

The State of Play of Digital Assets in Malaysia and Linkages To Financial Stability

Digital asset activities globally have been growing and evolving rapidly especially over the past few years. Accordingly, central banks and national regulatory authorities are devoting resources to better understand the digital asset landscape and its linkages with mainstream finance and the broader economy. The borderless nature and increasing interconnectedness with the financial system underscores the need for enhanced surveillance, more effective regulation and supervisory cooperation to avert potential threats to financial stability.

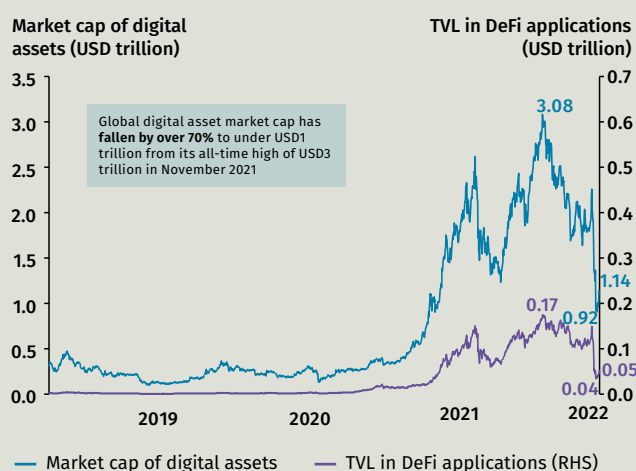
This article reviews the current state of play of digital assets in Malaysia, where adoption has also grown significantly since the start of the pandemic, and includes insights on the potential implications of such activities for domestic financial stability.

State of Play

Global landscape: Continued market volatility and uncertainty

More than a decade since the minting of the first Bitcoin in 2009, the digital asset market has experienced continued episodes of wild price swings and significant market volatility. As observed in the most recent market turmoil – dubbed by many as the “crypto winter” – this continues to be a defining characteristic of the market. During the pandemic, market capitalisation of digital assets grew to around USD3 trillion at its peak in November 2021. This was fuelled by ample liquidity, historic low interest rates, and increased participation by retail and institutional investors. However, the market capitalisation of digital assets plummeted by 70% to USD894 billion in June 2022, before recovering some of its losses more recently. The Total Value Locked (TVL) in decentralised finance (DeFi) platforms also experienced a similar decline, falling dramatically from a peak of USD186 billion in December 2021 to USD55 billion in June 2022 (Chart 1). This steep sell-off was contributed by a general risk-off sentiment due to a global environment facing high inflation, rising interest rates, and increasing geopolitical uncertainties. This was further exacerbated by market-specific events such as the failure of the TerraUSD project which wiped off USD40 billion in value within a matter of days.

Chart 1: Market Capitalisation of Digital Assets and Total Value Locked (TVL) in DeFi Applications



Source: CoinGecko

As a fallout from the crypto winter, a number of prominent crypto projects and companies have shuttered over a space of a few months. In addition to the TerraUSD collapse in May 2022, crypto lenders such as Celsius Network (based in the US) and Vault (based in Singapore) have resorted to restricting customer withdrawals, trading, and deposits on their platforms amid restructuring efforts. Crypto hedge funds have met similar fates, such as Three Arrows Capital (based in Singapore) which recently filed for bankruptcy with debts amounting up to USD3.5 billion.

In response to these developments, regulators and standard-setting bodies have stepped up efforts to address the concerns surfacing from the crypto markets. For instance, European Union (EU) agreed on a landmark deal to bring crypto-assets, crypto-asset issuers, and crypto-asset service providers under an EU-wide regulatory framework for the first time in June 2022. The resulting Markets in Crypto-Assets (MiCA) framework aims to protect investors and preserve financial stability, while allowing for innovation in the crypto-asset sector.¹ In September 2022, the White House released a comprehensive framework for responsible digital asset development that outlines recommendations to protect consumers, investors and businesses, foster financial stability, fight illicit finance and mitigate any environmental impact.² Closer to home, the Monetary Authority of Singapore (MAS) issued guidelines in January 2022 giving effect to expectations that Digital Payment Token (DPT) service providers should not promote their DPT services to the general public in Singapore, with indications that access to digital assets by retail investors may be further tightened. In August 2022, MAS also announced its intention to take stronger measures to restrict access to digital assets by retail investors and consider further measures to reduce consumer harm. These include imposing customer suitability tests and restricting the use of credit for trading.³

Domestic landscape: Growing rapidly, but remains small

Digital asset adoption in Malaysia has also grown rapidly over the past two years. Based on data published by the Securities Commission Malaysia (SC), the number of investment accounts across the four registered Digital Asset Exchanges (DAX) grew by around 300% to approximately 760,000 in 2021 (2020: more than 190,000). Despite the rapid growth, total digital asset activities in Malaysia remain small. The overall number of investment accounts in DAXs amounted to just over 3% when compared to the 24.1 million unit trust funds accounts in Malaysia in 2021 (2020: 21.3 million). In 2021, a total of approximately RM21 billion of digital assets were traded across all registered DAXs, compared to just RM1.4 billion in 2020. This accounted for only 2.3% and 0.2% when compared to the trading value in the local equities and foreign exchange (FX) markets respectively (Chart 2).

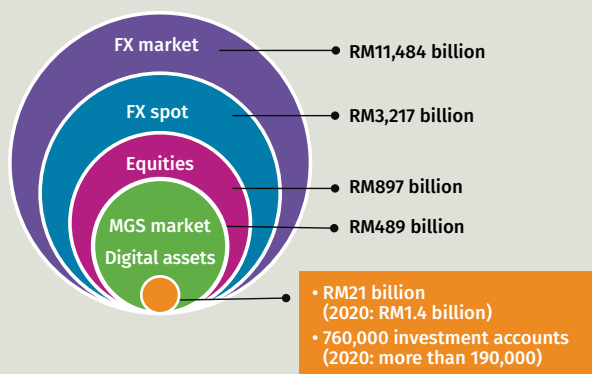
Younger investors aged below 35 years old comprised the largest segment of digital asset users in Malaysia, accounting for 62% of the total investment accounts as at end-2021. The greater prominence of younger investors is also consistent with global trends, as they are likely to be more technology savvy and willing to take on higher risks. A study by Luno indicated that 76% of its users purchased digital assets for investment purposes while 15% did so for trading purposes (Chart 3). This is consistent with digital assets being largely viewed by the public as a speculative asset class. In contrast, only 2% of respondents have used digital assets as a payment method. This too is consistent with the common view that digital assets are generally unsuitable as a medium of payment due to their significant price volatility.

¹ European Council and Council of the European Union (June 2022).

² The White House (September 2022). The comprehensive framework follows President Joseph R. Biden Jr.'s Executive Order on Ensuring Responsible Development of Digital Assets (March 2022).

³ Financial Times (August 2022).

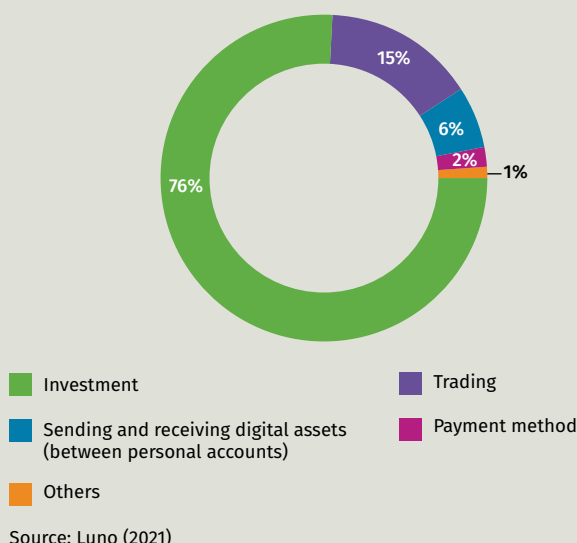
Chart 2: Annual Trading Value in Malaysia for Digital Assets and Other Financial Market Instruments in 2021



Note: 1. The annual trading value for MGS market is for secondary bond market.
 2. The high annual growth for digital assets is likely due to the low base effect.

Source: Bank Negara Malaysia, Bursa Malaysia and Securities Commission Malaysia

Chart 3: Percentage of Luno's Users in Malaysia by Purpose of Purchasing Digital Assets



Linkages to Financial Stability

Minimal risk to financial stability at the current level of adoption

At the current level of digital asset adoption in Malaysia, risks to domestic financial stability remain well contained. However, more widespread adoption of digital assets may be a source of future risks to the financial sector, with important implications for financial stability. This could arise from the disintermediation of the financial sector and heightened spillover risks from the digital asset market to the broader financial system. For example, a large shift of bank deposits to digital assets may put pressure on banks' cost of funds by increasing their dependence on costlier and less stable funding sources (e.g., wholesale deposits). The resulting impact on banks' liquidity and earnings could in turn drive higher lending rates or lower loan growth, with broader implications for economic activity and future credit risks. Such risks are low at present. As at end-June 2022, about RM4.9 billion of customer funds have been deposited at registered DAXs, accounting for only 0.6% of the total retail deposits in Malaysia. At the same time, the natural growth in bank deposits and loans⁴ have also continued to consistently outstrip any effects from broader digital asset adoption.

Financial institutions may also have direct and indirect exposures to digital assets that could give rise to liquidity, credit and operational risks. For instance, stablecoin arrangements, which aim to maintain a stable value relative to a specific asset, introduces such risks as they rely on short-term debt instruments or less credible stabilisation mechanisms⁵ to maintain the stable value. Such stablecoins are susceptible to runs where large-scale redemptions of the stablecoins may threaten the solvency of stablecoin issuers or trigger a fire sale of the underlying assets to meet redemptions. This could create broader disruptions in asset markets and generate funding shocks for corporates and banks. DeFi platforms and services have also come under greater scrutiny as a potential flashpoint leading to systemic risks, due to their potential reliance on leverage and borderless operations. To-date, however, there has yet to be any issuance of major stablecoins in Malaysia, or such projects backed primarily by Malaysian-based assets. The adoption of DeFi in Malaysia also remains modest, with Malaysia ranked 46th out of 145 countries in the 2021 Global DeFi Adoption Index.⁶

⁴ To date, there has been no instances of negative growth in bank deposits and loans in Malaysia.

⁵ For example, algorithmic stablecoins are typically programmed to adjust its supply in response to changes in demand in order to maintain a price peg.

⁶ As outlined in the Chainalysis' 2021 Geography of Cryptocurrency Report (Oct 2021) the DeFi Adoption Index is made up of three metrics, i.e., (i) On-chain cryptocurrency value received by DeFi platforms weighted by purchasing power parity (PPP) per capita; (ii) Total retail value received by DeFi platforms; and (iii) Individual deposits to DeFi platforms weighted by PPP per capita.

At present, the exposure of banks in Malaysia to digital asset activities is largely limited to facilitating low-risk client services - mainly comprising the provision of deposit or trust accounts for registered DAXs and facilitating payments for customer purchases of digital assets via the registered DAXs.⁷ Based on a recent survey of banks' intentions to participate in digital asset activities, key factors that have inhibited further involvement by banks in digital assets at this stage include concerns over price volatility, high fraud cases, lack of regulatory clarity around banks' involvement in digital asset activities and investor protection requirements, cyber security risks and the adverse environmental impact.

Looking ahead, several banks have indicated an interest to extend their involvement in digital assets, in response to anticipated demand from their clients and as a potential revenue stream. These activities may include providing digital asset exchange and custody services, among others. As this may increase the bank's exposure to digital assets, such activities will be closely monitored by the Bank as part of its supervisory activities, along with a consideration of relevant safeguards and controls to address any significant increase observed in the risk exposures of banks.

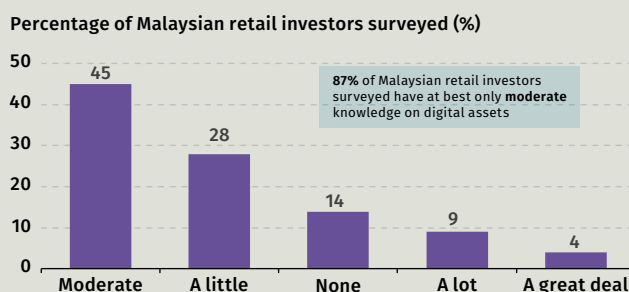
Wealth effects: Keeping investors and consumers safe

Insights on the profile of retail digital asset investors suggest a cause for concern. A recent study conducted by Sukumaran et al (2022) found that 87% of Malaysian retail investors surveyed had at best only moderate knowledge of the digital assets they were investing in (Chart 4). Given that these investors are mostly below 35 years old, they are also more likely to be vulnerable to financial stress due to lower financial buffers.⁸ A significant rout in digital asset prices would have negative wealth effects on retail investors. Investments that are funded through credit or leverage would further amplify these effects by impacting borrowers' debt servicing ability and add to individual financial stress.

Consumers are also exposed to additional risks when dealing with unregistered digital asset service providers. Such providers typically do not provide investors with customer protection and redress channels equivalent to those offered by mainstream finance and regulated DAXs. Further, there have been numerous recent cases of misuse of investors' personal data, theft of information assets, and inability to access user funds due to frozen accounts.

Given these risks, the Bank together with the SC have continued to direct efforts to educate the public on the risks associated with digital assets, in particular the risk that they could lose their wealth not only through large price swings, but also through an increased risk of fraud or cyber thefts when they deal with unregulated digital asset players.

Chart 4: Percentage of Malaysian Retail Investors by Depth of Knowledge in Digital Assets



Source: Sukumaran et al. (2022)

⁷ Investors in Malaysia are able to transfer funds to the four registered DAXs via the Financial Process Exchange (FPX), DuitNow or Interbank GIRO (IBG) systems for onward purchase of digital assets.

⁸ Estimates from DOSM's Household Income and Expenditure Survey 2019 data suggest that households headed by younger individuals (aged 35 years and below) typically have lower average residual income after accounting for expenditure and financial obligations, compared to older counterparts.

Going forward: Building capacity and strengthening collaboration

While there may be limited risks to financial stability from digital asset adoption now, the Bank, via its Digital Currency Research Hub, continues to closely monitor global and domestic developments surrounding such activities in relation to our core mandates. We continue to accord priority, working with other regulators, the Financial Education Network and relevant Government agencies, to strengthen financial education and public awareness on the risks of digital assets.

The Bank also aims to strengthen its on-going surveillance capabilities to facilitate better understanding of the digital asset landscape and to address potential data gaps. In expectation of an increase in banks' involvement in digital asset activities in the coming years, attention will also be directed towards enhancing our regulatory framework to mitigate the attendant risks posed by digital assets. Such efforts will be pursued in consultation with industry players and taking into account ongoing developments surrounding global regulatory standards in this area.

Efforts to strengthen the oversight of digital asset activities will also require the Bank to strengthen international cooperation and coordination with other financial regulators. This aims to reduce risks of fragmentation and regulatory arbitrage especially given the borderless nature of digital assets.

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