



Valour

Market Trends and Analysis

July 2022

Retail investors and institutions increasingly want to invest in decentralized finance (DeFi), cryptocurrencies, and Web 3.0 but doing so is not easy.

While interest and growth in these technologies have grown markedly in the last two years, they are still in their infancy, dominated by passionate, early-adoption communities. In addition, retail investors have significant barriers to accessing this asset class, with most current investments accessible only to private institutions and professional investors.

The lack of understanding about what DeFi and Web 3.0 really are poses a significant psychological hurdle to entry for traditional investors, but as DeFi and Web 3.0 become more mainstream and the opportunity and disruption it creates become more apparent, more investors are searching for investments that offer direct exposure to DeFi applications.

As with any disruptive technology in its infancy, DeFi poses significant regulatory, volatility, and security risks. Even so, Valour is an example of a company that has successfully positioned itself at the intersection of DeFi and traditional finance and is poised to benefit substantially from the macro opportunity afforded by DeFi disruption.



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5900 BALCONES DRIVE, STE. 4015
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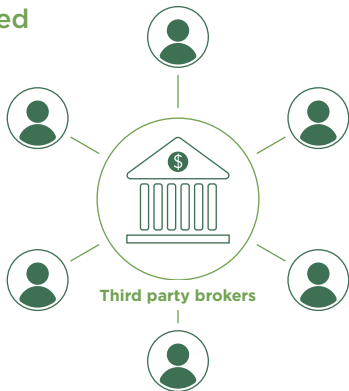
DEMYSTIFYING DECENTRALIZED FINANCE

Decentralized Finance (DeFi) is a vision of the global financial system that operates on a peer-to-peer basis, without intermediary third parties.

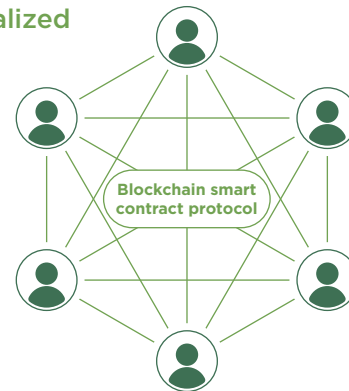
Think of all the things done in the world that require the help of a third-party broker. **Lending money, borrowing money, establishing insurance contracts, currency or equities trading, setting up a trust for one's heirs, credit/debit transactions, consumer banking** – all of these financial actions currently function via a central financial stack.

DeFi at its simplest is cutting out the gatekeepers who manage and control these systems. Stockbrokers, insurance agents, bank lenders – in a truly DeFi'ed system, these third parties are replaced by smart networks functioning via a distributed database known as the blockchain. Moreover, the rules in a DeFi system do not have to be set by or enforced by an external regulatory body or government – new rules are codified and set in code.

Centralized Finance



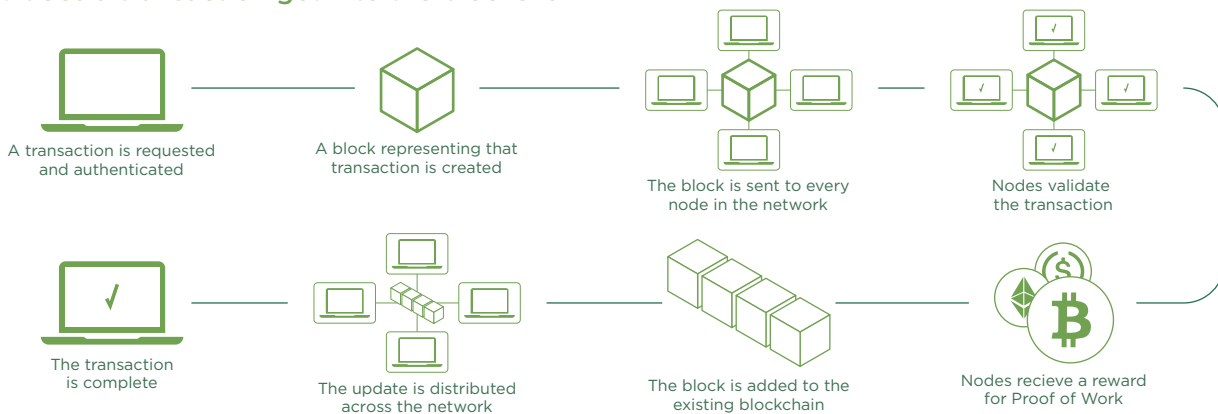
Decentralized Finance



Blockchain makes DeFi possible. Blockchain is a technology that builds a distributed ledger that contains the transaction history of an entire value exchange in unalterable blocks. The goal of blockchain is to enable digital information to be recorded and distributed without being modified by a bad-faith actor. Blockchain also works via a protocol known as **distributed ledger technology (DLT)**.

Unlike in a centralized database, where a single administrator oversees the database, in DLT, decentralized nodes all keep a record of the entire transaction history of a given block or chain of blocks. Even if someone succeeded in altering data at one node, it is impossible to alter the record at all the other nodes. The information and history in the blocks are theoretically transparent and irreversible.

How does a transaction get into the blockchain?



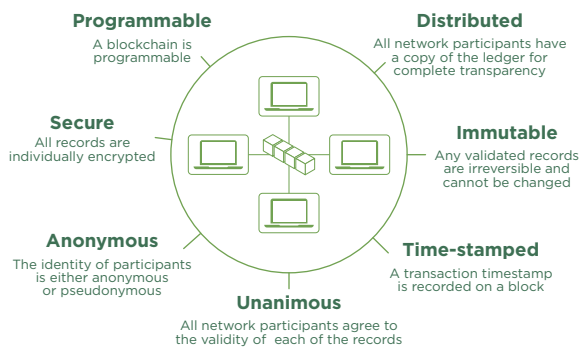
Source: Euromoney



DEMISTIFYING DECENTRALIZED FINANCE

The application of blockchain technology with which most investors are familiar is **cryptocurrency** – a straightforward use of a DLT to create a means of financial exchange that eliminates the gatekeeper of all gatekeepers – in cryptocurrency’s case, the currency of a government managed by that government’s central bank. But blockchain technology can record all sorts of data – legal contracts, an official identification, or even medical records. Moreover, once that data is stored on a blockchain, it can be combined with computer programs or transaction protocols to create smart contracts. A smart contract is simply a contract that executes automatically when the terms of the contract have been fulfilled. The current financial system relies on centralized, third-party intermediaries in part because these gatekeepers ensure trust. In DeFi, trust is irrelevant – it is literally coded into each transaction.

The properties of distributed ledger technology



Source: Euromoney

The last jargony word to demystify is **Web 3.0**. Gavin Wood, the founder of Ethereum, is credited with coming up with the idea of “Web 3.0.” Web 1.0 was an era of decentralized open protocols in which consumers visited static, individual web pages. Web 2.0 describes the internet as it is currently experienced – through centralized, closed platforms **dominated** by corporations like Google, Facebook, and Amazon and through an overall infrastructure subject to government control. Think of Web 3.0 as essentially a decentralized internet.

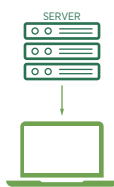
The promise of the internet was to connect individuals throughout the world, but as Web 2.0 has grown, so has the need for regulation and oversight – in part because bad-faith actors can and will take advantage of a system too unwieldy for any centralized actor to manage. To paraphrase Wood, the ultimate goal of Web 3.0 is less trust – and more trustworthiness.

It is difficult to overstate the disruption posed by the combination of these technologies. A few practical examples are instructive. Instead of an individual depositing their hard-earned savings in a bank, which in turn loans money to another individual at a much higher interest rate than the first individual receives for parking his or her money at the bank, in a truly decentralized financial system, that individual can loan money (and earn the interest currently being pocketed by the bank) themselves. Instead of having to rely on and pay fees to credit card companies to serve as the conduit between consumers and businesses (or to pay high interest on debts racked up on a credit card), individuals can pay directly. Instead of brokers charging fees for buying and selling equities via transactions that can take hours if not days to settle, imagine cutting out the middleman entirely. Imagine a homeowner’s insurance contract that pays out automatically when a set of predetermined conditions are met – rather than sending pictures to and arguing on the phone with an agent who explains all the reasons your claim is ineligible.

All of this and more are eliminated in DeFi, which has the potential to disrupt **every facet of modern financial life**. Indeed, DeFi is a radical reimagining of how all aspects of modern financial life are operated, regulated, and executed. Web 3.0, cryptocurrency, and blockchain are just some of the technologies that benefit from and enable DeFi. Indeed, DeFi is at such an early stage of its development that the most significant uses and applications of the underlying technology behind it have not even been imagined yet, let alone made available to the consumers that would benefit from them most. Last year, DeFi was **roughly** estimated to be an \$80 billion industry. Considering the many industries DeFi could disrupt, that is little more than a drop in the bucket.

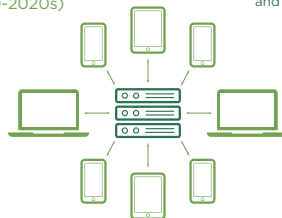
Web 1.0 (1990s-2000s)

Static, read-only webpages



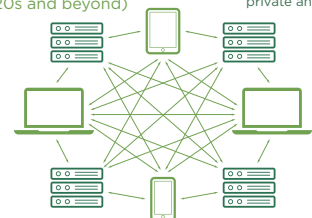
Web 2.0 (2000-2020s)

Information-centric and interactive



Web 3.0 (2020s and beyond)

User-centric, decentralized, private and secure



Sources: GlobalData, Medium

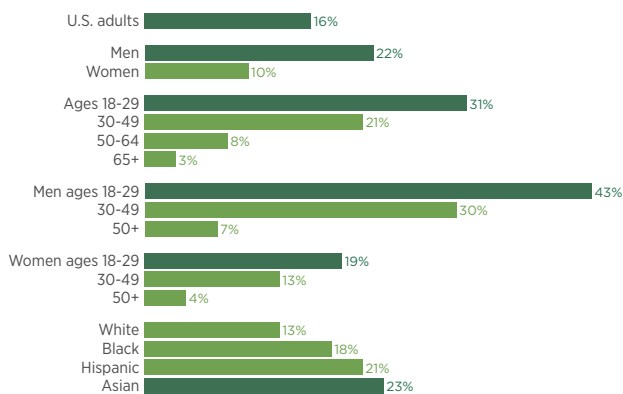


A REVOLUTION IN ITS INFANCY

Even in the United States, the adoption of DeFi is still in its infancy.

Cryptocurrency, for example, is a narrow application of DeFi concepts and blockchain technology, and despite conquering the *zeitgeist* during the pandemic, cryptocurrency is still only traded by a relatively small number of Americans (and used as an actual means of exchange by even fewer). According to a [recent](#) Pew study, just 16 percent of Americans say that have invested in, traded, or otherwise used cryptocurrency. The largest demographic of users by far are men aged 18-29, 43 percent of whom have used cryptocurrency, and overall, 31 percent of Americans of all genders have used cryptocurrency. This is not surprising – gaining direct exposure to cryptocurrency involves a degree of digital literacy beyond even millennials. The most interesting data Pew uncovered is that Asian, Black, and Hispanic adults are more likely than White adults to have used cryptocurrency. Minority groups are more predisposed to mistrust centralized government than the majority.

Share of U.S. adults that have invested in, traded or used a cryptocurrency

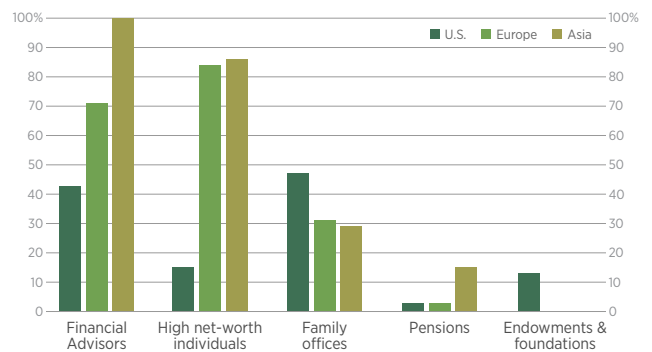


Source: Pew Research Center

The smart contract industry, one of the most critical aspects of DeFi applications, was a \$144.95 million *global* market in 2022. Verified Market Research [estimates](#) it will rise to \$770.52 million by 2028. That is a 24.55 percent compound annual growth rate over the next 7 years but compared to the size of Ethereum’s market cap of over \$250 billion (even after the recent crypto-swoon), that is a relatively modest projection. Indeed, the total value locked in DeFi was less than \$1

billion in 2020 but has [risen](#) to a whopping \$239 billion in 2022. In the words of AmberData, that is “the tip of the [proverbial](#) iceberg,” as the global financial services market is estimated to be worth more than \$23.3 trillion. Institutions are only starting to get wise. Just 5 percent of the total bitcoin supply is [held](#) by institutional-level players via custodial intermediaries. Large institutional crypto transactions surpassed retail as the biggest segment of DeFi [trade](#) by volume in Q4 2020, and [ac-cording](#) to PWC, the total AUM for crypto hedge funds almost doubled to \$4 billion from 2020 to 2021.

Cryptocurrency adoption by investor type, 2021



Source: Fidelity Institutional Digital Assets Survey

Disrupting the global financial services market is ambitious enough – but the real opportunity for DeFi applications lies beyond developed markets, where trust in centralized institutions and access to modern financial products are more accessible. According to the latest World Bank data, there was many as 1.7 billion unbanked individuals in the world – individuals without [access](#) to financial institutions or even with a mobile money provider. DeFi can bring modern finance to areas where there is none. The best and most ballyhooed early examples of this are countries like El Salvador and the Central African Republic adopting bitcoin as an official currency. These policies are not great examples because of how politically motivated they are. A better example is the Cardano network working with the Ethiopian government to [implement](#) a blockchain-based national ID system. Here, too, politics is obscuring Cardano’s goals – Ethiopia is mired in a civil war – but the willingness of developing nations to adopt DeFi technologies is a signpost for their adoption at a global level. It also belies the extent to which DeFi is much more than a simple cryptocurrency story.

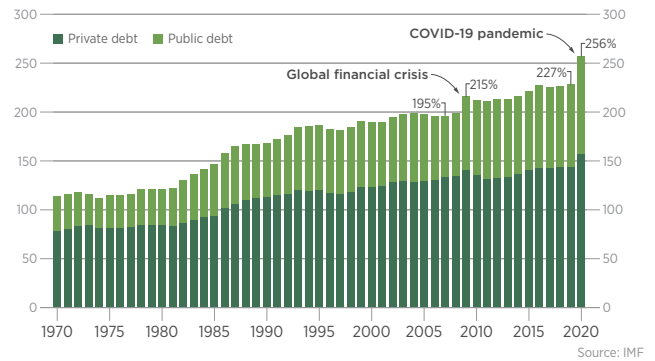


A REVOLUTION IN ITS INFANCY

Lastly, the global financial system is under significant strain, in part due to monetary policy decisions that have investors scouring for alternatives. Total global debt exceeded \$226 trillion in 2020 (or 256 percent of GDP), driven significantly higher by massive amounts of government stimulus in response to the COVID-19 pandemic. Due to the pandemic, global debt rose by 28 percentage points compared to the previous year, as governments borrowed to fund their stimulus programs. This debt orgy occurred following the longest bull market in U.S. history. When the U.S. Federal Reserve should have been raising interest rates, it was instead dispensing populist monetary, fiscal, and trade policies. As Marko Papic has predicted in his book *Geopolitical Alpha*, the remainder of the decade should feature more unorthodox fiscal and monetary policy, further fiscal easing, and even more fiscal stimulus. What this means in practical terms is currency debasement – a loss of faith in traditional stores of value and means of exchange. Whether in the dramatic weakening of the yen, the rush to gold, or the bubble in crypto assets, a lack of faith in government policies is leading to interest and adoption in financial services less exposed to governmental risk.

Despite the interest in DeFi and DeFi-adjacent assets, many of these technologies, platforms, and tokens are still in their infancy and dominated by passionate, early-adoption communities. As noted earlier, most of these assets are not even accessible to the average retail buyer. By definition, DeFi exists outside the traditional financial ecosystem. For those without significant tech fluency, it is difficult to acquire, hold, and stake DeFi assets for those unwilling or unable to develop the tech fluency to purchase and hold such assets in the current fractured, largely unregulated, and esoteric environment. Despite such a small percentage of Americans having traded or used cryptocurrency, recent polls have shown that between 38 and 53 percent of Americans think crypto could become the “future of finance.” That’s remarkable considering Americans enjoy access

Global debt-to-GDP ratio (debt as a % of GDP)



to the dollar, which is still the dominant global reserve currency and backed by the full faith and credit of the U.S. government. Investors are interested in crypto but don’t have the requisite ability or confidence to acquire DeFi assets.

Case in point: when the ProShares Bitcoin Strategy ETF (\$BITO, based on Bitcoin futures) launched in October 2021, it gobbled up over \$1 billion AUM in two days. The ETF does not actually offer investors direct access to Bitcoin due to SEC regulatory concerns, which also prevented similar funds from trying to launch cryptocurrency ETFs tied not to equities but to cryptocurrencies themselves for most of the last decade. But the surge in interest was telling: institutional and retail investors alike wanted a traditional product like an ETF they could purchase to gain exposure to the disruption and growth in the DeFi industry without having to set up a digital wallet, navigate a crypto exchange, and acquire the currency directly. Even Kiplinger – not exactly a scion of alternative investments – was advising its readers to buy into the crypto hype now that a traditional ETF offered exposure. The irony of course is that Bitcoin and DeFi in general offer more transparency than financial products that commoditize them into a digestible former for centralized finance consumers.



VALOUR: A LEAGUE OF THEIR OWN (US:DEFTF, CANADA: DEFI.NEO, FRANKFURT: GR:RMJR)

Until recently, DeFi was an “all-or-nothing” proposition.

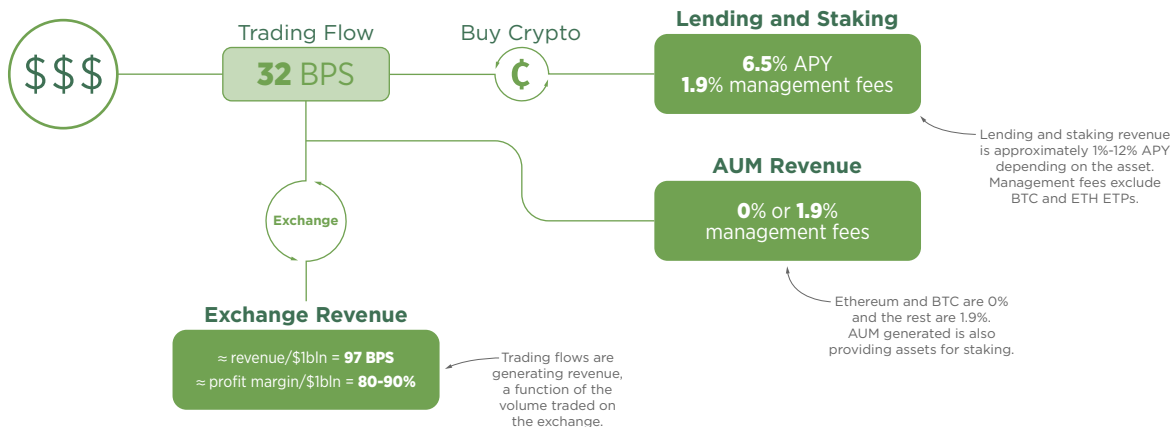
Even with the advent of crypto exchanges and a limited menu of ETFs, it is still difficult for investors to gain exposure to DeFi assets. Part of this is by design – central governments are skeptical of DeFi and especially of cryptocurrency. Some of this skepticism is warranted – central banks are concerned about financial stability, and an unregulated space like crypto that has enjoyed a boom even despite the recent pullback can generate instability that will affect the rest of the market. Governments however are also scared of the challenge to their legitimacy posed by DeFi, which in a certain sense aims to make government obsolete. Some countries, like China, have **banned** cryptocurrencies outright. Others, like the U.S., have dragged their heels on regulatory issues, setting unrealistic demands for creating traditional investment products with **exposure** to DeFi assets.

Enter Valour, a digital asset investment firm that enables traditional investors to invest in a diversified portfolio of digital assets across DeFi, cryptocurrency, blockchain, and Web 3.0. Valour wants to bridge the gap between traditional capital markets and decentralized finance. Valour is by no means the only company that wants to build a bridge between DeFi and CeFi (Centralized Finance). Grayscale and ProShares offer crypto-linked investment products but not direct exposure to the underlying assets.

Companies like LiquidMeta and Immutable Holdings share the same goal (i.e., to serve as a bridge between traditional finance, DeFi and Web 3.0) as Valour, either by offering a platform to deploy capital at scale or by taking positions in companies with DeFi exposure.

Even so, it would be incorrect to say these are direct competitors of Valour. Though they share the same basic goal as Valour, their approach to achieving the goal is markedly different. The core of Valour’s strategy is a suite of Exchange Traded Products (ETPs) that track the value of an underlying digital asset, DeFi protocol, or basket of protocols. When a user buys an ETP certificate via Valour, the company uses the proceeds to buy the protocol on a crypto exchange. Valour then stakes or lends the underlying digital assets, which yields between 1 and 12 percent depending on the asset. Valour charges a 1.9 percent management fee for assets under management, though it has already eliminated this fee for its Bitcoin and Ethereum ETP product and aims to drop all its management fees down to zero as it scales additional assets under management. The only company that replicates Valour’s ETP strategy is 21Shares, a Swiss-based company with a regulatory approval stake and a range of ETP products, but 21Shares only provides exposure to cryptocurrency rather than to DeFi as a whole and lacks Valour’s more targeted venture exposure and infrastructure potential.

| Valour earns revenue on AUM, Trading Flow and Lending and Staking



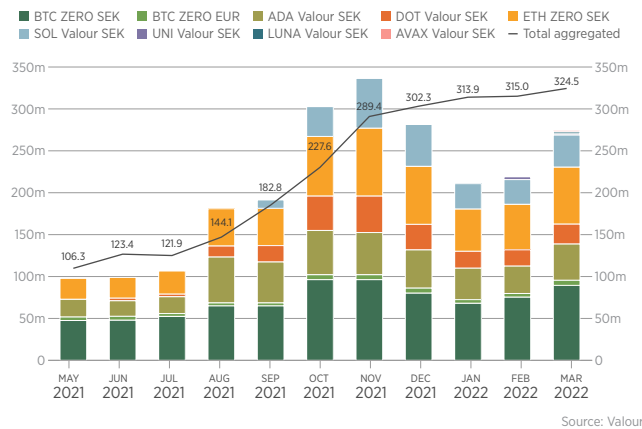
Source: Valour



VALOUR: A LEAGUE OF THEIR OWN

This is a brutally simple business model and it is effectively satisfying demand in the market. In May 2021, Valour had the equivalent of \$106.3 million AUM, mostly in Bitcoin, with smaller holdings in Ethereum and ADA. By March 2022, AUM had tripled to \$324.5 million. Moreover, Valour's holdings have diversified. Bitcoin and Ethereum exposure are relatively equal, with ADA, Avalanche, Sol, and Dot all enjoying major positions. Net sales are doubling on a monthly basis. Valour is also working on new ETPs for Matic, as well as an index of the top 5 DeFi-specific digital assets and a Metaverse/Gaming ETP that will offer exposure across that sector via a single investment.

Valour ETPs AUM and Net Sales (USD)



All this growth has occurred without SEC approval or the ability to sell within the United States. Valour's ETPs are listed on the Nordic Growth Market, Euronext and the Frankfurt Stock Exchange, which means access requires an account with a bank or broker with access to those exchanges. Considering the demonstrated investment interest in DeFi in the U.S., the availability of Valour's ETPs to a broader market, enabling traditional investors to gain exposure via their current CeFi structures, could have a similar effect as ProShares experienced when it launched its Bitcoin futures ETF.

This, of course, is easier said than done, and as explained in the risk section of this report, one of the key downside scenarios for Valour is continued recalcitrance from the U.S. and other government regulatory agencies. The recent swoon in crypto, driven by the Luna-Terra fiasco, will only increase scrutiny in this regard, but even so, it is unlikely the U.S. and other Western democracies will ban cryptocurrencies and DeFi outright as China and other authoritarian governments are.

Valour also has additional lines of business. While the bulk of Valour's revenue will come from monetizing direct access to digital assets for traditional investors, Valour is also putting its money where its products are. Via Valour Infrastructure, the company is offering independent governance for decentralized networks to run independent nodes. To that end, Valour has secured a partnership with Bison Trails to provide secure node infrastructure. This may sound daunting to the traditional investor, as most things in the DeFi space can due to the jargon of the industry, but in layman's terms: Valour provides the necessary infrastructure for protocols by running nodes and collecting a fee for each transaction on the network. Valour is not just creating ETPs for established protocols: it is investing in and providing infrastructure for decentralization in general.

Lastly, via Valour Ventures, the company is investing in a portfolio of private investments that are connecting to DeFi and the evolution of the digital economy. The most notable of these currently is SEBA Bank, a fully-regulated Swiss bank that offers digital custody solutions for liquid crypto or digital assets. Since Valour's ETPs are not available to many investors outside Europe, the company is essentially offering a call-option on the DeFi sector in general via its own stock. While the core of Valour's revenue is generated from enabling traditional investors to access cryptocurrency and other DeFi protocols via their existing bank or brokerage, the company itself is involved well beyond cryptocurrency, investing directly in companies using blockchain and DLT to disrupt the financial services industry.



KEY RISKS

Valour is at the forefront of an extremely disruptive technology that will change everything from traditional financial services to digital payments. Because the DeFi industry is at such an early stage of its development, however, there are significant downside risks to its strategy, as well as a significant amount of volatility baked into the DeFi industry in general.

1. Regulatory risk

The first and most significant of these is regulatory risk, which has already negatively affected Valour's ability to scale its ETPs by offering them to U.S. investors. The traditional investors Valour's ETPs target may pass on Valour stock for the same reason they do not want to buy cryptocurrencies themselves – they are looking to dip their toes in the water first rather than dive in headfirst. Decentralized finance challenges the authority of powerful vested interests within the current financial system and even the legitimacy of governments and traditional currencies. This is a “known unknown” – there *will* be aggressive governmental and regulatory backlash to DeFi in general, but it is impossible to predict how far and in what form the backlash could undermine a company like Valour's business model.

2. Price volatility

Second, as with any emerging technology, price volatility can be extreme, and many companies/protocols/digital assets will go to zero as the best protocols consolidate competitive space within the industry. We have just witnessed a perfect example with stablecoins in the TerraUSD/Luna debacle where \$60B went up in a virtual puff of smoke. In addition, speculative capital spends and is chasing the same returns that have traditional investors looking hard at DeFi. Governments around the world are now principally concerned with combatting inflation, and rising interest rates will offer traditional investors opportunities to generate significant yield from safer investments for the first time since before the 2008 financial crisis. The increasing cost of capital will be challenging for growth assets. The positive is that protocols and companies that have flourished in the artificially friendly environment of recent years will be revealed, and the DeFi industry, in general, will emerge stronger, but the path to maturation for DeFi will entail swoons like the crypto-price collapse of May 2022.

3. Cybersecurity

Lastly, cybersecurity is a major concern. Malicious actors can and will attack or attempt to steal digital assets, which can affect companies like Valour directly or via third-party custodians of digital assets. As innovation increases, new threats evolve, and Valour, like any company in an ecosystem this novel and volatile, must maintain a high level of security and preparedness. As with regulatory challenges, this is a “known unknown.” The fixed costs necessary for security today may increase markedly in the coming years based on the nature of the risks. (The opposite is also true – security risks could decline as blockchain technology becomes more established and DeFi protocols better developed.) According to Chainalysis, criminal hackers stole \$3.2 billion in cryptocurrency. In March 2022, a group tied to North Korea stole \$620 worth of Ethereum in one fell swoop.



CONCLUSIONS

Despite the material risks, the macro opportunity is clear. Decentralized finance and digital assets pose disruptive challenges to traditional finance.

In developed markets, inflation, debt, and debasement of fiat currency have investors looking for alternatives to traditional finance to preserve and grow wealth. In undeveloped markets, billions lack access to modern finance due to weak governance and lack of infrastructure – and DeFi offers a way out.

The most significant barrier to broader DeFi adoption is most investors feel overwhelmed or uneducated about what “DeFi” is and means. As DeFi becomes less esoteric, traditional investors are hungry to gain exposure to DeFi while remaining wary of a still largely unregulated, unlisted, and volatile space.

Valour is positioning itself as a trusted gatekeeper between DeFi and traditional finance, allowing investors skeptical of DeFi or unwilling to do the work of learning how to gain direct exposure to do just that via avenues to which they are accustomed. In addition, with a steady stream of revenue via its ETPs and a fixed cost structure generated by its investment products, Valour offers exposure to cryptocurrencies and DeFi protocols while serving as a de facto call option on the macro opportunity presented by DeFi in general for those that cannot access DeFi ETPs directly.

This is a unique approach to bridging the gap between DeFi and CeFi, and considering the size of the opportunity and the dearth of competitors, Valour has carved a compelling niche for itself to grow as interest and investment in DeFi accelerates.





PERCH PERSPECTIVES

5900 BALCONES DRIVE, STE. 4015
AUSTIN, TX | 78731

[P] +1.512.900.8457
[E] INFO@PERCHPERSPECTIVES.COM

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