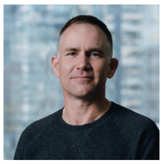
CHARTING NEW WATERS:
WHAT PENSION PLAN SPONSORS SHOULD KNOW ABOUT DIGITAL ASSETS



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Pensions may be missing out on a technological disruption that could represent the most profound new development in the digital economy since its start in the late 1990s. To date, they have lagged other institutional investors in the digital assets space. Barring a few well-publicized exceptions, investments by pensions into digital assets on the blockchain have been sparse when compared to endowments and foundations, sovereign wealth funds, and family offices. For many plans, this lack of exposure has come at a cost in the form of lower funded status and lower total assets.

As they think about their long-term strategy, pension plan sponsors can benefit from an increased understanding of blockchain technology and its potential portfolio implications. These implications include both new opportunities in digital asset investments and the potential effects of blockchain technology on current holdings. In addition to providing a general overview of how digital assets investments and blockchain technology work, this paper answers questions on related challenges and developments for plan sponsors to consider. At a minimum, plan sponsors should be learning about the digital assets landscape to understand its potential to disrupt their existing portfolio investments and generate returns for the plan.

WHAT ARE DIGITAL ASSETS?

Digital assets encompass a wide range of assets that are often issued using decade-old technology known as a "blockchain." A blockchain is a decentralized, network-based transaction ledger. Typically open-sourced, a blockchain is a distributed database that records each transaction in the order in which it takes place. This approach creates "blocks" of data, which are appended to the prior blocks in a long chain of transactions—hence the term blockchain.

This public record of transactions is virtually impossible—or at least extremely difficult—to manipulate. Bitcoin, the first blockchain-based digital asset, remains the best known and, to date, it has never been hacked or incurred network downtime. What's more, thousands of other investment opportunities in digital assets now exist. Some digital assets issued on blockchains are newer and highly speculative, while others are much further along in their life cycle, generating significant revenue and profits.

Published April 26, 2022

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WHY SHOULD PENSION PLANS TAKE NOTICE OF BLOCKCHAIN TECHNOLOGY?

Inherent in blockchain technology is the potential to disrupt existing businesses as it enables secure transactions, reduces costs, and creates new businesses and business models, among other attributes. It has not only accelerated the global creator economy but has begun to shift the balance of power within it. For example, musicians can now post their music onto blockchain-based music networks for anyone to discover and build direct relationships with their fans without sharing royalties with record companies. Also, they are no longer dependent on radio stations or music-streaming services for airtime.

Today, blockchain is more than a decade old and real-world commercial use is nascent. Over time, this emerging way of doing business could challenge the growth of businesses anchored in more traditional commercial frameworks.

WHAT CHALLENGES DO PENSIONS CONSIDERING DIGITAL ASSET INVESTMENTS FACE?

Access is the foremost problem. As recently as a few years ago, many of the best "crypto-native" funds—funds where the founders have long experience in the digital assets universe—were open. Today, access is challenging and likely only to get harder as more institutional investors enter the sector and existing digital assets investors increase their allocations. At present, the best funds are clearly distinguishable from lesser quality funds. Institutions that invested early in the space have captured outsized—although largely unrealized—returns and maintain access to these best funds today. Another challenge is the knowledge gap among institutions; awareness is increasing, but many plan sponsors are only at the early stages of understanding of how blockchain technology and digital assets work. Lastly, as a relatively new technology that is undergoing rapid change, many investors have a difficult time staying abreast of the technology as it evolves.

WHAT KIND OF INVESTMENT STRUCTURES ARE AVAILABLE IN THE DIGITAL ASSETS SECTOR?

There is a common belief among pension plan sponsors that venture capital lock-up funds are the only investment structure available for investing in the digital assets sector. In fact, blockchain offers a range of investment vehicles with growth opportunities. This is because, broadly speaking, it is a secular opportunity, with virtually all digital assets investments exhibiting high-risk/high-reward growth characteristics, regardless of investment structure. Just as blockchain is breaking many of the conventions of traditional business models and operating structures, crypto-native investment firms are breaking with tradition when creating investment structures to invest in digital assets. Some of these structures have generated venture-like returns in shorter-duration vehicles, making them attractive to closed or well-funded pension plans. Figure 1 presents an overview of investment liquidity, available structures, and their likely suitability to pension plans based on status.

FIGURE 1 SHOALS, RIVERS, AND OCEANS: MOST LIQUID TO LEAST LIQUID DIGITAL ASSET INVESTMENT STRUCTURES

MOST LIQUID

Liquidity	Structure & Strategy	Open/Accruing Pensions: Suitability	Closed/Frozen Pensions: Suitability	Active or Passive
Daily	Direct token ownership & SMAs	Yes	Yes	Passive
Weekly & Monthly	Index funds & LP structures holding specific tokens	Yes	Yes	Passive
< 1 Year	Trading-oriented & fundamental analysis hedge funds	Yes	Yes	Active
3 Years Lock, 1/3 Per Year Liquidity	Hedge funds persuing venture-like strategies with up to 1/3 in venture side pockets	Yes	Yes	Active
Direct & Co-Investments	Fund structures and direct holdings	Yes	Yes	Active
5–8 Years+ Extensions	Later stage liquid token funds in venture structures	Yes	Maybe	Active
6–12 Years+ Extensions	Fund of Funds: Hedge funds and VC structures, hybrid HF/VC structures	Yes	Only shorter-life FOFs	Active
10–12 Years+ Extensions	Seed to growth stage venture structures	Yes	No	Active

LEAST LIQUID

Source: Cambridge Associates LLC.

HOW DOES FUNDED STATUS INFLUENCE A PLAN'S DIGITAL ASSETS OPPORTUNITIES?

Historically, open and accruing pensions have had a distinct investment advantage over closed or frozen plans because they can invest across the spectrum, from liquid investments to the most illiquid venture funds. Blockchain technology is changing this paradigm.

The life cycle of blockchain investments is much faster than traditional corporate structures, which can take a decade to go public or be acquired. For example, liquidity events in blockchain can happen quickly, sometimes within a couple of years of a founding entity's debut. Consequently, more liquid fund structures can capture value in the sector in the same way longer lock-up structures can. Given the similar exposures within many of these funds—and the highly similar market beta of all the fund structures—investing in digital assets issued on the blockchain helps level the playing field between open/accruing and closed/frozen pensions.

Blockchain investments are, for now, distinct from other investment opportunities. As time passes, today's clear lines will blur as more traditional investment funds allocate to digital assets. For the time being, interested pension plans and institutions can construct a liquidity profile for their digital assets portfolio by mixing and matching a range of investments across the various fund structures.

HOW CAN CLOSED OR FROZEN PLANS INVEST IN DIGITAL ASSETS WITHOUT CREATING LIQUIDITY STRESS ON THEIR PORTFOLIO?

Time-horizon or liquidity-constrained pensions can avail themselves of multiple digital assets opportunities, which include direct token ownerships and Separately Managed Accounts (SMAs), token index funds, limited partner funds holding specific tokens (e.g., Bitcoin, Ethereum, or a range of specific tokens), trading-oriented hedge funds, fundamental analysis-oriented hedge funds, hedge fund structures investing in venture capital opportunities, and direct and co-investment opportunities. Most of these structures offer exit opportunities ranging from daily to six years. An additional structure that may fit within a closed/frozen plan's liquidity window are venture funds that invest in high-growth liquid tokens, typically offering liquidity within eight years.

Pension plans wanting venture-like exposure without a long lock-up should consider hedge fund structures investing in venture opportunities. These funds typically have an initial three-year hard lock-up and then a one-third per year exit schedule, which implies a six-year investment life—although funds often employ investor-level side pockets. In these hedge fund structures, incentive fees are first taken upon the completion of the initial hard lock-up's expiration, allowing all profits to compound free of incentive fees until the third anniversary of the investment. To date, many of these three-year hedge fund structures have offered venture-like returns for investors, owed in part to significant seed and early-stage investments, where up to one-third or even half of an investor's account could be these seed and early-stage side pockets.

To the extent that a pension views digital assets as a high-growth/high-return investment opportunity, more liquid digital assets structures represent an opportunity for liquidity-sensitive plans to gain exposure to venture-like risks/reward without committing to a 10+ year lock-up. However, longer lock-up structures do exist.

Another option for liquidity-sensitive plans to consider are the more liquid hedge fund strategies, focused on either traditional hedge fund trading strategies using liquid tokens or fundamentally driven token selection. Given the inefficiencies of this sector, arbitrage-focused trading strategies can generate market-independent returns. To date, these strategies have generated consistently high returns with high Sharpe ratios. However, these strategies are capacity constrained and, eventually, arbitrage returns will likely decline as more capital enters the market and spreads diminish. Actively managed token funds can be attractive due to the sector's retail-dominated trading, where professional investors with deep fundamental data have an inherent edge. Information can be highly asymmetrical and analysts and portfolio managers with sufficient expertise, customized data-gathering, and analytical tools possess a material advantage over retail and non-crypto-native investors.

DIGITAL ASSETS AND INVESTING: WHAT'S AHEAD?

Investing in the bourgeoning digital assets sector carries risks new to pension portfolios. Digital assets are relatively young and highly volatile, particularly in the area of liquid tokens. Only a handful of countries have a developed regulatory framework for digital assets, while most—including the United States—have issued only cursory guidelines. In early March 2022, the US Department of Labor issued guidance cautioning 401(k) plan fiduciaries to "exercise extreme care" before considering digital assets allocations. In Europe, EU entities, including the European Blockchain Partnership, are working to foster collaboration, but specific regulations vary by member state. Regulation remains similarly fragmented in Africa and Asia, with some countries—including Nigeria and China—implementing, or attempting to implement, outright bans on the trading of liquid tokens. Investing in digital assets today is in many ways comparable to investing in the internet in the late 1990s—some investments may generate extraordinary returns, while many others will see marginal returns or lead to losses.

Yet, ignoring the potentially transformative effect of blockchain entirely could be shortsighted. At a minimum, pensions should learn more about digital assets opportunities and consider the implications that blockchain technology might have on their existing portfolios. This approach will allow trustees, investment committees, and staff to make an informed decision.

Blockchain technology and digital assets could disrupt the way many of the companies in a pension plan's current investment portfolio do business. Today, blockchain is changing the way millions of people around the world do business—time will tell if it transforms how the entire world works and communicates over the coming decades. ■