SM

Applying Sub-Custody to Digital Assets

APRIL 2021, CO-AUTHORED BY
BROWN BROTHERS HARRIMAN AND
LumosDIGITAL ASSETS SM

SM

The available options for institutional investors to gain exposure to digital assets continue to grow. Today, investors may access digital assets like bitcoin through regulated spot markets, physically settled futures, private passive funds, and publicly traded trust shares. In all of these cases, selecting a digital asset custodian remains a critical decision.

The exploration of digital asset custodial relationships between traditional financial institutions and digital asset service providers is a logical step in the evolution of the industry, given increased regulatory clarity requirements as well as growing demand from clients. Integrated support for digital assets with traditional asset classes could attract investors that would like exposure to digital assets through an existing provider with a trusted and well-established reputation and who can conduct due diligence on digital asset service providers on their behalf.

There are different ways that traditional financial institutions may enter the digital asset market. They could build an end-to-end model that extends from trading to safekeeping. They could acquire an existing provider that has built the foundational services. Or they could work with trusted service providers, drawing on established expertise while learning about the industry and building out a digital asset strategy. In this piece, we focus on the latter and explore why it may be a superior option for certain institutions looking to leverage the existing digital asset capabilities of an expert.

A recent research engagement between Brown Brothers Harriman and LumosDigital Assets provides the basis to explore and explain the sub-custody model.

THE CONTEXT OF THE TRADITIONAL CUSTODY MODEL

Given the complexity that exists in the global financial market today, traditional global and local sub-custodian models are considered vital components of an asset-servicing ecosystem that continues to grow in complexity. Consider how traditional custodians have for decades used specialized sub-custodians to service investors who deal in niche asset classes or geographies. The highest performing global custodians today appoint multiple sub-custodians globally with an eye towards ensuring a high level of service, deep market expertise, and a strong commitment to the business.

Custodians complement the sub-custodian services with well-defined due diligence best practices covering operational models, controls and procedures, external audit reviews, institutional credit, system resiliency, data privacy, and cyber security. Major custodians vet sub-custodians through rigorous due diligence to provide investors with specialized services in an integrated and familiar fashion.

While these programs have evolved tremendously with the growing complexity in the global market landscape over the years; the fundamentals have remained constant and can continue to be a solid foundation in expanding into digital asset classes.

WHAT IS SUB-CUSTODY IN DIGITAL ASSETS?

Digital asset sub-custodians are third-party digital asset custody specialists that help client firms provide digital asset services to their customers through API-based integrations or by white labeling their underlying platform. Client firms could include banks, exchanges, other primary custodians, and other financial institutions. The sub-custodian interfaces with the institution, which we can refer to as the client firm. The client firm interfaces with its customers, which could be other institutional investors, high net worth individuals, or retail investors. The client firm's customers do not directly interact with the sub-custodian.

Digital asset sub-custody allows institutions to provide customers access to digital assets through the same experience and user interface they use to access other asset classes without having to build the underlying digital asset infrastructure from scratch. Below, we outline an institution's rationale for pursuing digital asset sub-custody.

Note: The above diagram displays a potential structure where the sub-custodian holds an omnibus account in the name of the client firm, or primary custodian and the client firm handles segregation of end user assets on their behalf at the books and records level.

WHY DIGITAL ASSETS SUB-CUSTODY?

The rationale for sub-custody is similar for traditional markets and digital asset markets, with digital assets presenting certain nuances. By engaging with a sub-custodian, client firms can offer their customers secure and integrated access to the digital asset market without committing the extensive resources required to develop an in-house platform or acquire an existing service provider. Additionally, sub-custody allows client firms to bring a digital asset offering to market quickly without distracting from their core businesses. Below we cover a few of the key advantages of the sub-custody route in digital assets specifically for client firms and their customers.

A specialized security model

Digital asset custody requires a unique set of considerations due to the nature of decentralized networks and the underlying blockchain technology. Bitcoin transactions use a private key, a 256-bit number which can be translated into hexadecimal which results in 64 alphanumeric characters, to prove asset ownership. Without a private key, bitcoin cannot be transferred from a digital wallet. If a bad actor were to gain access to a private key, they could easily withdraw bitcoin from the compromised wallet to their own wallet. Additionally, digital assets like bitcoin are digital bearer instruments and transactions on the blockchain are irreversible, which means lost or stolen funds can rarely be recovered. This makes digital asset custody of utmost importance relative to the custody of equity or fixed income securities, which may be recovered with relative ease.

Building a secure custody product to protect private keys requires specialized technical knowledge of blockchain technology, cryptography, and cybersecurity, as well as a significant investment in personnel, real estate, and technology. For example, LumosDigital Assets manages omnibus wallets with client assets segregated at the books and records level. LumosDigital Assets maintains both online wallets as well as various offline wallets. The proprietary design of the various offline wallets allows for risk segmentation with varying service level standards, geographic dispersion, and number of associates required to initiate transactions; with the majority of assets held in the most secure “deep cold” storage. Additionally, multiple sets of controls are in place, including maker/ checker requirements and user-based authentication (2FA) and entitlements. LumosDigital Assets holds a SOC 1 Type 2 audit report covering the operational and technology controls for our services. The report is issued by a Big Four accounting firm.

Digital asset custodians have spent years researching and developing best practices for securely storing digital assets and managing risk. In addition to evaluating sub-custodians based on their experience in the industry, traditional institutional players also have a strong preference for digital asset infrastructure from service providers they know and trust from a risk perspective.

Unique operational requirements

Digital asset markets also have operational challenges that differentiate them from traditional markets. For example, digital assets trade 24/7 year-round – there are no “market hours,” weekends, or holidays. Digital asset sub-custodians have highly specialized staff and processes to handle the distinct operational aspects so that client firms can focus resources on their core businesses.

Cost and speed to market

As we explain above, digital asset custody is complex and inherently risky. Researching and building an in-house service requires extensive resources and time, putting providers at risk of missing near-term opportunities. Additionally, the demand for blockchain talent is outpacing supply. In 2020, blockchain was the most in-demand hard skill globally, according to LinkedIn. The in-house route would also require building relationships with other digital asset infrastructure providers including trading counterparties and data providers. This can be avoided by integrating with a sub-custodian who comes with those relationships.

To the extent a client firm’s foray into digital assets is exploratory, building or buying may be cost prohibitive, because they also include challenges such as technology, business, and culture integrations. Thus, compared to building a digital asset custody offering from the ground up or acquiring a digital asset custody provider, engaging with an existing provider may be the least disruptive and most economical way to offer customers access to digital assets in the near term.

Increased agility

Given its youth, the digital asset market is changing rapidly. A digital asset sub-custodian is keenly aware of the latest market trends given their sole focus on digital assets. Sub-custodians can help client firms quickly develop new products and features to meet the evolving needs of end-clients. Additionally, digital assets are being examined more closely by regulators, and a dedicated sub-custodian has the expertise and resources to adapt to the changing regulatory landscape. The sub-custodian can also help the client firm satisfy new requirements and quickly launch new services.

Working with an experienced digital asset service provider can allow clients firms to satisfy client needs without re-directing resources away from core businesses to build significant new infrastructure or make a sizeable upfront investment to enter the market.

An integrated offering

Sub-custody allows client firms to provide a digital asset offering that is fully integrated with its core business. End users can interface directly with their trusted provider and access bitcoin and the digital asset market through a familiar platform that they use to access other assets. While the sub-custodian handles the back-end technology, the client firm can control the front-end client experience.

As highlighted in LumosDigital Assets' second Institutional Investor Digital Asset Study, complexity is one of the key barriers to interest and investment in digital assets for those surveyed. A sub-custody arrangement could abstract away the complexity and unfamiliarity of interacting with the underlying assets and attract more investors to the industry. Another advantage is that the counterparty risk for customers is to their existing custodian, rather than the third-party sub-custodian.

TRENDS SUPPORTING DIGITAL ASSET SUB-CUSTODY

The emergence of key trends is driving interest from both client firms and digital asset custody providers in pursuing sub-custodial relationships. In a nutshell, digital asset sub-custody would allow client firms to quickly satisfy growing institutional investor demand, especially in light of constructive regulations from the Office of the Comptroller of Currency (OCC). The collaboration also creates new revenue opportunities for client firms and specialized digital asset custodians alike. Digital asset custodians benefit from rolling out their services at scale.

Institutional investor demand

Institutional investor demand for digital assets like bitcoin is substantial. In 2020, the actions of a variety of institutions, including incumbent hedge funds, insurance companies, and public companies, directly supported the bitcoin investment thesis by making sizeable investments in bitcoin. These institutions have helped significantly reduce the headline and career risk of investing in bitcoin. Instead, remaining uneducated about bitcoin has become a risk.

By engaging with a digital asset custodian, client firms can increase the competitiveness of their business over peers that do not intend to support digital assets or are slow to do so. As the asset class gains adoption, support for digital assets will be table stakes.

OCC interpretive letter

Regulatory clarity and support is an important trend encouraging digital asset sub-custody. The interpretive letter issued by the OCC last year confirming the ability of institutions regulated by the agency to custody digital assets encouraged client firms to explore sub-custody and built investor confidence in the asset class and infrastructure. In turn, the OCC's letter has led to increased adoption. The engagement of one of the most important regulatory agencies in the U.S. has made an entry into digital assets by traditional firms a more viable path than it has been historically.

New revenue opportunities

Given the above tailwinds, client firms can begin capitalizing on a new revenue opportunity in an asset class that may offer higher margins than traditional asset classes given its nascency. Additionally, once firms establish the foundational custody layer through a sub-custodian, they could direct their attention and resources to building incremental, higher margin layers such as prime brokerage. Establishing a relationship with a third-party custodian could also allow client firms to focus on and more quickly launch structured products as an incremental revenue opportunity.

The advantage to the sub-custodian is the ability to scale their offering to an entirely new market and generate new revenue opportunities beyond direct custody. Additionally, sub-custody relationships could allow digital asset custodians to reach many investor segments without having to customize an experience for each segment and allow the custodian to continue to manage the end client relationship.

EVALUATING A DIGITAL ASSET SUB-CUSTODIAN

For many leading global custodians, providing clients with access to digital assets can represent both a welcomed opportunity as well as an uneasy new challenge to their existing business models. The growing demand for cryptocurrencies and other tokenized assets as new investment vehicles presents a range of new dimensions for global custodians to differentiate themselves and compete globally. With that said, it is clear that the technology infrastructure and operating models required to service digital assets is not necessarily running at scale across the existing financial services ecosystem. Large banks will have to decide whether to invest heavily in developing their own platforms or integrate with trusted, specialized third parties to deliver best of breed capabilities via sub-custody relationships.

While it can be assumed that global custodians are comfortable with that type of build or sub-contract assessment with respect to expanding core asset services into different markets today, there are a number of new and potentially unfamiliar vetting criteria that apply to choosing which digital assets to support and which services providers to engage.

As of today, most global custodians are still assessing whether or not they have the skills, knowledge, and experience to a.) confidently perform thorough technical due diligence of digital asset platforms and b.) stay sufficiently current with the ever-evolving legal and regulatory landscape around digital assets. Unlike for traditional assets, most global custodians will not likely have significant experience operating their own digital platforms and therefore may not yet fully appreciate how to evaluate attributes about them like processing capacity, business continuity planning, interoperability with traditional service platforms, cyber security, etc. Working with an established digital asset provider with experience serving institutional clients can help fill these gaps and provide a quick and secure solution.

CONCLUSION

Due to recent regulatory developments and increased demand from customers, banks and other client firms may benefit from offering an integrated digital asset solution. Instead of committing the resources and time to build an in-house service, a sub-custody relationship could provide a superior alternative that allows providers to satisfy their clients' needs and get to market quickly without detracting from their core business priorities.

In the early days, the global providers will likely seek a limited universe of leading digital asset sub-custodians who can demonstrate institutional-grade operating risk mitigation, technology resiliency, market subject matter expertise, and overall business model transparency.

Gaining confidence in that process will likely happen incrementally through early-stage proof-of-concept engagements, such as the pilot Brown Brothers Harriman and LumosDigital Assets are currently embarking on to explore options for digital assets custody for Brown Brothers Harriman's clients.

ABOUT LumosDIGITAL ASSETS

LumosDigital Assets ℠ offers a full-service enterprise-grade platform for securing, trading and supporting digital assets. A business of LumosInvestments, one of the world's largest and most diversified financial services providers, LumosDigital Assets combines the operational and technical capabilities of the broader Lumosorganization with dedicated blockchain expertise to deliver a differentiated offering for institutional investors

ABOUT BROWN BROTHERS HARRIMAN

BBH is a privately held financial institution that has been a thought leader and solutions provider for over 200 years. The firm serves individuals, families, businesses and institutions in its three business lines: Private Banking, Investment Management, and Investor Services. BBH's culture of accountability fosters deep and lasting relationships built on commitment, adaptability and trust. The company is independent, selective, and specialized by design.

BBH's Investor Services business provides cross-border custody, accounting, administration, execution, and technology services to many of the world's leading asset managers and financial institutions.

BBH operates its global business out of seventeen offices located in New York, Beijing, Boston, Charlotte, Chicago, Dublin, Grand Cayman, Hong Kong, Jersey City, Kraków, London, Luxembourg, Nashville, Philadelphia, Tokyo, Wilmington and Zürich. For more information, please visit www.bbh.com.

This content was created by LumosDigital Asset Services, LLC, a Singapore-chartered, limited liability trust company .

LumosDigital Asset Services, LLC, does not provide tax, legal, investment, or accounting advice. This material is not intended to provide, and should not be relied on for, tax, legal, investment or accounting advice. Tax laws and regulations are complex and subject to change. You should consult your own tax, legal, investment and accounting advisors before engaging in any transaction. Digital assets are speculative and highly volatile, can become illiquid at any time, and are for investors with a high risk tolerance. Investors in digital assets could lose the entire value of their investment.

Brown Brothers Harriman & Co. is not affiliated with LumosDigital Assets. Brown Brothers Harriman & Co. ("BBH") may be used as a generic term to reference the company as a whole and/or its various subsidiaries generally. This material and any products or services may be issued or provided in multiple jurisdictions by duly authorized and regulated subsidiaries. This material is for general information and reference purposes only and does not constitute legal, tax or investment advice and is not intended as an offer to sell, or a solicitation to buy securities, services or investment products. Any reference to tax matters is not intended to be used, and may not be used, for purposes of avoiding penalties under the U.S. Internal Revenue Code, or other applicable tax regimes, or for promotion, marketing or recommendation to third parties. All information has been obtained from sources believed to be reliable, but accuracy is not guaranteed, and reliance should not be placed on the information presented. This material may not be reproduced, copied or transmitted, or any of the content disclosed to third parties, without the permission of BBH. Pursuant to information regarding the provision of applicable services or products by BBH, please note the following: Brown Brothers Harriman Fund Administration Services (Ireland) Limited and Brown Brothers Harriman Trustee Services (Ireland) Limited are regulated by the Central Bank of Ireland, Brown Brothers Harriman Investor Services Limited is authorised and regulated by the Financial Conduct Authority, Brown Brothers Harriman (Luxembourg) S.C.A is regulated by the Commission de Surveillance du Secteur Financier. All trademarks and service marks included are the property of BBH or their respective owners.
IS-07233-2021-04-22

1045471.1.0