



XBTO



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Crypto Funds: Don't Let Accounting Drive Economics

Accounting seeks to accurately describe the true economics of companies and their transactions. Since accuracy competes with achieving broad application, the degree of accuracy is not perfect. To manage gaps between the accounting story and the economic story, we use mechanisms such as EBITDA to better understand the economic story and make better decisions. When measuring fair value, we can look beyond accounting to active secondary markets.

When determining the fair value of private fund interests, there is usually no active secondary market or similar price discovery mechanism. For equity transactions such as subscriptions and redemptions, investors are typically required to transact at NAV. To state the obvious, the gap between NAV and what one considers fair value presents a problem. For traditional strategies and portfolios, this gap is typically not material because specialized fund accounting guidance has been developed over many years to address various asset classes and specific situations. Digital assets, however, do not fit neatly into existing accounting guidance. To make matters worse, the price volatility and illiquidity in cryptocurrencies can severely exacerbate these problems.

As XBTO noted in its last thought piece "[Product Development for Crypto Funds](#)" dated November 19, 2018, this new asset class presents problems that, if left unsolved, could materially harm investors. In this paper, we attempt to describe some of those problems and offer potential solutions. Most of the issues we focus on relate to valuation, because that is arguably the most significant source of uncertainty in accounting for digital assets today.

Problem #1: Normal activities like subscriptions and redemptions may unintentionally result in material transfers of value between sets of investors.

Background

XBTO referred to this example in its last paper, so we'll start here. Let's say a \$400 passive fund of widgetcoins has four equal investors, and one investor fully redeems. The fund operates on a daily cycle and based on widgetcoin's liquidity, it executes trades throughout the entire 24-hour trading day. On the redemption date, the manager sells one-quarter of the widgetcoins. Just before the NAV is struck, the price of widgetcoin increases by 8%, and then retreats back down shortly afterward. With a NAV of \$424, the redeemed investor is owed \$106. The fund only has \$100 of cash, so now the manager must sell \$6 more of widgetcoins just to pay the redemption. Each of the three remaining investors' interests is now worth only \$98. These three investors just experienced a 2% loss simply because another investor redeemed. Worse, these three investors likely have no idea that they suffered a loss, and may not have the information necessary to identify or calculate the loss even if they wanted to.

Analysis

This problem exists because widgetcoins were sold at a time that was different than the time the NAV was struck. This problem is not typically addressed in the traditional world because 1) price volatility is smaller and 2) trading can often take place at the time the NAV is struck (e.g., participating in the closing auction for listed equities).

Solution

Calculate NAV using a Time-Weighted Average Price ("TWAP") methodology for the widgetcoin price. This way, the NAV will be calculated using prices that very closely approximate the actual execution prices.

Not surprisingly, this solution may create a **new problem**. GAAP may require using prices as of a single point in time instead of using a TWAP methodology, so this policy may be considered a departure from GAAP if it were to be used to produce the financial statements. We address this new problem separately in **Problem #3** below.

Problem #2: If NAV were to be calculated using GAAP-based valuation policies, it may not represent what a manager believes is fair value.

Background

Crypto fund managers should not determine valuation methodologies to calculate NAV by blindly following GAAP or advice from service providers. The traditional world has the luxury of established fund accounting guidance developed over many years that closely tracks fair value. The world of digital assets does not have this luxury.

Analysis

Accounting guidance may require digital assets to be held at LOCOM, cost (subject to impairment), or some other measure. Liquidity discounts may or may not be allowed. Impairment testing and impairment charge calculations are likely to be highly subjective. While we can all complain about these ambiguities, it's unreasonable to expect accounting guidance to be comprehensive and specific today, when digital assets are so young and change so frequently.

Solution

Put simply, managers should create valuation policies and procedures with the single goal of producing a NAV that, when used to calculate fees, subscriptions, redemptions, etc., results in economics that are fair and appropriate for their investors.

As a secondary matter, such a policy may be considered a departure from GAAP if it were to be used to produce the financial statements. We address this new problem separately in **Problem #3** next.

Managing a crypto fund today is arguably more difficult than managing a typical hedge fund. Beyond the basic requirement of having a team with a broad set of knowledge, skills and experience, a crypto fund manager must also possess a high level of independent thinking and creativity to solve new problems, while staying within the confines of existing rules and regulations. Fortunately, with most problems come opportunity. Solving accounting conundrums is just one of many opportunities where crypto managers can demonstrate to the investor community that they value substance over form, want to treat investors fairly, and put in place solutions that work.

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Problem #3: NAV is based on accounting policies that depart from GAAP, but financial statements must be prepared in accordance with GAAP.

Background

Problems #1 and #2 are just two examples of NAV calculation methodologies that may not conform with GAAP. The extent to which a particular fund has such policies will depend on the fund's strategy, the manager's execution abilities, and other factors specific to the fund.

Analysis

NAV is typically produced on a monthly or daily basis, while financial statements prepared in accordance with GAAP are typically produced annually. The financial statements will most likely present a Net Asset Value on the face of the balance sheet or in the notes (hereafter referred to as "GAAP NAV"). For many funds, the NAV as of year-end is identical to the GAAP NAV, but this is generally not a requirement.

Solution

To produce financial statements, adopt GAAP-compliant accounting policies that may be different than those used to calculate the daily or monthly NAV. In the notes, explain that NAV is calculated during the year using a different methodology, the reason for the difference, and the actual difference as of year-end (in dollar and percentage terms).

Managers should consult their auditors early and often, avoid surprises, and provide sufficient disclosure. Explain this issue to investors and actively seek and consider their feedback. If investors with interim reporting requirements have elected the practical expedient in ASC 820, simply calculate a GAAP NAV as of such dates for them.