Executive Summary

The rapid expansion and adoption of virtual assets, cryptocurrencies, and the encompassing web3 ecosystem have brought about a transformative shift in the global financial landscape, presenting both unparalleled opportunities and new challenges. To harness the full potential of this burgeoning industry, it is essential to establish a comprehensive, forward-thinking, and adaptive regulatory framework that encourages innovation while preserving financial stability and market integrity.

As a prominent international financial centre, Hong Kong must adopt a proactive and strategic approach to regulating web3 technologies to maintain its competitive edge and attract innovative businesses and investments. While the city's existing regulatory landscape provides a foundation for overseeing virtual assets and cryptocurrencies, a thorough reassessment and update are necessary to effectively address the unique challenges and opportunities posed by this rapidly evolving industry.

This suggestion paper aims to provide an in-depth analysis and a comprehensive set of recommendations for the development of a progressive, investor-friendly, and robust regulatory framework for the web3 industry in Hong Kong. The paper is structured as follows:

- 1. Overview of the Current Regulatory Landscape in Hong Kong
- 2. Comparative Analysis of International Regulatory Approaches
- 3. Key Principles for Developing a Friendly Regulatory Framework
- 4. Recommendations for Hong Kong's Regulatory Framework

In conclusion, embracing the web3 industry and adopting a progressive regulatory framework will enable Hong Kong to create a conducive environment for innovation and growth while safeguarding market integrity and ensuring the stability of its financial system. Implementing the recommendations outlined in this paper will position Hong Kong as a leading hub for the web3 industry and further solidify its status as a premier global financial centre.

Web3 Developments will be the watershed for Hong Kong's quest to continue being the International Financial Hub.

Foreword

The financial services industry is undeniably experiencing a period of profound transformation, largely driven by the emergence of virtual assets, cryptocurrencies, and the broader web3 ecosystem. These digital innovations have the potential to revolutionise the way financial transactions are executed and managed, while simultaneously introducing novel complexities and risks that demand the attention of regulators, policymakers, and industry stakeholders alike.

As a leading international financial hub, Hong Kong has a vital role to play in shaping the development and adoption of these innovative technologies. The city's reputation as a well-regulated and financially stable jurisdiction and its long-standing commitment to fostering innovation presents a unique opportunity for Hong Kong to become a world-class centre for the web3 industry.

In recognition of this potential, this suggestion paper is prepared to provide a comprehensive and actionable roadmap for the development of a progressive, investor-friendly, and robust regulatory framework for the web3 industry in Hong Kong. The paper combines a thorough examination of the extant regulatory landscape in Hong Kong, a comparative analysis of international regulatory approaches, and a set of guiding principles and recommendations designed to inform and support the city's efforts in cultivating a conducive environment for web3 innovation.

I believe that through the diligent application of the insights and recommendations contained within this paper, Hong Kong will be well-positioned to seize the opportunities presented by the web3 ecosystem while safeguarding the integrity and stability of its financial system. It is our hope that this paper will serve as a valuable resource for regulators, policymakers, industry stakeholders, and interested parties as they navigate the complex and evolving landscape of the web3 industry.

Table of Contents

Executive Summary	2
1. Introduction	6
2. Current Web3 Regulatory Landscape in Hong Kong	7
2.1. Securities and Futures Commission (SFC)	7
2.2. Hong Kong Monetary Authority (HKMA)	8
2.3. Financial Services and Treasury Bureau (FSTB)	8
3. Comparative Analysis of International Regulatory Approaches	9
3.1. United States	9
3.2. European Union	10
3.3. Singapore	10
3.4. Japan	11
3.5. Dubai	12
3.6. United Kingdom	13
4. Key Takeaways and Recommendations for Hong Kong's Regulatory Framework	14
4.1. Harmonized and Comprehensive Regulation:	14
4.2. Risk-Based Approach:	14
4.3. International Cooperation and Alignment:	14
4.4. Support for Innovation:	14
4.5. Education and Awareness:	15
5. Key Principles for Developing a Friendly Regulatory Framework	16
5.1. Clarity and Consistency	16
5.2. Proportionality and Flexibility	16
5.3. Collaboration and Harmonization	17
5.4. Balance Between Innovation and Risk Management	17
6. Recommendations for Hong Kong	19
6.1. Division of Roles between HKMA, SFC, and FSTB	19
6.2. Regulatory Sandbox	20
6.3. Licensing and Registration	23
6.4. Ongoing Supervision and Enforcement	25
6.5. Consumer Protection and Market Integrity	25
6.6. AML/CTF Compliance	27
6.7. Taxation and Reporting	29
6.8. Collaboration with International Regulatory Bodies	31
7. Risks and Challenges	35
7.1. Market and Liquidity Risks	35
7.2. Cybersecurity and Operational Risks	35
7.3. Legal and Regulatory Risks	35
7.4 Consumer and Investor Protection Risks	36

8. Beyond Financial Services: Broader Use Cases of Virtual Assets and Blockchain	
Technology	37
8.1. Supply Chain Management	37
8.2. Digital Identity and Privacy	37
8.3. Internet of Things (IoT) and Smart Cities	37
9. Fostering Talent and Education in the Web3 and Virtual Asset Ecosystem	39
9.1. Talent Attraction and Development	39
9.2. Education and Research	39
9.3. Public-Private Partnerships	39
10. Conclusion	41
11. Appendices	42
12. References	45

1. Introduction

The web3 industry, which encompasses virtual assets and cryptocurrencies, is a rapidly growing sector that holds immense potential to revolutionize the global financial landscape.

Hong Kong, as a leading international financial centre, has experienced rapid growth and development in the virtual asset ecosystem. With the increasing adoption of virtual assets and the emergence of various virtual asset service providers (VASPs), it is crucial for Hong Kong to establish a robust, effective, and internationally-aligned regulatory framework. This will not only help to mitigate potential risks associated with virtual assets, such as money laundering, terrorist financing, and market manipulation but also promote innovation and maintain Hong Kong's competitiveness in the global financial landscape.

The following recommendations provide a comprehensive roadmap for Hong Kong to enhance its cooperation and coordination with international regulatory bodies, adopt global best practices, and foster a resilient and vibrant virtual asset ecosystem. By actively engaging with global standard-setting bodies, establishing bilateral and multilateral relationships, facilitating cross-border supervision and enforcement, and participating in capacity-building and technical assistance initiatives, Hong Kong can ensure that its regulatory framework remains up-to-date, effective, and consistent with global standards.

2. Current Web3 Regulatory Landscape in Hong Kong

The regulatory landscape governing virtual assets and cryptocurrencies in Hong Kong is characterized by an evolving and multi-faceted approach, with various regulatory authorities assuming different roles and responsibilities. The primary regulators involved in the oversight of these digital assets are the Securities and Futures Commission (SFC), the Hong Kong Monetary Authority (HKMA), and the Financial Services and Treasury Bureau (FSTB). This section provides an overview of the existing regulatory framework, encompassing the key rules, regulations, and guidelines applicable to virtual assets and cryptocurrencies in Hong Kong.

2.1. Securities and Futures Commission (SFC)

The SFC is the principal regulatory authority responsible for overseeing the securities and futures markets in Hong Kong. Its mandate extends to the regulation of virtual assets and cryptocurrencies insofar as they fall under the purview of "securities" or "futures contracts" as defined under the Securities and Futures Ordinance (SFO).

In November 2018, the SFC issued a statement and a circular clarifying its regulatory stance on virtual asset portfolio managers, fund distributors, and trading platform operators. Key aspects of the SFC's approach include:

2.1.1. Virtual Asset Portfolio Managers:

The SFC requires that firms managing portfolios with virtual assets constituting 10% or more of the aggregate Gross Asset Value (GAV) be licensed or registered under the SFO. These firms are subject to the SFC's Fund Manager Code of Conduct (FMCC) and must adhere to additional requirements outlined in the SFC's circular, such as implementing risk management measures and ensuring proper custody of assets.

2.1.2. Virtual Asset Fund Distributors:

The sale and distribution of virtual asset funds in Hong Kong are subject to the SFC's licensing and conduct requirements, regardless of whether the underlying virtual assets qualify as "securities" or "futures contracts."

2.1.3. Virtual Asset Trading Platforms:

The SFC has established a voluntary opt-in framework for virtual asset trading platforms, allowing operators to apply for a license under the SFO if they meet specific eligibility criteria, such as offering trading services exclusively for professional investors, and providing access to at least one security token. Licensed platforms are subject to the SFC's regulatory oversight and must comply with a set of comprehensive rules and regulations, including anti-money laundering (AML) and counter-terrorism financing (CTF) requirements, as well as operational and conduct standards.

2.2. Hong Kong Monetary Authority (HKMA)

The HKMA is the primary regulatory authority responsible for maintaining the stability and integrity of Hong Kong's monetary and financial systems. While the HKMA does not directly regulate virtual assets or cryptocurrencies, it does oversee the activities of banks and other financial institutions that may engage in virtual asset-related services.

In 2018, the HKMA issued a circular highlighting the money laundering and terrorist financing risks associated with virtual assets and setting forth expectations for banks providing services linked to virtual assets. The circular requires banks to implement risk-based AML and CTF measures in line with the guidelines issued by the Financial Action Task Force (FATF) and to exercise caution when offering services to virtual asset-related businesses.

2.3. Financial Services and Treasury Bureau (FSTB)

The FSTB is responsible for formulating policies and legislation related to Hong Kong's financial services industry. In May 2021, the FSTB proposed amendments to the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (AMLO) to include virtual asset service providers (VASPs) within the regulatory scope.

Under the proposed amendments, VASPs, defined as entities engaged in the exchange, transfer, safekeeping, or management of virtual assets, would be required to obtain a license from the SFC and comply with AML and CTF requirements, as well as other applicable regulations. The consultation period for these amendments concluded in June 2021, and the legislative process is ongoing.

In conclusion, the current regulatory landscape for virtual assets and cryptocurrencies in Hong Kong is characterized by a combination of direct oversight by the SFC, indirect supervision by the HKMA, and ongoing legislative efforts led by the FSTB.

However, the existing regulations may not sufficiently address the unique challenges and opportunities posed by virtual assets and cryptocurrencies, which necessitates a review and potential reforms.

3. Comparative Analysis of International Regulatory Approaches

As virtual assets and cryptocurrencies continue to gain traction globally, financial regulators are adopting diverse approaches to address the unique challenges and opportunities posed by these digital assets. This section provides a comparative analysis of international regulatory approaches, focusing on key jurisdictions such as the United States, the European Union, Singapore, and Japan. The analysis aims to identify best practices and common trends that can inform the development of Hong Kong's regulatory framework for the web3 industry.

3.1. United States

In the United States, the regulation of virtual assets and cryptocurrencies is fragmented and primarily governed by a combination of federal and state-level authorities. Key regulatory bodies include the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), the Financial Crimes Enforcement Network (FinCEN), and state-level financial regulators.

3.1.1. Securities and Exchange Commission (SEC):

The SEC regulates virtual assets that qualify as "securities" under U.S. federal securities laws. The SEC has applied the Howey Test to determine whether a digital asset constitutes a security and is thus subject to federal securities regulation. The SEC has taken enforcement actions against non-compliant Initial Coin Offerings (ICOs) and has provided guidance on the registration and operation of digital asset exchanges.

3.1.2. Commodity Futures Trading Commission (CFTC):

The CFTC oversees virtual assets that are classified as "commodities," such as Bitcoin and Ethereum. The CFTC has jurisdiction over derivatives contracts involving virtual assets and has taken enforcement actions against fraudulent schemes, market manipulation, and unregistered trading platforms.

3.1.3. Financial Crimes Enforcement Network (FinCEN):

FinCEN is responsible for enforcing Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF) regulations in the United States. FinCEN requires virtual asset service providers (VASPs) to register as Money Services Businesses (MSBs) and comply with the Bank Secrecy Act (BSA) and other applicable AML/CTF regulations.

3.1.4. State-level Financial Regulators:

In addition to federal regulation, virtual asset businesses may be subject to state-level licensing and regulatory requirements, such as the New York State Department of Financial Services' BitLicense framework.

3.2. European Union

The European Union (EU) is in the process of implementing a comprehensive regulatory framework for virtual assets and cryptocurrencies, known as the Markets in Crypto-assets Regulation (MiCAR). MiCAR aims to create a harmonized regulatory environment for virtual assets across EU member states, with key provisions including:

3.2.1. Definition and Classification:

MiCAR establishes a taxonomy for virtual assets, distinguishing between various categories, such as utility tokens, asset-referenced tokens, and e-money tokens.

3.2.2. Licensing and Registration:

MiCAR introduces a licensing regime for VASPs and other crypto-asset service providers, requiring them to obtain authorization from their home country's competent authority and adhere to strict operational, governance, and capital requirements.

3.2.3. AML/CTF Requirements:

MiCAR reinforces the 5th Anti-Money Laundering Directive (AMLD5) provisions, mandating VASPs to implement risk-based AML/CTF measures, including customer due diligence, transaction monitoring, and suspicious activity reporting.

3.2.4. Investor Protection:

MiCAR introduces disclosure requirements for issuers of virtual assets, including white papers and other information documents, to ensure transparency and protect investors.

3.3. Singapore

The Monetary Authority of Singapore (MAS) has established a comprehensive regulatory framework for virtual assets and cryptocurrencies under the Payment Services Act (PSA) 2019. Key aspects of Singapore's approach include:

3.3.1. Licensing and Registration:

The PSA introduces a licensing regime for VASPs, requiring them to obtain a payment services license from MAS and comply with operational, governance, and risk management requirements.

3.3.2. AML/CTF Requirements:

The PSA incorporates AML/CTF obligations for VASPs, in line with the Financial Action Task Force (FATF) recommendations, to mitigate money laundering and terrorist financing risks associated with virtual assets.

3.3.3. Investor Protection:

MAS has issued guidelines for Initial Coin Offerings (ICOs) and Security Token Offerings (STOs), clarifying the application of securities laws to virtual asset issuances and requiring issuers to comply with disclosure and investor protection requirements.

3.4. Japan

The Financial Services Agency (FSA) of Japan has implemented a robust regulatory framework for virtual assets and cryptocurrencies under the Payment Services Act (PSA) and the Financial Instruments and Exchange Act (FIEA). Key aspects of Japan's approach include:

3.4.1. Licensing and Registration:

The PSA requires virtual asset exchange operators to register with the FSA and comply with strict operational, governance, and risk management requirements.

3.4.2. AML/CTF Requirements:

Japan's regulatory framework incorporates AML/CTF obligations for VASPs, in line with the FATF recommendations, to address money laundering and terrorist financing risks associated with virtual assets.

3.4.3. Investor Protection:

The FIEA regulates virtual assets that are classified as "securities" under Japanese law, including certain types of Initial Coin Offerings (ICOs) and Security Token Offerings (STOs). Issuers are required to comply with disclosure and investor protection requirements.

3.4.4. Consumer Protection:

The FSA has implemented consumer protection measures, such as mandating virtual asset exchanges to segregate customer assets from their own, maintain minimum capital requirements, and establish robust cybersecurity measures.

3.5. Dubai

Dubai, as a hub for innovation and technology, has embraced the potential of virtual assets and blockchain technology, positioning itself as a leading global player in the virtual asset space. The Dubai Multi Commodities Centre (DMCC), a government entity, has established a comprehensive regulatory framework for virtual asset activities, which has attracted numerous VASPs and blockchain-based businesses to the region.

3.5.1. Regulatory Sandbox:

The Dubai Financial Services Authority (DFSA) has introduced a regulatory sandbox, known as the "Innovation Testing Licence," which allows fintech and virtual asset businesses to test and develop their innovative products and services within a controlled environment. This approach enables the DFSA to monitor and assess the risks associated with new technologies and business models while providing valuable insights to help refine the regulatory framework.

3.5.2. Licensing and Supervision:

DMCC has introduced a licensing framework specifically for virtual asset businesses, which includes requirements for governance, risk management, and AML/CTF compliance. VASPs operating in Dubai must obtain a license from the DMCC and are subject to ongoing supervision and monitoring by the regulator.

3.5.3. Collaboration with Industry:

Dubai has actively engaged with industry stakeholders and global experts in developing its regulatory framework for virtual assets. The DMCC hosts regular events, workshops, and conferences, fostering dialogue and knowledge-sharing between regulators, industry participants, and thought leaders in the virtual asset and blockchain space.

3.5.4. International Cooperation:

Dubai has demonstrated its commitment to aligning its regulatory framework with international standards by actively participating in global regulatory forums and working groups. The DFSA is a member of the IOSCO and the FATF, which enables it to stay informed about the latest developments and best practices in virtual asset regulation and contribute to the global policy-making process.

3.6. United Kingdom

In the United Kingdom, the Financial Conduct Authority (FCA) is the primary regulatory body responsible for the oversight of virtual assets and cryptocurrencies. The FCA's approach to regulating virtual assets is primarily centred on AML/CTF measures and investor protection.

3.6.1. AML/CTF Requirements:

The FCA requires VASPs to register with the authority and comply with the UK's Money Laundering, Terrorist Financing, and Transfer of Funds (Information on the Payer) Regulations 2017 (MLRs). VASPs must adhere to strict AML/CTF measures, including customer due diligence, transaction monitoring, and suspicious activity reporting.

3.6.2. Investor Protection:

The FCA has issued guidance on the regulatory treatment of virtual assets, clarifying that certain types of virtual assets, such as security tokens, may fall within the scope of UK securities laws. The FCA requires issuers of such tokens to comply with disclosure and investor protection requirements, including the preparation of a prospectus for public offerings.

3.6.3. Crypto-asset Promotion:

The FCA has proposed the inclusion of crypto-assets in the scope of the Financial Promotion Regulation, which would require firms promoting crypto-assets to be authorized by the FCA or has their promotions approved by an authorized firm. This measure aims to enhance consumer protection by ensuring that promotions of crypto-assets are held to the same standards as traditional financial products.

4. Key Takeaways and Recommendations for Hong Kong's Regulatory Framework

Based on the comparative analysis of international regulatory approaches, the following key takeaways and recommendations can be drawn for the development of Hong Kong's regulatory framework for the web3 industry:

4.1. Harmonized and Comprehensive Regulation:

A comprehensive and harmonized regulatory framework should be established, encompassing key aspects such as licensing, AML/CTF, investor protection, and consumer protection. This approach would promote legal certainty, reduce regulatory arbitrage, and enhance market integrity.

4.2. Risk-Based Approach:

A risk-based approach to regulation should be adopted, tailoring regulatory requirements based on the nature and size of the virtual asset business, as well as the specific risks associated with the virtual assets being offered or traded. This would allow for proportionate regulation that balances innovation and growth with financial stability and consumer protection.

4.3. International Cooperation and Alignment:

Hong Kong's regulatory framework should be aligned with international best practices and standards, such as the Financial Action Task Force (FATF) recommendations. This would facilitate cross-border cooperation and information sharing, enhancing the overall effectiveness of virtual asset regulation.

4.4. Support for Innovation:

The regulatory framework should be designed to support innovation and growth in the web3 industry while mitigating potential risks. This could be achieved through initiatives such as regulatory sandboxes, which allow businesses to test innovative products and services in a controlled environment under the supervision of the regulator.

4.5. Education and Awareness:

Authorities should prioritize education and awareness initiatives to help consumers, investors, and market participants better understand the risks and opportunities associated with virtual assets and the web3 industry. This would promote informed decision-making and contribute to a more resilient and vibrant ecosystem.

By implementing a balanced and forward-looking regulatory framework for the web3 industry, Hong Kong can foster a thriving virtual asset ecosystem that supports innovation, protects consumers and investors, and contributes to the city's position as a leading international financial centre.

5. Key Principles for Developing a Friendly Regulatory Framework

Developing a friendly and effective regulatory framework for virtual assets and cryptocurrencies is essential for fostering innovation, attracting investments, and ensuring the overall growth of the web3 industry while mitigating risks associated with these digital assets. This section outlines key principles that regulators and policymakers should consider when designing a comprehensive and balanced regulatory approach to virtual assets.

5.1. Clarity and Consistency

A clear and consistent regulatory framework is crucial for reducing uncertainty and fostering a conducive environment for innovation and investment. Regulators should provide:

5.1.1. Definition and Classification:

Establish a taxonomy for virtual assets, distinguishing between different categories, such as utility tokens, security tokens, and stablecoins. This classification should take into account the specific characteristics and functions of various virtual asset types.

5.1.2. Applicability of Existing Regulations:

Clarify the applicability of existing securities, commodities, and payment services laws to virtual assets, providing guidance on the criteria used to determine whether a virtual asset falls within the scope of existing regulations.

5.1.3. New and Tailored Regulations:

Develop bespoke regulations for virtual asset activities not adequately addressed by existing laws, such as decentralized finance (DeFi) platforms, non-fungible tokens (NFTs), and digital asset custody services.

5.2. Proportionality and Flexibility

Regulatory requirements should be proportional to the risks posed by virtual asset activities and should ensure a level playing field for different types of market participants. Regulators should consider:

5.2.1. Risk-Based Approach:

Adopt a risk-based approach to regulation, tailoring requirements according to the nature, scale, and complexity of virtual asset activities. This approach should take into account factors such as the potential for money laundering, terrorist financing, market manipulation, and consumer harm.

5.2.2. Tiered Licensing:

Implement a tiered licensing regime for VASPs, with different categories of licenses reflecting the scope and complexity of their operations. This approach allows for proportional regulatory oversight while reducing barriers to entry for smaller or specialized service providers.

5.2.3. Regulatory Sandboxes:

Establish regulatory sandboxes or innovation hubs to facilitate the development and testing of new virtual asset products and services in a controlled environment, allowing regulators to better understand emerging technologies and adapt their regulatory approach accordingly.

5.3. Collaboration and Harmonization

Given the global nature of virtual assets and cryptocurrencies, cross-border collaboration and harmonization are vital for effective regulation. Regulators should:

5.3.1. International Standards:

Align domestic regulatory frameworks with international standards and best practices, such as the Financial Action Task Force (FATF) recommendations for AML/CTF measures and the G20-endorsed IOSCO principles for securities regulation.

5.3.2. Cross-Border Cooperation:

Establish bilateral or multilateral agreements with other jurisdictions to facilitate information sharing, enforcement cooperation, and mutual recognition of regulatory frameworks, reducing regulatory arbitrage and fostering a consistent approach to virtual asset regulation.

5.3.3. Stakeholder Engagement:

Collaborate with industry stakeholders, including virtual asset service providers, investors, and consumer groups, to ensure that regulatory frameworks are informed by practical insights and address the needs and concerns of various market participants.

5.4. Balance Between Innovation and Risk Management

Striking a balance between promoting innovation and managing risks is essential for the sustainable growth of the web3 industry. Regulators should:

5.4.1. Investor Protection:

Implement disclosure requirements for virtual asset issuers and service providers, ensuring transparency and enabling informed decision-making by investors. This may

include white papers, financial statements, and information on the underlying technology, risks, and management team.

5.4.2. Market Integrity:

Establish rules and guidelines for the prevention of market manipulation, insider trading, and other abusive practices, promoting fair and orderly markets for virtual assets.

5.4.3. Consumer Education:

Develop educational initiatives and resources to enhance consumer awareness and understanding of virtual assets and their associated risks, empowering individuals to make informed decisions when engaging with virtual asset-related products and services.

In summary, developing a friendly regulatory framework for virtual assets and cryptocurrencies involves striking a balance between fostering innovation and managing risks. Key principles to consider include clarity and consistency, proportionality and flexibility, collaboration and harmonization, and a balance between innovation and risk management. By adhering to these principles, regulators and policymakers can create a comprehensive and balanced regulatory approach that supports the growth of the web3 industry while safeguarding the interests of investors, consumers, and market participants.

6. Recommendations for Hong Kong

6.1. Division of Roles between HKMA, SFC, and FSTB

In order to develop a comprehensive and effective regulatory framework for virtual assets and cryptocurrencies in Hong Kong, it is essential to clearly define the roles and responsibilities of key regulatory bodies, including the Hong Kong Monetary Authority (HKMA), the Securities and Futures Commission (SFC), and the Financial Services and the Treasury Bureau (FSTB). This section provides recommendations for the division of roles and responsibilities among these regulatory authorities.

6.1.1. Hong Kong Monetary Authority (HKMA)

The HKMA, as the central banking institution and the primary regulator of the banking sector in Hong Kong, should focus on the oversight of virtual assets from a monetary and financial stability perspective. Key responsibilities of the HKMA may include:

- Stablecoins:

Regulating the issuance and operation of stablecoins and other asset-backed tokens, particularly those that may have implications for Hong Kong's monetary system and financial stability.

- Bank Involvement:

Developing guidelines and requirements for banks and other authorized institutions (AIs) that are involved in virtual asset-related activities, such as offering custody services, facilitating trading, or providing access to virtual asset platforms.

- Central Bank Digital Currency (CBDC):

Leading the research, development, and potential issuance of a digital Hong Kong dollar (e-HKD), in collaboration with other relevant authorities and stakeholders.

6.1.2. Securities and Futures Commission (SFC)

The SFC, as the primary regulator of securities and futures markets in Hong Kong, should focus on the regulation of virtual assets that fall within the ambit of securities and futures laws. Key responsibilities of the SFC may include:

- Security Tokens:

Overseeing the issuance, trading, and management of security tokens and other virtual assets that exhibit characteristics of securities or futures contracts, as defined under the Securities and Futures Ordinance (SFO).

- Virtual Asset Trading Platforms:

Licensing and supervising virtual asset trading platforms that deal with security tokens or other virtual assets deemed to be securities or futures

- contracts, ensuring compliance with operational, governance, and risk management requirements.
- Investment Funds: Regulating the operation and management of investment funds that invest in virtual assets, including the licensing of fund managers and the establishment of disclosure and investor protection requirements.

6.1.3. Financial Services and the Treasury Bureau (FSTB)

The FSTB, as a key policymaker and coordinator for financial services regulation in Hong Kong, should focus on the overall policy direction and legislative framework for virtual assets. Key responsibilities of the FSTB may include:

Policy Development:

Formulating policy recommendations and proposing legislative amendments to ensure that Hong Kong's regulatory framework for virtual assets remains up-to-date and in line with international standards and best practices.

- Cross-Agency Coordination:

Facilitating coordination and cooperation among various regulatory authorities, including the HKMA and SFC, to ensure a cohesive and comprehensive approach to virtual asset regulation in Hong Kong.

- International Engagement:

Representing Hong Kong in international forums and engaging with foreign regulators and standard-setting bodies to promote cross-border collaboration and harmonization in virtual asset regulation.

By clearly defining the roles and responsibilities of the HKMA, SFC, and FSTB in the regulation of virtual assets and cryptocurrencies, Hong Kong can develop a comprehensive and effective regulatory framework that supports the growth of the web3 industry while safeguarding the interests of investors, consumers, and market participants.

6.2. Regulatory Sandbox

To foster innovation and facilitate the development and adoption of virtual assets and other web3 technologies in Hong Kong, the establishment of a regulatory sandbox is recommended. A regulatory sandbox is a controlled environment in which qualified startups and established firms can test their innovative products, services, and business models under the guidance and supervision of relevant regulatory authorities. This section outlines the key components and considerations for implementing a regulatory sandbox in Hong Kong.

6.2.1. Objectives

The primary objectives of a regulatory sandbox for virtual assets in Hong Kong should be to:

Foster Innovation:

Encourage the development and adoption of new virtual asset products and services by providing a conducive regulatory environment for experimentation and learning.

- Promote Collaboration:

Facilitate collaboration between innovators, regulators, and other stakeholders, fostering mutual understanding and the exchange of knowledge and expertise.

- Enhance Regulatory Capacity:

Enable regulators to better understand the risks and opportunities associated with emerging virtual asset technologies, helping to inform the development of appropriate and proportionate regulatory frameworks

6.2.2. Eligibility Criteria

To ensure that the regulatory sandbox is focused on genuinely innovative products, services, and business models, eligibility criteria should be established. Applicants should demonstrate that:

- Innovation: Their proposed product, service, or business model involves the use of new or emerging virtual asset technologies or applications that are not adequately addressed by existing regulatory frameworks.
- **Consumer Benefit**: Their proposed product, service, or business model has the potential to deliver significant benefits to consumers, investors, or the wider financial services industry in Hong Kong.
- **Readiness**: They have developed a functional prototype or minimum viable product (MVP) and are ready to conduct live testing in a controlled environment.

6.2.3. Application Process

The application process for the regulatory sandbox should be transparent, streamlined, and user-friendly. Key steps in the process may include:

- Submission:

Applicants submit a detailed proposal outlining their innovative product, service, or business model, along with relevant documentation, such as a white paper, technical specifications, and risk assessments.

- Assessment:

Relevant regulatory authorities, such as the HKMA or SFC, review the proposal and assess its eligibility based on the established criteria, seeking additional information or clarification from the applicant, as necessary.

- Approval:

Successful applicants are granted access to the regulatory sandbox,

subject to specific terms and conditions, such as the scope of permissible activities, testing duration, and reporting requirements.

6.2.4. Regulatory Flexibility and Safeguards

During the testing period, sandbox participants should be granted a certain degree of regulatory flexibility, subject to appropriate safeguards to protect consumers, investors, and the integrity of the financial system. These may include:

- Tailored Regulatory Requirements:

Sandbox participants may be granted temporary relief from certain regulatory requirements, such as licensing and capital adequacy while being subject to alternative, proportional measures designed to mitigate risks associated with their activities.

- Consumer Protection:

Sandbox participants should be required to implement appropriate consumer protection measures, such as transparent disclosures, dispute resolution mechanisms, and data privacy safeguards.

- Risk Management:

Sandbox participants should be required to maintain adequate risk management policies and procedures, including cybersecurity measures, AML/CTF controls, and contingency plans for dealing with operational disruptions or failures.

6.2.5. Monitoring, Reporting, and Exit

To ensure the success and effectiveness of the regulatory sandbox, a robust monitoring, reporting, and exit framework should be established. This may involve:

- Monitoring:

Regulatory authorities should closely monitor the progress of sandbox participants, conducting regular reviews and assessments of their activities, risk management practices, and compliance with applicable terms and conditions.

- Reporting:

Sandbox participants should be required to submit periodic reports to relevant regulatory authorities, detailing their testing progress, key performance indicators, and any issues or challenges encountered during the testing period.

- Exit:

Upon completion of the testing period, sandbox participants should either transition to full compliance with applicable regulatory requirements or cease their activities, depending on the outcomes of the testing process and the regulator's assessment of their readiness for market entry.

In conclusion, the establishment of a regulatory sandbox for virtual assets in Hong Kong can help to foster innovation, promote collaboration, and enhance regulatory capacity, supporting the growth and development of the web3 industry while ensuring appropriate safeguards for consumers, investors, and the integrity of the financial system.

6.3. Licensing and Registration

A well-defined licensing and registration regime is essential for ensuring that virtual asset service providers (VASPs) operating in Hong Kong adhere to appropriate operational, governance, and risk management standards. This section provides recommendations for implementing a comprehensive and proportionate licensing and registration framework for VASPs in Hong Kong.

6.3.1. Scope of Licensing and Registration

The scope of licensing and registration requirements should cover a broad range of VASPs and virtual asset-related activities, including but not limited to:

- Virtual Asset Exchanges:

Platforms that facilitate the trading, exchange, or conversion of virtual assets, whether centralized or decentralized, and whether dealing in security tokens, utility tokens, or other virtual asset types.

- Custodial Wallet Providers:

Entities that provide custodial services for virtual assets, including the storage, management, and transfer of private keys on behalf of clients.

- Token Issuers:

Entities that issue virtual assets, such as initial coin offerings (ICOs), security token offerings (STOs), or other token generation events, subject to the classification of the issued tokens as securities, utilities, or other asset types.

- Virtual Asset Fund Managers:

Entities that manage investment funds or portfolios with exposure to virtual assets, including both traditional asset managers and specialized virtual asset investment firms.

6.3.2. Tiered Licensing Approach

To ensure that licensing and registration requirements are proportionate to the nature, scale, and complexity of VASPs' operations, a tiered licensing approach is recommended. This may involve:

- Standard License:

A standard license for VASPs that engage in a broad range of virtual asset-related activities or operate at a significant scale, subject to comprehensive operational, governance, and risk management requirements.

- Specialized License:

A specialized license for VASPs that focus on specific virtual asset-related activities or serve niche market segments, subject to tailored requirements that reflect the unique risks and characteristics of these activities or segments.

- Restricted License:

A restricted license for smaller-scale VASPs or those that serve a limited client base, subject to reduced requirements that balance the need for regulatory oversight to lower barriers to entry and foster competition.

6.3.3. Licensing Criteria and Requirements

To obtain a license, VASPs should be required to meet a range of criteria and requirements designed to ensure that they operate in a transparent, responsible, and compliant manner. These may include:

- Fit and Proper Test:

The VASP's key personnel, such as directors, senior management, and significant shareholders, should pass a fit and proper test, demonstrating their integrity, competence, and financial soundness.

- Capital Adequacy:

The VASP should maintain minimum capital requirements, which may vary depending on the type and scale of its operations, to ensure that it has sufficient financial resources to withstand operational and market risks

- Governance and Risk Management:

The VASP should establish robust governance structures and risk management policies and procedures, covering areas such as cybersecurity, anti-money laundering (AML), counter-terrorism financing (CTF), market manipulation, and consumer protection.

- Operational Resilience:

The VASP should maintain adequate operational resilience measures, including business continuity plans, disaster recovery procedures, and incident response protocols, to ensure the stability and integrity of its services.

- Disclosure and Reporting:

The VASP should provide transparent disclosures to clients, regulators, and the public, including information on its fees, risks, and governance practices, as well as periodic reporting on its financial and operational performance.

6.4. Ongoing Supervision and Enforcement

To ensure the ongoing compliance and accountability of licensed VASPs, a robust supervisory and enforcement framework should be established. This may involve:

6.4.1. Risk-Based Supervision:

Regulatory authorities should adopt a risk-based approach to supervising VASPs, focusing their resources and attention on those entities that pose the greatest risks to consumers, investors, and the financial system.

6.4.2. Monitoring and Inspection:

Regulatory authorities should conduct regular monitoring and on-site inspections of VASPs, assessing their compliance with licensing requirements, as well as their ability to identify, manage, and mitigate emerging risks.

6.4.3. Enforcement Actions:

Regulatory authorities should have the power to take enforcement actions against VASPs that fail to comply with licensing requirements, ranging from administrative sanctions, such as fines and remedial orders, to more severe measures, such as the suspension or revocation of licenses.

In conclusion, implementing a comprehensive and proportionate licensing and registration framework for VASPs in Hong Kong is essential for ensuring the integrity, transparency, and stability of the virtual asset market. By adopting a tiered licensing approach, setting clear criteria and requirements, and maintaining robust supervision and enforcement mechanisms, Hong Kong can support the growth and development of the web3 industry while safeguarding the interests of consumers, investors, and market participants.

6.5. Consumer Protection and Market Integrity

Safeguarding consumers and ensuring market integrity are crucial for fostering trust and confidence in the virtual asset ecosystem. This section provides recommendations for enhancing consumer protection and market integrity in Hong Kong's virtual asset market.

6.5.1. Disclosure and Transparency

To enable consumers and investors to make informed decisions, VASPs should be required to provide clear, accurate, and timely disclosures about their products, services, and operations. Key disclosure requirements may include:

- Fees and Charges:

VASPs should disclose all applicable fees and charges, including trading, withdrawal, and deposit fees, in a transparent and easily understandable manner.

- Risks:

VASPs should provide comprehensive risk disclosures, highlighting

the potential financial, operational, and regulatory risks associated with virtual asset investments and transactions.

- Best Execution:

VASPs should publish their best execution policies and procedures, detailing how they seek to obtain the best possible trading outcomes for clients in terms of price, cost, speed, and other relevant factors.

- Conflicts of Interest:

VASPs should disclose any potential conflicts of interest that may arise from their relationships with affiliated entities, issuers, or other market participants.

6.5.2. Fair Treatment and Dispute Resolution

To ensure that consumers and investors are treated fairly and have access to redress when disputes arise, VASPs should be required to implement appropriate measures, such as:

- Customer Agreements:

VASPs should provide clear and comprehensible customer agreements, outlining the rights and obligations of both parties, as well as the terms and conditions governing the use of their products and services.

- Customer Support:

VASPs should maintain effective customer support channels, enabling clients to raise

- Dispute Resolution:

VASPs should establish robust dispute resolution mechanisms, including internal complaint handling procedures and access to external mediation or arbitration services, to resolve disputes fairly and efficiently.

6.5.3. Market Integrity and Surveillance

To prevent market manipulation and other abusive practices, VASPs should be required to maintain robust market surveillance systems and controls, such as:

- Trade Monitoring:

VASPs should implement real-time trade monitoring systems to detect and prevent market manipulation, such as spoofing, layering, and wash trading, as well as other forms of trading abuse.

- Market Abuse Policies:

VASPs should adopt and enforce market abuse policies, outlining prohibited trading practices and the penalties for violations, as well as providing guidance on how to report suspected market abuse.

- Information Sharing:

VASPs should collaborate with regulators, industry associations, and other market participants to share information on potential market abuse, emerging threats, and best practices for enhancing market integrity.

6.5.4. Privacy and Data Security

VASPs should be subject to strict privacy and data security requirements, ensuring the protection of client information and the confidentiality of transactions. Key measures may include:

- Data Protection:

VASPs should implement robust data protection policies and procedures, in line with the Hong Kong Personal Data (Privacy) Ordinance and other relevant privacy regulations, to safeguard the collection, processing, storage, and transfer of client data.

- Cybersecurity:

VASPs should maintain strong cybersecurity controls, including firewalls, encryption, multi-factor authentication, and regular vulnerability assessments, to protect their systems and client information from unauthorized access, tampering, or loss.

- Incident Response:

VASPs should establish effective incident response plans and procedures to promptly detect, contain, and mitigate the impact of data breaches, cyberattacks, and other security incidents, as well as to notify affected clients and regulatory authorities as required.

In conclusion, enhancing consumer protection and market integrity in Hong Kong's virtual asset market is essential for fostering trust and promoting the responsible growth of the web3 industry. By requiring VASPs to provide transparent disclosures, ensure fair treatment, maintain market surveillance, and protect client privacy and data security, Hong Kong can create a stable, secure, and inclusive virtual asset ecosystem that benefits both consumers and market participants.

6.6. AML/CTF Compliance

Implementing a robust Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF) compliance framework is essential for mitigating the risks associated with virtual assets and promoting a safe and transparent virtual asset market in Hong Kong. This section provides recommendations for strengthening AML/CTF compliance among virtual asset service providers (VASPs) in Hong Kong.

6.6.1. Alignment with International Standards

Hong Kong's AML/CTF regime should be aligned with international standards, particularly those established by the Financial Action Task Force (FATF), to ensure effective cooperation with global stakeholders in combating money laundering and terrorist financing. Key components of the FATF standards include:

- Risk-Based Approach:

VASPs should be required to adopt a risk-based approach to AML/CTF, assessing and managing the specific risks associated with

their business models, customer profiles, products, services, and geographic locations.

- Customer Due Diligence (CDD):

VASPs should be required to perform comprehensive CDD measures, including the identification and verification of clients, the assessment of clients' risk profiles, and the ongoing monitoring of clients' transactions and activities.

- Record-Keeping:

VASPs should maintain accurate and up-to-date records of client information, transaction data, and AML/CTF compliance efforts, ensuring that such records are readily accessible to regulators and law enforcement agencies when needed.

6.6.2. Licensing and Registration Requirements

As part of the licensing and registration process, VASPs should be required to demonstrate their commitment to AML/CTF compliance by implementing appropriate policies, procedures, and controls. Key requirements may include:

- AML/CTF Compliance Program:

VASPs should develop and maintain a comprehensive AML/CTF compliance program, outlining their risk assessment methodologies, CDD measures, transaction monitoring processes, reporting obligations, record-keeping procedures, and employee training initiatives.

- Compliance Officer:

VASPs should appoint a qualified and experienced AML/CTF compliance officer, responsible for overseeing the implementation and effectiveness of the compliance program and serving as the primary point of contact for regulators and law enforcement agencies.

6.6.3. Reporting and Information Sharing

VASPs should be subject to clear reporting and information-sharing obligations, facilitating the timely detection and investigation of potential money laundering and terrorist financing activities. Key requirements may include:

- Suspicious Transaction Reporting (STR):

VASPs should be required to report suspicious transactions or activities to the relevant authorities, such as the Hong Kong Joint Financial Intelligence Unit (JFIU), in a timely and comprehensive manner.

- Large Transaction Reporting:

VASPs should be required to report large or high-risk transactions, as defined by specific thresholds or risk factors, to the appropriate regulatory authorities for further scrutiny and analysis.

- Cooperation with Law Enforcement:

VASPs should actively cooperate with law enforcement agencies,

providing prompt and accurate information in response to requests for assistance in AML/CTF investigations and prosecutions.

6.6.4. Supervision and Enforcement

A robust supervisory and enforcement framework should be established to ensure the ongoing compliance and accountability of VASPs in relation to AML/CTF requirements. Key components may include:

- Risk-Based Supervision:

Regulatory authorities should adopt a risk-based approach to supervising VASPs' AML/CTF compliance, focusing their resources and attention on those entities that pose the greatest risks to the financial system and public safety.

- Monitoring and Inspection:

Regulatory authorities should conduct regular monitoring and on-site inspections of VASPs' AML/CTF compliance efforts, assessing the effectiveness of their policies, procedures, and controls in identifying, managing, and mitigating money laundering and terrorist financing risks

- Enforcement Actions:

Regulatory authorities should have the power to take enforcement actions against VASPs that fail to comply with AML/CTF requirements, ranging from administrative sanctions, such as fines and remedial orders, to more severe measures, such as the suspension or revocation of licenses

In conclusion, implementing a robust AML/CTF compliance framework for VASPs in Hong Kong is critical for mitigating the risks associated with virtual assets and fostering a transparent, secure, and responsible virtual asset market. By aligning with international standards, imposing licensing and registration requirements, mandating reporting and information sharing, and ensuring effective supervision and enforcement, Hong Kong can contribute to global efforts in combating money laundering and terrorist financing while supporting the growth and development of the web3 industry.

6.7. Taxation and Reporting

Establishing a clear and comprehensive taxation and reporting framework for virtual assets and virtual asset service providers (VASPs) is essential for promoting transparency, fairness, and fiscal responsibility in Hong Kong's virtual asset market. This section provides recommendations for enhancing taxation and reporting requirements for virtual assets and VASPs in Hong Kong.

6.7.1. Tax Treatment of Virtual Assets

To ensure consistency and fairness in the taxation of virtual assets, Hong Kong's tax authorities should provide clear guidance on the tax treatment of

various types of virtual assets and related transactions. Key considerations may include:

- Tax Classification:

Virtual assets should be classified for tax purposes based on their characteristics and use cases, such as payment tokens, utility tokens, security tokens, or non-fungible tokens (NFTs).

- Taxable Events:

The tax authorities should clearly define the specific events or transactions that trigger tax liabilities for virtual assets, such as the disposal, exchange, or realization of gains or income from virtual assets.

- Valuation Methodologies:

The tax authorities should provide guidance on the acceptable methods for valuing virtual assets for tax purposes, taking into account factors such as market price, cost basis, and the valuation date.

6.7.2. Tax Compliance for VASPs

VASPs should be subject to comprehensive tax compliance requirements, including the filing of tax returns, the payment of relevant taxes, and the maintenance of accurate tax records. Key requirements may include:

- Corporate Tax Filing:

VASPs should be required to file annual corporate tax returns, reporting their taxable income, deductions, and tax liabilities in accordance with Hong Kong's Inland Revenue Ordinance and other applicable tax legislation.

- Withholding Tax Obligations:

VASPs should be required to withhold and remit taxes on behalf of their clients, as applicable, for transactions such as interest payments, dividend distributions, or other income derived from virtual assets.

- Record-Keeping:

VASPs should maintain accurate and up-to-date tax records, including transaction data, client information, and supporting documentation, to facilitate tax audits and investigations by the tax authorities.

6.7.3. Tax Reporting for Virtual Asset Holders

Individuals and entities holding virtual assets should be subject to clear tax reporting requirements, ensuring that they accurately report their virtual asset holdings and transactions for tax purposes. Key recommendations may include:

- Capital Gains Reporting:

Virtual asset holders should be required to report their capital gains or losses from the disposal or exchange of virtual assets, calculating the gains or losses based on the difference between the acquisition cost and the disposal proceeds.

- Income Reporting:

Virtual asset holders should be required to report any income derived from virtual assets, such as interest, dividends, or other forms of yield, as part of their annual tax returns.

- Foreign Account Reporting:

Hong Kong residents holding virtual assets in foreign accounts or with foreign VASPs should be subject to reporting requirements, similar to those applicable to traditional financial assets held abroad, to ensure the accurate disclosure of offshore virtual asset holdings and income.

6.7.4. International Cooperation and Information Exchange

Hong Kong should actively participate in international efforts to enhance tax transparency and combat tax evasion in the virtual asset market. Key measures may include:

- Tax Treaties and Information Exchange Agreements:

Hong Kong should negotiate and implement bilateral or multilateral tax treaties and information exchange agreements, facilitating the sharing of tax-related information with foreign tax authorities for virtual asset transactions and holdings.

- Common Reporting Standard (CRS):

Hong Kong should consider incorporating virtual assets and VASPs within the scope of the CRS, ensuring the automatic exchange of tax information for virtual assets with other participating jurisdictions.

In conclusion, implementing a clear and comprehensive taxation and reporting framework for virtual assets and VASPs in Hong Kong is vital for promoting transparency, fairness, and fiscal responsibility in the virtual asset market. By establishing the tax treatment of virtual assets, imposing tax compliance requirements on VASPs, mandating tax reporting for virtual asset holders, and participating in international tax cooperation and information exchange, Hong Kong can foster a transparent and responsible virtual asset ecosystem that supports the growth and development of the web3 industry while safeguarding the integrity of its tax system.

6.8. Collaboration with International Regulatory Bodies

For Hong Kong to establish a robust and effective regulatory framework for virtual assets and virtual asset service providers (VASPs), it is essential to collaborate with international regulatory bodies and adopt global best practices. This section provides detailed recommendations to enhance cooperation and coordination between Hong Kong's regulatory authorities and their international counterparts.

6.8.1. Engagement with Global Standard-Setting Bodies

Hong Kong's regulatory authorities should actively engage with global standard-setting bodies, such as the Financial Action Task Force (FATF), the

International Organization of Securities Commissions (IOSCO), and the Basel Committee on Banking Supervision (BCBS), to stay informed about the latest developments and best practices in the virtual asset space. Key areas of engagement may include:

- Adoption of International Standards:

Hong Kong should align its regulatory framework for virtual assets and VASPs with international standards and recommendations, such as the FATF's guidance on Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF) for virtual assets, IOSCO's principles for the regulation of crypto-assets, and BCBS's capital requirements for banks involved in virtual asset activities. This alignment will ensure that Hong Kong's regulations are consistent with global best practices and facilitate cross-border cooperation with other jurisdictions.

- Participation in Policy Development:

Hong Kong's regulatory authorities should actively participate in the development of new international policies, standards, and guidance related to virtual assets by contributing to working groups, committees, and task forces within the aforementioned standard-setting bodies. By providing input and feedback based on their unique market characteristics and regulatory experiences, Hong Kong can help shape the global regulatory landscape and ensure that its own regulatory framework remains up-to-date and effective.

6.8.2. Bilateral and Multilateral Cooperation

To strengthen cross-border supervision, enforcement, and information sharing, Hong Kong's regulatory authorities should establish strong bilateral and multilateral relationships with their counterparts in other jurisdictions. Key elements of such cooperation may include:

- Memoranda of Understanding (MoUs):

Hong Kong should negotiate and sign MoUs with foreign regulatory authorities, outlining the framework for cooperation and information sharing in relation to the supervision, investigation, and enforcement of virtual asset activities and VASPs. These MoUs should address key aspects of cooperation, such as the scope of information sharing, confidentiality requirements, and dispute resolution mechanisms.

- Participation in International Forums:

Hong Kong's regulatory authorities should actively participate in international forums and working groups, such as the FATF's Virtual Assets Contact Group, the IOSCO's Crypto-Asset Task Force, and the BCBS's Working Group on Virtual Assets, to exchange experiences, insights, and best practices with fellow regulators and stakeholders. By fostering a collaborative environment, Hong Kong can contribute to the development of global regulatory standards, learn from the

experiences of other jurisdictions, and adapt its own regulatory framework accordingly.

6.8.3. Cross-Border Supervision and Enforcement

To ensure effective supervision and enforcement of virtual asset activities and VASPs across borders, Hong Kong's regulatory authorities should collaborate with foreign counterparts in conducting joint inspections, investigations, and enforcement actions. Key aspects of cross-border supervision and enforcement may include:

- Joint Inspections:

Hong Kong's regulatory authorities should coordinate with foreign regulators to conduct joint inspections of VASPs with cross-border operations, ensuring that they comply with the applicable regulatory requirements in both jurisdictions. These inspections should assess the VASPs' compliance with AML/CTF requirements, capital and liquidity standards, risk management practices, and other relevant regulatory obligations.

- Investigation Assistance:

Hong Kong's regulatory authorities should provide and seek assistance from foreign counterparts in conducting investigations into potential violations of virtual asset regulations, such as market manipulation, insider trading, or money laundering activities. This assistance may involve sharing information, resources, and expertise, as well as coordinating the collection of evidence and the questioning of witnesses.

- Enforcement Coordination:

Hong Kong's regulatory authorities should collaborate with foreign counterparts in taking enforcement actions against VASPs or individuals who violate virtual asset regulations. This cooperation may include sharing information, evidence, and resources, as well as coordinating the imposition of sanctions, penalties, or other enforcement measures.

6.8.4. Capacity Building and Technical Assistance

Hong Kong's regulatory authorities should actively engage in capacity building and technical assistance initiatives, both as recipients and providers, to enhance their understanding of virtual asset risks, opportunities, and regulatory best practices. Key initiatives may include:

- Training and Workshops:

Hong Kong's regulatory authorities should participate in and organize training sessions, workshops, and seminars on virtual asset regulation, inviting experts from international organizations, academia, and industry to share their knowledge and expertise. These events should cover a wide range of topics, such as regulatory approaches, risk

assessment methodologies, technological developments, and market trends, to ensure that Hong Kong's regulators stay abreast of the latest developments and best practices in the field.

- Technical Assistance:

Hong Kong should seek and provide technical assistance to other jurisdictions, particularly those with less developed regulatory frameworks or limited resources, to enhance their capacity to regulate and supervise virtual asset activities and VASPs. This assistance may involve sharing technical expertise, regulatory experiences, and best practices, as well as providing support in the development and implementation of regulatory frameworks, guidelines, and procedures.

By adopting these recommendations, Hong Kong can establish a robust and effective regulatory framework for virtual assets and VASPs that is aligned with international standards, promotes cross-border cooperation, and fosters a resilient and vibrant ecosystem. Collaborating with international regulatory bodies and engaging in capacity building and technical assistance initiatives will not only strengthen Hong Kong's own regulatory capabilities but also contribute to the global effort to ensure the responsible growth and development of the virtual asset sector.

7. Risks and Challenges

This section outlines some of the key risks and challenges associated with virtual assets and their ecosystem, as well as potential mitigation strategies that regulators and policymakers may consider.

7.1. Market and Liquidity Risks

Virtual asset markets can be subject to high levels of volatility and fluctuations in value, which may pose risks to investors and market participants. Furthermore, some virtual asset markets may have limited liquidity, which could exacerbate price swings and make it difficult for investors to execute trades or exit positions.

Mitigation Strategies:

- Enhancing transparency and disclosure requirements for virtual asset service providers (VASPs)
- Encouraging VASPs to adopt robust risk management practices to mitigate market and liquidity risks
- Providing investor education and awareness initiatives related to virtual asset investments

7.2. Cybersecurity and Operational Risks

The virtual asset ecosystem is susceptible to various cybersecurity threats, including hacking, theft, and fraud. Additionally, operational risks may arise from system failures, inadequate controls, or human error.

Mitigation Strategies:

- Implementing robust cybersecurity requirements and best practices for VASPs
- Enhancing reporting and monitoring mechanisms to detect and respond to cybersecurity incidents
- Encouraging collaboration between industry stakeholders, regulators, and law enforcement agencies to combat cyber threats

7.3. Legal and Regulatory Risks

Regulatory uncertainty and evolving legal frameworks can pose challenges for virtual asset service providers and market participants, potentially hindering innovation and market development.

Mitigation Strategies:

- Developing clear and comprehensive regulatory guidelines that provide legal certainty for market participants
- Engaging in ongoing dialogue with industry stakeholders to adapt regulatory frameworks to market developments and emerging risks
- Fostering international cooperation and harmonization of regulatory standards

7.4. Consumer and Investor Protection Risks

Investors and consumers may be exposed to risks associated with fraudulent schemes, market manipulation, or the potential loss of virtual assets due to hacking, theft, or the failure of VASPs.

Mitigation Strategies:

- Implementing robust licensing and registration requirements for VASPs to ensure adherence to high standards of conduct and consumer protection
- Enhancing disclosure and transparency requirements for VASPs and virtual asset issuers
- Providing consumer and investor education initiatives on the risks associated with virtual assets and their ecosystem

8. Beyond Financial Services: Broader Use Cases of Virtual Assets and Blockchain Technology

This section highlights the potential use cases of virtual assets and blockchain technology in sectors beyond financial services, illustrating the transformative potential of this technology across various industries.

8.1. Supply Chain Management

Blockchain technology can enhance transparency, traceability, and efficiency throughout the supply chain by providing a decentralized, tamper-proof, and verifiable record of transactions and asset movements.

Examples of Use Cases:

- Tracking the provenance and authenticity of goods to mitigate counterfeiting and fraud.
- Improving the efficiency of cross-border trade by streamlining customs clearance and documentation processes.
- Enhancing visibility into supplier practices to promote ethical and sustainable sourcing.

8.2. Digital Identity and Privacy

Blockchain technology can facilitate the creation of secure, decentralized, and user-centric digital identity solutions that empower individuals to control their personal data and protect their privacy.

Examples of Use Cases:

- Enabling the issuance and verification of digital credentials, such as educational degrees, professional certifications, or identity documents.
- Facilitating secure and privacy-preserving data sharing between individuals and service providers.
- Supporting the development of self-sovereign identity (SSI) systems that give individuals greater control over their personal data.

8.3. Internet of Things (IoT) and Smart Cities

Blockchain technology can support the development of IoT ecosystems and smart cities by providing a secure, decentralized, and interoperable infrastructure for managing the vast amounts of data generated by connected devices.

Examples of Use Cases:

- Facilitating the secure exchange of data between IoT devices and networks to enable real-time monitoring, analysis, and decision-making

- Supporting the development of smart contracts and decentralized applications (dApps) that automate processes and transactions within smart city environments
- Enhancing the security and resiliency of critical infrastructure, such as energy grids, transportation systems, or public services

9. Fostering Talent and Education in the Web3 and Virtual Asset Ecosystem

This section emphasizes the importance of government support in promoting education, talent development, and innovation in the virtual asset ecosystem, and provides recommendations on how governments can play a proactive role in driving growth in this emerging sector.

9.1. Talent Attraction and Development

A strong talent pool is crucial for the growth and sustainability of the virtual asset ecosystem. Governments can take various measures to attract and develop talent in this field, including:

Recommended Actions:

- Implementing policies that encourage skilled professionals in the virtual asset and blockchain space to immigrate, work, and start businesses within the country
- Supporting local talent through scholarships, grants, and other incentives for pursuing education and careers in the virtual asset and blockchain industries
- Establishing partnerships between industry stakeholders, academic institutions, and government agencies to promote knowledge exchange, collaboration, and talent development

9.2. Education and Research

Promoting education and research in virtual assets and blockchain technology is essential for fostering a deep understanding of this emerging field and driving innovation.

Recommended Actions:

- Encouraging academic institutions to develop and offer specialized courses, degrees, and programs focused on virtual assets, blockchain technology, and related areas
- Providing funding and support for research projects, laboratories, and centres
 of excellence dedicated to the study and development of virtual asset and
 blockchain technology
- Facilitating collaboration between industry stakeholders, academia, and government agencies to identify research priorities, share knowledge, and advance technological innovation

9.3. Public-Private Partnerships

Public-private partnerships can play a vital role in fostering innovation, talent development, and education in the virtual asset ecosystem.

Recommended Actions:

- Establishing innovation hubs, incubators, and accelerators to support the growth of startups and entrepreneurs in the virtual asset and blockchain sectors
- Organizing events, competitions, and hackathons to promote awareness, knowledge sharing, and collaboration within the virtual asset and blockchain communities
- Encouraging joint ventures and collaborative projects between industry stakeholders, academic institutions, and government agencies to address key challenges and opportunities in the virtual asset ecosystem

10. Conclusion

In an increasingly interconnected and digitalized world, the virtual asset industry has emerged as a transformative force, driving innovation and reshaping the global financial landscape. As a leading international financial centre, Hong Kong has a unique opportunity to leverage this potential for the benefit of its economy and society. To seize this opportunity, it is indispensable that the government adopts a forward-looking and comprehensive regulatory framework that enables innovation and growth in the virtual asset ecosystem while upholding the highest standards of market integrity, consumer protection, and financial stability.

Drawing on the analysis and recommendations presented in this report, the government is strongly encouraged to embrace a friendly and pragmatic regulatory approach that balances the need for innovation with appropriate safeguards. This includes adopting a risk-based, tiered, and proportionate regulatory framework that recognizes the diversity of virtual asset activities and service providers, as well as establishing a comprehensive licensing and registration regime that ensures a level playing field for market participants.

Moreover, it is crucial that the government maintains an open and constructive dialogue with industry stakeholders, encompassing virtual asset service providers, investors, technology firms, and other market participants. By actively consulting these stakeholders and incorporating their feedback and insights into the regulatory framework, the government can ensure that its policies are tailored to the specific needs and challenges of the virtual asset ecosystem, fostering a vibrant and dynamic market that benefits all participants.

In addition, the government should prioritize collaboration with international regulatory bodies and standard-setting organizations, ensuring that Hong Kong's regulatory framework aligns with global best practices and facilitates cross-border cooperation and coordination. This will solidify Hong Kong's position as a hub for virtual asset innovation and investment, attracting leading service providers, entrepreneurs, and investors from around the world.

Finally, the government should invest in capacity building and technical assistance initiatives to enhance the knowledge, skills, and expertise of its regulatory authorities, as well as to support the development of the virtual asset ecosystem more broadly. This includes providing training and resources on virtual asset regulation, risk assessment, and technological developments, as well as engaging in partnerships and collaborations with other jurisdictions, international organizations, and industry stakeholders.

In conclusion, by adopting a friendly, stakeholder-centric, and internationally aligned regulatory approach, Hong Kong can harness the vast potential of virtual assets and their underlying technologies, fostering a thriving and responsible market that contributes to the overall growth and development of the digital economy. In doing so, Hong Kong can further strengthen its position as a leading global financial centre and a pioneer in embracing the opportunities presented by the digital age.

11. Appendices

The following appendices provide supplemental information and resources to further support the recommendations and analysis presented in this report. These appendices are intended to serve as additional reference materials for policymakers, regulators, and industry stakeholders

Appendix A: Glossary of Key Terms

This appendix provides definitions for key terms and concepts related to virtual assets and their regulation.

- Virtual Assets: A digital representation of value that can be digitally traded, transferred, or used for payment or investment purposes, and which does not have legal tender status in any jurisdiction.
- Virtual Asset Service Providers (VASPs): Entities that provide one or more of the following services in relation to virtual assets: exchange, transfer, safekeeping, issuance, or other services associated with the management and administration of virtual assets.
- Anti-Money Laundering (AML): A set of procedures, laws, and regulations designed to prevent the generation of income through illegal activities and the subsequent concealment or disguise of the source, ownership, or control of such income.
- Counter-Terrorist Financing (CTF): A set of procedures, laws, and regulations aimed at preventing the financing of terrorist activities or the provision of financial support to individuals, organizations, or countries associated with terrorism.
- Financial Action Task Force (FATF): An intergovernmental organization established to develop international standards and promote the effective implementation of measures to combat money laundering, terrorist financing, and other related threats to the integrity of the global financial system.

Appendix B: List of Relevant Legislation and Regulatory Guidelines in Hong Kong

This appendix provides a list of relevant legislation, regulations, and guidelines that pertain to the regulation of virtual assets and VASPs in Hong Kong.

- Securities and Futures Ordinance (SFO)
- Anti-Money Laundering and Counter-Terrorist Financing Ordinance (AMLO)
- Inland Revenue Ordinance (IRO)
- Companies Ordinance
- Personal Data (Privacy) Ordinance
- Hong Kong Monetary Authority (HKMA) Guidelines
- Securities and Futures Commission (SFC) Guidelines
- Circulars and Guidance issued by the SFC and HKMA related to virtual assets and VASPs

Appendix C: International Regulatory Bodies and Standard-Setting Organizations

This appendix provides a list of key international regulatory bodies and standard-setting organizations that are relevant to the regulation of virtual assets and their ecosystem.

- Financial Action Task Force (FATF)
- International Organization of Securities Commissions (IOSCO)
- Basel Committee on Banking Supervision (BCBS)
- Group of Twenty (G20)
- Bank for International Settlements (BIS)
- Financial Stability Board (FSB)
- Committee on Payments and Market Infrastructures (CPMI)

Appendix D: Regulatory Approaches in Other Jurisdictions

This appendix provides a brief overview of the regulatory approaches adopted by other jurisdictions for virtual assets and VASPs, highlighting key similarities and differences with Hong Kong's proposed framework.

- United States: Regulation by the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), the Financial Crimes Enforcement Network (FinCEN), and other state-level regulators
- European Union: Regulation under the revised Markets in Crypto-assets (MiCA) framework and the Fifth Anti-Money Laundering Directive (5AMLD)
- United Kingdom: Regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA)
- Singapore: Regulation under the Payment Services Act by the Monetary Authority of Singapore (MAS)
- Japan: Regulation under the Payment Services Act and the Financial Instruments and Exchange Act by the Financial Services Agency (FSA)

Appendix E: Use Cases and Benefits of Virtual Assets

This appendix provides a non-exhaustive list of potential use cases and benefits associated with virtual assets, illustrating the transformative potential of this emerging asset class.

- Payments and Remittances: Virtual assets can facilitate faster, cheaper, and more transparent cross-border payments and remittances, particularly for individuals and businesses in regions with limited access to traditional financial services.
- Financial Inclusion: Virtual assets can provide underserved populations with access to a range of financial services, such as savings, lending, and insurance products, thereby promoting economic growth and reducing poverty.
- Asset Tokenization: Virtual assets can enable the tokenization of real-world assets, such as real estate, art, or commodities, providing new investment opportunities and increasing liquidity in traditionally illiquid markets.
- Decentralized Finance (DeFi): Virtual assets can power innovative decentralized financial platforms that offer an alternative to traditional intermediaries, such as

- banks, brokerages, and payment processors, potentially reducing costs and enhancing efficiency.
- Smart Contracts: Virtual assets can facilitate the creation and execution of programmable, self-executing smart contracts, automating various processes and transactions across a wide range of industries.

By considering these supplementary materials in conjunction with the main report, policymakers, regulators, and industry stakeholders can better understand the broader landscape of virtual assets.

12. References

The following references include key sources of information, research, and analysis that informed the development of the recommendations and insights presented in this report. These references provide additional context and background on the virtual asset ecosystem, regulatory approaches, and international best practices.

- 1. Financial Action Task Force (FATF). (2019). Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers. Retrieved from https://www.fatf-gafi.org/media/fatf/documents/recommendations/RBA-VA-VASPs.pdf
- 2. International Organization of Securities Commissions (IOSCO). (2020). Issues, Risks, and Regulatory Considerations Relating to Crypto-Asset Trading Platforms: Final Report. Retrieved from https://www.iosco.org/library/pubdocs/pdf/IOSCOPD649.pdf
- 3. Basel Committee on Banking Supervision (BCBS). (2019). Statement on Crypto-assets. Retrieved from https://www.bis.org/bcbs/publ/d498.pdf
- 4. Securities and Futures Commission (SFC) of Hong Kong. (2020). Proforma Terms and Conditions for Licensed Corporations which Manage Portfolios that Invest in Virtual Assets. Retrieved from https://www.sfc.hk/-/media/EN/files/PCIP/20201016.pdf
- 5. Hong Kong Monetary Authority (HKMA). (2018). Statement on Initial Coin Offerings. Retrieved from https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2018/2018 0209e1.pdf
- 6. European Commission. (2020). Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0593
- 7. Monetary Authority of Singapore (MAS). (2020). Payment Services Act. Retrieved from https://www.mas.gov.sg/regulation/acts/payment-services-act
- 8. Financial Services Agency (FSA) of Japan. (2020). Payment Services Act. Retrieved from https://www.fsa.go.jp/en/laws_and_regulations/payment_services_act.html
- 9. United States Securities and Exchange Commission (SEC). (2017). Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO. Retrieved from https://www.sec.gov/litigation/investreport/34-81207.pdf
- 10. Zetzsche, D.A., Buckley, R.P., & Arner, D.W. (2020). Regulating Libra: The Transformative Potential of Facebook's Cryptocurrency and Possible Regulatory Responses.

European Banking Institute Working Paper Series 2019, No. 44. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3414401

- 11. Tapscott, A., & Tapscott, D. (2016). Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World. Penguin.
- 12. Mougayar, W. (2016). The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology. Wiley.
- 13. Casey, M.J., & Vigna, P. (2018). The Truth Machine: The Blockchain and the Future of Everything. St. Martin's Press.
- 14. Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. Princeton University Press.
- 15. Swan, M. (2015). Blockchain: Blueprint for a New Economy. O'Reilly Media.

These references offer valuable insights and perspectives on the regulatory, legal, and financial aspects of virtual assets, as well as the broader implications of this rapidly evolving market. By reviewing these sources, policymakers, regulators, and industry stakeholders can deepen their understanding of the challenges and opportunities presented by virtual assets and their regulation, and develop informed strategies for fostering a responsible, innovative, and thriving virtual asset ecosystem in Hong Kong.