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**Crypto assets in the Swiss private wealth management**

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## Management Summary

Switzerland has enjoyed a well-regarded reputation as a leading financial center for many decades due to its high-quality services, expertise, and stability. Wealth management services have been a major source of income for banks. However, the Swiss wealth management industry competitiveness is falling behind in terms of financial sector digital capabilities.

As the world advances technologically, new client expectations emerge; consequently, the Swiss financial institutions must adapt to these new client demands, which requires the institutions to embrace technological breakthroughs. The technological advancements of this century include cryptography, the underlying technology of the revolutionary crypto asset's ecosystem. Due to the institution-sceptical libertarian movement that started crypto assets, they are a controversial topic. This is shown by how Swiss financial institutions are differently positioned concerning the topic: some are at the intersection of the crypto ecosystem and traditional finance, while others are studying the topic or have stated their opposition to crypto assets.

Consequently, the purpose of this study is to comprehend the extent of crypto asset offerings by Swiss financial institutions, as well as the rationale behind their position, their impressions of clients' demand, and their view regarding the institutionalization of crypto assets. In addition, as the crypto asset sector expands and a rapidly rising number of crypto asset categories and classes are established, this study aims to examine the crypto asset class(es) that have the potential to meet the demands of Swiss wealth managers and their clients. The methodology used to address these topics is based on interviews with experts in the field. The qualitative analysis adopts the grounded theory approach. The grounded theory approach seeks to discover or construct a theory using qualitative data that have been methodically collected and analysed using comparison techniques.

The interviews revealed that Swiss financial institutions that offer crypto asset investment solutions to their clients do so in collaboration with Swiss crypto banks or Swiss custodians and that only a limited number of crypto assets are currently offered. In

addition, it was acknowledged that there are a variety of services and offering structures among firms that provide clients with crypto asset investment options. Financial institutions in Switzerland that do not currently offer crypto asset investment solutions to their clients still provide educational services or utilize cryptography for internal operations. Moreover, regardless of their position on crypto assets, it was recognized that financial institutions can book investment products listed on regulated exchanges, such as crypto funds and crypto ETPs, if a client with an execute-only mandate requests it.

The position of banks that currently offer crypto assets is based primarily on client demand, the wealth-driving source emerging from the asset class, a belief in the asset class value proposition, advantages in portfolio management, and the desire to position themselves with younger clients, where demand for crypto assets is concentrated. And for banks that currently do not offer crypto asset solutions to their clients, reputational concerns, the lack of regulation in the asset class, the immaturity of the asset class, the number of unsuccessful ventures, the perceived threat to financial institutions, and the market volatility are the main reasons for their positioning.

Moreover, Swiss wealth managers have differing opinions regarding the crypto asset classes that are expected to meet their and their clients' demands; however, based on the findings of the interviews, selected cryptocurrencies, crypto utility tokens, and crypto security tokens are the crypto asset classes that are viewed favourably by Swiss wealth managers.

Based on the analysis of the literature review and expert interviews, the crypto ecosystem is in an emerging phase, and institutions are faced with the need to position themselves in an innovative ecosystem that presents Swiss financial institutions with both opportunities and risks. Positioning themselves in this environment demands an in-depth analysis of the asset class, an assessment of client needs, and an overall strategy that reduces the risks associated with the asset class.

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## List of Abbreviations

AI	Artificial Intelligence
AML	Anti-Money Laundry
AuM	Assets under Management
BCBS	Basel Committee on Banking Supervision
CBDC	Central Bank Digital Currency
DLT	Distributed Ledger Technology
ETFs	Exchange Traded Fund(s)
ETPs	Exchange Traded Product(s)
FCNB	Financial and Consumer Services Commission
HNWI	High Net Worth Individual
ICO	Initial Coin Offering
KYC	Know Your Costumer
NFT(s)	Non-Fungible Token(s)
PoS	Poof of Stake
PoW	Proof of Work
UHNWIs	Ultra-High Net Worth Individuals
STO	Security Token Offering
SUERF	The European Money and Finance Forum
VASP	Virtual Asset Service Provider

# 1. Introduction

## 1.1. Motivation

In 2008, Satoshi Nakamoto published the paper that gave birth to Bitcoin, a fully peer-to-peer form of electronic currency that enables digital payments to be transmitted directly from one party to another without the need for a banking institution as an intermediary (Nakamoto, 2008, p. 1). In the years that followed, cryptography, the underlying technology of Bitcoin, was utilized to create different crypto asset classes with diverse functionalities (Burniske & Tatar, 2017, p. 90).

The general perception of crypto assets is ambiguous. To some, crypto assets are a speculative investment devoid of intrinsic value that uses an essential resource, electricity. Others are enthusiastic about the future of crypto assets; these individuals often believe digital assets will be part of the subsequent evolutionary growth (Dobrauz et al., 2022, p. 5). Nevertheless, despite the hype and technical enthusiasm of the last few years, there are fundamental reasons why investors may find crypto asset investments to be reasonable. They may provide anti-inflationary value storage, growth potential, and portfolio diversification benefits (Avaloq Evolution AG, 2022, p. 5). Moreover, a significant community considers crypto assets as a tool for addressing social, political, and economic issues (Antonopoulos, 2019, p. 25).

The 2008 financial crisis prompted several of financial advisers and wealth managers to consider portfolio allocation strategies other than the traditional asset classes, such as bonds and stocks. Throughout the financial crisis, hedge fund results were cited as instances of non-traditional and alternative investment vehicles that had generated favourable performance (Burniske & Tatar, 2017, p. 164). Consequently, some wealth management organizations are actively investigating how alternative assets, such as crypto assets, might be used to provide portfolio diversification, enhance customer returns, and hedge positions due to its low correlation to traditional capital market assets (Burniske & Tatar, 2017, p. 168 - 170).

Moreover, according to the PwC Wealth Management research, the demand for crypto assets is increasing, and clients, including UHNWIs, are requesting additional support from

their wealth managers as the crypto industry expands (Lehmann et al., 2022, p. 5 - 15). However, the business models of the majority of wealth management organizations continue to be cautious about the inclusion of crypto assets in their clients' supply offerings (Burniske & Tatar, 2017, p. 450 - 470).

The CFA Institute Research Foundation cites the high volatility of the crypto market compared to other conventional asset classes as one reason why certain wealth managers are reluctant to include crypto assets in their clients' capital allocation (Hougan & Lawant, 2021, p. 25 - 35). In addition, potential risks may contribute to wealth managers' unwillingness to utilize crypto asset solutions. The European Money and Finance Forum (SUERF) identifies these risks as investors' limited understanding of crypto markets, the crypto assets regulatory uncertainty, the fear of crypto assets' potential impact on the stability of financial markets, and the crypto assets' innovative approaches for value storage and transaction services, which present a new competitive threat to traditional banking services (Hernández, 2022, p. 4 - 6).

## **1.2. Research Questions**

This study aims to determine, by answering the following research question, to what extent Swiss wealth managers offer crypto asset solutions to their clients.

*To what extent do Swiss wealth managers offer crypto asset investment solutions to their clients?*

In addition, as the crypto assets sector evolves and a rapidly expanding ecosystem is created, with the second research question, this study will investigate the crypto asset class(es) that will suit the demand of Swiss wealth managers and their clients.

*Which class(es) of crypto assets are viewed as most suitable to meet the demands of Swiss wealth managers and their clients?*

## **1.3. Methodology and Data**

The methodology will be conducted through expert interviews in order to explore the research questions. The grounded theory approach will be utilized for the interview process. The main objective of this theory is to provide an explanation for the research questions by

identifying key concepts (ideas, concerns, and opinions) from the interviewees and outlining their connection within the research investigation (Toloie-Eshlaghy et al., 2011, p. 10). In addition, grounded theory seeks to uncover or develop theory using qualitative data that have been systematically collected and analysed utilizing comparison methods (Chun Tie et al., 2019, p. 1).

According to Glaser and Strauss's study, the primary criteria for selecting comparison groups for theory development is their theoretical significance in expanding the spectrum of viewpoints on the investigated subject (Glaser & Strauss, 1967, p. 49 - 60). Consequently, the research aims to conduct 10 interviews with selected Swiss wealth managers experts from two distinct groups. The first group will be experts from organizations that currently offer crypto asset solutions to their clients and the second group will be experts from organizations that do not supply crypto asset solutions to their clients to provide a comprehensive overview of the various perspectives on the topic.

Furthermore, a semi-structured interview process will be conducted, consisting of prepared questions based on the literature assessment and personalized exchanges between the interviewer and interviewee (Kallio et al., 2016).

Each participant will get a consent form to sign and return. On the form, respondents will be required to indicate if they would like their name and organization to appear in the article. In addition, depending on the interviewee's preference, the interviews will be recorded either by audio or video, depending on whether the interview is conducted in person or remotely.

#### **1.4. Structure of the Work**

The paper is structured into 5 chapters. The first chapter introduces the topic under investigation, defines the research question, highlights the objective of the paper, and outlines the methodology. The second chapter contains a comprehensive literature review encompassing the definition of crypto assets, the definition of wealth management, an overview of the crypto asset classes, the crypto assets landscape in the international and Swiss wealth management industries, an overview of the crypto assets' benefits in portfolio management, and the currently available integration solutions for traditional finance and

crypto assets. In the third chapter, the methodology section will define the qualitative analysis's principles; also, the interview questions' rationale and a listing of the interview questions will be provided. In addition, the interviewees will be presented. In chapter four, the findings from the interviews will be categorized and listed. Lastly, the final chapter concludes and interprets the interview findings and provides answers to the research questions. The paper closes with implications and recommendations for the Swiss wealth management sector, and an outlook for further studies is provided.

### **1.5. Crypto Winter**

The value of all major crypto assets declined during the first half of 2022. Several crypto-related firms are currently facing serious financial difficulties, including bankruptcy. This period of market decline is now known as "crypto winter" (Bloomberg, 2022). On July 24, 2022, the total market capitalization of the top 100 crypto assets was one trillion dollars. This is a 62% decline from the market capitalization of these 100 crypto assets on November 7, 2021, which was USD 2.7 trillion. In addition, the crypto ecosystem has become more sensitive to how it interacts with the traditional financial market and this may be one of the reasons for the price drop since the current drop in crypto assets prices isn't unique to crypto assets; it's part of a global sell-off in almost every asset class (Woock, 2022).

Additionally, in reaction to the coronavirus outbreak, central banks loosened monetary policy and investors contributed immensely to blockchain businesses and crypto assets. Later, as central banks started to reverse course and increase interest rates, crypto assets dropped, shattering the concept that they had a status comparable to gold as a haven for investors in times of economic instability. Several investors consider this decline as evidence that crypto assets are still too volatile to be included in traditional investment portfolios, thereby decreasing demand for crypto assets. As a result of this decline in demand for crypto assets, volumes on crypto exchanges and crypto-related business activity have also decreased (Kharif, 2022).

Furthermore, there are some crypto-specific problems, such as the collapse of the algorithmic stablecoin (TerraUSD) and the coin that backed it (LUNA). The collapse of TerraUSD and LUNA caused USD 40 billion in investor losses and had a cascading effect on the whole crypto assets sector (Woock, 2022). In addition, the lending organization Celsius,

which engaged in hazardous trading wagers, suffered liquidity challenges and declared bankruptcy (Powell, 2022). Consequently, the damage done to both institutional and retail investors has increased pressure on governments to bring crypto assets into a similar circle as conventional finance, with more regulatory control to prevent future catastrophes (Kharif, 2022).

Moreover, in November 2022, a major scandal involving the bankruptcy of FTX.com, FTX US, and Alameda Research caused the crypto market to lose billions of dollars in value. Sam Bankman-Fried was the primary shareholder of Alameda Research, a private trading firm; FTX.com, an exchange for crypto assets; and FTX US, the American subsidiary of the crypto exchange FTX.com. FTX.com has become one of the world's largest crypto exchanges and Alameda was the first and primary market maker for FTX.com. The institutions were supposed to operate as independent enterprises in their respective fields. On November 2, CoinDesk leaked Alameda's balance sheet, revealing that USD 5.2 billion of the trading firm's USD 14.6 billion in assets (36%) were held in FTT, a token issued by FTX.com crypto exchange, indicating fraudulent transactions between the two organizations. Binance, the largest crypto assets exchange in the world, chose to liquidate a portion of its FTT tokens in response to these findings, which scared investors and sparked a bank run on the FTX.com exchange. Since the release of the CoinDesk report, the value of FTT has decreased significantly. More than 130 entities tied to FTX.com, FTX US, and Alameda Research filed for bankruptcy subsequently. The case has impacted several participants in the crypto sector, who are now more sceptical and seek stricter regulations (*The Collapse of FTX*, 2022), (21Shares AG, 2022a), (21Shares AG, 2022b).

For crypto enthusiasts, the advantage of the crypto winter is that bear markets are frequently optimal periods for price corrections. Moreover, crypto winters eliminate unproductive initiatives, allowing the most innovative ones to thrive and exhibit their products. Crypto assets that survive this downturn may be in a better position during the crypto winter recovery phase (Patel, 2022).

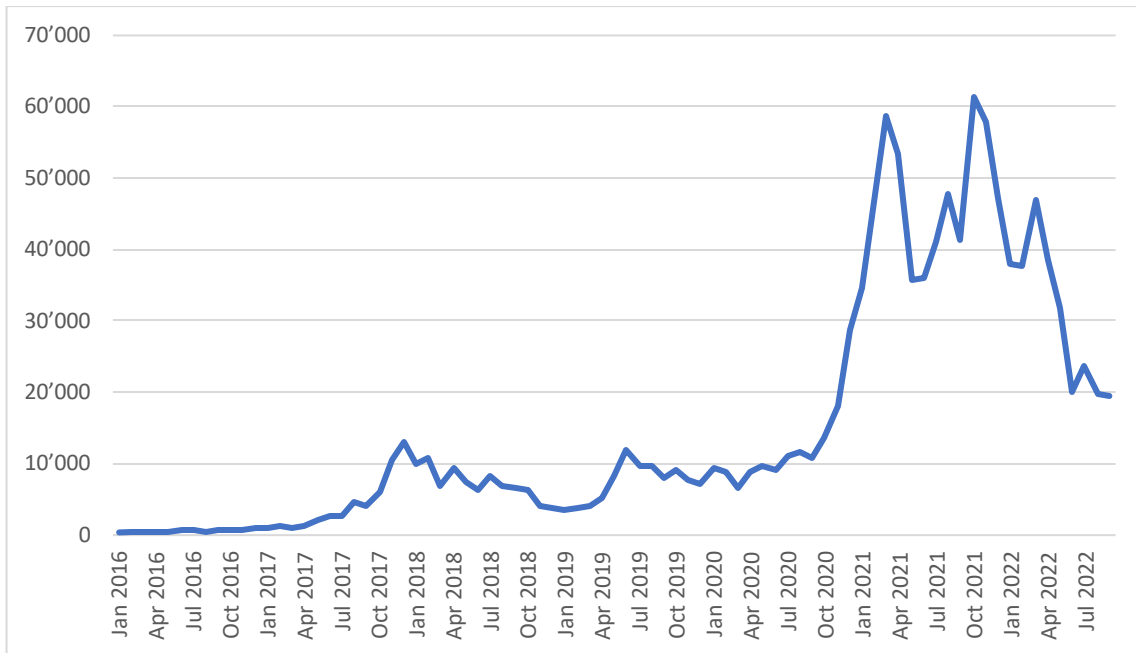
As illustrated in Figure 1 the quarterly price evolution of Bitcoin (BTC) from January 2016 to July 2022 is described. In Appendix I, the monthly Bitcoin (BTC) price development from January 2016 to September 2022 is detailed. The price of Bitcoin peaked in October 2021

at more than USD 61,000, compared to less than USD 20,000 in August 2022. That is a price fall of -68% over 10 months. Furthermore, Bitcoin's value has dropped by more than 50% half a dozen times since its creation. Four such occurrences resulted in extended crypto winters. Bitcoin, however, has effectively recovered from all previous crypto winters prior to the most recent decline. Moreover, Bitcoin, in particular, has been more resistant to seasonal fluctuations than any other crypto market initiative. Additionally, despite the recent decline in Bitcoin's price, the Modern Portfolio Theory research continues to support the inclusion of Bitcoin in a diversified portfolio (Edstrom, 2022).

As illustrated in Figure 2 the quarterly price evolution of Ethereum (ETH) from January 2016 to July 2022 is described. In Appendix II, the monthly Ethereum (ETH) price development from January 2016 to September 2022 is detailed. The price of Ethereum (ETH) peaked in November 2021 at more than USD 4,400, compared to less than USD 1,600 in August 2022. That is a price fall of -65.5% over 9 months. Despite the price decline, there is excitement about Ethereum's imminent merge, when it will transition from a Proof of Work (PoW) blockchain to a Proof of Stake (PoS) blockchain that is more energy efficient (Hakki, 2022). The merge is, at its most fundamental level, an upgrade to the Ethereum blockchain that will lessen its environmental effect, boost network security, and allow Ethereum developers to implement new features and increase the chain's scalability. Therefore, a successful merge could be beneficial to the Ether's price (Beyer, 2022).

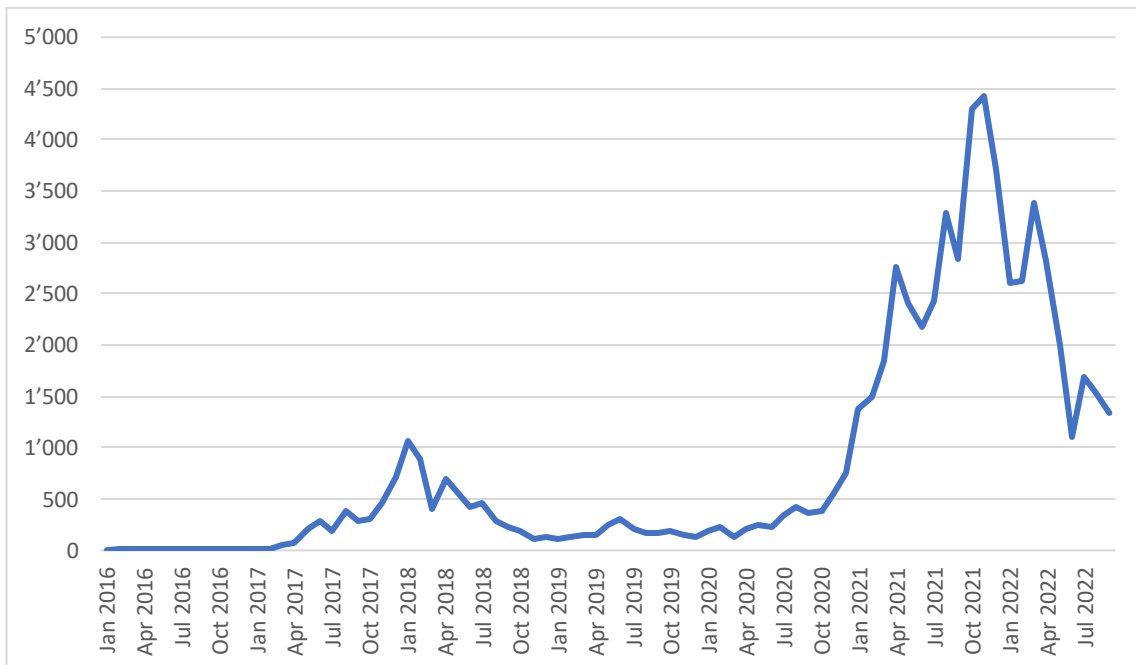


**Figure 1: Bitcoin (BTC) Quarterly Price Evolution (USD)**



Note. Own Illustration. Source: (Statista, 2022). Retrieved: 06.11.2022

**Figure 2: Ethereum (ETH) Quarterly Price Evolution (USD)**



Note. Own Illustration. Source: (Statista, 2022). Retrieved: 06.11.2022

## **2. Literature Review of cryptoassets in the Swiss private wealth management**

### **2.1. Definition of wealth management**

There is no universal definition of wealth management in terms of the goods and services provided or the client base that is addressed (Beaverstock et al., 2013). However, the generic term ‘wealth management’ is based on similar core concepts.

The Swiss Bankers Association defines wealth management as holistic asset planning, including services such as asset allocation and investment strategy, access to financial markets, products and exclusive investments, financing, research, suitability and adequacy assessment for financial products, pension planning, tax and estate planning, succession solutions, custody strategies, and philanthropic activities (Swiss Banking, 2021, p. 91). Similarly, Lucerne University of Applied Sciences and Arts describes wealth management as the ‘supply of comprehensive financial solutions, such as financial planning, asset management, and a variety of packaged financial services’ (Ankenbrand et al., 2021, p. 14).

Traditionally, wealth management has been defined as the financial management of high-net-worth families and individuals. Consequently, portfolio design and investment solutions in private wealth management are customized to the complexity of an investor's specific circumstances, resulting in a wide variety of financial services to offer the client a complete wealth structuring (Ankenbrand et al., 2021; Jennings et al., 2011).

However, there is no universal client segment nomenclature concerning wealth levels and they can vary largely. Table 1 shows varying wealth split client categorizations of wealth management made by the BCG group.

**Table 1: Wealth Management Client Categorization**

<b>Categorization</b>	<b>Level of Personal Wealth (net assets)</b>
Retail	\$0 to \$250'000
Affluents	\$250'000 to \$1 million
Lower end of HNWI I	\$1 million to \$5 million
Lower end of HNWI II	\$5 million to \$20 million
Upper end of HNWI	\$20 million to \$100 million
Ultra-HNWIs, UHNWI	> 100 million

*Note.* Own Illustration. Source: (Zakrzewski et al., 2021, p. 22)

The wealth management services business may provide three service structures: advisory mandate, discretionary mandate, and execution-only mandate. Primarily, the customer decides on the investment policy and makes an investment choice based on investment advice and appropriate information supplied by the financial institution with an advisory mandate. The financial institution subsequently allocates the client's investment choice into action. Subsequently, the customer specifies the investment policy with a discretionary mandate, but the financial institution decides and implements the investments. Lastly, under an execution-only mandate, the client determines the investment policy and makes autonomous investment choices, but the financial institution is entirely responsible for investment implementation (Ankenbrand et al., 2021, p. 14).

According to Dziawgo (2021), the wealth management industry is experiencing a transformation. The sector is experiencing considerably greater challenges than in the past. Accelerated digitalization, significant pressure on budgetary control, ongoing development of fast wealth transfer mechanisms, dynamic consumer profile, and the competition of big tech companies all play a significant role in the wealth management industry, as do external factors such as natural events (such as the COVID-19 pandemic) and the possibility of an economic recession. As a consequence, wealth techs have grown in popularity and seem to be contributing to fundamental changes in wealth management sector definitions (Dziawgo, 2021).

## **2.2. Definition of crypto assets**

Prior to defining crypto assets, it is necessary to comprehend what distributed ledger technology (DLT) is. The Financial and Consumer Services Commission (FCNB) defines distributed ledger technology (DLT), the technology behind crypto assets, as a sort of database that maintains electronic records that are copied and shared across several locations and maintained by the members of the network. Before a new transaction is added to the ledger, all network participants must consent to it (Financial and Consumer Services Commission, 2022).

Crypto assets do not have a precise definition; however, it is frequently used as a term for digital tokens produced and traded on DLT systems. Transactions, ownership, and applications of crypto assets are often recorded and maintained on a blockchain, which is a type of DLT (Blandin et al., 2019, p. 15 - 17). The Business Growth and Transformation Action Plan defines a crypto asset as any intangible asset able to represent, digitally, one or more rights that may be issued, authorized, preserved, or relocated through a DLT that enables the owner of such an asset to be identified directly or indirectly. These digital intangible assets can apply to currencies, commodities, securities, or derivatives of commodities or securities (Blandin et al., 2019, p. 69).

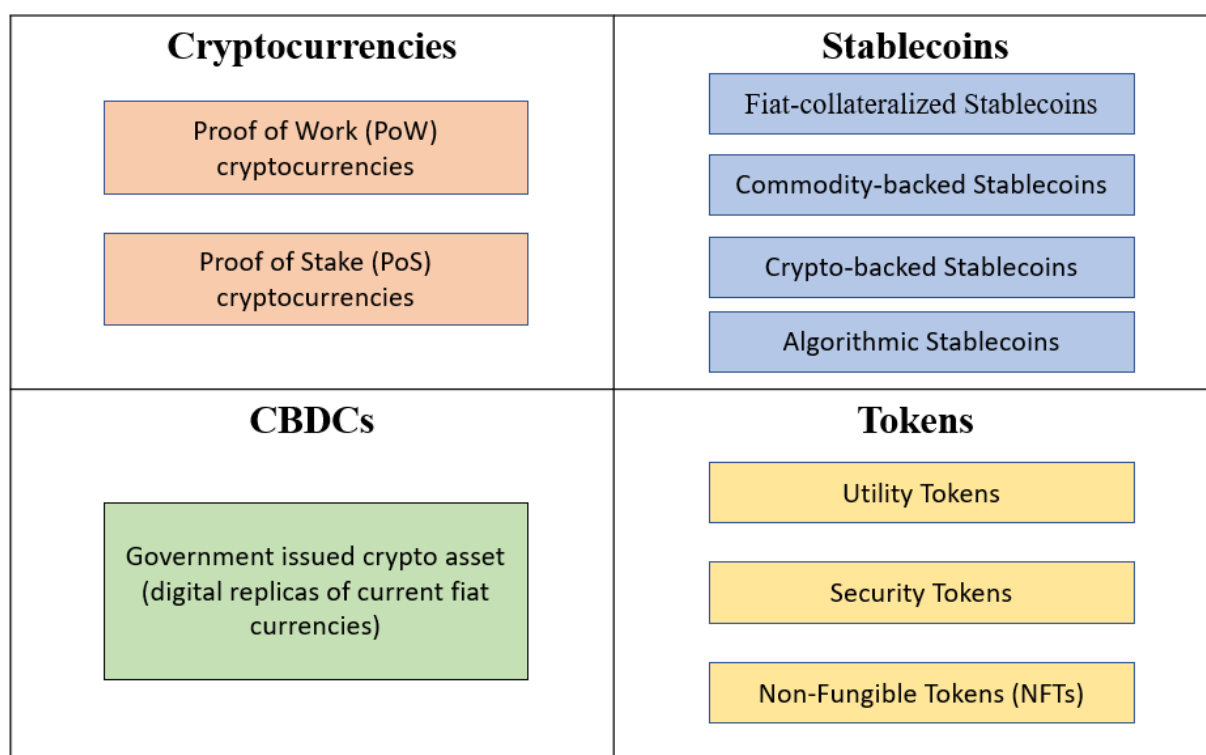
## **2.3. Overview of crypto asset classes**

Regarding the different crypto asset classes, the European Money and Finance Forum (SUERF) refers to crypto assets as a broad variety of assets classes that have the characteristic of being a digital representation of value or a collection of contractual rights (Hernández, 2022, p. 1). In addition, multiple crypto asset classes exist and thrive since their underlying technologies are designed for distinct purposes. It is essential to note, however, that owing to the nature of crypto assets' evolving ecosystem, the current classes may alter in the future and their definitions may overlap as a consequence of new initiatives (Hougan & Lawant, 2021, p. 17).

According to Bartolucci and Kirilenko (2022), the existing crypto asset classes include cryptocurrencies, stablecoins, CBDCs (central bank digital currencies), and crypto tokens. Firstly, cryptocurrencies are decentralized crypto assets that use a cryptography system to

protect value transfers between network users; the great majority of cryptocurrencies use sophisticated encryption and digital signatures as authentication mechanisms. Secondly, stablecoins are crypto assets that have their values tied to baskets of fiat currencies, cash equivalents, existing investment vehicles, physical assets such as commodities, or baskets of other crypto assets. Thirdly, CBDCs are digitally native representations of a country's fiat currency, or a digital balance held in the country's monetary authority's reserve account. Fourthly, tokens are tradable crypto assets that give holders access to an existing or prospective product or service based on a distributed ledger platform (Bartolucci & Kirilenko, 2020, p. 4 - 6). Figure 3 illustrates the existing crypto asset classes and their classifications.

**Figure 3: Crypto Asset Classes Overview**



*Note.* Own Illustration.

### 2.3.1. Cryptocurrencies

Cryptocurrencies are assets stored on a blockchain that can be traded or transferred between network members. The advantages of cryptocurrencies are that they may reduce transaction costs and increase security and privacy (Giudici et al., 2020, p. 3 - 6). Bitcoin, the pioneering cryptocurrency, emerged in 2008, and a large number of other cryptocurrencies

eventually followed. After Bitcoin, blockchain technology was leveraged to construct other blockchain systems with distinct features and enhanced functionality capabilities, resulting in a significant growth in the number of cryptocurrencies (Bartolucci & Kirilenko, 2020, p. 5-7). The most significant cryptocurrencies in terms of market capitalization currently are Bitcoin (BTC) with a market capitalization of USD 408 billion, Ethereum (ETH) with a market capitalization of USD 200 billion, and Binance Coin (BNB) with a market capitalization of USD 46 billion (CoinMarketCap, 2022).

One way to characterize cryptocurrencies is via the consensus mechanism of these cryptocurrencies. Consensus mechanisms are the protocols, algorithms, or other computer systems that enable the operation of cryptocurrencies. These mechanisms of agreement define the authenticity of transactions and the blockchain's governance. To validate cryptocurrency transactions, there are presently two main kinds of consensus techniques in use: Proof of Work (PoW) and Proof of Stake (PoS). Proof of work is a competition between miners to solve cryptographic puzzles and validate transactions to receive block rewards. Proof of stake selects validators at random to ensure the transaction's trustworthiness, compensating them with cryptocurrency in return (Antolin, 2022). PoW and PoS have substantial design differences that influence network performance, security, decentralization, and energy consumption (*Proof Of Work vs. Proof Of Stake*, 2022). Another distinction between PoW and PoS cryptocurrencies is that the first may use the mining production cost as an estimate of their valuation. However, since staking generates a cash flow, PoS cryptocurrencies have a recurring value stream generated by the network, and their valuation is generally evaluated using the discounted cash flow model (Ndinga et al., 2022, p. 26). These two consensus mechanisms for blockchain systems are further explained in Table 2.

**Table 2: Consensus Mechanism Definitions**

<b>Proof of Work (PoW)</b>	<b>Proof of Stake (PoS)</b>
A Proof of Work (PoW) is based on a piece of data that is difficult to generate, easy for others to verify, and satisfies specific requirements. These data pieces are created by mining and are frequently utilized as consensus techniques in crypto asset networks. Mining is an energy- and computation-intensive lottery that decides which blocks to add and which miners to reward. As a result, PoW cryptocurrencies employ mining as their primary production cost. Bitcoin is an example of a PoW cryptocurrency.	Proof of Stake (PoS) is a system that selects block makers based on a participant's stake, such as the quantity of tokens they own or the duration of their network participation. PoS validators are required to invest a percentage of their money (the "stake") to obtain access to a stream of recurring value provided by the network's rules. Proof-of-stake (PoS) cryptocurrencies need ownership of the native asset in order to obtain access to the network's recurrent value stream. PoS reduces the need for computationally and energy-intensive mining compared to PoW since it does not use mining as a production cost. PoS cryptocurrency examples are Ethereum and Solana.

*Note.* Own Illustration. Source: (Ndinga et al., 2022).

### **2.3.2. Stablecoins**

Since the beginning of the route towards stability in the crypto space, several measures have been adopted by centralized institutions, decentralized protocols, and non-profit groups to monitor the issue of volatility in the crypto ecosystem, allowing stablecoins to arise. Stablecoins currently have a total market value of around USD 185 billion. Stablecoins are classified into four types based on their stability mechanism: fiat-collateralized stablecoins, commodity-backed stablecoins, crypto backed-stablecoins, and algorithmic stablecoins (Paone, 2022, p.7). Table 3 describes the four stablecoin categories.

**Table 3: Stablecoins Categories**

<b>Fiat-collateralized Stablecoins</b>	The most prominent stablecoins are supported by fiat cash. Since the underlying collateral is not another cryptocurrency, this sort of stablecoins is classified as an off-chain asset. Fiat-collateral is held in reserve with a central issuer or financial institution and must be comparable to the quantity of stablecoins units in circulation.
<b>Commodity-backed Stablecoins</b>	Commodity-backed stablecoins are backed by tangible assets like as valuable metals, oil, and real estate reserves. While not well known within the cryptocurrency community, most commodity-backed stablecoins are utilized to give access to investment vehicles that were previously unavailable to small investors.
<b>Crypto-backed Stablecoins</b>	Stablecoins that are crypto-collateralized are supported by another cryptocurrency as collateral. Other than depending on a central issuer, this procedure takes place on-chain and utilizes smart contracts. When acquiring this kind of stablecoins, users lock the cryptocurrency inside a smart contract in exchange for stablecoin units of equivalent worth.
<b>Algorithmic Stablecoins</b>	An algorithmic stablecoin employs specific algorithms and smart contracts to maintain its value stable. Typically, these algorithms connect two coins and change their prices based on investor demand and supply. Despite being tied to the value of a real-world asset, an algorithmic stablecoin is not collateralized by one.

*Note.* Own Illustration. Source: (Cryptopedia, 2022), (Ginsburg, 2022), (Rees, 2022).

### **2.3.3. CBDCs**

It is crucial to note that a substantial segment of the crypto community does not consider CBDCs to be a crypto asset class. Although CBDCs exist as a digital asset in the blockchain's underlying infrastructure, it employs a different blockchain type. CBDCs use a private and permissioned blockchain network, consequently, they lack the trustless and decentralized characteristics of the majority of crypto assets (Farrington, 2022).



Moreover, CBDCs are only digital replicas of current fiat currencies; therefore, they are directly affected by monetary policy and inflation (Kumar et al., 2022). One of the primary motivations for using cryptography to establish a national digital currency issued by a central bank is to facilitate financial inclusion and facilitate the execution of monetary and fiscal policies. However, before being implemented, CBDCs need a complex regulatory framework, including security, consumer protection, and anti-money laundering rules (Adcock, 2022).

The Basel Committee on Banking Supervision (BCBS) mentioned distinct treatments of banks' crypto asset exposures and suggested a two-tier system: crypto assets satisfying a set of categorization scenarios would be eligible for treatment under the existing Basel framework with modifications and additional guidance. This category would consist of conventional assets that have been tokenized, such as CBDCs and stablecoins. The second category would consist of crypto assets that do not meet the categorization criteria, such as Bitcoin. Since the second category represents different risks, assets in this second category would be subject to a pragmatic approach that emphasizes conservatism (Adcock, 2022). To comprehend the implications of these distinct legal frameworks on institutional clients' overall adoption of crypto assets, this research considers CBDCs as a crypto asset class.

#### **2.3.4. Crypto Tokens**

Crypto tokens are, in general, non-mineable digital assets that circulate as registry entries on blockchain systems. Moreover, crypto tokens are digital assets that are constructed on an existing blockchain and may serve a variety of purposes, such as representing a physical object or allowing access to platform-specific services and features (Binance Academy, 2022).

Technologically, a token is a digital right that resides exclusively on the network. The ownership of a token requires knowledge of the private key linked to the public key containing the token (Parrondo, 2018, p.2). Furthermore, it is important to mention that due to the fast-emerging nature of the crypto tokens class, there are different definitions for crypto tokens categories; this study decided to follow the definitions from the Financial and Consumer Services Commission (2022) and with some additional insights from PWC (2022) as a way to approach the regulatory and corporative perspectives (Baur, 2022). As illustrated in Table 4, the Financial and Consumer Services Commission identifies three types of crypto tokens:

utility tokens, security tokens, and non-fungible tokens (NFTs) (Financial and Consumer Services Commission, 2022).

**Table 4: Crypto Tokens Categories**

<b>Utility Token</b>	Utility tokens offer access to the products or services of an application and are designed for use within the blockchain's network, rather than for investment purposes. These tokens can be referred to as prepayment for goods or services. Moreover, in recent years, utility tokens have frequently been linked to initial coin offerings (ICOs). ICOs allow developers to raise funds for upcoming blockchain projects by selling utility tokens prior to the launch of the project.
<b>Security tokens</b>	In contrast to utility tokens, security tokens have no associated utility. A security token is a digital representation of securities, such as shares of stock, bonds, and other ownership rights. Governments and organizations control security tokens considerably more strictly. This is because, under the law, they function similarly to other securities. Furthermore, a Security Token Offering (STO) is a growing method of investing in a blockchain company. An STO is essentially a regulated offering of securities using blockchain technology. In addition, the security tokens offered via an STO possess several qualities that provide them with potential advantages over stocks and other conventional assets.
<b>Non-fungible tokens (NFTs)</b>	Non-fungible tokens (NFTs) are tokens that reside on a distributed ledger or blockchain that represent ownership of a unique tangible or intangible asset, such as music, digital picture, or designer apparel. NFTs cannot be exchanged for related assets. In contrast to fungible crypto assets such as Bitcoin (BTC) and Ethereum (ETH), NFTs are immutable and illiquid.

*Note.* Own Illustration. Source: (Financial and Consumer Services Commission, 2022), (Baur, 2022), (Arner, 2020, p. 4 - 12).

## 2.4. Overview of crypto assets benefits in portfolio management

Based on the Modern Portfolio Theory, some institutions suggest that adding crypto asset exposure in the portfolio composition would lead to a superior risk-adjusted investment outcomes due to their low correlation to other asset classes (21Shares AG, 2022, p. 32). The statistical characteristics of the return rates of crypto assets vary substantially from those of other alternative assets, such as gold, oil, and hedge funds. Moreover, due to the low correlation between crypto assets and both conventional and alternative investments, investing in crypto assets may provide considerable diversification benefits (Brière et al., 2015, p. 2).

According to Gangjin Wang, Yanping Tang, Chi Xie, and Shou Chen's article, crypto assets have high returns, considerable volatility, and weak correlations with other assets (Wang et al., 2019, p. 173 - 178). Additionally, crypto assets may be used as a hedge for commodities, currencies, bonds, and equities (Nekhili & Sultan, 2022, p. 7).

The correlation of returns for significant asset classes, represented by prominent exchange-traded funds (ETFs), and two major crypto assets, Bitcoin (BTC) and Ethereum (ETH), can be found in Table 5. The timeframe considered in the asset correlation matrix (Table 5) is from December 31, 2014, to March 31, 2022. The ETFs used for the calculation are shown in Table 6 (21Shares AG, 2022, p. 32).

The correlation between Bitcoin and key asset classes ranges from -0.01 to 0.23 (excluding Ethereum), whereas the correlation between Ethereum and major asset classes varies from -0.02 to 0.15 (excluding Bitcoin). These two correlation ranges of the two main crypto assets are comparable to the -0.02 to 0.34 correlation range of gold (GLD) to other major asset classes. Because of this degree of correlation, Ethereum and Bitcoin may be used to diversify traditional portfolios, which are often composed of equities and bonds (21Shares AG, 2022, p. 33).

**Table 5: Assets Correlation Matrix**

	US Equity	Developed Equity	Emerging Equity	US Bond	USLT Treasury	Real Estate	Gold	ARK Innovation	Cash	<b>Bitcoin</b>	<b>Ethereum</b>
US Equity	1	0.87	0.78	-0.01	-0.36	0.75	-0.02	0.69	0	0.15	0.11
Developed Equity	0.87	1	0.84	0.02	-0.35	0.66	0.03	0.61	0.01	0.15	0.11
Emerging Equity	0.78	0.84	1	0.04	-0.26	0.56	0.08	0.63	0.02	0.13	0.1
US Bond	-0.01	0.02	0.04	1	0.78	0.17	0.34	0.09	-0.01	0.05	0.05
USLT Treasury	-0.36	-0.35	-0.26	0.78	1	-0.14	0.31	-0.17	0.01	-0.04	-0.01
Real Estate	0.75	0.66	0.56	0.17	-0.14	1	0.09	0.46	-0.02	0.11	0.07
Gold	-0.02	0.03	0.08	0.34	0.31	0.09	1	0.02	0.03	0.07	0.08
ARK Innovation	0.69	0.61	0.63	0.09	-0.17	0.46	0.02	1	-0.01	0.23	0.15
Cash	0	0.01	0.02	-0.01	0.01	-0.02	0.03	-0.01	1	-0.01	-0.02
<b>Bitcoin</b>	0.15	0.15	0.13	0.05	-0.04	0.11	0.07	0.23	-0.01	1	0.51
<b>Ethereum</b>	0.11	0.11	0.1	0.05	-0.01	0.07	0.08	0.15	-0.02	0.51	1
<b>Average Correlation</b>	0.36	0.36	0.36	0.23	0.07	0.34	0.19	0.34	0.09	<b>0.21</b>	<b>0.20</b>

*Note.* Own Illustration. Source: (21Shares AG, 2022, p. 33)

**Table 6: ETFs used in the Assets Correlation Matrix**

<b>US Equity</b>	US Equities, as represented by SPY – The SPDR S&P 500 ETF, tries to replicate the performance of an index that tracks the S&P 500.
<b>Developed Equity</b>	Developed equity represented by EFA – The iShares MSCI EAFE ETF seeks to track the investment results of an index composed of large- and mid-capitalization developed market equities, excluding the U.S. and Canada.
<b>Emerging Equity</b>	Emerging Equity, symbolized by EEM – The iShares MSCI Emerging Markets ETF aspires to replicate the performance of an index consisting of large- and mid-capitalization emerging market equities.
<b>US Bond</b>	US Bond, symbolized by AGG – The iShares Core U.S. Aggregate Bond ETF aims to replicate the performance of an index consisting of the entire U.S. investment-grade bond market.
<b>US Long Term Treasury</b>	US Long Term Treasury, represented by TLT – The iShares 20+ Year Treasury Bond ETF seeks to track the investment results of an index composed of U.S. Treasury bonds with remaining maturities greater than twenty years.
<b>Real Estate</b>	Real Estate, represented by VNQ - The Vanguard Real Estate ETF, tries to replicate the performance of an index comprising of equities issued by firms that acquire office buildings, hotels, and other real estate properties.
<b>Gold</b>	Gold, represented by GLD - SPDR Gold Shares ETF, tries to replicate the performance of an index that tracks the price of gold bullion.
<b>ARK Innovation</b>	ARK Innovation, represented by ARKK, is an actively managed Exchange Traded Fund (ETF) that seeks long-term capital growth by primarily (at least 65% of its assets) investing in equity securities of companies relevant to the Fund's investment theme of disruptive innovation.

*Note.* Own Illustration. Source: (21Shares AG, 2022, p. 32)

## **2.5. Crypto assets landscape in the International Wealth Management**

According to a survey conducted by the PwC Wealth Management department, over 94% of client advisors worldwide believe that UHNWIs raised their crypto assets allocation in 2021 (Lehmann et al., 2022, p. 3). Additionally, PwC mentions crypto as a wealth-driving force, stating that there were at least 11 crypto billionaires in 2021 with a total wealth of USD 62.4 billion, compared to just one crypto billionaire in 2016, whose total wealth was USD 1.8 billion. Among these eleven billionaires, there are investors, entrepreneurs behind the crypto asset exchange offering infrastructure, and investors who have integrated crypto assets into their original business (Lehmann et al., 2022, p. 6 - 13). This increased wealth from the crypto ecosystem and the rising demands from customers for crypto assets have compelled the traditional wealth management industry to face new challenges (Oliver, 2021).

The present situation includes some wealth managers who are monitoring and waiting to observe how this new industry develops over time before investing resources, while other wealth managers are actively seeking or implementing crypto asset solutions for their customers. The strategy of implementing crypto asset solutions for clients exposes wealth managers to the uncertainty of this emerging ecosystem, whereas the strategy of monitoring and waiting to observe how this new industry develops before investing resources in it exposes wealth managers to the risk of missing out on lucrative opportunities as they arise and losing clients who are looking for digital assets solutions (Avaloq Evolution AG, 2022, p. 10 - 14).

In the international wealth management crypto offering landscape, Switzerland, and Singapore, both significant wealth hubs, appear to have more tolerant regulations regarding crypto assets, making both countries more able to invest and explore this market. The United Kingdom and the United States, on the other hand, have rather stricter regulatory rules regarding crypto assets, while China appears to be highly strict, for example, by prohibiting the mining of bitcoin. Consequently, it could be an interesting opportunity for Swiss wealth management to explore the crypto market as a competitive advantage strategy over other hubs (Burroughes, 2022). Regarding the institutional investor perspective on crypto assets, the recent research conducted by Fidelity in 2022 revealed that, despite the market decline, the number of institutional investors in the United States and Europe with a positive outlook on

crypto assets grew in 2022 compared to 2021. Despite the fact that Asian countries, excluding China, have the greatest affinity for crypto assets, the number of institutional investors with a positive outlook on crypto assets decreased slightly from 2022 to 2021 (Fidelity AG, 2022, p. 11).

In 2021, 82 agreements accounted for USD 1.48 billion in crypto and blockchain investment funding in Singapore, compared to USD109.75 million over 26 deals in 2020. In addition, Singaporean authorities are expected to continue focusing on crypto assets as the nation attempts to find a balance between the benefits of this financial innovation and any inherent hazards in this emerging industry (KPMG Singapore, 2022).

Switzerland is the location of the Crypto Valley Association, an independent, government-supported organization whose mission is to construct the world's premier blockchain and cryptographic technology ecosystem by capitalizing on Switzerland's advantages. The attractive legal framework of Switzerland and the region's abundance of crypto and blockchain specialists, service providers, and academic institutions continue to drive the region's growing activity. As a result, more than half of Swiss banks, including wealth management firms, stated their intention to offer digital asset services in the coming years (swissinfo.ch, 2022).

In the United States, Morgan Stanley's wealth management department has been providing three crypto assets funds to US investors since 2021, followed by JPMorgan, which offers six crypto assets fund options to US consumers. Goldman Sachs announced that it will also connect global wealth customers to crypto assets funds. Citi Private Bank admitted that an increasing number of customers are inquiring about crypto asset solutions (Oliver, 2021). From 2021 to 2022, the percentage of U.S. high-net-worth investors who indicated a future preference to own crypto assets increased significantly, from 31% to 74% (Fidelity AG, 2022, p. 14). Regarding the United Kingdom, Avaloq's study indicates that 89% of British investors who do not already own crypto assets would invest in crypto via their financial provider if given the opportunity (Brusnahan, 2022).

## 2.6. Crypto assets landscape in the Swiss Wealth Management

Switzerland is the world's leading cross-border wealth location (Ankenbrand et al., 2021). In terms of the international competitiveness of the wealth management market, Deloitte ranks Switzerland as the most competitive country in the world, followed by Singapore and Hong Kong. Deloitte defines competitiveness in terms of the business environment, provider capability, stability, taxation, and regulation. According to Deloitte, the strength of Switzerland resides in its stability. Its shortcomings may be attributed to its business environment, which is hampered by its smaller market size. Moreover, Switzerland is falling behind in terms of financial sector digital capabilities (Lagassé et al., 2021, p. 5). Furthermore, Boston Consulting Group's Wealth Management Report from 2021 also rates Switzerland as the leading cross-border financial center followed by Hong Kong and Singapore. However, its forecast for 2025 ranks places Hong Kong in the lead, followed by Switzerland and Singapore (Zakrzewski et al., 2021, p. 8). This indicates a possible shift in the composition of global financial power from the West to the East (Guo, 2013, p. 2).

Furthermore, according to Centro Law, the Swiss wealth management industry has mostly overlooked the influence of blockchain technology. However, wealthy individuals and family offices continue to widen their exposure to crypto assets. Meanwhile, the Crypto Valley, located in Switzerland and Liechtenstein, has attracted over 960 blockchain businesses employing over 5000 workers (Ritter, 2022).

In the Swiss wealth management market crypto offering, Julius Baer has begun offering crypto asset solutions to its customers via its partnership with SEBA Bank AG, Julius Baer announced that the bank aspires to position itself at the convergence of crypto assets and traditional markets (Halftermeyer, 2022). Julius Baer acknowledges the technological and regulatory uncertainty associated with this new asset class, but also the fact that finance is just one of many industries on the verge of a radical paradigm shift due to blockchain technology's ability to digitalize trust and contracts (Bonzon, 2022). In addition to Julius Baer, Vontobel has begun providing customers with crypto asset solutions such as Digital Asset Vault, a service that enables clients to purchase, sell, and transfer crypto assets (Vontobel Offers a Custody Solution for Digital Assets, 2019).



Additionally, the CEO of Crypto Finance AG (Jan Brzezek) stated that ultra-high net worth customers switched banks due to their previous provider's absence of crypto asset solutions (Gerber, 2021). However, major Swiss wealth management organizations, such as UBS, are hesitant to allocate crypto assets to their customers' portfolios. The Chief Investment Office (CIO) of UBS stated that cryptocurrencies have been ineffective as a portfolio diversifier or inflation hedge, that the claim that crypto assets are uncorrelated with traditional financial assets has been significantly weakened, and that clients should avoid crypto assets investments (Gordon et al., 2022).

Regarding Credit Suisse AG, the bank started collaborating with the Swiss crypto assets custody and trading platform Taurus on initiatives involving crypto assets (Allison, 2021). However, the current state is an absence of crypto asset solutions for their clients, which concerns Credit Suisse management, who indicated at the World Economic Forum in Switzerland that the bank is worried about being left behind as crypto assets gain traction in the financial world (Clarke & Daniel, 2022).

Furthermore, Switzerland is a pioneer in the field of DLT and blockchain. In Switzerland, a developing fintech and blockchain ecosystem has emerged, particularly in the banking sector. The emerging ecosystem could thrive due to the Federal Act on the Adaptation of Federal Law to Developments in Distributed Electronic Register Technology and the associated blanket that went into operation on August 1, 2021. The Federal Act offers a safe legal foundation for the trade of rights through electronic registries. Under the financial market infrastructure legislation, a new license category for DLT trading systems was formed, establishing a flexible legal framework for new types of financial market infrastructure (SIF State Secretariat for International Finance, n.d.). Therefore, the Swiss wealth management sector has a compelling opportunity to capitalize on the advantageous Swiss legal framework for crypto assets and increase digital capabilities of the sector.

## **2.7. Current available integration solutions for traditional finance and crypto assets**

A few years ago, digital assets were still an innovative asset class that a few technology enthusiasts explored. Currently, crypto assets are quickly moving closer to becoming a permanent investment component of the traditional financial market. Its expansion includes

presence in segments such as wealth management, asset management, and professional financial advice (Zwahlen, 2021). As a result, a number of traditional financial institutions are investing in crypto assets and developing frameworks to provide crypto asset services to their customers (Università Bocconi, n.d.). However, several banks are unsure of the optimal way to utilize crypto assets, how to avoid the issues connected with them, and how to handle transactions between crypto assets and fiat (government-issued) money (Mogul et al., 2020).

Some business models were created to facilitate institutionalization of crypto assets, such as crypto custodians (Akiki, 2022). A crypto custodian is a financial institution that stores crypto assets on behalf of investors since professional and institutional investors often prefer not to manage their own private keys to reduce the risk of operational errors, loss of funds, or technical mishaps (Lielacher, 2022).

Some financial institutions are acquiring integrated solutions instead of building a crypto assets infrastructure from scratch. A straightforward option is to provide crypto-based funds. These funds do not provide all the advantages of their underlying crypto assets. However, procuring such a product from an asset manager or hedge fund and delivering it to consumers is a straightforward approach to join the crypto assets market while avoiding a significant amount of strain (Avaloq Evolution AG, 2022, p. 8 - 12).

Another interesting approach is the use of crypto assets ETPs (Exchange Traded Products). ETPs follow underlying securities, an index, or other financial instruments. Akin to stocks, they trade on exchanges, so their prices might vary throughout the day. The underlying assets supporting crypto ETPs are crypto assets. The advantages of crypto assets ETPs include transparency, liquidity, exchange listing, and product standardization. Additionally, crypto ETPs enable the establishment of crypto indexes, allowing investors to invest thematically and in many asset classes with a single instrument. Crypto ETPs have the potential to expand the crypto universe by providing institutional-class custody solutions for investors, easier trading incorporated into conventional brokerage, and a broader range of more sophisticated market participants entering the ecosystem for these products (Abner, 2019, p. 1 - 4). In February 2022, there were 73 crypto ETPs in Europe with USD 7 billion in assets, representing 57% of the global crypto ETP market (Akhtar, 2022).

## 2.8. Interim Summary

In summary, based on the literature review, the Swiss wealth management sector is a crucial industry for Switzerland, and numerous changes are occurring in this industry as a result of multiple factors, including the emergence of new technologies such as crypto assets. Moreover, crypto assets are part of an innovative ecosystem that is rapidly developing, and it is questionable whether the crypto assets ecosystem is or will be included in the client offerings of Swiss wealth managers. In addition, there is a large debate regarding the crypto assets value proposition and regularity, as well as how they should be integrated into the Swiss wealth management client service.

Consequently, the purpose of this study is to determine the extent to which Swiss institutions offer crypto assets to their clients, the primary reasons why Swiss wealth managers provide crypto asset investment solutions to their clients, and the reasons why Swiss wealth managers do not offer crypto assets to their clients, as well as the circumstances and scenarios under which Swiss private banks that do not offer crypto would change their positioning. In addition, this research will attempt to discover if Swiss wealth managers from banks that do not offer crypto asset solutions to clients view their respective banks' position as a competitive disadvantage.

Likewise, researchers observed that crypto is a wealth-driving force and that the demand for crypto assets has increased in recent years. Consequently, the objective of this study is also to comprehend the client demand for the assets in this emerging ecosystem by assessing if Swiss wealth managers have experienced an increase in this demand and from what types of customers this demand originates. For example, what are the location, level of wealth, and demographics of the customers that inquire about this asset class. In addition, this article seeks to comprehend clients' reactions to the price decline of crypto assets in the current market environment and the benefits of investing in crypto assets through a financial institution instead of a direct wallet.

In addition, crypto assets created a new ecosystem comprised of distinct classes, initiatives, and product structures with unique value propositions. There are different ways to include these types of assets into a standard offering, such as with the assistance of custodians

or in collaboration with crypto banks. Therefore, the goal of this study is to discover which crypto asset class or classes Swiss wealth managers believe offer the most compelling value propositions for them and their clients, as well as how these assets are or will be included in their offerings. Moreover, there are investment vehicles such as crypto exchange-traded products (crypto ETPs) and crypto funds that serve as a way to provide crypto assets investments to traditional investors; thereby, this paper also seeks to understand if and how Swiss wealth managers utilize these types of products and if clients have an interest in them.

Lastly, the purpose of this research is also to gain an understanding of the point of view held by Swiss wealth managers regarding the potential institutionalization of crypto assets in the near future.

### 3. Qualitative Methodology

This section describes the methodology used to structure the expert interviews, the qualitative analysis procedure, list the questions that will be posed during the interviews, and provide details of the interviewees.

#### 3.1. Grounded Theory Approach

The grounded theory approach will be utilized for the interview process. The overall aim of grounded theory is to construct a theory based on participants' own experiences and viewpoints (Loop, n.d.). In addition, the grounded theory approach tries to construct a theory through the systematic collection and comparative analysis of qualitative data (Chun Tie et al., 2019, p. 1). The main goal of this theory is to determine an explanation for the research questions by identifying important ideas (concepts, strata, and issues) and then defining the connection between these aspects inside the research investigation (Toloie-Eshlaghy et al., 2011, p. 10). The grounded theory suggests a five-step process as shown in Table 7.

**Table 7: The Analytical Stages of the Grounded Theory Process**

1. Research proposal
2. Data collection
3. Regulating the data
4. Analysing the data
5. Comparing the content

*Note.* Own illustration. Source: (Toloie-Eshlaghy et al., 2011, p. 11)

The fundamental focus of the research proposal step is to choose the strategy and the research question (Toloie-Eshlaghy et al., 2011, p. 8 - 10), defined in the first section of this paper.

Data collection comprises conducting interviews with selected experts using theoretical sampling, which means participants are selected with the assumption that they will be able to provide the necessary information to answer the research question (Loop, n.d.). In

addition, Glaser and Strauss's study indicates that the primary criterion for selecting interviewees for the comparison groups for theory building is their theoretical significance in terms of extending the range of perspectives on the qualitative data of the investigated subject (Glaser & Strauss, 1967, p. 49 - 60). Consequently, the study seeks to conduct ten interviews with specialists from two separate groups of Swiss wealth managers. To provide a comprehensive overview of the various perspectives on the topic, the first group will consist of experts from organizations that currently offer crypto asset solutions to their clients. The first group will focus on Swiss wealth managers that work with banks that currently provide their clients with, for instance, crypto assets advisory services, the possibility of opening a crypto wallet, or custody services. The second group will consist of experts from organizations that do not offer crypto asset solutions to their clients. This second group will focus on Swiss wealth managers that work for banks that do not provide access to crypto wallets, advisory services, or custody of crypto assets to their clients.

Regulating the data is accomplished by defining processes and structuring all appropriate data, such as timeframes, consent documents and transcripts. Regulating the data stage serves as a precursor to the data analysis (Toloie-Eshlaghy et al., 2011, p. 12).

The grounded theory analysis method involves developing ideas and concepts, summarizing material, linking expressions from multiple interviewees, and combining concepts (Toloie-Eshlaghy et al., 2011, p. 8). The first step in the analysis stage is called open coding, which is a technique of assessing textual information. Open coding is achieved by segmenting data into meaningful phrases (Flick, 2009). Open coding can begin with a complete transcription of an interview, followed by text analysis to identify important terms or phrases that connect the participant's interview to the topic under investigation, highlighting the key concepts and phrases on the transcripts (Moghaddam, 2006). The open coding was developed utilizing Appendices III to XII as a guide.

Following the development of open coding, axial coding is established. In contrast to open coding, which involves the selection of textual content, axial coding begins with the building of linkages between the information provided by expert interviews into the appropriate categories and questions. The axial coding can be found in Section 4 of this study, in which the findings for each interview topic are provided in their respective categories. The

final phase of grounded theory analysis is selective coding, in which the categories and findings from each expert are linked to the research question (How To Do Open, Axial, & Selective Coding in Grounded Theory, n.d.). The selective coding facilitates the development of this paper's discussion of findings (Section 5.1).

The final stage is a comparison of the analysed frameworks to create and present the theoretical conclusion for the research question (Toloie-Eshlaghy et al., 2011, p. 12). The final stage can be found on Section 5.2.

### **3.2. Interview Structure**

There are three types of interviews: structured, semi-structured and unstructured interviews. For the purpose of this paper, semi-structured interviews will be conducted. Structured interviews include preparation and creation of questions in advance, and each applicant is asked the same questions throughout an identical sequence. Unstructured interviews are those in which questions are not prepared in advance and the interviewer asks spontaneous questions which emerge during a free-flowing dialogue. This implies that each applicant is given a unique set of questions. Semi-structured interviews include elements of structured and unstructured interviews. They include both prepared questions as well as individual dialogues between the interviewer and interviewee (Kallio et al., 2016). A semi-structured interview is one where the interviewer asks a predefined question, but is still free to ask unstructured questions, as needed. As semi-structured interviews contain both structured and unstructured elements, it enables an objective comparison of candidates while also allowing for spontaneous exploration of issues important to that particular interview partner (The Difference Between Structured, Unstructured & Semi-Structured Interviews, n.d.).

Each interviewee will be provided with a consent form to sign and return, which will require interviewees to choose whether they wish their name and organization to be shown in the paper. In addition, according to the interviewee's preference, the interviews will be recorded via audio if the interview is conducted in person, or by video if the interview is conducted remotely. The interviews' transcripts are found in Appendices III to XIII.

Furthermore, the interviews will be divided into two groups, as indicated in Table 8, each group will get a unique series of questions, with Group 1 focused on experts from firms that currently offer investment solutions for crypto assets to their clients. Group 1 will concentrate on Swiss wealth managers who operate with banks who presently offer their clients advisory services for crypto assets, the option to open a crypto wallet, or custody services. Group 2 will be composed of experts from firms who do not offer crypto asset solutions to their customers. Group 2 will focus on Swiss wealth managers who work for institutions that do not offer customers access to crypto wallets, crypto asset advisory services, or crypto assets custody.

**Table 8: Interviewees Groups Division**

<b>Group 1</b>	Experts from organizations that <i>currently offer</i> crypto asset solutions to their clients
<b>Group 2</b>	Experts from organizations that <i>do not currently offer</i> crypto asset solutions to their clients

*Note.* Own illustration

### 3.3. Interview Questions

This section contains the interview questions for Groups 1 and 2. Twelve questions will be presented to experts in Group 1 (Table 9), and twelve questions will be presented to experts in Group 2 (Table 10).

**Table 9: Interview questions Group 1**

1. To what extent does the bank for which you currently work provide crypto asset solutions to clients? (Including internal capabilities, partnerships, etc.)
2. What are the motivations behind your bank's commitment to provide crypto asset investing solutions to clients?
3. Do you observe a rise in customer demand for crypto assets over the last several years?



4. Do you see a pattern in terms of age, geography, or wealth level among customers that look for crypto asset solutions?
5. What are the advantages of investing in crypto assets via a financial institution from the client's perspective? Why not use a wallet directly?
6. How did your bank and its customers respond to the most recent crypto assets crash?
7. Based on the numerous crypto asset classes and the varying regulations applicable to each crypto asset class, which crypto asset class(es) are considered most likely to fulfil the demand of Swiss wealth management clients? (Examples include cryptocurrencies, stablecoins, NFTs, and utility tokens).
8. How does your bank include digital assets into its conventional offering? (By offering advice, access, and tokenization, etc.)
9. As an investment vehicle, does your bank use pooled vehicles such as crypto funds or crypto ETPs (Exchange Traded Products)?
10. Does your bank have a partnership with other players to facilitate the transfer of digital assets to fiat money or to store private keys?
11. Do you see (further) institutionalization of crypto assets and how?
12. What kind of future outcomes do you expect from the institutionalization of crypto assets?

*Note.* Own illustration

**Table 10: Interview questions Group 2**

1. To what extent does the bank for which you currently work provide crypto asset solutions to clients? (Including internal capabilities, partnerships, etc.)
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2. What is the rationale behind your bank's unwillingness to provide crypto assets investing solutions to clients?
3. Do you observe a rise in customer demand for crypto assets over the last several years?
4. Do you think your bank is losing clients for not offering crypto asset solutions to them?
5. Do you see a pattern in terms of age, geography, or income level among customers that look for crypto asset solutions?
6. Do you believe that, with the institutionalization of crypto assets, your bank's unwillingness to provide crypto asset solutions might result in a competitive disadvantage?
7. How did your bank react to the recent drop of crypto assets? Did it raise the hesitancy to give customers with crypto asset solutions?
8. What prerequisites, such as market volatility, legislation, industry maturity, and institutionalization, would be necessary for your bank to begin rethinking its policy of not offering crypto assets?
9. Based on the numerous crypto asset classes and the varying regulations applicable to each crypto asset class, which crypto asset class(es) are considered most likely to fulfil the demand of Swiss wealth management clients? (Examples include cryptocurrencies, stablecoins, NFTs, and utility tokens)
10. Is there an investment vehicle, such as crypto funds or crypto ETPs (Exchange Traded Products), that you believe would be interesting for your bank to provide if it decided to undertake an initiative to offer crypto asset solutions to its clients? In addition, do you identify any possible partners, such as Sygnum Bank, SEBA Bank,

or crypto custodians, that are aligned with your bank's needs and might assist your bank in launching the crypto offering?
11. Do you see (further) institutionalization of crypto assets and how?
12. What kind of future outcomes do you expect from the institutionalization of crypto assets?

*Note.* Own illustration

### 3.4. Background Information about the Interview Partners

Wealth managers of large and internationally active Swiss banks will be interviewed. A summary of the experts is provided in Table 11. In addition, transcripts of the expert interviews are found in Appendices III to XII.

**Table 11: Overview of Interview Partners Group 1**

<b>Name</b>	<b>Position</b>	<b>Bank</b>	<b>Years of experience in Wealth Management</b>
Dr. Stephan A. Zwahlen	Chief Executive Officer (CEO)	Maerki Baumann & Co. AG	24 years
Interviewee 1 (E1)	Private Wealth Manager	Independent Asset Manager A	15 years
Interviewee 2 (E2)	Private Wealth Manager	Bank Y	7 years
Sven Sprunger	Account Manager, Associate Director,	Julius Baer	11 years

	Private Banking Greece/Cyprus		
Marva Harmann Safa	Wealth Management Director	Bank C	14 years

*Note.* Own illustration

**Table 12: Overview of Interview Partners Group 2**

<b>Name</b>	<b>Position</b>	<b>Bank</b>	<b>Years of experience in Wealth Management</b>
Dejan Jakovljevic	Relationship Manager (Associate Director)	UBS	15 years
Interviewee 3 (E3)	Wealth Manager (HNWI Arabian Gulf)	Bank X	11 years
Interviewee 4 (E4)	Wealth Manager	Bank Z	8 years
Interviewee 5 (E5)	Wealth Manager	Bank B	10 years
Thiago Wechsler Louro	Vice President International Private Banker	EFG Bank	24 years

*Note.* Own illustration

Dr. Stephan A. Zwahlen was selected due to his 24 years of expertise in the Swiss private banking industry and his position as Chief Executive Officer (CEO). In addition, Dr.

Stephan A. Zwahlen has a solid knowledge about crypto assets, and the bank for which he works, Maerki Baumann AG, was one of the first Swiss institutions to offer customers solutions involving crypto assets.

Interviewee 1 (E1) was selected based on his or her 15 years of experience in the Swiss private banking industry, as well as the fact that he or she currently works for an independent asset manager. Therefore, it is important to understand the perspective of this type of firm, which typically has a more flexible offering structure and has strong connections to private banks.

Interviewee 2 (E2) was selected for this research due to his or her 7 years of experience at a major Swiss Bank in various international markets. Furthermore, E2 was chosen to represent the millennial generation in the Swiss private banking industry. E2 is relatively younger compared to the other interviewees, but still has many years of experience in the banking industry, is well informed, and therefore has the necessary knowledge to provide relevant feedback.

The selection of Sven Sprunger is based on his 11 years of experience and the fact that he was working at Julius Baer when the bank started offering crypto services to their clients. Therefore, Mr. Sprunger has the knowledge to explain the steps that were taken to start with the offering and how this affected Julius Baer, as well as, how the bank communicated with its personnel, and how they worked to increase people's knowledge and education regarding crypto assets.

Ms. Marva Harmann Safa was selected for the interview due to her fourteen years of experience in the Swiss wealth management industry and her expertise in the digital economy and technology economy.

Dejan Jakovljevic was chosen due to his 15 years of expertise in the wealth management industry at one of Switzerland's largest banks and his pursuit of a CCFE (Certified Crypto Finance Expert). Consequently, it is crucial to learn from a crypto and wealth management specialist who can comprehend the viewpoints of both the traditional bank wealth management industry and the crypto ecosystem.

Interviewee 3 (E3) was chosen due to his or her 11 years of experience at a major Swiss bank as well as his or her expertise in wealth management in a variety of foreign markets. Therefore, it is intriguing to comprehend the viewpoint of a Swiss wealth manager with such an international outlook.

Interviewee 4 (E4) was selected due to his or her 8 years of expertise in a major Swiss bank. In addition, E4 was selected to represent the millennial generation in the Swiss private banking. E4 is relatively younger than the other interviewees but has many years of experience in the financial business and has the requisite expertise to offer pertinent insights.

Interviewee 5 (E5) was selected due to his or her 10 years of experience in a major Swiss bank. In addition, although E5 is currently a Swiss wealth manager, in the past he or she worked as an alternative investment analyst; as the Swiss banking industry views crypto assets as an alternative investment, it is interesting to hear E5's perspective.

Mr. Thiago Wechsler Louro was selected based on his 24 years of experience in the wealth management industry, his expertise in international tax planning, and his experience advising European and Latin American customers on international structure and investments.

## **4. Results from the interviews**

### **4.1. Interviews Findings from organizations that currently offer crypto asset solutions to their clients**

This section will present findings pertaining to Swiss wealth managers employed by banks that currently offer crypto assets investment solutions to clients. The objective is to discover the extent of their offering structure, the rationale for their existing bank's position, their perspectives on client demand, which crypto asset classes they believe will fulfil their needs, and their views on the institutionalization of crypto assets.

#### **4.1.1. The extent of private banks' crypto asset solutions**

In order to introduce its crypto offering, Maerki Baumann implemented a three-step offering integration strategy. The first step was to offer corporate accounts to start-ups involved in blockchain or crypto services; the second step was to offer trading and custody of the most traded crypto assets through a partnership with a transaction partner and securities dealer called Crypto Finance AG; and the third step was to launch crypto assets advisory and discretionary services (Appendix VI, lines 10 - 20). In addition, Dr. Stephan A. Zwahlen mentioned that there are multiple ways to invest in crypto assets through Maerki Baumann, in which clients can have a wallet in addition to their traditional custody account and simply allocate a certain amount of money and then hold crypto assets in the wallet. Maerki Baumann also offers clients the option to open an account with only a crypto wallet, meaning that the client opening process is much easier than opening a normal account, but the client can only hold crypto assets in this account. This was decided since there are clients who want to invest in crypto assets but already have a relationship manager at another bank and do not want to go through the process of changing banks. With this offering, these clients become closer to Maerki Baumann, at first just with the crypto wallet account, and later on, the client can open a traditional account if they like Maerki Baumann's services. Regarding Maerki Baumann's discretionary mandate side, the bank offers a crypto module that is part of the bank's modular investment solutions. This crypto module has a segregated account, and the bank discretionarily manages the crypto portfolio. There are currently around seven different crypto currencies involved in this module, and the minimum investment in this module is one hundred

thousand Swiss francs, which means that the client must have a minimum of five million Swiss francs in assets with Maerki Baumann to be eligible to engage in this mandate. Maerki Baumann knows that is quite a high threshold for many clients. So, the bank decided to provide an additional solution that offers an actively managed certificate on the same investment, and that is available starting from ten thousand Swiss francs (Appendix VI, lines 192 - 216).

E1 stated that since he or she is employed by an independent asset management, the organization has a more open infrastructure for crypto investments. Therefore, Independent Asset Manager A uses products supplied by a number of partner banks or product providers. As a consequence, Independent Asset Manager A supplies crypto assets to its customers through single asset trackers or indexes offered by, for example, 21shares or SEBA Bank. If the customer wants to create a direct wallet for trading crypto assets, Independent Asset Manager A will assist them to do the custody via a Swiss crypto bank (Appendix VIII, lines 22 - 33).

E2 stated that Bank Y started providing alternative mandates regarding crypto assets via a cooperation with SEBA Bank, where SEBA Bank is responsible for hot or cold crypto assets storage custody. Furthermore, Bank Y offers clients a crypto asset advisory service (Appendix VII, lines 14 - 19). In addition, E2 mentioned that Bank Y provides a variety of crypto assets chosen based on their liquidity and volume (Appendix VI, lines 28 - 32).

Mr. Sven Sprunger stated that approximately one and a half years ago, Julius Baer established a partnership with SEBA Bank in order to offer crypto services to clients who wish to invest in crypto assets. Firstly, Julius Baer provided an account with SEBA Bank where it was feasible to do cold storage and hot storage, which was advantageous for Julius Baer's clients. However, the coins or assets that could be traded via SEBA were limited, consisting of approximately six crypto assets. Furthermore, during this period, this offering was utilized by ultra-high or extremely ultra-high net worth clients who had significant trading volume and were eligible to invest in these types of assets. Secondly, with the support from SEBA, Julius Baer was able to offer their own crypto assets trading, where it was possible to trade via their own platform. However, due to set-up constraints requiring clients to have a segregated relationship with a different advisor in order to trade these assets, this offering did not have significant demand. In addition, Mr. Sven Sprunger noted that Julius Baer's research and



education offerings to clients and employees are a significant differentiator from other banks (Appendix IX, lines 18 - 85).

Ms. Marva Harmann Safa stated that Bank C is currently developing a solution in collaboration with Sygnum Bank that would allow Bank C to provide its Swiss customers with a digital wallet. However, due to the rules of offshore nations, this service is presently only provided to Swiss clients. Aside from that, Ms. Marva Harmann Safa mentioned that Bank C issues a Bitcoin certificate (Appendix X, lines 22 - 27, 93).

#### **4.1.2. Rationale behind the private bank's commitment to provide crypto asset investing solutions to clients**

Dr. Stephan A. Zwahlen explained that Maerki Baumann's decision to start offering crypto assets was motivated by two factors. First, the customer demand was analysed to determine the clients' needs. One need was for start-ups involved in blockchain or crypto business, the Crypto Valley emerged, and many companies had to go to Lichtenstein to open an account. These companies were looking for an account to do fiat transactions, payments for employees, and investments in Swiss francs or euros, but they could not obtain a bank account in Switzerland since the majority of Swiss banks were not prepared to provide this service. Therefore, this type of service was lacking in Switzerland, and Maerki Baumann recognized an opportunity. The second motivation was the belief that crypto assets will become an integral component of professional investment advice and asset management. Moreover, Maerki Baumann recognizes the potential for digitalized tokenized traditional assets, which could be very interesting for both clients and banks. For clients, because they can invest in asset classes that were previously inaccessible, and also due to the fact that with this technology clients can also invest in fractions and not only in the whole pieces of the respective investments. From a bank's perspective, that is interesting because it can significantly expand the investment universe and, therefore, increase the return potential of a bank or a financial institution (Appendix VI, lines 23 - 43). Dr. Stephan mentioned that the decision to include crypto assets in their offering was also influenced by the macroeconomic environment, as many private clients were seeking additional investment opportunities, particularly at a time when interest rates were extremely low and traditional asset classes, such as real estate and equity, were overpriced. Moreover, Maerki Baumann entered this new market with the belief that it would

bring agility and flexibility to the business culture, making Maerki Baumann more proactive than the typical Swiss private bank (Appendix VI, lines 161 - 188).

E2 indicated that one of the reasons for Bank Y's decision to start offering crypto assets to their customers was the significant customer demand during the crypto assets hype phase. E2 mentioned that for Bank Y to remain competitive, they needed to offer crypto asset investment solutions to their clients (Appendix VII, lines 21 – 46).

Mr. Sven Sprunger stated that the motive behind the crypto assets offering by Julius Baer is acceptability. Julius Baer was required to acknowledge the emergence of new technology and the resulting client demands. In addition, Mr. Sven Sprunger noted that this was one of the reasons why Julius Baer invested in research and education, as clients required a fundamental understanding of how this new asset class can be utilized to construct a portfolio and to what extent they have a beneficial impact on portfolio creation (Appendix IX, lines 90 – 99).

Ms. Marva Harmann Safa mentioned that the transformation of a new generation of customers, who are digital natives and have exposure to technology, is the driving force behind Bank C's commitment to offering crypto assets investing solutions to customers. Consequently, Ms. Marva Harmann Safa indicated that Bank C wants to position itself with a solid record for the new generation of clients (Appendix X, lines 31 - 37).

#### **4.1.3. Client demand for Crypto Assets**

Dr. Stephan A. Zwahlen acknowledged that the younger generation, who are digital natives and have a closer connection to technology, have a greater demand for crypto assets. Furthermore, Dr. Stephan stated that Maerki Baumann's crypto assets strategy was the only initiative that was successful in bringing the bank closer to the wealth of the younger generation. Moreover, Dr. Stephan A. Zwahlen mentioned that it has also been observed that older investors are interested in crypto assets. Once Maerki Baumann began the crypto assets offering, conservative clients had several questions about it. However, the bank made it clear to these clients that what Maerki Baumann was doing was not high risk; rather, it was solely an additional service the bank was providing. Therefore, these customers were not frightened by the offer but rather interested in it. He also discussed the perspectives of other ecosystem

participants, such as politicians, regulators, and financial institutions. He stated that the financial industry is slow to accept crypto assets due to a lack of knowledge and education, as well as to the misconception that the crypto industry intends to eliminate institutions. Regarding politicians, their adoption of crypto assets was relatively favourable, and politicians were proactive in implementing the Swiss DLT law. Regarding regulators, Dr. Stephan A. Zwahlen viewed them as neutral to slightly positive and prepared to acquire the necessary information (Appendix VI, lines 57 – 95).

E1 stated that the most traditional wealthy clients are older individuals. However, due to E1's customer niche, his or her consumers are younger, and E1 has never had a situation in which a client had approached expressing interest in the topic; rather, the topic was brought up by E1 with clients in order to evaluate their opinions. Moreover, E1 stated that the clients' responses varied, with some stating that they would not engage in this type of assets, some having heard about it from their children, and others being interested and seeing potential but lacking the skills to invest. Furthermore, the clients from the Independent Asset Manager A who purchased crypto assets obtained small applications and tracker certificates from the most popular and liquid crypto assets (Appendix VIII, lines 38 - 60).

E2 observed that the demand for crypto assets is broader among younger, more internationally oriented individuals, and rarely among traditional Swiss investors over the age of sixty. In addition, E2 stated that he or she had not noticed an increase in demand lately, stating that this was due to the current state of the financial markets in general. However, Bank Y has clients who have engaged in crypto assets and continue to do so (Appendix VII, lines 36 – 48). Furthermore, E2 noted that the perception of Bank Y within the Swiss financial industry, internationally, and among the crypto community has changed since the bank started offering crypto assets and established a cooperation with SEBA Bank (Appendix VII, lines 59 - 62).

Mr. Sven Sprunger stated that the demand was higher during the hype phase. And regarding the pattern among clients who ask for crypto assets, the clients he expected to ask for crypto assets, never did it. In his opinion, this was because they have the required knowledge to do it themselves without the assistance of a financial institution. Clients who did not have the necessary technical knowledge to open an account on their own sought Julius

Baer to do so, and Mr. Sven Sprunger believes that is the niche in which Julius Baer can position itself since private banks lack the cost-competitiveness to compete with players such as Binance and Coinbase (Appendix IX, lines 106 - 139).

Ms. Marva Harmann Safa stated that there has been an increase in demand for crypto assets. Furthermore, she stated that Eastern European nations have adopted crypto assets sooner than Switzerland, which is moving in that direction but at a slower rate. In addition, Ms. Marva Harmann Safa highlighted that the Swiss financial institutions are taking the necessary steps toward crypto assets and blockchain technology in order to maintain their competitiveness (Appendix X, lines 42 - 50).

#### **4.1.4. Client's response to the recent crypto crash**

Dr. Stephan A. Zwahlen observed that the response from clients to the recent crash of crypto assets was extremely limited since Maerki Baumann has a risk-controlled approach regarding crypto assets. Furthermore, regarding corporate clients from businesses in the crypto industry, one or two had to leave the market since they no longer had a solid foundation for survival, but Maerki Baumann continues to acquire one new crypto-related corporate client per day (Appendix VI, lines 143 - 158).

Regarding the client's reaction to the recent crypto assets fall, E1 indicated that the majority of clients who invested in crypto assets were aware that it is a young and volatile asset class, thus this crash, or from E1's perspective, a price correction, was expected. In addition, E1 noted that traditional asset classes experienced a hard market environment, and what is observed in the crypto sector is a continuation of what is happening in the traditional market environment. Furthermore, E1 explained that clients are not liquidating their crypto assets holdings since crypto assets represent a small fraction of their portfolios and the current market decline is not an appropriate time to liquidate them (Appendix VIII, lines 69 - 78).

E2 explained that investors in the crypto assets market are more risk-tolerant. Therefore, this type of investor, which typically has confidence in the technology and believes that crypto assets will grow in significance, normally wished to increase their crypto assets exposure. However, there is this segment of the investor base who desires to increase their exposure, since they consider the current low prices as an interesting entry point, and there is

another investor base who was in shock by the current crypto crash and currently wants to wait and liquidate all their crypto asset holdings (Appendix VII, lines 73 - 84).

Mr. Sven Sprunger mentioned that clients reacted differently to the crypto downturn. He noted that since clients typically hold a small exposure in crypto assets, less than 3% of their portfolio, they are primarily waiting for a price increase in order to liquidate their holdings. In addition, Mr. Sven Sprunger emphasized that certain clients are purchasing more; for instance, some clients may add five thousand Swiss francs for every 10% average decline in the values of crypto assets. Furthermore, Mr. Sven Sprunger indicated that clients who did not possess crypto assets did not invest in this asset class under the current market conditions. Additionally, Mr. Sven Sprunger mentions that he recognizes an emotional approach in the investment behaviour of crypto assets, in which investors typically do not enter the market during bear markets, but once the prices begin to rise, they regret not having invested earlier and wish to invest (Appendix IX, lines 199 - 212).

Ms. Marva Harmann Safa indicated that some investors exited the crypto market before the crash because they had market expertise and could anticipate the situation; clients who did not sell their crypto assets prior to the fall are still holding their positions. Ms. Marva Harmann Safa concluded by stating that despite the market decline, consumers still have confidence in crypto assets (Appendix X, lines 67 - 72).

#### **4.1.5. Advantages of investing in crypto assets via a financial institution**

Dr. Stephan A. Zwahlen stated that there are multiple reasons why a bank's crypto asset services are advantageous. First, Dr. Stephan A. Zwahlen highlighted security as an advantage of Maerki Baumann's service, as it is backed by a regulated bank and a security dealer. Additionally, the bank's crypto offering is of interest to those who do not have the skills to invest in crypto assets on their own, but wish to do so, and therefore seek a trusted party. Moreover, investors with a considerable amount of capital would frequently prefer a bank's offering since they prefer to interact with a regulated organization that they are familiar with rather than doing it directly. Furthermore, an offering via a traditional institution is advantageous for younger clients, since the younger generation frequently does not have a clear solution for the case of their death. For instance, no one knows that they would own a

significant amount of crypto assets because they have their own key, and it is not written in the bank's asset management statement. Moreover, clients who hold big quantities of crypto assets are frequently well-versed in the crypto ecosystem but not in the management of such large amounts of wealth, and many of these wallets are quite volatile. Therefore, they frequently seek to diversify their assets and, to do so, they require a partner at the intersection of the digital world and the traditional financial system (Appendix VI, lines 98 - 134). Dr. Stephan A. Zwahlen also recognized a motivation for opening an account with Maerki Baumann to deal with crypto assets since clients must pay taxes based on their wealth, and as the wealth coming from crypto assets increased, clients searched Maerki Baumann for assistance with their wealth-related taxes (Appendix VI, lines 136 - 139).

Regarding the advantages of investing in crypto assets through an institution, E1 stated that the most traditional clients have their investment portfolio with a bank in which they've probably been working for a long time, so it's easier for them to continue with the investment through them or just purchasing a tracker certificate and adding it to an existing portfolio, rather than opening a new wallet. Many traditional investors lack the technological expertise to complete the entire procedure on their own. Moreover, E1 emphasizes the benefit of having an overview of how crypto assets investments interact with the entire portfolio, as opposed to having a separate account for this type of investment. Furthermore, E1 stated that for traditional investors, the investment in crypto assets is often small, so it makes sense to open through an intermediary; however, if the investor wishes to invest significant amounts, it would be cost-effective to initiate organizing the entire direct set up of custody (Appendix VIII, lines 81 - 92).

E2 indicated that clients choose to invest in crypto assets through an institution because of the facility involved since opening a wallet directly with a crypto exchange is challenging if the client does not have the necessary knowledge. Clients are usually willing to pay extra to open an account with an institution due to the security and trust involved (Appendix VII, lines 66 - 71).

Mr. Sven Sprunger remarked that the advantage of trading crypto assets through a financial institution is due to the facility, as if the investor conducted so through an exchange directly, he or she would not be able to call in the event of a technical issue (Appendix IX,

lines 131 - 136). Mr. Sven Sprunger noted that the investor's familiarity with the investment process has a role since the investor knows what to expect. Furthermore, if something goes wrong with the investment, the bank will also bear responsibility because the bank is the responsible party for asset storage, which does not happen when the investment is made directly through an exchange such as Binance or Coinbase; consequently, investing in crypto assets through an institution provides the investor with more trust and security (Appendix IX, lines 140 - 152).

Ms. Marva Harmann Safa stated that one of the advantages of investing in crypto assets through a financial institution is the investor's ability to speak directly with a banker in the event of a problem; therefore, Ms. Marva Harmann Safa stated that even though other exchanges are less expensive, they pose a greater risk to customers (Appendix X, lines 60 - 64).

#### **4.1.6. Private bank's view of crypto asset classes**

Dr. Stephan A. Zwahlen believes tokenized assets will grow in significance. Dr. Stephan A. Zwahlen highlighted that currently, Maerki Baumann does not offer tokenized assets to its clients but that it is just a matter of time before the bank starts to do so since Maerki Baumann already has a system in place for the custody of tokens in the bank, but currently, the bank must assess each case individually. In addition, Maerki Baumann possesses a substantial amount of Bitcoin and Ethereum, the two cryptocurrencies with the largest market capitalization (Appendix VI, lines 47 - 54). Furthermore, Dr. Stephan A. Zwahlen stated that he believes all tokens and NFTs have growth potential in the future, but that he only sees the potential of these asset classes when an established institution is involved. As a result, Dr. Stephan A. Zwahlen believes that institutions that will be able to take custody of NFTs, for example, may have an advantage over crypto companies that are engaged in unregulated activities (Appendix VI, lines 250 - 253).

E1 indicated that he or she believes the crypto asset classes that will satisfy the requirements of wealth managers are well-established cryptocurrencies such as Bitcoin or Ethereum, or crypto assets that generate some type of cash flow, such as through staking or other services. E1 does not believe in cryptocurrencies such as Ripple and Shiba since, in E1's

view, these cryptocurrencies provide no value other than speculation (Appendix VIII, lines 97 - 101). In addition, E1 stated that he believes crypto assets that generate cash flows or provide services that might lead to an asset's growth will be more stable and survive in the crypto ecosystem. Moreover, E1 believes that investing in an NFT is similar to purchasing a work of art, and art is an asset class that has historically been more exotic and only invested in by family offices or large institutional clients who may have a passion for it. However, investing in art with the intention of generating financial returns is difficult, and E1 believes the same happens with NFTs (Appendix VIII, lines 103 - 116). Moreover, E1 stated that he or she sees potential in the investment in scarcity crypto assets, such as Bitcoin, which can be used to store value, perhaps to a certain extent as an alternative to gold, where the investor may not have the cash flow, but there is a store of value because it generates scarcity. Furthermore, E1 perceives no investment potential in stablecoins (Appendix VIII, lines 119 - 124).

E2 indicated that cryptocurrencies are the crypto asset class that he expects could fulfil the demand of wealth managers, as this type of crypto asset class has demonstrated the potential to improve the risk-return profile of a diversified portfolio (Appendix VII, lines 95 - 98).

Mr. Sven Sprunger observed that the crypto asset classes that are the most well-established are the ones that he considers having the most potential to meet the demand from Swiss wealth managers. He made this observation because he has never witnessed any of his clients investing in anything other than Bitcoin or Ethereum, and the clients who have inquired about unknown tokens, typically do so from a position of speculation (Appendix IX, lines 156 - 170). Additionally, Mr. Sprunger believes that stablecoins have proven to have no value (Appendix IX, lines 176 - 184).

Ms. Marva Harmann Safa stated that cryptocurrencies, such as Ethereum and Bitcoin, are currently the crypto assets most likely to meet the needs of Swiss wealth managers' clients (Appendix X, lines 77 - 78).



#### **4.1.7. Investment vehicles for the inclusion of crypto assets in the client's portfolio**

Dr. Stephan A. Zwahlen mentioned that before the execution of their present crypto asset offering strategy, crypto investment vehicles were investigated, but Maerki Baumann currently does not utilize them (Appendix VI, lines 192 - 195).

According to E1, the Independent Asset Manager A has utilized tracker certificates on single crypto assets or baskets of crypto assets provided by, for example, 21shares, SEBA Bank, and Sygnum Bank. E1 also mentioned the use of an index created by 21shares and Sygnum Bank in collaboration (Appendix VIII, lines 20 - 28). In addition, E1 mentioned the utilization of the crypto assets fund called Swiss REX (Appendix VIII, lines 58 - 64).

Regarding investment vehicles that allow the inclusion of crypto assets in a client's portfolio, E2 indicated that Bank Y provides its investors with crypto assets ETPs, as well as crypto asset trackers and certificates, which can be traded via a regulated exchange. 21shares is an example of a third-party company that provides this type of product (Appendix VI, lines 28 - 32).

Mr. Sven Sprunger mentioned that the current setup by Julius Baer requires the client who wants to invest in crypto assets to open an additional banking relationship in order to open an account with SEBA Bank and receive crypto assets advisory services. Therefore, Mr. Sven Sprunger believes that if an investor wants to invest less than two hundred thousand Swiss francs in crypto assets, the investor typically prefers to invest in them through a crypto exchange-traded product (ETP) to avoid the entire process of opening an additional banking relationship (Appendix IX, lines 112 - 118). Mr. Sven Sprunger stated, however, that as he focuses on the markets in Greece and Cyprus, he cannot actively recommend or promote crypto assets ETPs or crypto assets funds to his client base due to the regulations in these territories; therefore, to the transaction be made, the request for this type of investment must emerge from the clients (Appendix IX, lines 190 - 196).

Ms. Marva Harmann Safa stated that the investment vehicles she employs are Bitcoin certificates issued by Bank C (Appendix X, lines 77 - 78).

#### **4.1.8. Institutionalization of crypto assets**

Dr. Stephan A. Zwahlen stated that the institutionalization of crypto assets is necessary and that numerous parties, including banks, crypto firms, government institutions, and regulators, are working on it as well as taking the necessary steps for this to occur. Dr. Stephan A. Zwahlen feels that the first step in the institutionalization of crypto assets would be regulation. Furthermore, the concept behind crypto assets originated with libertarians who are extremely sceptical about institutions. However, the crypto community has begun to recognize the need for regulation in economic contexts, whether in traditional banking or in the digital world. This regularization of crypto assets is a process that is currently occurring, with crypto businesses requesting licenses as security dealers. According to Dr. Stephan A. Zwahlen, the second phase in the institutionalization of crypto assets is research and education. There are now more research facilities, but the methodologies and time series of data behind the research are still limited. The third phase in the institutionalization of crypto assets, according to Dr. Stephan A. Zwahlen, is the establishment of a secondary market to build a regulated foundation for the trading practices of tokenized assets (Appendix VI, lines 224 - 242). Dr. Stephan A. Zwahlen concluded by stating that Maerki Baumann positions itself as an asset manager that bridges the gap between the traditional financial world and the digital era, and that Maerki Baumann collaborates with partners in this digital world. Therefore, SEBA Bank, Bitcoin Suisse, and Crypto Finance are not direct competitors, but rather possible business partners (Appendix VI, lines 242 - 247).

E1 indicated that, from the perspective of portfolio management, any asset that can be added to a portfolio that is uncorrelated or has a low correlation to the other assets in the portfolio is an attractive case and could serve to make a portfolio overall more stable and secure. However, there is a significant correlation between crypto assets and the stock market currently. Therefore, it does not provide value from a diversification perspective, and as long as this asset class presents such high levels of volatility, it will be more difficult for institutional investors to approach such assets and systematically incorporate them into their portfolios. Moreover, E1 believes that crypto assets are currently a retail speculative product for investors that are engaged in this market and have a deep understanding of crypto assets. E1 acknowledges that institutional investors are investigating it, but the industry must mature and stabilize before this type of investor will actively engage in this class (Appendix VIII,

lines 143 - 157). Additionally, E1 remarked that the ideal scenario for institutional investors to begin investing in crypto assets would be when volatility lowers and crypto assets become more widely adopted, with a broader and more stable investor base. Furthermore, E1 believes that the current bear market will assist crypto assets in consolidating the class and visualizing which assets have investment potential (Appendix VIII, lines 162 - 173). Furthermore, E1 stated that the regulatory task performed by Europe and North America will provide investors greater confidence in investing in this sort of assets (Appendix VIII, lines 175 - 183).

Regarding the institutionalization of crypto assets, E2 mentioned the current market decline as a disadvantage, while E2 highlighted that this had occurred in traditional markets. However, crypto assets have proven to be closely connected with growth stocks, which is currently challenging the institutionalization of crypto assets. In spite of this, E2 believes that the current financial market situation might prove the value of crypto assets in the long run, given that during down markets, serious and promising projects can be distinguished from fairly weak projects, hence generating price corrections (Appendix VII, lines 106 – 112).

Mr. Sven Sprunger mentioned that due to the significant correlation between crypto assets and traditional assets, the main concept of portfolio diversification benefits from crypto assets is questioned. As a result, Mr. Sven Sprunger predicts that as long as the correlation between crypto assets and traditional assets remains high, further institutionalization of crypto assets will not develop (Appendix IX, lines 215 - 225).

Ms. Marva Harmann Safa remarked that political and economic conditions will influence the future institutionalization of crypto assets (Appendix X, lines 96 - 98). In addition, Ms. Marva Harmann Safa noted that a regulatory framework will impact the development of crypto assets. However, Ms. Marva Harmann Safa considers the legislation to be incompatible with the decentralization ideology behind crypto assets (Appendix X, lines 101 - 105).

#### **4.2. Interview Findings from organizations that do not offer crypto asset solutions to their clients**

This section will address the findings regarding Swiss wealth managers who work with banks that do not currently offer their clients with crypto asset investment solutions. The

objective is to discover the scope of their providing structure, their justification for their existing bank's position, the components of client demand, which crypto asset classes they believe will suit their demand, and their perspective on the institutionalization of crypto assets.

#### **4.2.1. The extent of private banks' crypto asset solutions**

Mr. Dejan Jakovljevic mentioned that UBS currently does not offer crypto asset solutions to its clients and does not provide advisory services on crypto assets; consequently, UBS's clients do not have direct access to crypto tokens. However, if a client has an execute-only mandate and asks his or her relationship manager to invest in a crypto ETP or crypto fund, UBS will buy it for the client through Vontobel, Swiss quote, or Bitcoin space (Appendix III, lines 9 - 14). Furthermore, Mr. Dejan Jakovljevic stated that, in his opinion, crypto assets will persevere; nevertheless, around 90 percent of current projects will collapse, but a specific number of crypto assets will prevail. As a result, Mr. Dejan Jakovljevic believes that UBS and other traditional banks are working on an infrastructure for delivering crypto assets to their clients in the future in order to remain competitive, although at a slower rate than other financial institutions (Appendix III, lines 36 - 48). Moreover, Mr. Dejan Jakovljevic stated that even though UBS does not provide advice or direct crypto asset solutions, UBS does provide reading materials to clients who inquire about crypto in an effort to explain the underlying technology (Appendix III, lines 64 - 68). Furthermore, Mr. Dejan Jakovljevic stated that if UBS starts offering crypto asset investment solutions to its clients, the bank would do so without the collaboration of third-party companies and would create its own infrastructure for the offering (Appendix III, lines 121 - 128).

E3 stated that he or she is unable to recommend crypto assets to clients and that large institutions such as Bank X do not frequently support crypto assets. In addition, E3 reported that Bank X started looking into crypto assets between 2019 and 2020, when it began to publish research studies describing what crypto assets are, how they operate, what cash flow an investor may expect from such an investment, and how it may correlate with other asset classes (Appendix IV, lines 16 - 22).

E4 mentioned that Bank Z does not proactively advise clients on crypto assets and that its Investment Office did not allocate any crypto assets in its model portfolio. However, if a

client in an execute-only mandate wished to purchase an exchange-traded product, such as a tracker, E4 would do so on their behalf, but only if they specifically requested it (Appendix V, lines 48 - 57). In addition, E4 stated that due to anti-money laundering regulations, Bank Y is required to return all funds that enter clients' accounts from exchanges such as Binance and Coinbase (Appendix V, lines 65 - 78). Additionally, E4 stated that he or she expects Bank Z would collaborate with a Swiss crypto bank such as Sygnum Bank to harness their expertise if Bank Z were to decide to provide crypto assets (Appendix V, lines 198 - 202).

E5 stated that Bank B does not provide its clients with any crypto asset solutions or advice (Appendix IX, lines 20 - 21). Furthermore, E5 mentioned that he or she does not assume Bank B is at a competitive disadvantage for not offering crypto asset solutions to its clients due to the high opportunity costs associated with investing in crypto assets due to rising interest rates around the world (Appendix IX, lines 49 - 54).

Mr. Thiago Wechsler Louro indicated that EFG Bank does not offer or advise clients on crypto asset investment solutions. Mr. Thiago Wechsler Louro noted that the only service the EFG bank can offer the client is the booking structured products issued by a trusted provider such as Leonteq or Vontobel if the client so desires. However, the EFG bank is unable to assist clients with investments in this asset class. Therefore, Mr. Thiago Wechsler Louro noted that unlike other banks, EFG Bank has been accepting funds from existing clients who hold crypto assets; but in order to be accepted, the fund must meet strict criteria under EFG Bank AML and KYC policies; furthermore, funds arising from crypto ICOs are not accepted by EFG Bank since this type of fund is considered riskier by the bank. Additionally, Mr. Thiago Wechsler Louro highlighted that EFG Bank has two partnerships in the compliance sector that assist EFG Bank in checking the client's wallet to determine whether a compliance check is necessary (Appendix XII, lines 15 – 26, 30 - 35). In addition, Mr. Thiago Wechsler Louro stated that EFG Bank is currently in the first stage focused on education and that the bank's next steps are unknown. However, he mentioned the possibility of banks entering the market for crypto assets custody and that banks may take over the role of crypto exchanges in the future, offering crypto assets more securely since they have the financial resources to do so (Appendix XII, lines 300 - 308, 310 – 319).

#### **4.2.2. Rationale behind the private bank's unwillingness to provide crypto asset investing solutions to clients**

Mr. Dejan Jakovljevic stated that the reason UBS is reluctant to provide crypto asset solutions to its clients is that UBS is a conservative bank, and therefore it is not advantageous to take positions on controversial topics such as crypto assets (Appendix III, lines 18 - 24). Additionally, Mr. Dejan Jakovljevic stated that UBS would reconsider its stance on crypto assets once the crypto market was regulated. Mr. Dejan Jakovljevic cited the fact that in traditional financial markets, a stockholder who owns more than 5% of a given stock cannot execute all of his trades at once and must disclose all of his activities, which does not occur in the crypto assets ecosystem and thus allows for price manipulation. Mr. Dejan Jakovljevic cited the lack of transparency in the crypto space and the scarcity of historical data as barriers to starting to advise clients on it. Furthermore, financial indicators, such as the correlation of crypto assets to stocks and fixed income, would be required to consider crypto assets as a potential investment (Appendix III, lines 84 - 99). Moreover, Mr. Dejan Jakovljevic remarked that advising customers on assets with such significant volatility is hazardous (Appendix III, lines 69 - 72).

E3 indicated that Bank X's position of not providing crypto assets to its clients is due to the absence of regulation in this ecosystem, and E3 considers this lack of supervision to be evidence that crypto assets do not officially exist. Furthermore, E3 claimed that Bank X does not support crypto assets due to the disruptive nature of the technology, which could place financial institutions in a vulnerable position (Appendix IV, lines 25 - 34). Moreover, E3 mentioned that he or she does not view Bank X's position of not offering crypto assets to its clients as a competitive disadvantage, given that crypto assets are typically adopted by a small portion of the client base and represent a small portion of their portfolio. Therefore, in E3's opinion, crypto assets offering is not a significant factor in bank X's competitiveness (Appendix IV, lines 63 - 70). Furthermore, E3 stated that he or she believes reputational risks exist for banks that engage in the crypto asset industry since crypto assets exist in an ecosystem that provides anonymity. Therefore, E3 believes that crypto assets could only become a component of conventional finance if they were regulated and transparent (Appendix IV, lines 89 - 105). Furthermore, E3 indicated that he or she views Swiss banks to have a more conservative culture compared to other banks abroad, as offshore banks, such as U.S. private

banks that have a culture of trading, which is not as prevalent in Swiss banks because their investment banking departments are not as developed as those in the United States (Appendix IV, lines 144 - 150).

E4 indicated that Bank Z does not provide crypto assets due to their high volatility and the rapid emergence and demise of numerous failed initiatives (Appendix V, lines 48 - 57). Additionally, E4 stated that he or she finds crypto assets unpredictable, making it difficult for E4 to provide investment advice on them. Furthermore, E4 believes it is too early for Bank Z to take a position on it, and that crypto assets must be supported by a fundamentalist analysis and a use case before Bank Z changes its stance (Appendix V, lines 105 - 111). Moreover, E4 stated that he or she does not view it as a disadvantage for Bank Z to not offer crypto assets, as the market is relatively small (Appendix V, lines 116 - 122). In addition, E4 stated that Bank Z would change its stance of not offering crypto assets to its clients if there was a greater demand for crypto assets or if crypto assets became more transparent; E4 also stated that there is a lack of trustworthy information in the crypto ecosystem, and E4 believes this will be remedied by increased regulation (Appendix V, lines 135 - 148).

E5 stated that the reason Bank B does not offer crypto asset solutions to its clients is owing to the early stage of the asset class, which entails several risks; E5 also stated that Bank B is risk averse. Furthermore, E5 mentions that it is difficult to value crypto assets. He or she gave the example that the way to calculate crypto assets could be through supply and demand calculations, similar to the calculation of commodities. However, in his or her opinion, differently from commodities, crypto assets have no intrinsic value since they are not tangible, and there is no clear long-term trend as there is with stocks and bonds (Appendix IX, lines 24 - 37). E5 indicated that Bank B would change its current position of not issuing crypto assets, once there are significant use cases behind the asset class that would make individuals require this type of asset class (Appendix XI, lines 104 - 110).

Mr. Thiago Wechsler Louro stated that the EFG Bank's decision not to offer crypto asset solutions to its clients is related to the fact that the current phase is a first step and a sort of learning curve. In addition, Mr. Thiago Wechsler Louro mentioned that EFG Bank has a study group focused on the topic and that the first step was to begin accepting funds from clients who hold crypto assets. Mr. Thiago Wechsler Louro emphasized that EFG Bank is still

learning and acquiring knowledge about the asset class as a first step, and future developments will depend on the current phase of education (Appendix XII, lines 29 - 47).

#### **4.2.3. Client demand for Crypto Assets**

Mr. Dejan Jakovljevic indicated that the demand for crypto assets is cyclical; while the prices were high, he observed a high level of demand; however, as the prices have declined significantly recently, the demand for crypto assets has decreased (Appendix III, lines 26 - 32). In addition, Mr. Dejan Jakovljevic stated that the patterns of the customers who request crypto assets are diverse. Previously, the demand for crypto assets came from younger clients, between the ages of 25 and 35. These clients typically inquired about the offering, and regardless of how the crypto market evolves, they continue to discuss it. However, during the past year, UBS's elderly clients have begun to inquire about it (Appendix III, lines 51 - 60).

E3 reported that there was an increase in demand for crypto assets, but that it was driven by a need for knowledge and education about the asset class rather than investment demand. In addition, E3 believes that crypto assets are hype and that the difficulty in analysing business models is a result of misleading news involving these assets (Appendix IV, lines 37 - 49). Moreover, E3 stated that his or her clientele are not digital natives because they are older. E3 believes that the demand is being driven by the children of these clients, who typically already trade crypto assets and have spoken with their parents (Appendix IV, lines 52 - 58).

E4 mentioned that during the hype era, clients proactively inquired about crypto assets and desired to hold them with Bank Z. However, Bank Z did not offer any solutions other than investing in products listed on regulated exchanges, such as crypto ETPs or crypto funds (Appendix V, lines 59 - 64). Furthermore, E4 cited examples from consumers around their 40s who requested crypto assets products; moreover, E4 claimed that a pattern among the clients who asked about crypto assets is that all of them are risk lovers and frequently speculate. Additionally, E4 claimed that all the clients who asked, inquired during the excitement phase, and as the values fell, no client asked about crypto assets anymore (Appendix V, lines 91 - 102).



E5 indicated that he or she observed an increase in demand for crypto assets, however not on a regular basis; E5 occasionally received inquiries concerning crypto assets (Appendix IX, lines 40 - 44). In addition, E5 stated that he or she has not observed a pattern among clients who inquire about crypto assets (Appendix IX, lines 57 - 61). Moreover, E5 stated that there is a demand for crypto assets; however, E5 believes that wealth managers do not wish to connect with this demand since wealth managers seek to limit their trading activity (Appendix XI, lines 78 - 83).

Mr. Thiago Wechsler Louro reported that a small percentage of EFG Bank's customers possess crypto assets structured products from Swiss issuers. Furthermore, Mr. Thiago Wechsler Louro stated that, with rare exceptions, western consumers below the age of 45 have a greater demand for crypto assets (Appendix XII, lines 50 - 56, 59 - 62).

#### **4.2.4. Client's response to the recent crypto crash**

Mr. Dejan Jakovljevic stated that the present volatility of the crypto market confirmed UBS's view regarding the dangers associated with this asset class. In addition, Mr. Dejan Jakovljevic believes that the current bear market is required for the price correction of crypto assets (Appendix III, lines 70 - 79).

E3 stated that the recent crypto market fall was evidence that individuals should not invest in the wrong places and that crypto assets are not designed as an investment instrument. Furthermore, E3 noted that these types of crashes have occurred in the past, with the major difference this time being the high correlation to traditional financial markets, rendering invalid one of the primary arguments for investing in these assets, such as the low correlation to the traditional financial market and the diversification benefit in a diversified portfolio (Appendix IV, lines 74 - 85).

E5 stated that he or she does not recall hearing any remarks on the crypto assets crash, as Bank B's model portfolio did not contain any crypto assets and had a clear stance against the asset class (Appendix IX, lines 65 - 69).

#### **4.2.5. Private bank's view of crypto asset classes**

Mr. Dejan Jakovljevic mentioned that the crypto asset classes that will suit the needs of Swiss wealth managers are those that are desired by its customers. In addition, he predicts that Bitcoin and three additional assets will prevail. Furthermore, Mr. Dejan Jakovljevic does not anticipate banks investing in stablecoins considering that their instability has been proven (Appendix III, lines 106 - 116).

E3 suggested that cryptocurrencies such as Ethereum have an appealing business model and the potential to spark a technological revolution, which will transform the economic system and the way individuals interact (Appendix IV, lines 37 - 49). Moreover, E3 indicated that he or she would be interested in a structured crypto product where the underlying assets are unregulated, but the structured product is listed and regulated on a traditional exchange (Appendix IV, lines 112 - 121).

E4 mentioned that he or she finds stablecoins attractive for trading and that hedging exchange rate risk would be an additional fascinating use case. Furthermore, E4 does not recognize the utility of NFTs (Appendix V, lines 157 - 166). In addition, E4 stated that he or she sees the current use case for crypto assets as profit generation, as he or she has never encountered someone who purchased it for usage in the metaverse, for instance (Appendix V, lines 180 - 183).

E5 stated that he or she believes wealth managers have a demand for tokenization and that tokenized assets in general have a considerable potential (Appendix IX, lines 83 - 95). In addition, E5 noted that the use cases for tokenizing assets might alter how other assets, such as real estate and stocks, are placed on the financial markets. E5 stated that one of the benefits of tokenization is the ability to prove asset ownership or transfer fractions of ownership; as a result, E5 believes that the crypto assets involving digital tokenization are the ones that will meet the demand of Swiss wealth managers. Moreover, E5 does not envision the usage of stablecoins currently, except if they become necessary in the future for the use of applications (Appendix XI, lines 83 – 95, lines 110 - 116, lines 149 - 154).

Mr. Thiago Wechsler Louro indicated that he does not recognize the value of Bitcoin because it is merely a currency whose value proposition is value storage. According to Mr.

Thiago Wechsler Louro, the value of a currency is dependent on faith, which is why he does not consider Bitcoin reliable. Mr. Thiago Wechsler Louro stated, however, that he is interested in cryptocurrencies such as Solana, Ethereum, and Cardano, as these cryptocurrencies offer a more robust use case, smart contracts, liquidity through staking, and service capabilities. Mr. Thiago Wechsler Louro argues that crypto assets should be utilized for payments, particularly foreign transfers, and thus for the international payment system rather than for the currency itself. Moreover, Mr. Thiago Wechsler Louro highlighted his opinion that utility tokens will have more use cases in the future as a way to show ownership transparently and efficiently, and as a result, they may be used in countries such as South Africa or Brazil to combat corruption. Additionally, Mr. Thiago Wechsler Louro underlined the need for centralization and a system that connects the wallet to the individual's identity in order to enable security, AML, and KYC requirements for the revolution to occur (Appendix XII, lines 106 - 131, 133 - 164). Additionally, Mr. Thiago Wechsler Louro stated that he believes cryptocurrencies to be more resistant to money laundering than the U.S. dollar because, in Mr. Louro's view, it is easier to track and verify transactions using the blockchain since cryptography technology promotes transparency. In addition, Mr. Thiago Wechsler Louro highlighted the facility to assess information in the crypto market, which he has already experienced (Appendix XII, lines 66 - 106). Furthermore, Mr. Thiago Wechsler Louro does not believe in the value proposition of NFTs as it is currently used as a piece of artwork; therefore, he suggested the concept of utilizing the technology behind NFTs to prove ownership of intellectual property. In addition, Mr. Thiago Wechsler Louro elaborated on the potential of establishing ownership through tokenization, mentioning the purchase of the right to use a hotel during vacations or even a security through a token (Appendix XII, lines 193 to 216).

#### **4.2.6. Investment vehicles for the inclusion of crypto assets in the client's portfolio**

Mr. Dejan Jakovljevic stated that clients with an execute-only mandate can request their relationship manager to invest in a crypto ETP or crypto fund, and UBS will purchase it for the client via Vontobel, Swiss quotation, or Bitcoin space (Appendix III, lines 9 - 17).

E3 mentioned that he or she finds it more interesting for banks to offer or use an investment vehicle such as a crypto fund or a crypto exchange-traded product, since if a client

with an execute-only mandate requests his or her banker to invest in Bitcoin, for instance, it is preferable to invest through these types of investment vehicles that are regulated and listed on traditional exchanges, as opposed to buying Bitcoin directly on a decentralized exchange. E3 noted that investing in a crypto fund is advantageous because the fund itself is adequately diversified in crypto assets. However, E3 questioned if these products are compatible with the decentralized ecosystem's core philosophy (Appendix IV, lines 126 - 140).

E4 stated that he or she considers crypto funds valuable for portfolio diversification if they are created by specialists who study the use cases and perform fundamental analysis on these assets. E4 also stated that Bank Z can invest in exchange-traded products for its clients upon request (Appendix V, lines 48 - 57, lines 188 - 194).

E5 mentioned that Bank B has investments in companies that are related to the technology that is behind crypto assets. These companies include companies that provide blockchain technology capabilities as well as crypto exchanges such as Coinbase (Appendix IX, lines 67 - 73, lines 98 - 99).

If the client so desires, EFG bank can book structured products issued by reputable Swiss providers such as Leonteq or Vontobel, according to Mr. Thiago Wechsler Louro (Appendix XII, lines 15 - 26, 281 - 282).

#### **4.2.7. Institutionalization of crypto assets**

Mr. Dejan Jakovljevic suggested that the institutionalization of crypto assets will occur alongside surviving projects. Furthermore, Mr. Dejan Jakovljevic believes that once the crypto market is regulated, banks will feel comfortable providing actionable advice on these instruments, as there is an active community pushing for it and the allocation of crypto assets in a diversified portfolio is shown to provide diversification benefits and improved sharp ratios (Appendix III, lines 131 - 141).

E3 indicated that he or she believes that the institutionalization of crypto assets would depend on whether or not cryptos can establish a compelling business model; for instance, E3 mentioned Ethereum's value proposition, which is backed by revolutionary technology to create smart contracts. According to E3, this type of use cases will act as a catalyst for the

institutionalization of crypto assets, resulting in a market with a few initiatives. In addition, E3 noted that the rapid emergence of various cryptocurrencies without a clear business use case makes crypto assets appear unserious (Appendix IV, lines 155 - 171).

E4 stated that he or she believes that the future of crypto assets could unfold in several ways: one scenario would be that there will be a massive use case for these crypto assets, where individuals can adopt these crypto assets if they need to buy something in the metaverse or earn cash; the second scenario would be the continuation of a cycle of hypes and falls, with only a handful of initiatives surviving; and the final scenario would be that all crypto assets will be regulated, with just few initiatives surviving (Appendix V, lines 207 - 215).

E5 indicated that distributed ledger technology and blockchain as a technology will have great possibilities. E5 stated that he or she believes that, in the future, distributed ledger technology could increase the security of databases and positively impact the security of transactions. In addition, E5 claimed that tokenization in varied domains such as automotive industry, real estate, stocks, and mortgages might have a favourable effect on society. However, E5 is unaware that crypto assets must exist for technological breakthroughs to occur via the DLT technology. In addition, E5 highlighted that in his or her opinion, blockchain technological use cases should precede crypto assets; and if the technological use case succeeds and this case requires the use of crypto assets, then E5 would expect the institutionalization of crypto assets (Appendix XI, lines 122 - 143).

Mr. Thiago Wechsler Louro stated that crypto assets will play a larger role in certain structural products and deposits. He believes that crypto assets will alter the structure of fiduciary deposits, as crypto liquidity pools provide a massively superior, faster, more secure, and more robust service for fiduciary deposits than those currently used. In addition, Mr. Thiago Wechsler Louro stated that if the credit risk rating is conducted using blockchain technology, there is a reduced chance of fraud because it is more difficult to forge balance sheets and documents. Therefore, Mr. Thiago Wechsler Louro believes that the banking business is only one of the areas that blockchain technology will disrupt (Appendix XII, lines 171 – 188, 261 - 265). Mr. Thiago Wechsler Louro stated that European nations such as Switzerland have a philosophy of adapting new things to current regulations, and as a result, he believes that the degree of crypto asset regulation in Switzerland is sufficient. In addition,

Mr. Thiago Wechsler Louro stated that the first step is to obtain a deeper understanding of the asset class, which can be identified by examining how the existing FIMNA regulation is operating. Mr. Thiago Wechsler Louro mentioned the need for a structure in which the wallet is linked to the individual's identity in order for the necessary security measures to be implemented, as this would address his primary concern regarding the institutionalization of crypto assets, notably safety. In addition, Mr. Thiago Wechsler Louro also mentioned that with the use of blockchain technology, businesses will have new information about customer buying behaviours; this illustrates a whole business that can be done with the use of blockchain data. Mr. Thiago Wechsler Louro mentioned that banks must become more information technologically driven in order to adapt and survive, with cryptography being one of the fields in which banks will need to adapt in order to remain competitive (Appendix XII, lines 224 – 277).

## **5. Conclusion**

### **5.1. Discussion of the Findings**

The discussion of the findings will start with a review of the private banks' current crypto offerings, followed by an explanation of their positioning. Following is a subsection that explains the Swiss wealth managers' acknowledged customer perspective on the subject. And as an outlook, this discussion will present the crypto asset classes deemed capable of meeting the demand of Swiss wealth managers and their clients, as well as their perspectives on the institutionalization of crypto assets.

#### **5.1.1. The extent of private banks' crypto asset solutions**

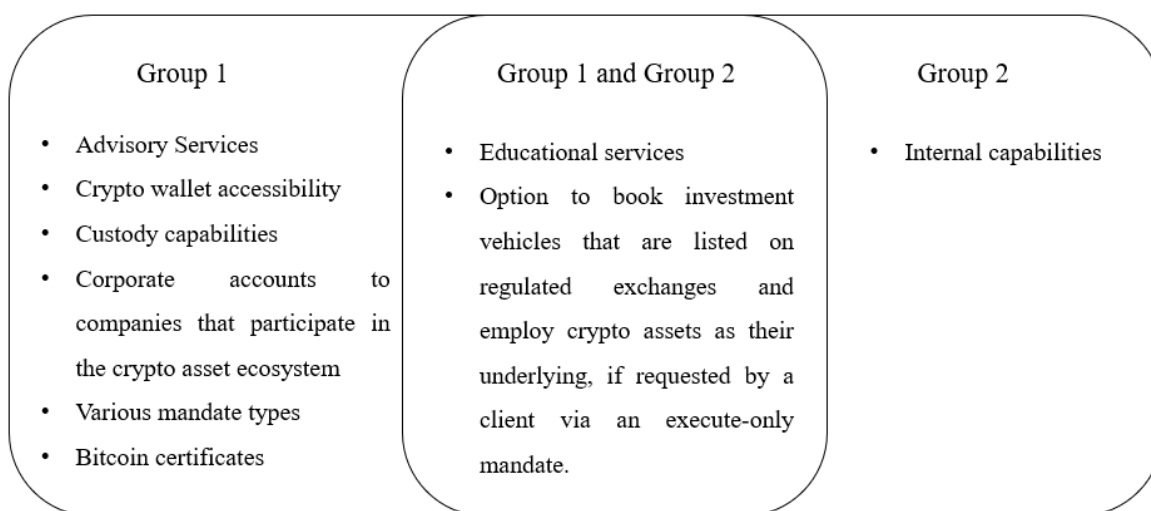
Swiss banks that currently offer crypto asset solutions to clients do so in collaboration with Swiss crypto banks or Swiss custodians and only a limited number of crypto assets are currently available. These banks provide educational services, crypto assets advisory services, crypto wallet accessibility, custody capabilities, and a variety of crypto-focused mandate types, as well as the option to book investment vehicles listed on regulated exchanges that have crypto assets as their underlying asset, such as crypto ETPs or crypto funds. A recognized limitation of the current banks' crypto asset offerings is the relatively high minimum investment required to access these offerings. As a result, Maerki Baumann started to offer a variable minimum offering amount and the option for clients to open only a crypto wallet account with the bank. In addition, Maerki Baumann provides corporate accounts to companies that participate in the crypto asset ecosystem. Additionally, unlike other banks in this study, Vontobel issues Bitcoin certificates. Furthermore, due to the complexity of Julius Baer's current offering structure, which requires clients to open a new relationship manager account in order to participate in the crypto assets offering, clients who wish to invest small sums of money in crypto assets typically do so through listed investment vehicles, such as crypto ETPs and crypto funds.

Swiss banks that do not currently offer crypto asset solutions to their customers provide educational services and the option to book investment vehicles that are listed on regulated exchanges and have crypto assets as their underlying, if requested by a client via an execute-only mandate. In addition, unlike the majority of Group 2 banks, EFG Bank is able to receive

funds derived from crypto holdings if certain criteria are met. Additionally, EFG Bank has internal AML and KYC capabilities based on cryptography. Also, one of the interviews revealed that UBS is working on an internal system to provide its clients access to crypto assets. Group 2 banks, according to available literature and interview analysis, are in an educational and learning phase before offering crypto asset solutions to their clients.

Additionally, the extent to which the two groups' offerings are comparable can be recognized by educational services and by booking investment vehicles that are listed on regulated exchanges and employ crypto assets as their underlying, such as crypto ETPs or crypto funds, if requested by a client via an execute-only mandate. However, none of these investment vehicles are included in the model portfolios of the institutions analysed. Figure 4 illustrates an overview of all crypto assets offering services mentioned by interview partners from Group 1 and Group 2, as well as the overlap between the services offered by both groups.

**Figure 4: Crypto assets services extent by Swiss banks**



*Note.* Own illustration.

### **5.1.2. Rationale behind bank's current positioning**

The Swiss banks' decision to offer crypto asset solutions to their clients is based on several factors, the most important of which is customer demand for this new asset class. Among the reasons for the offering is the emergence of start-ups involved in blockchain or crypto businesses that did not previously have access to banking services, as well as the



recognized benefits of crypto assets in portfolio management. In addition, there is a belief that crypto assets will become an integral component of professional financial advice and asset management, particularly with the tokenization of traditional assets, which might be attractive to both clients and banks. Furthermore, the past macroeconomic situation influenced the position of offering crypto assets, as many private clients were looking for new investment opportunities, particularly at a period when interest rates were extremely low. One of the banks in Group 1 stated that the desire to enter this new market was also founded on the notion that it would bring agility and flexibility to the private bank's business culture. Moreover, one of the interviewees stated that the desire to enter this new market is motivated by acceptability, as the bank recognizes that in order to remain competitive, it is necessary to acknowledge the emergence of new technologies and position itself in such a way that the bank can profit from it. Furthermore, banks consider the service as a way to position themselves for the new generation of clients, who are more familiar with technology and digitization.

Several factors contributed to the Swiss banks' decision not to offer crypto asset solutions to its consumers. Some wealth managers hold the belief that crypto assets are a controversial topic and, as a result, could present reputational risks to the bank. Other interviewees attribute the banks' current positioning to the significant volatility of crypto assets, the infancy of the asset class, and the number of failed ventures. In addition, the absence of regulation, robust historical data, fundamental valuation methods, and transparency in the crypto assets market is viewed as a barrier to entry. Therefore, based on literature and interview analysis, crypto assets can be viewed as a threat to the traditional banking system, which is one of the reasons why Swiss private banks have chosen not to promote them. The Swiss wealth managers in Group 2 do not view their bank's position as a competitive disadvantage because only a small portion of their customers are interested in crypto assets.

### **5.1.3. Client's perspective overview**

Regarding the customer demand for crypto assets, except for a small number of older clients, Swiss wealth managers believe that the younger generation, who are digital natives and have a stronger relationship with technology, has a greater demand for crypto assets. Moreover, wealth managers from both groups acknowledged that the demand for crypto assets is driven by emotions, with customers posing more queries during the period when crypto

asset prices were higher. In addition, it was highlighted that part of the demand originated from the motivation to invest, while others derived from the desire to acquire knowledge. Also, banks that now offer crypto asset solutions to their consumers have noticed greater proximity to the younger generation of clients since they began providing crypto assets.

Additionally, Swiss banks that currently offer crypto asset solutions to clients perceive the client's reaction to the recent meltdown of crypto assets as limited, given that the majority of these institutions take a risk-controlled approach to the asset class. It was stated that the observed decline in the crypto sector is a continuation of what is occurring in the traditional market environment and that investors in the asset class are aware of its volatility. In addition, different client responses were mentioned, including a client segment that is holding their crypto assets because they represent a small portion of their portfolios and the current market decline is not an appropriate time to liquidate them, and an investor segment that wants to increase exposure because they view the current low prices as an attractive entry point. However, some interviewees from Swiss banks that do not currently offer crypto asset solutions view the current crypto crash as evidence that the asset class is still too immature to be invested in and that the current high correlation to traditional assets proves that the main value proposition of adding crypto assets to a portfolio based on diversification benefits has been disproven. Furthermore, both groups perceive the current market circumstances as a moment for price corrections in the crypto ecosystem.

Regarding the consumer benefit of investing in crypto assets through a financial institution as opposed to opening a wallet directly through an exchange, the interview partners noted that doing so through a regulated organization they are familiar with makes investing in the asset class safer and less complicated. Rather than having a separate account for this type of investment, institutions offer an overview of how the client's crypto assets investments interact with the entire portfolio, which is desirable from a customer's perspective. In addition, traditional institution's service is advantageous since the private keys are safe in the bank's asset management statement and money may be transferred more easily in an event of a wealth succession. Furthermore, many clients who hold large amounts of crypto assets are well-versed in the crypto ecosystem but not in wealth management, and many of their wallets are extremely volatile. Thus, these clients typically need a partner at the intersection of the digital and traditional financial systems with access to fiat currency to diversify their assets.

Additionally, depending on the jurisdiction, capital gains on these assets may be subject to wealth-related taxes, which institutions can provide in conjunction with the standard investment capital gains taxes.

#### **5.1.4. Private bank's view of crypto asset classes**

As a result of the crypto fast-changing environment and the diverse definitions of crypto asset classes and their categories, some interview partners lack awareness of the numerous crypto asset classes. Therefore, this confirms the necessity for education mentioned by multiple interviewees in order to increase the market's transparency. In addition, based on the interview analysis, it is expected that the demand from Swiss wealth managers will reflect the demand from their customers.

The majority of experts consider that the cryptocurrencies with the largest market capitalizations, Bitcoin and Ethereum, are receiving most demand from customers currently. However, a number of the experts interviewed had additional opinions regarding which classes of crypto assets will expand and be placed on the financial markets.

There are diverse viewpoints regarding the crypto asset class(es) that will suit the needs of Swiss wealth managers and their clients, depending on the interview partner. The majority of interview partners cited cryptocurrencies as a segment in which they expect a rise in use cases, with almost all experts mentioning Ethereum or Bitcoin. In addition, with the exception of one interview partner, the respondents had a negative opinion of stablecoins due to the failure of some stablecoins to remain tied to their respective assets. Furthermore, it is acknowledged that some Swiss wealth managers lacked knowledge of the various stablecoins categories. As a result, the findings of the interviews did not extend to the stablecoin categories, and the four distinct stablecoins categories are therefore not described in Figure 5. Additionally, none of the Swiss wealth managers mentioned CBDCs, indicating that the asset class is not widely addressed by institutions. Moreover, utility and security tokens were viewed as major crypto asset classes that are anticipated to have more use cases in the future due to the value proposition behind tokenization of assets, which may alter how other assets, such as real estate and stocks, are placed on financial markets; the benefits of these assets include demonstrating asset ownership or transferring fractions of ownership. In addition, one of the

interview partners indicated that the bank currently has the infrastructure in place for tokenization and is essentially awaiting the completion of the last steps to begin utilizing it. Differently from the other crypto token categories, NFTs did not present a positive view among the majority of the interview partners, as some of the Swiss wealth managers perceive the current use case as unattractive. Moreover, it was identified a demand from Swiss wealth managers for crypto assets structured products. Figure 5 provides a detailed analysis of the findings of the wealth manager's overview of the crypto asset classes that are expected to meet their demand and the demand of their clients.

**Figure 5: Private bank’s view of crypto asset classes**

<b>Cryptocurrencies</b>	
<b>PoW cryptocurrencies</b>	Bitcoin was the Proof of Work cryptocurrency mentioned; opinions regarding Bitcoin are diverse, as it has been suggested that Bitcoin serves as a store of value, possibly as a gold substitute due to its scarcity and that Bitcoin has no apparent use case due to its lack of use cases.
<b>PoS cryptocurrencies</b>	It was underlined that there is a recognized market for Proof of Stake cryptocurrencies, with some interviewees expressing a wish to profit from staking returns. Ethereum, Cardano, and Solana were cited as cryptocurrencies in which the interviewees were interested.
<b>Stablecoins</b>	
Several interviewees do not recognize the utility of stablecoins, except for one expert who believes stablecoins could be trading attractive and a potential solution to hedge currency risks. In addition, for some of the interview partners, stablecoins will only be justified if they become indispensable for the use of applications in the metaverse. In addition, a number of interview partners expressed a lack of interest in the asset class as a result of the failure of several stablecoins to remain pegged to their respective assets. Moreover, it was recognized that some Swiss wealth managers lacked knowledge of the various stablecoin categories.	
<b>CBDCs</b>	
None of the Swiss wealth managers mentioned CBDCs.	
<b>Tokens</b>	
<b>Utility tokens</b>	Utility tokens are viewed as an appealing crypto asset category and are expected to have more use cases due to their ability to verify and share ownership transparently and efficiently across multiple business sectors. In addition, the usage of utility tokens for international transactions and as a tool to combat corruption in some nations was addressed.
<b>Security tokens</b>	Security tokens are regarded as an important category of crypto assets and are expected to have more use cases, as this class is perceived as advantageous to institutions and customers since the use of security tokens can expand the investment universe and give access to previously unavailable investment instruments to the financial sector.
<b>NFTs</b>	Except for one interview participant, the majority view NFT’s current art-related value proposition as unappealing. Nevertheless, some interviewees recognize the potential of the technology behind NFTs for other financial applications.

*Note.* Own illustration.

### **5.1.5. Institutionalization of crypto assets**

The majority of the experts believe that the necessity for regularization of the crypto assets market is a crucial component for institutionalizing the asset class. In addition, it was underlined that the concept of crypto assets originated with institution-sceptic libertarians. Nonetheless, the crypto community has begun to recognize the need for regulation in both traditional banking and crypto sector. It is essential to highlight that, according to experts, the regularization of crypto assets is already taking place.

Moreover, a number of experts noted that since the correlation between crypto and traditional assets is currently high, the correlation level between crypto and traditional assets must decrease before the asset class's value proposition regarding its potential diversification benefits can once again be evidenced. In addition, it was highlighted that there is a need for more valuable use cases, as the rise and demise of numerous crypto ventures pose reputational hazards to the sector. Experts acknowledged that several crypto assets initiatives will fail, leaving just a few survivors in a sequence of hypes and falls in an economic cycle for emerging technologies and that the current bear market will create opportunities for market selection in the crypto sector. It was stated that the volatility of the asset class must decrease in order to attract more institutional investors. However, experts stated that a larger number of institutional investors would increase market stability, creating a paradox regarding which will occur first: the increase in the number of institutional investors in the crypto ecosystem or the decrease in volatility. In addition, concerns regarding security and market manipulation, as well as the absence of fundamentals to determine crypto assets' appropriate value and the threat to the traditional banking system, were cited in the interview analysis as obstacles to institutional adoption.

In addition, respondents cited multiple use cases including the application of blockchain technology to improve operations, security, payments, and taxation in several business sectors. Some business sectors that were mentioned as potentials to be affected by this technological disruption were real estate, the automotive industry, the stock market, and the consumables market. The disruptive nature of the technology behind crypto liquidity pools and smart contracts was cited among the blockchain ecosystem's technological use cases by most experts. For technological disruptions to occur, it was also suggested that a wallet must

be linked to the individual's identity via an identification system. Moreover, the tokenization of assets was cited as a potential disruption that will be increasingly institutionalized. Lastly, the need for education as a basis to increase market transparency was addressed. Table 13 illustrates the potential obstacles to institutional adoption of crypto assets discussed by experts throughout the interviews, as well as the number of interviewers who implied each obstacle.

**Table 13: Obstacles to Institutional Investment Adoption**

<b>Obstacles</b>	<b>Out of ten, the number of experts who addressed the obstacle</b>
Lack of regulation	8
Price volatility	6
Market immaturity	5
Limited understanding of crypto markets	5
Security concerns	5
Crypto assets correlation to traditional assets	4
Threat to the banking system	3
Lack of fundamentals to gauge appropriate value	3
Concerns around market manipulation	2
Lack of concrete use cases	2

*Note.* Own illustration.

## **5.2. Conclusion of the Findings**

In conclusion, based on the literature review and interview analysis, the current Swiss wealth management crypto offering is still in its development phase, with certain banks already offering it and others continuing in a phase of observation and information collection.

Moreover, regarding the Swiss financial institutions that offer crypto asset investment solutions to their clients, this has been accomplished through cooperation with Swiss crypto banks or Swiss custodians, and only a limited number of crypto assets are currently available. In addition, the interview analysis revealed that, in some institutions, the current offering configuration imposes restrictions on the minimum amount required to participate in such a service and, in some instances, necessitates the opening of a new client relationship account, which has presented challenges, although some institutions are already working on it or have provided potential solutions. Experts cited educational services, diverse crypto-focused mandate types, crypto wallet accessibility, crypto certificates, advisory services, corporate accounts to companies involved in the crypto ecosystem, and custody facilities among the solutions provided by the institutions. Moreover, if the institution does not offer crypto asset solutions to its clients or if the clients of the institutions that does offer crypto asset solutions are not satisfied with the setup provided and if the client is in an execute-only mandate, some clients can request the investment in products such as crypto funds or crypto ETPs that are listed on regulated exchanges.

The position of banks that now provide crypto assets is premised on client demand, the wealth-driving source emerging from the asset class, a belief in the asset class value proposition, recognized benefits of crypto assets in portfolio management, and a desire to position themselves with younger clients, where demand for crypto assets is concentrated. And for banks that do not offer crypto asset solutions currently, reputational risks, a lack of regulation, security concerns, the immaturity of the asset class, the number of failed initiatives, the perceived threat to financial institutions, and market volatility are the primary reasons for their positioning. In addition, the interview analysis revealed the existence of cyclical client demand.

Furthermore, the primary crypto asset classes expected to fulfil the demand of Swiss wealth managers and their clients are cryptocurrencies with the largest market capitalization, such as Ethereum and Bitcoin, and PoS cryptocurrencies that offer staking returns, such as Solana and Cardano, as well as to crypto utility tokens and crypto security tokens. In addition, it was recognized a demand from Swiss wealth managers for crypto structured products.



### **5.3. Implications of the Findings and Recommendations**

The implications and recommendations will be divided into two subsections, with the first subsection focusing on the implications and recommendations for Group 1 institutions that offer crypto asset solutions to their clients. The second subsection focuses on the implications and recommendations for Group 2 institutions that do not offer crypto asset solutions to their clients.

#### **5.3.1. Implications of the Findings and Recommendations for Institutions from Group 1**

Based on the analysis of the literature study and expert interviews, the crypto ecosystem is in an emerging phase, and institutions that engage in this ecosystem are exposed to numerous risks, including significant volatility and reputational hazards. Consequently, it is crucial for Group 1 institutions to work intensively on education and research to sceptically determine in which segment of the crypto ecosystem to participate and how to position themselves most securely at the intersection of the traditional and crypto sectors.

Furthermore, it is important for Group 1 institutions to investigate their current offering structure and client needs in order to make their offerings more approachable to their clients, as it was underlined in the interview analysis that the complex setups of some banks' offerings encourage customers to invest in the asset class through other instruments. In addition, a systematic approach regarding the benefits of investing in crypto assets through a financial institution must be effectively communicated, as financial services may be of interest to the crypto community but are inadequately understood.

#### **5.3.2. Implications of the Findings and Recommendations for Institutions from Group 2**

One of the recommendations of the interview findings for institutions that currently do not offer crypto asset investment solutions to their clients is the acceptability that the current financial system is susceptible to technological challenges, and as a result, there is a need to adapt to new client requirements resulting from technological advances. Moreover, the findings from the expert interviews reinforce that the majority of demand for crypto assets

comes from the younger generation (Millennials and Generation Z), who are digital natives and have a closer relationship with technology; therefore, institutions from Group 2 should consider how they intend to position themselves to this new clientele, as this could impact the bank's survival as wealth shifts gradually to the younger generation.

In addition, based on the analysis of the literature review and expert interviews, since Group 2 banks are in a phase of observing and collecting information regarding crypto assets and there is a customer demand for knowledge about the asset class, another recommendation is for Group 2 institutions to strengthen their educational and research activities pertaining to the crypto asset class to establish a basis on which clients and employees can build their understanding and trust.

Moreover, one of the experts believes that financial institutions can take a portion of the market share from centralized crypto exchanges. It was also mentioned that banks are already working on an infrastructure to offer additional crypto asset investment services to their clients, and initiatives regarding the tokenization of traditional assets are already in place, indicating that the convergence between traditional and crypto ecosystems is becoming increasingly apparent. As experts have stated that there is no alternative to becoming more digital and adapting, banks must become more information technologically driven to survive, with crypto assets being one of the fields in which banks will need to adapt in order to remain competitive.

#### **5.4. Limitations of the Study**

One of the limitations of the study is its dependence on Swiss wealth managers' willingness to discuss future intentions for crypto asset offerings among their organizations. Moreover, crypto assets are an innovative asset class that is undergoing rapid regulatory and technological change; accordingly, while conducting the literature review, it was evident that there is scarcity of published academic articles on how the continuing changes will be incorporated into the existing financial landscape.

The scarcity of academic studies on crypto asset classes and categories and the lack of consensus on their definitions were two of the most significant limitations of this study. Therefore, there is a constraint in that the chosen category definitions are not generally

accepted in academia. Consequently, it was recognized a lack of knowledge regarding the different crypto asset classes among some interview partners, making it difficult to deepen the discussion on the different crypto asset classes that have the potential to fulfil the demand from Swiss wealth managers. Moreover, due to the recent nature of the asset class, there is a lack of historical data on which to base a fundamental analysis of the asset class's value, as well as a dearth of academic research on the subject, making it challenging to compose a comprehensive literature review. Lastly, this study's qualitative findings are not statistically representative, which is another limitation.

### **5.5. Outlook**

As an outlook for future research, it would be interesting to develop a fundamental valuation assessment regarding the different crypto asset classes once sufficient historical data is available. In addition, it would be fascinating to investigate the evolution of crypto asset classes and categories, including the emergence of new crypto asset classes and categories and the demise of others, given that their classifications and use cases are subject to change due to the rapidly evolving environment of the crypto ecosystem.

Moreover, it would be of interest to investigate further the new developments in Swiss private banks' crypto asset offerings and their perspectives on crypto asset classes once the industry is more mature, in addition, a comparison could be made between which developments occurred and caused the industry to evolve. Additionally, it would be beneficial to obtain a new perspective on the asset by investigating the potential internal capabilities of crypto assets within the structure of financial institutions.

Furthermore, it would be of interest to investigate the institutionalization of crypto assets from the perspectives of crypto banks, crypto custodians, and issuers of crypto investment vehicles, such as crypto ETPs issuers and crypto funds issuers, to understand how these players at the intersection of the traditional finance and crypto environment perceive the institutional adoption and what the main obstacles are.

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## Appendix

### Appendix I: Bitcoin (BTC) Monthly Price Evolution (USD)

January 2016	378
February 2016	438
March 2016	414
April 2016	454
May 2016	537
June 2016	635
July 2016	636
August 2016	574
September 2016	605
October 2016	694
November 2016	732
December 2016	952
January 2017	921
February 2017	1'190
March 2017	1'049
April 2017	1'312
May 2017	2'171
June 2017	2'547
July 2017	2'719
August 2017	4'676
September 2017	4'208
October 2017	6'131
November 2017	10'543
December 2017	13'062
January 2018	9'914
February 2018	10'903
March 2018	6'970
April 2018	9'269

May 2018	7'363
June 2018	6'189
July 2018	8'166
August 2018	6'939
September 2018	6'577
October 2018	6'276
November 2018	3'952
December 2018	3'690
January 2019	3'441
February 2019	3'773
March 2019	4'081
April 2019	5'151
May 2019	8'287
June 2019	12'024
July 2019	9'573
August 2019	9'591
September 2019	8'086
October 2019	9'226
November 2019	7'729
December 2019	7'251
January 2020	9'545
February 2020	8'778
March 2020	6'484
April 2020	8'773
May 2020	9'688
June 2020	9'188
July 2020	11'119
August 2020	11'657
September 2020	10'764
October 2020	13'574
November 2020	18'114

December 2020	28'769
January 2021	34'622
February 2021	46'643
March 2021	58'734
April 2021	53'260
May 2021	35'750
June 2021	35'946
July 2021	41'157
August 2021	47'663
September 2021	41'413
October 2021	61'374
November 2021	57'834
December 2021	47'128
January 2022	37'929
February 2022	37'804
March 2022	47'063
April 2022	38'651
May 2022	31'741
June 2022	20'109
July 2022	23'653
August 2022	19'805
September 2022	19'564

*Note.* Own Illustration. Source: (Statista, 2022). Retrieved: 09.2022

## Appendix II: Ethereum (ETH) Monthly Price Evolution (USD)

January 2016	2
February 2016	7
March 2016	12
April 2016	8
May 2016	13
June 2016	12
July 2016	12
August 2016	11
September 2016	13
October 2016	11
November 2016	8
December 2016	8
January 2017	11
February 2017	16
March 2017	50
April 2017	75
May 2017	217
June 2017	288
July 2017	195
August 2017	381
September 2017	296
October 2017	309
November 2017	461
December 2017	720
January 2018	1'067
February 2018	888
March 2018	411
April 2018	687
May 2018	562

June 2018	429
July 2018	456
August 2018	284
September 2018	231
October 2018	196
November 2018	111
December 2018	131
January 2019	108
February 2019	132
March 2019	142
April 2019	154
May 2019	253
June 2019	314
July 2019	210
August 2019	169
September 2019	171
October 2019	183
November 2019	154
December 2019	132
January 2020	186
February 2020	230
March 2020	134
April 2020	215
May 2020	244
June 2020	228
July 2020	336
August 2020	423
September 2020	357
October 2020	384
November 2020	568
December 2020	746



January 2021	1'386
February 2021	1'496
March 2021	1'842
April 2021	2'760
May 2021	2'408
June 2021	2'182
July 2021	2'436
August 2021	3'280
September 2021	2'839
October 2021	4'298
November 2021	4'427
December 2021	3'710
January 2022	2'604
February 2022	2'629
March 2022	3'384
April 2022	2'817
May 2022	1'996
June 2022	1'099
July 2022	1'697
August 2022	1'525
September 2022	1'336

*Note.* Own Illustration. Source: (Statista, 2022). Retrieved: 09.2022

## Appendix III: Interview Transcript 1

**Project:** Master's Thesis ZHAW

**Interview number:** 1

**Group:** 2

**Date, time:** September 14<sup>th</sup>, 2022, 12:10

**Location:** Google Meets

**Recording mode:** Otter App

**Duration:** 00h35m27s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (Dejan Jakovljevic)

**Organization:** UBS AG

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank

1 I: Hello Mr. Jakovljevic, how are you? Thank you very much to agreeing to see me today, I really  
2 appreciate it.

3 E: Hi Bruna, I am good and you? No problem, it is a pleasure to participate and that is a topic that  
4 I like it.

5 I: I am good as well. Thank you for asking. Shall we start?

6 E: Sure!

7 I: So, the first question is: to what extent does UBS provide crypto asset solutions to clients? So,  
8 first, do you offer crypto assets to your clients? And how do you do it?

9 E: So, we do not offer crypto assets solutions, we just invest for the clients if they have an execute  
10 only contract and ask us to invest on an ETF or crypto fund, in this case we buy for them through  
11 Vontobel or Swiss quote or Bitcoin space. So, our clients are buying these types of products, but  
12 they don't have access directly to crypto tokens. And they can buy things structural the same, but

13 we're not advising on them. So, it's only what we call execution only. So, if a client calls and says  
14 I want to buy this product, I place that for him, but I'm not advising on this.

15 I: Ok, nice! So, they ask, and you just provide for them but don't advise anything. Okay, and  
16 what's the rationality behind UBS unwillingness to provide crypto asset investment solutions to  
17 their clients?

18 E: look UBS is known to be a very conservative bank. So, to taking certain type of position  
19 especially on controversial topics like cryptocurrencies. From our perspective, from UBS  
20 perspective, we see as cryptocurrencies still as a very young investment market, and which is also  
21 still quite easy to manipulate in a sense that you have people who are both very large stakes of  
22 certain cryptocurrencies and that they can, you know, move the price in one direction since this  
23 market is not regulated. So, for UBS advising clients to take exposure on a certain asset, which is  
24 which not somehow regulated, it's on the bank doesn't want to expose itself.

25 I: And do you observe a rise in the customer demand for crypto assets in the recent years?

26 E: It does, but it's also very cyclical. Why is cyclical because as we see you know, for example,  
27 last year when we when we saw Bitcoin surging above \$40,000. And, and raising so much  
28 everybody was you know, every second client interaction was, what do you think of Bitcoin should  
29 I buy bitcoin as well? Now in the last six months since, you know, the prices are down, there was  
30 contractions. The discussions are less around the crypto topic. So, it is increasing because the  
31 awareness is more and more there, but it's also very cyclical. So, depending on how the price  
32 moves, we see a correlation in terms of client's requests.

33 I: That's really interesting. And do you believe with the new institutionalization of crypto assets,  
34 UBS would be losing clients or would be in a competitive disadvantage for don't offering or  
35 arriving late in this market?

36 E: I think my opinion, but this is just my personal opinion, and I think that cryptocurrencies will,  
37 are there to stay, and I would say probably 90% of the projects or what we see as crypto today will  
38 somehow fade away or will disappear, but there will be certain number of cryptocurrencies, or  
39 somehow some of the technologies involved in these projects are here to stay. I believe that you  
40 know, a big institution like UBS or other banks. They are already working in a direction to you

41 know, stay in the game because I think everybody's recognizing the importance of crypto. So,  
42 they're working in that direction, probably at a slower pace than then than other providers. But I  
43 think these goes in, in correlation with, with, you know, the defensive view that the bank has, so  
44 they're working on that, they're building up the infrastructure to work on that. So maybe to offer  
45 maybe a crypto wallet for clients to store their own cryptocurrencies. So, there are definitely  
46 discussion in that regards, but definitely not doing that would leave a bank, I think, maybe not in  
47 a year or two, but in 10 or 15 years from now, probably behind. So, I think, definitely it's an  
48 important thing to work on for every bank on financial market.

49 I: Thank you. And do you see any pattern in terms of age, wealth level or geography among the  
50 customers who require crypto assets solutions?

51 E: I would say it's pretty fun mix picture over the last few over the last few years. At the beginning,  
52 it was mostly I would say the younger clients so the one age 25 to 35, which we're discussing these  
53 type of things or you know, asking what, what the offering is. And those are actually the one which  
54 no matter how the market, the crypto market is moving. They're still talking about it. They're still  
55 you know, telling you that they're investing on crypto or investing in a certain project or other. But  
56 during the last, the last year in crypto, I had also clients, which were maybe 60, 65, 70 that were  
57 actually asking me "what do you think", "Shall I buy some?", so, some people are into it, so I  
58 think, you know, everybody is trying to get into crypto, but definitely technology natives. 20, 25,  
59 35 years old investors are definitely mostly investing or interested about. I think 20% of my clients  
60 in that age bracket are having exposure to crypto.

61 I: Great. And how did these clients reacted to the recent drop, that you felt a high decrease in the  
62 demand, or do you think for your bank internally, it was like a proof that was too early to start to  
63 invest in crypto assets. How was the reaction inside?

64 E: Yeah, well you know, what, what we do we provide some sort of asset, we don't directly provide  
65 solutions. We try just to explain to you know, some reading material and other stuff to our clients  
66 who ask about crypto we try to explain them what you know, the technology is behind, and we  
67 don't give advice whether they should buy or not. But for us, it's of course, you know, always a  
68 talking point. When clients ask us, you know, what you think about cryptocurrencies and then we  
69 tell them yes, might be something good, but look at the volatility. Today, you might invest \$10,000.

70 Tomorrow, you might not have ever been there. So, as with any other investment, we always try  
71 to make them understand and be aware you know, what does, what does that mean, how volatile  
72 this is, you know, of course if you look at from a 10-year span, Bitcoin moved from few dollars to  
73 several thousands. But that's when it comes to investing. There are also emotions coming into play.  
74 So, you know, for me, it's difficult to advise a client who is upset when he loses five 10% in his  
75 regular portfolio and tell him "Yes, go ahead". And I know that the minus 10 thousand can happen  
76 within few hours. So, for us, of course, you know, seeing that volatility is just approved to tell our  
77 clients or wealth management clients, feel free to go ahead with that. But those are risks involved  
78 and I think it was to a certain extent also necessary some type of correction. So that people realize  
79 again, okay, well, it's not, it's not only what I was aware of.

80 I: Interesting, thank you. And other question, what are the pro requisites regarding for example,  
81 volatility, legislation, industry maturity, that would be necessary for banks like UBS that are more  
82 traditional start to think about offering crypto asset solutions to their clients? Are there like clear  
83 scenarios that these would become opportunity?

84 E: I think definitely regulation. As I mentioned before, you know, having a market that can be  
85 easily influenced by almost like two or three people, it's something that I think no bank is really  
86 interested to have a big exposure. We know in the in the regular financial markets, whoever holds  
87 more than 5% of a certain stock, for example, cannot place all his trades all at once or needs to  
88 disclose to all these activities. And I think something similar should apply to the crypto market in  
89 order for a bank to have a comfort level to advise our clients on that. So, this lack of transparency,  
90 I think it's a big question mark. We have now bitcoin is the first currency, which should have  
91 started with the whole the whole crypto game, and this one has maybe 14 to 15 years of existence.  
92 And only in the last three, four years. I would say there was real interest and awareness around it.  
93 So, it's also difficult for a bank to advise properly on something which has a short track. So, I think  
94 a good combination of regulation and seeing how, you know how a certain asset class responds to  
95 certain market circumstances. I think it's important we see now for example, you know, what is  
96 the relation between maybe cryptocurrencies, to equities, to inflation, to interest rates, so those are  
97 all parameters that the bank maybe wants before going ahead, I mean like to see happening before  
98 telling your clients well, now it's a good moment to invest in certain investments. So, I think those  
99 two are key for increase the crypto market adoption by institutions.

100 I: Thank you. This connects with the next question. It's about the crypto assets' classes. Since  
101 different classes have applied different legislations required. What do you think it would be a  
102 crypto asset class or classes that will be in line with the Swiss wealth management clients? Like  
103 more towards tokens cryptocurrencies, stable coins, because we know that stable coins in CBDCs  
104 have a completely different capital requirement for a bank than other cryptocurrencies. So how do  
105 you see already a movement towards one specific class?

106 E: I think just what banks will do, first of all, sort of sound at the market and see you know, where's  
107 the demand line. So, and I think, I think most likely, it will screw towards two or three crypto  
108 assets which is in my view, maybe Bitcoin a few others, like and one or two others which will  
109 survive I think over the next two to three years. Because those are the crypto assets that are mostly  
110 demanded, mostly known, and I don't think you know, the bank is going towards stablecoins or  
111 other things. Because we've seen all that was sold stable concept thing, but not always so stable as  
112 it remains to be. So, I think it will be mostly flow with the with the client demand. And what I can  
113 expect to see is if you will use here from now that maybe the bank will put in its own in this  
114 strategic asset allocation, probably maybe 2% to 5% allocation to the crypto space and these 2%  
115 to 5% can be then split up and clients' preferences between Bitcoin and Ethereum or in different  
116 three crypto assets.

117 I: Right. And to do that, do you see an investment vehicle, such as crypto funds or crypto ETPs,  
118 that you believe would be interesting for your bank to provide if decided to undertake crypto  
119 initiatives or and do you see any possible partnership with for example with Sygnum Bank or Seba  
120 Bank or crypto custodians that are aligned with UBS needs?

121 E: It's a good question. I think generally, working in UBS for 15 years think UBS if they can, they  
122 will provide their own solutions. You know, develop their own custodian wallet for crypto assets,  
123 what I can imagine is that maybe if they create that, they might partner up with or provide actively  
124 fund solutions or structure products solutions or other providers so that they don't have to, from a  
125 UBS asset management perspective don't need to develop a new product, but rather use the ones  
126 which are already in already existing as I mentioned before, for example, from Vontobel or so.  
127 But I would not I think UBS also given the size and assets under management. I would imagine  
128 that they would develop their own.

129 I: Right. And what kind of future outcomes do you expect from the institutionalization of crypto  
130 assets?

131 E: I think this is going to happen with what we do discussed all before you know, with sort of  
132 cleaning of this crypto space with the projects that are surviving. And as soon as you know that  
133 there is some sort of regulation so that the banks can feel comfortable providing advice actively  
134 on these instruments. I think you know, the traditional finance and the traditional bond, equities,  
135 and hedge funds. We might have in 2, 3, 5 years from now a new asset class which can be cryptos,  
136 this I think will connect with what a lot of a lot of crypto fans are pushing and pushing to, because  
137 apparently as they sell it, it's a great way to increase the to improve the Sharpe ratios of portfolios  
138 and, diversification, which is true in my view, but it's also quite obvious because you have a crypto  
139 asset that grows few 2,000% over a decade. So, it makes it makes sense today to see in that way.  
140 But the actual I think, requires at least two to five years to see how real crypto assets are going to  
141 move in the market.

142 I: I understand and regarding internal capabilities? Do you see the use of blockchain technology  
143 inside their own internal processes in the bank? Do you see any?

144 E: Yeah, that's a good question. Maybe more to direct to our supplier supply chain management.  
145 But why not? I mean, definitely blockchain as technology itself, it's already proving in many  
146 industries to be to be a key element facilitator to transactions and to remove bottlenecks and to  
147 increase efficiency. So why sure that blockchain technology is going to be implemented as well as  
148 in some internal processes within the financial industry. Especially when it comes to the to the  
149 custody of investments. There are already a couple of companies which are tokenizing certain  
150 stocks and that you can move you know through the blockchain and network your stocks from one  
151 custodian to the other. So, the financial industry will also be somehow disrupted with Blockchain  
152 technology.

153 I: Thank you. That's great. That was all the questions. I'm really grateful. It was really helpful. And  
154 thank you very much.

155 E: You're very welcome

## Appendix IV: Interview Transcript 2

**Project:** Master's Thesis ZHAW

**Interview number:** 2

**Group:** 2

**Date, time:** September 17h, 2022, 17:10

**Location:** Google Meets

**Recording mode:** Otter App

**Duration:** 00h40m10s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert Interviewee (E3)

**Organization:** Bank X

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

- 1 I: Hi E3, how are you?
- 2 E: I am good Bruna, and you?
- 3 I: All good as well, thank you for meeting me today, it means a lot to me.
- 4 E: No problem.
- 5 I: Shall we start?
- 6 E: Sure! Just to mention, I am not so up to date because I am in the military service since the  
7 beginning of the year, so some of the topics maybe I won't be able to answer.
- 8 I: No problem. My topic for my master thesis is crypto assets offering in the Swiss wealth  
9 management. And it this interview won't be technical; it is just an overview of your view as a  
10 wealth manager about it. So, the first question is, to what extent does Bank X provide the crypto  
11 asset solutions to the clients?



12 E: I can tell you a lot, of course, like participant view or that, but I can't go too far in the  
13 recommendations because I think Bank X like told us that we cannot recommend anything  
14 regarding crypto, just that you know, it's my own opinion.

15 I: That is fine

16 E: So basically, what we had, like one year ago, was pretty much nothing that we offered our  
17 clients. We had started to think about it like two or three years ago, and we had read a research  
18 team that started to issue more or less frequently a report about cryptos in general, which wasn't  
19 really a recommendation but more of an explanation of what crypto currencies are, how they work,  
20 and what the cash flow you might expect from such an investment and how it might correlate with  
21 portfolios. It was quite basic what we did, most probably due to the fact that most big banks, such  
22 as Bank X, do not really support a lot of cryptocurrencies.

23 I: I think this already directs to the next question, that is, what's the rationality behind your bank's  
24 unwillingness to provide crypto asset investing solutions to the client? What are the reasons?

25 E: So, like I said, I mean, this is like my personal opinion and doesn't really reflect the official  
26 Bank X, it is just like a private view. What I think, which strongly influences the approach of my  
27 bank and many other banks, is that cryptos are not regulated. And as such, they do not truly have  
28 an official existence or right of existence that's within their way, and if you don't really have a  
29 regulated market, or at least to some extent, it's kind of a difficult thing to advise a client on  
30 something like that, that it isn't regulated. You can't really give many other major points of view  
31 on that. And I think this is for sure. One of the key reasons why they are still really against it. And  
32 my very personal opinion, it might also be because it's, it might also be quite revolutionary. So, it  
33 could maybe eat up a lot of tech systems, businesses, or banks, if you support it too much. But like  
34 I said, I mean, I'm not the 100% expertise in this field.

35 I: That's great. Yes, I got it. That's perfect. And do you see a rise in the demand from the customer  
36 side for crypto assets in these last years?

37 E: mean, for sure we had the rise in demand but personally I rather perceived it arrived in interest  
38 to know what it is exactly more than it arrived in investment demand. And here I also say again,  
39 this is my personal opinion, I think cryptos are a hype. I really truly believe that a lot through social

40 media can be fake news, I believe, what they say about crypto. And therefore, it ultimately spreads  
41 around, and it also reaches people that have not really a lot of knowledge about this. Even though  
42 I have to say there are some cryptocurrencies, like Ethereum, where I believe there is truly a  
43 business model. Behind that might really a tech revolution, that it will change a lot our way of  
44 living and the financial industry. And therefore, I just noticed that when he was there during  
45 Corona and also one or two years before I got started, there were also other people or their investors  
46 starting to ask how this is placed in the investment framework and how other investments could  
47 be affected by this cryptocurrency. Some asked, "I had my son who told me this is a good thing.  
48 You can make a lot of money." So there were definitely rising infections. I would say rather than  
49 in demand.

50 I: Okay, and do you see a pattern in these types of customers? For example, age, income level or  
51 generation, etc.?

52 E: Maybe one pattern that I can describe is that most of the people, to give you a background, a  
53 great deal of our client base consists of older people, or they are like the family patriarch, or  
54 matriarch, or whatever. So they belong to the older generation of the families. Hence, they not  
55 always are or might not be so digital. But many of those who ask those questions have children or  
56 nephews or grandchildren that have started to deal with cryptocurrencies or approach their  
57 grandfather or father about this topic. So it's kind of an impulse that came from the younger  
58 generation within the family.

59 I: It's interesting, and do you believe that with the institutionalization of crypto assets, your bank  
60 unwillingness to provide crypto assets solutions might be in a competitive disadvantage compared  
61 to other banks, for example Vontobel and Julius Baer, that offers Crypto asset solutions? Do you  
62 see that as a potential disadvantage? Or you don't see it?

63 E: I would say it's marginal domain. You might be able to discuss that. I mean, it would not make  
64 sense to have a massive number of cryptos in a portfolio, and I mean, you can have a very long  
65 discussion after that. What is true, what is not, isn't notified. But even if you probably agree to  
66 include such an allocation in such an asset, it's such an asset that it's, I mean, a small portion of  
67 your portfolio. And that's the first thing. The second thing is from those people who are willing to  
68 allocate such a small portion of their portfolio. If again, a small portion of all the client base, you

69 get what I mean. I would say those banks who offer that might call rather a niche than a big market  
70 request.

71 I: That's a really good point. Did you hear about the crypto recent crash? Do you think it just  
72 affirmed the hesitancy to give customers crypto asset solutions because we saw that the volatility  
73 is really high?

74 E: Yes, we had a big drop in the crypto space. Yeah, and if this elicited the reaction of okay, maybe  
75 definitely to entering this market, or whatever it was, it kind of confirms that people should not  
76 invest in the wrong places. It's not developed as an investment instrument. You know, exactly. I  
77 kept reading about financial markets and following them, and in the meantime, I don't think this  
78 will have influenced a lot of opinions about investors. Because I mean, we already had such  
79 pressures and crashes before. Maybe what it could have strengthened, but I think is that the opinion  
80 that it's not really contra correlating to financial markets. So that's always been kind of a key  
81 argument of the pros five, the pro crypto side that they said it's an instrument that is not correlating  
82 with financial markets. mean, during the corona crisis markets dropped cryptos dropped. Now we  
83 have 2022 and you can name all the reasons why the market dropped and crypto dropped also.  
84 Well, maybe it has relative strength in this opinion, then. It's good thing or not, because I think  
85 Meanwhile, people have built their mind about this topic. And I don't think that these moves.

86 I: Thank you for the feedback, what prerequisites, such as market volatility, legislation, industry  
87 maturity, and institutionalization, would be necessary for your bank to begin rethinking its policy  
88 of not offering crypto assets? What would which scenario this would change?

89 E: Or I mean, like I said, I cannot speak for Bank X, though I can really give an opinion. One  
90 would be the primary reason for Bank X to change their approach, primarily when they decide that  
91 maybe they don't even have themselves to a European level, but anyway, I cannot speak for Bank  
92 X. But what I can tell you is that one of the key reasons that will influence the big, big banks is  
93 regulation. I think that will have a big effect. I mean, once I had some clients talking with another  
94 banker, and when I asked him about the opinion on cryptos, he said he found something interesting,  
95 which was that the fact that crypto exchanges, all the transfers are kind of anonymous. I mean,  
96 they are Facebook with the code and everything, but you don't really see the name of the person  
97 behind them. Obviously, it gives space to different criminal acts, or as a wave of how you can use

98 it to commit fraud and other crimes, or to finance criminal activities. I mean, if a big bank started  
99 actively using cryptos one day, I don't know, an important politician, say, in a big country, will be  
100 killed, and the killer will be paid in cryptos supported by a big bank. This would imply huge  
101 reputational damage. So there is a lot of reputational risk in where we've arrived. I think that this  
102 is also one of the risks, or not, I think is for sure a reason which is linked to the regulation story.  
103 Aside from the fact that regulation clarifies how the market operates, Because, ultimately, there is  
104 no transparency into how prices are determined because there is no regulation. I mean, of course,  
105 demand and offer, but it's not the same thing as if it's regulated through a regular stock exchange,  
106 for instance, or an OTC market.

107 I: And based on the diverse crypto asset classes and the varying regulations applicable to each  
108 crypto asset class, do you see any crypto asset classes that are considered most likely to fulfil the  
109 demands of Swiss wealth management clients? For example, cryptocurrencies, tokens, CBDCs or  
110 stablecoins and ETPs or tokens? Or do you see one that you feel that's more in line with what they  
111 may be?

112 E: That's for sure, but they'd be better off with a structured product on cryptos because then the  
113 exchange on the structure of the product is regulated. The underlying behind it is probably not  
114 regulated or not regulated enough, but the product you trade is regulated, this maybe you could  
115 fulfil more, maybe not the assets themselves, I would prefer to invest in a format that represents  
116 the underlying asset and this format is regulated, even though the underlying asset is not. But  
117 maybe the technology behind could fulfil more I mean, which one is the token I think that you  
118 have a much faster way of illustrating things, and you could, maybe, one day in the future, use it  
119 for things like fact sheets and all this kind of stuff that you could use this technology for. Yeah,  
120 Also internally Yeah, sorry. You mean internally in the operation center, not only with clients but  
121 also, in general, speaking about systems and processes.

122 I: That's great. And I think you already touched on it around this topic, but is there an investment  
123 vehicle just crypto funds, or crypto ETPs? That is the ETFs. But for crypto, they call it ETPs that  
124 are regulated and listed on exchanges that you believe it is more interesting. If you decided to take  
125 our crypto offer to clients.

126 E: You mean it's more interesting for banks and for clients for a bank to offer because, for example,  
127 sometimes a bank cannot offer if a client with an execute-only mandate asks to invest in Bitcoin  
128 because it's harder for a banker to buy directly on a decentralized exchange, for example, or in  
129 Binance. That's so hard. There are so many risks involved. So, in this sense, maybe a solution like  
130 an ETP, or like the structured product that I mentioned before, could facilitate a lot. Since you kind  
131 of focus on the first shell, then this one is regulated, one within the fund, and it's the fund manager's  
132 job. To have a clear split, put it that way. They kind of for bands. They kind of can delegate this  
133 job to the fund manager. Of course, I mean, then you can also face the question of whether it's  
134 moral if you have a view on cryptos and you say you just delegated the job on that one. So it is  
135 more often than not, that's not the question. But in theory, you could just use this one much more  
136 easily in a mandate. You can say you want to have an allocation to this fund, which the fund itself  
137 is diversified enough in different cryptos, which is another advantage, an additional method to  
138 have such vehicles. So I would say they could definitely facilitate the acceptance within banks.  
139 Whether they are willing to do this and can combine it with their moral view and their approach is  
140 another story, but in theory, this could make a lot of things easier.

141 I: Yeah, there are some funds from JP Morgan, Goldman Sachs, and other wealth management  
142 banks from the US that are providing crypto funds, but I see the Swiss banks are taking another  
143 approach. So yeah, that's why I was trying to understand the perspectives as well.

144 E: Maybe what those could be is that Swiss banks just have a more conservative approach in  
145 general. Yes. I mean, you see different, different aspects in the banking sector. I mean, I'm not  
146 working in that department that is working on deciding whether we accept cryptos, but imagine  
147 that, of course, the general culture that we have in this banking sector has definitely had a third  
148 influence on this approach. And maybe also the fact that these banks haven't really had a big  
149 investment banking purge. So this trading culture is smaller or at least reduced when compared to  
150 US banks, which do more trading. Trading has, I would say, trade is more used to such risk, risky  
151 stuff.

152 I: Yeah, that's true. That's a really good point. I never thought in this perspective, that's really  
153 interesting. And do you see a further institutionalization of crypto assets? And how do you see this  
154 coming to the institutions in the future?

155 E: Like I said, I mean, I'm rather humble knowledge about cryptos. But I think if it will come, it  
156 will. It will depend on whether cryptos can create a business model like the one I expect at some  
157 point in time. For example, the value proposition of Ethereum, that you can maybe really use the  
158 technology behind it, for example, to create smart contracts and that you can concretely use their  
159 technology. This could become kind of a catalysator to institutionalizing them more, which, of  
160 course, will eventually lead to the market consisting of a few cryptocurrencies and not having any  
161 kind of names like fox names and beer names, or whatever you know. It has to create a certain  
162 trust. This is my opinion, and here we have the crypto sector destroying this trust themselves.  
163 Because if you have every week a new cryptocurrency, that is just piping to other sand because it's  
164 not clear why a limited number of people can have access to, and others cannot have access. And  
165 so, it's not, it's not clear, it's not transparent. It's not. I mean, why should I believe and trust any of  
166 those currencies if it's unclear how they were created, how they work behind the scenes, and it  
167 appears to me to be like a game. I'm not talking about like, like, you probably perceive I'm like, I  
168 have rather a positive view on Ethereum because I see a concrete business model behind the  
169 merging, which I don't see in other coins, for instance, just to make an example. Maybe I don't  
170 understand it. This could also be, but I have never really heard about anything concrete behind  
171 there that can be eventually materialized to something tangible.

172 I: I understand I'm sorry, the noise. It is the church bell.

173 E: No problem. I understand.

174 I: That was all the questions. Oh, good. Good. I am really happy with the result. I think you gave  
175 really, really good examples. Also, perspectives that I wasn't looking at before. Do you want to  
176 add something else you would like to say?

177 E: I'm glad to hear that. No, I mean, like, like I said, I mean, my personal opinion on cryptos is  
178 really that if you don't have a business model, it will be really difficult for you to become a  
179 traditional financial instrument. I'm not saying it's both. You know, it's nothing worse than having  
180 nothing at all, but it has to have at some point, something tangible. I mean, if you follow the  
181 classical theory of economics, you allocate a certain value to an asset based on the future cash flow  
182 or discounted future cash flow, and there is no future cash flow expected from such currencies.  
183 Unless you have a concrete business model emerging from it. And then from that point on, you

184 will have a concrete value that you can allocate to it. And, and I believe from that point in time on  
185 also the volatility will decrease substantially.

186 I: That's great. Thank you very much.

187 E: You're most welcome.

188 I: Finally, is that your final thought, questions or comments?

189 E: Yes. Is there any chance I could get a copy of it? When you? So just for my personal interests,  
190 I'm curious to know what you are going to have already introduced to other people.

191 I: Yes. I'm having interviews with two groups. One is like the big banks who are not offering, and  
192 their group is like Julius Baer, the other Swiss banks who are offering, and then I will elaborate,  
193 elaborate on two perspectives.

194 E: And yes, no, if you can and will be glad. But overall, is what I said, these assets that do not have  
195 a business model clear and follow a type of hype, as long as this is still alive, these assets will have  
196 quite difficult life.

197 I: Yes, it is an emerging market, and it come with risks, a lot of assets will fall.

198 E: Every emerging market has frictions, so it's not bad to have frictions because from fractions  
199 you become better if you start discovering your fractions you can see you can develop on them.  
200 That's not exactly how to say this. It's absolutely normal. I mean, I can swear that when was it in  
201 1700 or something when this Italian bank issued the first share, I'm sure this issue was full of  
202 frictions as well. And shares are the most traditional asset that we have today and the most common  
203 as well. So it's absolutely normal, but I believe it's wrong to use miscommunication to make a  
204 purchase.

205 I: Thank you very much. That's really good points

206 E: You are very welcome, good luck with your thesis, I wish you all the best, if you need anything  
207 you can ask me. Have a good weekend

208 I: You too, have a good weekend and I will send you the thesis once it is finished.

209 E: Thanks, bye bye

210 I: Bye.



## Appendix V: Interview Transcript 3

**Project:** Master's Thesis ZHAW

**Interview number:** 3

**Group:** 2

**Date, time:** September 29h, 2022, 17:10

**Location:** Google Meets

**Recording mode:** Otter App

**Duration:** 00h36m03s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (E4)

**Organization:** Bank Z

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

- 1 I: Hi, how are you? Did you also study at ZHAW?
- 2 E: Yes, I did my bachelor there. I wrote my thesis on family office structures and success factors  
3 of them yeah, now I'm doing the master's online elsewhere in London. ZHAW is a very good  
4 school, and I would for sure study again.
- 5 I: Yeah, I did my bachelor in Brazil. But I moved here to do my master and now I'm working here  
6 as well. So and I like it. That's nice. So just to give you an introduction, I am doing my master's  
7 thesis about the crypto offering in the Swiss wealth management. I am interviewing two groups,  
8 one of private bankers who currently offer crypto assets solutions to their clients and other who  
9 don't. So, my main objective behind that is to understand their motivation behind offering and  
10 don't offering crypto assets to their clients.
- 11 E: No problem.
- 12 I: And you work in Bank Z, right?

13 E: Yes, actually, I worked there until end of June. And tomorrow, I'm still not tomorrow, on  
14 Monday. I'm starting a new job

15 I: Oh, nice. Well, what are you going to do?

16 E: The new job will be something different. It will be corporate finance, focused on real estate. So  
17 yeah, something totally new. I will need to learn a lot and get some experience because yeah, I just  
18 wanted to go a bit out of the private banking environment.

19 I: Nice, but it's really nice. Real estate is always something that it's more stable, I think.

20 E: For sure. But I mean, it's I did not go there because real estate is extremely interesting for me.  
21 I mean, of course it is. But private banking got so regulated. It's crazy. It's hard to do business. I  
22 mean, I worked with the Middle Eastern business area and there you can still do some business.  
23 But for example, if you're working with a country from the European Union, it's hard to advise  
24 clients because you need to focus on so many regulations and you cannot proactively advise them  
25 on something, they need to come and ask you and you then need somehow to try to make them  
26 ask you without doing it proactively. Because if something goes wrong, I guess. Then, you're the  
27 person who did the fault because of the investor protection regulations. And it's not so easy. So I  
28 thought, as long as I'm young, let's do something else because private banking I can go back any  
29 time.

30 I: That's true, actually, last semester, did a research about the competitiveness of the Swiss wealth  
31 Management. And I heard the same problems from several wealth and assets managers, also the  
32 older interviewees, talking about that they cannot work anymore because so many regulations, and  
33 the banks are packed with compliance departments, that it's so bureaucratic, that when you need  
34 to move to a new strategy requires such a bureaucratic process that when you finally do it, it's  
35 already too late.

36 E: True, absolutely. True. I mean, this compliance people, the problem of them is that they did not  
37 work in our position, so they don't see how businesses how business works. And they basically  
38 stop everything and sometimes asked for a decrease things which are not possible, sometimes the  
39 client does not want to give the information to you. Yeah, the process takes so long that it's already  
40 too late for the client to do something new. And yeah, it's like really hard and you're basically just

41 mitigating problems with them, and I don't know, I feel like instead of doing the business, you are  
42 half of the day, just documenting stuff, what you have done or running off the forums or arguing  
43 with them and trying to find a solution. It's like, it's not fun. I'm, it's just annoying.

44 I: I understand. I understand. So back into crypto. Can I start to make some questions?

45 E: Of course. Yes.

46 I: Thank you, to what extent the bank that you work for, provides crypto asset solutions to their  
47 clients, including internal capabilities, partnerships, crypto ETPs, crypto funds, etc.

48 E: So at least until end of June, we really not proactively advised clients on any crypto assets and  
49 our Investment Office did not even include it in their asset allocation at all. I do not know the exact  
50 reasons, but I think it's on one hand, the volatility of the crypto assets. Then, on the other hand, I  
51 mean, crypto assets, especially these coins one day they appear the other day they disappeared. I  
52 mean, we do not have the control to check all of them. And yeah, I guess these are the two main  
53 reasons. But if a client wanted to buy an exchange traded product, like a tracker or something, and  
54 she had the wish and told us “Hey guys, buy this for me”, of course we did buy that. But we never  
55 went to the client told him “Hey, in order to diversify your portfolio, or buy a tracker of Ethereum  
56 or Bitcoin”, that's something we did not do. Okay. So that's basically also the end of the story  
57 because, yeah, we just executed these types of allocation in case the client asked us to execute.

58 I: Okay. And do you see a rise in the customer demand for crypto assets in the last years?

59 E: Let's say it that way. Always when there was the hype, people wanted to invest, and they came  
60 proactively and asked. Then, of course, if they came with the product, we bought it for them. We  
61 were never looking by ourselves for a product which we could buy for them. So we told them  
62 yeah, this is not a part of our investment offering. If you're interested in crypto assets, you need to  
63 bring us the product, something that way. And some of the clients did. Some of the clients did not.  
64 We also have a client, for example, who did not want to invest in exchange traded products, but  
65 instead, he wanted to buy his crypto assets directly from Binance. But he wanted to store them  
66 with us because he trusted us more than Binance. But this was also not possible. And because, I  
67 mean, we do not have the platform for that, and even more, what it was, let's say, extremely  
68 complicated in this specific client, he wanted to open a new account, just for some types of crypto

69 assets, so that he could transfer them in and out, so that he has a kind of his own overview. We  
70 open the account for them, and the purpose of the account was yet that from time to time he wants  
71 to transfer money to Binance. And what happened after was that our compliance department saw  
72 that account opened and they said “hey, did you read the anti-money laundering rules? Any funds  
73 which leave the accounts to an exchange for example, they're kind of gone. If he wants to transfer  
74 funds, let's say from Binance or any other Crypto exchange back to us, and we cannot accept it. If  
75 we see Binance, we will block it and send the cash back because we do not want to take any risk  
76 regarding this kind of money laundering. Yeah, many people wash money with these crypto assets  
77 in the bank did not want to take this risk. So they did not accept any money coming from these  
78 exchanges.

79 I: So that's reputational risk as well in case they would use this money used in exchanges to money  
80 laundry, the bank would be at risk.

81 E: Exactly yes. Agree.

82 I: And also, this enters in the regulation point of view. Do you think this position from Bank Z  
83 regarding the ecosystem of crypto assets is caused by the lack of regulation, or that this ecosystem  
84 is not fully regulated yet?

85 E: I don't know. I mean, I honestly don't know if that is the case. I really cannot comment on that  
86 because simply I don't know, I would tell you something wrongly. But I mean, more regulation in  
87 the crypto environment could for sure add some weight on adding crypto assets to the to the  
88 investment of institutions.

89 I: Nice. And regarding these clients who asks about crypto, do you see a pattern regarding wealth  
90 level, age, geography and etc.... of these clients who are searching for it?

91 E: No, I mean, all these stories were actually all from Middle East clients. So, we had a woman  
92 who asked for it and she's in her 40s. She did not in the end buy any trackers because we did not  
93 offer them practically. I mean, we did not have like a list of assets which she could buy. Then we  
94 had the clients of course, also from Middle East, but he was older than 60 years old, who was  
95 interested, and he practically opened an account at Binance and did his stuff. But no trackers. But  
96 he mainly invested because he's kind of convinced to do so. Then we had another client who was

97 also in his 40s and she bought these trackers but what's these clients have in common? It is  
98 normally at our desk you could only open accounts with if you have if you keep assets of at least  
99 30 million with us, and none of them had 30 million with us. So yeah, and two of these clients are  
100 more like let's say, I cannot say gamblers because in the Middle East you're not allowed to gamble,  
101 but they like to speculate, they were speculators. Anyway, they like to do more risky things if we  
102 can say in that way. I mean, then what else do they have in common is that all of them demanded  
103 crypto assets solutions when they were rising, when there was a hype and as soon as the hype  
104 passed and crypto assets started to fall like in beginning of this year, nobody was interested on it  
105 anymore. But, like literally nobody. One of the clients who had a bigger position in one of these  
106 trackers even had a margin call. So yeah, I mean, in my opinion, crypto assets are so unpredictable,  
107 that it's hard to give them an investment view on them. I mean, I know there are many people who  
108 do technical analysis and try to predict the price of these assets. But I don't know in my opinion,  
109 and that's my personal opinion, I think it needs to be something more fundamentalist and there  
110 needs to be a use case behind these assets. And behind many of them there isn't one or maybe it's  
111 too early for what they are planning, I don't know.

112 I: That's really interesting. And do you feel Bank Z is at a competitive disadvantage because we  
113 see other players like Julius Baer or Vontobel or Maerki Baumann that are offering crypto asset  
114 solutions and supplying to a part of the market that wants these types of crypto assets? And do you  
115 feel this is at a disadvantage to Bank Z?

116 E: No, I don't think so. I mean, I think we are not even offering these trackers, but I don't think so.  
117 Even if we were to do so, I don't think that this would not be a very big kind of market. For the  
118 bank for our asset management, because I mean, these are just trackers that show the price. They  
119 track only the price. If you have them, you don't have the coin, so you could not use them in a  
120 different way. You only have the tracker, which is following the price and you would have no  
121 other advantage out of it. And with such investment products, the margins for the banks are already  
122 small, so I don't think that there is a disadvantage.

123 I: And do you believe that with the institutionalization of crypto assets the view from Bank Z  
124 would change? Because we see that some of the crypto assets are being more integrated to the  
125 structure of banks and financial services internally and also to enhance activities and processes.

126 Do you think with this type of transitioning and the merge between the digital world and digital  
127 assets, Bank Z would have a different view about it?

128 E: Yes, if they wanted to use it for their processes, I'm sure they'd want to make the process more  
129 efficient. I mean, I don't find myself speaking on behalf of the chief operating officer or anybody.  
130 But I mean, if this makes you save costs, then I would not. And if it's safe, obviously, then I would  
131 not see a reason not to use it. So I guess if it's possible and if it's not, why not? Surprise me.

132 I: Is there a scenario, like an ideal scenario, in which you see Bank Z changing their stance on  
133 crypto assets? Maybe with volatility, regulation, or other aspects in this ecosystem that could  
134 change the perspective of Bank Z?

135 E: I don't know if there would be huge client demands or if these crypto assets would become more  
136 transparent in the sense of, for example, from my perspective as a private investor, all that I see  
137 from these crypto assets is that they may have a homepage, they had their initial coin offering, and  
138 they have an advisory white paper, and that's all. I mean, I see 1000s of people commenting on  
139 them on YouTube or Instagram, but these are people with no experience, people who made a lot  
140 of money by chance and now think they are crypto gurus. But there is not something transparent  
141 on which you can rely where you can say, "Yeah, I know this is something percent safe. I can rely  
142 on this information". And yeah, that's a problem. And the problem is that there are still so many  
143 of these so-called whales who can impact the price of a crypto asset, and there are just so many  
144 things you do not know I think if everything became clearer, maybe even more regulated, I don't  
145 know. And it could become something, but I think the main thing is client demand. As long as this  
146 is missing, no bank or financial institution will really go into it. Except if they want to create a  
147 niche. Yeah, yeah, it's just a niche, and otherwise I do not see them making a big advancement in  
148 the topic.

149 I: That's great. That's a really nice input. And regarding the different crypto asset classes and the  
150 varying regulations that are applicable to them, do you see a crypto asset class that would be  
151 considered most likely to fulfil the demand of Swiss private bankers and their clients?

152 E: Sorry, can you repeat the question did not hear the beginning.

153 I: Sorry. For example, if there is a crypto asset class or classes that you think would fulfil the  
154 demand from Swiss private bankers and their clients, for example, we have Ethereum (Ether),  
155 Bitcoin, NFTs, Stablecoins, inside of this ecosystem, which one of these classes could be more in  
156 line with the bank's perspective.

157 E: Okay, to be honest, I believe coins could be used simply to participate in the price. I mean,  
158 stable coins are interesting, but in my opinion, they are only interesting for traders, crypto traders,  
159 or people who just want to sell their Bitcoin and leave it in, for example, with Dollar Tether, just  
160 to avoid any fluctuation, and they leave it like that to invest in it maybe later again. But, I mean, I  
161 could imagine that stable coins could become interesting if they could, for example, hedge an  
162 exchange rate risk, but so far, I don't see it because, I mean, even if you buy a US dollar or any  
163 other stablecoin, you're basically still bearing the risks of the US dollar because, I mean, you cannot  
164 avoid it, unfortunately, but that could be something. In terms of NFTs, I think this would really  
165 need to be somehow aligned in order to make the use case acceptable, but I don't see the point of  
166 paying for something which I can see on Google or it's just somehow, I don't see the use of it.

167 I: Yeah, I think also with the media, they shared one use case. If we think about government  
168 passport, identities because of if you use the technology behind to make it more secure, and more  
169 private for your give information, even validating that is yourself. But right now, we are I think  
170 they went to other direction. To be honest, just a comment.

171 E: That could be something interesting, I think this use case could match with the governmental  
172 documentation and so on. But I still think for example, I mean, there would need to be like a  
173 committee who makes this possible international because I mean, there are still many countries  
174 who do not have the funds to invest in such a huge platform and I mean, let's look for example, at  
175 Africa, and they do not care about crypto assets. They care about having food or something. And  
176 I think, the world designed this split between the traditional way of doing things and crypto assets.  
177 Changing the status quo is very different between countries. Yeah, that's my personal opinion.

178 I: I totally agree. That's true. Yeah, depending on the country you don't have the possibility not  
179 even to think about it or have the information access.

180 E: Yes, for sure. And also, something that once came to my mind, which is, let's say, a point of  
181 view for crypto assets, is that I do not know anybody who buys crypto assets just to use them in

182 the metaverse or to do something with them. Everybody buys them in the hope of achieving a  
183 profit.

184 I: Yeah, I understand. So it's more as well, in the sense of having a tangible use case for it. That's  
185 a really nice point. And are there any investment vehicles such as crypto funds, crypto ETPs (that  
186 are the Exchange Traded Products), that you believe would be interesting for your bank to provide  
187 if it decided to undertake an initiative to offer?

188 E: I mean, I could imagine if you have like, if you do something like a fund just to diversify the  
189 portfolio of a person, that could be something interesting, but also only if you have like, crypto  
190 specialists, like somebody who studied crypto assets, who knows all the mechanisms. Somebody  
191 who knows all the coins, not somebody from YouTube, but somebody with real education. And  
192 yet they believe there is a new use case, and they can do a fundamental analysis and give out, like,  
193 yeah, opinions on these assets. And I could imagine that this could be something valuable, but  
194 otherwise I don't see it.

195 I: Nice. Thank you. And do you see any possible partners, such as Sygnum Bank, SEBA Bank, or  
196 crypto custodians that are aligned with your bank's needs and might assist if one day your bank  
197 decides to launch a crypto offering?

198 E: Yes, I mean, I could imagine that they would partner with one of these Swiss based crypto  
199 banks like Sygnum, but I think I mean, it's too early to have any certain thoughts on that because  
200 we at Bank Z do not even know what's the bank's goals regarding this topic, for example, we do  
201 not know what they want to achieve. However, it will not surprise me if they want to custody with  
202 one of these Swiss crypto banks.

203 I: Thank you. And what do you expect from the future of this market? Do you have any views on  
204 that? How this transitioning between the traditional ecosystem and crypto assets is going to take  
205 place, if they are going to meet, or do you think is going to be something that will maintain stay  
206 separated?

207 E: It's difficult to say, but I have a few scenarios in my head because I'm also investing in a few of  
208 these crypto assets. One scenario would be that there will be a huge use case for these crypto assets  
209 and people will start to buy them, where you can adopt these crypto assets because you need to



210 buy something in the metaverse and earn cash or something. And that could be a use case where  
211 there is value behind it. Then the other case could be through just like it already happened; there  
212 is a hype, people buy it, and again it goes down; the hype and falls and continuous like that. Or  
213 there is the day when the first scenario occurs and only the coins with something behind them are  
214 kept alive, while the rest die. Yeah, or the third scenario is that it becomes regulated and almost  
215 all the coins disappear, just some survives. Yeah, that's all.

216 I: Do you think the CBDC, that is the central bank digital currency, that are not decentralized, but  
217 still uses the blockchain technology. Do you think Bank Z would support in this case? Because we  
218 see the UK central bank, Sweden, US, Russia even Brazil's central bank, that started already and  
219 already published reports talking about projects regarding CBDCs, saying that it will be soon  
220 launched. Do you feel like this will come to Switzerland? What are the views of the bank about it?

221 E: it's hard to say, I would imagine that would have a pilot project with the bank trying to test if  
222 that really works and what is feasible. But behind that, I cannot really make an estimation because  
223 it's very hard without knowing anything what's going on, even when I was working at Bank Z, you  
224 as a private banker, you just get the opinion of the of the Investment Office, you're not a part of  
225 the of the committee who make the big decisions. Your job is basically to sell the products and to  
226 make the best for the clients. So I'm really not I was not even a part of these type of strategic  
227 question.

228 I: Just for curiosity, which crypto assets you stated investing and through each vehicle?

229 E: I buy through Binance, I invest in Ethereum, Sandbox, I need to check again, I invested in a lot,  
230 but I did not check recently because of the crash. I even want to enter again, but because it's so  
231 painful I will just wait to see if the situation gets better. But I want to make a remark that I really  
232 did not read and researched about all these coins, I just followed the hype to be honest because I  
233 did not have the time to check what they can do and what are the future expectations of these  
234 crypto assets. Okay, other thing I wanted to ask, I saw on your LinkedIn profile you work for a  
235 crypto company, can you tell me what you do and also what your thoughts on this crypto markets  
236 are?

237 I: Sure, I work in a company called 21shares and we are a crypto ETP issuer. So we have Exchange  
238 Traded products listed in some exchanges here in Europe, and now in the Middle East and in Latin

239 America. And my view is that I see some of the use cases. And did you meet Mr. Kley in your  
240 classes at ZHAW? So, he gives the classes about crypto assets and blockchain in the master  
241 program and really worked in making the students understand the sense behind it and the actually  
242 use cases of it. So, I started to get interested and in addition, it helped me with transferring money  
243 from Brazil to Switzerland. And I just as it's my first internship, I wanted to enter the market, see  
244 how it is. But my view is that like all emerging markets, a lot of the initiatives will fall and others  
245 that have a stronger use case will prevail. And as any emerging market I think it will be a lot of  
246 volatility and it will or already experienced the hype in the beginning, and after the prices fall,  
247 initiatives that are not so strong goes bankrupt, they will follow the normal cycle of economics.

248 E: Good, good. I'm really curious to see how things will move on.

249 I: Yeah, I think it will change a lot. I worked before in VC and in traditional finance, and comparing  
250 my experiences, I feel like it looks like that one week is one year in the crypto market.

251 E: I like this topic really much, and as there is not so many sources that I can trust, could I read  
252 your thesis when you finish?

253 I: Sure, I can send it to you once it is ready.

254 E: Goodbye Bruna, I need to leave, thanks for the interview.

255 I: Thank you, bye.

## Appendix VI: Interview Transcript 4

**Project:** Master's Thesis ZHAW

**Interview number:** 4

**Group:** 1

**Date, time:** October 03rd, 2022, 16:00

**Location:** Maerki Baumann AG

**Recording mode:** Otter App

**Duration:** 00h38m09s

**Speakers: I:** Interviewer (Bruna Auto Cabus), **E:** Expert interviewee (Dr. Stephan A. Zwahlen)

**Organization:** Maerki Baumann AG

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

1 I: Hi Mr. Zwahlen, thank you very much for agreeing to meet me today.

2 E: Thanks for coming, no problem!

3 I: So, shall we start? The first question is, to what extent Maerki Baumann offer to their clients'  
4 crypto asset solutions, and including, how do you provide it, for example, internal capabilities,  
5 partnerships, etc?

6 E: Yes. Maybe I should give you a short-term view of the strategy we implemented starting in  
7 2019. We came to the topic in May of 2018. And I gave at that time an interview to a journalist,  
8 and this was misquoted later by an online journalist saying that we were the first crypto bank to  
9 offer, this interview misinterpretation said that we are the first bank to offer crypto services to  
10 European clients, which was not the case actually, it was a wrong statement. But it went all over  
11 the world, and I had 400 requests from people asking whether we could help them with crypto  
12 services. And we took that as a starting point to think about whether to go into that topic or not.  
13 Then we came up with a crypto strategy and we worked in it for three months. And we then decided  
14 to go forward with three strategic steps. The first was to offer corporate accounts to start-ups  
15 companies that are involved in blockchain or crypto services. The second was to offer actually

16 trading and custody of the common cryptocurrencies, through the setup with our transaction  
17 partners we found in and subcontractor of the transaction bank that is called crypto finance. And  
18 in the third step, we then started to offer advisory services as well as discretionary services in the  
19 space of cryptocurrencies. So since the third step has been implemented, we offer our clients that  
20 they can that part of their wealth, let them manage by us as a bank by opening a segregated wallet  
21 for the respective client or starting July this year also by a crypto certificate.

22 I: Interesting, and what was your motivation behind to start with crypto assets offering initiative?

23 E: There were basically two when we received these 400 requests, we start to analyze what these  
24 people were asking for intimate in particular to needs we discovered. One need were start-ups  
25 companies that were involved in blockchain or crypto business but did not get a banking account  
26 in Switzerland because at that time, it was before crypto banks Sygnum and SEBA got the license,  
27 most banks in Switzerland were not prepared to accept such corporate accounts because they did  
28 not have the knowledge of blockchain crypto industry. So that was one key reason without its lack  
29 of services we would have in Switzerland at that time. Furthermore, already in Zug, the crypto  
30 Valley emerged, and many companies had to go to Lichtenstein trying to open an account. They  
31 were actually looking for an account to do Fiat transactions, payments for the employees and  
32 making investments in Swiss francs or euros. But they didn't get a bank account. So that was one  
33 motivation because we thought we should offer as a Swiss bank, this service for that kind of  
34 companies that are very valuable also for the development of the Swiss financial center and the  
35 second reason was our conviction and we are still convinced that digital assets will become an  
36 integral part of professional investment advice and asset management. And this includes crypto  
37 currencies that are just the first representative of digital assets. There will be an even bigger  
38 potential when it comes to digitalize the tokenized traditional assets, that might be very interesting  
39 for clients and also for banks, for clients because they can invest in asset classes that were not  
40 available for them before, because it can also invest in infractions and not only in the whole pieces  
41 of the respective investments. And from a bank's perspective, it's an interesting because it can  
42 significantly increase over time, the investment universe and therefore also return potential of a  
43 bank or a financial intermediate.

44 I: Interesting, so, the main use cases in your view of the different classes of crypto assets. Is the  
45 tokenization? Correct? or do you think there is other classes that also would be a way of integrating  
46 with the traditional financial system?

47 E: From the FINMA's perspective, its categorization of utility tokens, payment tokens and asset  
48 tokens, currently in the investments we will implement for clients that wish to be involved in  
49 crypto currencies, all kinds of currencies are basically in the universe. In fact, we have a large  
50 portion in Bitcoin and in Ether nowadays, because these are the cryptocurrencies with by far, the  
51 biggest capitalization. Going further, I think that tokenized assets will also become more  
52 important. We already have a set up to actually have custody tokens in our bank, but we need to  
53 analyze it case by case and at that point, we do not offer tokenized assets to our clients. But this is  
54 sure only a question of time.

55 I: Interesting. And do you see a pattern in the terms of age, geography, or wealth level among the  
56 customers that look for crypto assets' solutions?

57 E: Yeah, I think it's definitely the younger generation that is more proactive. If we have a look at  
58 the industry in Switzerland, I observe the following various patterns among the players. One is the  
59 financial industry that is by far the slowest in that process. I guess it's a result of lack of knowledge.  
60 And it's also meant by the idea that the original intention of people in crypto, like in the crypto  
61 industry, was to get rid of the institutions, so it's also fear of cannibalization of their, of their  
62 business, maybe, but it has changed in the last few months. So most financial institutions in  
63 Switzerland which does start to think about how and in what ways they could offer services in that  
64 respect, but in general, the financial industry is rather slow in adopting the new potentials.  
65 Regarding politics, was slightly positive at the time when we were thinking about it, I have also  
66 various connections to politicians also to the government and they were quite proactive. They also  
67 managed to establish in 2021, the DLT law in Switzerland first step in February, and as a second  
68 step in August, and this actually passed the parliament with more than 100% positive votes. So the  
69 basis for the tokenized economy was basically implemented quite early. When it comes to the  
70 regulator, my feeling was they are neutral to slightly positive, very interested in getting the  
71 necessary knowledge, and then finally, they also got a license to Sygnum Bank and Seba Bank  
72 very early compared to other companies, and this was not seen in other countries. And if you ever  
73 look at private clients, I would say it's particularly younger ones who have a closer connection to

74 the technology, digital natives, most of them would have been involved in some way already with  
75 cryptocurrencies, maybe smaller insolvency, but they know quite well, how to deal with it. But the  
76 longer the more also, older people are interested in digital assets and in what's going on, we realized  
77 that quite early when we started to implement our crypto strategy, there were quite a few questions  
78 from our existing clients, that typically conservative clients and in our bank, but I think probably  
79 we could make it clear that what we are doing is not something that is high risk, or that would  
80 affect them, but it's just an additional service we would offer. So, they were not frightened by what  
81 we what we did, but they were actually interested and that's also what we observed people are that  
82 with time the older, they're more interested. Also the older ones. Maybe not the oldest in the age  
83 bracket. But the interest gets into the older and older if you have a look at clients. But what's  
84 happened actually as a consequence of our digital asset strategy is that we also started to attract  
85 younger people. I mean, we have been working on many next generation projects in the last 10  
86 years, but none of them really worked. We tried with various concepts to attract the younger and  
87 younger people between maybe 25 and 45, but it was quite hard, and one reason was that the retail  
88 banks of the large, universal banks have excellent offerings for younger people, for students, for  
89 example, and it was very hard to compete with that. And things changed when we launched our  
90 crypto strategy. This was the first topic that really attracted young people. And the nice thing is  
91 younger wealthy people most often and as a as a wealth manager, you should certainly have but in  
92 particular for these clients a good offering. And what we observe nowadays is that if there is  
93 someone dies and there is a situation of inheritance, quite often the next or our next generation, we  
94 also deal with would ask whether you whether we can handle digital assets or not. So this has  
95 really significantly helped to access the younger generation of existing clients or also in the market.

96 I: Really interesting and what are their advantages of investing crypto assets via a financial  
97 institution from the client's perspective, and why not directly wallet?

98 E: What we observe is that many people are most younger people will do it directly by opening a  
99 wallet and then trade in a crypto exchanges. However, there are several reasons why the services  
100 provided by a bank are an advantage, particularly for people that are interested in the asset class  
101 or they have huge amounts of wealth in that asset class, it can make sense to be compliant of a  
102 bank since you have a very high level of security. In our setup, you have the client bank, that is  
103 Maerki Baumann, then you have to transaction bank that would do the outsourced processes for  
104 example trading, custody services, back-office operations and so on. Then you have crypto

105 finance, that would be the subcontractor in the area of crypto, that's licensed securities dealer. So  
106 you have to regulated banks and you have a securities dealer, so it is a high level of security. And  
107 that's interesting for people that do not have the knowledge how to do it in detail, but want to be  
108 involved, but they're looking for party where they trust, and that is capitalized very well, and maybe  
109 that they know it already for a long time, that's definitely an advantage and they are also prepared  
110 to pay more compared to opening a wallet and do it directly. The other category of people that  
111 would prefer to do that, are people that have a significant amount of money that is invested. So,  
112 they sometimes prefer to work with a regulated institution they know than just do it directly.  
113 Another important aspect is the whole custody of the of the piece it's in the standard setup among  
114 these companies I described. However, the client has a contractual relationship with us as a bank,  
115 but we work together with the transaction bank and the subcontract to make sure that the keys are  
116 in custody on a high security level. And other advantage is that younger mainly younger people  
117 do not have a clear solution for the case if they would die. So for example, no one knows that they  
118 would own significant amount of cryptocurrencies because they have their key on their own, it's  
119 not a written in in asset management statement of a bank, if you become a client of a bank this is  
120 automatically for sure. So these are actually a few reasons, and if I have a look at the clients, the  
121 will since we are in crypto business, the interesting thing is that this kind of across we bring  
122 traditional clients in the crypto world, the ones that are interested to get involved. But also, we  
123 bring wealthy young clients from the crypto world into the private bank. Because what we meet  
124 quite often are people that maybe made 50, 100, 200 million and that amount of money lies in  
125 wallets. No banks know it because it's under the radar of banks. And quite often they know a lot  
126 about cryptos but not so much about managing such huge amounts of wealth and many of these  
127 wallets are highly volatile. So, what they're looking for is to diversify their assets and quite often  
128 if you have large amounts, you need a partner at the intersection between digital world and classical  
129 financial system. So you need to have access to the to the Fiat world. And that's the knowledge  
130 we've built up in the last few years. We can do the KYC and AML analysis because we understand  
131 the crypto market and if everything is okay, we can offer the clients that transfer for example,  
132 Bitcoins in in Swiss francs. Afterwards, these clients would either invest in natural things like  
133 yachts and cars and things like that. In private equity in real estate, some of them would also give  
134 us a mandate to do a conservative Asset Management Solution.

135 I: Interesting.

136 E: They are actually looking for a partner that helps them to deal with their wealth, including taxes.  
137 It's also a topic you need to deal with. You have taxes on the wealth, but you might also have taxes  
138 on the income that is graded by cryptos staking rewards for example, or other forms of premiums,  
139 you get the like from the income.

140 I: Interesting, yet because there is a huge new wealth coming from the crypto market, also start-  
141 ups and how did your bank' customers reacted to the recent crypto crash? How was the demand  
142 reaction?

143 E: Well, the effect on the bottom line was extremely limited because we are in crypto business but  
144 with a very risk-controlled approach on the side of the corporate accounts and that's a significant  
145 result with more than 200 corporate accounts now that come from blockchain and crypto business.  
146 We typically have a Fiat account with companies will do their salary payments, investments and  
147 so on in Fiat. There was no direct effect on these companies. Maybe one or two had to leave the  
148 market because they did not have a good basis to survive anymore. But still we have one additional  
149 corporate client a day, so one corporate client a day. So, there are even many more requests but  
150 due to our diligence that is very strict, we would only accept that much less than we have demand  
151 on the side of crypto assets. And as well, the volume is not that high right now, there is a low  
152 volume. Why is that volume so low? I mean, what happened was exactly that from crypto  
153 community. People came to our bank and then they transferred crypto in in Fiat. So, that's not in  
154 this Fiat part. And on the other hand, that we have to admit the process of traditional clients going  
155 into crypto is rather slow, particularly institutional clients would not have started to invest yet.  
156 And things like they happened last June certainly don't help too much to establish the asset class.  
157 So volatility, since volatility is still very high. It will take far more time to establish the asset class.  
158 But from a bottom-line perspective of our bank, it has no significant defects.

159 I: Interesting and you already talked about but, for instance, how was the process to merge  
160 traditional finance and this crypto offering? What was the hardest part in this process?

161 E: For at first, we were also in discussions about whether it makes sense to establish a business  
162 within the same entity as the bank. And many journalists were actually attracted by the fact that  
163 we went into that business because they said it's a contradiction of traditional conservative private  
164 bank goes into crypto. But we came to the conclusion that this is actually a good thing to do for



165 several reasons. One reason was that we observe many private clients looking for additional  
166 investment opportunities, and mainly in in a time where interest rates are very, extremely low,  
167 now, it's changing but I used to be very long for a long time and traditional asset classes were very  
168 highly priced, real estate, equity and so on and private clients were looking for additional  
169 investment opportunities and that was a reason why we thought it makes sense to have that  
170 business in our bank. Additionally, because on the other side, you have companies you have these  
171 startup companies that are looking at some point in their life cycle for additional capital. So the  
172 idea was to bring together at some point, these two elements of the investors and entrepreneurs.  
173 Another idea we had was that entering on this new market could let's say vitalize the company  
174 culture a little bit by this new topic, because we were always a little bit more proactive than the  
175 average private bank. We found that this transaction backfired in the established modular  
176 investment solution that did not exist in 2016 when we launched it, we went into crypto quite early.  
177 But still we were a bank and company culture were limited when it comes to agility and flexibility  
178 for changes. And we thought that when we go into that business, it might just change, and this  
179 actually work. Since we did not say that we are creating something new that will be a threat for  
180 the existing business. We decided not to push the idea with our clients to hard we didn't force our  
181 credit advisers to use these services, but we just established a crypto desk next to the other private  
182 banking units and offered the client advisers and the clients to participate if they wish to do so.  
183 And the fact that no one was on or felt threatened by this, by this change led to the fact that they  
184 started to increase interest and also involved themselves in in this process. The result was for  
185 example that in private banking, interested clients interested client advisers started to take small  
186 stakes in cryptocurrencies as well. Client advisers also older, older ones went to I think it's also  
187 taped on me to do a digital asset seminar and someone, so they even implemented further  
188 education.

189 I: That's really interesting because also it's other types of customer profile entering into this market.  
190 And do you already thought about using a vehicle for example, crypto funds or crypto ETPs that  
191 help investing in crypto assets?

192 E: At first, before the implementation of their current crypto assets offering strategy, we thought  
193 about this other investment vehicles, but we did not follow with the proposal. There are basically  
194 two, four ways of doing it with us today. You have investment advisory, or you have asset  
195 management, investment advisory you can either have a wallet next to your traditional custody

196 account, where you just allocate a certain amount of money and then you hold your cryptos in that  
197 wallet. Or you can even if that's what we changed, I think it was major fear. You can even come  
198 to Maerki Baumann with only a wallet. This means the client opening process is much less work  
199 than it is to open a normal account but you can only hold the cryptocurrencies and the reason why  
200 we decided to do that was the many clients haven't established a bank relationship and they don't  
201 want to change it and do the whole client opening and offering just a wallet might be the first step  
202 to get involved with wealthy clients and if they are happy with it with the service they might in a  
203 second also come with a traditional accounts, and this actually happened already. And on the  
204 discretionary side we have two solutions, we have a crypto module that is part of our modular  
205 investment solutions. And in this crypto module, that's also a segregated account, we will  
206 discretionarily manage the crypto portfolio. These are currently around seven different crypto  
207 currencies involved. And you can make sure that you allocate sort of a certain amount to that  
208 module and then it's managers minimum amount to invest this one, CHF 100.000 is the minimum  
209 amount, for this crypto module. What we are telling our clients is we will not invest more than 2%  
210 to 3% of a diversified portfolio in crypto. So this means if you have a minimum investment of  
211 100.000 in that crypto module that you could you need at least 5 million of assets. That's quite a  
212 high threshold for many clients. So, we decided to come up with an additional solution and that's  
213 an AMC actively managed certificate on the same investment plus task and that's available starting  
214 from 10,000 Swiss francs and this can also be in custody of your own bank. So you do not have to  
215 become a client of Maerki Baumann, one that goes through the whole process, but you could also  
216 buy it in the market and then hold it in your custody account.

217 I: That's really interesting. And was this recent?

218 E: It was we launched it in July. The AMC we then wanted to come up with a campaign, but we  
219 observed after the significant drop in the crypto markets. So, it was not the right time. So the  
220 instrument is available, but we haven't we haven't pushed to get in the market because market  
221 timing is probably currently a little bit difficult.

222 I: And do you see a further institutionalization of crypto assets? And which outcomes do you  
223 expect from it?

224 E: Yes, I think this is what needs to happen, there are several elements like banks and crypto  
225 companies, and we see government institutions and regulators working on that, one it is to regulate  
226 the whole thing and we can observe that in all main financial centers. At the beginning the whole  
227 idea behind these crypto currencies came from the libertarian force, people that are really critical  
228 towards institutions and so on, so they were kind of really clear competitors against financial  
229 intermediaries. However, with time, also the crypto community started to realize that regulation  
230 was necessary in business cases, weather it is in traditional finance or in the digital world. That is  
231 exactly what is happening now. We see even that crypto companies are now applying to security  
232 dealers' licenses or banking licenses. As a result, I think it will be a conversion in the future  
233 between the traditional financial system and the digital world, like that the same things are  
234 regulated in the same way. However, this is a process to institutionalize the whole business and  
235 that it is going on now. The second point is that now you have more research facilities, what helps  
236 a lot. However, the research methods and the time series of the data that are underlying the research  
237 are still limited. And the third point and the second remark are that when you talk to clients about  
238 tokenized assets, the question that comes very early is how or who would sell the tokens if I wanted  
239 to get rid of it and for what prices, like "are these prices regulated?" "Is there some monitoring of  
240 these players?" and so on, so the establishment of a secondary market would be an important point  
241 for the forces of these tokenization companies to have a foundation, that are actually doing the  
242 tokenization, that is also the companies that also have the technological know-how. If you look at  
243 our position, we are not the bank that wants to have this deep technological know-how of crypto  
244 markets, but we position ourselves as an asset manager that unite these two worlds, the traditional  
245 finance world and the digital world, and we work together with partners in this digital world. So,  
246 SEBA, Bitcoin Suisse, Crypto Finance, are not particularly competitors, but actually potential  
247 partners.

248 I: These were all the questions, but I would like to add a question, which use case of crypto assets  
249 you see the most expected to meet the demand of private banks and their clients besides the tokens?

250 E: I could imagine that all the types of tokens or NFTs could meet this demand, but it needs to be  
251 under custody of an established institution, so the institutions that will be opened to take under  
252 custody of NFTs for example might have an advantage when compared to crypto companies that  
253 are involved in unregulated activities.

254 I: Thank you. That was all.

255 E: Ok.

256

257

## Appendix VII: Interview Transcript 5

**Project:** Master's Thesis ZHAW

**Interview number:** 5

**Group:** 1

**Date, time:** October 05th, 2022, 12:10

**Location:** Zoom

**Recording mode:** Otter App

**Duration:** 00h23m30s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (E2)

**Organization:** Bank Y

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

- 1 I: Thank you for meeting me today.
- 2 E: You're welcome.
- 3 I: So, a brief introduction. I'm doing my master thesis about the crypto assets offering in the Swiss  
4 private banking. And the main research question is about what's the rationality behind the ones  
5 that are offering crypto assets of the private banks and what is the rationale behind the other group  
6 of private banks that are not offering crypto assets to their clients. In addition, to which extent they  
7 offer and how they are doing that? What are the preferences? So that's basically just an overview  
8 about the research. And do you have any question Is it okay if I record?
- 9 E: Yeah, it's fine. Maybe just to let you know. Maybe as a remark before, I mean, I'm, I'm stating  
10 my own opinion and my own news and not the view of bank.
- 11 I: Thank you. So, shall we start? Can I start with some questions?
- 12 E: Sure.

13 I: To what extent does the Bank Y provide crypto assets solutions to their clients?

14 E: So as you might know, Bank Y has a collaboration with Seba bank. It's a crypto bank, it's a  
15 licensed bank based in Zug. And basically, we started to look into crypto assets in the past and the  
16 crypto offerings started let's say one year ago, roughly. I would say and so that entails you know,  
17 on one hand offering from SEBA itself, so we have mandates which we clients could subscribe to.  
18 And then there's a BANK Y offering like standalone, not in within SEBA. And as far as I'm  
19 concerned, the custody of the assets is done by SEBA bank. So we have hot and cold storage.

20 I: Interesting and what are the motivations behind Bank Y commitment to provide crypto asset  
21 investing solutions to its clients?

22 E: I mean, you know, of course, when the whole hype in quotation marks started, you know, a lot  
23 of investors wanted to take part in that and, you know, over the years, it came also apparent to  
24 classic or traditional wealth manager that, you know, that might make sense to offer an entry  
25 opportunity for clients in digital assets as they were interested on it. So, motivation is basically  
26 just to also have something on the offering shelf for the clients to be to be competitive also because  
27 the others are doing it as well.

28 I: Yeah, which products those Bank Y offer?

29 E: So basically, you can trade a selection of coins, I can tell you with ones right now because I  
30 can't remember all of them exactly by heart, but you know, you can assume that it is the most  
31 liquid and the most traded ones. Then, we also have some exchange traded products, like the  
32 standard products you also see probably in other banks like you know, 21 shares, so, of course, you  
33 can also trade you know, these kinds of third-party trackers, certificates and this kind of stuff.

34 I: Interesting. Thank you. And other question, I would like to know if do you see a rise in the  
35 customer demand over the last several years for crypto assets?

36 E: You know, the timing has been a bit rough in that space, right? Not only digital assets also in  
37 the financial markets in general. But, you know, from my perspective, maybe, how can I put this?  
38 The demand certainly has not increased like from our clients' base, I would say, because the market  
39 environment has just been too harsh, you know, decreased too much. But we have we have some

40 clients who were and still are engaged in digital assets, not necessarily directly with us, sometimes  
41 via other exchanges and third parties. Yeah, but to answer your question, no, I cannot really see  
42 that.

43 I: Okay. And the Do you see a pattern in terms of age, geography, or wealth level among the  
44 customers that look for crypto assets?

45 E: Yeah, I mean, there's clearly you know, some from demographics, you can say it's rather young,  
46 that's for sure. Geography Difficult to say. Difficult to say. Certainly, you know, it's not the classic  
47 or typical, traditional Swiss investor with sixty years old and as several millions or billions on that  
48 account. But the broader young, quite internationally oriented, I would say.

49 I: And do you observe, when your bank started to offer crypto assets, it came at different customer  
50 profile to search Julius bear, did you feel this impact?

51 E: What do you mean?

52 I: For example, if the view of the bank, since you started offering digital assets solutions, changed  
53 or attracted other customers profiles, for example, younger customers, if you could attract other  
54 customer segment when you started with this offering?

55 E: I mean, probably I cannot conclude our bank view because I don't have the statistics on that  
56 topic. But I mean, of course, you know, it has changed over the past years the view first. What we  
57 made it was not really on the plate. So to speak, digital assets, you know, over some probably a  
58 lengthy process, also regarding the investment officer, and the perspectives from older people,  
59 departments, investors, relationship managers, so they introduced the digital assets offering and,  
60 yeah, it's hard to answer it specifically. But of course, the perception within the Swiss financial  
61 industry and probably also the international perception is that Bank Y has, become open to crypto,  
62 you know, also due to the collaboration with SEBA bank. So, I would say in the digital asset space,  
63 Julius Bear is not an unknown. Put it that way.

64 I: Yeah, that's interesting and what are the advantages of investing in crypto assets via a financial  
65 institution from the client's perspective? Why not use your own wallet directly?

66 E: That's, you know, I don't know if you traded yourself in digital assets, but, you know, it is not  
67 that easy, if you work with let's say, with a solid institution in the market, and you have access to  
68 your account, so your wallet probably you're willing to pay a bit more for the security behind it.  
69 So that you know, you also hear these stories from clients that have lost its private key and could  
70 never retrieve his assets. So probably the reason a client would prefer to trade through a financial  
71 institution is trust and security.

72 I: Nice. And how did your bank and its customers react to the recent crypto assets crash?

73 E: You know, I cannot say about the entirety of the clients of Bank Y. But I would assume and I'm  
74 also you know; I have some connections in the Swiss Crypto Valley. If you if you know what that  
75 means, the investors in the digital asset space, they're probably a bit more risk affine, like they're  
76 not that risk averse. And for them, and for the investors who really believe in the technology and  
77 think that digital assets will prevail or even you know, get more and more important, probably they  
78 have a stance of, I want to increase my exposure and then you know, buying again. Yeah, so, but  
79 you know, I cannot generalize it to be honest, but I would assume that probably some, some part  
80 of the investor base wants to invest even more, because the prices have come down, and they see  
81 it as an entry point and a good entry price, for sure it was a shock and some of them want to  
82 liquidate and, you know, get out but I cannot tell you how much to split of these ones who sees as  
83 opportunity and want to expand their exposure and the ones who wants to liquidate and get out of  
84 the crypto ecosystem.

85 I: Do you have customers from the crypto Valley since it's emerging wealth source in the last  
86 several years.

87 E: What do you mean if we have clients from there?

88 I: Yeah, if do you see this type of clients from the new crypto wealth searching the traditional  
89 finance institution to open accounts or investing their money?

90 E: No, I do not have any client from there.

91 I: And based on the numerous crypto asset classes and the various regulations that each one has,  
92 which crypto asset class or classes are considered, most likely to fulfil the demand of Swiss wealth



93 management clients, like for example, CBDCs, cryptocurrencies, NFTs, stablecoins, utility tokens,  
94 security tokens, etc?

95 E: Probably coins. And the reason be, it is probably Wealth Management reasons. So if you have  
96 a portfolio of several millions, probably you want to have some allocation to digital assets. Because  
97 the risk return profile might enhance your portfolio and therefore you, you'd probably go for coins  
98 I would say. But what I can observe is we only have coins.

99 I: Okay. Interesting. And in the partnership with SEBA bank, does SEBA bank do the transactions?  
100 Transactions from digital assets to fiat money and is Seba bank the custodian of the digital assets?

101 E: Yes. SEBA bank is our partner how I said, and he support us with all the process, including the  
102 transactions, custody, storage and so on.

103 I: Okay. Interesting. And how you see the further institutionalization of crypto assets?

104 E: It's hard to say.

105 I: Just like your personal opinion.

106 E: yeah, I mean, probably, you know, now, all markets, also ultra-traditional markets are really  
107 difficult. And digital assets, they proved to be highly correlated to, let's say, growth equities, high  
108 growth equities. So you know, in an environment where interest rates are increasing, you know,  
109 coins also thing and to digital assets also tend to fall, right? Maybe this this whole situation, I  
110 mean, this is my opinion, might prove as valuable in the long run. Because then you really can  
111 divide the other projects from serious projects and really trustworthy and promising projects from  
112 rather funky can kind of projects. Yes. Yes. Like you're also a way of, of price correction.

113 I: That is really interesting, so you think the crypto winter could be a good thing for the market?

114 E: Yes, I'm not another professional in digital assets, do you know, but what I am saying is my  
115 personal opinion.

116 I: What is interesting, actually, the most important is to see the view not from crypto specialists  
117 but from private bankers like you, how private bankers see this asset class from the traditional  
118 perspective. So that's really interesting. Your point of view.

119 E: I am happy to help, I already was in this phase when I did my Masters, and that is a really  
120 interesting topic.

121 I: Thank you very much for meeting me today, it was really helpful.

122 E: No worries, do you still have a long time to finish the Master?

123 I: No, I will finish hopefully in January and then I am over with it, looking forward to it.

124 E: Well, good luck with everything.

## Appendix VIII: Interview Transcript 6

**Project:** Master's Thesis ZHAW

**Interview number:** 6

**Group:** 1

**Date, time:** October 06th, 2022, 11:00

**Location:** Zoom

**Recording mode:** Otter App

**Duration:** 00h30m23s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (E1)

**Organization:** Independent Asset Manager A

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

1 I: Hi E1.

2 E: Hi Bruna, how is it going with the interviews? Do you have a lot of interview partners? I  
3 remember a long time ago in my bachelor thesis I struggled to find.

4 I: I has been very successful, didn't get the full number of asset managers that I need for the analysis  
5 who will give you, their insights.

6 E: Yeah, was it difficult?

7 I: It has been difficult, but I had good feedbacks from them because they also, mainly all of them,  
8 tried it as well, like they already did bachelor and they said, "Yeah, I know how it's hard. In my  
9 time was the same", so, that was nice.

10 E: Good. Pretty good.

11 I: So, maybe I can give you an introduction about the project. This work will focus on the crypto  
12 assets offering in the Swiss private banking. And the main research questions are about if there is

13 this offering and how it's done. How is the motivation behind, and which crypto asset classes are  
14 inside this offering?

15 E: Okay, thank you.

16 I: So, shall we start? To what extent the bank you work for currently provide crypto asset solutions  
17 to its clients?

18 E: Well, maybe I have to start with the statement that I'm not working for bank.

19 I: Okay.

20 E: We're an independent asset manager. We advise our clients on investments of course by working  
21 with the banks, who essentially provide the custody and the platform for what to do with our work  
22 in the asset management field. That means that we have very much open infrastructure or open  
23 architecture when it comes to investing in the crypto space. So we can use products offered by  
24 partner banks, by product suppliers, we are relatively open on that perspective. What we have been  
25 using for example is tracker certificates on single crypto assets or basket of crypto assets these  
26 kinds of certificates, you know, they're provided by certain sorts of names may be like 21shares,  
27 or SEBA bank, or say one Sygnum, we also have trackers that are made by a collaboration of these  
28 players, for example 21shares and Sygnum providing the index. So this would be like the baskets  
29 plus other options we've seen on for example, with bank Sygnum for clients who would want to  
30 trade or invest into crypto directly through an account or wallet provided by these banks, instead  
31 of buying a tracker certificate, they can look to a custody account of today's most traditional crypto  
32 banks. So very often our architecture is in that sense.

33 I: Interesting. And what was the motivation behind this starting to offer this type of, of product  
34 and investments to your clients? It was something that came from the clients' demand, or was it  
35 something that was hard in the company to decide if you would start to advice or offered products  
36 in this type of market?

37 E: Yeah, maybe just before I started in case anything which doesn't make sense for you in the  
38 context, because I assume you don't have much experience in that practical experience in the field.  
39 Please just interrupt me and ask. I think when it comes to wealth management, you have to know

40 that the traditional clients are many of the clients, wealthy clients are older, right, just naturally  
41 because when you look at the traditional way of an entrepreneur, for example, you found a  
42 company you build it up for 10 to 20 years, whatever years, and finally you might potentially sell  
43 it and then you have liquidity and searches for a wealth management plan so, when this happen,  
44 you're already a bit older. So that's one part. Me personally, I'm working with professional athletes  
45 a little bit, meaning that they're younger. Maybe traditional client of my company and like wealth  
46 management companies in general. On behalf of have never really had a case for clients' activity  
47 approached me like you know, "I want to invest in crypto or I am interested in that topic", I didn't  
48 have that. My organization and I brought it up with one or the other client by myself just you know,  
49 to have a discussion like "what do you think about it", something I've been already looking at and  
50 I wanted to understand if there is a sort of interest just to start the conversation. And of course,  
51 most people heard about it, but I'd say the large part is like, "I don't want to touch it". You know,  
52 like my, "my kid may be investing, but I don't understand that space". Then you have those who  
53 say like, you know, "I think the technology is interesting. I don't really understand in depth, but I  
54 think there's potential and I would be interested to tiptoe a little bit", and these are the guys who  
55 then maybe started by buying you know, smaller applications and trackers certificates on Bitcoin  
56 or Ethereum, but the more well-known and liquid ones. But yeah, we don't have any crypto  
57 allocation or digital asset allocation in our model portfolios. Because, yeah, I think it is the opinion  
58 from our Chief Investment Officer and he says that's a bit too early. We wouldn't invest in it across  
59 the board, but of course clients are interested on it, and we're open to have a look into it and  
60 accommodate, but it's more on an advisory basis system than like us like pushing it actively. Just  
61 because you asked about the products before, just something that came to mind, there's a fund,  
62 which invests in digital assets we have been following for a time for quite a while because we  
63 know the people well and also recently invested, the fund is called the Swiss REX. We'll find it on  
64 the web. It has, for that field, a relatively long track record. I think they're on for four years or so  
65 and they've done really well. So that's also another option apart from simply buying tractor  
66 certificates or going directly to by the asset at Sygnum or SEBA bank for example.

67 I: Interesting, and how did your clients that invest in crypto assets reacted to the recent crash and  
68 also your bank?

69 E: Well, I think those who did invest, or we had conversation about it was mainly very clear that  
70 this is a very young and volatile asset class. So you need to expect a lot of volatility, right. That's

L

71 pretty much what happened, then I think, the kind of the crash or this large correction came also  
72 at the same time when other asset classes, more traditional asset classes, had a very tough market  
73 environment and it just you know, basically what you see in the crypto space it's just factor two or  
74 three of what you see in the traditional space. So it's, it was I think it was accepted as part of a  
75 larger downturn of markets in general and those who were invested, they pretty much stuck with  
76 it for now being because it was a smaller part of the portfolio and then you know, they're like,  
77 okay, it's 50% or 60% down and it is just 1%, 2% or 3% of my portfolio, so selling at this point,  
78 that doesn't really make sense anymore. So just stick with it. And I see how that can also

79 I: Interesting. And when what do you think about the main advantages of investing in crypto assets  
80 towards asset manager or a bank or a tracker, besides directly using the wallet?

81 E: Well, I think it's the simple right? The most traditional clients, they have their, their investment  
82 portfolio with a bank, or maybe a bank that they've been working with for a long time and it's  
83 easier for them to just buy a tracker certificate and then add it to a portfolio they already have.  
84 Rather than to have, you know, opening a new bank account or a wallet. Again, that goes into that  
85 point of like many still are not very technological experts to do all the process. So when you tell  
86 them, you have to go and open your own crypto wallet, they would say like "I have completely no  
87 idea how that works". It's also a little bit like, easier as an asset manager if you will have it part of  
88 the traditional portfolio and you can oversee it as well, rather than having it separate in another  
89 place. But again, it's mainly because it's a relatively small exposure and if you for most clients if  
90 you want to do it on a larger scale and more professionally and of course you have to do it in a  
91 more professional and maybe more cost efficient and organize the whole direct set up of custody  
92 and open the wallet than buying just tracker certificates or funds.

93 I: And based on the number of crypto asset classes in this crypto ecosystem, do you identify some  
94 classes that would meet the demand from Swiss wealth management or asset managers and their  
95 clients? For example, we have now in NFTs, utility tokens, cryptocurrencies, the stablecoins, do  
96 you see one of these that would be meeting your demand?

97 E: Well, I think at this stage, or in general, I think you should, you should stick to the tokens,  
98 which are either well established like Bitcoin or Ethereum or then the ones where you can generate  
99 some sort of cash flow, you know, which generate cash flow by staking or other kinds of like,

100 services they provide. What I wouldn't touch is, like classic payment tokens, like Ripple and Shiba,  
101 kind of like tokens where there's not really value apart from speculation. We're a wealth manager  
102 or an asset manager, we don't speculate, we reinvest into something which generates a return. So  
103 from that sense, would have to be in total tokens that are generating value or providing a service  
104 that can make an asset grow or generate a cash flow over time. Also because we think these kinds  
105 of like assets will be the more likely ones to survive and the more stable ones compared to maybe  
106 other tokens like independent space. You mentioned NFTs, there you have, that's my opinion, a  
107 very different space from like other from crypto assets. Because when you have a NFT it's like  
108 buying a piece of art and art it is an asset class which is still today something which has been more  
109 exotic and only invested by like, you know, family offices, large institutional clients, who might  
110 have a passion for it. But really investing into art as an investment, with the aim of generating  
111 financial returns is difficult and it's the same thing with an NFT. In my view, you might buy it  
112 because you like it, you want to own it, or because it's maybe linked to something you're interested  
113 in. You know, I have a sports background and angle and, there's these fan tokens but it's not  
114 something you get by as an investment it's something you buy as an expense to own like, you  
115 know, buying and other maybe luxury good or something you just want to own but not as financial  
116 intentions of generating a return in that sense.

117 I: Thank you very much. That's really interesting. And the do you see a use case in some of these  
118 assets that you feel it will meet the demand from asset and wealth managers?

119 E: Yeah, I mean, repeating what I said before, you know, like, using scarcity assets, such as  
120 Bitcoin, which you can use store of value maybe to a certain extent as an alternative to something  
121 like gold, where you might not have cash flow, but it's a store of value because it generates scarcity,  
122 I see potential there. And then all the data assets which generate cash flow by providing a service,  
123 there are a set of demands potential. Payments tokens, I don't really see the value. Stablecoins, I  
124 don't really see the value today either, at least from an investment point of view.

125 I: Really interesting. And the partnership with signum bank. How does it work is? Do they do the  
126 custodian of these assets and transfer to fiat money from the digital wallet or how what's the  
127 mechanism behind this partnership?

128 E: Well, I have to say that today we have no client to actually opened an account with Sygnum,  
129 but I don't know if you're familiar with that triangle, relation between the client, the bank and an  
130 external asset manager where the bank is mainly doing the custody and supports maybe the  
131 external asset manager when he has a specific need. And essentially, in this analogy, the asset  
132 manager is the one who is mainly interacting with the client in terms of investment advice and  
133 asset management. Maybe in the crypto space has been different because I would say so not many  
134 asset managers don't have massive expertise in the field. So maybe the involvement of a bank like  
135 Sygnum would be more profound. So you will go more with the client together to the bank and  
136 get the kind of like inputs and then maybe decide with the client and what you think would make  
137 sense based on what you heard now. Unless so you know, this would be the scenario than giving  
138 the advice from my end, without really involving the bank versus the client. But yeah, like I said,  
139 we don't have a live case today where I could say like, this is how it worked. But that's how I  
140 would imagine doing it if a client of mine had a specific interest just to accompany him as you  
141 know, trusted advisor and approaching the bank together.

142 I: Interesting. And do you see a further institutionalization of crypto assets and how?

143 E: Yeah, when you say institutionalization, I assume you mean more like that professional  
144 investors would enter in this market to really make it part of their portfolio management. When  
145 you look at it from the portfolio management perspective, any kind of asset which can be added to  
146 portfolio that generates something different and is maybe in ideal case, not correlated as much to  
147 other assets in the portfolio, this would help to kind of like make an overall portfolio more stable  
148 and safer. What we have seen in the most recent history is that the correlation between crypto  
149 assets and the stock market was very high. So from that point of view, it doesn't really add value  
150 from a diversification perspective. And yeah, as long as you have the kind of like volatility levels  
151 that we have today, it will be more difficult to for institutional investors to approach such assets  
152 and really strategically add it as, as a portfolio component. It's too early for that. Yeah, I think for  
153 the time being, it's really more of a retail speculative product and for the kind of investors who are  
154 maybe really much into that field because they understand it very well or has been active in this  
155 space. Of course, institutional clients are looking at it, they're observing it, but at the moment, they  
156 think it still needs to get more mature as an asset class and more stable, before it becomes  
157 investable for institutional clients.



158 I: Interesting. And the last question you already answered, but I would like to ask if you want to  
159 add something, in which scenario would be ideal for institutional investors start to invest in this  
160 asset classes, for example, when it would have a lower volatility or regulation if would be more  
161 stable in the business cases, in the processes in which scenario you would see this change?

162 E: Yeah, I think the volatility needs to come down and once it becomes more adopted and the  
163 investor base becomes more wide and maybe more solid. And of course, it's a bit of a chicken and  
164 egg question right. What comes first, the reduced volatility or the increased implementation on  
165 institutional money? Yeah, I think it's probably more than a ladder that the volatility needs to come  
166 down. Maybe also we need to have a bit more visibility of which kind of like tokens are going to  
167 be that the leader is specific fields in our standing around, right now there's so many out there.  
168 And it's sometimes hard to know, you know, do I just buy all of them and hope to be with the  
169 winner, or do I select a few and then maybe you bet on the wrong horses. So it's I think that the  
170 industry as a whole needs to maybe consolidate a bit which is something which should happen  
171 when you have crypto winter like we have now. Or you can argue it's already crypto winter, but  
172 um, they need to consolidate and then once you know which ones are really the players to stay  
173 adopted more easily.

174 I: Interesting. And what do the regulatory overview would influence in this market establishment?

175 E: I think it makes a big difference, right? Because as long as you have to, you have to go through  
176 the Binance to buy certain assets, it has this like little bit shady touch. And of course if you have  
177 developed markets, develop market for equities. Switzerland is doing something on the regulation  
178 side, you have the US, which is becoming active, that helps for sure. Yeah, the more the better of  
179 course, it doesn't help but countries like China doing what they do. But we also know that China  
180 is very different case in many aspects. So I think what we will matter is how, how regulation is  
181 progressing in North America and Europe to become to make it more solid again, and make the  
182 case and give investors more confidence in investing in an environment which has some sort of  
183 like, regulatory coverage.

184 I: Interesting. So thank you very much. These were all the questions. Okay. These were really nice  
185 insights and this interview will help me a lot in my work and research. Good

186 E: Are you using that anonymous basis or?

187 I: Yeah, this is the next thing I wanted to ask you. I will send to your mail a consent form. And  
188 there you can mark if you would like to don't be mentioned at all, that your name and the asset  
189 management manager that you work for would be used as a pseudonym.

190 E: Anonymous is probably easier since I didn't discuss it with our legal and compliance. So it's  
191 just it's easier if you do it on an anonymous basis, I think. Because at the end of the day, what the  
192 need is the information

193 I: Yes. It's no problem at all. I will send you to your mail this consent form. There are four options  
194 you can mark. Yes, in the one that you choose that indicates is to be anonymous, sign and then  
195 you send to me.

196 E: Perfect then. Send to me and I will sign and send to you.

197 I: Thank you Mr. Interviewee 1.

198 E: My pleasure, could you send me after the transcript?

199 I: Sure, no problem.

200 E: Bye Bruna

201 I: Bye.

## Appendix IX: Interview Transcript 7

**Project:** Master's Thesis ZHAW

**Interview number:** 7

**Group:** 1

**Date, time:** October 13th, 2022, 11:00

**Location:** Zoom

**Recording mode:** Otter App

**Duration:** 00h35m23s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (Mr. Sven Sprunger)

**Organization:** Julius Baer

**Transcribers:** Bruna Auto Cabus (Interviewer)

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

- 1 I: So, thank you very much for meeting me. So. I'm doing my master thesis about crypto offering  
2 in the Swiss private banking industry and basically the research will be in two groups. The first  
3 group will be with wealth managers of private bankers who offer crypto asset solutions to their  
4 clients. The other one, the second group are wealth managers or private bankers from banks that  
5 do not offer crypto often solutions. And the main research question is about what are the motivation  
6 of offering to their clients? What is the client's profile and as well as which type of crypto asset  
7 classes will fulfill the Swiss wealth management demand?
- 8 E: Okay, nice. Is Julius Baer in the group that offers?
- 9 I: Yes.
- 10 E: Okay, good.
- 11 I: Yes. So, do you have any question? Or should I start with asking the interview?
- 12 E: Let's start so

13 I: is it okay if I record?

14 E: Yes, yeah, with video or without video?

15 I: Actually is just the audio.

16 E: Okay, that the audio is fine.

17 I: Okay. Yes. So to what extent those Julius Baer provide the crypto assets to their clients?

18 E: And if I recall, we started a collaboration with SEBA bank approximately one and a half years  
19 ago. If I recall correctly, this was made to offer our clients who want to invest in crypto assets, to  
20 offer them crypto services, like first of all, we were able to book with SEBA, so, there was an  
21 account with SEBA at the very first when it was initiated. Then later on, the coins or the assets  
22 that could be traded via SEBA were quite limited. I think it came down to like six tokens or crypto  
23 assets. And then it was possible at some point to also reflect the positions that were with SEBA,  
24 and it was possible to do cold storage, hot storage, like both types, which was well for our clients.  
25 Honestly, no one did SEBA back then, I think it was more a thing for the ultra-high, very ultra-  
26 high net worth clients who had some volume to trade but like from what I saw personally is that  
27 there was not so much interest in this offering. And then actually after we could offer later on our  
28 own crypto assets trading. So it was also possible to trade them through our FX trading over the  
29 phone at first. And I think this was more of a success because it was carried on and also now  
30 recently, we were able to introduce this crypto assets by a tool called a toolbox with us. So it's  
31 basically the tool where we can trade the ETFs, but now also crypto assets. It's still not something  
32 that is very much in demand because of the set-up restrictions, like how it has to been set up in the  
33 sense that we are only able to book crypto assets on a kind of a segregated relationship. So that  
34 means for each client who wants to trade crypto assets we have to open a separate banking  
35 relationship which is a bit of a burden, especially under the consideration of all the KYC and the  
36 legal approvals. But from our book, I can tell you we have like two clients that have that have  
37 crypto assets trading, like the crypto assets trading enabled banking relationship. And what we do  
38 also have is that, also makes Julius Baer quite strong from what I understand and comparing it to  
39 others, is that we also have our own next generation research. So, this next generation research is  
40 about topics that are shaping the future and that could be potential mega trends. So this is basically  
41 incorporated in a fund. But the team behind this fund or behind the theme, which also comes up

42 regularly with my research updates consists of seven people and one guy in this team he was  
43 specifically focused on crypto and he also got actually quite a good platform and he could even  
44 write in the in the daily research publications, he could write articles about crypto, crypto news,  
45 so for example when Ethereum chain changed from a proof of work to a proof of stake concept,  
46 this was one of the things that was outlined or that was explained in the research.

47 I: That's really nice. So there is a big work as well with education.

48 E: Indeed, because also what has to be said is like I would consider myself the younger generation  
49 at JB, but the elders, I would say they are not so much into you know new things when it comes  
50 to new technological things. They're always very sceptical, a bit not really supportive. And I think  
51 that's why a lot of education is needed as well. And I think also from our line management, it was  
52 really funny to see how they tried to introduce the topic because once, I remember this very well,  
53 we once had a town hall with our head of banking, Robert Chari and he really tried to emphasize  
54 how easy it is to create a token basically, and how this basically changed the world and he did put  
55 it in a very funny context because he tokenized his dog and he tokenized his dog into like 100  
56 tokens and one could buy the tokens then from him and it was set up so funny because he said,  
57 you know, buy 100 shares of my dog and take him for a walk. And this was in a very, very funny  
58 concept. And then I haven't checked by now how many of these token office dogs have been sold  
59 to the bank but yeah, some of the people in the back they just looked into it, and they also bought  
60 some of the dog tokens from him. Also, we had in the in the ARM, so this is the assistant  
61 relationship manager circle, we once had a guy from Singapore, and he also introduced a bit the  
62 concept of decentralization, the tokens and also how he believes that this could shape the world  
63 and how ground-breaking the technology is. Actually by now the whole hype has flattened a bit  
64 again. So we're a bit now on the bottom again, but this is always the case with such technologies  
65 where you have cycles and then there is the hype and then there are the downs, and again hype,  
66 but time will tell how this will all levels.

67 I: That's true. I think also right now we will have an environment where some of the technologies  
68 will survive or their initiatives, and others will die, and this will shape for the future the best use  
69 cases. And other question the reason why there are different RMs for advice crypto and digital  
70 assets are different from the ones that have the other assets? Or is that a preference from Julius  
71 Baer regarding this?

72 E: I think so far it is more of a preference because this was also a recently introduced that now for  
73 clients that are under the so called advisory advanced profile, so this is the most at once them  
74 advisory model and they are able to get crypto advice from the dedicated advisory. Those are the  
75 basically the advisors that just deal with advisory all day. Like we for our part we do not deal all  
76 day with advisory, so we also have other tasks like onboarding, looking for new clients. a lot of  
77 admin tasks unfortunately as well. But then, from our end we are not allowed to advise actively on  
78 cryptocurrencies. Although, I have to say I might even though I hold some crypto cryptocurrencies  
79 myself and I have been invested for quite some time, I wouldn't feel comfortable honestly to advise  
80 at this stage where the environment is still very like fluid and a lot of changes happening. I don't  
81 think I have the time currently to look into the topic deep enough to understand it and to give  
82 proper advice. And that's why I'm pretty happy with the setup how it is currently because our core  
83 competency is more on that traditional financial asset. And this is also where we can selectively  
84 advice. But the other thing is that we are also working in a bit different setup because we have  
85 Cyprus and Greece clients. So, we are working in a cross-border context and that means that we  
86 are only allowed to advise on reverse solicitation. So only when the client approaches us, we are  
87 allowed to give advice, so we're not allowed to actively promote something.

88 I: Interesting. And what are the motivations behind Julius Baer commitment to provide the crypto  
89 asset solutions to their clients?

90 E: I think it's more having to do with acceptance, so that the bank actually was not stubborn, and  
91 they accepted that there is something new emerging and that they understood, or we understood  
92 that and that there are certain needs from clients. And in that sense, also in the research side, there  
93 were actually there one full research focus, so, this is approximately a nine page and research  
94 report, drafted by the next generation research and it was on how cryptocurrencies could be used  
95 to construct a portfolio like to, to what level cryptocurrencies have a positive impact on portfolio  
96 construction and the outcome of that was that adding 1% of cryptocurrencies to a traditional assets  
97 portfolio actually has some diversification benefits in the sense that volatility can be decreased but  
98 only at the 1% but still, for clients that hold for example, 10 or 20 million with us it would already  
99 be substantial to have 100,000 or 200,000 in cryptocurrencies.

100 I: That's true. That's really interesting. I think Julius Baer has a really good position as research.  
101 Also I use with a lot of research from Julius bear in my thesis, so and it's really interesting that the

102 bank is embracing education as well and thinking about it, because there is a lot of speculation and  
103 media around it, and its really good research. And after this comment, do you observe, increasing  
104 the customer demand for these types of assets in the last years? For sure, now, a bit less because  
105 of the down market but during the hype.

106 E: Yeah, I think it's more still rather hype. Because when we could again read all over the news  
107 that the bitcoin is trading USD 40,000 some months back, it's already nine months back, and  
108 everyone caught again this formal type of behavior and wanted to be part of it. And then we had  
109 also some clients that bought into it, but since it was a bit complicated or time consuming to, to  
110 open additional banking relationships, and it's also not worth if someone just wants to buy 10,000  
111 or 30,000 in cryptocurrencies, then honestly he does it normally via an ETF so for example, I think  
112 you know, you know that better, 21 shares for example, they have a broad offering of ETFs and  
113 also some trackers. I think from Leon tech or Vontobel. But we were really not allowed to provide  
114 anything actively. I will have to check though if by the meantime, we have added some maybe for  
115 Swiss based clients, if we have added some ETF or Exchange Traded Product solutions to the  
116 offering. But we from our end with Greek Cyprus clients because those ETFs have a different  
117 framework to Greece or Cyprus, we are not allowed to, to actively advise on them. But then the  
118 clients they just approach us, and normally what you do is that you tell them that we can either do  
119 it with us opening a second relationship and it will take some time and also honestly, if you don't  
120 consider investing more than 200,000, I would not advise to do that because it's also it's also linked  
121 to costs. And then I would rather do it via an ETF. But we cannot tell you which ETF so you can  
122 do your own research and go on with us with the one you chose. And then get back to us and tell  
123 us what we should buy.

124 I: Interesting. And do you see a pattern in terms of age, geography, or wealth level among these  
125 clients who are asking for digital assets?

126 E: Interesting, actually differ, for example, from the ones that I would expect that they do  
127 cryptocurrencies, they've never asked for it. But I guess that they have they figured out or they  
128 already had different storage solutions or a different trading platform so that they are already like,  
129 informed enough to find it themselves. So maybe they trade by other exchanges like Binance,  
130 Coinbase, whatever other exchanges are out there. And then the ones that do maybe not have the  
131 technical or the IT skills to set up something like that or that are just too comfortable, they don't

132 want to get in touch with something that is not so tangible. Like if you go to Binance and you can  
133 open an account but it's all automated and if there is an issue, you will probably still have to wait  
134 some days till the issue is resolved. And yeah, these clients actually preferred them to go through  
135 us to do it in order to it in a more traditional way to trade them, like trade crypto assets via the  
136 traditional way. And I think that's also the niche where the private banks can position themselves.  
137 Because in terms of competition like we do, we have to be realistic. I don't think we can ever  
138 compete with in terms of costs, we will never be able to compete with other exchanges. But that's  
139 also not I will say our goal.

140 I: Yeah, so like advantage of opening account and trading crypto assets with a private bank is for  
141 what you mentioned, the user friendliness where you can call to, it's more traditional and  
142 something that you know, and you have also the security right?

143 E: Exactly as I think these are the three aspects, like the first aspect is security, the second is then  
144 sticking to something that is known and sticking to something from where the client knows what  
145 kind of service they can expect. And I think one other small aspect could also be that you have  
146 someone who you can put the blame if things don't work out, so they transfer the responsibility.  
147 So the client has some confidence that he will not lose his tokens through a bank because the  
148 storage is safe, which in the past for some like the small exchanges was not the case where crypto  
149 assets were lost and hacked. And I think this is what clients in general are aware of, to the extent  
150 that they know that there is this risk, but they do not know exactly how they could protect  
151 themselves from these risks. Like via cold storage or, security measures as well authentication,  
152 and whatever else.

153 I: What's interesting. And based on the numeral crypto asset classes and different regulations  
154 applying to these different ones, which crypto asset class or classes do you feel would meeting the  
155 demand of Swiss wealth managers and their clients, such as cryptocurrencies, tokens, stablecoins  
156 or CBDCs?

157 E: Yeah, like mostly the ones that are very well established. Well, that's a big four, six maybe that  
158 are well established, but I never had someone asking for anything else than Bitcoin or Ethereum.  
159 Unfortunately, maybe Litecoin, but yeah, this is what, what people see everywhere, and I think  
160 this is what they are looking for, at first at least. Like some clients they ask, like one client for



161 example, he asked is what we can offer and yeah, in fact, we can offer like, approximately 15 coins  
162 I think by now and yet and we just sent him the whole list and it ended up to that he traded Bitcoin  
163 and Ethereum or whatever. You can also see sometimes, it's actually the same client he just  
164 randomly asked for crypto coin that I've never heard of it, and if you checked it out, it was ranked  
165 somewhere and like on the rank 1500. So, a very small token, but I think those things also come  
166 up when people discuss with each other. They found a great token. Yeah, I invested I made double  
167 my money and then you know this, it's also a bit of a competition. I will say that you can go for  
168 some of them with the goal to tell someone like "I doubled my money". And it's also something  
169 very specific cultural for the for the Greek and Cyprus market. Especially among the ship owners  
170 in that market. And you know, these ship owners, they know from each other what they are doing.  
171 Like if one of them buys a new ship, I think the whole market knows it the next day, because it's  
172 in the present. It's always a bit the competition there as well.

173 I: Okay, got it. And these classes for example, do you have any thoughts about stablecoins, NFTs,  
174 how the clients view these other types of classes. If they see a use case behind it, or more  
175 cryptocurrencies and tokens?

176 E: Yeah, I think the stablecoins came up with under scrutiny recently, and with drain off. This was  
177 also treated in the research dailies or there was also an article about that how it could basically  
178 happen. And so the whole concept of the stablecoins has become a bit wobbly and a bit unstable  
179 in general and so far, specifically asking for a stable coin because there are fears that fiat currencies  
180 are not backed by something that is actually keeping their value, so, it is not something we see at  
181 this point. Then we more have demand for gold, but now with the current interest rate situation  
182 like very little demand, because yeah, gold has not proved to be a protection against inflation. And  
183 the same applies to the cryptocurrencies were with Bitcoin having a definite supply of these 21  
184 million coins. And the price didn't hold on.

185 E: That's true. Yeah, the correlation increased a lot between crypto assets and traditional assets  
186 because I think also it has been a move from crypto assets through the institutions as well. So yeah,  
187 yeah, it's, I agree. And as an investment vehicle, does your bank use vehicles such as crypto funds  
188 or crypto ETPs, like Exchange Traded product to offer as well to their clients? Or does this type  
189 of products arrive as a request from some clients?

190 E: Yeah, this is more aware of where we cannot offer direct trading because of this account then  
191 RMs segregation restriction that currently still applies, a bit how I explained to you before. But as  
192 I said before, in the in the crypto funds and crypto ETFs. We, because of cross border are not  
193 allowed to promote it. What I can do after the interview is I can check if we have any offering for  
194 the Swiss clients if they have added some exchange traded products to the offering. And I could  
195 let you know because that's really something I haven't really checked because it was not the topic,  
196 main topic for us.

197 I: How did your clan clients react to the recent crash? Do they want to hold crypto assets or  
198 liquidate it-?

199 E: Yeah, there you have different behaviors, actually, for some of them it's generally that those are  
200 still very small positions of the overall portfolios. Like we do not have anyone who is fully invested  
201 in cryptocurrencies, like mostly it's, it's well below 3% of the portfolio. And these clients, I think  
202 they just forget about it; they keep it holding for the next step upward move and then they  
203 potentially sell. Some other clients bought more, they average down with very small increments,  
204 or they may add another USD 5.000 on every average 10% downward move. And yep, I think  
205 what's more interesting to see is how demand is influenced by the market movements. So yeah,  
206 whenever we see a downward move, we have the clients that already holds crypto assets, they may  
207 buy a bit more average down, but the ones that did not hold any cryptocurrencies, they barely  
208 approach us in such environments. It's more like they forget about what they want to do when they  
209 saw the markets going up. And then they mostly also missed to enter the market and, you know,  
210 when the boom again is here, then they regret that they have not invested, and they invest. So it's  
211 very, a big it's still very emotionally driven thing. It's also a logic because we have this very erratic  
212 moves and yeah, this can just create emotional investment behavior.

213 I: Interesting and do you see a further institutionalization of crypto assets? And which outcomes  
214 do you expect from this merge between digital assets and traditional finance in general?

215 E: I think if the institutional side, I think some institutional investors, they may still hold some  
216 crypto assets because what really initiated this whole discussion I think, was when Elon Musk said  
217 that he bought back whatever how much he bought so fair in Bitcoin, for Tesla, and also with  
218 dogecoin. So yeah, this can be moved a lot by one single person. And then I think at the time when

219 we saw that crypto assets were still correlated with traditional assets. Think also some larger  
220 institutional investors, they did hold a certain part of the assets in cryptocurrencies, or they were  
221 just about to think that this could make sense to add it and then unfortunately, the past came and  
222 with it the bear market, and I think this very much puts the whole concept of diversification  
223 benefits in question. And yeah, so far at the moment, where we see very high correlation with  
224 traditional assets. I think this whole institutionalization of crypto assets has a bit become a thing  
225 that is no longer that much on top of everyone's mind. Yeah.

226 I: Interesting, these were all the questions. Thank you so much for your insights. It was really  
227 interesting to understand the perspective of Julius Baer because it's a model bank, like how it  
228 positions itself right on the bridge between these two ecosystems, and it's really impressive.

229 E: Yeah, so it's really nice. Yeah. Do you also speak to other people from the bank or?

230 I: from Julius Baer? I had the other interview with another relationship manager. Okay. Well, but  
231 I'm also talking with someone from Bank A. And I talked with the CEO from Maerki Baumann.  
232 Yeah. And from the other group, more wealth managers from the traditional side like UBS, Credit  
233 Suisse. Yes.

234 E: So you were mainly focusing on the on the wealth management side and not so much of the  
235 research part?

236 I: Yes. Because I did with the literature review more in depth with the research of where we have  
237 downsides and positive regarding this new ecosystem, as well as the history and some analysis  
238 regarding the correlation and returns and volatility. But the main research question and that's what  
239 my supervisor would like to know, is the perspective of the wealth managers who work on the  
240 traditional side.

241 E: Ok, great, good luck.

242 I: Thank you.

## Appendix X: Interview Transcript 8

**Project:** Master's Thesis ZHAW

**Interview number:** 8

**Group:** 1

**Date, time:** November 01st, 2022, 10:30

**Location:** Zoom

**Recording mode:** Otter App

**Duration:** 00h20m23s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert interviewee (Ms. Marva Harmann Safa)

**Organization:** Bank C

**Transcribers:** Bruna Auto Cabus

**Consent form:** Signed

**Note:** The views expressed by the interviewee in this interview do not necessarily represent the views of the interviewee's employing bank.

1 I: Hi Marva

2 E: Hi Bruna, how are you?

3 I: I am good and you? Thank you for meeting me.

4 E: No problem, my pleasure.

5 I: So, I also sent you a document that is about the consent form that you need to sign. In that  
6 document, you have the option of remaining anonymous or being explicitly quoted in the report,  
7 depending on your preference.

8 E: You are free to quote me in my personal capacity, but not in the name of the bank; if I did so, I  
9 would be required to seek authorization from the legal department first from Bank C and this  
10 would involve so many processes and bureaucracy.

11 I: Absolutely, there won't be any issues. I will conduct the research with the bank under a fictitious  
12 name, such as Bank C, the most important is the information you are going to provide, so, no  
13 worries.

14 E: Fine, thank you. Really interesting topic, we here in Bank C are pioneers as a traditional bank  
15 and embraced technology.

16 I: That is amazing. So, shall I start with the interview questions? Looking forward to learning about  
17 your view.

18 E: Sure

19 I: The first question that I have for you is as follows: to what extent does the private bank that you  
20 presently work for provide solutions for crypto asset transactions for its customers? Including  
21 things like internal capabilities, partnerships, and so on.

22 E: At this time, we are working on a solution that will allow us to give our customers located in  
23 Switzerland with a digital wallet. Because of the restrictions that apply while crossing international  
24 borders, it is likely that the other countries will follow at a later point. Aside from that, Vontobel  
25 already possesses its BTC certificate, and I will after the interview send to you a link that shows  
26 the project, with the details and so on. We have something similar to a certificate and two different  
27 future forms of Bitcoin, short and long. Around Bitcoin, we have a variety of different systems.

28 I: Nice, I had a look before, and it is really impressive; so, the second question is: what are the  
29 motivations behind your bank's dedication to give investing solutions for crypto assets to  
30 customers?

31 E: To tell you the truth, as a relationship manager in private banking, all I have is my perspective  
32 to offer. In this case, the transformation of a new generation of customers clients belonging to the  
33 next generation of private banking are they are more digital natives and have experience in  
34 technology, therefore the bank wants to position itself in a strong spot for the new generation. This  
35 generation is interested in digital assets and are very well aware that this could be the future. The  
36 "outdated" banking" might not make it through the next few years, and as a result, we have little  
37 choice but to follow the trends. Another open question is whether or not Crypto will be successful  
38 or not, that I do not know.

39 I: Nice and intriguing; so, this brings us to our next question, which is as follows: have you noticed  
40 an increase in the demand from customers for crypto assets over the course of the past several  
41 years?

42 E: Yes, without a doubt. I have been employed in private banking for more than ten years, and the  
43 industry is seeing tremendous demand growth. The countries of eastern Europe, which are the  
44 countries that I cover, have been involved in cryptocurrency trading since 2015, and these  
45 countries are home to the pioneers who have already invested millions in crypto initiatives, it is  
46 impressive. Switzerland is catching on to the trend, however, I need to admit, at a considerably  
47 slower pace than other countries. Nevertheless, there is a demand for it, and I am pleased to see  
48 that Swiss financial institutions are making the appropriate moves in the direction of  
49 cryptocurrencies and blockchain technology because this is required in order to remain  
50 competitive.

51 I: Really interesting, and many thanks for the response. My next question is also connected to the  
52 two questions that came before it; specifically, can you comment on whether or not there is a  
53 detectable trend in terms of age, location, or wealth level among customers who are interested in  
54 crypto asset solutions?

55 E: I have already answered; the new generation, often known as digital natives, are the ones who  
56 have familiarity with technology.

57 I: Okay, I appreciate it, but from the point of view of the customer, what are the benefits of  
58 investing in crypto assets through a financial institution? Why not just use a wallet straight off the  
59 bat?

60 E: You make a good point; the fact that you can speak directly to a banker is probably the reason  
61 why it is preferable. There are numerous exchanges that offer the trading service at a lesser cost;  
62 however, this comes with additional risks do you know, including the possibility of losing your  
63 money, not having any reimbursement in the event that a mistake was made, and having no direct  
64 contact with a real person.

65 I: I appreciate you asking this question; I was wondering how your bank and its customers reacted  
66 to the most recent drop in the value of crypto assets.

67 E: The bank does not provide any cryptocurrency related advice at this time. Customers that came  
68 to the table with prior knowledge in this field were not taken aback and exited the market well  
69 before others did. The other players have not yet given up their coins and are holding and waiting  
70 a high again to liquidate it or holding more because there are also some investors who really believe  
71 in the technology, so they hold independent of the price, like crypto enthusiastic investors. Despite  
72 this, the vast majority continues to have faith in crypto.

73 I: Which of the several crypto asset classes, taking into account the various restrictions that are  
74 relevant to each crypto asset class, are thought to be the most likely to satisfy the need of clients  
75 of Swiss wealth management companies? Some examples of these are utility tokens,  
76 cryptocurrencies, stablecoins, CBDCs, and non-fungible tokens, the called NFTs.

77 E: Right now, my faith is only in Bitcoin and Ethereum; there may be additional innovations in  
78 the future, but for the time being, I only have faith in these two cryptocurrencies.

79 I: The next thing to ask is about the process by which your bank incorporates traditional offerings  
80 with digital assets. By maybe providing them with guidance, access, and tokenization, trackers for  
81 example.

82 E: We do not provide active advice, but we do provide the products that I described earlier in the  
83 event that they have an interest. I must emphasize that this only applies to customers in  
84 Switzerland; we are not permitted to provide some of our solutions to customers in other countries  
85 or continents.

86 I: Thank you for your response, and I was wondering if your financial institution makes use of  
87 pooled investment vehicles, such as cryptocurrency funds or cryptocurrency exchange-traded  
88 products (ETPs).

89 E: We are in hold of the BTC certificate that I indicated at the beginning of the interview.

90 I: Does your financial institution have a collaboration with any other parties in the industry to  
91 make it easier for customers to convert digital assets into fiat currency or to store private key  
92 information?

93 E: We got the partnership off the ground with the Sygnum bank.

94 I: Do you foresee a further move toward institutionalization of crypto assets, and if so, how would  
95 it be?

96 E: To tell you the truth, it depends; I believe that the shift in investment products and the  
97 institutionalization will be determined by the political and economic circumstances that we find  
98 ourselves in. It is difficult to speculate on what the outcome might be.

99 I: And what sorts of long-term results do you anticipate the institutionalization of crypto assets  
100 bringing about?

101 E: The fate of the crypto assets would be determined by the regulations that were put in place. The  
102 goal of Crypto is to establish a decentralized trading exchange, which is its ideology. If the  
103 government were to get control of this situation, there would be no point in putting any faith in  
104 cryptography. Since this is not yet resolved, there is little point in engaging in productive  
105 speculation about the possible possibilities. In any case, I just wanted to share my thoughts.

106 I: Thank you very very much.

107 E: No problem.

108 I: Could you send me after the consent form signed?

109 E: Sure, I need to leave.

110 I: Thanks, goodbye.



## Appendix XI: Interview Transcript 9

**Project:** Master's Thesis ZHAW

**Interview number:** 9

**Group:** 2

**Date, time:** November 01st, 2022, 20:00

**Location:** Microsoft Teams

**Recording mode:** Microsoft Teams

**Duration:** 00h30m23s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert Interviewee (E5)

**Organization:** Bank B

**Transcribers:** Bruna Auto Cabus

**Consent form:** Signed.

1 I: Hi E5, how are you? Thank you very much for meeting me today.

2 E: No problem, Bruna, I am good, however it has been hard days for being a wealth manager and  
3 you?

4 I: I am also good. Happy to be in the final line to deliver my thesis, I am pretty happy with the  
5 results that are appearing.

6 E: Cool, again, could you give me a brief further explanation about your thesis?

7 I: Sure, so I will just briefly explain to you what my thesis is about and what I'm searching for. So  
8 I am researching the crypto assets offering by Swiss private banks and wealth management firms.  
9 In the literature I researched more about how it impacts a portfolio and what banks are doing, what  
10 solutions they are providing, and what other banks are not providing, and for the interviews I have  
11 two groups. One is from private banks that offer crypto assets solutions to their clients, for  
12 example, Maerki Baumann, Julius Baer, Vontobel, and so on, and the other group is from banks  
13 that are not offering crypto assets solutions to their clients, and I want to understand the rationale  
14 behind the ones that offer and the ones that don't offer.

15 E: Cool, it sounds interesting.

16 I: Can I start with the questions? Is it ok if I record the call?

17 E: Sure, no problem at all.

18 I: So the first question is, "To what extent does the private bank for which you currently work  
19 provide crypto asset solutions to its clients?" Including internal capabilities, partnerships, etcetera.

20 E: So, my employer is Bank B, and to the best of my knowledge, we do not offer any crypto  
21 services or any advice in the digital asset universe.

22 I: What is the rationale behind the decision from Bank B of not offering crypto assets solutions to  
23 its clients?

24 E: Well, I cannot answer the question from Bank B's perspective. Obviously, my answer is just  
25 like would be my personal opinion. So, what I can say, or what is my personal opinion, is: why is  
26 such a big bank as Bank B not entering the market for digital assets? Of crypto assets, whatever  
27 you want to call them, it's a rather new and, you know, interesting investment. It's a rather new  
28 technology. I mean, OK, we talk about maybe 10–12 years since the White Paper of Satoshi came  
29 up, but it's still rather early to investigate and to know the area, and I think the most important  
30 point is really that. And it's extremely difficult to value crypto assets. There's not really a meaning  
31 there. Of course, there's some research, and you know how to validate it. You know, maybe you  
32 can have something like demand and supply analysis or something like that, similar to  
33 commodities. But there is not a clear long-term trend as with equity or bonds, and you have no  
34 intrinsic value. You also know that, especially since it's a rather new technology, there's also some  
35 risk involved. And I wonder if these banks, or maybe you know private banks, will stay or if they  
36 will be the only ones in this group of banks that foster crypto assets. I think there is also more risk.  
37 I think they won't associate with the asset class because they're more risk averse.

38 I: Great. That's an intriguing fact. And have you noticed an increase in the demand from customers  
39 for cryptocurrency assets over the course of the past few years?

40 E: I have not been. I wouldn't say that there has been an increase in demand over the course of the  
41 past few years. I mean, it's not regular at all; in fact, I wouldn't even call it that. I have not been  
42 approached on a daily basis with questions concerning crypto assets; I would say that every once

43 in a while I have been questioned about the possibility of having exposure to crypto assets, but this  
44 happens quite rarely.

45 I: And do you believe that if your bank were not offering crypto assets in the future, it would result  
46 in a loss of customers? Do you believe that could put you in harm's way? Or let's say it's a  
47 disadvantageous position in terms of competition with other banks.

48 E: Well, at this very moment, you know, you know, we hold this interview at a time when crypto  
49 assets have dropped significantly in value and opportunity costs have dramatically increased due  
50 to, you know, rising interest rates all over the world at this very moment. The easy, clear answer  
51 is no. There are just too many opportunity costs to invest in digital assets. That's my personal  
52 opinion because there are so many other things in which to invest, especially bonds. So at the  
53 moment, I would say no, but maybe it can make a difference, you know, but this is more than what  
54 crypto assets are offering. In total, you know that's more a question of this.

55 I: Great. Do you notice a trend in terms of age, geographical location, or income level among the  
56 clients who have inquired about having their exposure in crypto assets?

57 E: A pattern, I think, would appear if, as I said, I was asking for investments in crypto assets. So I  
58 am not able to give, assess, or do either. You know, assume a pattern there. I would rather say, you  
59 know, my clients are rather wealthy; they have at least a couple of million dollars in assets with  
60 the bank and also other assets and assets in real estate, and so on. But, I mean, I wouldn't say there's  
61 a pattern, no.

62 I: And how did your bank react to the recent drop in crypto assets? Did it raise the unwillingness  
63 provide customers with crypto asset solutions? Just for example, is there proof that the position of  
64 not offering was correct?

65 E: I do not recall hearing any comments regarding this matter. Because, as you are well aware, we  
66 had none of them before. We held a specific viewpoint regarding the investment in crypto assets;  
67 in addition, we held a viewpoint regarding the technology that underlying the cryptocurrency, and  
68 as you are aware, we offered investments in this technology in some capacity. You know, for  
69 instance, businesses that provide blockchain technology, or possibly even coinbased businesses.  
70 You think of it as a transaction, but it's not. We hadn't done any study on that in terms of

71 investments, and as a result, we didn't have anything to say about it either because we hadn't done  
72 any research in the first place. Why should we remark on something as current as the state of the  
73 environment, anyway?

74 I: And based on the numerous crypto asset classes and the varying regulations that are applicable  
75 to these assets, which crypto asset classes are considered to be most likely to fulfill the demand  
76 from Swiss wealth managers? For example, there are cryptocurrencies, tokens, stable coins, NFTs,  
77 and utility tokens.

78 E: When it comes to the questions, Is there a demand for this? You know, I think yeah; it's apparent  
79 that there is a desire, particularly for perhaps younger people. I believe this to be the case.  
80 However, the right questions are actually encouraged do asset managers to take advantage of this  
81 need. Is this the kind of work that they genuinely want to do? Because, as far as I can tell, you are  
82 already aware. Trading is not really something that wealth managers want to do, and it is not even  
83 their primary emphasis anyway. The primary market for wealth managers I believe that there is  
84 most definitely a significant demand for tokenization when it comes to all different sorts of assets.  
85 The use of digital tokens, on the other hand, enables the tokenization of virtually anything. Also,  
86 I believe that you have a significant amount of potential in tokenize assets in general. And I believe  
87 that is exactly what is going on here. My opinion is that even more institutional investors are  
88 driving the majority of the demand. Stablecoins, Well, maybe. I really don't know. Where do we  
89 stand with the questions, exactly? Do you? Why do you require coins that are stable, if I may ask?  
90 Where exactly is this tremendous advantage found? Perhaps you will require it. You will be  
91 required to have a number of coins for specific applications later on. I agree, but since we aren't  
92 required to set up applications just yet, I believe there is a very low need. Tokenization is hence  
93 my first recommendation, followed by if-statements. Maybe. But the Metaverse is not complete  
94 just yet, so we could be jumping the gun a little bit here. To be more specific, I believe tokenization  
95 to be the way to go. That seems to be the most important thing for me right now.

96 I: Thanks for your response, and I was wondering if your financial institution makes use of pooled  
97 investment vehicles, such as bitcoin exchange-traded products or cryptocurrency funds.

98 E: How I said we invest in companies that invest in the technology behind crypto assets, but I  
99 never invested on such vehicles to clients.

100 I: Perfect. And what kind of a scenario does the projection anticipate it being in, one in which the  
101 volatility might be more under control? In order for your bank to start to reconsider its position of  
102 not offering, new regulations and more developed industry conditions are required. Is there a  
103 possible outcome in which your financial institution would take a different stance?

104 E: Sure thing. So the problem is that, first and foremost, we need to have very clear applications.  
105 I mean, first and foremost, I may comment on that based on my personal assessment, right? I mean,  
106 I'm not sure if this would happen, but again, this is my personal perspective, and so well, I believe  
107 look at the asset class, or if you can call it that, an investment in digital assets. It can be made more  
108 interesting if and just if there are actually more or more use cases and there are relatively few use  
109 cases for digital assets that it stands to reason that we truly, truly require digital assets. And if that's  
110 the case, I believe in digital assets, specifically tokenization. That seems like something that might  
111 be used to a variety of situations. And, you know, we see that in many various domains such as  
112 real estate or, I mean, even equities; you know, you can tokenize equities and then hold like a  
113 fraction of shares or anything like that. Sure thing. But, you know, the aim is really the reason I  
114 believe there will be one. As a true change, if we have underlying applications that we that crypto  
115 assets are needed for, then I believe that we will see an increase in the number of players entering  
116 this market.

117 I: Do you foresee increased institutionalization of crypto assets, and if so, how might this take  
118 place?

119 E: Do you mean the business aspect or the technological aspect?

120 I: The technology in general, together with the assets and investments that are related to it. To  
121 clarify, I'm referring to crypto assets in general.

122 E: That's probably what you're referring to when you talk about technology, at least that's what I  
123 assume it is. I would like to talk about the distributed ledger technology, as blockchain as a  
124 technology, because I believe it is something that should be discussed. Like tokenization. And then  
125 you may be able to use that to all different sorts of treating, for example on the stock exchange,  
126 where you can apply the distributed ledger technology for more fluid, more smoothly trading, as  
127 well as more even and more secure like databases, of course. Make an effort to complete it there,  
128 in that, in there, in that. Yes, but I'm not sure about, maybe in things like databases, property,

129 property, and other similar topics. I believe that there is a significant amount of work to be done,  
130 most notably in the world of mortgages, where, as is common knowledge, the person must first  
131 originate and then service mortgages. I think something similar to that, you know, because you  
132 have a property database, and then you can maybe trade the properties of top at the mortgages on  
133 top also with real estate if you have tokenization for real estate, I think there may be enabled with  
134 the technology itself, so there are use cases for the technology. I say this because you have a  
135 property database, and then you can maybe trade the properties of top at the mortgages on top also  
136 with real estate. So once more, tokenization and then possibly for investments, look once more  
137 here, I mean if crypto assets are needed for this tokenization, then I again I think then the crypto  
138 assets are very fascinating, interesting for trading or investing, investing, sorry. Sorry, trading.  
139 Sorry. Therefore, I believe that the application is the first thing that you need to do, and then the  
140 investment should follow suit after that, and yeah. To summarize my thoughts, I believe in the  
141 technology and that the use cases should come before the assets, if the technology use case works  
142 and if this case needs the crypto assets to be used, then, and just then, I see crypto assets being  
143 institutionalized.

144 I: I understand. You also suggested tokenization as an additional method to verify ownership, is  
145 that correct?

146 E: Yes, to share certain kinds of assets, such as using the technology to establish ownership of  
147 other kinds of assets, but the technology itself is the primary focus of this form of sharing.

148 I: Interesting.

149 E: Exactly. In other words, being able to provide ownership evidence is really necessary. Exactly.  
150 Yeah. You may also share it, which, in my opinion, is the most attractive feature of all because it  
151 not only demonstrates your ownership but also gives you the opportunity to do so with the ability  
152 to distribute ownership of an asset, like as a house, or in the automotive industry for example  
153 among a number of people, do you know, and in the same way, you can distribute tokens to several  
154 people in exchange for a single share, trading and ownership would be easier.

155 I: Thank you, I understand, really interesting perspectives and use cases for the technology, thanks  
156 for sharing.

157 E: Yes, I like to think about the ownership because brings up so many nice use cases for the  
158 technology itself you know.

159 I: True, interesting.

160 E: Yeah

161 I: I believe that covers all of the questions; is there anything else you would like to inquire about  
162 or add?

163 E: No, I think I mentioned all. Thanks Bruna.

164 I: Thank you. Bye.

165 E: Bye.

## Appendix XII: Interview Transcript 10

**Project:** Master's Thesis ZHAW

**Interview number:** 10

**Group:** 2

**Date, time:** November 11th, 2022, 12:00

**Location:** Zoom

**Recording mode:** Otter

**Duration:** 01h00m03s

**Speakers:** I: Interviewer (Bruna Auto Cabus), E: Expert Interviewee (Thiago Wechsler Louro)

**Organization:** EFG AG

**Transcribers:** Bruna Auto Cabus

**Consent form:** Signed

- 1 I: Hi Thiago, how are you? Thank you very much for meeting me today.
- 2 E: Hi Bruna, my pleasure.
- 3 I: So, I will just briefly explain to you what my thesis is about and what I'm searching for. So I am  
4 researching the crypto assets offering by Swiss private banks and wealth management firms. In  
5 the literature I researched more about how it impacts a portfolio and what banks are doing, what  
6 solutions they are providing, and what other banks are not providing, and for the interviews I have  
7 two groups. One is from private banks that offer crypto assets solutions to their clients, for  
8 example, Maerki Baumann, Julius Baer, Vontobel, and so on, and the other group is from banks  
9 that are not offering crypto assets solutions to their clients, and I want to understand the rationale  
10 behind the ones that offer and the ones that don't offer.
- 11 E: Sounds cool, lets go!
- 12 I: The first question is, to what extent those effects EFG bank provide the crypto asset solutions to  
13 its clients, including, internal character capabilities, partnerships or investment vehicles that have  
14 exposure to these type of assets.



15 E: EFG Bank does not offer; we don't advise, and mostly, if not actually, everything we cannot do  
16 actively for the client, we can just book structured products for the client issued by a well-known  
17 provider such as Leonteq, Vontobel, or any other big provider. So we can book it for the client in  
18 case he or she wants, but we cannot actively help the client invest in this class of asset. In terms of  
19 partnerships, we have a lot of them, but on the compliance side, we have two providers that help  
20 us check the wallet of the client to see if we need to do the compliance check to see if there is any  
21 kind of AML alert or, you know, KYC alert in the wallet of the client. It also means that it needs  
22 to come from an exchange, for instance, a regulated exchange that can provide the trading record  
23 and many other aspects. So this is the only kind of partnership that we have in that sense. As a  
24 result, it is relatively new. We have been accepting funds from existing clients who hold  
25 cryptocurrency, but it must meet certain criteria in order for us to accept it in accordance with our  
26 AML and KYC policies.

27 I: Interesting, and could you please explain the reasoning behind your bank's attitude that it does  
28 not give its customers with alternatives to invest in crypto assets?

29 E: I believe there is a learning curve at first, and perhaps because we are not decentralizing  
30 decisions and management, everything is taken by the board. But we have internal committees,  
31 and people are going to form a special study group where they provide to the board whatever is  
32 needed to take a decision, so we have a task force working toward studies about the topic, but it's  
33 still very early in the process. The first step was to accept funds, which in this case were  
34 cryptocurrency if they came from trading, and so on. We avoid any kind of funding coming from  
35 ICOs because it is riskier and harder to track. But if it's coming from trading activities within an  
36 exchange, that is easier for us to accept. So, we have the ability to accept funds from the crypto  
37 economy, let's put it like this, but we have some strong restrictions on it within this acceptance  
38 process. So we are, and I cannot say that we're working towards having these kinds of services  
39 provided by the bank, but I would say that it could be a natural consequence of this task force that  
40 I'm telling you about. However, this is something that is currently off the table. At this point, we  
41 are studying and learning how to implement a new internal process to first accept funds coming  
42 from these activities. So, I believe that anything further will be a result of the experience that we  
43 are gaining. And for those reasons, we are not loaded with knowledge and, to put it another way,  
44 has limited knowledge of the crypto environment. Personally, I have a totally different opinion.  
45 But I'm not alone in my opinion; you can see client officers and client relationship officers here,

46 but we're still at the bottom of this process line for change of chain of management. So it is  
47 something that might come, but it is still in the first stage.

48 I: I understand. And have you noticed an increase in the demand from customers for crypto assets  
49 over the past several years?

50 E: Yes, as long as we make the necessary bookings. So we do have some customers who hold  
51 structured products with cryptocurrency underlying, but the number of those customers is  
52 relatively low. In my perspective, it is not even sufficiently big to be regarded as notable because  
53 of its size. It is at an extremely low level. However, we almost always have a Swiss issuer, most  
54 likely Vontobel or Leonteq, which makes any kind of US issuer extremely unlikely; I'd say it's  
55 more local, but this is just my impression based on the experiences of other relationship officers  
56 because I don't have any clients who hold any US funds with crypto as the underlying asset.

57 I: Interesting. And do you observe a pattern in terms of age, geographical location, or income level  
58 among these consumers who are looking for crypto asset solutions?

59 E: I think there are more Western-type clients, maybe more Caribbean, and Latin Americans are  
60 not as numerous. I would say, in terms of age, below 45. Okay, above 45 is really hard for them  
61 to understand; I have just one exception, where the guy is like sixty to sixty-five years old but he's  
62 truly an exception.

63 I: I understand. And do you think we'll see more institutionalization of crypto assets? The bank's  
64 unwillingness to provide crypto asset solutions might result in a competitive disadvantage. Or how  
65 do you perceive its positioning?

66 E: I think my perception is okay. My perception. To begin with, I believe that cryptocurrency is  
67 more resistant to money laundering than the US dollar. For instance. than cash because I would  
68 give you the example that we are discussing today. Right. So, we're talking to the big guys who  
69 do the forensics for us. So, they do the compliance check on the wallet, which is the source of  
70 funds for a potential client, right? So they were analyzing these, not for our client, they were just  
71 sharing an experience, and so in this case, they were checking the wallet coming from an exchange  
72 here in Europe, and they were able to identify that less than 1% of the crypto that he was holding  
73 came from or was connected one day, like five years ago, to a case of what I think was child abuse

74 or something like this, like extortion and child abuse. So, you see how far a KYC compliance  
75 check—you know, a forensic check on some funds coming from a client can go. So, we can know  
76 when to assess if the client is close or if the crypto was just in the blockchain because it was so far  
77 away from him. So maybe it makes no sense to be really connected to the person because it's too  
78 far away. But they are able to identify that part of it was once connected to these kinds of cases.  
79 So, you see the beauty of crypto, which you don't have with USD because, say, if you have a shop  
80 like a kiosk, you have zero knowledge of who buys there. As a result, the money coming from the  
81 kiosk could be associated with money laundering, or it could be associated with any type of  
82 international drug trade or whatever, including child abuse and extortion, from which they are  
83 receiving funds. Not from this activity, but they're receiving this that was part of this activity, and  
84 no one knows, and with crypto not existing, you can determine how close and what percentage of  
85 your crypto was once associated with a type of crime. And another example is really interesting,  
86 and you might know this. I'm not sure if you recall a case where a man stole from an exchange and  
87 then went to a Starbucks in London. He was, I don't know, in a shed, whatever he was in his  
88 computer, and then the police found him, and they were able to find him because he was using this  
89 wallet to do a service, and they were able to track the IP, and they found him at Starbucks, you  
90 know, and he got arrested. So that's the beauty of crypto. It makes everything public. Everyone  
91 has access to it. It's very easy to check and know that maybe something's wrong. You see another  
92 example, and this is my experience, right? So, I read something on the web, and then it was a  
93 service, and then I said, "Okay, it looks like an interesting service. So, it was cheap for me to  
94 purchase the service, and then I did, and I didn't get back the service that I was fine with. And then  
95 I thought, "You know, let me check the wallet. And when I was checking the wallet, I was able to  
96 see how much they were maybe stealing from people, and they were stealing like \$4 million. You  
97 know, and I reported this to the police, saying, "You know, this is the address; maybe you're able  
98 to track it," and I found that address was related to a special country. So, I reported these to the  
99 police, explaining that this was the case and that I would be able to provide the information that I  
100 had discovered. So, I was able to find the IP, the name of the website owner, how much he or she  
101 had in their wallet, and so on. So, this was provided. I don't know what happened before; I was  
102 never contacted. So, but my point is that I was able to do it myself, and I am, you know, not a  
103 detective and not a police officer, and I am a common person. Of course, working in the banking  
104 industry makes no difference in this world. If you're a dentist or if you're a librarian, you know  
105 that if you do a little bit of searching and you learn a little bit here and there, you're able to do the

106 same. So, yes, I believe that's very promising in terms of being a method of payment. For example,  
107 I'm not particularly fond of Bitcoin. because I don't think it's a reliable form of payment, not  
108 because it is. It is reliable, but not everyone will have faith in it at the end of the day. A currency  
109 is based on faith, right? So, the US dollar is purely based on the faith of people. People believe  
110 and they want to have it; they want to hold it, and people accept this because they also believe,  
111 and they know they understand. So, at the end of the day, the dollar is a matter of faith rather than  
112 purpose. People believe in the dollar not because of anything you know; there is no correlation  
113 other than people believing in and accepting it. So, in that sense, I'm not sure if Bitcoin will one  
114 day replace it; I'm not sure, and I don't care in that sense about what I care about or what I believe  
115 will really break the businesses, which are platforms like Ethereum, Solana, and Cardano, because  
116 they provide a service behind which you can build contracts, a service behind, and, you know, to  
117 the token having Ethereum, Solana, and Cardano as a base for the use case, So I believe that this  
118 may be more of a problem for swift business—the business shift—than for the currency itself. So,  
119 for international payments, it is much more reliable, it's better, it's faster, it's cheaper, and it is  
120 traceable. In Eastern, you can have the funds come in and do your independent KYC on the funds  
121 coming from the institutional institution itself. So, for example, consider why one of the world's  
122 largest intermediary banks is responsible for, I don't know how much, but maybe 60–70% of US  
123 dollar international transactions, right? They deal with it as an intermediary for USD. So, imagine  
124 if they can use artificial intelligence to check automatically to see if the funds coming from that  
125 bank have any kind of connection to crime, and they can do this instantly and nightly with their  
126 AI. So, I believe that cryptocurrency should be used for payments, specifically international  
127 transfers, and thus for the international payment system rather than the currency itself. And what  
128 I believe could be a threat to banks is the kind of services that are provided by, again, utility tokens  
129 like Ethereum, Cardano and Solana because they are able to do staking. So not only do we have  
130 the smart contracts behind us, but they are also able to provide liquidity to the market through  
131 staking, and I'm not sure if you can do steak with Bitcoin.

132 I: Yes, you cannot do staking with Bitcoin.

133 E: I don't think so. I don't recall seeing it. So no, you're confirming because it's not the purpose of  
134 the bitcoin to do so. So, assets that do steaking, would be ideal like something synthetic. So, if an  
135 exchange is saying to the client that they are providing steaking in Bitcoin, I think this is dangerous  
136 because it is a synthetic kind of setup. It is not a true liquidity pool, and so on, as you can do with

137 utility tokens, for example, if you are going to learn it, and so on. So, for banks, I believe that this  
138 is more threatening than Bitcoin or whatever. So, yeah, I believe notaries will be the first to go.  
139 You can have a public signing and publicity for the contract because you can. You know,  
140 everything that the notary provides can now be immediately replaced by the blockchain. So, you  
141 can purchase a house, you can purchase a car, you can purchase whatever through the blockchain,  
142 and I will be connected, like a proven and reliable document, that that specific property belongs to  
143 me. And these could also prevent corruption in many countries. You know, let's say, countries in  
144 Africa, Brazil, and Latin America—you know, less developed countries where the notary has a lot  
145 of power by registering the properties, for instance, even for state and city taxes over property?  
146 This is a very good solution because if I have a contract representing a property, that property has  
147 a description. So, whenever I need to update the description of that property, I have to go through  
148 the blockchain to update the contract, right? So, ideally, the blockchain would be used for this type  
149 of business, but in the real world, the notary has the power, so I'm not sure. Maybe they can just  
150 swap a paper and a description that wasn't there before and make it today. You should be aware  
151 that this is a significant bribery and corruption loophole. So, I believe that blockchain is bulletproof  
152 for bribery and corruption, which is the opposite of what many people believe, because people  
153 believe that this can be used for AML and whatever, but for me, no, because it's traceable. You  
154 can figure out where it was. It's possible you don't know from whom. But this is something that  
155 maybe the regulators could do because you can name your own wallet. So, if we have some kind  
156 of regulation, like a centralized IT issuer of wallets, making it mandatory to name the wallet, I  
157 don't know a team number. It doesn't need to be the name of the person, you know; it could be the  
158 T number or something else that connects the person to the wallet, you know, and that would be a  
159 very simple solution. That would, I believe, alleviate the majority of the concerns about the crypto  
160 world. Because if I have a centralized wallet and simply impose regulations stating that payments  
161 within this country must be accepted, they will only be accepted if the wallet is called ABC or Z.  
162 You know, every store and every service provider could say, "You know, I'm accepting it now,"  
163 and since you know everything about the client and everything about the person, you know, I  
164 believe this is a very good solution.

165 I: That's true for many, many, many businesses. And we see already here in Switzerland with the  
166 car business, the car buying and selling business, that a lot of businesses are already using the  
167 blockchain technology to register and documented the information to avoid fraud or misleading

168 information in the automotive industry. Also we have a supply chain of Nestle for example, that's  
169 already started to use as well. So we see that the technology is getting bigger in the use cases. And  
170 I am really curious how this will play out in the financial industry as well.

171 E: I believe it will play a larger role in certain structural products. Maybe it will be like fiduciary  
172 deposits. Because liquidity pools provide far superior and faster service, and more dependable  
173 service for fiduciary deposits, as well as if a share deposit is made, because the deposit is made to  
174 the bank's account. The bank works with the money, and then you have a credit risk, right. Okay,  
175 so you have to rate things, and it says so, but how many cases do we know around the globe where  
176 someone faked it to balance sheet and then everything went down, and you cannot fake the  
177 liquidity pool. You simply cannot, and no one can use the liquidity pool except those who are  
178 lending against it, taking money to lend against it, or whatever position they have. So, it is a very  
179 structured way to provide returns for the client. They stake, and I believe staking poses a risk to  
180 the bank. Yes. What else are instruction books for, because if you want to do reverse convertible  
181 whatever, all you have to do is place a blockchain with nothing written on it. And then you build  
182 into this algorithm that this will be purchased by days and days, and it will use these as the  
183 underlying calculation to determine whether or not it will be good days. So, I think the blockchain  
184 will change the business in that sense; I think products will be better, and the assessment will be  
185 better. It is transparent, not only for the client but also for the regulator because it's public. You  
186 know, you don't need to rely on humans who are going to rely on, you know, computers or  
187 whatever is reporting that investment to the public. Because it's their blockchain, you know, and  
188 there is no way for this to be mistaken. You know, the margin of error is very, very small.

189 I: I have to agree with you there. And you talk to me a little bit about the other crypto asset classes,  
190 such as Solana, Cardano, and Ethereum, each of which you believe has a higher value proposition  
191 than any use case then Bitcoin, for example. And what do you think about tokenization and NFTs?  
192 What are your thoughts on these different types of asset classes?

193 E: Okay. Therefore, we have no choice but to separate what is appropriate. It is more well known  
194 by the public because we read on the news that that, you know, piece of file is worth 30 million to  
195 50 million but for me, this is this is unbelievable. So this brings us to the art NFT, which is more  
196 it is well known by the public. I just don't believe it. The value that has been assigned to this kind  
197 of asset is not something that I just do not understand the why. Okay. I have faith, without a doubt,

198 in the technology. Simply said, I do not buy into the significance that other people attribute to this.  
199 For this to cost fifty million dollars. It's a huge question mark if you will. Why, pray tell, would  
200 you pay money for a file that can only be seen on your personal computer? So makes no sense.  
201 There are already consumer electronics available for purchase. Also, you can already buy things  
202 like large screens on which you can display your NFTs if you choose to do so. In that case, it  
203 would make more sense, wouldn't it? Because I have an artwork that I can display for everyone to  
204 see, I am able to hang it on the wall in my home. I am able to display it at my workplace, and as  
205 you well know, the point of art is to flaunt one's accomplishments, so I can certainly do that. Or  
206 either simply to myself or to one other person who is known to me. Right? As a result, I believe  
207 that as gadgets such as DVDs and screens become more popular, people will become more familiar  
208 with them. It would make more sense for me to own an NFT in that case. But then we have different  
209 kinds of purposes for NFT. Right? So, for example, I'm not sure if something like poetry videos is  
210 acceptable; that would be closer to the art of using properties such as sharing. So, if you buy the  
211 right to use a hotel room, for instance, okay, so you have timeshare hotels all around the globe.  
212 So, I can tokenize this, and why not? You know, I have my wallet with my 1,000 hours and the  
213 right to use a hotel room, and I just go to the hotel, and I use my wallet, and that's it. You, see? So  
214 maybe, just maybe, we'll see more products for NFTs in that sense. I think the use case behind it  
215 should be to prove ownership, in securities, in utility, transactions and so on, not to buy a piece of  
216 art for yourself.

217 I: I understand. Yeah, I think right now, in my opinion, NFTs have gone in a direction where the  
218 technology is very focused on the art. But I think the beauty of something immutable, trackable,  
219 and that proves ownership can also be really useful for documentation, and we're seeing these use  
220 cases through the way you described the use cases in the practice, room, and capabilities. That's  
221 really interesting. And do you think there are some pre-requisites, such as market volatility  
222 legislation in the industry, maturity, and institutionalization, that would be necessary for EFG to  
223 rethink its policy of not offering crypto assets?

224 E: I really have no idea. It doesn't seem likely to me. I see it more as a learning curve than anything  
225 else. As you may have been aware, countries in Latin America are more acclimated to the mindset  
226 of "okay, it's a new thing." Let's establish a new regulation, shall we? In addition, I believe that  
227 European countries such as Switzerland are more comparable to, "You are aware that the  
228 regulations have been established, aren't you? Instead of doing things in reverse order, let's try to

229 adapt the new items to the regulations that are already in place. Consequently, I am of the opinion  
230 that the level of regulation that applies to assets of this kind is already sufficient here in  
231 Switzerland. Therefore, the first step that has to be taken is to acquire a deeper knowledge of the  
232 asset class that is included in the service. Therefore, this can be comprehended by looking at how  
233 the legislation is applied. To accommodate this, I do not believe that the legislation has to be  
234 changed. Simply reaching a consensus on what everyone means will do. And with regard to this  
235 particular aspect, I am of the opinion that FIMNA did a good job with the rules for crypto, which  
236 state, "You should know that this is how we interpret it. We have payment tokens, utility tokens,  
237 and service tokens, and this is how we understand the initial coin offering (ICO): this ICO is that,  
238 you know, so we don't need additional regulations if we just grasp and have a common  
239 understanding of what's going on. At the end of the day, I believe that the only regulation that  
240 could come is what I mentioned earlier, namely, you know, okay, so if you want to use  
241 cryptocurrencies in this country, you need to name your wallet in the standard, like a T number or  
242 whatever, and then it will be accepted. This is the only regulation that I believe could come. The  
243 end, as they say. You should be fine with just using my name as the only reference. Your purse or  
244 wallet. In this regard, you know, maybe the platforms of this kind will be found right on the  
245 blockchain in the future, especially given the fact that you can name your own wallet. It is not  
246 necessary for you to have a well-known brand name for your wallet. That is your wallet, right  
247 there. That would be you. That's right, you are the one in question. And so. Yeah. And let's say  
248 that's the issue; it seems to be more concerned about your wellbeing, doesn't it? Because it is  
249 available to the whole population. If I wanted to find out how much money you have, all I would  
250 have to do is invest in a couple of stocks. If I saw that she only had a few million dollars in her  
251 account, I would obviously want some of that money. Therefore, in my opinion, the primary  
252 concern would be one of safety. But, you know, in order to avoid situations like these both in the  
253 real world and in the realm of the internet, let's think about it. Yes, you see. If both the exchange  
254 and the bank are regulated, and if I want to buy something with cryptos using an address with my  
255 name, I simply transfer money from my bank account to the exchange, money that no one else  
256 besides the bank and the government sent to the exchange, I buy my crypto, and I use that fund to  
257 buy whatever I want, and everyone will know that I bought \$10,000 in crypto and bought  
258 something from the store, whatever. If neither the exchange nor the bank is regulated, however,  
259 the process described above; therefore, it is possible that this will affect a great many things in the  
260 future, such as business information, because then I would be able to monitor the behavior of



261 customers, such as when they make purchases and at what time, and therefore determine where  
262 these customers are originating from. Consequently, I believe that a great deal will alter, not only  
263 in the business of finance, but also, and I believe primarily, in the business of homes, because just  
264 think of all the information you could have if you knew where your customers were located.  
265 Everyone already uses newsletters and IPs and cookies and whatever else there is to know this,  
266 but it is far more accurate if you know where they are spending their time if you know where they  
267 are spending their time. Imagine for a moment that you went to a store, found it, and bought it.  
268 You know, to match a new belt with a purse, a new shirt with a purse, or maybe recommend a  
269 vacation for you to go on with your purse — so the advertising sector and other industries similar  
270 to it would gain immensely from the blockchain. Therefore, I think it has the potential to bring  
271 about significant change, and the repercussions of this will be felt across many other sectors. I  
272 think I was referring to banking when I stated that, because banks in any case, the bank will not  
273 survive in its current form if it does not make the necessary adjustments, whether or not  
274 cryptography is involved, whether or not something is digital. You should know that picking  
275 between that or surviving is your only option. If you don't have a bank or anything digital today,  
276 you're already headed down the road to oblivion or, you know, a future merger. If you don't have  
277 either of those things, you're already doomed. However, cryptography is merely the next stage.

278 I: I find that interesting. And do you make use of any investment vehicles, such as crypto funds or  
279 crypto exchange traded products, that are listed on a regulated exchange and in which you  
280 participate?

281 E: No, no, we can't book anything like that, just structured products from Vontobel or Leonteq for  
282 example.

283 I: Yeah. Okay. And in case your bank would start an initiative to provide crypto assets would these  
284 be done internally? Or would EFG search for potential partners as Sygnum bank, Seba bank, or  
285 crypto custodians to help with the infrastructure?

286 E: I have no idea whether or whether this is something that will be chosen by management, and it  
287 is not possible for us to find out about it.

288 I: Interesting. And do you see a further institutionalization of crypto assets?

289 E: Yes.

290 I: And which I think we talked about but just to follow up, which outcomes do you expect from  
291 it?

292 E: Deposits, crypto and structure products.

293 I: Interesting. Yeah. All of my questions might be summed up like this. Okay. Would you like to  
294 contribute anything to this?

295 E: No.

296 I: But it's really interesting to understand for me that EFG already has this initiative that they  
297 accept, as we see so many other banks that doesn't accept any funds that came from crypto into  
298 their customers' accounts. This makes it really interesting for me to understand that EFG already  
299 has this initiative that they accept.

300 E: Due to the fact that something is still in the embryonic stage, we are constrained in many ways.  
301 Yeah. It is. This is the initial phase. Yes. I've just got another thought that might develop into  
302 something significant in the near or far future. Therefore, it is possible that what will also come to  
303 pass is for banks to become increasingly involved on the information technology side, not just for  
304 the digital access, as you know, but also to provide services such as custody for cryptocurrencies.  
305 Therefore, as we can already see, many funds employ a variety of cold wallets, you know, for  
306 safety purposes, and I feel that maybe this kind of setup may also happen for banks. Perhaps the  
307 role of the exchanges could be taken over by banks. Take, for example: you are aware that the  
308 custody of the assets has been given to banks already.

309 I: Yes, we have, for example, Maerki Baumann, who does that currently. Yeah, it's

310 E: Okay, so the term for this type of arrangement is called also offers custody. There is yet another  
311 one that slipped my mind just now, and in addition to that, we have other options for custody. Yes,  
312 we are already seeing some banks offer the service, and I believe that this is just going to become  
313 bigger and bigger because we have the funds with banks, and they have to find to find to just  
314 purchase the polls if they need to buy if they need to go very fast to just buy a company you know.  
315 So yes, we are already seeing some banks offer the service, and I think that this is just going to

316 become bigger and bigger because we have the funds with banks. I believe that custodian deposits  
317 and fiduciary deposits, which are used to structure products, are obsolete at least for the time being.  
318 The primary and most important next step for financial institutions to take is to begin providing  
319 services to its customers.

320 I: That's really, really interesting. You gave me so many insights that I didn't hear before and that  
321 I wasn't aware of before. That's pretty interesting. Nice. Okay. and a lot of use cases that I didn't  
322 know, as well, in internal capabilities and utility.

323 E: Thank you. I appreciate it and if you want to speak again I'm available, it is something that I  
324 enjoy.

325 E: Yeah, I have been joining as well.