TANGL
CAPITAL PARTNERS

White paper:

Introduction:

- Brief introduction to our company and our viewpoints of the startup industry and its growth prospects (Qualitative Open remarks).
  - "Systematic access to wealth creation"
- Why Early stage startups
  - Founders focusing on Product or Services disruption
  - Many are built on Powerful core technologies such as: Blockchain, AI and Machine learning
  - But lack capital, operational efficiency, team headcount, and talent needed to scale
- TANGL Capital Partners is ready to engage in the vital role of startup incubation and successfully unlocking the enterprise value of these early stage companies.

However:

- The enablers (Vcs) are trailing behind the adoption of disruptive technologies
- How we are looking to disrupt the Asset management Industry through in-house proprietary technology usage of Security token offerings, Blockchain and DLT.

The Venture Capital industry as a subsection of the Capital markets & Private equity industry has been instrumental in actualising the endeavours of Entrepreneurs across the globe and providing customers with new products and services they can interact with on a daily basis. The merging of innovation and capital has evidently powered economic growth continent to continent some further ahead than others and introduced new ways of doing commerce.

In the early stage of a company the founding team is focussed solely on the creation of a product or service that solves a problem, capitalises on a gap in a market or disrupts a traditional market/ business model and improves its adoption. Many of these Startups are industry focused and are built on Powerful core technologies such as: Blockchain, AI and Machine learning. At this early stage companies have working prototypes or solutions which they have gained user traction on and a moderate level of revenue, but most importantly have gathered customer insight and metrics needed to scale and improve their offering. Early stage startups lack capital, and as a result have limited operational efficiency, team headcount, and the talent needed to scale, so many look to raise capital from investors to provide their companies with adequate runway to allow them to focus on the business and product development stages.

Many startup companies do not see debt financing as an appropriate route to financing the growth of their business, so look to raise capital through the periodic sale of equity to strategically reach scale and maximise product/service's market share. The influx in innovation has led to a significant increase in the Venture capital allocations to tech startups. This trend of value creation in the Private & Alternative investments market has been acknowledged by both GPs and LPs and as a result the PE & VC AUM is forecasted by Preqin "to more than double from $4.41tn at the end of 2020 to $9.11tn in 2025" with "a global growth rate of 15.6% over the period" highlighting the capital appreciation opportunity the market presents investors.

Our mission is to enable systematic access to wealth creation within the alternative investments asset class to Global investors and be a proponent in the value creation the industry is poised to experience. As a result We TANGL Capital partners, a startup investment firm are aiming to raise our debut venture fund focussed on early stage tech enabled startups positioned in high growth markets and engage in startup incubation to successfully unlock the enterprise value of these early stage companies. Producing desirable returns for the investors that place capital in our debut fund.

As a firm that endeavours to invest in startups that disrupt industries, we believe we need to be dynamic forward thinking investors. We are living in an ever increasing digitally native world, and the finance sector is still yet to find its bearing. Technology integration in the Asset management sector has lagged behind for many years. Today, the sector is going through a structural debate, alluding to the transformational change needed as a result of the possibilities Digital ledger technology and Blockchain presents to the Asset management & financial services industry.

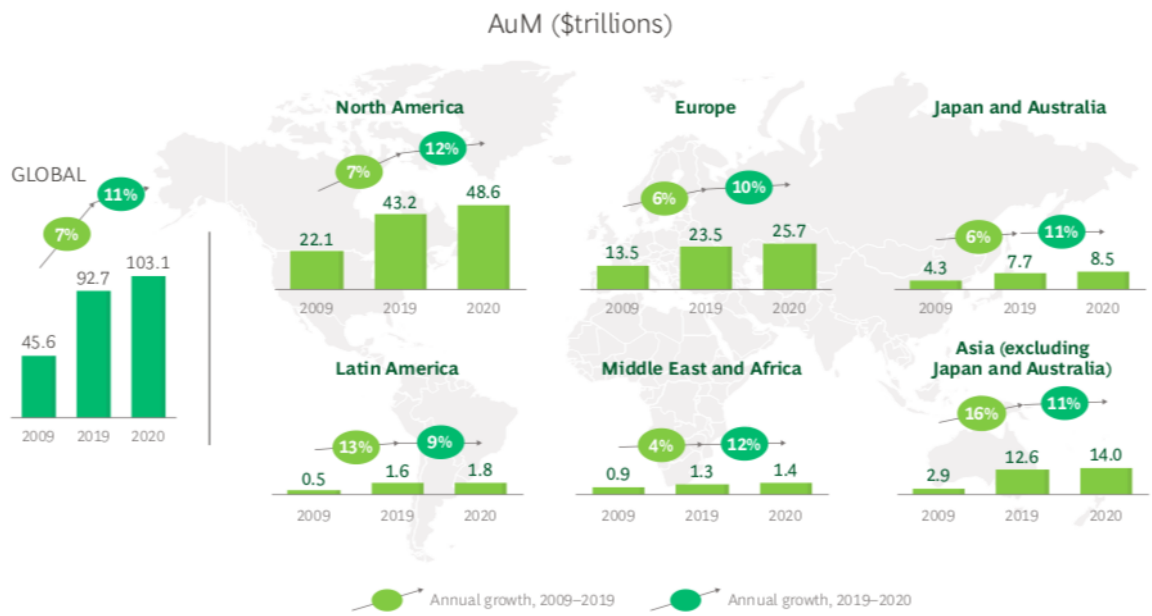
Starting with the inception of our fund structure, Blockchain technology would simplify and streamline the investor onboarding process. The introduction of Tokenization into our fund offering provides our investors with a trust incentivised environment for investment issuance, settlement, asset servicing, reporting and liquidation events. Providing a fully digital end to end investor lifecycle where all parties involved in the transaction would have access to the exact same data about that investment and be kept up to date with the performance of their investment. All participants benefit from substantial infrastructure cost savings, effective data management and transparency, faster investment processing cycles, minimal manual reconciliation, the removal of inefficient intermediaries and the ability to safeguard their investments through the use of a digital asset wallet and an investors personal private key for signing off.

Asset management overview:

- + Current market overview and trends
- + Current Vc operation limitations:
    - + etc.

The asset management industry stands to be a core enabler of economic prosperity. Despite The Global pandemic at the tail end of 2019 and length of 2020, The asset management industry has emerged from the global pandemic in a position of strength and greater prominence, with assets growing by 11% in 2020 to end the year at $103 trillion Institutional investments grew at a similar pace to reach $61 trillion, or 59% of the global market while retail portfolios, represented 41% of global assets at $42 trillion which grew by 11% in 2020. Retail investors were the main driver of net inflow, contributing 4.4% of net new capital in 2020, twice the size of the contribution made by institutional investors (2.2%).

Exhibit 2 - Global AuM Exceeded $100 Trillion in 2020, with North America as the Main Driver of Growth



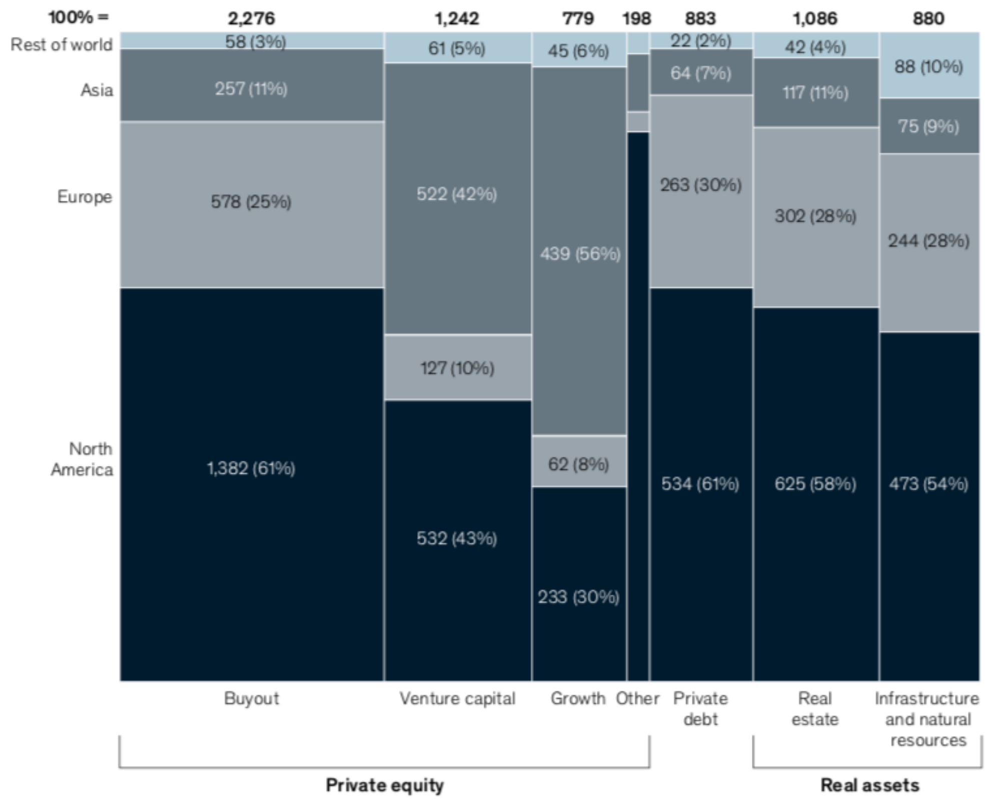
Sources: BCG global asset management market-sizing database 2021; Broadridge GMI; The Economist Intelligence Unit, Strategic Insight; Willis Towers Watson; local organizations, including regulators; press reports; BCG analysis.

Focussing our attention to the private markets specifically Private Equity and Venture Capital operations. Private equity represented the largest share of private markets firms at approximately 75 percent of the total, as well as the fastest growing at 9.1 percent per annum. Following a second-quarter “COVID correction” comparable to that seen in the public markets, private markets have since experienced their own version of a K-shaped recovery. Private equity continues to perform well, outpacing other private market asset classes and most measures of comparable public market performance. The strength and speed of the rebound suggest resilience and continued momentum as investors increasingly look to the private markets for higher potential returns in a sustained low-yield environment.

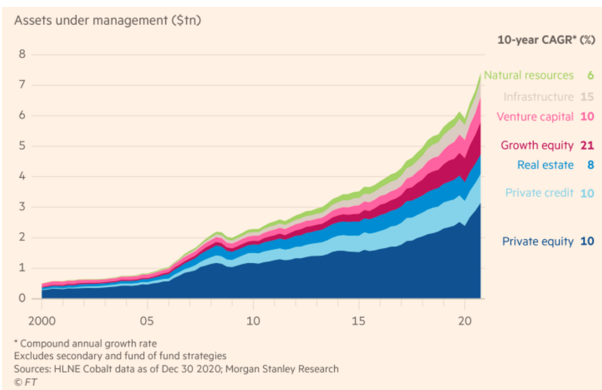
Fundraising fell sharply in the second quarter, at the height of uncertainty, before rebounding in the fourth quarter as confidence returned and LPs and GPs alike adjusted processes to accommodate the remote working environment. Despite the COVID decline a significant contributor to fundraising growth has been the expansion in the number of strategies that GPs pursue, Venture Capital early stage being one of those strategies.

Private market closed-end assets under management surpassed $7.3 trillion.

Private market assets under management, H1 2020, $ billion

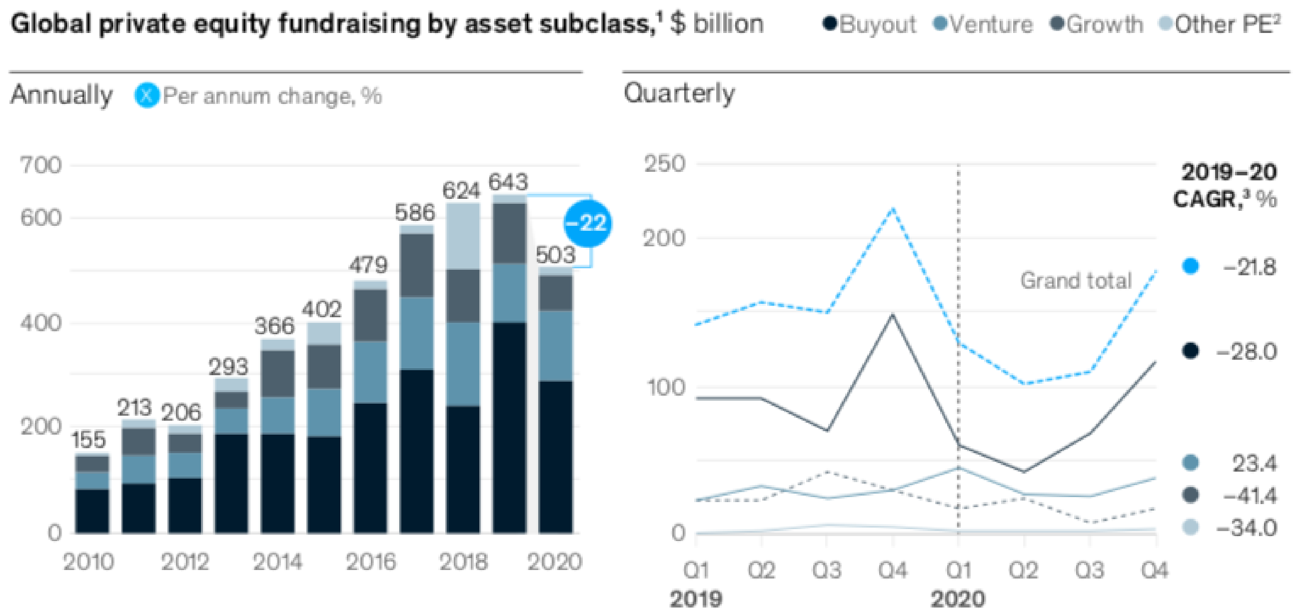


Note: Figures might not sum to 100%, because of rounding.
Source: Preqin



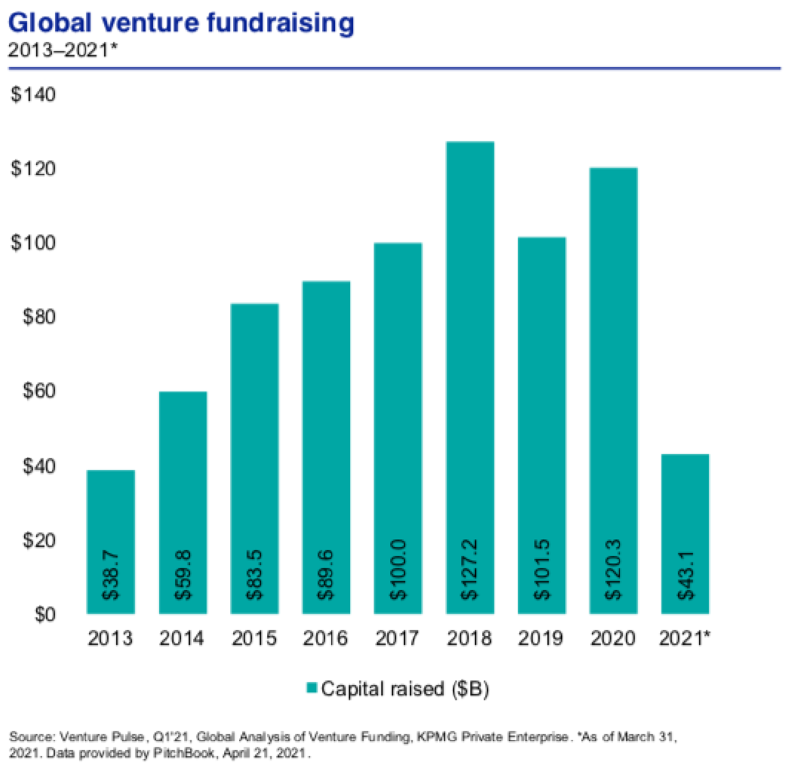
There is no question that the pandemic was the most significant driving force behind the first-half slowdown. Overall PE fundraising declined 21.8 percent from 2019. recovered rapidly in the second half of the year as investors retooled processes to reflect the new environment and LPs gained comfort writing checks from afar. The decline also reflects the complexity and lengthy processes involved in international capital raising and investment capital deployment due to legacy systems and lengthy underwriting causing some degree of “lumpiness” in the timing of raises, highlighting the industry's inability to quickly innovate from within and fill in this void. The fundraising environment in Europe proved incredibly resilient, growing by 7.6 percent on increased raises in both buyout and VC. Third-quarter fundraising was particularly strong; it included the closing of the largest European fund on record [CVC Capital Partners amassed €22 billion in July for its eight flagship fund vehicle], which surpassed its stated fundraising target by more than 20 percent.

Private equity fundraising showed signs of recovery in the second half of 2020 due to the increased fundraising of buyouts.



[1]Excludes secondaries, funds of funds, and co-investment vehicles to avoid double counting of capital fundraised.
[2]Other private equity includes turnaround PE funds and PE funds with unspecified strategy.
[3]Compound annual growth rate.
Source: Preqin

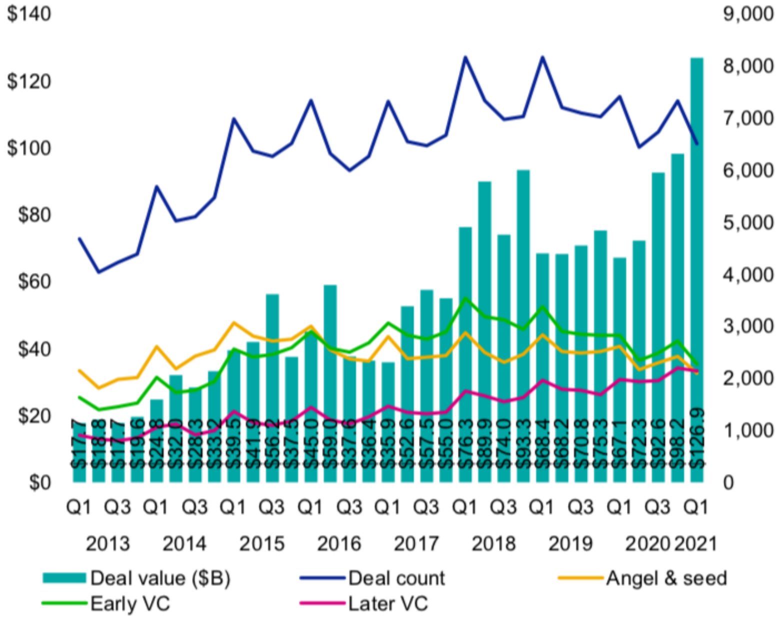
VC fundraising was an outlier in 2020, growing by 23.4 percent. With this surge, venture’s share of total PE fundraising increased from 17.1 percent in 2019 to 26.9 percent in 2020. As the asset class has grown, large funds have become more prevalent: fundraising for funds greater than $1 billion more than tripled in 2020, accounting for 32.6 percent of total VC fundraising.



A **total of $120.3B** was raised by the close of 2020 across 700+ funds in Global venture fundraising efforts. Highlighting Limited partners having an appetite for exposure to venture capital deals was not affected in the slightest by the pandemic. More fund managers are targeting ever-more niche segments, which stand to benefit the next wave of critical technical innovation and LPs are continuing to look to emerging fund managers networks to provide them with access to growth potential startups. Investor confidence being restored at the close of 2020 has led to a strong start to 2021 with Q1’21 recording fundraising figures of $43.1 Billion the LP sentiment shows that limited partners are even more eager to commit funds to capitalize on prolonged market dislocations, consequently backing startups that can appropriately adapt and pivot their product offering if need be, to sustain growth and produce desirable return multiples for investors.

Venture capital continues to be a bright spot. The Total Global Venture investment allocation was at $283B as of the close of Q4’20. This includes all funding stages, from seed, venture, corporate venture and private equity rounds in venture-backed companies. $59.5B Q1’20, $69.5B Q2’20, $73.2B Q3’20 and $80.8B Q4’20 across all funding rounds. [Q2’20 up 17% quarter over quarter]...[Q3’20 up 9% year over year]. Global venture financing in 2021 also started strongly with [Q1’21 up 29.2% quarter over quarter] and [Q1’21 up 89.1% year over year] highlighting a very good start to a promising 2021, which could be the industry's best year on paper.

Global venture financing
2013–Q1'21



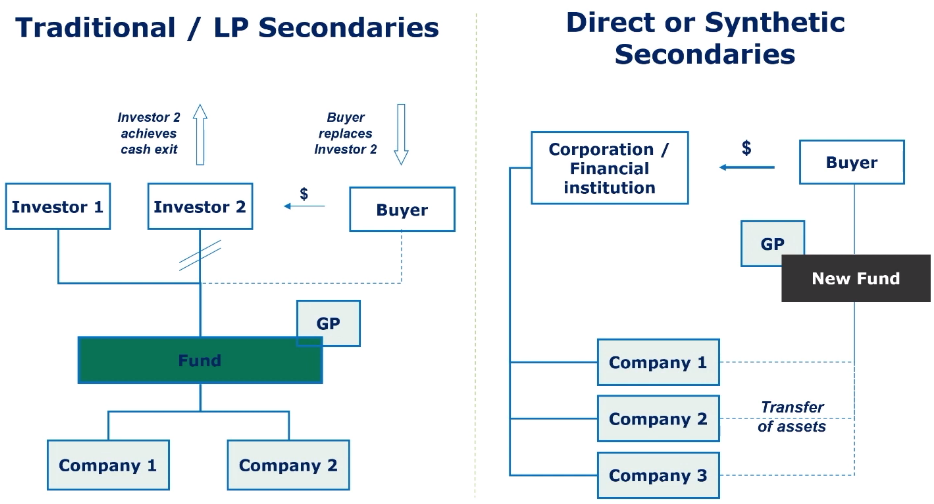
Source: Venture Pulse, Q1'21, Global Analysis of Venture Funding, KPMG Private Enterprise. Data provided by PitchBook, April 21, 2021.
Note: Refer to the Methodology section at the end of this report to understand any possible data discrepancies between this edition and previous editions of Venture Pulse.

As of Q1'21, Globally, VC-backed companies raised a record high of $126.9B across 6,508 deals. The global VC market saw an explosion of activity in Q1'21 as investors across the globe competed for the biggest and best deals. There appeared to be a significant amount of FOMO – the fear of missing out – in the market as investors looked to make deals to capitalise off the accelerated need of industries wide innovation caused by the global pandemic. Investors looked to get in on tech companies seeing a rapid acceleration in demand, including areas like software-as-a-service, delivery, and a wide-range of consumer-focused digital solutions – from edtech and gaming to digital health services and cryptocurrency exchanges. Q1'21 saw a continuation of this trend. Fintech was an industry getting the most investment allocations in most regions of the world during Q1'21, in addition to logistics, food delivery, edtech, and B2B solutions.

As the private markets mature, a long-running public debate has gained attention: whether private equity has earned its illiquidity premium and truly created more value for investors than the public markets have. The short answer is yes. Private equity has outperformed public markets quite consistently.

The Private equity secondaries market has an avenue for GPs and Individual LPs to realise the illiquidity premium and exit positions before liquidation events, Investors' situations and strategies change over time, creating a need for early liquidity (These transactions are known as 'direct' or 'synthetic' secondaries, or, simply 'directs'). However this liquidity remains fairly concentrated among a handful of specialised firms who have purchasing power and primarily focus on providing liquidity to the sector. Evolution in the secondary market may be key to making the private markets more accessible to a broader range of investors.

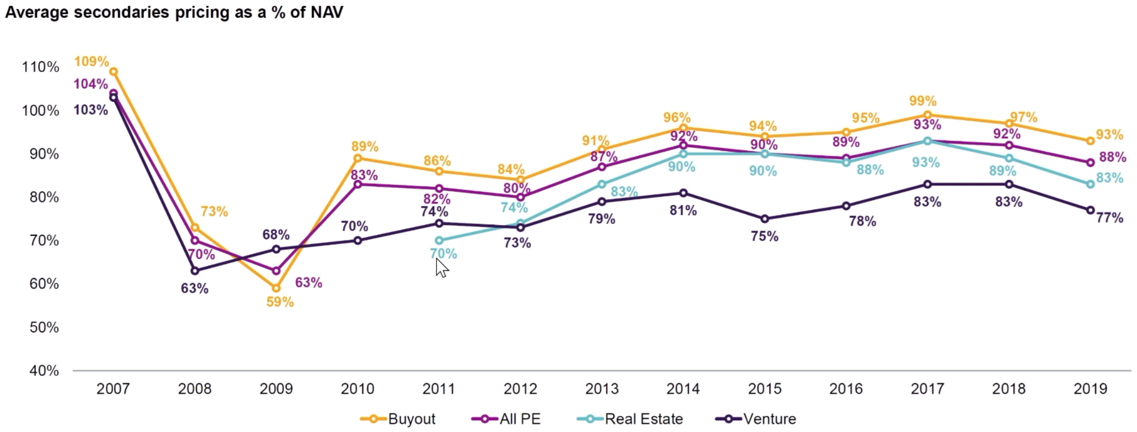
Types of Secondary Transactions



Fundraising in the Secondary market flourished in 2020, tripling off the back of strong performance in recent years. Potential sellers held onto their positions rather than choose to lock in losses, so deal volume dropped considerably in the secondary markets. Yet the decline in deal volume came predominantly in the second quarter, at the height of the market uncertainty, and the asset class finished the year largely back on track. In the last downturn during the Global Financial Crisis, secondaries performed similarly, as discounts to NAV (Net Asset Value) expanded rapidly to 70 to 60 percent before recovering within about four quarters.

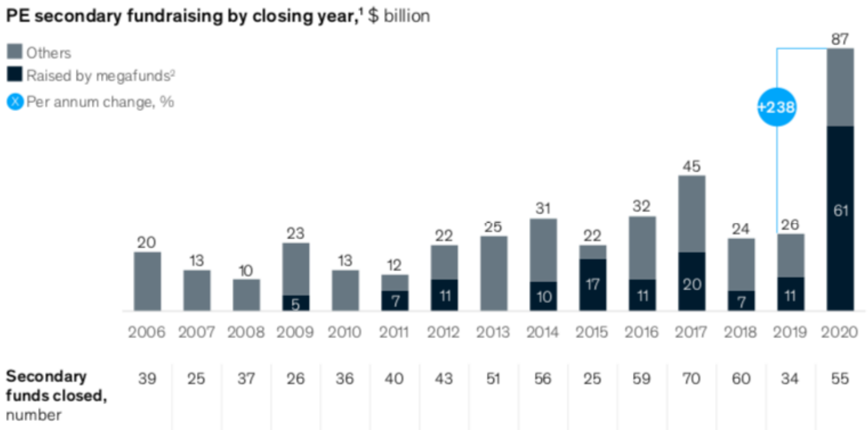
Secondary pricing –
What to expect looking at History

Discounts to NAV increase post-crisis as portfolios are marked to market



Source: Greenhill
Note: Averages of each time period used for pricing. The data presented in the chart above are a representation of the secondary market as a whole, and as such are not a representation of the pricing applicable to any existing or future Coller Funds or their investments. There is no assurance that any trends highlighted above will continue in the future.

Private equity secondaries raised roughly $87 billion and nearly tripled 2019 totals. Market remains concentrated.



One important factor underlying growth in the secondary market has been growth in the primary PE market: for secondary buyers, the pool of positions to be transacted has grown significantly over the last decade. Moreover, the share of positions that transact in the secondary market has grown as the practice has gained acceptance among LPs and GPs and seen as a viable solution to seeking early exits from Fund allocation. Many LPs now view secondaries as a portfolio management tool, while GPs' hesitancy to allow LPs to exit positions has declined over time. These dual factors have set baseline growth for the industry at a higher rate than for the primary market, if processes are streamlined and technology found in the public liquid markets finds its way in to make it more accessible and efficient.

While the initial GP-led secondary market (circa 2012–17) proved the model, the market has accelerated more recently. The GP-led market has shifted from providing struggling managers with solutions to primarily enabling GPs to recapitalize funds,and enabling LPs to exit or join the new or vintage fund vehicle at their discretion and hold onto assets longer, or accelerate economic realization for LPs and GPs alike.

Asset management has been slower than other financial services industries to embrace new technologies, legacy functions are insufficient to structurally support the growth trajectory of the private markets. Its high profit margins have precluded the need to innovate lengthy labor-intensive models; its focus on AUM growth has de-emphasized client service and retention; and the home-run investment culture has reinforced the belief that strong investment performance would trump all distribution inefficiencies. Interactions are driven by individuals, but built on dated standardized engagement models, without much customization, flexibility or efficiency.

Most asset managers have viewed technology only as an extension of their existing operational strategy. Consequently, fund distribution technology has received limited management attention, talent and budget. To be successful, asset managers need to place operational and fund distribution technology at the very heart of their strategy and hands of investors. This will lead most asset managers to rethink their functions altogether—and adopt a new structure.

As the global pandemic recedes, it is becoming increasingly clear that asset managers are entering a new era that will require them to adapt to new ways of doing business.To remain competitive on the operations side, firms must utilise technology, data and analytics for portfolio management and adjust to remote models for distributed work, whilst also putting more emphasis on bettering client relations. On the revenue side, sizable allocation to disruptive technologies, high growth markets, and performing asset classes within the private markets and alternatives in general, will be crucial to growth during the next several years. Indeed, the next big task for all industry players will be to carve out a suitable growth strategy as they rethink every aspect of their business and operations.

Vs

- building a tokenized Venture fund and asset management company utilising Blockchain native architecture.
- What is Blockchain & DLT
- What is Ethereum
- What is Tokenization and How tokenization works
    - For us the asset managers:
        - Cost saving reduction (as per cashlink report)
        - Investment issuance through STOs
        - Investment legals standardized through smart contracts
    - For fund investors:
        - Provides etc.
- Data to analyse current market conditions, where there is a 'gap'
    - To prove bullet points above.

Observing the current structural state of the asset management and private capital markets, presents TANGL Capital Partners a unique opportunity to be an industry pioneering Firm and bring to the market a truly digitally native investment & asset management firm harnessing the benefits of Blockchain technology and asset tokenization. Adding a digital wrapper to the way securities are invested in creating an alternative way of interacting with the various private market asset classes.

(explanation taken from consensys digital asset report)

Firstly, what is Blockchain technology? Blockchain technology is a type of Distributed Ledger Technology (DLT).The Blockchain DLT technology takes its name from the way in which the ledger is structured, where inputs onto the ledger are grouped into blocks of transactions, which are then validated and transmitted to the network. DLTs involve ledgers, or databases, where the input and maintenance of data on the ledger is controlled on a peer-to-peer (P2P) basis. This P2P nature means that there is no central trusted party or intermediary required to control the ledger, and so they can be said to be decentralised.

How does Blockchain technology work? The two concepts which were combined to create the blockchain technology were asymmetrical cryptography and distributed IT architecture.

Asymmetrical cryptography is a system of public and private keys which allows users to confidently exchange encrypted information with unknown third parties. A public key is a string of numbers and letters which can be made available to everyone [think of your email address], while the private key remains secret, and is used to access any data which is sent to your public key [think of your password used to login and access your emails].

A distributed IT system is a series of independent computers, known as nodes, which can communicate with each other over a network with no central node, much like the Internet. As all the nodes are connected to each other on a P2P basis, when one goes down it does not bring the entire network down with it, also known as automated redundancy.

Blockchains use these two concepts to allow users to store and send information in a decentralised manner, while the users of the network maintain it with the help of consensus algorithms which certify and confirm the transactions into 'blocks'. Users which complete this certification are known as miners, and a range of consensus algorithms are used depending on the blockchain, the most prevalent of which are proof-of-work and proof-of-stake. Once the miners have validated blocks through these mechanisms, it is added to the chain and shared with the network. Each block contains a hash of the previous block, which means that if any data in the block was altered in any way, the hash of the block would also change, and so the link to the chain would be broken. This means that once a block has been added to the blockchain, it is prohibitively difficult for it to be changed, making blockchains effectively immutable and tamper proof.

The Ethereum Blockchain

The original Bitcoin blockchain was created specifically for the transfer of bitcoin, or digital currency, between peers. However, it could not be programmed to transfer anything beyond this. In 2015, Vitalik Buterin launched Ethereum, which was the world's first fully programmable blockchain. Ethereum crucially supports the representation of real world assets through tokenization, and the creation of smart contracts. These are contracts between two or more parties which are digitally programmed and automatically execute clauses of the contract on the completion of certain events. The events which cause the automatic execution can be external to the blockchain, and the data concerning it is fed into the blockchain by a trusted third party known as an oracle.

What is Tokenization?

Blockchain is the enabler of tokenization, tokens are created on the blockchain as a digital representation of a unit of value. This unit of value can be assigned to anything deemed valuable by investors, be it digital assets or digital representations of real-world assets. Therefore, the possibilities for asset managers are essentially endless, as tokens could represent everything of value in the public or private markets – securities, physical assets, real estate, debt, and alternatives such as creative productions (works of art, music, etc), and a whole lot more. The type of token most relevant for an asset manager is a security token, a type of programmable token.

The different types of tokens:

Security Tokens: Tokens that are backed by tradable assets, ranging from securities, coins redeemable for precious metals, to tokens backed by real estate.

Equity Tokens: A subcategory of security tokens that represent ownership of an asset, such as debt or company stock

Utility Tokens: Also called App Coins or User Tokens, provide users with future access to a product or service. A good example of a Utility token is the Storj token which is used to pay for cloud storage on the network.

What is a Security Token offering?

A security token is a digital representation of a security (asset or an investment product), recorded on a distributed ledger, subject to regulation under securities laws. An STO is a process whereby security tokens are created which represent a tradable asset; the digital representation of an asset is an electronic record of an analogue contract between two or more parties. Security tokens can represent shares in investment funds, companies, real estate or even the ownership of precious goods like metals or fine art.

Blockchain "has quickly become a fixation in the financial services industry". We see blockchain causing major disruption in the management of assets and the role of the asset manager in the coming years. Tokenization creates a new value chain that harnesses the functional parts of the traditional asset management processes and reconfigures or totally removes inefficient ones to create a new end to end digitally native asset managers operational value chain.

[Diagram of stage of full value chain to be created]

+ Pre-Issuance (Front office)

The process of Pre-Issuance is similar for both traditional investment offerings and Security token offerings. Pre-Issuance focuses on the structuring of the legal terms for the security (carried out by an external law firm which has been instructed to underwrite the transaction) and the creation of a securities prospectus displaying market research, asset performance & financials along with the transaction formation for investors to carry out their due diligence on. Depending on the Asset Class the investor financial rights such as Dividends & profit sharing are outlined.

The costs incurred here are dependent on the budget outlined by the sales side and time commitment needed to set up the necessary documentation. As a buy side institution Legals is a cost to be outsourced on an incentivised retainership basis, we would only work with reliable deal underwriters who will not add any inefficiencies to the pre-issuance phase.

+ Primary Private market issuance & Asset Servicing (Middle office)

Fundraising, Contract Digitalisation to form smart contract, investor onboarding compliance, primary distribution, fee billing

Once documentation which typically includes a final version of the investor deck, a whitepaper, a term sheet, a prospectus, and purchase or subscription agreements along with the legal underwriting to ensure that all necessary fundamentals are in place, the security is ready to be tokenized and issued. Having our capital pooled in a fund allows us to deploy capital quicker versus engaging in investor syndication. The technology has allowed for investors' interests in our fund to be represented digitally in their Investment Wallet on our portal, where they can see their fund allocation and the funds allocation to portfolio companies alongside the legal docs per investment, with the funds NAV visible to see.

The funds sector relies heavily on financial services intermediaries such as transfer agents, fund distributors, private placement agents and fund administrators. Fund subscriptions and redemptions are complex processes involving a handful of intermediaries such as distributors and transfer agents. To conclude the offering successfully, all clauses in the offering documentation have to be met. As per the smart contracts in place tokens are then distributed into investors' wallets.A smart contract is a computer protocol designed to digitally facilitate, validate, or enforce the negotiation or performance of a contract.

The use of smart contracts to govern clauses stipulated in the transaction's legals allows for the automation of capital events as per investors rights, and swifter settlement of payments to investors wallets. Smart contracts also allow us to regulate the types of investors who can invest in our fund per the regulation of their jurisdiction, having this controlled digitally allows the fund to be compliant in real time from inception and during its lifetime.

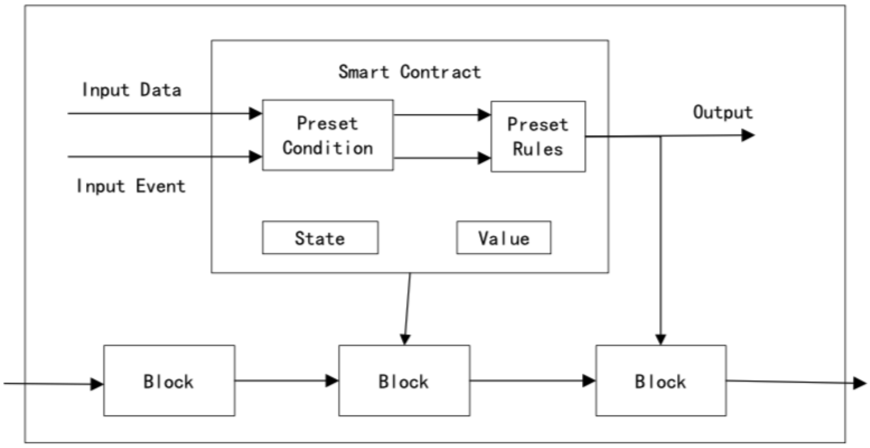


Figure 5: An overview of a smart contract

Separately, the rise of technology has created New business models which enable individuals to invest directly into a portfolio company through a blockchain powered platform allowing equity denominations to be much smaller and remove the need for such intermediaries. Issuance platforms onboard investors to an exchange like platform which allows investors to allocate their own capital deal by deal. Access to deal flow is charged for under a subscription agreement or fees paid per purchase of a listed companies security token.

Typically, when issuing a traditional security, the issuing company commissions an investment bank or an agent that charges a % fee of the total issued volume, for access to their network and the successful deposit of capital to the investment deal, usually at the IPO stage. With tokenization on the contrary, the deployment of capital can happen earlier in a company's lifecycle whilst still being a private company as opposed to at IPO when the company goes public. We find the upfront cost to be more cost-efficient and the Digitalization of the company shares allows equity to be automatically apportioned directly to investors. Currently when crowdfunding in such a way on platforms, the manual processes of creating a nominee structure must be used meaning investors do not actually own the underlined equity. This outdated system of paper ownership creates problems for investors when they are looking to liquidate their investment.

[Bitstocks case study to be added and presented]

+ Asset custody (Back office)

Investment management/NAV calculation, smart contract auditing, safeguarding the issued securities, capital events, and corporate action magnagement.

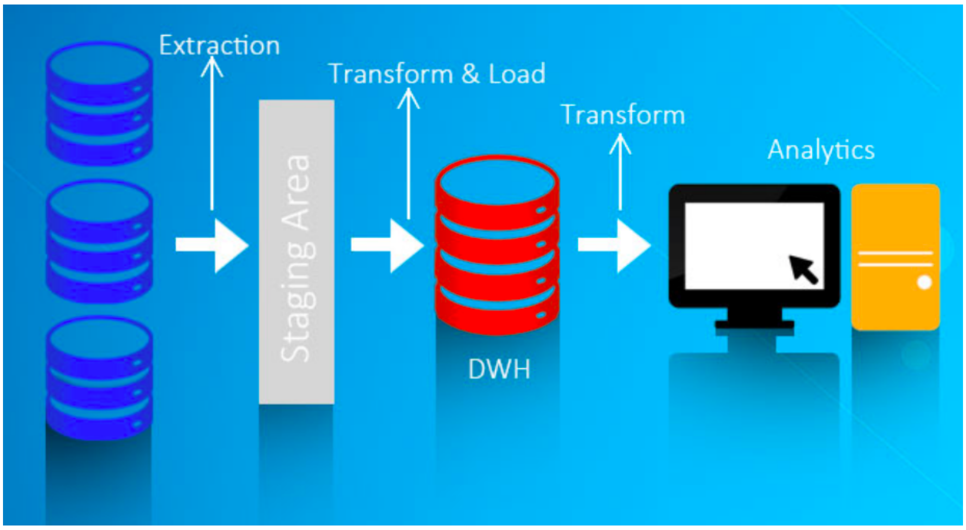
Once the fund has successfully been formed and the capital has started to be deployed to prospective portfolio companies, the maintenance of the fund is highly important. Back office roles include investment management tasks, like the periodic liaising with portfolio companies, adjustments of the fund AUM & NAV. Most importantly with the introduction of smart contracts the auditing of the states of these contracts is needed to maintain their integrity and longevity during the post investment process. Providing custodial services to our investors means investor assets are safeguarded and they receive their allocations from capital events in a secure manner. automatically notify clients of actions, creates a streamlined process and a better investor experience.

+ Fund administration (back office)

Fund and Portfolio accounting, Fund reporting to regulators and investment reporting to investors, fund liquidation, Fund risk management and Operational risk management.

Having our investments issued via a security token allows us to have a record of transactions and synthesise these records on demand, these records can be plugged into our accounting models to give a real time overview of our balance sheet, cutting out the lengthy, labour and paper intensive processes fund accounting is seen to be in the industry. The immutable nature of the blockchain helps to ensure that investors are up to date on the funds performance, while also making sure the fund is legally compliant in its practices.

Regulatory reporting is another labour intensive task firms in the financial services ecosystem are mandated to carry out, which has greatly intensified in recent years following the global financial crisis. Transacting on a blockchain means reporting could be done by sharing the information directly with the regulator on a near real-time basis. Fund administrators currently share reports with their regulators on a monthly or quarterly basis. The reporting structure is generally quite consistent across time periods, however the manner in which information is gathered can be quite complex, and manually intensive work being undertaken.



By using the ETL (Extract, Transform, Load) layer tools, there are the capabilities for fund administrators to upload this information onto a blockchain based platform where a hash of each of the key financial transactions would be created, along with a hash of the corresponding uploaded reporting documents.

The document could either be stored off chain on a database, or potentially on IPFS (InterPlanetary File System), thereby meaning that the regulator could have real-time access if granted. The regulator could rely on smart contracts to perform sanity checks of the reports and automate a currently manual process, meaning more time to spend on their supervisory role. Another great benefit of using a blockchain here is that documents or figures could not be tampered with after the fact, ensuring a consistent reporting standard, with no risk of firms committing fraud.

[Case study]

A great example of this type of blockchain use case for regulatory reporting is Project Lighthouse by the Irish Funds Industry Association. In this project, an Ethereum blockchain was used for Money Market Investment Fund (MMIF) reports to prove the benefit to both the fund administrator and regulator in reducing the cost and time of producing reports, thereby potentially disrupting the current operating model for reporting in the Irish funds industry.

In this cryptographically secured system, counterparties would be able to send private transactions to one or multiple parties in a secure manner, while also being able to sign transactions with the public key of the regulator, giving them access to the data in real time. The potential benefit for reporting is apparent, as regulators would be able to feed the data in real time into their systems, giving them a pulse on the market immediately instead of waiting for a monthly or quarterly report which can be out of date by the time it is reviewed. A system such as this would greatly benefit the fund administrator, and there would be no onus on them to spend time producing reports.

[Case study] corporate action

Aboveboard is one of the companies that have put pressure on traditional asset managers by streamlining the way companies can issue securities Aboveboard, a Delaware corporation, became the first company to issue corporate stock on the blockchain. They “minted” all of their issued shares to a company wallet, and then distributed stock to the Ethereum wallets of employees. The stock is represented as ERC-20 tokens and the shareholders are tracked using their own Aboveboard’s registry software. Their registry software tracks security token holders on the Ethereum blockchain and provides the management of shareholder rights, governance and trading rules. The vision of Aboveboard allowed investors from many different countries to purchase stock after qualifying to be on a local blockchain “whitelist”. This has made a hassle-free global distribution possible.Furthermore, approved investors could immediately trade particular securities on exchanges for private and public tokenized securities, this has the potential to significantly increase the liquidity of these assets.

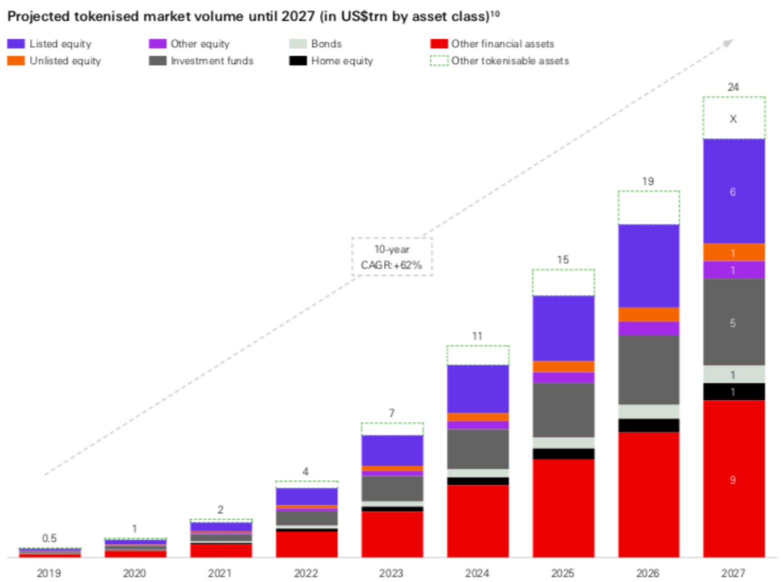
Once all technology elements have been built and implemented into the operations of our firm this end to end process of deal structure inception and investment issuance can take 60 to 90 days to close, with the majority of the time spent off chain negotiating and drafting legal contracts. The cost accumulated over these 60-90 days is highly apportioned to the fees structure of our legal underwriter, a cost and time effective solution is achieved as more deals are underwritten by our legal counsel; a harmonised process can be achieved.

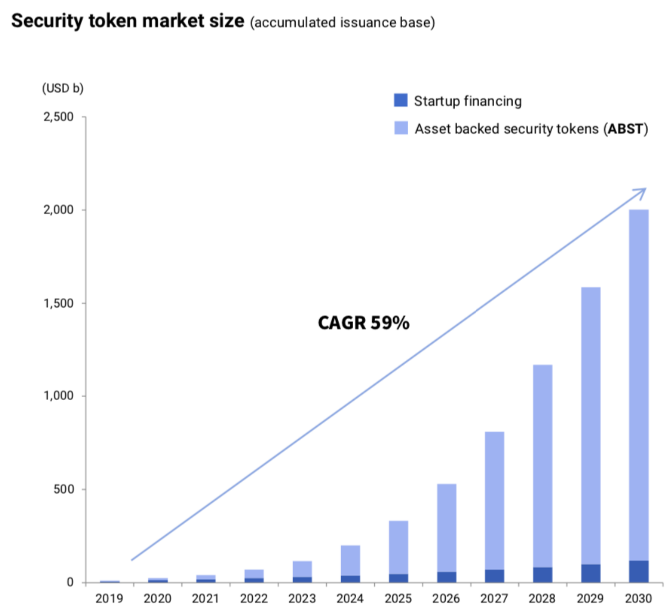
Roughly 50% of middle and back-office (MBO) costs are still linked to manual personnel intensive processes, this recurring expense is not sustainable for leading firms or emerging funds like TANGL. An increased adoption of technology and process automation, deployed internally via tokenization & Blockchain/Digital Ledger Technology will reduce the need for lengthy human intervention across the MBO of the fund. A full end to end operational model utilising Tokenization as a Service addresses the most acute pain points for COOs. This will reduce the need to outsource services and maintain a lean operating model leveraging technology. Human capital will no longer be able to meet the demands of the industry without better technology coverage and a willingness to continuously innovate and implement technology. Technology allows the firm to deliver tailored client experiences at scale across institutional clients via our portal and investment wallets.

STO market breakdown:

The Market data of Tokenization shows that the ecosystem is still very nascent and presents firms with a first movers advantage. The industry is currently going through a proof of concept phase and has presented financial institutions with alternative ways of interacting with asset classes as opposed to being the better solution which will take some time to be achieved. Security tokens as a way of facilitating securities transactions is an important development for the financial sector. The representation of traditional securities, such as equities or debt, on a distributed ledger (the ‘tokenization’ of assets) could have substantial implications for the way assets are invested in & capital is raised Globally by funds. Assets issued via Security tokens are traded exclusively on a distributed ledger, assets being digitally native increases their global migration and presents the opportunity to facilitate the global interconnectedness of the market.

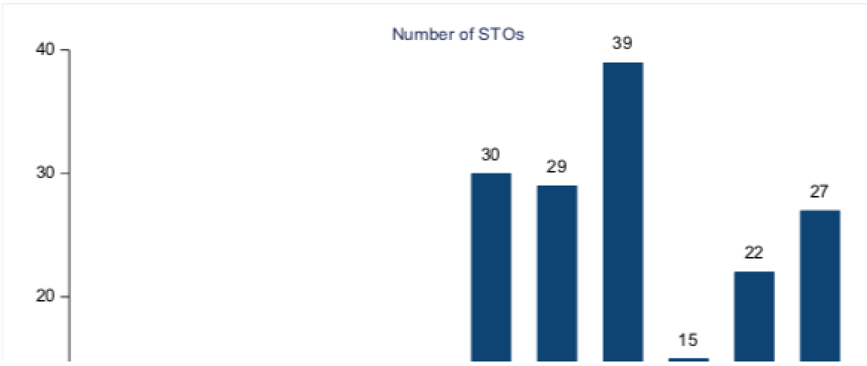
HSBC reports that US$1.7 billion per annum is currently spent on DLT in financial services globally with the WEF (World Economic Forum) estimating that up to 10% of global GDP will be stored and transacted via DLT by 2027 meaning the Tokenized markets could potentially be worth as much as US$24 trillion by 2027. With asset classes such as listed equity, investment funds and financial assets contributing significantly to a 10 year CAGR of +62%. The sub-sector market size of security tokens is set to grow to USD 2t by 2030 with a 59% CAGR during 2019-2030.





The STO market took its inception in 2017 after the hype and correction of the 2017 ICO (Initial Coin Offering) season, where many blockchain companies used tokenization as a way of crowdfunding the development of their various ventures. Many ICOs were not carried out in compliant ways and many investment schemes turned out to be fraudulent endeavours masked as legitimate investments. STOs however are carried out in regulated manners. Between 2017-19 $950M was raised across industries via STOs, with the finance and banking sector receiving 80% of the total funding amount.

Panel B: Number of STOs over time



Panel B: Sample composition by economic purpose

Economic purpose	Freq.	Freq. (%)
Debt token	7	6.60
Equity token	49	46.23
Fund token	16	15.09
Other investment token	2	1.89
Income-share token	32	30.19
Total	106	100.00

The biggest raises so far via a STO are as follows: tZERO (USD 134M of equity), Société Générale SFH (USD 115M of covered/asset backed bonds and received a rating of Aaa/AAA by Moody's & Fitch) followed by Proxima Media LLC (USD 100M).

2020 finished with a total market cap of $374,061,074 and has performed very well during 2021 to currently be at $902,200,293.36 near the close of August 2021.
The market experienced a Monthly Change of +19.38% between June-July. July's top performing tokens saw gains of:

- SPiCE VC (INX: SPiCE): **+120.59%**
- INX Limited (INX: INX): **+88.89%**
- Mt Pelerin (Uniswap: MPS): **+61.36%**

[2020 & 2021 market caps to be displayed graphically]

[data to be added about funds which have tokenized their offering]

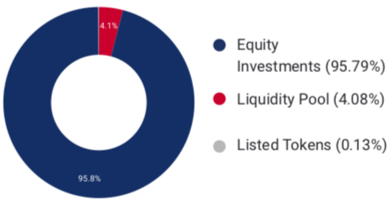
Tokenizing a fund offering is a new concept that has not been carried out by many funds yet. So far there have been few notable tokenized venture funds. Examples like Blockchain capital, Spice Vc, Cosimo x, Hyperion Vc and Sygnum bank. All named funds have issued tokens to represent economic interest in their funds and have pooled capital from accredited investors and are looking to invest capital into early stage tech projects in different industries.

Sygnum banks takes it further to become the “world’s first digital assets bank” providing a trusted, secure and efficient digital asset economy for investors and financial institutions. Protos is “the first tokenized hedge fund to trade on an ATS”. Protos being the first implementation of fund tokenization in the hedge fund Space shows another use case for the Security tokens in the private markets ecosystem.

Blockchain capital has amassed the highest amount raised for a fund via STOs with a market cap of $87,799,550 and has made investments in companies such as Coinbase, Ripple and Securitize.
Hyperion Vc total market cap being $56,301,042 as of Q2'21 and $9,400,335 at fund inception 2018, the funds NAV has seen significant increase in the first two quarters of 2021 rising from $29,641,074 Q1’21 to $56,301,042 in Q2’21.

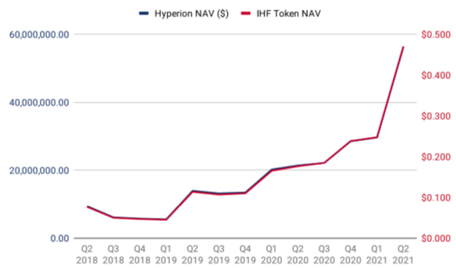
VENTURE CAPITAL
Hyperion VC

FUND COMPOSITION



PERFORMANCE

	Fund Inception 31/5/18	Q1 2021	Q2 2021
Net Asset Value ($)	$9,400,335	$29,641,074	$56,301,042
IHF Total Supply	122,852,180	119,662,263	119,662,263
IHF/USD	$0.077	$0.248	$0.471



Hyperion Vc’s parent company Invictus capital has released a series of technology platforms for their investors: investment dashboard to have a bird’s eye view of your investments, digital assets wallet and an investment performance analytics platform. Self proclaimed “Invictus capital’s alternative investment platform disrupts the global fund management and distribution industry with the use of tokenized funds and smart contracts”. In their quarterly report they announced the development of the Invictus Capital Mobile App is fully underway. The app will be available to both Android and iOS devices, and brings the management of Invictus investments to the palm of an investor’s hand.

Spice Vc Net Assets under management being $33,793,498 and has made investments in companies such as Bakkt, a digital assets security exchange company created by ICE, owners of the New York Stock Exchange. And INX who is building a fully-regulated digital asset and security token trading platform, targeted mainly at institutional investors.

Cosimo X total market cap being $10,000,000 as of last disclosure in 2019 and has not publicly reported about their portfolio growth.

Sygnum Bank going full end to end providing digital assets & Security token investors and institutions with technology services covering the whole investment spectrum with solutions like: Tokenization as a service, digital assets asset management, accounts and custody, brokerage, lending to increase fiat liquidity against digital assets and B2B banking services.

Tokenization has allowed these funds to pool capital continually whilst also keeping their operational costs low. Alongside their investment strategies these funds have seen it applicable to innovate and create technology solutions which can be integrated into the traditional capital markets or create new financial products entirely. We believe as more institutions enter this space we will see more fund focussed investment platforms created for their investors. It creates an opportunity for early entrants to white label or offer API coverage to new entrants into the tokenization space and make larger institutions more confident in the utility of the technology.

+Secondary Market

With the main focus and resources being allocated to the primary issuance market, the creation of a secondary market is inevitable. The Secondary market will be vital in providing early stage investors with a means to liquidate their portfolios and realise the illiquidity premium earnt during the investment maturity and potentially unlock access to the asset class for retail investors, it opens up the opportunity for asset price arbitrage for early investors. The processes used to carry out LP secondaries and synthetic secondaries can all be facilitated on the Secondary market, with equity ownership also being transferred upon trade settlement.

liquidity is a term that represents separate, more solvable problems that when solved help to scale the secondary market. First and foremost, the main aim of an asset manager is to carry out due diligence and expose their clients to high quality assets and tokens with great governance structures. Creating a portfolio with attractive offerings that perform successfully on the primary market will make investors feel more confident participating and endorsing this new asset class. An attractive primary market increases the interest of secondary market investors who may have missed out on the primary token sale and are looking to purchase the funds' vintage offering or due to regulation did not qualify for the early token release.

At this early stage of the secondary token market, it is hard to expect there will be substantial liquidity and trading volume with the space currently having a market cap of $902,200,293.36. As the space matures we will see valuable Assets tokenized and trading exposure increase also. Unless the Security tokens ecosystem overcomes its current illiquidity issue, chances of institutional money flowing into the security token primary market may lead to muted growth.

Liquidity matters, More liquid markets are associated with lower costs of trading, and give investors the ability to move more easily in and out of assets, with lower price volatility, and improved price formation. Facilitating investment exits via the secondary market is again advantageous for the asset classes growth, as trading costs are lower and transfers can be automatically filled and executed via smart contracts, this provides participants with a lower cost base and more accessible marketplace than the traditional secondaries market. The integration of Blockchain means trade settlement fees are absent in digital asset custody due to the non-necessity of certain intermediaries in the tokenization ecosystem that allows investors to directly connect to exchanges or even upload their asset class exposure onto a decentralized exchange which can seek out liduity for their token holdings. The full end to end process from primary issuance to secondary market trading presents asset managers with new potential revenue streams and a number of key benefits.

An example of major companies trading on a secondary market eg. Tesla, Coinbase Apple all listed on Digital assets.AG platform.

Binance launched the tokens in partnership with investment firm CM-Equity AG, a pioneer in the field of digital asset management, with a fully licensed, interfaced capital market infrastructure platform for digital assets for companies, FinTechs and investors and asset tokenization platform by Digital Assets AG Swiss based boutique firm focused on the design, structuring and the issuance of tokenized financial products and has partners such as Biance, FTX, Alameda, Bittrex and many others.

Binance launched the stock tokens on their exchange to provide exposure for its users to more traditional markets. By utilizing stock tokens, Binance users will also be able to benefit from several unique advantages the exchange provides. One benefit is the large amount of liquidity that comes with the trading volumes on the world's largest crypto exchange. The ability to trade fractional units of publicly traded equities also lowers the barrier of entry for entry-level traders. Stock token holders will also receive capital returns on the underlying stock, such as dividends and stock splits.

The world's largest crypto exchange also said that they will price and settle stock tokens in Binance USD (BUSD). BUSD is the exchange's stablecoin which is pegged to the U.S. dollar.

FTX joined Binance in listing Coinbase stock tokens ahead of their Nasdaq debut. Upon listing Coinbase shares were valued at $445 on Bniance & FTX; the tokenized shares were valued considerably higher than COIN's reference price of $250 from Nasdaq ahead of the direct listing. Tokenized stocks are synthetic versions of real equities, on FTX tokenized stocks serve as spot tokens that can also be used as collateral for futures trading.

"Stock tokens demonstrate how we can democratise value transfer more seamlessly, reduce friction and costs to accessibility, without compromising on compliance or security"

said Changoeng Zhao, ceo of binance

Data and comments from institutions and their sentiment around the technology usage.

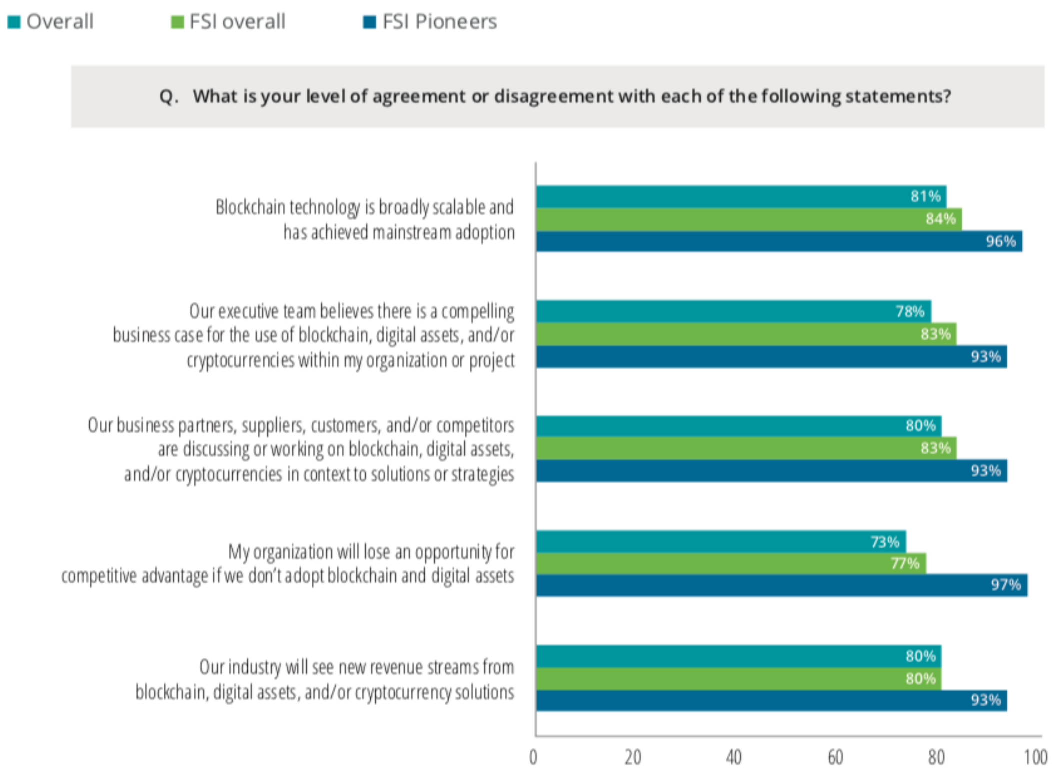
It is common consensus that crypto currencies and blockchain technology is here to stay, with crypto currencies like Bitcoin being deemed a legitimate asset class and potential hedge against inflation. But the way blockchain technology and crypto ecosystem integrates into financial services and the capital markets will be a test of time and capital to support innovators.

Deoitte conducted a survey between March 24th and April 10th 2021, primarily as a research vehicle to gain insights into the overall attitudes and investments inBlockchaina digital assets. The survey highlights the opinions and perceptions around blockchain and digital assets and the potential impact they can have. The survey polled a sample of 1,280 senior executives from across the globe.

The survey finds "That global financial services industry (FSI) leaders see digital assets—and their underlying blockchain technologies—as a strategic priority now and in the near future: In fact, nearly 80% of overall respondents say that digital assets will be "very/somewhat important" to their respective industries in the next 24 months." From the survey more than three-quarters of FSI respondents strongly or somewhat agree that their organization will lose an opportunity for competitive advantage if they fail to adopt blockchain and digital assets.

How do financial executives view blockchain and digital assets?

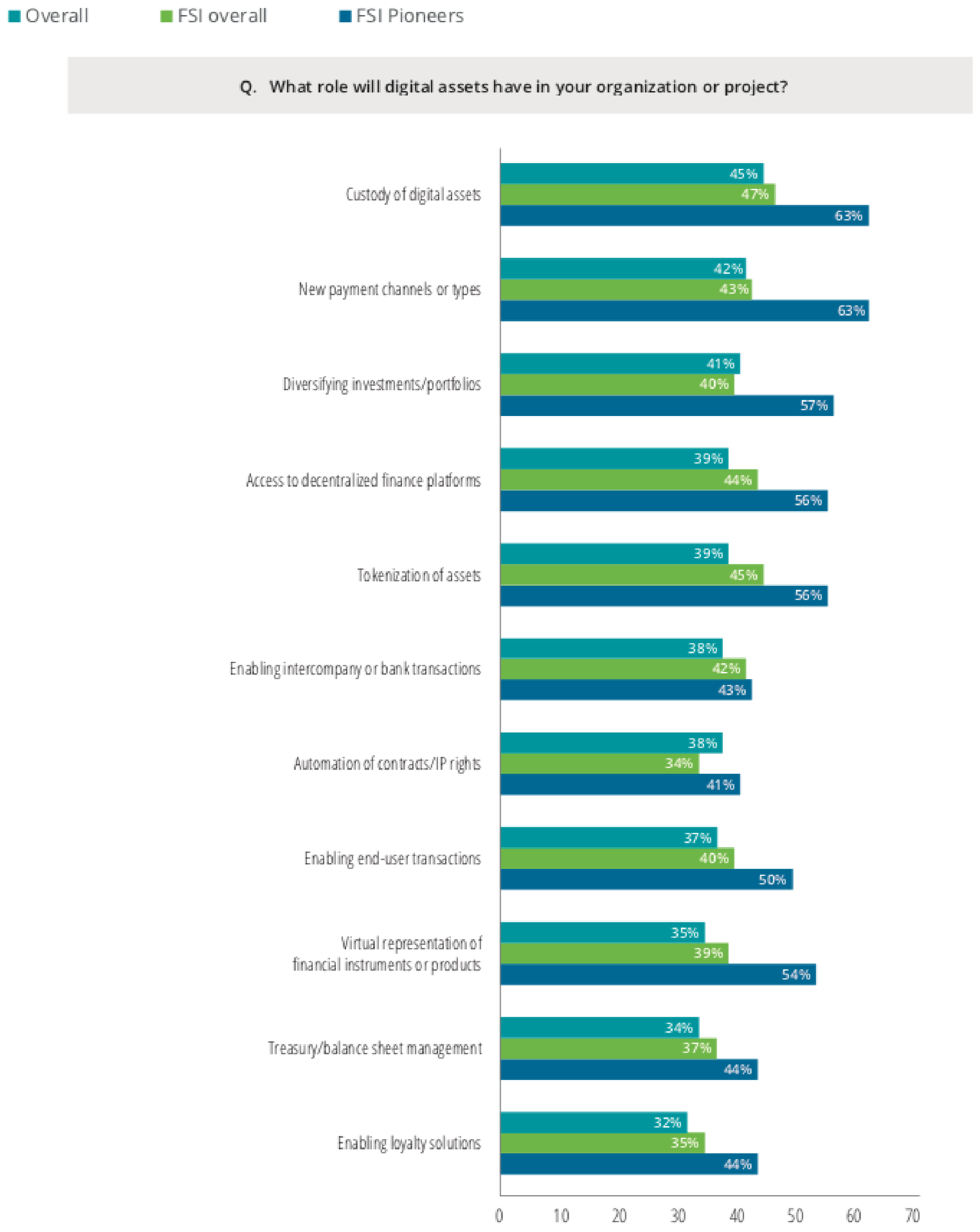
FSI overall respondents and, especially, FSI Pioneers express stronger convictions about the critical importance of blockchain and digital assets than overall respondents



Notes: Percentage of respondents who strongly or somewhat agree with each statement. N=1,280 (2021 overall); N=320 (FSI overall); N=70 (FSI Pioneers).
Source: Deloitte's 2021 Global Blockchain Survey.

The role of digital assets in future

Custody and new payment channels stand apart among potential digital asset use cases

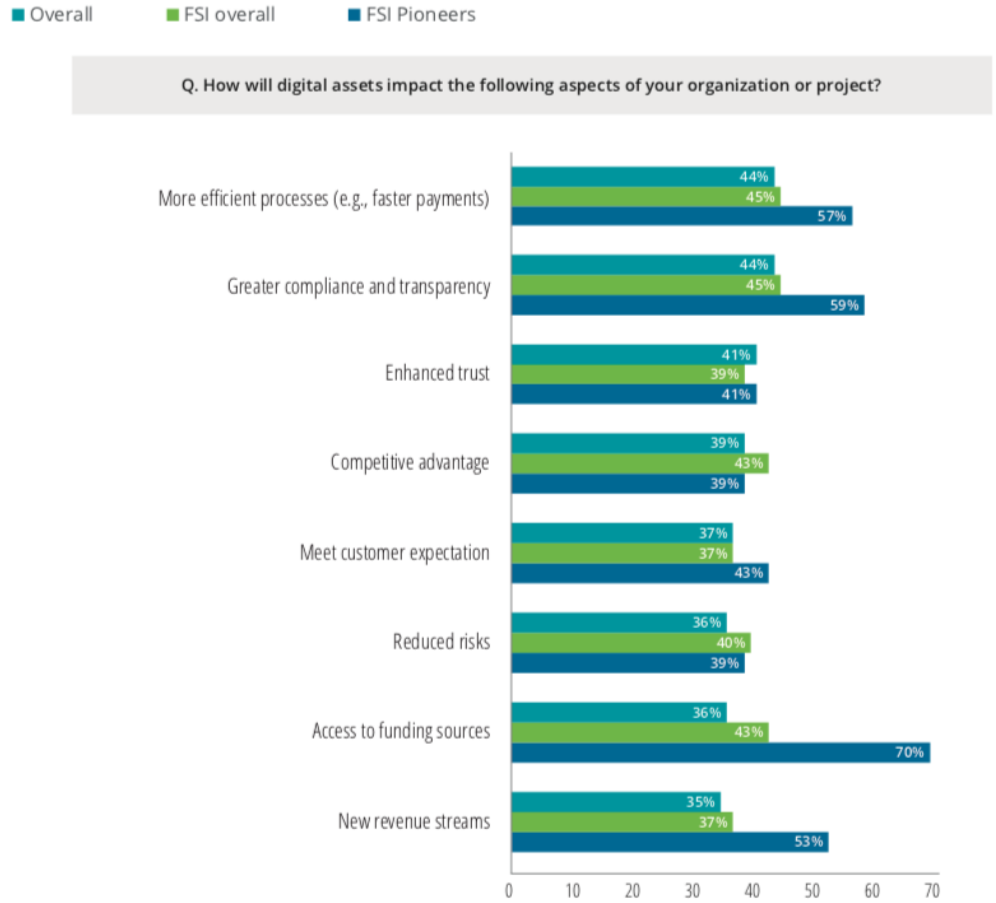


Notes: Percentage of respondents who say that digital assets will play a "very important" role. N=1,280 (2021 overall); N=320 (FSI overall); N=70 (FSI Pioneers).
Source: Deloitte's 2021 Global Blockchain Survey.

Banks aren't standing still—they remain some of the largest patent filers around digital assets and blockchain technologies. They are exploring ways to harness the power of the technology, including how to create new services to address revenue losses from traditional services. They have recognized that blockchain technology and digital assets capabilities threaten their key long-standing banking revenue sources.

Where will digital assets have the greatest impact?

Although lagging overall, seven in 10 FSI Pioneers say that access to funding sources will be the greatest area of digital asset impact



Notes: Percentage of respondents who say that digital assets will have a "significantly positive" impact. N=1,280 (2021 overall); N=320 (FSI overall); N=70 (FSI Pioneers).
Source: Deloitte's 2021 Global Blockchain Survey.

capital formation is in for an upgrade, as new approaches address a growing appetite for more efficient ways to secure funding. From the survey 70% of FSI Pioneers say that access to funding sources will serve as the largest area of digital asset impact to their respective organisations. Improvements are also necessary in the mechanisms for issuing a company's ownership and debt.

Just as companies are raising money through shares in their business they can also do the same thing by token issuances through smart contract-based governance models. As a result tokenization provides companies an alternative way: to how capital is formed and raised, how corporate actions are executed, and how value is exchanged in these companies.

We expect new implementations to become far more dynamic and highly disruptive to the financial services industry, unlocking a new source of asset value, increasing the velocity of economic activity, transparency, and placing trust back into economic activity.

+ Fund and Tokenization Regulations

UK authorised funds are flexible and can be structured in a number of different ways. They are highly regulated and have detailed investment restrictions, investment limits which vary depending on their regulatory “type”. The Financial Conduct Authority (FCA) is responsible for authorising UK funds as well as overseeing and approving changes throughout the lifecycle of the fund.

Opened ended investment companies (OEICs) is a Uk FCA authorised vehicle which will have regulatory permission to manage a UCITS and/or manage an authorised AIF.

These structures are all open ended. This means that they have variable capital and no fixed number of units in issue. New units in the fund are created in accordance with investor demand and any unitholder has the right to sell the units back to the fund at a price determined by reference to the net asset value of the fund’s underlying portfolio.

The majority of UK authorised funds are daily dealing. UK regulation currently requires regulated funds to deal frequently (at least twice each calendar month), except in the case of certain less-liquid funds which may be structured with limited redemption arrangements.

A UK authorised fund may be structured as a single standalone fund or as an umbrella fund. Umbrella funds will have one or more sub-funds which are separate compartments of assets. Sub-funds may be managed differently from one another, have different risk profiles, be targeted at different investor types, levy different charges, have different delegates appointed and are treated as separate taxable entities. They are often viewed as individual funds by the market and by investors. Any standalone fund, or sub-fund may also offer multiple share classes with different features designed to meet the needs of different types of investors.

In practice, many asset managers have a group entity which is able to act as an authorised fund manager or they use the services of a specialist third party authorised fund manager. The authorised fund manager is responsible for the ongoing operation of the fund, including making decisions as to what assets the fund should acquire in accordance with its investment objective and policy, taking action to rectify any breach regarding valuation and pricing of units, keeping records relating to the scheme and valuing the fund’s property.

The authorised fund manager is able to delegate some of its functions. In practice, the investment management and fund accounting functions are frequently delegated to other entities.

The depositary: Every UK authorised must have a depositary appointed in order to hold its assets and to safeguard the interests of the fund's unitholders. The depositary is responsible for the safekeeping of the fund's property and is required to be independent of the authorised fund manager. As well as holding the assets of the fund, the depositary performs an important oversight function. It oversees compliance with the fund's constitutional documents and the FCA Rules. The depositary is entitled to delegate certain functions and may, for example, appoint additional sub-custodians to hold the fund assets.

The investment manager: The authorised fund manager of a UK authorised fund will often delegate the function of investment management of the fund's property to another firm. The firm providing investment management must be appropriately regulated and, where the investment manager is based in the UK, must be an authorised firm.

Fund Establishment Process and Key Documentation

Fund development:

As a first step to establishing an UK authorised fund, the asset manager's team will:

- Determine the fund's investment objective and policy – this will be reviewed to ensure that it is clear, easy for investors to understand, accurately represents the intended portfolio and will meet FCA expectations
- Decide upon the fund's structure – will it be structured as an AUT, OIEC or ACS?
- Decide upon the funds regulatory type – will it be authorised as a UCITS, NURS or QIS? Will it be classed as one of the specialist fund categories?

Model the fund's anticipated portfolio – to ensure that all investments are permissible under the regulatory rules and to enable detailed stress and scenario testing to be conducted.

Consider the target market for the fund – including whether it will be distributed to retail or institutional investors; the fund's risk profile and the investment time horizon and distribution strategy.

The asset manager will then select the parties it wishes to engage to assist with the establishment and the operation of the fund. This will include the depositary, the auditor, and any delegates such as investment managers or fund administrators.

Applying for authorised fund status:

The asset manager will then typically engage a law firm to draft the key documentation.

This includes:

• the fund's trust deed (for an AUT), instrument of incorporation (for an OEIC), or contractual scheme deed (for an ACS)

• the fund's prospectus

• the depositary agreement

• all investor disclosure documents (such as key investor information documents)

• the ACD agreement (for an OEIC)

• any related agreements, including any delegation agreements such as an investment management agreement and

• the relevant FCA application form and other supporting checklists and FCA forms (as applicable).

The documents are then reviewed by the authorised fund manager and the depositary and any relevant delegates.

These key documents are then submitted to the FCA along with an indicative model portfolio and details of all stress and scenario testing performed. The FCA also requires checklists to demonstrate that the prospectus meets the regulatory rules and a solicitor's certificate to confirm that the fund's constitutional document is compliant with the law. Where the fund is to be a NURS or a QIS further documents are also required to comply with the UK AIF Rules.

Many asset managers prefer the appointed law firm to submit these documents to the FCA on their behalf. This means that the law firm will also act as the key point of contact for the FCA's queries.

An application fee will also need to be paid to the FCA at the point of application. The fee varies depending on fund type and whether the fund will be a standalone fund or an umbrella fund. Current FCA application fees for UK authorised funds range between £1,200 and £4,800.

The FCA has up to two months to determine an application for a UCITS. However, usual practice is for all authorised fund applications to be determined within two months.

The FCA will review the application, including the draft documents and will usually ask several rounds of follow-up questions before determining whether it is able to authorise the fund.

Authorisation:

Once FCA is satisfied that the requirements for authorisation will be met, it will grant an authorisation order. OEICs will be formally incorporated on the date of the authorisation order.

If the fund is being established as an AUT or ACS, the FCA will request that the trust deed or the contractual scheme deed is executed to establish the AUT or ACS before it issues the authorisation order.

The newly authorised fund will appear on the FCA Register within a day or so of authorisation. The entry on the register will contain the new authorised fund's product reference number (or PRN).

Launching the fund:

Once the authorisation order has been granted the fund can be launched and is able to accept money from investors and issue units.

The product documentation should be finalised prior to launch and final copies must be sent to the FCA.

The various operational and delegation agreements between the parties involved in the management and operation of the fund should be finalised and executed prior to launch.

Marketing and Distribution:

Once a fund has been launched it may be marked to investors in the UK and abroad. Marketing is typically undertaken by the asset manager or delegate investment manager.

On 1 January 2021 all EU product passports in relation to UCITS lapsed. Asset managers should therefore seek local law advice before marketing UK authorised funds in any other jurisdiction pursuant to national private placement regimes (if available).

Asset Managers commonly distribute units in their UK authorised funds via fund platforms. Some asset managers have their own in-house fund platforms which TANGL Capital Partners currently has and aims to integrate investor digital asset wallets into. Others rely upon third party platforms who will provide retail investors access to a wide number of UK authorised funds.

Distribution arrangements with platforms are typically documented in a platform agreement. Both asset managers and platforms must ensure that such agreements evidence compliance with the FCA's product governance rules as they apply to manufacturers and distributors of UK authorised funds.

Ongoing Supervision of UK Authorised Funds:

UK authorised funds are subject to ongoing supervision and regulation by the FCA. The level of scrutiny has increased over recent years as the FCA has focussed on the asset management sector as an area.

There are periodic filing requirements, such as the requirement to file the annual and half yearly reports and accounts of the fund with the FCA and event-driven filing requirements, such as the obligation to file any revisions to the prospectus. There are also detailed rules governing the process for making changes to a UK authorised fund's documentation.

Many changes to UK authorised funds require the FCA to approve the change prior to it being implemented. In addition, when considering a change, the authorised fund manager and the depositary must together decide whether the change should be treated as insignificant, notifiable, significant or fundamental under the FCA rules. The classification of the change will determine how investors will be notified of the change and, in some cases, whether they must be given the opportunity to vote to accept or reject the proposed change.

Where FCA approval is required the authorised fund manager must complete an application form giving details of the change. Draft documents showing the change must be provided to the FCA and, where the instrument, trust deed or contractual scheme deed is to be altered, a solicitor's certificate must be provided. Practically, many authorised fund managers find it easier to appoint lawyers to draft the changes to the documentation, the investor notification and the application form. The appointed law firm is able to submit the change request to the FCA on behalf of the asset manager and liaise regarding any additional changes. The FCA has one month to consider and approve (or reject) a proposed change.

Adding tokenization to the fund structure also means we need to abide by FCA regulation pertaining to crypto assets and custody.

FCA, uses the term 'security token' to define those tokens that constitute Specified Investments.

They use the expression 'issuers of tokens' to cover a number of entities including developers, designers, firms who issue tokens and certain intermediaries, since determining precisely who the issuer or issuers are is not always easy or possible. While we use the term 'issuers' in this paper in all of these ways, 'issuer' under the Prospectus Directive means something narrower and refers to the legal issuer of the securities e.g. the company – where this applies, we make it clear by linking the term to rules like the Prospectus Directive.

Cryptoassets can take many forms and can be structured in different ways. The FCA recognises three broad categories of crypto assets: exchange, security and utility tokens, it is important to know that these categories are not mutually exclusive, nor exhaustive of the types of crypto assets that can exist. For example, a token issued as a utility token (to access a current or prospective product or service) might, during the course of its lifecycle, be used as an exchange token (that could be used as a means of exchange).

If you carry on regulated crypto asset activities involving crypto assets that meet the definition of a Specified Investment as set out in the RAO, i.e. security tokens, you will need to make sure you are appropriately authorised or exempt. This is the same regardless of technology – if you are carrying on a regulated activity, it is likely you will need to be authorised. Companies will also need to ensure they have appropriate authorisation if their token constitutes e-money, or is used to facilitate regulated payments services.

Issuers of tokens may themselves not need to be authorised, however certain requirements related to the issuance of the tokens may still apply, for example prospectus and transparency requirements.

How do I know if my token is a Specified Investment?

Given the complexity of many tokens, it is not always easy to determine whether a token is a Specified Investment, specifically those types of Specified Investment that are securities, like shares or debt instruments. There are a few factors that are indicative of a security. These factors may include, but are not limited to:

- The contractual rights and obligations the token-holder has by virtue of holding or owning that crypto asset.
- Any contractual entitlement to profit-share (like dividends), revenues, or other payment or benefit of any kind.
- Any contractual entitlement to ownership in, or control of, the token issuer or other relevant person (like voting rights).
- The language used in relevant documentation, like token 'whitepapers', that suggests the tokens are intended to function as an investment, although it should be noted that the substance of the token will determine whether an instrument is a Specified Investment, and not necessarily the labels used – For example, if a whitepaper declares a token to be a utility token, but the contractual rights that it confers would make it a Specified Investment, we would consider it to be a security token.
- Whether the token is transferable and tradeable on crypto asset exchanges or any other type of exchange or market.
- A direct flow of payment from the issuer or other relevant party to token holders may be one of the indicators that the token is a security, although an indirect flow of payment (for instance through profits or payments derived exclusively from the secondary market) would not necessarily indicate the contrary.

If the flow of payment were a contractual entitlement we would consider this to be a strong indication that the token is a security, irrespective of whether the flow of payment is direct or indirect (or whether other ownership rights are present).

The most relevant Specified Investments for tokens

The full list of Specified Investments is in the RAO with detailed guidance provided in PERG 2.6 but the most relevant of those Specified Investments for tokens, given the market we have observed, are likely to be the following:

Shares

The Specified Investment category of shares etc under article 76 of the RAO includes shares or stock in the capital of:

- Any body corporate (wherever incorporated); and
- Any unincorporated body constituted under the law of a country or territory

Whether or not a particular form of overseas body is a body corporate depends on whether the law under which it is established confers on it the status of incorporation. Separate legal personality is a significant but not determinative factor; another significant factor is that the body survives a change of member. The definition also applies to overseas unincorporated bodies, but these bodies must have a share capital outside the UK.

Shares can also be transferable securities under MiFID. <u>We consider that all shares and (securitised debt) that are negotiable on the capital markets fall within the definition of transferable securities; we do not take the view that the shares must be listed to be a transferable security under MIFID.</u>

Negotiability means that the tokens must be capable of being traded on the capital markets. Factors that may suggest a token is negotiable on the capital markets include:

- It can be transferred from one person to another and so ownership of the token is transferred,and
- It gives the person who acquires it good legal title to the token.

How this applies to tokens

- Tokens that give holders similar rights to shares, like voting rights, or access to a dividend of company profits or the distribution of capital upon liquidation, are likely to be security tokens.
- Tokens that represent ownership or control are also likely to be considered security tokens, as shares tend to represent ownership (through dividends and capital distribution) and control (through voting).

However, this is not always the case as some tokens give voting rights in direction without it being considered control. For example, a token that provides the token holder with the right to vote on future Equity investment the firm will invest in and no other rights would likely not be considered a share as the voting rights don't confer control-like decisions on the future of the firm.

The voting rights that are typically associated with being a shareholder are quite specific and governed by company law. Whether a token represents a share in the capital of a body corporate or similar entity incorporated outside the UK will depend on the operation of company and corporate law. A right to vote in general meetings of shareholders may be one indicator but voting and other rights may differ from share to share.

Units in collective investment schemes

A collective investment scheme means any arrangement, the purpose or effect of which is to enable persons taking part in the arrangements to participate in or receive profits or income arising from the investment or sums paid out of such profits or income.

The participants do not have day-to-day control over pooled, or where the investment is managed as a whole by a market participant, for instance the issuer of tokens, is likely to be a collective investment scheme. References to pooled investments, pooled contributions or pooled profits in a whitepaper could also be a factor in a token being considered a security.

What this looks like in practice

The management of the investment and contributions of the participants, and profits from which payments are to be made, are pooled and/or the investment are managed as a whole by or on behalf of the operator of the scheme. Certain arrangements are excluded.

The specified investment category under article 81 of the RAO is units in a collective investment scheme and includes units in a unit trust scheme or authorised contractual scheme, shares in open-ended investment companies and rights in respect of most limited partnerships and all limited partnership schemes. Shares in, or securities of, an open-ended investment company are treated differently from shares in other companies. They are excluded from the Specified Investment category of shares. This does not mean that they are not investments but simply that they are treated in the same way as units in other forms of collective investment scheme.

How this applies to tokens

A token that acts as a vehicle through which profits or income are shared or pooled, or where the investment is managed as a whole by a market participant, for instance the issuer of tokens, is likely to be a collective investment scheme. References to pooled investments, pooled contributions or pooled profits in a whitepaper could also be a factor in a token being considered a security.

FCA Case Study: Firm IJ invests in fine art using the funds it receives and pools from investors and hires it out for use at corporate events for a fee. It issues tokens to investors in proportion to their contributions. These tokens also entitle the investors to receive a share of the fees generated by the art rental, and the profits it makes when it sells the art from time to time. The token holders have no day- to-day control over the art or the rental fees. The token holders' contributions are pooled, so are the rental fees and profits from art sales, and the art is managed as a whole by IJ. The tokens that represent the participants' share in the investment are therefore likely to constitute units in a collective investment scheme.

Other considerations

Tokens can be considered transferable securities under MiFID as well as Specified Investments under the RAO. When identifying transferable securities, in addition to those considerations discussed above, FCA takes into consideration the answers the European Commission (EC) has provided in the Q&A on MiFID. FCA will also have regard to material from the EC and the European Securities and Markets Authority (ESMA).

Firms and consumers can also gain exposure to exchange tokens through financial instruments which reference these tokens like CFDs, options, futures, exchange traded notes, units of collective investment schemes, or alternative investment funds. These instruments derive their value from referencing the crypto asset, but they're not crypto assets themselves.

Products that reference tokens, like derivative instruments, are very likely to fall within the regulatory perimeter as Specified Investments (either as options, futures or contracts for difference under the RAO). These products are also capable of being financial instruments under MiFID II.

Table 1: Indicative list of market participants and permissions

Market Participants	Potential activities	Indicative list of permissions
Issuers of tokens	Issue tokens, including issuing tokens through ICOs.	A company does not need regulatory permissions specifically to act as issuer of its own securities such as shares, but will need to consider regulations that may apply to the issuance. Such rules and regulations include, but are not limited to: • Prospectus Directive • Disclosure Guidance and Transparency Rules • AML and KYC • if the offer is made available internationally, local laws in each jurisdiction where the offer is available • for companies seeking listing on a regulated exchange, the Listing Rules • rules of the relevant trading exchange or platform
Advisers and other Intermediaries	Provide advice to consumers regarding different tokens and may help facilitate the purchasing of tokens.	For those advising, permissions may include, but are not limited to: • advising on investments If the intermediaries facilitate the purchasing of tokens, permissions may include, but are not limited to: • dealing in investments as principal • dealing in investments as agent • arranging deals in investments • making arrangements with a view to investments • sending dematerialised instructions

Market Participants	Potential activities	Indicative list of permissions
Exchanges and trading platforms	Facilitate transactions between market participants.	Depending on the operation/scope of the exchange, permissions may include, but are not limited to: • operating a multi-lateral, or, organised trading facility • dealing in investments as principal • dealing in investments as agent • arranging deals in investments • safeguarding and administering investments • making arrangements with a view to investments • sending dematerialised instructions
Wallet providers and custodians	Provide the secure storage of tokens.	Depending on the scope of activity, relevant permissions may include, but are not limited to: • managing investments • safeguarding and administering investments
Payments providers	Enable customers to pay merchants using a cryptoasset, or transfer fiat currency via a cryptoasset.	Depending on the nature and scope of the activity, relevant permission may include, but are not limited to: • issuing e-money Payments Services Regulations may also apply, including, but not limited to: • money remittance • cash placement Depending on the structure of the tokens, E-Money Regulations may also apply.

Figure 2 sets out some of the key market participants in the cryptoasset market, the types of regulated activities they are likely to be carrying on.

Due to TANGL Capital Partners taking fiat from clients and giving them exposure to our fund tokens we would need to also have an E-money license.

E-money tokens

E-money tokens are tokens that meet the definition of electronic money in the EMRs. That is:

- Electronically stored monetary value that represents a claim on the issuer
- Issued on receipt of funds for the purpose of making payment transactions
- Accepted by a person other than the issuer
- Not excluded by regulation 3 of the EMRs

In CP 19/3, the FCA set out where crypto assets may meet the definition of electronic money and fall within the scope of EMRs. We described that they are likely to be certain types of utility tokens, including those referred to as 'stablecoins'.

Investment Thesis:

- Investment Criteria (Firewall):
  - Layer 1, investment target areas being in the five
  - Layer 2, blockchain as a core technology, or have adopted synergies with blockchain and are looking to leverage the technology alongside their core offering.
  - Layer 3, effective business model and go to market strategy to achieve scalability
- Where they are failing, where we add value, and how that's added into the core firewall
- the Metrics used to filter through investment thesis (quantamental strategy)
- deal flow creation and limitations

stage 1: pipeline creation

stage 2: review of materials

stage 3: meeting and initial discussions

stage 4: deep dive

stage 5: term sheet and closing

stage 6: Capital placement

stage 7: portfolio management to exit

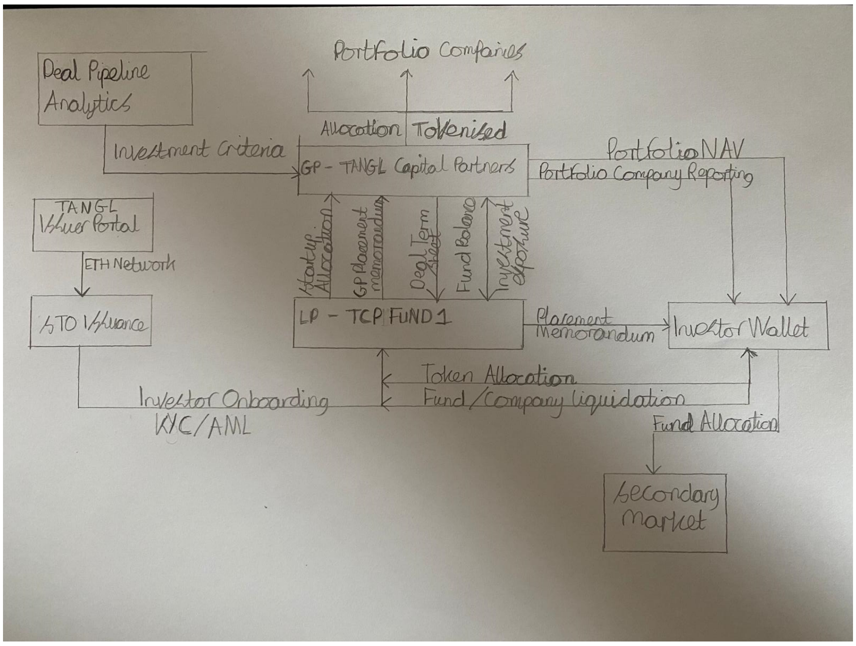
- Investment execution operations:
  - Valuation metrics
  - Token NAV
  - Fund liquidity

- Target operating model: (Sales)
  - Venture building services
  - Talent placement
  - Consultancy on Startup technology Architecture

- Team breakdown & roles:
  - Existing team
  - Potential new GPs
  - Investment team, analysts, CFO etc
  - Fund advisors
  - Fund investment Legals
  - Fund administrator

+ Fund auditor

Fund & asset manager Technology Framework Diagram:



(Digitalising the above with further detail in terms of granula operations, and defining current unknowns, operation value chain,)

- Break down of technology architecture:
  - Side by side comparison
  - functionality suite
- Highlighting of benefits:
  - Liquidity,
  - Reporting
  - etc.
- The different asset class applications
- Current Equity funding problem analysis (Bitstocks case study)

- Target operating model: Sales B2B
  - Asset and fund issuance consultancy
  - Daily billables: “how can your company can benefit from blockchain” masterclasses (+selling developer placements &/or consultancy within layer 2 firewall opportunities such as leveraging blockchain for other startups sectors e.g real estate etc.)
  - Software white label opportunity within written fca standards on smart contracts & ideally working within a sandbox/engagement with the regulators, giving us that exclusivity to sell.
  - API plugin of issuance and settlement for other asset managers
  - Smart contract Escrow services leveraging exclusive third party relationships as a billable (e.g linklaters legals)
  - Selling turnkey primary & secondary (direct listing) issuance services (third party companies) including listings, and liquidity consultancy. (like IPO consultancy)
  - Corporate action Smart contracts
- Team and breakdown of roles:
  - missing roles, blockchain developers
  - project advisors

- Roadmap:
  - Costing up the architecture in terms of time and money (project management task)
  - What the potential Looks like
  - Growth strategy
- Project Risk Outline