

Blockchain Transferred Funds (BTFs): The New Frontier for Investment Funds

The Evolution of Investment Vehicles



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1

Executive Summary

Innovative technologies have impacted and advanced many industries, yet their integration into financial services products, processes, and infrastructure has been less frequent. Blockchain technology is initiating a “changing of the guard,” presenting a breakthrough mechanism for the financial industry to modernize. This new technology’s promise of greater accessibility, increased liquidity, elimination of intermediaries, real-time settlement, and fractional ownership are significant improvements in and of themselves. Additionally, experience shows that applying new technology to an industry also leads to unforeseen innovations and the development of new utility opportunities. As such, we believe the next iteration of our financial system should combine the best of traditional finance and the transformative power of blockchain to achieve optimal performance, issuance, and investment processes.

The evolution of pooled investment vehicles from mutual funds to exchange traded funds (ETFs) demonstrates how advancements in technology enabled the development of more efficient investment products. However, while ETFs have become a leading financial product, combining their core features with blockchain technology creates a new framework to solve some of the industry’s most salient challenges: transferability and time. Arca has developed a solution to incorporate blockchain technology into the traditional pooled investment fund structure, regulated under The Investment Company Act of 1940 (‘40 Act), with the goal of driving a paradigm shift in financial services. Developed over 2 years, Arca Labs—Arca’s innovation division—created the blockchain transferred fund (BTF)—the first registered ‘40 Act fund to issue shares as digital asset securities.

This paper explores the historical, present, and future state of investment vehicles as a means of contextualizing how blockchain-powered products and services can free the financial system from limiting constructs to promote a more powerful, efficient, and democratized framework. We believe the creation of the novel BTF structure blazes a trail for other registered investment vehicles to be launched and tokenized on-chain and positions BTFs as the next generation of investment funds.

The finance industry is at a critical inflection point: traditional finance and investment products have not kept pace with technological developments and consumer behavior, but for the first time, a blockchain-based solution presents an opportunity for the industry to shepherd in a revolutionary new era.

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Introduction

Securities markets are vast and complex ecosystems of interconnected participants, regulators, and service providers. Because the parties depend on each other to maintain a harmonious balance, the evolution of investment structures and funds is often sluggish, and it is challenging to effect substantive change. The global institutional asset management industry is a \$100 trillion behemoth that has traditionally been impervious to new technology adoption mainly due to the significant advantage of legacy technology and strict regulation.¹

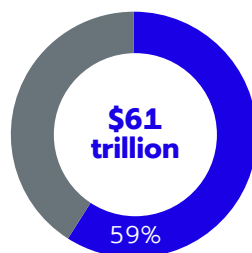
But embedded in those challenges lies tremendous opportunity for those who seize it. Early adopters have reaped the rewards on the occasions that innovation has emerged, and notable paradigm shifts have propelled the industry forward and shaped the investment landscape for decades to come.

The global institutional asset management industry is a **\$100 trillion** behemoth.

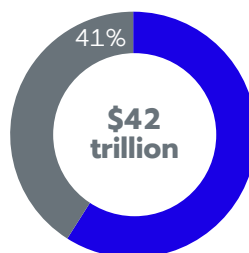
One such shift was the early 20th-century idea of pooling capital for investment, which led to the advent of mutual funds. This relatively simple concept transformed the way the world invested. The traditional mutual fund reigned supreme until the late 1980s when the need for greater liquidity and the ability to track indexes with computer technology gave rise to exchange traded funds (ETFs), sparking another dramatic evolution in the investment landscape. Today, innovators have introduced the next iteration of financial vehicles by incorporating blockchain technology into the traditional regulated pooled fund structure: the blockchain transferred fund (BTF). ETFs and BTFs are links of the same evolutionary chain, building on the structures that preceded them.

The combination of public blockchains, permissioned blockchains, and distributed ledger technology (DLT) creates a new technological framework that we believe will revolutionize the global financial system and underpin all industries in the future. Blockchain technology will enable advancements in industries like finance, insurance, and entertainment, addressing shortcomings from archaic architecture and antiquated processes. In addition, the decentralized nature of blockchain and its ability to offer greater transparency, traceability, and speed without friction from intermediaries enables more agile innovation.

The Asset Management Industry



Institutional Investments



Retail Portfolios

North America was seen as the main driver of asset management growth and held the lion's share of assets at **\$49 trillion**.¹

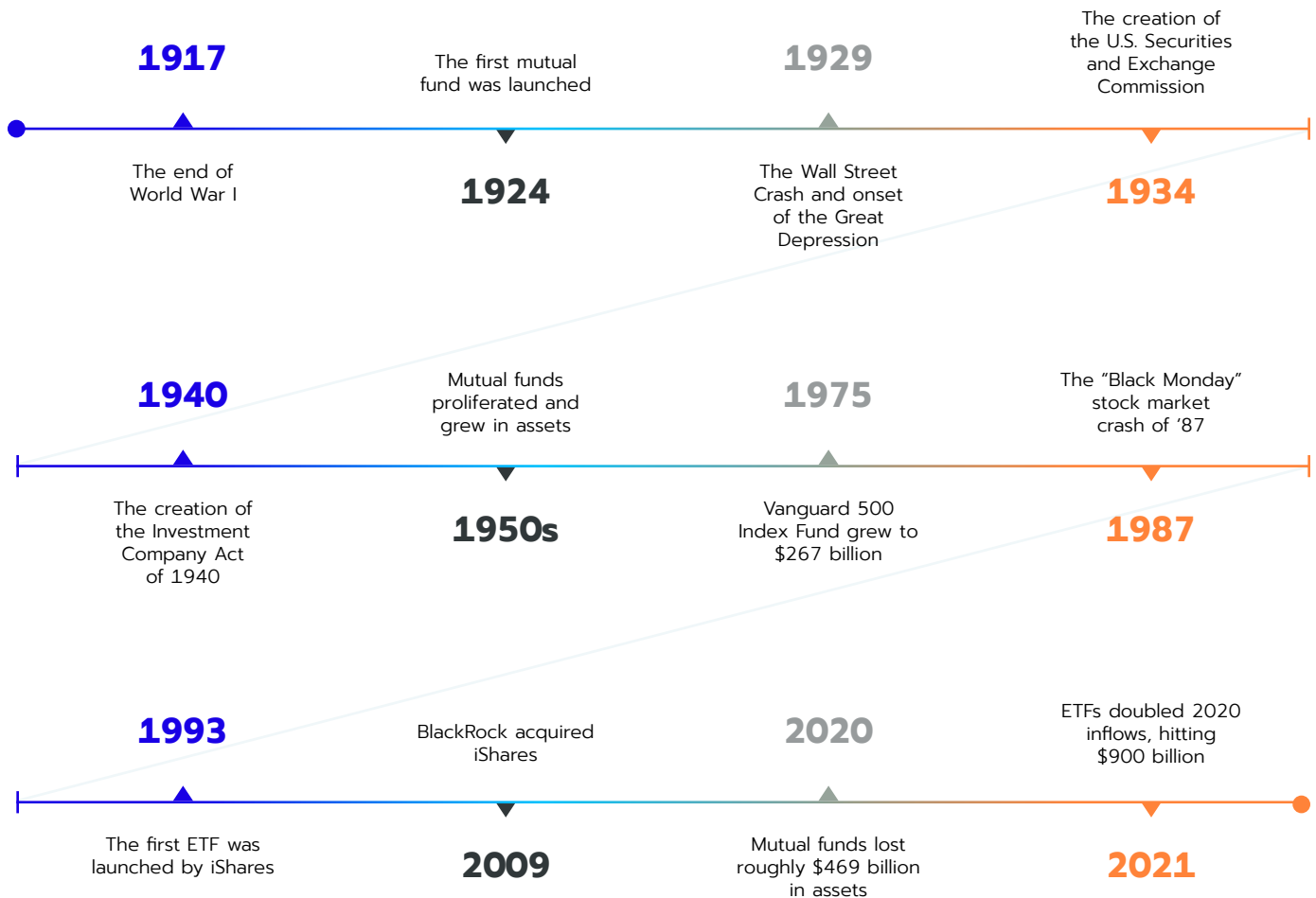
Note. The data are from "The Asset Management Industry Has Surpassed \$100 Trillion – And There's Still Room to Grow" by G. Chung, 2021, Institutional Investor.

3

A Century of Investment Vehicles

The odyssey of the investment fund started in 1924 with the birth of mutual funds and the arrival of professional asset management. After the societal and economic trauma of World War I (1914-1917), the global economy contracted, and confidence in financial markets shrank. The introduction of the first open-end mutual fund, Massachusetts Investors Trust, allowed investors to create and redeem shares regularly, buying and selling at net asset value (NAV)—a novel concept at the time. Presently, the fund is still widely recognized as one of the world’s most successful and longest-running mutual funds. As prosperity fueled economic growth, the Roaring Twenties were characterized by excess and speculation in the unregulated securities market. The stock market crash of 1929 and the onset of The Great Depression highlighted the dangers of unregulated markets and the attractive features of an open-end pooled investment vehicle—a low-cost method of investing in a balanced financial product that provided liquidity at NAV rather than at a discount.

Investment Fund Milestones



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Regulatory Oversight of Investment Funds



The Securities and Exchange Act of 1934 created the Securities and Exchange Commission (SEC) and gave the agency broad authority to register, regulate, and oversee all aspects of the securities industry. Investment funds are regulated under the Investment Company Act of 1940 (referred to hereafter as “the ‘40 Act”), which regulates the investing and trading activities of pooled investment vehicles—mutual funds, closed-end funds, and ETFs.

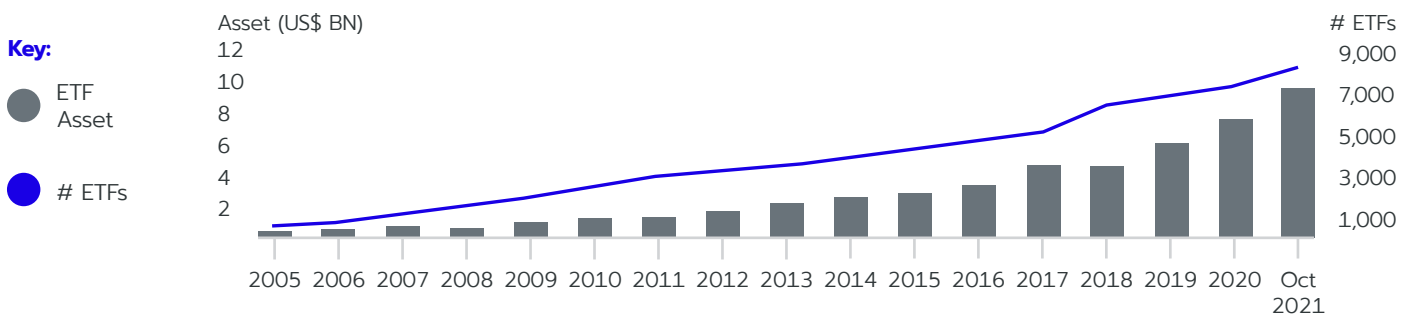
Mutual funds gained momentum after the creation of the SEC and the ‘40 Act—they were a new regulatory body and set of rules that offered investors clarity and protection around securities offerings. When the American economy recovered and started thriving in the 1950s, capital flooded into the financial markets; mutual funds proliferated and grew in assets. In addition to their daily liquidity, mutual funds enabled individual investors to realize better returns generated through diversification, operational efficiency, and professional management.

The next major innovation in pooled investment vehicles was the exchange traded fund. Interestingly, as the creation of the mutual fund was informed by a financial crisis, the ETF structure was born out of the 1987 stock market crash. Once again, investors suffered significant losses; this time, it was not due to global conflict or misguided business practices, but an unfortunate repercussion of the equity markets’ response to computer program-driven trading and the massive, simultaneous request for liquidity. Referred to as “Black Monday,” the SEC identified the cause and called for the creation of a security that represented the broad market—similar to futures contracts on the S&P 500 Index, but a real-time version for the equities market.

The ETF—an open-end, exchange traded investment vehicle—evolved from the mutual fund’s commingled investment framework as a new security that birthed an entire industry. ETFs offer a professionally managed pooled investment product with lower fees, accessibility, transparency, intraday liquidity, tax advantages, and better-targeted securities baskets that can represent the broad market. It took nearly 2 decades for ETFs to achieve widespread adoption because skeptics challenged their development, regulatory approval took 5 years, and market adoption took another 10 years. Ultimately, the ETF enhanced the pooled investment structure and resolved many constraints of the original investment funds. Today, it is a \$9 trillion industry.²

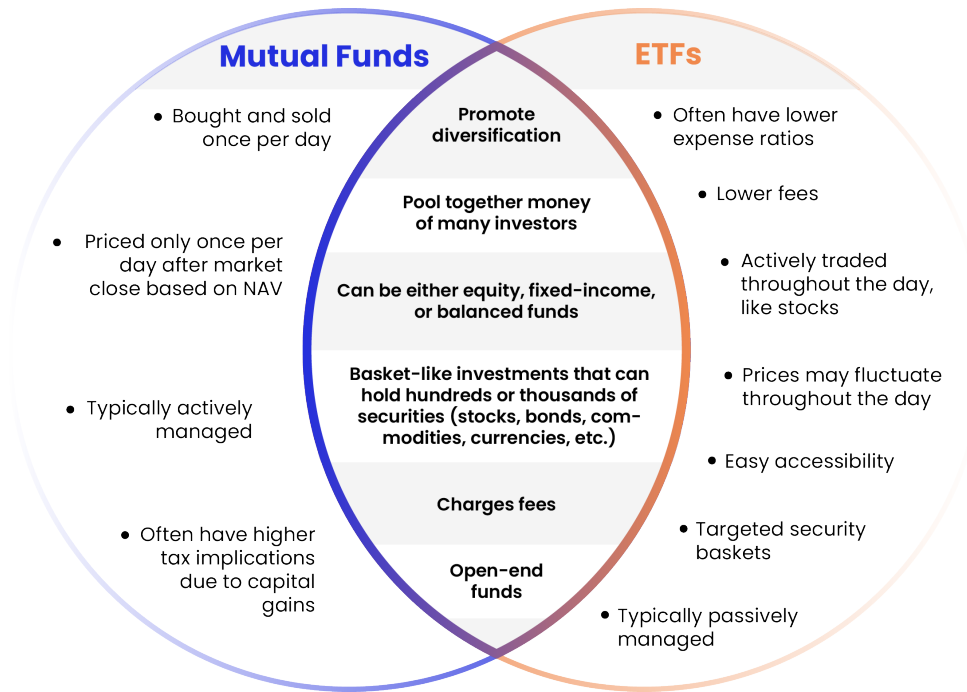
Global ETF Growth

Global ETF assets as of the end of October 2021³



Source: ETFIGI

Mutual Fund and ETF Comparison



Source: Ally⁴

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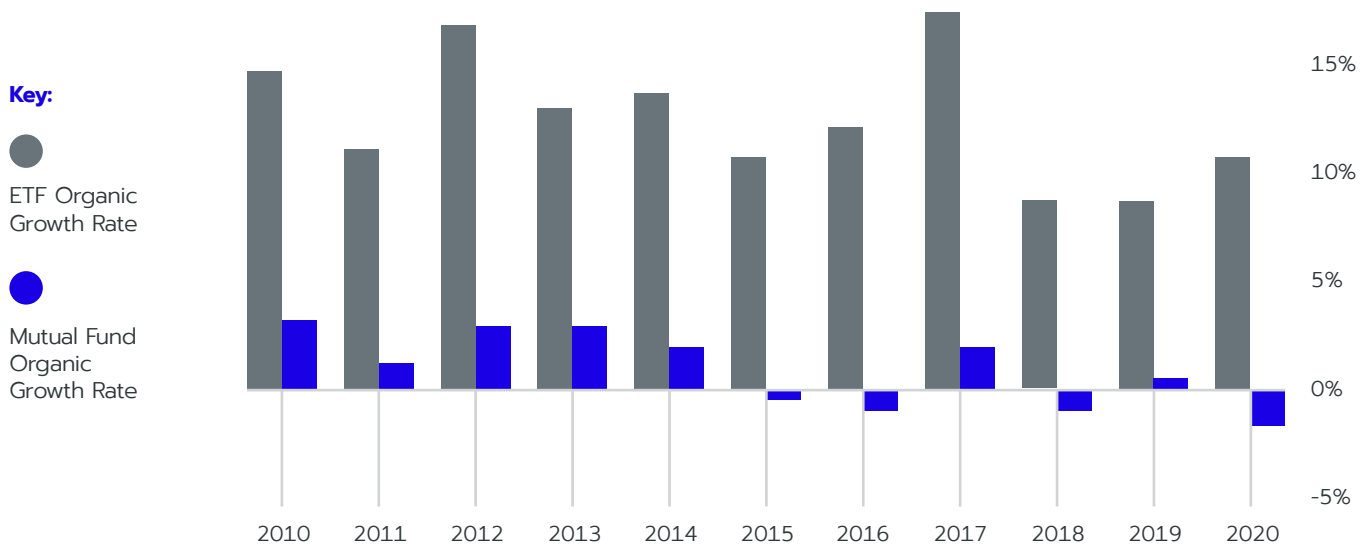
ETF Dominance

The first ETF was launched in 1993 and is recognized today as one of the most significant financial disruptions in the last half-century. ETFs have spread virally across investment portfolios in the past decade, with massive inflows into ETFs weekly. In March of 2021, \$71 billion flowed into U.S.-listed ETFs in a single week.⁵ Today, ETF inflows nearly doubled those of 2020 (\$507.4 billion), hitting an annual inflow of over \$900 billion.^{6,7} These gains stand in stark contrast to mutual funds, which lost roughly -\$469 billion in assets in 2020.⁸ ETFs continue to assert their dominance in pooled fund strategies.

Despite their current prevalence, ETFs initially failed to gain immediate traction. Inertia and the embedded distribution fees of mutual funds initially hindered growth, as advisors did not readily recognize the potential of ETFs. Even Vanguard’s Jack Bogle initially resisted adopting the ETF opportunity, criticizing the new product for being rooted in self-serving objectives for the exchange business and pegging it as detrimental to investors.⁹ Vanguard, then the leader of the investment fund sector, championed index mutual fund products with their core Vanguard 500 Index Fund that grew from an initial \$11 million in 1975 to \$267 billion, becoming the largest fund in the world by 2013.^{10,11} Even so, Vanguard has since been surpassed by BlackRock—who acquired ETF pioneer iShares from Barclays in 2009 and is now the largest issuer of ETFs, with \$2.2 trillion in AUM.¹² The delay in Vanguard’s adoption of ETFs enabled first-movers like iShares to become one of today’s market leaders. The structural advantages of the ETF—low fees and intraday liquidity—have continued to attract investors and their capital, becoming especially apparent over the last decade. The growth rate of ETFs has held firm above 10% while mutual funds’ growth fell consistently below 5%—even dipping into negative growth for multiple years.

A Decade of Dominance

Investors pour money into ETFs while mutual funds stagnate¹³



Source: Bloomberg Quint

ETFs provide simplified access to a balanced exposure of various asset classes, specialized sectors, and investment strategies in a ‘supermarket’ approach. Over the past 2 decades, ETFs have expanded to offer hundreds of variations, most originating and gaining popularity only in the last few years, like thematic and ESG incorporated funds.¹⁴ The versatility of exchange traded funds includes index ETFs, commodity ETFs, inverse ETFs, industry ETFs, actively managed ETFs, foreign market ETFs, bond ETFs, investment style ETFs, and debt ETFs, suitable for almost all investment profiles. Presently, exchange traded funds continue to grow in product variation, size, and functionality, demonstrating the untold opportunities.

ETF Types

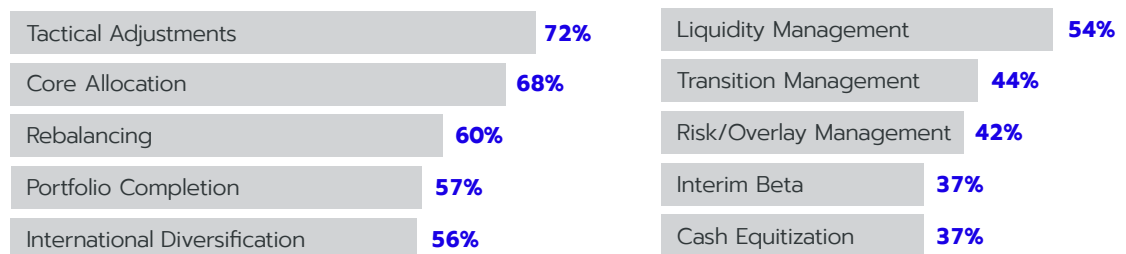


Note. Adapted from "Exchange TRADE Funds (ETF): The definitive guide" by S. Rana, 2018, Medium.¹⁵

The flexible structure of ETFs broadens investor choice, which allows issuers to create diverse products. As such, financial institutions have begun to consider the application of ETFs as a tool for internal management, expanding their utility for scalability and collateral management. However, ETFs still have certain restraints, such as third-party intermediary fees and marketplace limitations. Enhancing the pooled investment vehicle with new technologies promotes further expansion, utility, and elimination of current deficiencies.

ETF Application

How institutions use ETFs¹⁶



Source: Visual Capitalist

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The Blockchain Transferred Fund (BTF): A New Model Emerges

While ETFs have become the financial product of choice, integrating blockchain technology into a pooled investment structure offers the potential to create a financial product that combines the benefits of an ETF with the advantages of blockchain technology. Technology has reshaped much of our world into an interconnected, accessible, digital universe, but the financial industry and its investment products have often lagged. Regulatory moats, entrenched and co-dependent systems, and the high stakes involved with enormous sums of money hinder agile innovation. Blockchain technology introduces a compelling and disruptive value proposition that gives the industry the tools and the impetus to improve upon traditional, antiquated methods.

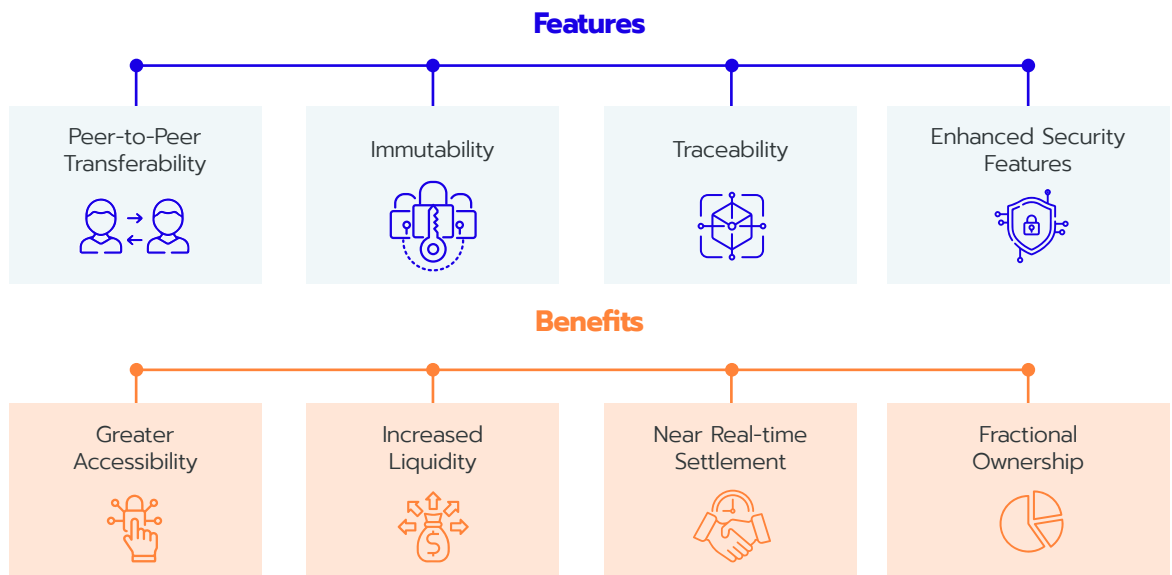
As ETFs improved on the daily 4 pm market close and liquidity limitations of mutual funds, similarly, new technology has introduced a means to improve the structural constraints of ETFs.



Enter: the blockchain transferred fund (BTF) – a pooled investment fund registered under the '40 Act that issues its shares on the blockchain. These shares represent ownership in the fund's portfolio and are digital asset securities that can be issued, transferred, and redeemed entirely via a blockchain.

Blockchain's decentralized and distributed technology offers peer-to-peer transferability, traceability, immutability, and enhanced security features that transform the investment experience with greater accessibility, increased liquidity, near real-time settlement, and fractional ownership.

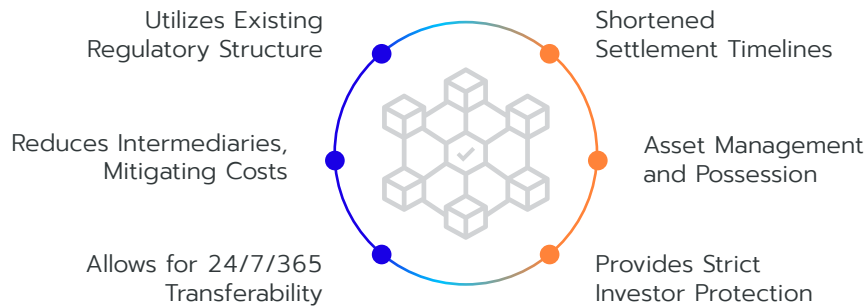
Blockchain's Decentralized and Distributed Technology



Source: Arca Labs¹⁷

The BTF integrates blockchain technology into the structure that underpins ETFs; it enhances the preceding framework and offers a more operationally efficient product with increased time and cost savings. Additionally, BTFs can offer more than just a new investment opportunity; the digital asset security shares present the ability to reimagine existing processes and improve outdated operational methods. Blockchain's peer-to-peer functionality enables the BTF's digital asset security to be held by the investor rather than a third-party intermediary. This unique quality radically shifts industry perspectives on asset ownership and has the potential to change investment behavior and market strategies.

Blockchain Transferred Fund Advantages



Source: Arca Labs¹⁷

Following the trajectory of how ETFs built upon the mutual fund structure, we believe the next iteration of '40 Act products will similarly transform the investment landscape. Akin to the evolution of phones (telephones granted instant communication, cell phones provided remote accessibility, and smartphones enabled productivity and further innovation), blockchain and distributed ledgers can build on previous financial instruments to offer new efficiencies and unique functionalities. Beyond the primary objective of creating financial products to maximize investor returns, countless undiscovered opportunities exist for additional utility and use cases. Just as the smartphone transcended the telephone's original intended uses and transformed photography, navigation, and software creation and distribution, financial institutions look for additional applications for their current financial products.¹⁸ One such example is that financial institutions are investigating how they can utilize ETFs for other workflows in collateral and treasury management applications. The unanticipated outcomes of technology can far outweigh the anticipated ones.

Truly innovative technologies profoundly challenge our concept of utility and stimulate previously unimagined possibilities. The idea of decentralizing our centralized world is a fundamental shift that has the potential to revolutionize how we use financial products.



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What Are Digital Asset Securities?

One of the primary structural innovations of the BTF is that shares of the fund are issued as digital asset securities.

Digital asset securities represent an ownership stake in real-world assets that already have value, where ownership is recorded on a blockchain, such as:



Real Estate



A Car

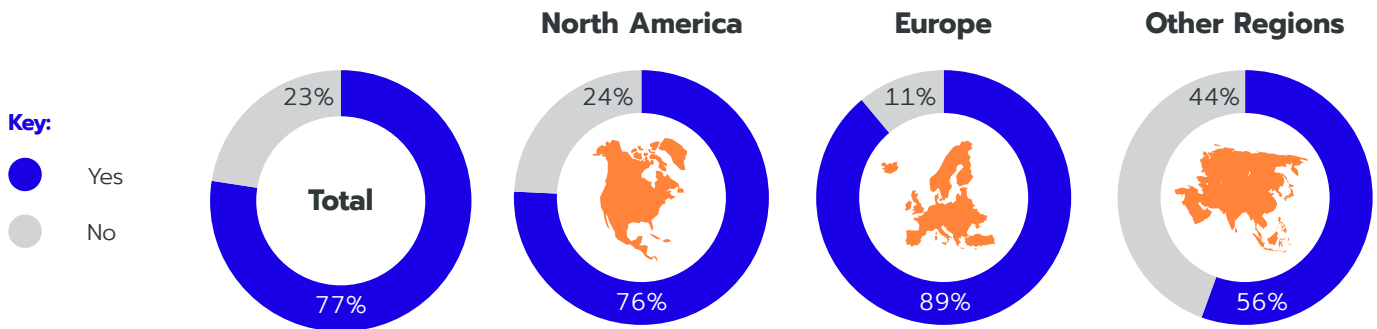


Corporate Stock

Initially known as security tokens, they are digital representations of fractional ownership interests in an underlying asset or company that can move freely among KYC/AML-approved investors at the asset owner’s discretion. Digital asset securities must follow prescribed purchase and transfer guidelines and are subject to jurisdictional securities law and applicable regulation.

According to The Future of Securities: A Digital Asset Securities Study conducted by Coalition Greenwich on behalf of Arca Labs in 2021, 77% of respondents across all global regions agreed that most securities would be digitized and settled on a blockchain in 5-10 years. The belief was most pronounced in Europe, where 89% agreed.¹⁹

Will Most Securities Be Digitized and Settled on a Blockchain in 5-10 years?



Source: Arca Labs¹⁹
Other regions = Mostly Asia Pacific

Blockchain technology can revolutionize the securities industry. Like traditional securities, tokenized securities abide by the conventional regulatory oversight, reporting requirements, and strong compliance mandates prescribed by the '40 Act that investors are accustomed to, encouraging further investment confidence in the BTF structure. Additionally, the BTF delivers the enhanced benefits that blockchain enables.

'40 Act Traditional Regulatory Requirements

BTF Added Benefits

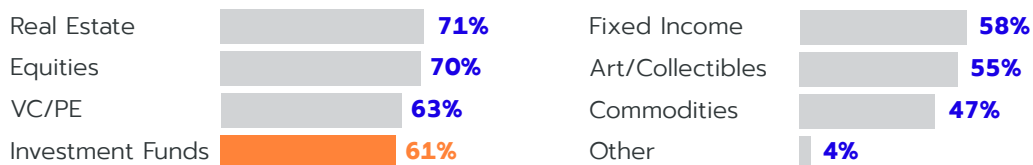
| | | | |
|---|---|---|--|
| <ul style="list-style-type: none"> • Assets held in a regulated trust • An independent auditor, administrator, and board of trustees • Mandatory reporting of annual audited financials, semi-annual reports, trade confirmations, monthly account statements, daily NAV, and SEC filings on material events | + | <ul style="list-style-type: none"> + Immutable record-keeping + Automated execution + Programmable security/fund registration requirements + Faster settlement + Fractionalization | <ul style="list-style-type: none"> + Ability to freeze, cancel, or replace lost or compromised tokens + Lower fees due to the elimination of unnecessary intermediaries + Asset ownership and history transparency + Peer-to-peer transference |
|---|---|---|--|

Source: Arca Labs¹⁷

There are countless securities and investment products in the traditional financial world, providing an expansive landscape for blockchain enablement. One of the most highly anticipated use cases for the convergence of blockchain and financial products is the investment fund. In the survey mentioned above, 61% of participants wanted to see investment funds transferred on the blockchain.

Other Tokenized Assets Represented as Digital Asset Securities

Real estate and equities are survey respondents' top 2 choices to be represented as digital asset securities and transferred on the blockchain.¹⁹

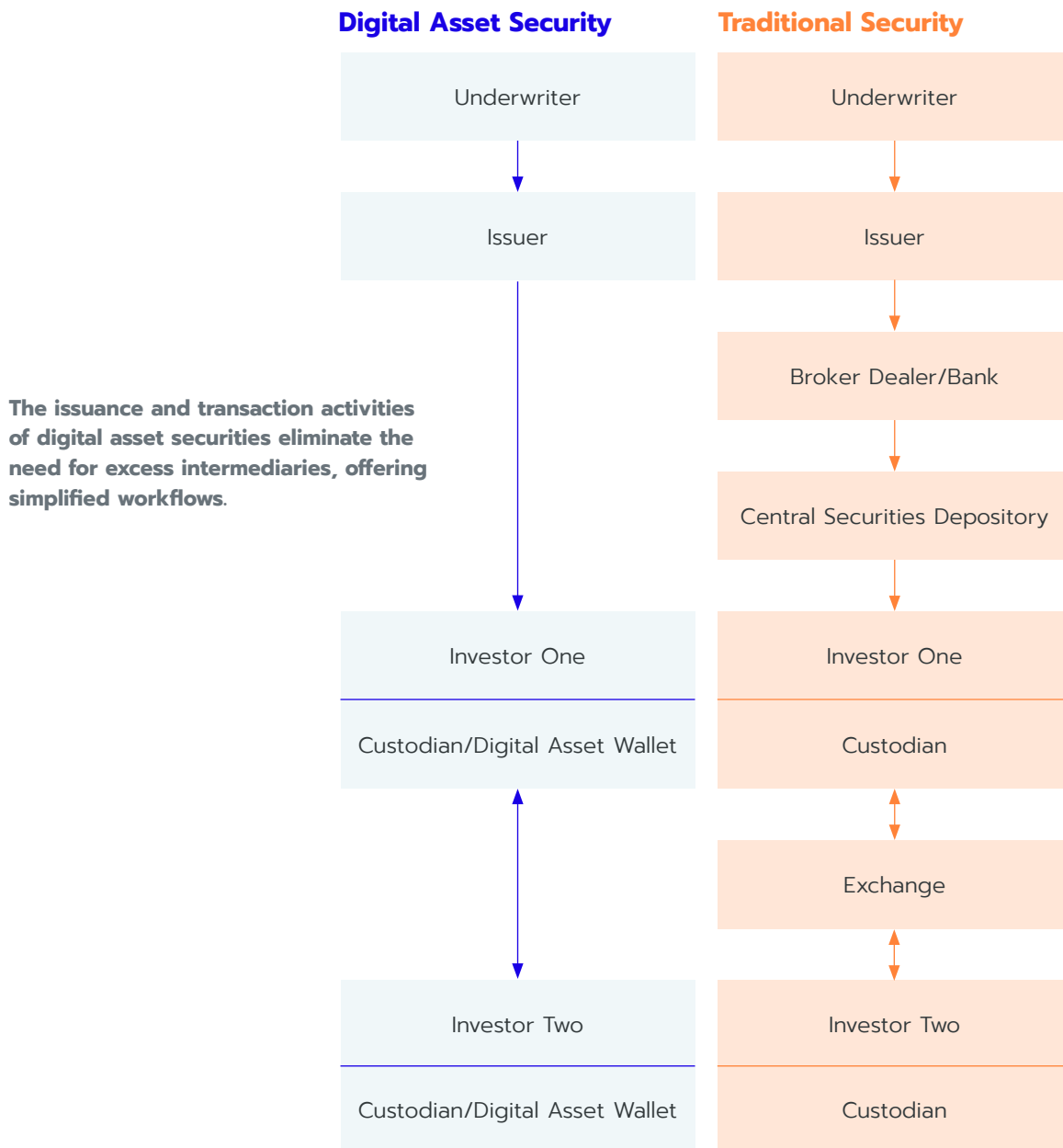


Source: Arca Labs

ETFs depend on intermediaries like issuers, broker dealers, and exchanges for product issuance, investor verification, and investment purchase and sale. Investors are obligated to disclose KYC/AML financial data for background verification; the exchange and its team of service providers then return an electronic representation of the purchased asset. The investor has given up control of their data and transferred capital without gaining possession of an asset—instead, they have a legal representation of ownership. This solution was satisfactory in the early '90s when an electronic representation of an asset was advanced compared to previous snail-mail certificates.

In comparison, a registered fund that issues its shares as digital asset securities via a blockchain gives investors newfound freedoms: ownership of the underlying fund through a tokenized share and the ability to transfer the asset to any KYC/AML-approved investor at any time, outside of the surveillance of an exchange or trading platform.

Security Issuance and Transaction Process

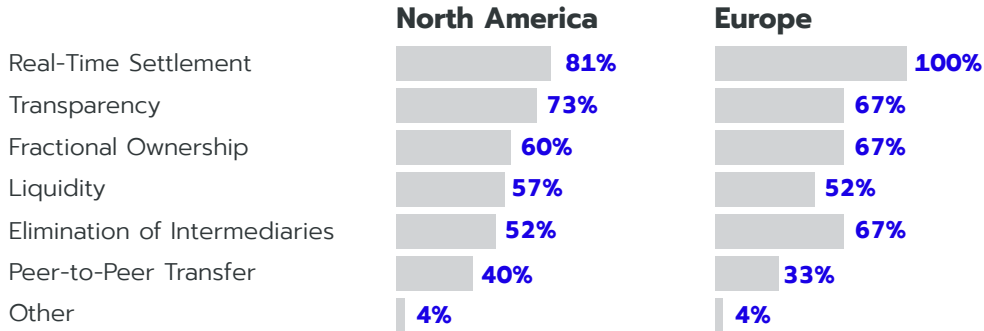


Source: Arca Labs²⁰

According to the Arca Labs digital asset securities study, real-time settlement and transparency are the most commonly cited benefits of blockchain-based settlement globally, as stated by knowledgeable professionals, investors, and technology builders.

Key Benefits of Blockchain-Based Settlement for Digital Asset Securities

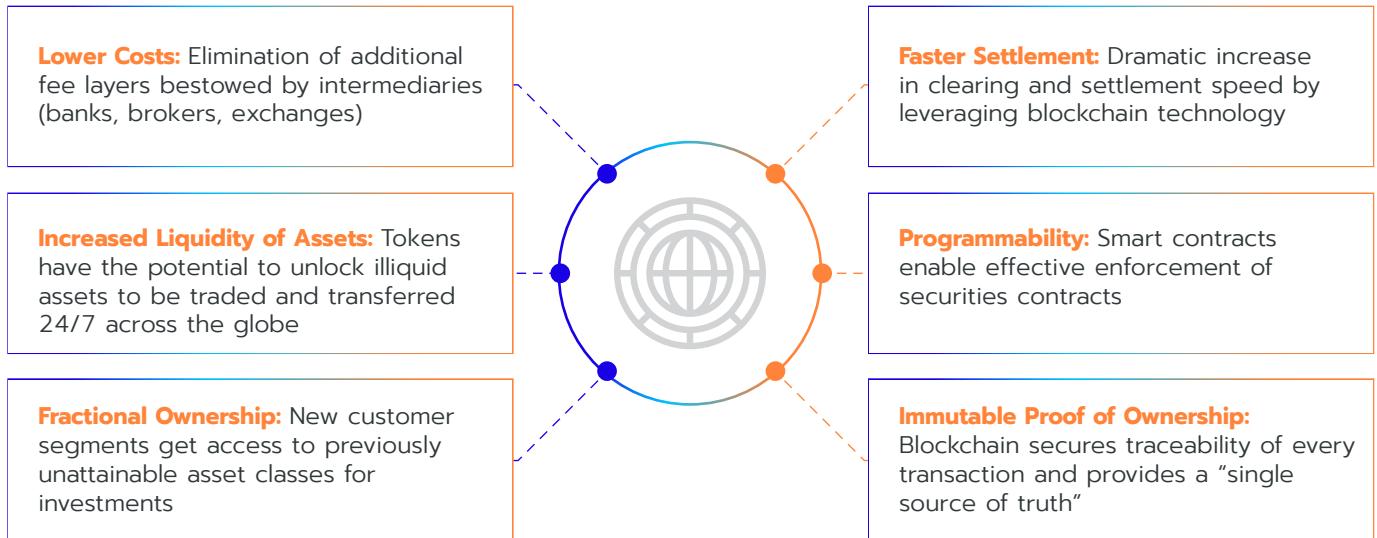
North American and European respondents agree that real-time settlement and transparency are top benefits¹⁹



Source: Arca Labs

The potential benefits of tokenizing real-world assets are becoming more widely understood. A wide array of financial assets, such as venture capital, commercial real estate, precious metals, collectibles, and even equities and bonds can be tokenized into digital asset securities. We share the sentiments of the survey participants—that the tokenization of securities is inevitable and will happen within the foreseeable future. This monumental shift toward harnessing the potential power of blockchain can reshape the trajectory of investment funds and financial services.

Digital Asset Security Opportunity: Tokenization Benefits



Note. Adapted from "Wave Financial + TQ Tezos: State of Digital Securities" by Wave Financial + TQ Tezos, 2020, Slideshare.²¹



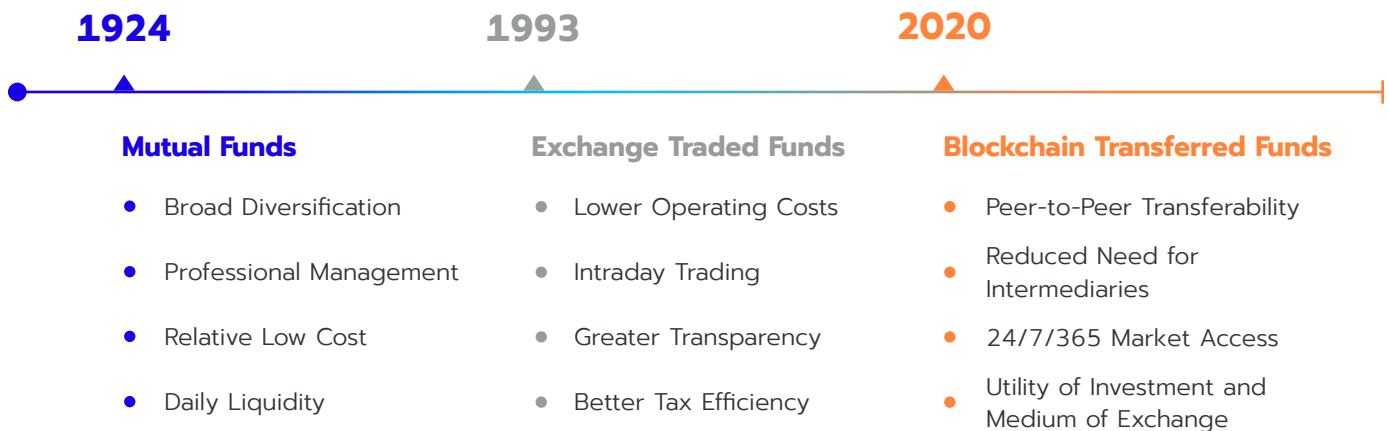
Comparing Pooled Investment Structures

Mutual funds, exchange traded funds, and blockchain transferred funds are all varying investment structures that contain a portfolio of assets within a “wrapper.” Each structure is created differently with distinct advantages and drawbacks, but they all benefit from adaptability. ETFs have become the dominant pooled investment structure in today’s market due to the incredibly flexible nature of what can be put inside. A financial product that improves on these capabilities, allowing further liquidity with 24/7/365 investor-to-investor transfer and near-instant settlement, may have the ability to overtake mutual funds and ETFs in market share.

BTFs introduce expanded benefits that potentially help eliminate many unnecessary intermediaries, which reduces counterparty risk and third-party dependencies. In doing so, many of the traditional investment vehicle workflows need to be re-engineered to facilitate enhanced liquidity and ownership control. Displacing banks, broker-dealers, and central depositories requires introducing an issuance platform to fulfill the creation, issuance, and redemption of a digital asset security. Digital asset securities provide the investor with greater choice related to custody (self or third-party), transaction (ATS or peer-to-peer), and utility (payment, investment, or medium of exchange).

Blockchain Transferred Funds

The next evolution of ‘40 Act products¹⁷



Source: Arca Labs

Today, large ETF brands and distributors have built robust businesses, spending significant time and energy establishing intermediary relationships and perfecting workflow processes that make it difficult to innovate against their existing products (giving rise to the Innovator’s Dilemma).²² However, a combination of new firms and some daring incumbents will likely be the first to adopt blockchain and the BTF structure and incorporate it in their product and technical roadmaps.

Blockchain transferred funds improve the experience for all participants. The potential benefits conferred by BTFs in their current and future state extend past the issuer to the entire network of investors:

| Issuers | Investors | Intermediaries | Regulators |
|---|--|---|---|
| <ul style="list-style-type: none">• Immutable record of ownership• Increased liquidity with peer-to-peer transfer• Limited dependency on intermediaries, such as exchanges and broker-dealers• Expanded network of potential investors | <ul style="list-style-type: none">• Fractional ownership• Near real-time settlement• 24/7/365 peer-to-peer transference• Asset possession and control | <ul style="list-style-type: none">• Increased transparency for record-keeping• Programmable technology that reduces human error• Increased stakeholder confidence with immutable ledger | <ul style="list-style-type: none">• KYC/AML validation embedded into financial product• Real-time transparency• Immutable ledger of KYC/AML-approved investors• Programmable smart contracts for future automated compliance |

Technology has consistently been a catalyst for the transformation and growth of financial products, often resulting in redefining moments. Blockchain technology is the current stimulus for pooled investment vehicles, with BTFs offering a novel perspective on their evolution. When the ETF was conceived, no one fully understood the potential extent of its utility. Similarly, BTFs may encourage commingled investment vehicles for myriad uses not yet considered.

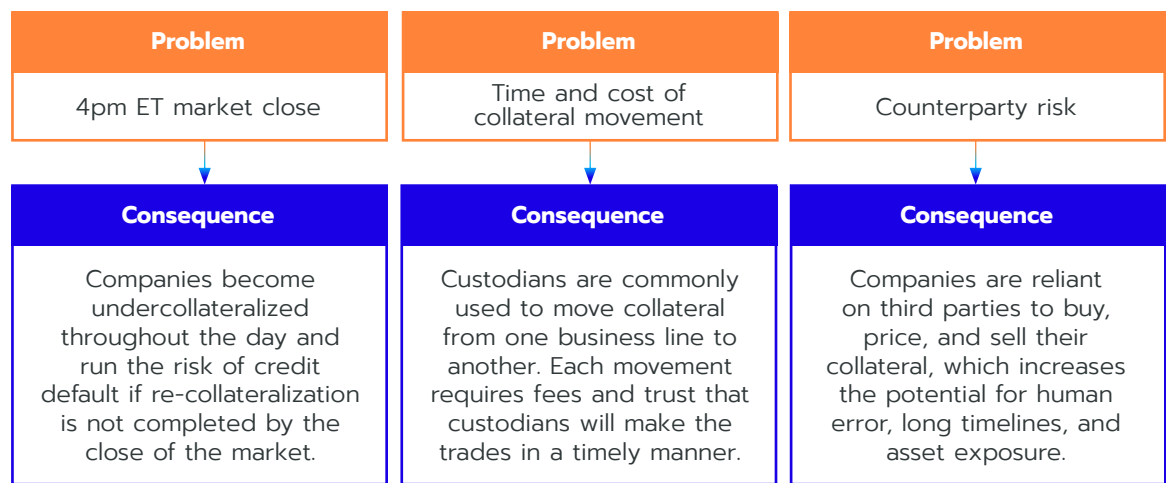
9

The BTF Is Revolutionary – Future Use Cases

Beyond providing utility as an investment vehicle, blockchain transferred funds offer the additional benefit of being a means of value transfer. The utility integrated into the BTF structure can impact those financial sectors that can benefit from a reduction in settlement time, elimination of laborious processes, and risk mitigation.

9.1 Collateral Management

Collateral management—the pledging of assets from one party to another to mitigate credit risk and potential default—is widely used in banking and financial services. However, the current methods for collateralizing are manual, expensive, and time-consuming, exhibiting a prime area for innovation:



U.S. Treasuries are among the most common assets pledged for collateral management because of their stability, liquidity, and high investment-grade ranking. Therefore, a BTF with a portfolio of U.S. Treasuries that issues its shares as digital asset securities has a clear use case for institutional collateralization. BTFs utilize the core benefit of digital asset securities—peer-to-peer transference—to reduce costs associated with cross-collateralization, abate the time required to trade reserves using traditional trading platforms, and decrease risk and error by eliminating intermediaries.



9.2 Payments

Payments is a massive financial sector that represents the mechanisms allowing individuals and entities to exchange goods and services.

However, the existing structural make-up of payment networks is encumbered by layers of intermediaries between assets and owners, presenting an industry ripe for modernization. For example, a checking account is a stop for your money on its way somewhere—not a final destination; a brokerage account allows an investor to participate in financial markets by investing their capital in financial products to achieve a potential return. The purpose of investing is to grow one's capital and then deploy it for a specific use. The current framework requires a liquidation step before capital can be utilized. Ideally, an individual would be able to consolidate and deploy their assets without the friction of liquidation.

McKinsey's 2021 Global Payments Report anticipates global payments revenue to generate **\$2.5 trillion** by 2025²³

Like banks and brokerage accounts, walled gardens have been put in place to facilitate trade and are responsible for settlement and record keeping. When the world was transitioning into the electronic age, this function was essential; individuals were willing to pay a premium and give up temporary ownership of assets for convenience and safety. This trade-off allowed third-party intermediaries to utilize individuals' custodied funds for the intermediary's own earning potential. Today, blockchain enables individuals to retain ownership of their assets and deploy their capital for their gains rather than those of the bank.

The introduction of a more liquid, instantly settled asset, such as digital asset securities, provides a means to carry out payment exchange without the need for intermediaries. This change could collapse the space between payments and investments, enabling investors to access and deploy all of their capital more efficiently. In addition, the frictionless feature of digital asset securities grants investors greater authority and earning power over their assets. BTFs add this capability to single assets represented by digital asset securities and commingled investment vehicles.

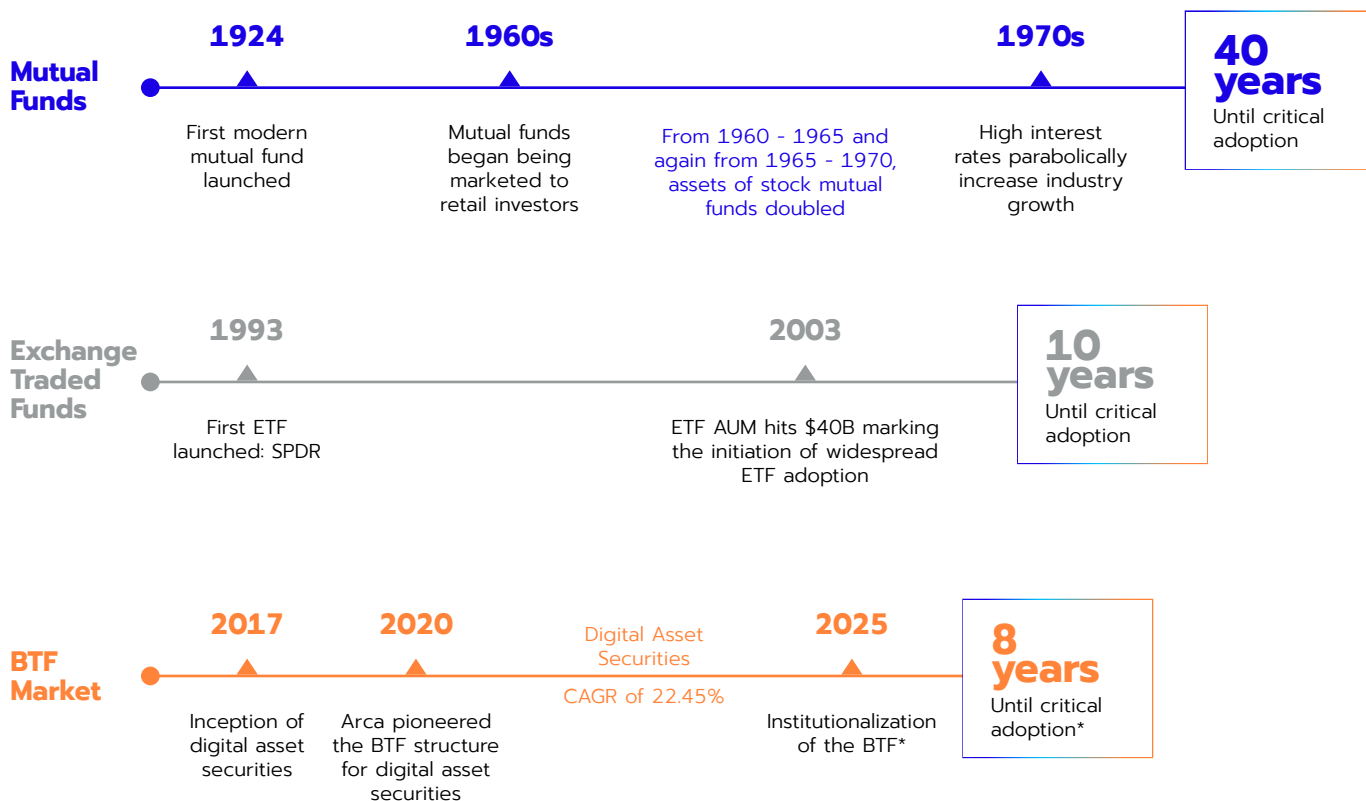


Look Back to Steer Ahead

Traditionally, new financial technologies faced resistance from investors and institutions. It was 40 years before mutual funds gained critical adoption; decades later, they remain an important part of investment portfolios worldwide. Likewise, more than 10 years passed before ETFs picked up steam, ultimately enjoying exponential growth after the turn of the century.

Like many innovations in financial services, dominant players rarely initiate disruption. For example, low commission and later commission-free ETF trading did not come from the large wirehouse incumbents but rather from challengers like Charles Schwab. If the past is a guide, early adopters will eclipse market participants who delay implementing new technology-driven applications. The early adopters will likely capture the largest share of these new markets.

Investment Fund Timeline



Source: Arca Labs¹⁷
*Research Supported by: SEC Archives, PWC, LCX, BOA, Data Bridge, Chain Partners Research, Investopedia





Conclusion


Historically, institutions that have been slow to adopt new technologies have scrambled—often too late—to catch up. Mutual fund giants that failed to swiftly embrace the ETF fell behind more agile companies. We have arrived at a similar inflection point: asset management is being disrupted by the digital asset ecosystem and its accelerated pace of change. Institutional investors and regulatory bodies that do not engage will run the risk of suffering the same fate.

For investment funds, the potential benefits of tokenization are profound. The BTF is the first iteration of incorporating blockchain technology into a registered fund with the potential for more significant gains in utility than the ETF had over mutual funds. As immense as the ETF market is, we believe the BTF opportunity is just as large (if not larger) for those intrepid organizations that choose to pursue it. Innovators and investors recognize that blockchain's attributes of decentralization, peer-to-peer transferability, and immutability offer new benefits that can challenge the centralized nature of other investment structures. Moreover, given that BTFs adhere to existing regulation and compliance mandates, the structure should inherently earn credibility and will pave the way for institutional adoption. As regulations and compliance standards take time to adjust to new technology, financial innovators will continue to forge ahead with solutions designed to level the financial playing field and bridge the gap between our current and future worlds.

 For more information about BTFs visit: arcoin.arcalabs.com/blog

Acknowledgements


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