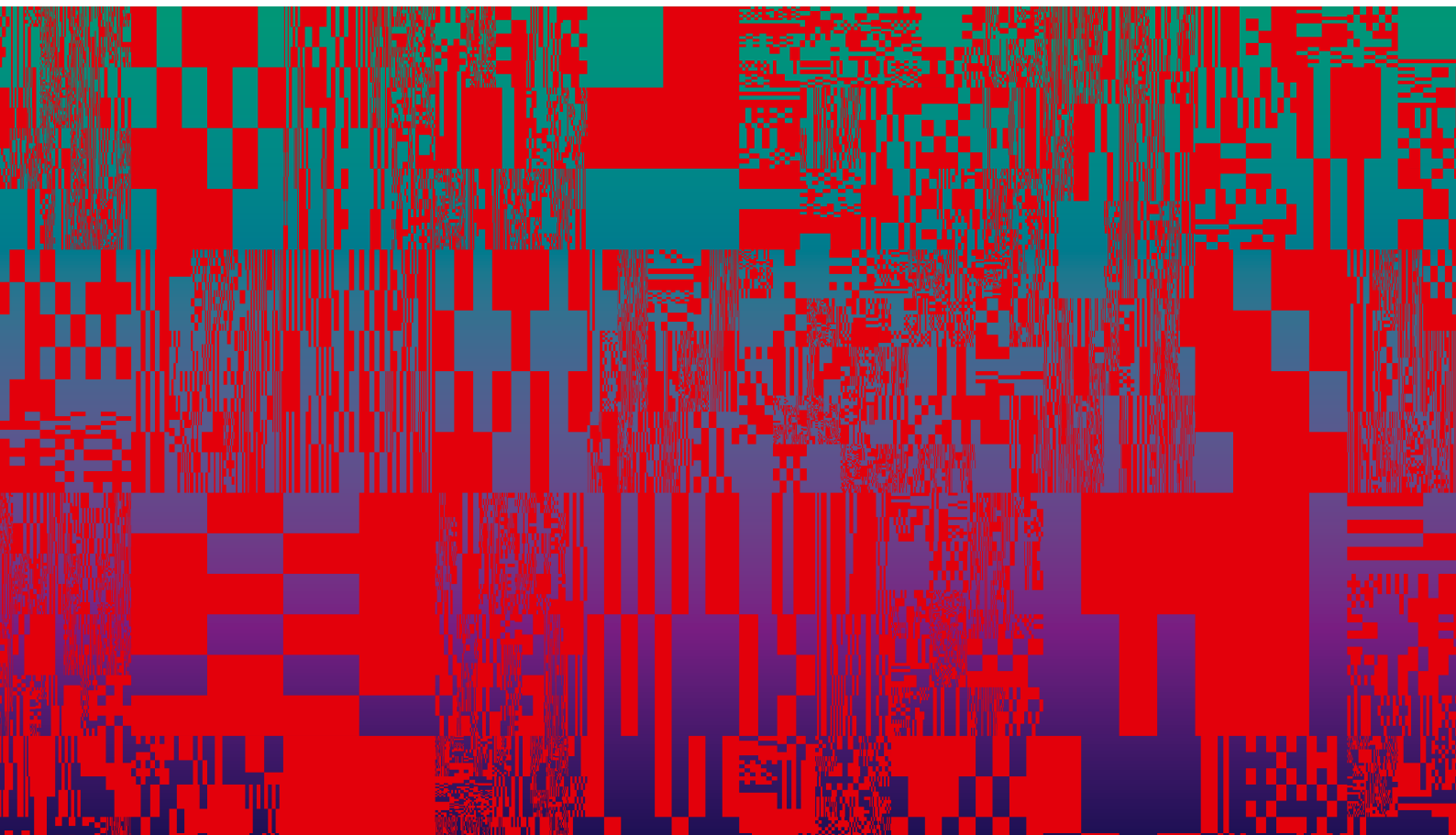


Created by:
Alexander E. Brunner

Swiss Digital Asset Market Report 2022



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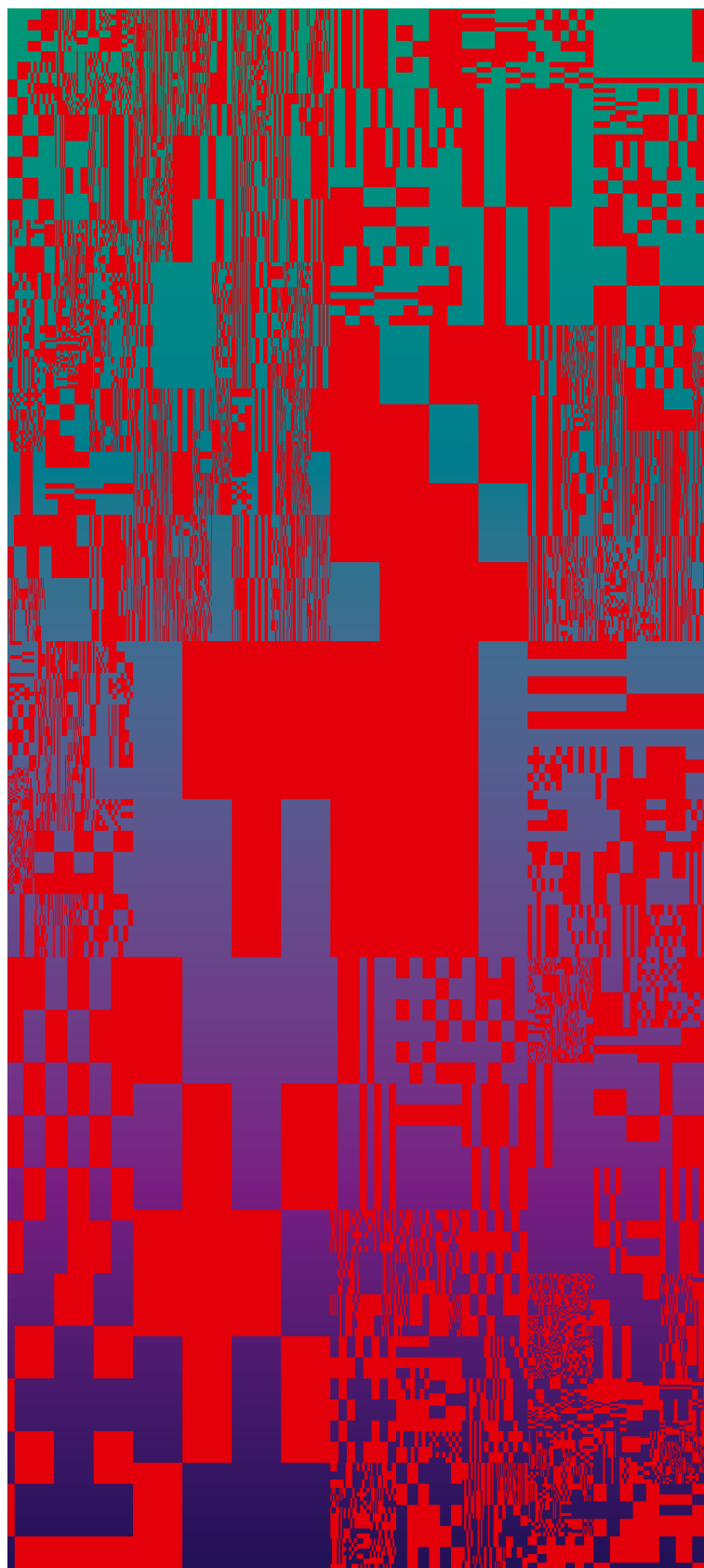
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01

Preface





A Unique Opportunity for Switzerland

The potentials of blockchain technology are endless, and Switzerland's Crypto Valley is at the forefront of this revolution.

Now is the time to seize this opportunity. Switzerland is a pioneer location and offers some of the world's clearest and most business-friendly framework conditions. One important factor is the foresight and acceptance of blockchain technology of our country. This openness is signaled even from the highest levels of politics. Our parliament unanimously voted to make selective adjustments to existing legal structures. The new DLT legislation enacted in 2021 offers legal certainty and room for innovation and new business models.

A flourishing ecosystem has evolved between Zug, Zurich, Lugano and Geneva in recent years. Over 1,000 companies providing 6,000 jobs already call Crypto Valley their home. In addition, law firms, universities, and many service providers have specialized in blockchain and created a fantastic support network.

The Swiss Blockchain Federation unites the industry's most important actors and actively contributes to a positive development with the help of many experts. With Home of Blockchain.swiss, we have launched a new initiative to promote the Crypto Valley abroad. We look forward to welcoming more founders and businesses who look to contribute to Switzerland positively.



Heinz Tännler

The Swiss Digital Asset Market Report 2022 helps better understand the thriving digital asset space by assembling the most important facts and figures. It serves as a reference publication and features contributions by partners from the public and private sectors. Thank you for being so interested in Switzerland. I hope you find this publication both stimulating and insightful.

Government Councillor Heinz Tännler

Minister of Finance of the Canton of Zug and President of the Swiss Blockchain Federation

Heinz Tännler has served as a Government Councillor for the Canton of Zug since 2007, first as Minister of Infrastructure and since 2016 as Minister of Finance. The trained lawyer has private sector experience in the world of sports. He was the Head of Legal at the world governing body of football, FIFA, and served as a judge for the Swiss Icehockey Federation.



Switzerland the Home of Blockchain

Switzerland Global Enterprise (S-GE) promotes Switzerland as a tech and business location. Together with our cantonal and regional partners, we support international companies with their expansion projects, from evaluating Switzerland as a potential location to setting up local operations. With the rise of new technologies such as blockchain, the pragmatic regulatory approach of the Swiss authorities has become an important asset and location factor. Swiss laws, unlike those in many other countries, are designed in a tech-neutral manner, which means companies that implement new business models and innovate using emerging technologies can operate within existing law and enjoy legal certainty. This progressive regulatory environment laid the foundation for the now famous Swiss Crypto Valley.

The unified approach of Home of Blockchain.swiss perfectly complements the investment promotion activities of Switzerland, and we are excited to be part of this initiative.

Sirpa Tsimal

Director Investment Promotion at Switzerland Global Enterprise (S-GE)



Sirpa Tsimal

21SHARES

The World's largest Digital Asset ETP Issuer

As of April 2022, 21Shares manages more than \$2 billion in 23 cryptocurrency ETPs and over 130 listings, including the world's only ETPs tracking Binance, four Crypto Index Baskets and two ETPs with investor staking rewards (Tezos and Solana). Its products are listed on eleven regulated European and Swiss trading exchanges.



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Foreword by Olaf Hannemann Co-Founder CV VC & CV Labs

Blockchain technology is the technology opportunity of our generation. In lockstep digital assets have established themselves as a new and attractive emerging asset class in its own right.

In our view, there are two key drivers for this: First, blockchain technology can be considered a “catalyst technology”, driving and more efficiently enabling many other tech megatrends, such as AI, IOT, machine learning and continued automatization as well as personalized health. Secondly, a humanitarian need for greater transparency and accountability has emerged. Whilst many nations, governments, and public entities grapple with how to respond to this, certain industries and our Swiss digital assets ecosystem are charging ahead.

On a medium to long-term basis, we see continued demand from investors to allocate capital to the blockchain ecosystem. This has been shown by global blockchain venture funding which by far outpaces all other venture funding while achieving higher valuations at the same time. The strong inflow of capital to exchanges, fintechs, and institutional servicing platforms as the key service providers to a functioning digital asset ecosystem, continues unabatedly.

Regulations continues to be an obstacle to even broader adoption and acceptance in many regions. However, regulatory initiatives such as the European Markets in Crypto-Assets framework, create guidance for digital assets. This enables the global transition to Web3.0, accelerating the digitization of all assets.



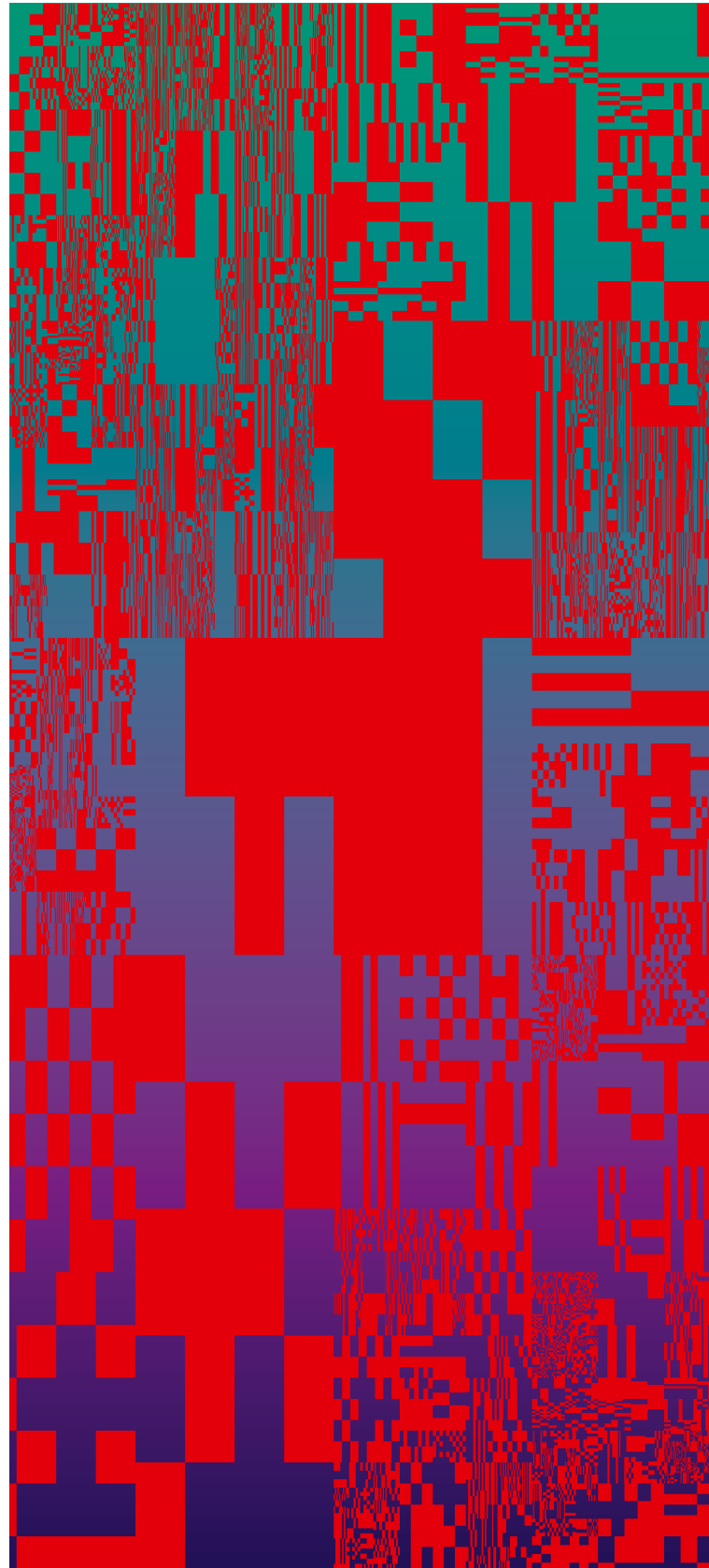
Switzerland is in a unique position to capitalize on its early adopter position as an exemplary regulatory jurisdiction, a hub of corporate and legal talent, well-experienced service providers, crypto-friendly banks, and academic institutions. In order to capitalize on this, Swiss stakeholders need to work collaboratively. We must align our digital asset expertise with our strong heritage in finance. This will enable Switzerland to develop a leading digital asset ecosystem. As CV VC, we will proudly support this ambition in cooperation with Home of Blockchain.swiss.

Olaf Hannemann,

Co-Founder CV VC

02

Introduction





Home of Blockchain.swiss

Crypto liquidity flywheel

THE ICO boom of 2017 was followed by a “crypto winter” in 2018. However, the winter did not last very long. Shortly after the massive dip in crypto prices, an enormous wealth creation cycle kicked in, sending bitcoin and other coins to all-time highs. The cycle was built on ultra-loose monetary policy, pushing investors further out on the risk curve. The combination of an avalanche of venture capital funding for digital assets and the launch of decentralized finance projects led to the creation of a dizzying number of tokens – almost 20,000 by early May 2022. This flywheel of more funding triggered higher crypto prices, which led to even more investors investing, followed by the issuance of more tokens. It felt like investing in an ATM that was spitting out fresh money to investors.

This “marginal liquidity” was very much driven by the “fear-of-missing-out” and made bitcoin the best performing asset class for the last ten years (by the end of 2021).

Innovation at speed

Many proponents of digital assets highlighted the incredible financial innovation originating from the so-called “decentralized finance (DeFi)” industry. In 2021 seemingly every banker attending a conference talked about crypto and digital assets. However, to critics digital assets were borne out of a speculation frenzy of fake money conjured out of thin air. It was clear that digital assets started on a journey of institutional adoption in 2021 with several large international financial institutions such as Fidelity Investments offering investment services. It was also clear that the speed of innovation in DeFi was mind-boggling. This led to large hacks and frauds, making demands for investor protection and regulations grow louder.



Alexander E. Brunner

Crypto-FIAT-fusion

For the digital asset industry, which had a tense relationship with the regulator, a seminal moment came in March 2022 with US President Joe Biden’s “executive order” to ensure a responsible development of digital assets. It looked like the US government finally acknowledged that digital assets were here to stay (or at least merit some regulatory guidance). Crypto became too big to fail for regulators to plainly stop it. With the Swiss regulator’s first ICO guideline in early 2018, followed by the new Swiss distributed-ledger-law in 2021, the Swiss digital asset ecosystem had a head start compared to other financial centers.

In early 2022, regulations became the most debated topic in the digital asset industry. Prominent players emphasized the importance of compliance for the future viability of their businesses. The race on how to best fuse traditional finance, built on central-bank FIAT money, with the DeFi started to accelerate in 2021.



Sitting at the nexus of traditional and DeFi, Switzerland boasts a mature ecosystem with practical regulatory and legal frameworks and an openness to new innovative businesses.

This Swiss digital asset market survey confirms Switzerland's strength with an increasing number of international companies such as FTX, BitPanda, BitMex, Copper, Fireblocks or Anchorage Digital setting up operations in Switzerland. Other strong indicators are the increasing number of employees in the digital asset ecosystem (even though from a low base) or the expanding institutional-grade digital asset offering by Swiss entities, ranging from token issuance over to staking, lending and NFT services.

Home of Blockchain.Swiss

With its "Crypto Valley", Switzerland had an early start into the digital asset space, which led to the local domiciliation of some of the most well-known blockchain institutions such as Cardano, Ethereum, Tezos or Near. The Swiss ecosystem for digital assets has also made a lot of progress in moving closer to the traditional financial sector, creating legal, regulatory and taxation bridges. With its strong heritage in private banking, liberal values and a trustworthy legal system, Switzerland is the perfect home for digital asset and blockchain companies. With the endorsement of the Minister of Finance, Ueli Maurer, we are very proud to launch the global promotion initiative "Home of Blockchain.swiss".

As president of this public-private-partnership initiative I would like to cordially thank our amazing corporate as well as governmental partners. We are looking forward to strengthening and growing the Swiss digital asset ecosystem at the intersection of traditional finance and digital assets.

Alexander E. Brunner

President Home of Blockchain.swiss

Alexander is an advisor to the Swiss government about blockchain and digital assets in addition to working with international technology companies as a senior advisor and board member. He is an acclaimed author and speaker on the subject of blockchain and digital assets as well as a member of parliament of the City of Zurich. Alexander has authored Crypto Nation Switzerland, the first book on Swiss Crypto Valley (2019), as well as the first Swiss Digital Asset and Wealth Management Report 2021.

SwissOne
C A P I T A L

Top 50 Crypto Smart Index Fund

A proven investment strategy built to capture crypto's vast return potential with a solid track record since 2019.

Diversified.
Institutional.
Asymmetric.

Own the Future.


Steffen Bassler, CEO

Swissone.capital
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Survey highlights

Highlights from survey about the Swiss digital asset ecosystem as of the end of 2021

Licenses

47 Swiss entities replied with:

- 17%** Banking licenses
- 11%** Securities firm licenses
- 28%** SRO memberships
- 11%** Portfolio managers
- 34%** Without supervision with about a third of them applying for licenses

Employees

1,283 Full-time equivalent employees in the Swiss digital asset ecosystem.

Offering

47 entities in total offered (multiple responses possible):

- 34%** Custody
- 32%** Issuances
- 36%** Trading
- 26%** Staking
- 19%** NFT
- 17%** Lending

Custody

Out of 16 custody providers offered:

- 88%** non-security tokens
- 56%** security tokens
- 69%** stablecoins

CHF 13.2 billion in total digital assets are held under custody.

Banks or security firms keep 48% of all digital assets that are held under third party custody.

Client breakdown of custody providers:

- All** serve institutional clients
- 93%** serve professional private clients
- 36%** serve retail clients

Financial products

Out of 15 providers for financial products:

- 87%** offered issuance services for structured products and actively-managed certificates
- 40%** offered issuance services for funds and ETFs
- 13%** offered issuance services for derivatives

The most popular products are **actively-managed certificates and structured products.**

In 2021, a total of **124 actively-managed products** were issued, followed by only 1 fund.

Token issuances

Out of 15 token issuance providers:

- 87%** offered issuance services for security-tokens
- 40%** offered issuance services for non-security tokens
- 27%** offered issuance services for stablecoins

In 2021, a total of **60 security-tokens** and **8 non-security tokens** were issued.

In 2021 a total value of **CHF 227.3 million security-tokens** and **CHF 442.0 million non-security-tokens** were issued.

Trading

Total trading volume in 2021 of **CHF 41.2 billion.**

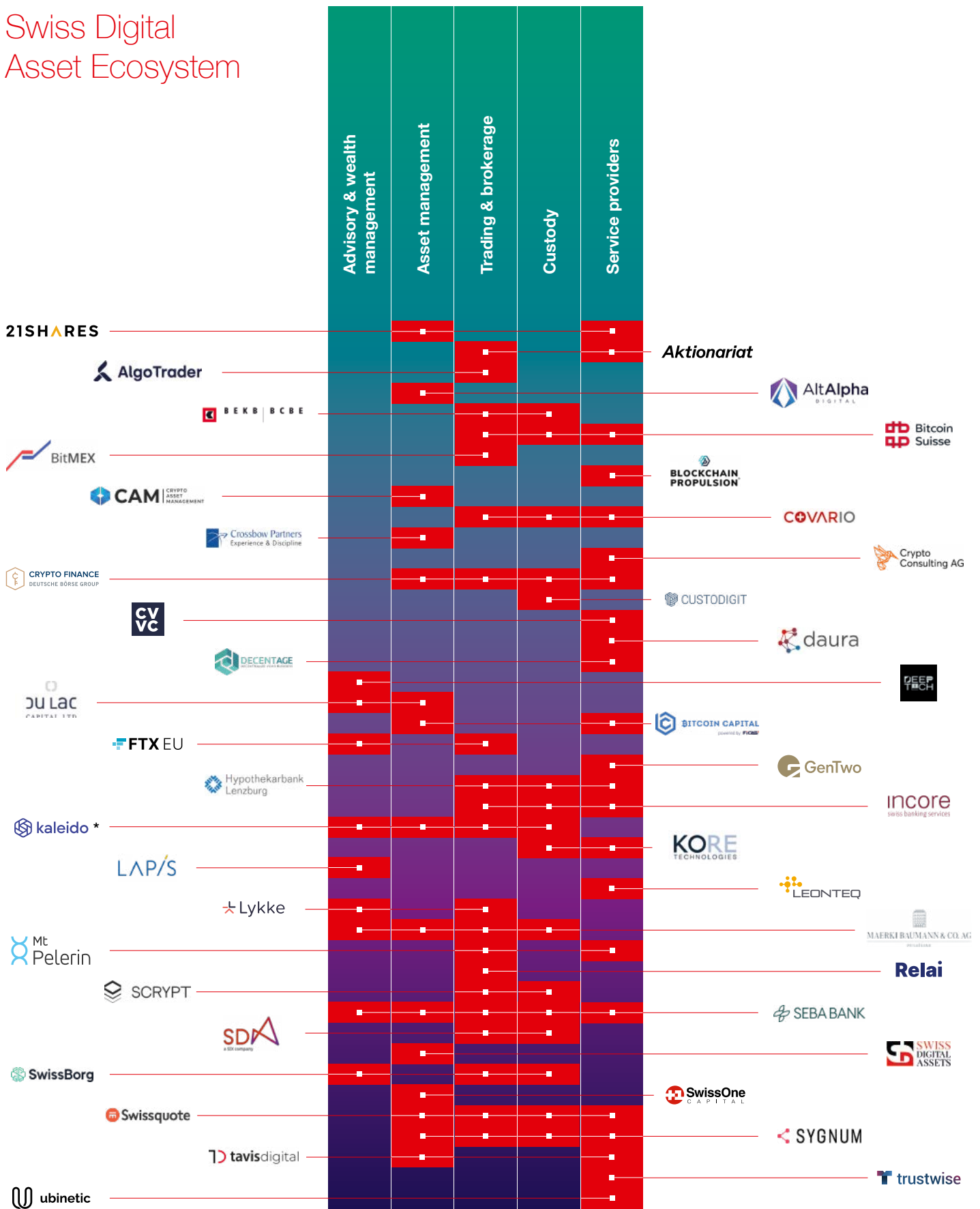
CHF 31.2 billion traded in non-security tokens and **CHF 4.5 billion** in security tokens.

Staking

The most popular staking protocol was **Tezos** followed by **Cardano** and **Ethereum.**



Swiss Digital Asset Ecosystem



*no advisory yet





Comment on Swiss Digital Asset Ecosystem Map

A thriving digital asset ecosystem requires six key components: Clear and attractive regulation, human knowledge, strong use cases, competent service providers and an audience ready for adoption and ample funding. This is all present in Switzerland, a leading global hub for digital assets, as demonstrated by this Swiss Digital Asset Ecosystem Map. It is home to a range of institutional-grade service providers applications are being built, funding is flowing, supporting attractive and relevant projects. All key service providers for a thriving ecosystem are located in one country, fostering innovation at rapid pace.

Supported by regulatory stability, optimal business conditions expertise, and know-how, Switzerland remains the prime Crypto Nation. It is a leading hub for the fusion of traditional finance, decentralized finance and digital assets. In order to retain its lead, Switzerland needs rapid continued adoption of this new asset class by investors, financial institutions and the overall financial and corporate sector. Digital assets represent a unique opportunity for Switzerland as a financial center, putting it at the forefront of a new revolution in finance with the opportunity to become a dominant player.

Tracy Trachsler

Managing Director CV Labs

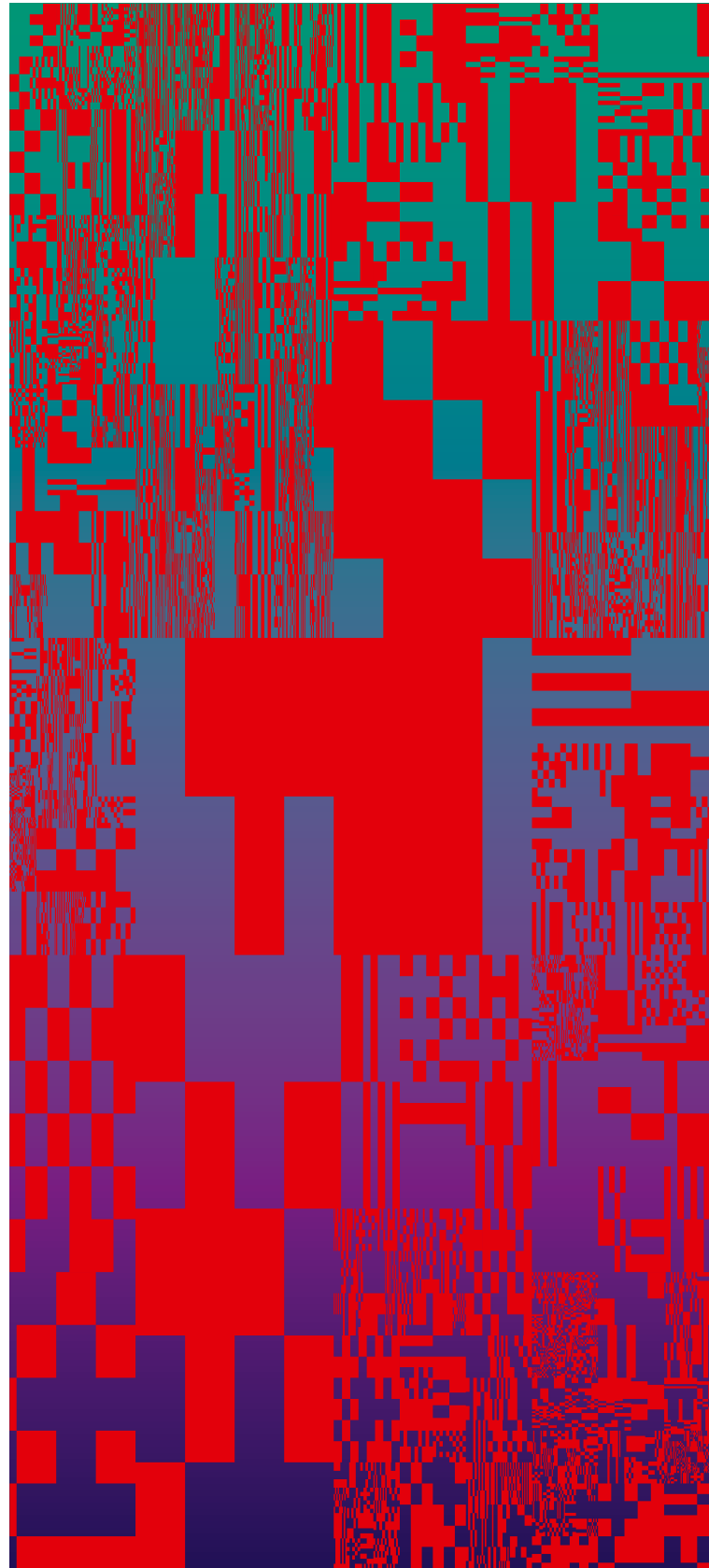


Tracy Trachsler



03

Swiss Digital Asset Market Survey 2022





Introduction to the study

Since the ICO-boom in 2017 followed by a “crypto winter”, the Swiss blockchain and digital asset ecosystem has grown rapidly. With the arrival of the Ethereum Foundation and other first layer protocols such as Cardano, Tezos or Near in the Crypto Valley in Zug, Switzerland has become one of the leading blockchain and digital asset hubs globally. In particular, Switzerland is a pioneer in successfully fusing traditional finance with the rapidly growing world of digital assets and decentralised finance. The objective of this report is to capture the Swiss digital asset ecosystem at the intersection of fiat and crypto. Going forward, it is our ambition to annually update the report and document the future development of the Swiss ecosystem.

The data was collected between the 25th of March 2022 and the 2nd May 2022 by the Eastern Switzerland University of Applied Sciences in St.Gallen (all figures in CHF per December 2021).

The survey was aimed at companies based in Switzerland. We consciously excluded global entities with only a small footprint in Switzerland, in order not to distort the numbers. The participating entities were asked to fill out an online questionnaire. Over the course of the survey period the project team conducted a multitude of supplementary interviews with participants. 47 responses out of 81, including some of the largest providers, resulted in a very high response rate of 58%. The survey explicitly excluded entities that are exclusively active in the fields of consulting, advisory or legal.

A defining feature of the digital asset and decentralised finance community is the use of snazzy terms such as staking, forking, oracle, gas fee, NFTs or airdrops. This also results in some ambiguity in the terminology. We have tried our best to clearly define terms in questions, conducting additional interviews and extensive research. In addition to the quantitative survey, we created an ecosystem map that positions the providers and categorizes their offerings.

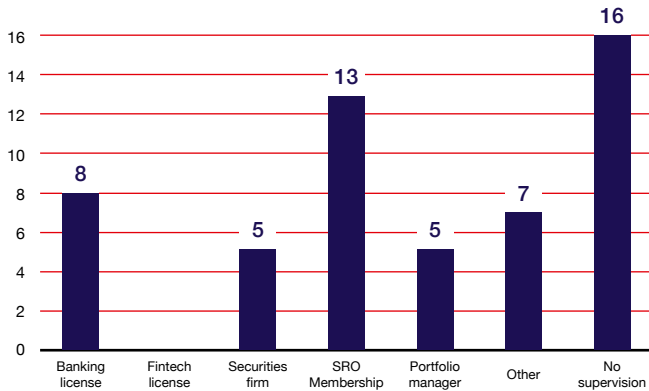




Regulatory Licences

Which licence does your company hold?

(n = 47, multiple responses possible)



In recent years the innovative digital asset and crypto industry has challenged regulators. In early 2018, the Swiss regulator FINMA was the first regulator to issue a token framework. The Swiss parliament followed in mid-2021 with a Distributed Ledger Law, creating an innovative legal framework. In March 2022, US President Joe Biden issued an executive order, calling the government to examine the risks and benefits of crypto assets (in the US bitcoin is considered a commodity and not a security). With increasing regulatory scrutiny around the world, regulations and regulatory licenses have become a key topic in the industry. With its digital asset friendly ecosystem, Switzerland has seen a wide range of regulated entities and the influx of entities that are in the process of applying for licenses. The survey found that 16 out of 47 entities are currently not supervised or regulated. However, at least 5 of these 16 are currently in the process of applying for a license. This clearly shows that Switzerland is an attractive destination for setting up a regulated business.

It can also be observed that Swiss entities often try to improve their regulatory status. In addition, five entities that are already regulated or supervised are currently applying for an additional or a new license. Interestingly, none of the current market participants in Switzerland has received a FinTech license yet. However, the data suggests that at least one of the participating entities is considering such a step. No entity has yet received a distributed-ledger-technology-trading license under the new DLT-law. As the law was only enacted in 2021, it has to be seen if it will be attractive to businesses.

Overall, entities operating in and out of Switzerland are clearly aiming to solidify their regulatory status, lending legitimacy as well as reliability to their business.

Advertising

Crypto Assets

KEEP TRENDS AT HAND!

Take advantage of crypto volatility at the snap of a finger while enjoying the security of a Swiss bank.

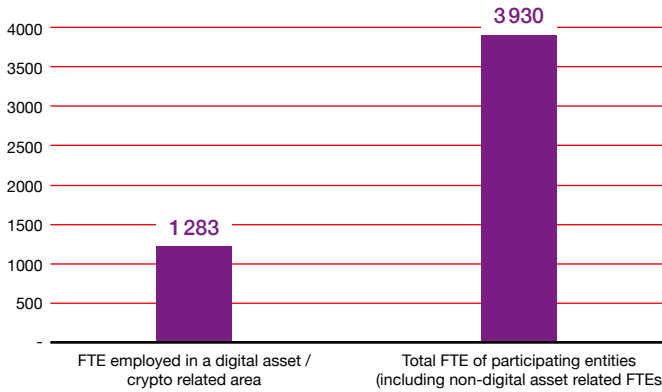
swissquote.com/crypto



Employees

Employees

n = 47



From a government perspective the number of employees of an industry is highly relevant e.g. due to the associated tax revenues. In the survey, the 47 entities reported a total of 1,283 full-time equivalents (FTE) working fully in a digital asset related area. Including all other (non-digital-asset-related) staff, a total of 3,930 people are working with the entities that participated in the survey. These additional 2,647 employees are working with only 11 of the participating entities. Most of them are typically banks. Conversely this means that as for 36 of the 47 surveyed entities, the entire workforce is working solely in the digital asset space.

The survey also shows that the industry for digital assets consists mostly of companies, which have a workforce of less than 100 FTEs. Only 5 entities employ a total of more than 250 FTEs, which is the threshold for the definition of an SME according to the Swiss State secretariat for economic affairs (SECO). Thus, it can be said that the Swiss digital asset ecosystem so far has mostly been driven by SMEs and Startups.

The survey also shows that 455 out of 1,283 FTEs in the digital asset space were employed by entities that are members of a self-regulatory body. Another 293 FTEs are employed by entities with a Swiss banking license and 150 FTEs are employed by a securities firm.

In comparison to the more than 100,000 employees in the Swiss banking industry alone, excluding asset managers, wealth managers or family offices, the number of employees in digital assets is small, highlighting the niche-character of the digital asset industry. However, the “CV VC Top 50 Report” counted more than 6,000 employees in the entire crypto and digital asset ecosystem, including startups and auxiliary firms that were excluded from this report.

It will be interesting to see if the digital asset ecosystem will see a similar growth in employees' numbers. Anecdotal evidence shows that many of the Swiss as well as foreign firms domiciled in Switzerland are hiring at a rapid pace.



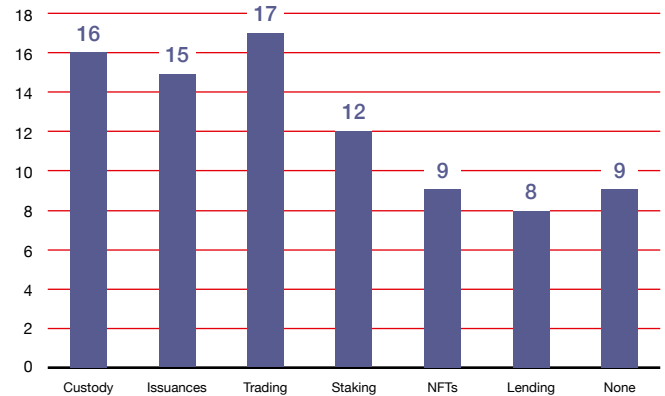


Offering

The above chart depicts the type of services offered by the surveyed entities. The numbers for custody, issuances and trading only refers to direct investments into digital assets. They only cover direct investments into tokens or coins. The reason for this is that the survey targeted entities with a strong focus on digital assets. It is evident that there is also a considerable market for indirect investments into digital assets (i.e. via traditional financial instruments). The survey has captured parts of it but as the study was limited to entities openly focussing on digital assets and a large part of the traditional financial banking industry was not included.

Services related to digital assets offered by participating entities

(n = 47, multiple responses possible)



The following graph however shows that entities, which focus on direct investment into digital assets (i.e. non-security tokens, security tokens or stablecoins) are also partly engaged in the traditional financial markets. A few of them also offer services that are related to indirect investments into digital assets. Overall, the focus of most entities is on direct investments and many entities offer services across the entire spectrum of digital assets and decentralised finance: Staking, the process of earning rewards for holding certain cryptocurrencies, is offered by more than a fourth of all entities.



Explore crypto with a guide you can trust.

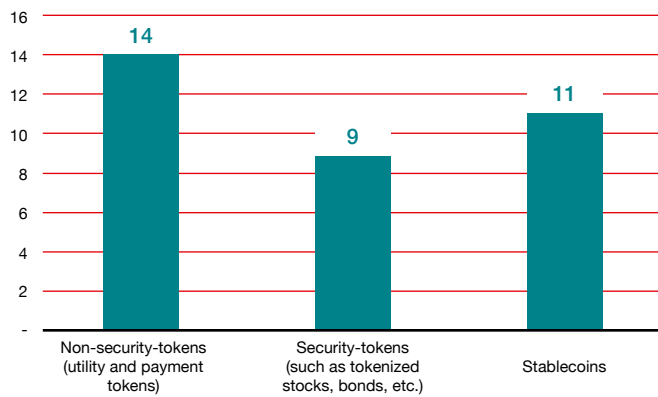


Custody

A key feature of the blockchain is that users can hold and safe-keep their digital assets themselves. This self-custody is a key feature of the bitcoin whitepaper published in 2008. However, doing self-custody by personally storing the private keys, can beget risks such as loss of the private key or hacking. Therefore, it is no surprise that institutional-grade custody offerings are a key feature of the ecosystem. Below we looked in more detail into the type of custody being offered by different providers.

Custody by token category offered by participating entities

n = 16, multiple responses possible)



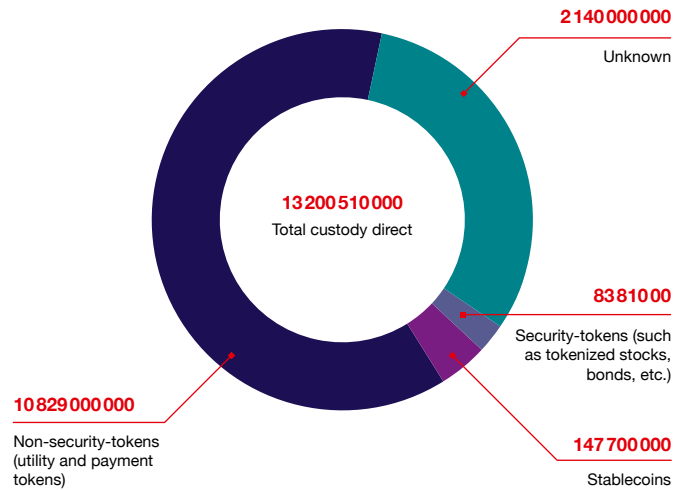
The following three graphs show the breakdown of type of custody according to entities. The majority of custodians are traditional banks and / or securities firms.

Direct Custody

A total of 16 entities offer custody services for direct investments into the digital asset, letting clients to hold coins and tokens directly without a structuring vehicle such as a fund or certificate. However, only 11 of these entities have provided detailed information about the respective volumes. The surveyed entities were holding CHF 13.2 billion of assets under direct custody (equalling to about 0.6% of the total market cap of all coins by the end of 2021).

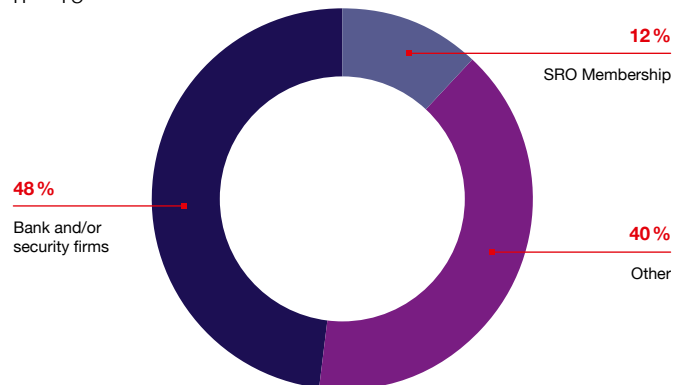
Digital assets under custody (at market value)

n = 16



Split of digital assets under custody (at market value)

n = 16





Indirect Custody

Besides holding crypto and digital assets directly, many investors prefer to use structures such as funds or certificates that offer the advantages of being easily bankable. It is our assumption that many larger institutional investors, such as wealth managers, family offices and even high-net-worth investors, prefer to use traditional financial services to access digital assets instead of direct investments.

As stated before, the participating entities do not represent a representative sample of entities providing custody services for indirect investments (such as funds or actively managed certificates) in Switzerland. The following data is only reflecting the answers of the 47 entities that have been part of this survey. The focus lies within the digital asset space and therefore differs from the requirements that would need to be set to give a detailed view. Nevertheless, the following data can be used to add additional information regarding the business priorities of the entities of the digital assets space.

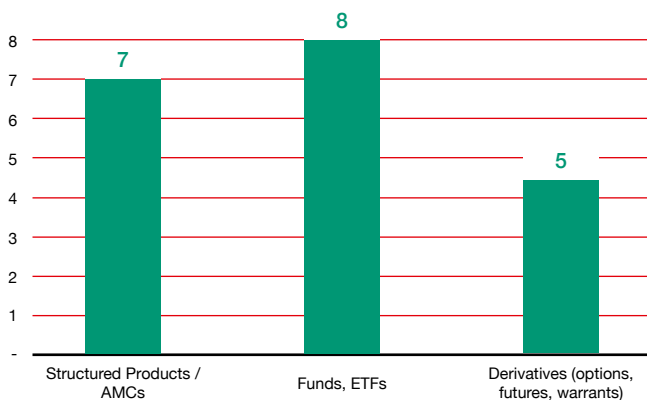
It is interesting to observe that investors prefer familiar financial instruments. Our assumption is that many first-time investors actually prefer the convenience, transparency and security of traditional structures versus holding crypto and digital assets directly. This is a strong indicator that a wider adoption of digital assets and tokens among institutional investors requires the packaging by traditional “old-school” financial instruments ranging from funds to ETFs.

Custody Clients

Custody services are mostly targeted at professional and institutional investors such as wealth managers, family offices or pension funds. Only five of the entities participating in the survey offer custody services to retail clients. Seven of the entities that participated in the survey also provided an exact split of their assets under custody by customer type. The respective data shows that on average 75% of all assets held under custody belong to institutional clients (pension funds, family offices, wealth managers or financial institutions).

Number of companies offering custody for financial products (with digital assets as underlyings)

n = 8



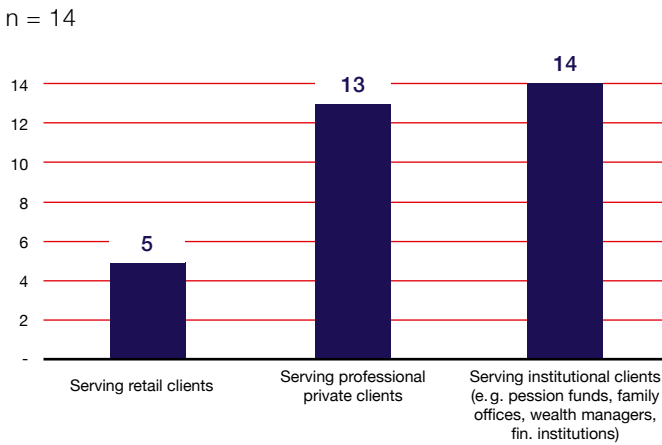
The above information is also consistent with the percentage share of assets under custody by the representative participating institutions. Most of the providers state that the assets held under custody (including both direct as well as indirect investments) are owned by professional private clients or institutional clients. Professional private clients accounted for 5% to 20% (with an average at about 12%) of all digital assets held under custody by the responding entities. Institutional clients such as family offices, wealth managers, pension funds or financial institutions generally make up more than half of all digital assets held under custody by the respondents (the average was approximately 76%).





As there was only limited data provided for the customer group of retail clients the survey does not allow any statement regarding digital assets (direct or indirect) held under custody on behalf of retail clients.

Customer categories to which custody is offered (regarding both direct and indirect investment products)

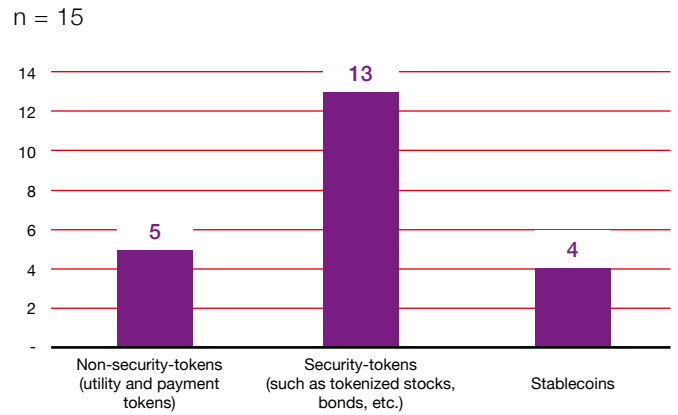


Token Issuance

Types of Token Issued

A key feature of digital assets and decentralised finance are the issuance of tokens. The website CoinMarketCap listed 19,405 tokens in early May 2022. For our survey we decided to categorize tokens into non-security tokens (utility and payment tokens), security tokens (tokenized stocks, bonds and other securities) as well as stablecoins that are pegged to fiat-currencies such as the US dollar. Interestingly, Switzerland's providers for digital asset services seem to focus on security tokens, while issuance services for other categories of tokens are less prominent.

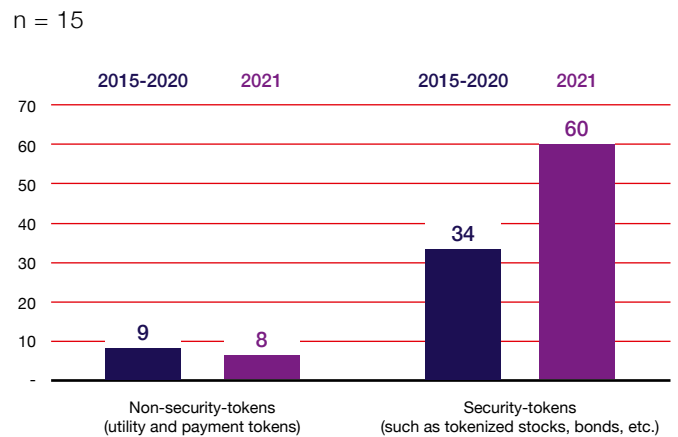
Token issuance providers by categories



Number of Issuances

A total number of 15 entities issued tokens, mostly on behalf of their clients. The below chart compares the period of 2015-2020 with a single year 2021. This indicates that the issuance of security tokens has accelerated recently. It will be interesting to observe if the new DLT-law, enacted in 2021, will support this growth even further.

Total amount of token issuances (tokenizations) carried out by participating entities

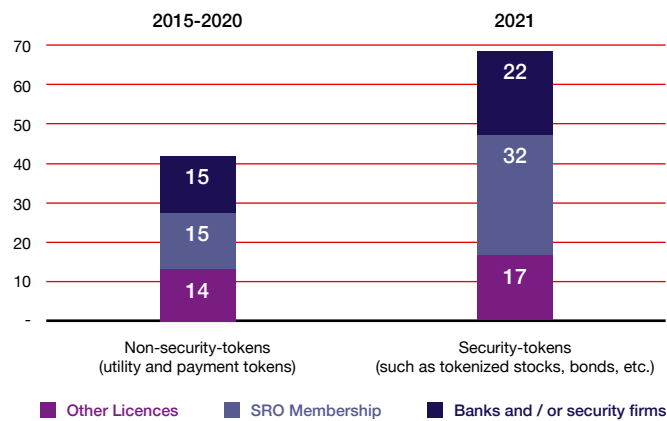




The following graph shows the temporal comparison of token issuances by entity type. For simplicity reasons only three groups have been chosen. The first group consists of banks and/or security firms. The second group looks at all other entities with a licence or supervision, while the last group contains all the entities that are not supervised. The increase of issuances by entities that are not supervised is mainly attributable to a rise of equity tokens that have been issued on behalf of SMEs.

Total token issuances (tokenizations) by licence

n = 15

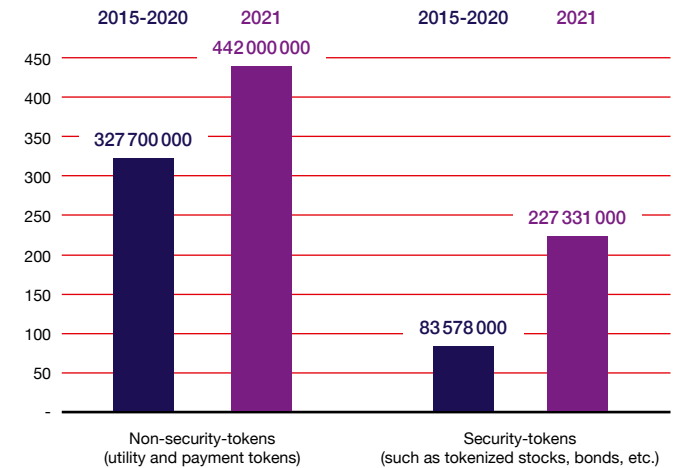


Issuances Volumes

It is interesting to note that even though there has been a greater number of security token offerings over both analysed periods, the actual inflows of cash for non-security tokens in Swiss Francs exceeds this by a multitude (for both analysed periods). In the case of stablecoins there has only been limited data available. This is why, no detailed information is published at this point of time.

Total amount of token issued / tokenized (total inflows)

n = 14



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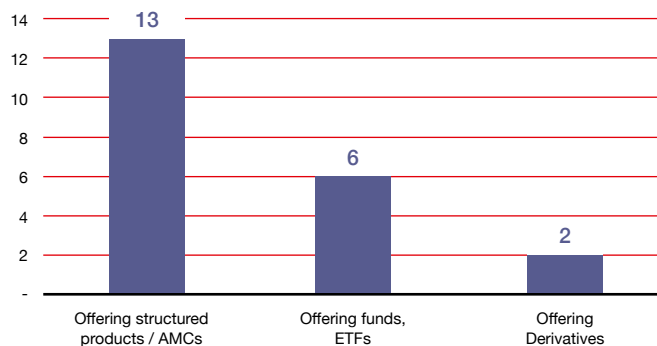


Investment Products

For many professional and institutional investors investing into a traditional investment product like funds, ETFs, ETPs or AMCs is a simple, convenient and secure first step into the world of digital assets. The survey clearly shows that structured products such as Exchange Traded Products (ETP) and actively managed certificates (AMC) are offering simple and cost-efficient structures for providers and investors. With 21Shares and GenTwo two large providers have built successful businesses in recent years. At the same time, traditional banks and asset managers that dominate the traditional asset management landscape have largely been absent.

Number of companies offering issuance services for indirect investment products with digital assets as underlying

n = 15



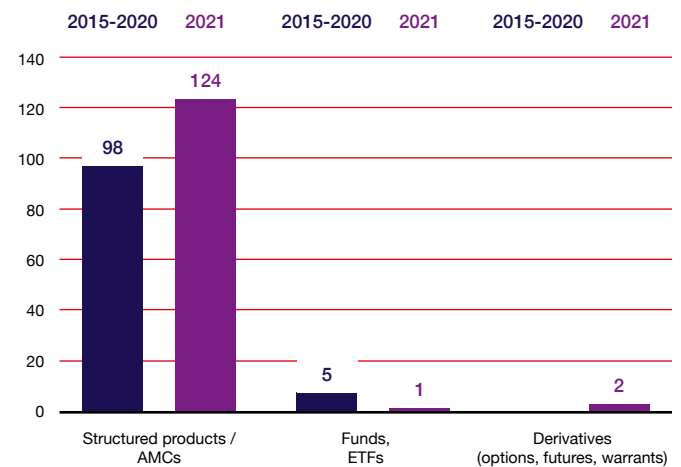
Number of Product Issuances

Comparing the time-period before 2020 with the single year 2021 shows that the issuance of structured products and certificates has been growing by more than 26 percent. This is clearly a strong sign of institutional adoption. One can also see that the number of AMCs and or structured products is by far greater than the number of funds and ETFs as well as derivatives for both periods. It seems that in particular AMCs seem to be a popular structuring vehicle due to large issuers, the low costs and ease of distribution versus traditional funds. However, comments of the

participating entities indicate that there are multiple projects ongoing regarding funds in the digital assets space. While AMCs might be a quick and cost-efficient structuring tools, funds most likely will remain investors preferred choice due to their acceptance and familiarity.

Issuances of financial products related to crypto / digital assets

n = 15



Volumes of Product Issuances

Due to a low number of replies regarding volumes of inflows at launch a broader analysis cannot be made. This might also be an indicating that overall sizes of volumes remain well below the 100 million Swiss francs thresholds. The digital asset industry is still very much a cottage industry, being dwarfed by traditional investment funds as well as hedge-funds. This was also confirmed in the 3rd Annual Global Crypto Hedge Fund Report 2021 by PwC and Elwood that put the average crypto fund size at USD 42.8 million with a median AuM at fund launch of a tiny USD 1 million.

Based on the provided information we put the total inflows into investment vehicles at roughly CHF 1 billion in 2021. However, as mentioned before, the data is very limited and thus the total inflows into new issuances might very well be way higher.



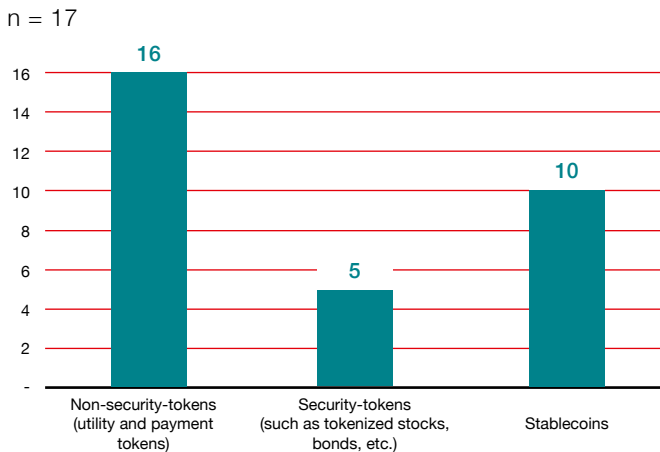


Crypto Trading

Service Providers

The Institute of Financial Services in Zug in a research paper put the traded volume of crypto assets at CHF 103 billion in 2021. However, this number includes trading volumes from large global crypto exchanges. In our survey we asked the 17 participants that offer trading what type of tokens they were offering. In line with the total value of tokens in the previous paragraph, most providers offer trading for non-security tokens, followed by stablecoins.

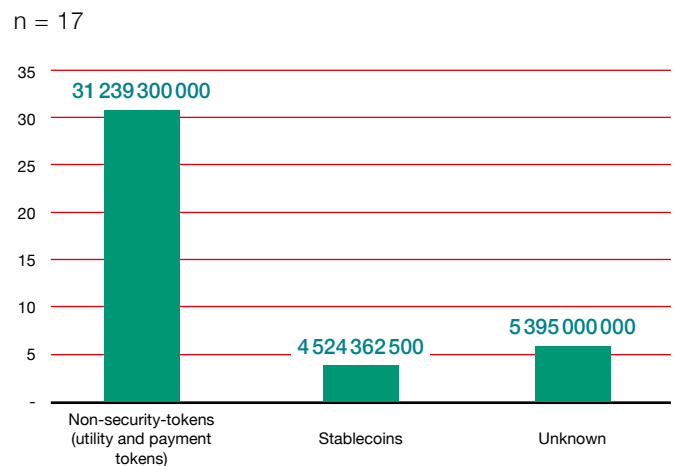
Token categories for which trading was offered by participating entities



Total Trading Volumes

In 2021, comparing the total assets held under custody versus the total turnover for trading, defined as number of trades multiplied by price, shows that trading volumes are larger than pure custody. In 2021 a total of CHF 41.2 billion was traded in digital assets. Again, especially the category of non-security-tokens with a CHF 31.2 billion trading volume exceeded the other kind of tokens. Although some entities (namely five) have indicated that they offer trading of security tokens, the survey's data does not allow any indication in terms of the respective turnover in 2021 due to a low number of insightful replies. Please note that the category "unknown" does not refer to security tokens.

Total turnover of digital assets in 2021 (at market value)





Staking

Staking is a key feature of proof-of-stake blockchains such as Cardano, Tezos or Solana. According to Investopedia.com staking “is a consensus mechanism for processing transactions and creating new blocks in a blockchain. A consensus mechanism is a method for validating entries into a distributed database and keeping the database secure.” Our chart shows that surveyed entities offer staking services across the entire spectrum of digital assets, being offered by more than a fourth of all entities. High staking rewards, similar to interest rates, clearly attracted investors. Unfortunately, due to the low number of detailed replies regarding the volume of staked digital assets, no robust statement in terms of volume in CHF can be made at this point. Again, this is a clear sign of the immaturity of this rapidly developing ecosystem

Staking Offering for Protocols

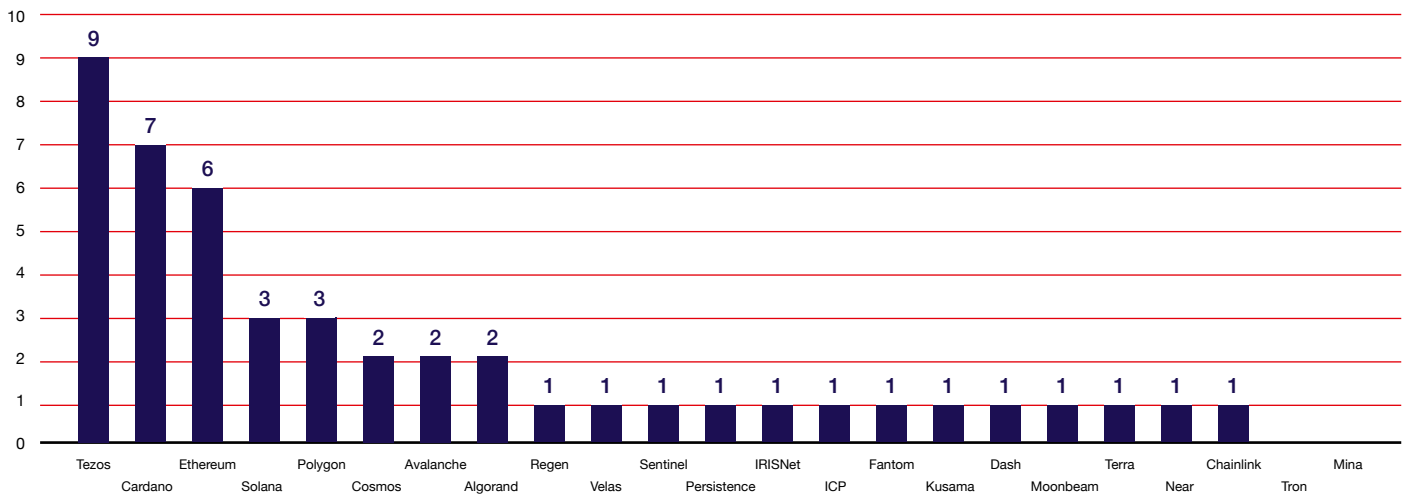
Based on our survey, a total of 12 entities offered staking services, offering between two to nine protocols and the average being five protocols.

Most Popular Staking Blockchains

The most popular staking protocols in 2021 were Tezos, Cardano and followed by Ethereum (even though Ethereum has not fully moved to a proof-of-stake consensus mechanism). The top three protocols all have a clear connection with Switzerland, all being initiated here and/or retaining an organization in Switzerland. This again shows the pioneering role of Switzerland in the global digital asset ecosystem.

Protocols offered for staking

n = 12





Non-Fungible-Tokens NFT



With the USD 69 million sale of the NFT by American artist Beeple at Christie's in March 2021, the market for non-fungible-tokens (NFT) has exploded. In our survey we analyzed the available services for NFTs by Swiss entities. Somewhat expected the majority of services offered are for custody and minting. Being the newest kid-on-the-block, trading and brokerage is still very limited with only three entities offering such a service. Another reason for this low number of trading providers for NFTs might be strong competition from global platforms such as OpenSea and Rarible

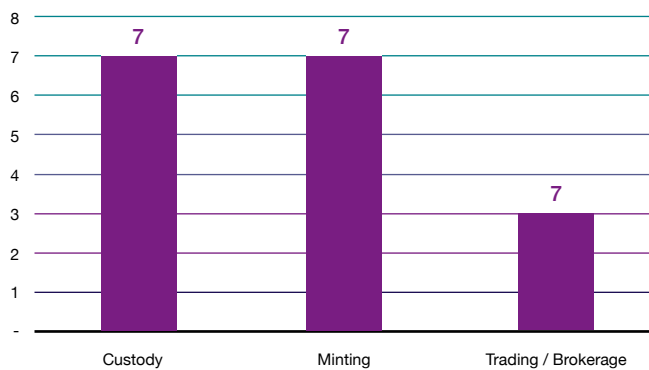
Crypto Lending



Lending for crypto tokens is another nascent segment of the global digital asset industry. In 2021 eight entities offered lending services. Unfortunately, no additional information could be obtained. Nevertheless, selected qualitative interviews clearly showed an interest in more detailed information in future, making it an interesting area for further research.

Offered services regarding Non-Fungible-Tokens

n = 10



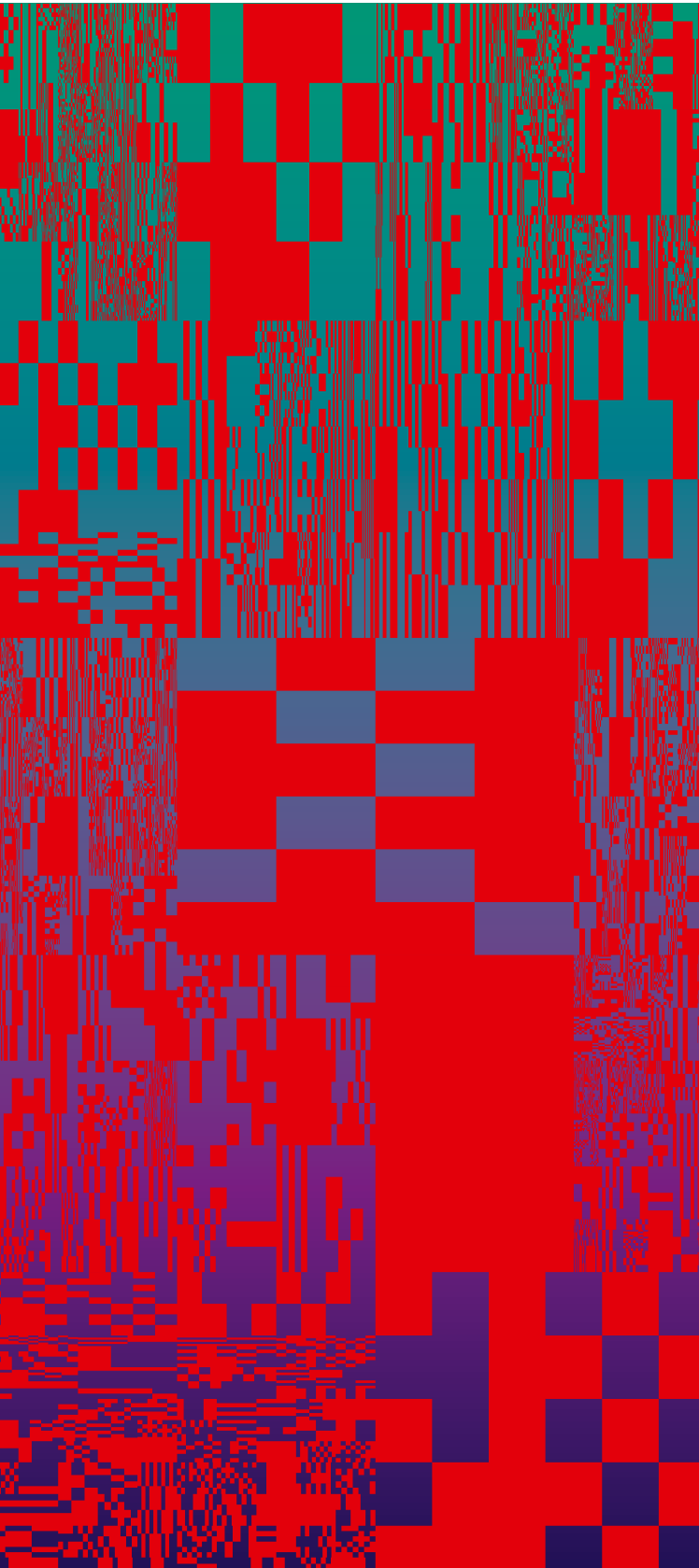
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Since 2013.

04

Features



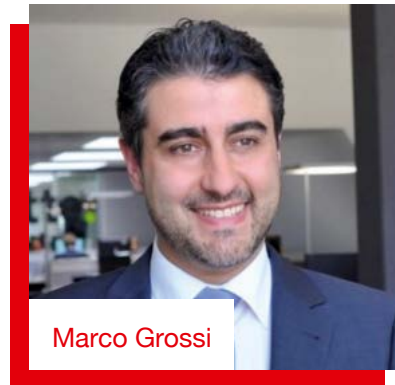


Tokenizing the physical world

Atomyze AG aims to tokenize physical assets in the commodities and investment markets. Our first use cases are all around metal supply chain, metal custody and metal investments. We seek to use Distributed Ledger Technology (DLT) to add and track all key information including product, payment, trade and ESG data, bringing investment and industrial worlds together.

Atomyze AG is based in Zug, Switzerland. The country has been at the forefront of blockchain development, providing supportive environment, establishing clear rules and guidelines including tax, accounting, regulations, and compliance.

Capitalizing on the supportive Swiss environment, Atomyze AG seeks to bring a fundamental change to the commodities market and its supply chain management.



ATOMYZE





Sustainability & ESG

ESG practices have become a core priority at board level, with more than 80% planning to increase the investment in sustainability. Amidst this reality, one of the Cardano Foundation's flagship partnerships stands out as a striking instance of utility. veritree, which was created to solve the issue of double counting in reforestation efforts, uses the Cardano blockchain's on-chain metadata capabilities to ensure key data becomes permanent, immutable, and always available for consultation. By implementing a distributed database network, every aspect of a project can be monitored and verified accurately. This ensures transparency of all information regarding the initiative from field-level data collection, site planning, plantation management, and impact monitoring. It truly displays the 'art of possibilities' for blockchain to solve real world problems.

Fred Gregaard

CEO Cardano Foundation



Fred Gregaard





Regulated exchanges

It is a great pleasure for the entire FTX group and in particular FTX Europe to be involved in this initiative. FTX intends to become and remain a fully regulated digital asset exchange-group. FTX is fully committed to comply with all applicable laws and regulations in the jurisdictions it is active in. FTX sees full compliance and adherence to the highest moral standards and all applicable rules and regulations as absolutely required to become and stay operational and in business. Digital assets as an asset class are here to stay and will be subject to similar rules and regulations like other traditional asset classes. FTX embraces this and is in close contact and collaboration with regulators, law makers, politicians, and other stakeholders to contribute and participate in this process.

Martin Liebi

Country head Switzerland and member of management of FTX Europe, FTX



Martin Liebi





Sygnum Bank - Invest in crypto with complete trust

Sygnum is a global digital asset technology group founded on Swiss and Singapore heritage. With its Swiss banking licence and Capital Markets Services (CMS) licence in Singapore, Sygnum empowers everyone, everywhere, to own digital assets with complete trust.

Sygnum clients can access a portfolio of seamlessly integrated crypto asset services, including regulated brokerage, staking, Lombard loans and institutional-grade custody, all available 24/7 via secure e-banking. Our end-to-end crypto offering also includes a suite of innovative asset management products, unique asset token investment opportunities and B2B banking.

From inception, Sygnum's strategy was to be the most trusted gateway to the digital asset megatrend within the forward-looking jurisdictions of Switzerland and Singapore. Via our regulated operations, our clients benefit from the peace of mind of a regulated bank, and the future-ready investments only generated by a pure-play crypto specialist. Sygnum is proud to be the Swiss Home of Blockchain's banking partner and looks forward to contributing our innovations and experiences in shaping Future Finance to the global audience.

Fabian Dori

Head of Asset Management & Deputy Group CEO

To learn more, visit us at sygnum.com



Fabian Dori



Crypto made easy

At 21Shares, we are excited to contribute to the flourishing digital asset space that has evolved in Switzerland.

Our vision from the beginning was to increase accessibility and build bridges into the crypto world. We enable our clients to invest in cryptocurrencies and digital assets without dealing with wallets, private keys, storage and other technological hurdles. The pace of innovation in the sector is incredible and showing no signs of slowing down.

We founded our company in 2018 in Switzerland because the Swiss offer very clear guidelines for crypto regulations and financial products compared to the rest of the world. This combination has allowed the country to become a leader in the crypto space. We are grateful to be a part of this community and to call Switzerland our home.



Hany Raswhan

Hany Raswhan

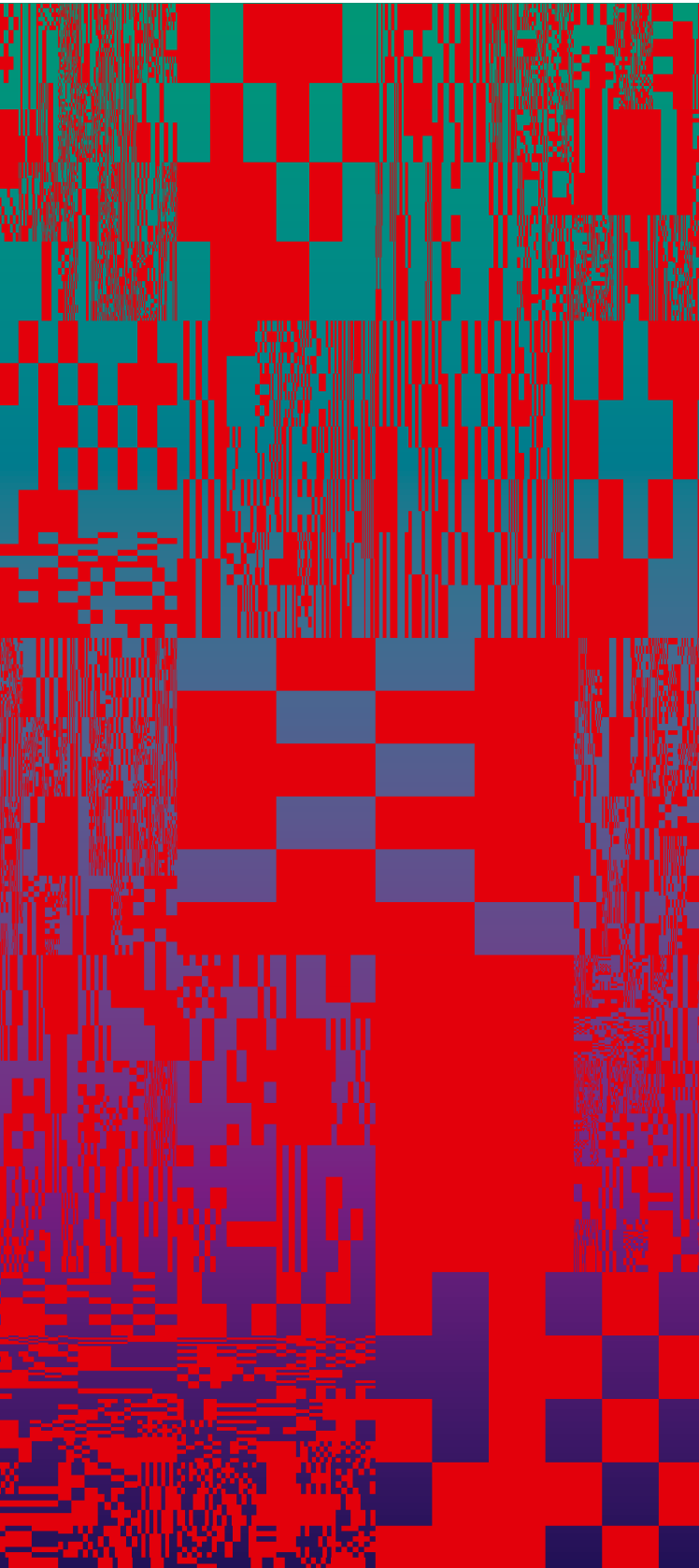
21Shares

21SHARES



05

Ecosystem





Blockchain-based asset management: a great opportunity for Switzerland

The Swiss Asset Management Industry is not only well known for its high standards in terms of quality, performance and sustainability. Being located in the heart of one of the largest blockchain ecosystems worldwide, it is also perfectly positioned to take a leading role in the management of digital assets. What is necessary to make all this happen? First of all, Switzerland's bottom-up, decentralised political culture is a fertile ground for decentralised business models. That is here to stay. Swiss authorities' pragmatic and business-friendly attitude has to also be maintained. Traditional Swiss Asset Managers should have less fear of contact with blockchain-based applications and cryptocurrencies. And lastly, blockchain and cryptocurrency aficionados would certainly do well not to refer to sceptics as extinct dinosaurs. The conditions are ideal for Switzerland to become the leading hub for digital asset management in Europe.



Lorenz Arnet

Lorenz Arnet

Asset Management Association Switzerland

ASSET MANAGEMENT
ASSOCIATION 





Growing interest from institutional investors

During our training and consulting activities with banks, family offices and pension funds, we have observed that institutional investors are increasingly interested in crypto assets. While banks and family offices have lately started to build up an exposure, Swiss pension funds have so far been waiting on the sidelines. Fears of high volatility, regulatory uncertainty and cyber risks are partly to blame. In addition, certain prejudices would need to be dispelled. Crypto assets, for example, do not per se imply high energy consumption and thus do not necessarily clash with ESG compliance of pension funds. Furthermore, even though direct crypto investments and certificates are available, pension funds strongly prefer fully regulated mutual funds. Despite these challenges, we believe that crypto investments will become an option for pension funds in the medium term.



Ernesto Turnes



Pascal Egloff

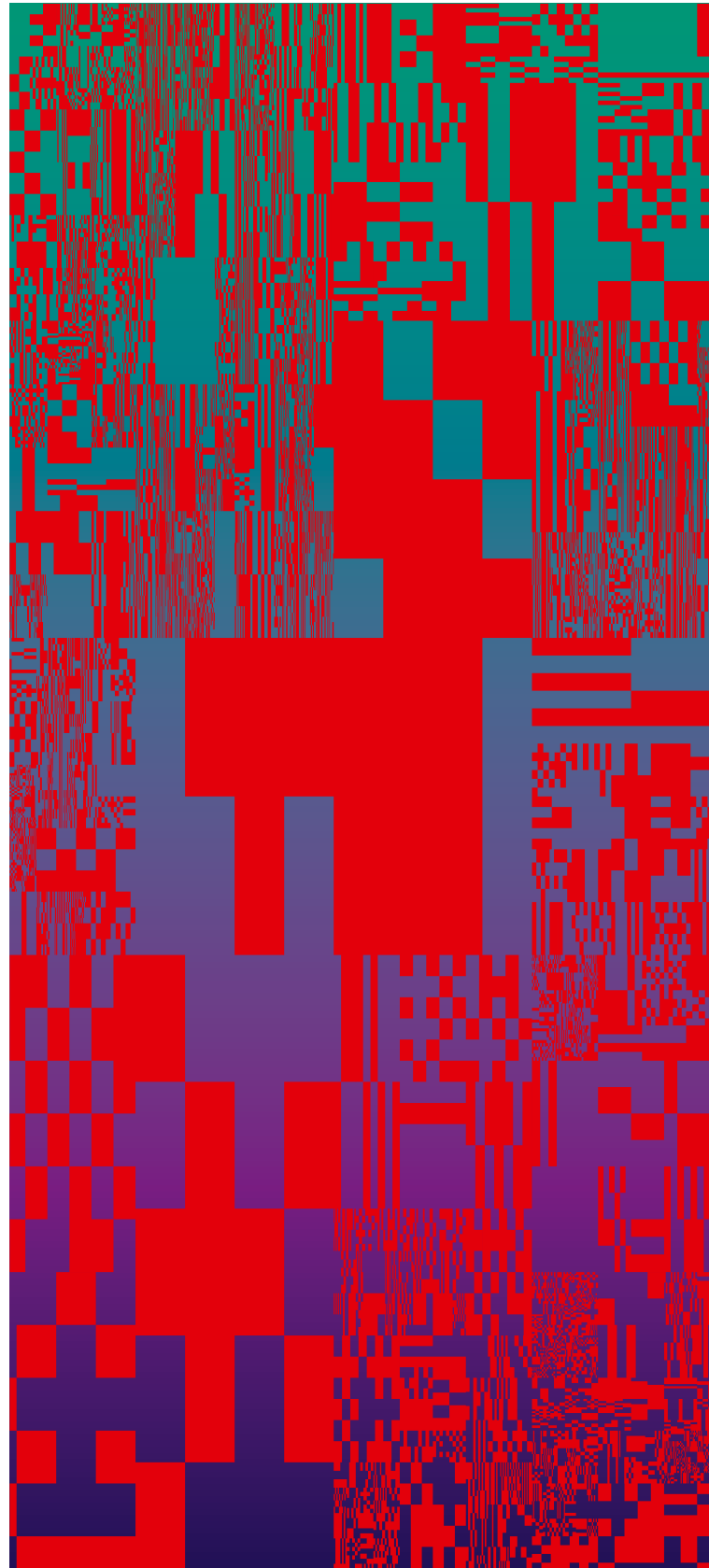
Prof. Ernesto Turnes and Pascal Egloff

Competence Center for Banking & Finance of the Eastern Switzerland University of Applied Sciences



06

Governmental
Partners



Canton of Zurich

Why is the Canton of Zurich attractive for blockchain and digital asset companies?

The canton of Zurich has a dynamic blockchain ecosystem and is home to more than 200 blockchain companies. Some players are already established, internationally known and have a large number of employees. These include for example Sygnum Bank AG, the world's first regulated Digital Asset Bank, SIX Digital Exchange (SDX), the world's first fully regulated FMI digital asset exchange and a digital asset specialist with global reach. Moreover, paired with top universities and research institutions such as ETH, UZH, HWZ, and ZHAW that are firmly committed to blockchain and DLT, they feed the large talent pool in Zurich.

What are the strengths of your blockchain ecosystem and what other sectors are relevant in the Canton of Zurich?

The Zurich economic area is a predestined location for blockchain technology because it is not only traditionally home to a strong and internationally established financial industry with its banks and insurance companies, but has also developed into a leading ICT location. The vibrant blockchain innovation ecosystem of Zurich was additionally strengthened by the Blockchain-Hub Trust Square, the insurance consortium B3i, and the DFINITY Foundation with their mission to build and maintain an Internet Computer for creating a new way to build "Decentralised Finance" (DeFi) and open internet services.

What does the Canton of Zurich have to offer which other locations are missing?

Thanks to its excellent universities, companies can draw from a large talent pool. This is one reason why big brands such as Google, IBM, Microsoft, Facebook,



Fabian Streiff

and AWS have settled in Zurich. In addition, it is important that these creative minds are connected across industries so that innovative ideas and projects can emerge.

Zurich - a cosmopolitan city by the water - offers a creative urban life with a large variety of cultural activities and has an excellent transport infrastructure including Zurich's international airport. Due to its central location in Europe, other major cities are within easy access.



Canton of Zurich
Department for Economic Affairs
Office for Economy and Labour





Canton of Zug

Why is the Canton of Zug attractive for blockchain and digital asset companies?

Since 2013, the Canton of Zug has been the leading location for blockchain companies in Switzerland. This attractiveness is due to the high availability of talents and professionals, the international environment, the regulatory framework which provides legal clarity, the excellent accessibility and great infrastructure. Over the last few years, a thriving blockchain and crypto ecosystem has emerged in the Canton of Zug. The authorities are highly experienced in servicing blockchain companies and the cluster's momentum is ensuring a continuous development and growth.

What are the strengths of your blockchain ecosystem and what other sectors are relevant in the Canton of Zug?

The highly developed blockchain ecosystem consists of over 500 blockchain companies from all relevant sub-sectors, a wide range of service providers, including blockchain and crypto savvy law firms and banks, co-working spaces, incubators and associations. Together, they form a first-class blockchain location. Additionally, the interactions among cantonal authorities, companies, and universities are efficient. Not only the blockchain cluster benefits from these synergies, but also other industries, such as pharma, medtech, high-tech, commodity trading, ICT and financial services.

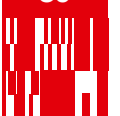


Alberto Diaz

What does the Canton of Zug have to offer that other locations are missing?

The Canton of Zug offers an excellent overall package, which consists of political and economic stability, good accessibility, high quality of life, a large pool of qualified talents, internationality, and an attractive tax regime. In this small canton in the centre of Switzerland, everything is in close proximity to each other and its authorities enjoy an excellent reputation for their efficiency and business-friendliness. Nonetheless, the Canton of Zug as part of the greater Zurich area is nationally and internationally well embedded also thanks to the close proximity to the airport of Zurich.

 Kanton Zug





Canton of Ticino

Why is the Canton of Ticino attractive for blockchain and digital asset companies?

The Swiss legal framework and the open approach by the authorities allow the optimal development of new technologies, such as Blockchain. Canton Ticino also offers the unique advantage of its strategic geographical location in the middle of the metropolitan areas of Zurich and Milan, creating a natural bridge for entrepreneurs to benefit from both connections.

Furthermore, the beautiful nature of Ticino's pre-Alps and its Mediterranean flavour foster the creativity needed by the ICT engineers in such new endeavours.

What are the strengths of your blockchain ecosystem and what other sectors are relevant in the Canton of Ticino?

Canton Ticino has a diversified economy, with several small but highly competitive clusters, one of them being in the blockchain sector, which exploits the outstanding ICT competences present in the Canton. The ICT sector has been growing very rapidly in the past several decades and is constantly supported by the two faculties of computer sciences at the University, the University of applied sciences, and their dedicated institutes. In particular, the Information Systems and Networking Institute showcases an important expertise specifically in blockchain technologies.



Stefano Rizzi

What does the Canton of Ticino have to offer which other locations are missing?

The combination of the strategic location and the solid technological competences, in such a small ecosystem allows easy and quick collaborations between the various stakeholders, which is also facilitated by the Ticino Blockchain Technology Association.

In Canton Ticino it is possible to combine the applied research incentives offered by the Swiss Innovation Agency (Innosuisse) for the collaboration with academic institutes, with specific local support for innovation projects.



Dipartimento delle finanze e dell'economia
Divisione dell'economia



State of Geneva

Why is the Canton of Geneva attractive for blockchain and digital asset companies?

Geneva is one of the world's leading financial centers and the birthplace of private banking. The high concentration of asset managers and presence of the major private banks, are extremely attractive for creative financial technologies companies (fintech) in general and innovative digital asset companies in particular.

Furthermore, Geneva is one of the largest commodity trading hubs and a world leader in trade finance. Trading companies flock to Geneva from around the world to ensure proximity with the banks financing the world's commodity trade. Companies that offer added security to commodity trading value chains constantly reinforce Geneva's position as a reliable and solid trade finance hub. This includes the use of distributed ledger technology.

What are the strengths of your blockchain ecosystem and what other sectors are relevant in the Canton of Geneva?

The strength of Geneva relies on the presence of a mix of the most competent lawyers, bankers and engineers. Together, they shape standardization and influence regulation that provides safety while allowing innovation and benefit the professional both private and institutional users. This has been the case, for example, in "proptech", a field in which Geneva-based companies have allowed the tokenization of real estate to progress nationally and internationally.

Geneva is also the seat of the Capital Markets and Technology Association (CMTA) [www.cmta.ch], which is an association formed by leading actors from Switzerland's financial, technological and legal sectors to create common standards around issuing, distributing and trading capital market instruments leveraging the distributed ledger technology and

related legal and regulatory innovation. Standardization and interoperability are key in harnessing the power and efficiency potential of new technologies.

What does the Canton of Geneva have to offer which other locations are missing?

Geneva allows companies to experience immediate proximity with global decision makers. Issues handled in Geneva by the multilateral organisms (United Nations...) affect every inhabitant of the planet every day. Geneva is the most active multilateral diplomatic center globally. It is home to a unique network of international organisations, NGOs and representations of foreign governments. All gather in Geneva to attempt to find solutions to the world's issues. In addition, Geneva hosts the world's largest underground accelerator of particles at the CERN used by the best physicists on the planet. Incidentally, CERN is also the birthplace of the World Wide Web in 1989. Geneva is also the location chosen by the World Economic Forum to establish its headquarters, from where it organises events all around the world attended by the business and political leaders from all countries. The highly diversified and resilient ecosystem of Geneva's economy is key to welcoming creative and innovative entrepreneurs, assured to find the required support for their projects to thrive.



Michael Kleiner





Ticino Blockchain Technologies Association

In Ticino, the blockchain community is growing rapidly. The Ticino Blockchain Technologies Association (TBTA), utilises established relationships with similar organisations in Italy and Zurich to attract ideas and entrepreneurs from Southern Europe, and facilitates access to companies north of the Alps. The Association's members include both local and international companies, start-ups, local universities as well as more established companies active in the ecosystem.

Ticino boasts many advantages, among them its relatively small size, which enables rapid development of relationships and easy access to public institutions and academic research. The great networking opportunities have been the key of some success stories, such as a prominent DeFi protocol (AAVE), the creation of Lugano's own Blockchain (3A chain) maintained by local institutions, and Lugano's PlanB which aims to create the "European Bitcoin capital", encouraging also the settlement of new companies.



Ticino Blockchain Technologies



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Research partner for the survey

Academic research partner for the survey leading to the Swiss Digital Asset Market Report 2022:

Eastern Switzerland University of Applied Sciences (OST)

Competence Centre for Banking & Finance
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Sebastian Müller
Raphaël Lampert



Cardano Foundation

Building Bridges
through blockchain.

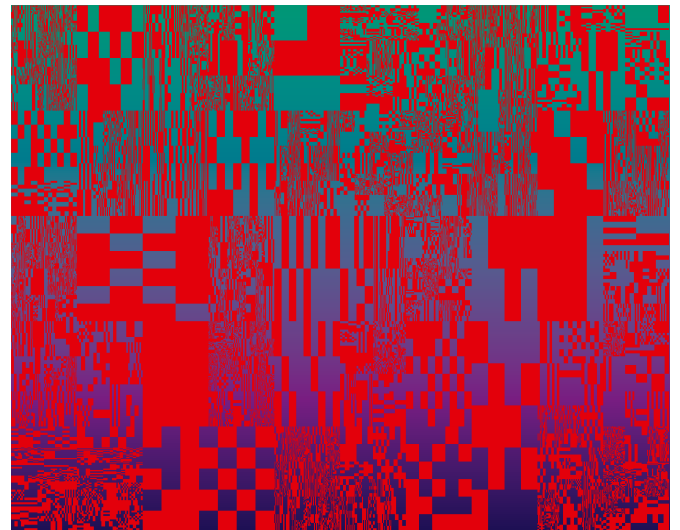


Disclaimer

Please note that no extrapolations have been applied to the data provided by the participating entities. The replies constitute the perception and understanding of the participating entities of their own business models. The replies have not been subject to an in-depth legal verification or reconciliation. The report's focus was set on quantitative measurements. The numbers and data provided do not claim completeness. The focus only lied on providing indicative numbers and to establish a baseline for future comparisons.

Algorithmic report design

A key feature of this report's design is the colorful repetitive algorithmic pattern. The pattern was initially programmed by the Zurich-based designer Christian Etter for Alexander Brunner's book "Crypto Nation Switzerland" that was published in 2019. The pattern represents the algorithmic as well as random nature of the code enabling the blockchain-technology. Christian is the co-founder of the Museum of Digital Arts in Zurich as well as the creator of several award-winning computer games such as Drei.





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About

Home of Blockchain .SWISS

The Swiss Blockchain Federation, the official umbrella organization of the blockchain industry in Switzerland, launched a global promotion initiative called **Home of Blockchain.swiss** during the World Economic Forum (WEF) in Davos in May 2022.

Home of Blockchain.swiss is a new public-private partnership under the patronage of Federal Councillor Ueli Maurer, Head of the Federal Department of Finance FDF. Besides working closely with Switzerland Global Enterprise (S-GE), the official Swiss organization for export and investment promotion, the project is also supported by several Cantons from Switzerland's three major language regions.

Together with leading blockchain players, **Home of Blockchain.swiss** aspires to make foreign companies aware of Switzerland's many strengths and advantages. The initiative will release blockchain-related publications, participate in global conferences, and start a media campaign. The recently enacted DLT legislation, which created transparent and business-friendly framework conditions, is one of many reasons why foreign companies find Switzerland attractive.

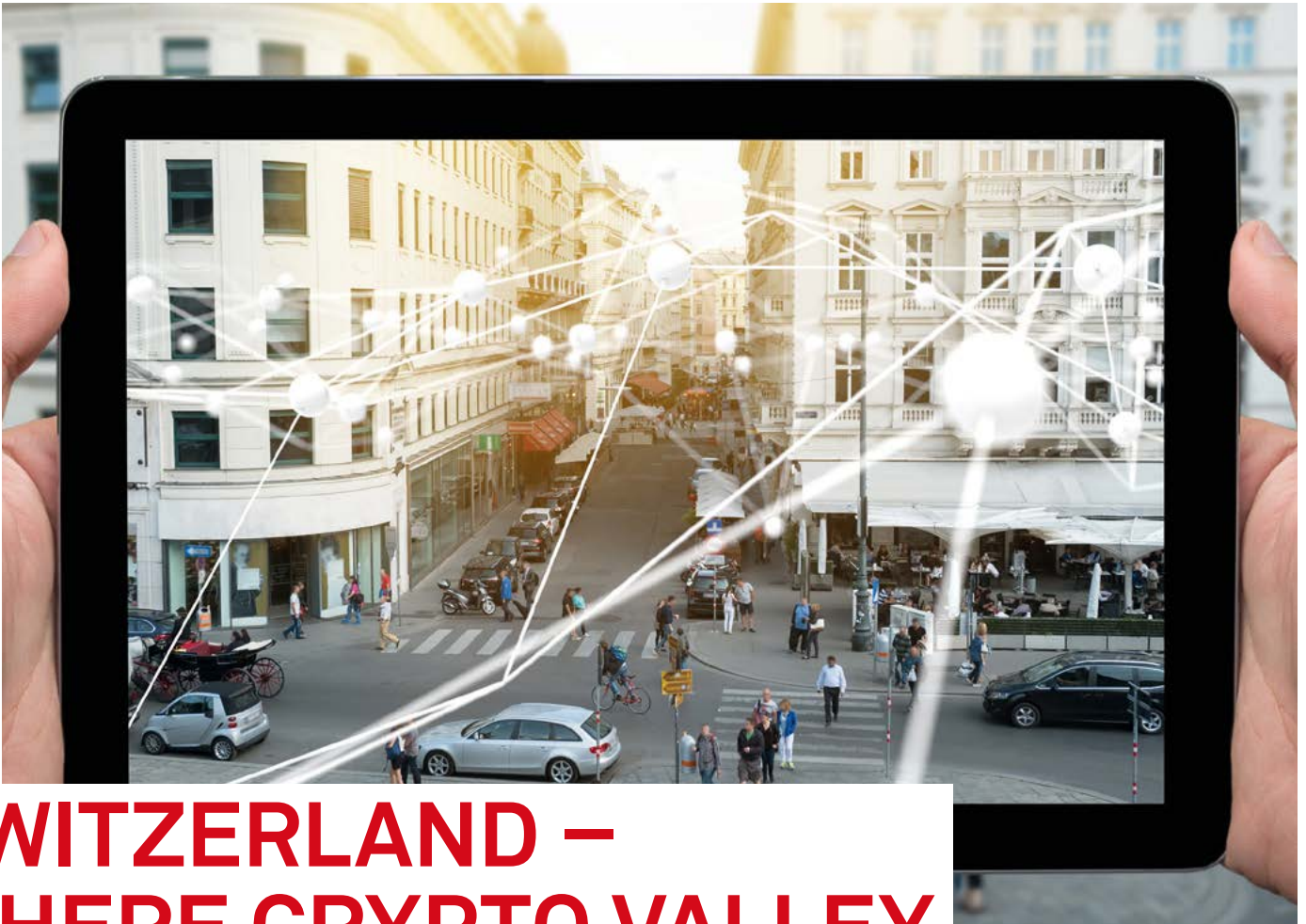
The high-caliber private partners of **Home of Blockchain.swiss** highlight the quality and diversity of Switzerland's blockchain ecosystem. Since the early days of the technology's development, leading blockchain protocols such as the Cardano Foundation have settled in the Crypto Valley. With Sygnum Bank, the world's first licensed crypto bank participates in the project. Recently, the crypto exchange FTX made headlines by choosing Switzerland as its European headquarters. The co-founders of 21Shares, a rapidly expanding issuer of crypto ETPs, selected Switzerland out of 25 different jurisdictions when establishing their companies. Atomyze demonstrates the broad applications of blockchain technology by tokenizing the commodities industry.

Further ecosystem actors contribute to the success of **Home of Blockchain.swiss**. In addition to Switzerland Global Enterprise, they include the Swiss Blockchain Federation, the Asset Management Association Switzerland, and CV Labs. Several prominent voices have expressed their delight in the initiative.

Further information: <https://homeofblockchain.swiss>

Report design and layout

Alexandre Graindorge: <https://alexandre-graindorge.com>



SWITZERLAND – WHERE CRYPTO VALLEY WAS BORN

A rich heritage of financial security, strong privacy laws and a pragmatic regulatory approach have made Switzerland a vibrating hub for new business ideas in the field of fintech, ranging from blockchain to cybersecurity. We foster innovation while offering a secure regulatory framework.

Switzerland Global Enterprise is the official Swiss organization for investment promotion. With offices around the globe, we support your international expansion project, from evaluating Switzerland as a potential location for your business to setting up an operation in Switzerland.

Get in touch: s-ge.com/invest



Ultra Partners

21SHARES

ATOMYZE



FTX EU

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Stellar Partners



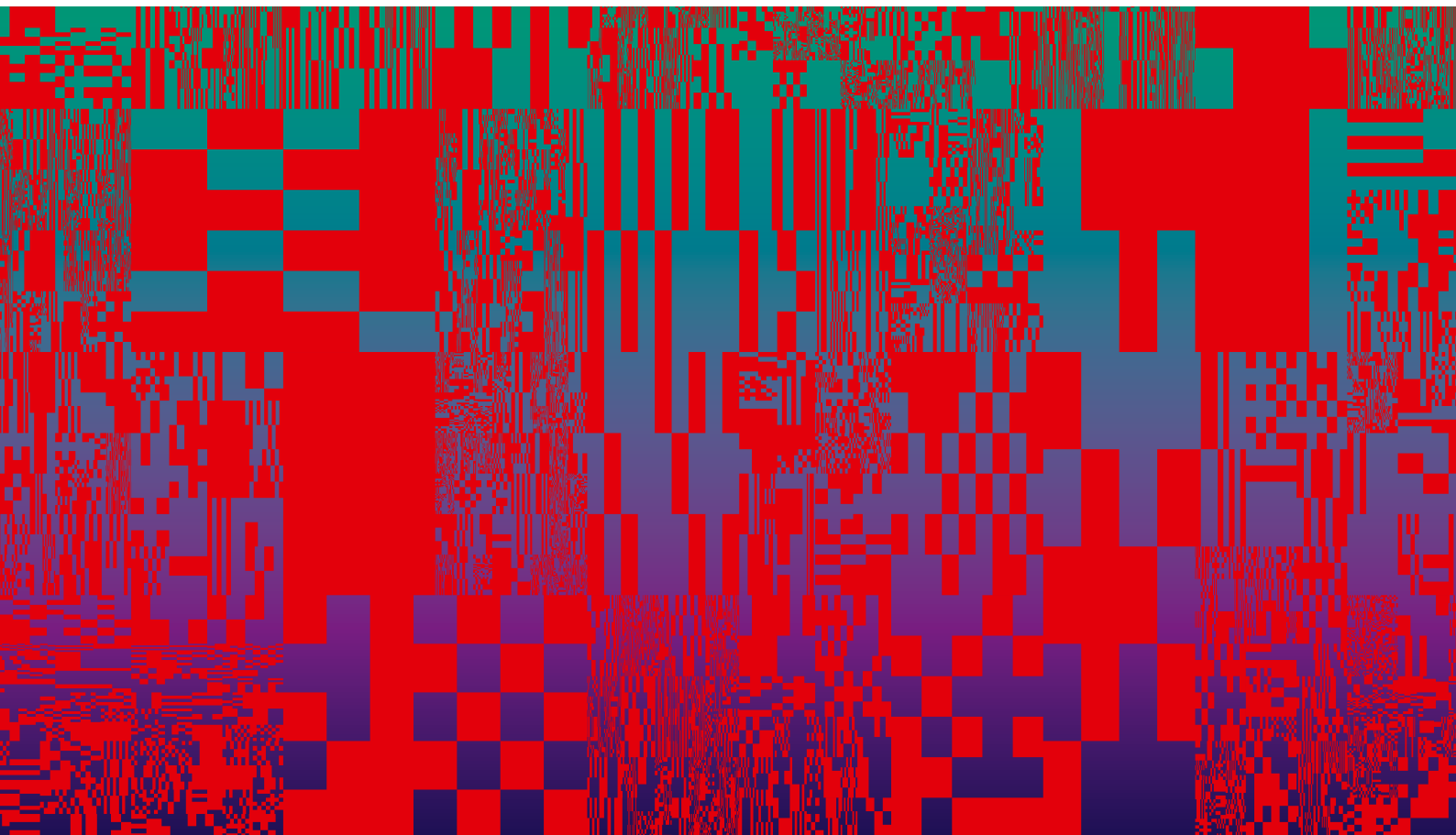
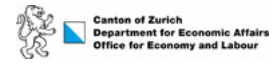
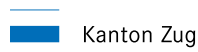
Network Partners



Ecosystem Partner



Governmental Partners



Further information:

www.homeofblockchain.swiss