

ike the gold rush of the mid-19th century that lured prospectors far and wide to California, cryptocurrency mania has taken hold globally. While not yet sparking a rush among mainstream investors, this burgeoning asset class is generating enormous interest that early entrants hope will yield a pot of gold. In a recently released report, research firm Aite estimates the total trading value of cryptocurrencies will break the \$1trn mark by the end of 2018. Quite a feat for an asset that is not backed by fiat currency, is not regulated by a central authority and arguably has no intrinsic value.

But asset managers and others clearly want in. Part of the draw of cryptocurrencies is their upside potential. Market capitalisation for all cryptocurrencies has fluctuated wildly, but currently surpasses \$285bn. Bitcoin, the largest (by market capitalisation) and most well-known of the cryptocurrencies, was worth less than a penny in May 2010. After a rollercoaster ride and reaching an all-time high of more



#### Mike Slemme FundCount

Mike Slemmer has over 30 years of experience in investment and treasury technology and is COO-Americas for FundCount. He earned his BA at the University of Delaware, an MBA in finance from the University of Houston and an executive degree from the Columbia University Graduate Business School. Slemmer is a CFA (Chartered Financial Analyst) charter holder and a member of the CFA Institute and the Boston Security Analysts Society.

than \$19,000 in December 2017, bitcoin is currently trading in the \$6,000-\$7,500 range.

In spite of the volatility (and for those chasing alpha, because of it), investing in cryptocurrencies has gone well beyond early adopters and tech-orientated millennials. It now encompasses a growing pool of investors from emerging managers, hedge funds and Ultra-high networth Individuals to the occasional 'mom and pop investor'. Profit is clearly on the minds of those investing, but so is diversification and the chance to add something new to a portfolio. Yet, the number of people investing in digital currencies barely scratches the surface. According to finder.com, less than 10% of the US population currently own cryptocurrency versus more than 50% that own stock.

# Many hurdles to cross

Volatility is only one factor hampering widespread adoption. The inherent complexities of cryptocurrencies, which don't function like other asset classes, definitely play a part as well. Cryptocurrencies are more difficult to purchase; investors need a wallet to hold each cryptocurrency and an exchange that lists it in order to buy, sell or trade that currency. This fragmentation only adds to the challenge of owning cryptocurrency. Security issues and the lack of a regulatory framework further compound concerns.

Nonetheless, financial news website TheStreet estimates: "64% of firms are considering taking on digital currency exposure in the next few years." Although most endowments and pension funds, which tend to be risk averse, are not quite ready to embrace cryptocurrencies, they are watching developments carefully. Traditional financial institutions are being cautious as well for fear of breaching regulatory guidelines and concern over reputational risk.

Their 'wait and see' approach is

not without merit. A multitude of issues set this asset class apart from other investments. These issues must be addressed in order to attract more cautious investors.

#### Challenges ahead

Unlike traditional brokerage where there is a single source that aggregates information, the cryptocurrency ecosystem is fragmented. Data on various holdings must be gathered from numerous exchanges and OTC counterparties and then normalised for net asset value (NAV) calculation and reporting. The process is labour-intensive and without standardisation, it is more difficult for asset managers to crunch numbers and manage target allocations. Data from the exchange provider or other cryptocurrency servicer is often put in spreadsheets and then fields are mapped to a back-office accounting system. And that is assuming the accounting system is flexible enough to handle cryptocurrencies. "How to properly report to investors and account for assets are among the greatest operational challenges managers face," says Mikhail Davidyan, managing partner at Theorem Fund Services.

Determining fair market value poses another challenge. While traditional exchanges close at a defined end-of-day upon which a fund's NAV is determined, crypto trading is a 24x7 affair. In other words: how do you value a fund where the pricing is constantly changing?

Fragmentation and valuation come into play from an accounting standpoint where you need accurate pricing to report realised gains/losses. "It is important to utilise a pricing source which provides a close to real-time valuation that is based on a weighted valuation across many exchanges to eliminate any distortions from any one exchange," adds Davidyan. "Once you have all data, it can easily be fed into a flexible accounting system like FundCount for analysis and reporting."

For asset managers operating in multiple jurisdictions, it is critical to understand how cryptocurrencies are treated for tax purposes. In the US and many other countries, for example, "virtual currency" is considered a capital asset by tax

authorities while in Germany, it is considered private money and in Japan it is legal tender.

## Liquidity risk

Liquidity poses its own problems. There are over 1,600 cryptocurrencies today according to investing. com, yet only four currencies (bitcoin, ether, litecoin and bitcoin cash) can be traded on Coinbase, a platform for buying, selling, transferring and storing digital currencies. Such a limited selection on one of the most well-known exchanges speaks

FundCount enables users to establish cryptocurrencies and integrates all accounting information to provide a complete picture of activity

volumes for the issue of liquidity. Furthermore, the top five cryptocurrencies account for nearly 90% of the total market capitalisation of all cryptocurrencies. As a result, investing in multiple cryptocurrencies means holdings are spread across different exchanges, each with their own interfaces, protocols and risks. Trading large blocks of cryptocurrencies in a timely fashion is difficult because a willing buyer may not be available for the order to be filled.

The lack of liquidity hamstrings an investor's ability to exit when desired, contributes to volatility and introduces "slippage" into the trade. The speculative nature of cryptocurrency makes the lack of liquidity all the more apparent. Investors want to buy or sell large blocks at a similar time but cannot do so efficiently.

#### **Custodial services**

Most cryptocurrency exchanges aren't regulated so there is little recourse if the cryptocurrency is lost or stolen or if the trading platform fails. And, a lack of transparency regarding ownership increases the risk of misuse by bad actors and complicates know your customer screening. This makes it difficult for a custodian to meet its obligation

of holding and safeguarding assets. As a result, only a limited number of fund custodians currently service this asset class

The lack of a regulatory framework is a risk not only to fund managers, but to all parties in the transaction chain. Regulatory compliance is an issue that must be addressed to lay the groundwork for traditional custodial safekeeping services and attract risk averse investors.

## Diving in

All these issues and challenges seem to have only made cryptocurrencies more enticing, and the market continues to grow. Maintaining the momentum while widening the pool of participants to include institutional and mainstream investors will require cryptocurrencies to reach a level of 'legitimacy'. Establishing best practices and developing an infrastructure to address operations, security, regulatory issues, ease-of-use and other gaps will help achieve that goal.

With a low barrier to entry, hundreds of technology start-ups have been rushing in with their own exchanges, wallets, coin offerings, asset management tools and services to fill operational gaps – and grab a slice of this lucrative market. Whichever companies survive what is likely to be an eventual shakeout, cryptocurrencies are here to stay. Fund managers that hope to ride this wave through will need the right strategy, infrastructure and technology.

While no vendor currently provides end-to-end operational coverage for cryptocurrencies, interoperability and flexibility will streamline the more labour-intensive processes. Back-office accounting and investment analysis software like Fund-Count includes flexible templates and APIs to accept information in various formats from other systems. FundCount empowers users with the ability to establish 'custom currencies' (such as cryptocurrencies) and integrates all accounting information to provide a complete picture of activity. Portfolio, financial and other reports can be generated quickly to support audit and tax reporting requirements.