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Author: Leo Kwan
Email: ckkwan@bochk.com
Tel: +852 398 27181

Contact: Ms. Chan
Email: ccchan@bochk.com
Tel: +852 282 66208

Virtual Assets and Traditional Finance Mutually Penetrate Which Gradually Forming a New Rule of Game

Leo Kwan, Principal Strategist

Preface

2025 is an important year for the accelerated development of virtual assets. Following the release of the “Regulatory Roadmap for Hong Kong’s Virtual Asset Market” by the HKSF in Feb this year, the HKSAR Government also plans to publish its second policy statement on the development of virtual assets within the year to explore how to combine the advantages of traditional financial services with technological innovations in the field of virtual assets. Looking back at the development trajectory of the virtual asset market, since the publication of a paper titled “Bitcoin: A Peer-to-Peer Electronic Cash System” signed by Satoshi Nakamoto in Nov 2008, the development of virtual assets was officially started, and then the “Bitcoin” network was launched in Jan 2009. Around 16 years later, “Bitcoin” becomes a hot topic of the investment market. Driven by the Bitcoin investment boom, virtual assets market is constantly changing, and a wide variety of products have emerged. Today, there are more than 1,600 Cryptos in the market. However, despite the rapid development of virtual assets, the concept of “Decentralized Finance” (DeFi) has been challenged and questioned. With the active participation of the Government and regulators, the development track of the virtual asset market has also changed. This report briefly analyzes the latest market situation of virtual asset market and attempts to explore its future development trends.

I. Types of Virtual Assets and its Influencing Power Continue to Increase

Virtual assets are based on blockchain technology and a Decentralized Financial (DeFi) ecosystem. With the support of blockchain and smart contracts technologies as well as technological and financial innovation, virtual assets have rapidly developed with the concept of DeFi, among which “Bitcoin” and “Ethereum” have become iconic virtual assets. Today, 16 years after the birth of Bitcoin, the virtual asset market continues to change and develop, and is flourishing all over the world.



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The total market value of global virtual assets (e.g. crypto, tokenized assets, etc.) have shown a fluctuating upward trend due to a variety of factors. According to data from the Investing.com, as of May 13, 2025, the total market value of global crypto exceeded US\$3.3 trillion, of which Bitcoin dominated (over 50%) with a market value of over US\$2 trillion (approximately HK\$16 trillion). Ethereum, which ranked second, had a market value of US\$296 billion (approximately HK\$2.3 trillion), which was only about 16.4% of Bitcoin. In addition, Stablecoins (such as USDT and USDC) are another crypto currencies that has attracted much attention in the world, and their total global market value has exceeded US\$220 billion.

From the perspective of market value, “Bitcoin” has already surpassed the total market value of silver, which is only less than US\$2 trillion. This does not include spot and futures ETFs linked to Bitcoin, and other virtual assets like RWA (Real World Asset), NFT, Meme coins, central bank digital currencies (CBDCs), and some less well-known virtual assets, such as utility tokens and privacy coins. Among them, the Trump Meme Coin (\$TRUMP) issued by the US President Donald Trump has a total market value of more than HK\$100 billion (about US\$14 billion). As of May 2025, there are rumors in the market that Trump may issue a second batch of meme coins.

In addition, in Feb 2025, Invest Hong Kong approved a “Capital Investment Entrant Scheme” (CIES) application with Ethereum (ETH) as a proof of assets of HK\$30 million, which is considered equivalent to traditional assets. At the same time, HashKey Capital launched the first “HashKey FTSE Digital Asset 20 Index Fund” (HashKey 20¹) approved by the HKSF for institutional and professional investors in Feb 2025, allowing investors in the CIES to allocate HK\$10 million (1/3 of the investment threshold) to the HashKey 20 Index Fund. It indicates that the market recognition and influence of virtual assets are rising.

II. Regulators Gradually Enter the Market, and the Market Structure Shifts from Decentralized to Traditional Financial Model

In the DeFi system, all transactions of virtual assets do not need to rely on financial instruments provided by traditional financial institutions (FIs) such as brokerages, exchanges and banks, nor do they require legal institutions and centralized units such as lawyers and accountants to verify and execute. Its unchangeable and traceable nature allows both parties to the transaction to directly trust the DeFi system, which largely gets rid of the supervision on financial transactions, services and products.

In the early stages of virtual asset development, the market generally values its high autonomy, the ability to automatically execute transactions through smart contracts 24/7, openness, transparency and low costs. All transactions are recorded in the blockchain system, eliminating intermediary, manpower and rental costs, and able to trade through mobile phones. However, when running in a completely decentralized architecture, each transaction needs to read all blocks in full before it can be confirmed, which will inevitably lead to efficiency problems. Therefore, whether it is Bitcoin or Ethereum, a similar “archive node²” architecture has emerged, which uses a snapshot to calculate all the ledgers on the chain at a certain point in time, which can be verified through recalculation and speed up the accounting process. In addition, the unregulated and non-intermediary financial system has also led to rampant fraud, such as online fraud and exchange hacking. Victims are likely to have nowhere to seek for help. Participants with technical or capital advantages can gain relative advantages, which will gradually form unequal classes.

In recent years, the development of virtual assets in Hong Kong has gradually taken root in the centralized regulatory system of traditional finance. This is partly because the market and regulators have gradually realized that the DeFi operating model carries great potential risks. Virtual asset markets have seen a series of issues, involving illegal activities such as illegal transactions, fraud cases and market manipulation, which have led to several major accidents, such as the closure of FTX, the world’s second

¹ HashKey 20 currently includes Solana, Dogecoin, Cardano, Avalanche, ChainLink, Polkadot, Stellar, Filecoin, and Ripple.

² Archive nodes store all historical states of a blockchain between blocks. An archive node essentially contains snapshots of the network at different points in time.

largest virtual currency exchange, and the theft of more than 400,000 ETH (worth US\$1.5 billion) from the Bybit exchange, as well as the evaporation of US\$40 billion in market value after the value of LUNA tokens returned to zero, bringing a lot of shocks to the investment and financial markets. Therefore, traditional regulatory bodies must enter the market to improve the regulatory environment of the virtual asset market to minimize the impact of emerging DeFi concepts on traditional financial markets. On the other hand, Governments, central banks and regulators in many countries around the world have begun to study and deepen their participation in the virtual asset market. According to a survey released by the Bank for International Settlements (BIS) in 2024, 94% of the world's central banks have invested in central bank digital currency (CBDC)-related work. In Asia, China, India, Thailand and other countries have entered the initial application or testing stage, reflecting that virtual assets are gradually moving towards the traditional financial operating system.

III. With the Active Promotion of the HKSAR Government, Hong Kong is Expected to Become an Innovative Testing Field for Virtual Asset Biz

In Oct 2022, the HKSAR Government, through the Financial Services and the Treasury Bureau, issued the “Policy Statement on the Development of Virtual Assets in Hong Kong”, clarifying the Government’s policy stance and guidelines on promoting the virtual asset industry, and demonstrating its determination to develop Hong Kong into an “international virtual asset centre”. Subsequently, local regulatory authorities have introduced corresponding regulations, statements and guidelines. Since Oct 2022, the Hong Kong Monetary Authority (HKMA) has issued a total of 41 notifications to the market on virtual asset supervision, mainly focusing on areas such as staking guidance for licensed virtual asset trading platforms, intermediary activities, tokenized asset custody, stablecoin issuer “sandbox”, and anti-money laundering risk management. By refining the regulatory content and guidelines, it systematically promotes the development of the virtual asset market. Meanwhile, the HKSFC issued a total of 40 related announcements, such as the licensing system for virtual asset trading platforms, circulars on the SFC’s approval of funds to invest in virtual assets, provision on staking service for virtual assets and authorised virtual asset funds, and the “A-S-P-I-Re” regulatory roadmap, namely Access, Safeguards, Products, Infrastructure and Relationships, to achieve orderly development. In addition, the HKSAR Government plans to publish its second policy statement on the development of virtual assets within the year to explore how to combine the advantages of traditional financial services, with technological innovations in the field of virtual assets to enhance the security and flexibility of traditional economic activities. It encourages local and international companies to explore the innovation and application of virtual asset technology.

With the active role of the Government and regulators, the local virtual asset market has made many breakthroughs. The first is to launch the virtual asset trading platform licensing regime, as of Jun 2025, a total of 10 licensed trading platforms are officially in operation, significantly reducing platform risks. The second is to successfully promote the issuance of virtual asset ETFs by the Hong Kong Stock Exchange (HKSE), and further realize the issuance of “Bitcoin” and “Ethereum” futures and spot ETFs. As of the second quarter of 2025, there are 18 virtual currency ETFs listed on the HKSE, with a total market value of HK\$9.2 billion. Third, by introducing virtual asset staking services, investors can earn income from virtual assets in a regulated market environment, helping to improve the liquidity of virtual assets. Fourth, to regulate and/or implement a licensing regime for fiat-referenced stablecoins (FRS) and virtual assets over-the-counter trading services (OTC). The Hong Kong Legislative Council completed the third reading and passed the “Stablecoin Bill” on May 21, 2025, and the relevant regulations are expected to come into effect in 2025. In addition, OTC regulation is expected to be introduced within the year, which will promote the further standardization of the virtual asset market and reduce the number of crypto OTC money changer scams that have occurred in Hong Kong in recent years. Fifth, it successfully attracted the “Consensus Conference”, a key event in the global cryptocurrency and Web3 industry, to be held in Hong Kong in Feb 2025, bringing together thousands of industry elites and corporate representatives from the global virtual assets, blockchain, Web3 and financial technology industries, confirming Hong Kong’s market position in the virtual asset business. It is worth noting that the Hong Kong SAR Government is more directly involved. Based on the HKMA’s Project Genesis, Hong

Kong has issued two batches of Government tokenized green bonds in 2023 and 2024 respectively, making tokenization move from proof of concept to practical application.

IV. As Virtual Assets Evolve to RWA, Traditional Financial Institutions are Exploring Business Opportunities with a Cautious Attitude

Virtual assets started with the early concept of Web3.0 and DeFi, both products and business models have gradually moved closer to the traditional financial system. After the entry of regulatory bodies, the virtual asset market began to follow a systematic and standardized development mode. Under the requirements of related regulations, the role of traditional FIs is gradually becoming more important. For example, the HKSAR Government launched the first batch of Government tokenized green bonds in Feb 2023, introducing traditional FIs such as banks, investment banks as well as custodians, and also kicked off the mutual penetration and market's integration of the virtual asset and traditional financial market. Subsequently, the HKSFC introduced a licensing system for virtual asset trading platforms, the issuance of crypto spot and futures ETFs, and the launch of a series of projects such as Ensemble and Stablecoin Sandbox, which continued to promote and increase the participation of traditional financial industries in the virtual asset market. At the same time, traditional FIs have also begun to actively use blockchain technology to explore the launch of tokenized products and services.

Today, traditional FIs such as banking groups, asset management companies, insurance companies, investment banks, fund house, and securities firms have entered the market one after another, showing a trend of mutual penetration and interactive development between the traditional and new financial systems. However, at this stage, traditional FIs generally adopt the “steady and prudent approach”, which can be summarized into two major areas.

In terms of supporting policy projects, traditional FIs are more active, such as participating in the Project Ensemble (interbank payment settlement, tokenized bond settlement, tokenized e-bill of lading settlement), CBDC, mBridge, stablecoin sandbox, and supporting the issuance of crypto ETFs and other projects. They are playing a very important supporting role. In general, they are actively cooperating with the Government's steady and progressive development pace.

In terms of promoting innovative projects, the strategies of traditional FIs are not overly aggressive. Instead, they are more focused on developing a combination of the virtual and real world assets, such as promoting tokenized funds, gold, bonds and other real world asset (RWA) projects, while avoiding aggressively participating in customer marketing and trading services for cryptos and related products (such as ETFs) with huge price fluctuations and higher potential risks. As of the second quarter of 2025, only a few traditional banks provide cryptos ETF trading services to their customers, while other innovative market players like digital banks and digital brokerages are more aggressive and have relatively high participation.

V. The “Investment Attribute” of Virtual Assets is Developing Rapidly, and the “Payment Attribute” is Expected to Catch Up

Referring to the definition of the Hong Kong Investor and Financial Education Council (IFEC), “Virtual assets are a digital representation of value that can be traded, transferred or used for payment or investment purposes. Examples of virtual assets include crypto assets, decentralized autonomous organisation tokens, non-fungible tokens, and tokens claiming to be backed by commodities or other underlying assets...”. In general, virtual assets mainly include two connotations. **One is “investment”**, such as tokenized RWAs (such as gold, real estate, and artworks) and cryptos (such as Bitcoin and Ethereum), which can be regarded as tools for storing value and making investments for profit. **The other is “payment”**, as a substitute for traditional currency to achieve

peer-to-peer (P2P) transactions, small-amount instant payments, in-game transactions, etc. (such as special-purpose tokens), or used to reduce the cost and time of cross-border remittances in the traditional financial system (such as USDT and XRP).

From the above analysis, it can be seen that the “investment” attribute of Hong Kong’s virtual asset market is developing relatively fast. Investors can participate in tokenized funds and gold, bonds, cryptos and related futures and spot ETFs through banks, securities firms, licensed trading platforms and traditional money changers. In the future, it is more likely to contact and participate in a wider range of investment products (such as real estate, artworks, large projects, etc.) through RWAs or STOs (security token issuance) projects. However, at present, local retail and corporate customers generally fail to use tokenized virtual assets as a medium of “payment” and still rely on traditional currencies and related e-transactions, such as e-payments solutions offered by banks, credit card, licensed SVF, as well as the HKMA’s fast payment system “FPS” and cross-border remittances, etc. Nevertheless, **as eCNY begins to be put into use, eHKD is also under study, and the supervision and implementation of the licensing regime for stablecoins would be gradually realized within 2025. It is expected that virtual assets will be applied in areas such as daily and cross-border trade payments, and their payment attributes will be gradually extended and developed.**

VI. Conclusion: Virtual Assets Will Continue to Transform and Grow, Developing Steadily on the Basis of Four Major Elements

The market transformation of virtual assets is still on the way, and many areas such as stablecoins, OTC trading services, cross-border/multinational virtual asset transactions, innovative development paths and supervision of tokenized assets are still in the development process. It is expected that with the active participation of Government and regulators, and the communication and cooperation with international regulators, **the rule of game of the virtual asset market will gradually change and develop healthily in four main directions.**

Standardization. through the efforts of the HKSAR Government and regulators, such as legislative regulation and the issuance of licenses, the regulatory environment of the virtual assets market will continue to be improved and refined, moving from chaotic development to a more standardized development stage.

Specialization. On the one hand, products must be professionalized. Products that are approved by regulators must undergo appropriate evaluation or review to effectively reduce risks and improve professionalism. On the other hand, trading platform management must be professionalized. Asset custody, fund utilization, trading processes, technical operations, etc. are all subject to professional supervision to protect the interests of investors.

Popularization. Through legislative regulation, the potential risks of virtual assets transactions are expected to be gradually reduced. Investors can participate in the buying, selling and investment activities of virtual assets through regulated trading platforms, securities firms, commercial banks and digital banks.

Diversification. Virtual assets are developing in two major areas. One is the continuous extension of investment product types, expanding from cryptos-related transactions to tokenized RWA (such as funds, bonds, precious metals, securities, etc.); the other is the continuous development of payment services. With the continued popularization and development of CBDC such as eCNY and eHKD, and the subsequent entry of stablecoins, it is expected to help realize the exploration and development of cross-border payments with tokenized assets under a regulatory environment

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Author:

Kwan Chun Kau (Leo), Principal Strategist, holds a Doctor in Business Administration from the Hong Kong Polytechnic University, a MBA (International Business) from the University of Birmingham, UK, a Master of Finance from Curtin University of Technology, Australia, a MSC in Occupational Psychology from the University of Leicester, UK, a MSC in Applied Psychology from the City University of Hong Kong, a MSC in Counselling Psychology from the Hong Kong Shue Yan University, an Associate Fellow of the Hong Kong Psychological Society, a Registered Psychologist in the Department of Industrial and Organisational Psychology and the Department of Counselling Psychologist, a Chartered Manager of the Canadian Chartered Institute of Business Administration, and obtained the Chartered Marketer status of the Chartered Institute of Marketing, UK in 2003. He has worked at Bank of China (Hong Kong) for more than 20 years. His main research areas include corporate strategy, channel strategy, business innovation, fintech, retail banking, customer segmentation, consumer behavior, digital transformation and tokenization business.

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主要經濟指標 (Key Economic Indicators)

一、本地生產總值 GDP	2022	2023	2024	2025/Q1
總量 (億港元) GDP(HKD 100million)	28,090	29,010	29,729	7,997
同比增長率 (%) YoY change(%)	-3.7	3.3	2.5	3.1
二、對外商品貿易 External merchandize trade			2025/4	2025/1-4
外貿總值 (億港元) Total trade(HKD 100million)				
總出口 Total exports	45,317	41,774	4,345	16,050
總進口 Total imports	49,275	46,450	4,505	17,020
貿易差額 Trade balance	-3,958	-4,676	-160	-970
年增長率 (%) YoY Growth(%)				
總出口 Total exports	-8.6	-7.8	14.7	11.9
總進口 Total imports	-7.2	-5.7	15.8	11.4
三、消費物價 Consumer Price				
綜合消費物價升幅 (%) Change in Composite CPI(%)	1.9	2.1	2.0	1.7
四、零售市場 Retail market				
零售額同比升幅 (%) Change in value of total sales YoY(%)	-0.9	16.2	-2.3	-5.6
五、訪港遊客 Visitors				
總人數 (萬人次) Total arrivals(10 thousands)	60.5	3,400.0	384.8	1,607.6
年升幅 (%) YoY change(%)	561.5	5,523.8	13.5	10.0
六、勞動就業 Employment			2025/1-2025/3	2025/2-2025/4
失業人數 (萬人) No. of unemployed(10 thousands)	16.3	11.3	12.3	12.9
失業率 (%) Unemployment rate(%)	4.3	2.9	3.2	3.4
就業不足率 (%) Underemployment rate(%)	2.3	1.1	1.1	1.3
七、住宅買賣 Domestic property sales and price index			2025/3	2025/4
合約宗數 (宗) No. of agreements	45,050	43,002	5,367	5,694
住宅售價指數 (1999=100) Domestic price index	369.7	337.4	284.7	285.7
八、金融市場 Financial market			2025/4	2025/5
港幣匯價 (US\$100=HK\$) 期末值	780.8	781.1	775.7	784.4
HKD exchange rate (US\$100 = HK\$), end of period				
銀行體系收市總結餘 (億港元) 期末值	962.5	449.5	446.1	1734.3
Closing aggregate balance(HKD 100million), end of period				
銀行總存款升幅 (%)	1.7	5.1	4.1	-
Change in total deposits(%)				
銀行總貸款升幅 (%)	-3.0	-3.6	0.5	-
Change in total loans & advances(%)				
最優惠貸款利率 (%) 期末值	5.6250	5.8750	5.2500	5.2500
Best lending rate (%), end of period				
恒生指數 Hang Seng Index	19,781	17,047	22,119	23,290