

Crypto-Derivatives Regulation(s)

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Crypto-derivatives dominate the crypto-economy, accounting for over 70% of trading activity, yet remain largely unexamined by regulators. This Article presents the first comparative analysis of crypto-derivatives regulation across eleven key jurisdictions, exposing regulatory fragmentation, its risks, and the urgent need for harmonized measures to address systemic vulnerabilities and investor protection gaps.

This Article first examines the core mechanics of both traditional and crypto-derivatives, demonstrating how crypto-derivatives largely mirror established financial structures while introducing new underlying assets, primarily cryptocurrencies. It then conducts a comparative analysis across eleven major jurisdictions, highlighting emerging regulatory trends, alongside enforcement actions. While the fundamental classifications of derivatives—options, swaps, futures, and forwards—remain consistent, regulatory disparities arise due to four key factors: settlement methods, definitions of eligible underlying assets, marketability considerations, and broader policy approaches.

This Article further explores the implications of these divergences, with particular focus on the risks of regulatory arbitrage, unregulated retail investor access to high-risk products, and the systemic vulnerabilities posed by interconnection, inadequate collateral management, and market concentration. Unlike traditional derivatives markets, where post-2008 financial crisis regulations imposed stricter oversight, crypto-derivatives regulation remains largely fragmented across jurisdictions, creating potential for systemic instability and harming investors.

In response, this Article presents concrete policy recommendations aimed at fostering a harmonized regulatory framework. These include the adoption of a functional, technology-neutral definition of crypto-derivatives, enhanced reporting and prudential standards to mitigate systemic risks, and restrictions on retail investor access to speculative instruments. The Article argues that, given the inherently cross-border nature of crypto-derivatives trading, international regulatory coordination—potentially modeled on post-crisis financial reforms—is essential to ensure market stability and investor protection while enabling innovation in the evolving crypto-financial ecosystem.

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We are grateful to Dan Awrey, Yesha Yadav, and Giovanni Patti for helpful comments and discussion.

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Introduction

Crypto-derivatives account for more than 70% of trading activity in the crypto-economy.¹ Yet they remain largely understudied and, more importantly, underexplored by regulators, despite their significance, inherent risks, and potential to reshape the crypto-market.² This Article makes a critical contribution by presenting the first comparative analysis of crypto-derivatives regulation across eleven key jurisdictions, where major service providers—such as crypto-trading platforms and broker-dealers—are based. This analysis identifies key

1. *September Exchange Review*, CCData 1, 9 (2024), https://cdn.prod.website-files.com/63e3774c88285e5c6cbf3b9d/66fe71a53009d5be557324a9_Exchange%20Review%20-%20September%202024.pdf [https://perma.cc/MY92-RNTF].

2. On the implications of crypto-derivatives in terms of developments for the crypto-economy, see Marco Dell’Erba, *Crypto-Derivatives*, 2025 U. ILL. L. REV. 1613, 1615 (2025). See also MARCO DELL’ERBA, *TECHNOLOGY IN FINANCIAL MARKETS: COMPLEX CHANGE AND DISRUPTION* 309-357 (2024).

regulatory frictions that could drive arbitrage in one of the most cross-border segments of global financial markets and advocates for greater regulatory harmonization in this highly complex and evolving sector.

Since the publication of the Bitcoin whitepaper in 2008,³ following the financial crisis, interest, investment, and debate in the crypto-economy and decentralized finance (DeFi) have been highly cyclical, marked by alternating “crypto winters” and speculative booms. Recently, political developments in the United States have reignited momentum in the sector, driving an increase in the overall market capitalization of cryptocurrencies and related activities.⁴ The Trump Administration’s issuance of a new executive order on crypto regulation is expected to shape future initiatives and accelerate growth in the industry.⁵ While largely symbolic and speculative,⁶ the launch of President Donald Trump and First Lady Melania Trump’s “meme coins” (\$TRUMP and \$MELANIA, respectively)⁷ signaled a more open stance toward the crypto-economy.⁸ This political shift could serve as a catalyst for further global developments, fueling greater interest and trading activity in crypto-derivatives—a key instrument for scaling the crypto-economy.

Derivative contracts are often linked to financial innovation, financial engineering, speculation,⁹ and financial risks.¹⁰ For generations of lawyers, bankers, scholars, and even the public, derivatives have become synonymous with

3. Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN (2008), <https://bitcoin.org/bitcoin.pdf> [<https://perma.cc/LTF7-9ZTD>].

4. See, e.g., Tom Westbrook, *Global Crypto Market Tops \$3 Trillion on Hopes of Trump-Fuelled Boom*, REUTERS (Nov. 14, 2024), <https://www.reuters.com/technology/crypto-market-capitalisation-hits-record-32-trillion-coingecko-says-2024-11-14/> [<https://perma.cc/7SHQ-6YCD>].

5. Strengthening American Leadership in Digital Financial Technology, 90 Fed. Reg. 8647 (Jan. 23, 2025).

6. See Vicky Ge Huang, *\$TRUMP Is Already Worth Billions. What to Know About the Meme Coin*, WALL ST. J. (Jan. 23, 2025), <https://www.wsj.com/finance/trump-meme-coin-crypto-explained-c881afff> [<https://perma.cc/Z5RS-5NJR>]; Joel Khalili, *Early Investors in Donald Trump’s Memecoin May Have Been Tipped Off, Experts Claim*, WIRED (Jan. 31, 2025), <https://www.wired.com/story/trumpcoin-biggest-backers/> [<https://perma.cc/WD8F-NNPF>].

7. See Vicky Ge Huang, *Unpacking the \$TRUMP Meme Coin*, WALL ST. J. (Jan. 22, 2025), <https://www.wsj.com/livecoverage/stock-market-today-dow-sp500-nasdaq-live-01-22-2025/card/unpacking-the-trump-meme-coin-aQZZMHvYBrHXPCtWeyOv> [<https://perma.cc/EYS9-MUPF>]. Meme coins are cryptocurrencies inspired by internet jokes, memes, or cultural references rather than having intrinsic utility or a serious technological purpose. They often start as humorous or speculative assets but can gain significant value due to community hype, social media influence, and celebrity endorsements. Notable examples of meme coins include Dogecoin (DOGE), the first meme coin, created in 2013 as a joke based on the Doge meme (a Shiba Inu dog); Shiba Inu (SHIB), marketed as the “Dogecoin killer” with a strong online following; Pepe (PEPE), inspired by the Pepe the Frog meme and often traded for speculative gains; and Bonk (BONK), a Solana-based meme coin that gained traction through airdrops and social engagement.

8. Interestingly, this initiative was very divisive. See, e.g., Joe Tidy, *‘A Mockery’: Trump’s New Meme-Coin Sparks Anger in Crypto World*, BBC (Jan. 23, 2025), <https://www.bbc.com/news/articles/crlkjejpw8o> [<https://perma.cc/4V4W-YQ2D>].

9. See Lynn A. Stout, *Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 703-712 (1999).

10. See Dan Awrey, *Complexity, Innovation, and the Regulation of Modern Financial Markets*, 2 HARV. BUS. L. REV. 235 (2012); Kathryn Judge, *Fragmentation Nodes: A Study in Financial Innovation, Complexity, and Systemic Risk*, 64 STAN. L. REV. 657 (2012). See also Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193 (2008).

financial crises—most notably the 2008 meltdown.¹¹ Their role in the collapse of major institutions like Lehman Brothers, Fannie Mae, and Freddy Mac, and the forced mergers of icons like Bank of America and Merrill Lynch cemented their reputation as both powerful financial tools and potential catalysts of systemic risk.¹² Derivatives are crucial tools for speculation, but their impact extends far beyond that. They played a key role in the financialization of the real economy, driving the rise of modern financial capitalism by increasing the influence of the financial sector.¹³ Derivatives have a long history, with early forms like forwards and options emerging in ancient Mesopotamia, Greece, and Rome to protect agricultural value.¹⁴ Over time, they evolved,¹⁵ spurring the creation of market infrastructures like the first clearinghouses in Le Havre and London,¹⁶ as well as self-regulatory initiatives such as the Chicago Board of Trade's 1863 reforms.¹⁷ Since the 1970s, the growing use of financial engineering and derivatives has contributed to the rise of shadow banking—a network of institutions and instruments that perform banking-like functions outside the regulated system.¹⁸

Crypto-derivatives, now the dominant market activity in the crypto-economy, have the potential to drive significant transformations in the crypto-economy. They are contributing to the rise of crypto-shadow banking—a network of institutions and financial instruments operating within the crypto-space.¹⁹ Like traditional derivatives, crypto-derivatives could introduce similar levels of complexity and interconnection to the crypto-economy, with the added challenge that the market is currently controlled by a small number of highly

11. See generally FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES (2011).

12. See generally T.V. SOMANATHAN & V. ANANTHA NAGESWARAN, THE ROLE OF DERIVATIVES IN THE GLOBAL FINANCIAL CRISIS OF 2008 107-121 (Cambridge Univ. Press, 2015); OTC Derivatives Coordination Group, *Macroeconomic Assessment Group on Derivatives*, BANK FOR INT'L SETTLEMENTS (2013), <https://www.bis.org/publ/othp20.pdf> [<https://perma.cc/WUX7-2NTA>] (discussing the impact of derivatives in various economies).

13. Duc Hong Vo et al., *The Importance of the Financial Derivatives Markets to Economic Development in the World's Four Major Economies*, 12 J. OF RISK AND FINANCIAL MANAGEMENT 35 (discussing the impact of derivatives in various economies).

14. See generally EDWARD J. SWAN, BUILDING THE GLOBAL MARKET: A 4000 YEAR HISTORY OF DERIVATIVES 36-84 (2000).

15. See generally Geoffrey Poitras, *From Antwerp to Chicago: the History of Exchange Traded Derivative Security Contracts*, 20 REVUE D'HISTOIRE DES SCIENCES HUMAINES 11, 23-24 (2009).

16. Guillaume Vuilleme, *The Value of Central Clearing*, 75 J. FIN. 2021, 2026-28 (2020); Randall S. Kroszner, *Can the Financial Markets Privately Regulate Risk?: The Development of Derivatives Clearinghouses and Recent Over-the-Counter Innovations*, 31 J. MONEY, CREDIT & BANKING 596, 601-604 (1999). See also PETER NORMAN, THE RISK CONTROLLERS: CENTRAL COUNTERPARTY CLEARING IN GLOBALISED FINANCIAL MARKETS 79-94 (2011).

17. Joseph Santos, A HISTORY OF FUTURES TRADING IN THE UNITED STATES, EH.NET ENCYCLOPEDIA, (Mar. 16, 2008), <https://eh.net/encyclopedia/a-history-of-futures-trading-in-the-united-states/> [<https://perma.cc/T9PP-DLT4>]; see also Jerry W. Markham, *Federal Regulation of Margin in the Commodity Futures Industry – History and Theory*, 64 TEMP. L. REV. 59, 66-67 (1991).

18. See generally Gary Gorton & Andrew Metrick, *Regulating the Shadow Banking System*, 2010 BROOKINGS PAPERS ON ECON. ACTIVITY, 261 (2010). See also Steven Schwarcz, *Regulating Shadow Banking*, 31 REVIEW OF BANKING & FINANCIAL LAW 619-642 (2012).

19. See Dell'Erba, *supra* note 2.

interconnected financial institutions involved in diverse businesses.²⁰ For example, major crypto-trading platforms often offer a mix of broker-dealer services, banking services, and marketplace functions.²¹ While spillover effects between the crypto-economy, DeFi, and TradFi have not yet fully materialized, these interconnections have already caused problems, as seen in the case of Three Arrows Capital (3AC).²² A major crypto investment firm with heavy exposure to crypto-derivatives, 3AC collapsed in 2022 due to poor risk management and excessive leverage.²³ The firm borrowed extensively to speculate on volatile assets like Bitcoin and Ethereum but couldn't meet margin calls when prices dropped, triggering a wave of liquidations.²⁴ The firm's bankruptcy had a significant ripple effect throughout the crypto-market, particularly in DeFi and crypto-derivatives.²⁵

Such events not only pose systemic risks to the broader financial system but also directly impact unsophisticated investors. The crypto-economy is characterized by an informal trading environment, with no restrictions in place to limit access for inexperienced investors, despite the highly speculative nature of these assets. The rise of new trading platforms has further contributed to market informality, making it easier for retail investors to participate without sufficient risk awareness. Beyond their financial impact, these platforms have also driven a cultural shift in market participation. Increased accessibility and ease of use have reshaped societal attitudes toward trading, with digital platforms—both centralized apps and decentralized applications (DApps)—offering 24/7 market access.²⁶ However, the proliferation of trading venues has led to extreme market fragmentation,²⁷ increasing opacity and risk, particularly for unsophisticated investors. So far, regulators have failed to address this issue. The speculative frenzy of the first wave of Initial Coin Offerings (ICOs) exposed investors to scams and market manipulation, including pump-and-dump

20. *Exchange Review: December 2024*, CCDATA (Dec. 2024), [https://cdn.prod.website-files.com/63e3774c88285e5c6cbf3b9d/675074a6a8a7ecc199819075_ER_December_Final%20\(4\).pdf](https://cdn.prod.website-files.com/63e3774c88285e5c6cbf3b9d/675074a6a8a7ecc199819075_ER_December_Final%20(4).pdf) [https://perma.cc/395X-JQL2].

21. See Marco Dell'Erba, *Crypto-Trading Platforms as Exchanges*, 2024 MICH. ST. L. REV. 1 (2024).

22. Weilun Soon, *It Was One of Last Year's Biggest Crypto Collapses. Here's an Update on the Mess*, WALL ST. J. (July 20, 2023), <https://www.wsj.com/livecoverage/stock-market-today-dow-jones-07-20-2023/card/a-year-after-crypto-firm-three-arrows-failed-liquidators-are-still-sifting-through-the-wreckage-1eyzeWvaCYbqS15X8Ioa> [https://perma.cc/223E-THSM]; See also Paul Madden, *The Crypto Contagion, An Overview of Recent Cases*, HARNEYS (July 16, 2024), <https://www.harneys.com/media/adjj34sq/the-crypto-contagion-paul-madden-harneys.pdf> [https://perma.cc/Q2GJ-56ZU].

23. Rodrigo Zepeda, *Crypto Analysis Case Study – 'Three Arrows Capital': Part VI*, FINEXTRA (Aug. 26, 2022), <https://www.finextra.com/blogposting/22804/crypto-analysis-case-study—three-arrows-capital-part-vi> [https://perma.cc/KFP2-FNQC].

24. *Crypto Crash: Unpicking the Three Arrows Capital Liquidation*, SRM (Oct. 10, 2022), <https://www.s-rminform.com/latest-thinking/crypto-crash-three-arrows-capital> [https://perma.cc/FV6A-YMMT].

25. See Madden, *supra* note 22; MacKenzie Sigalos, *How the Fall of Three Arrows, or 3AC, Dragged Down Crypto Investors*, CNBC (July 11, 2022), <https://www.cnbc.com/2022/07/11/how-the-fall-of-three-arrows-or-3ac-dragged-down-crypto-investors.html> [https://perma.cc/33YZ-GFXN].

26. Dell'Erba, *supra* note 21, at 9.

27. Kaiko Research Team, *How Is Crypto Liquidity Fragmentation Impacting Markets*, KAIKO RESEARCH (Dec. 8, 2024), <https://research.kaiko.com/insights/how-is-crypto-liquidity-fragmentation-impacting-markets> [https://perma.cc/7M72-ZALY].

schemes, even in the context of stablecoins.²⁸ A similar pattern emerged with the rise of non-fungible tokens (NFTs).²⁹ Crypto-derivatives pose even greater risks, as their inherent complexity and leverage amplify potential losses. Additionally, the volatility of the underlying crypto-assets makes these instruments significantly riskier than traditional derivatives, further exposing investors to unpredictable market dynamics.³⁰

Regulators know little about the crypto-derivatives market. Until recently, publications prepared by international bodies actively engaged in monitoring the crypto-economy, including the International Organization of Securities Commissions (IOSCO), the Financial Stability Board (FSB), and the Bank for International Settlements (BIS), did not contain any material reference to crypto-derivatives.³¹ Not even a private regulatory body such as the International Swap Dealers Association (ISDA) has meaningfully contributed to the debate, except for two streams of work: one providing guidelines for smart contract derivatives, and one in the area of international private law rules for smart contract derivatives³² and the technological infrastructure provided.³³ The contribution was in the form of a proposed set of definitions for digital asset derivatives.³⁴ Therefore, there remains an impellent need for regulators to get information about this market, at multiple levels, including market structures, the nature of investors involved, and trading volume involved. This is especially true for so-called over-the-counter (OTC) crypto-derivatives which are non-standardized derivatives, by nature more opaque than standardized ones, generating more risks systemic risks and investor protection concerns. The precedent set by the financial crisis of 2008, the general risks connected to derivatives in TradFi, and the similarity of the trends related to crypto-derivatives in the crypto-economy should lead regulators to adopt a more proactive role, in an attempt to design an appropriate harmonized framework for the coming years.

Currently, the regulatory treatment of crypto-derivatives varies significantly across jurisdictions. The jurisdictions for this analysis were selected based on four key criteria: prominence as financial hubs in traditional markets,

28. See Marco Dell'Erba, *Stablecoins in Cryptoeconomics: From Initial Coin Offerings to Central Bank Digital Currencies*, 22 N.Y.U. J. LEGIS. & PUB. POL'Y. 1 (2019).

29. See Yulia Guseva, *The Economic Reality of NFT Securities*, in THE CAMBRIDGE HANDBOOK OF LAW AND POLICY FOR NFTs 59, 59 (2024).

30. See Maria Teresa Chimienti, Urszula Kochanska & Andrea Pinna, *Understanding the Crypto-Asset Phenomenon, Its Risks and Measurement Issues*, in ECB ECONOMIC BULLETIN, Issue 5/2019 (2019), https://www.ecb.europa.eu/press/economic-bulletin/articles/2019/html/ecb.ebart201905_03~c83aeaa44c.en.html [<https://perma.cc/76NE-YMZC>].

31. *Thematic Review Assessing the Implementation of IOSCO Recommendations for Crypto and Digital Asset Markets*, INT'L ORG. OF SEC. COMM. (Oct. 2025), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD801.pdf> [<https://perma.cc/7KCX-V3SX>] (describing the first reference to crypto derivatives).

32. See Press Release, ISDA, *Private International Law Aspects of Smart Derivatives Contracts Utilizing DLT* (Jan. 13, 2020), <https://www.isda.org/2020/01/13/private-international-law-aspects-of-smart-derivatives-contracts-utilizing-distributed-ledger-technology/> [<https://perma.cc/WM7R-34P2>].

33. See Press Release, ISDA, *ISDA Launches Standard Definitions for Digital Asset Derivatives* (Jan. 26, 2023), <https://www.isda.org/2023/01/26/isda-launches-standard-definitions-for-digital-asset-derivatives/> [<https://perma.cc/BGW6-YCTU>].

34. *Id.*

significance in digital asset markets, regulatory stance on digital assets (including the existence of dedicated frameworks), ability to attract crypto-derivatives trading firms, and prevailing enforcement trends. They include the United States, Canada, the European Union (with particular attention to developments in France and its regulatory approach), Singapore, Hong Kong, the British Virgin Islands, Switzerland, Seychelles, the United Arab Emirates (specifically Abu Dhabi Global Market and Dubai), and the United Kingdom.

This Article's comparative analysis identifies key areas of divergence and examines the underlying causes of these discrepancies. A more consistent regulatory framework, supported by common rules and best practices, would benefit both the financial system and investors by promoting stability and harmonization.

This Article is structured in four parts and two annexes. Part I provides a background analysis of the basic mechanisms underpinning both traditional derivatives and crypto-derivatives. Crypto-derivatives do not represent a significant evolution of the product; rather, they replicate the structures found in traditional finance (TradFi)³⁵ while incorporating new asset classes, particularly cryptocurrencies, as underlying assets. Starting with a functional definition of traditional derivatives and an overview of key derivative contracts and their regulation, this section then explores the same contractual types in the context of crypto-derivatives, highlighting both their similarities and unique characteristics compared to traditional derivatives.

Part II builds upon the comparative analysis and highlights key trends. It adopts a comparative approach across eleven relevant jurisdictions, aiming to identify specific regulatory trends and divergences that should be addressed to mitigate emerging risks similar to those seen in traditional markets. While jurisdictions universally recognize structural components like OTCs and ETDs, none define "crypto-derivative" as a distinct category. The standard derivative classifications—options, swaps, futures, and forwards—are consistently applied to crypto-derivatives. However, significant differences emerge in their regulatory treatment. Part II identifies four key factors contributing to these divergences: three related to the taxonomy of derivatives and one linked to differing policy attitudes. These factors—settlement dynamics, the definition of eligible underlying assets, marketability, and policy attitudes—collectively explain the varying regulatory approaches to crypto-derivatives across jurisdictions, each shaped by unique legal, economic, and policy considerations.

Part III highlights the key issues arising from trends and divergences in crypto-derivatives regulation. A major concern is regulatory arbitrage, driven by factors that can be categorized as (i) formalistic, (ii) substantial, and (iii) policy related. Additional problems stem from the lack of restrictions on retail investor access, allowing them to freely trade highly speculative products—unlike in traditional derivatives markets. This is particularly concerning given the pressing need for investor and consumer protection in such a speculative market. Finally, systemic risks emerge from factors such as market interconnection, a limited number of dominant market players, and poor collateral

35. See Dell'Erba *supra* note 2, at 1618.

management practices, all of which increase potential vulnerabilities in the crypto-derivative space.

Part IV outlines key policy recommendations for regulators to address these issues and pursue a harmonized strategy, akin to the framework developed for traditional derivatives following the 2008 financial crisis. Given the cross-border nature of the crypto-derivatives market, international regulatory governance is essential, involving key national regulators. A starting point for harmonization is the establishment of a functional definition of crypto-derivatives with technology neutrality. The section also advocates for the implementation of reporting and prudential standards to minimize systemic risks, while providing regulators with the necessary data to better understand this emerging market. Additionally, limiting access to highly speculative instruments is recommended to enhance investor protection.

Annex I offers a detailed analysis of the regulations, covering both traditional derivatives and the treatment of crypto-derivatives in all the jurisdictions analyzed.

Annex II presents data on enforcement strategies, with a particular focus on the United States and Canada. Other jurisdictions worldwide have issued warnings but have not formally initiated any enforcement procedures.

I. Understanding Traditional Derivatives & Crypto-derivatives

This section analyzes the fundamental mechanisms of traditional and crypto-derivatives, which largely mirror TradFi structures while incorporating cryptocurrencies as underlying assets. It defines traditional derivatives, reviews key contracts and regulations, and examines crypto-derivatives, emphasizing their similarities and distinct features.

A. Traditional Derivatives

Derivatives are contracts wherein two parties agree to execute specific actions conditional on the price movement of an underlying asset or the occurrence of a future event.³⁶ Each type of derivative may have specific functions.³⁷ For instance, counterparties may commit to exchanging a certain amount of the underlying asset at a certain price on a future date (as in forwards or futures), or they may just agree on the right, but not the obligation, to do so (as in options).³⁸ Alternatively, they might establish periodic payments linked to the performance of the underlying (common in swap contracts).³⁹ From a general perspective, derivatives can be used for hedging purposes or speculation.⁴⁰

36. *Id.* at 1619.

37. *Id.*

38. *Id.*

39. *Id.* at 1619-1620.

40. See generally Lynn A. Stout, *Risk, Speculation, and OTC Derivatives: An Inaugural Essay for Convivium*, 1 ACCOUNT. ECON. & LAW [i] (2011).

Depending on their venue of transaction, derivatives can be both OTC (privately negotiated)⁴¹ and exchange-traded (standardized).⁴² Exchange-traded derivatives are structured to “virtually eliminate counterparty risk”.⁴³ Instruments such as futures are quoted and traded exclusively on exchanges or other organized platforms, which also define and standardize their contractual terms.⁴⁴ Traditionally, traders negotiated these derivatives using verbal calls and hand signals to convey their orders in what is known as an open outcry.⁴⁵ Electronic trading has replaced this system virtually everywhere, starting an evolution that now encompasses algorithmic, high-frequency, and increasingly decentralized methodologies.⁴⁶

OTC derivatives may have the advantage of allowing counterparties to agree on specific clauses related to their specific needs, with the negative downside effect of decreased liquidity and counterparty risks.⁴⁷ OTC derivatives, such as forwards and swaps, are negotiated bilaterally (or multilaterally) and off-exchange.⁴⁸ This grants the parties flexibility to tailor contractual terms to their specific needs but also creates a less transparent market whose vulnerabilities played a role in the 2008 financial crisis. For this reason, several jurisdictions have imposed extensive regulatory reforms on OTC derivatives, emphasizing greater standardization, transparency, and trading safeguards.⁴⁹

Derivatives trading is conducted via regulated brokerage firms or financial institutions that provide investors access to exchanges for a fee and subject to certain KYC and onboarding requirements.⁵⁰ Derivatives are essentially traded ‘on margin,’ indicating a commitment to a fraction of the total cost of the trade compared to the actual exposure of the position.⁵¹

41. ALAN N. RECHTSCHAFFEN, *CAPITAL MARKETS, DERIVATIVES, AND THE LAW: POSITIVITY AND PREPARATION* 161 (3rd ed. 2019)

42. See *id.* at 163.

43. *Id.* at 162.

44. See Dell’Erba *supra* note 2, at 120.

45. See generally Yiuman Tse & Tatyana V. Zabolina, *Transaction Costs and Market Quality: Open Outcry Versus Electronic Trading*, 21 J. FUTURES MKTS. 713 (2001).

46. The London Metal Exchange (LME) still employs an open outcry system. See *The Ring, LONDON METAL EXCHANGE*, <https://www.lme.com/Trading/Trading-venues/The-Ring> [<https://perma.cc/5BZB-3G25>] (last visited Mar. 10, 2026). The Chicago Board Options Exchange (CBOE) is also renowned for maintaining options ‘pits’ dedicated to open outcry trading. See Katherine Doherty, *Cboe Keeps Old Model Alive Opening New Trading Floor*, BLOOMBERG (June 7, 2022), <https://www.bloomberg.com/news/articles/2022-06-06/cboe-keeps-old-school-pit-alive-with-new-chicago-trading-floor#xj4y7vzkg> [<https://perma.cc/KH65-CV66>]

47. RECHTSCHAFFEN, *supra* note 41, at 162.

48. *Id.* at 161-162.

49. Org. for Econ. Coop. & Dev., *G20 Leaders’ Statement: The Pittsburgh Summit* (Sept. 24–25, 2009), https://home.treasury.gov/system/files/206/pittsburgh_summit_leaders_statement_250909.pdf [<https://perma.cc/A5NG-PFRR>] (describing the regulatory objectives in the wake of the financial crisis). Some of the most relevant efforts towards the Pittsburgh objectives in relation to OTC derivatives are represented by the US Dodd-Frank Act, the European Market Infrastructure Regulation (EMIR) and the UK Financial Services and Markets Act 2000 (Over the Counter Derivatives, Central Counterparties and Trade Repositories) Regulations 2013.

50. Dell’Erba, *supra* note 2, at 1621.

51. See Dmytro Matsypura & Laurent L. Pauwels, *Does Portfolio Margining Make Borrowing More Attractive?*, 43 INT’L REV. FIN. ANALYSIS 128, 128 (2016).

This commitment involves depositing successive tranches of funds into a margin account held by the broker, which functions as collateral to mitigate the counterparty credit risk.⁵² The tranche deposited upon entering a derivative contract is referred to as the ‘initial margin’ and is determined by the broker as a percentage of the total cost of the position (the ‘initial margin requirement’).⁵³

The most common types of derivatives include futures, options, swaps, and spot contracts. Futures are standardized contracts obligating parties to buy or sell an asset at a predetermined price on a specified future date and are commonly used for hedging or speculation. Options give the holder the right, but not the obligation, to buy (call option) or sell (put option) an asset at a specified price before or at expiration. Swaps are contractual agreements in which two parties exchange cash flows or financial instruments, and are often used to manage interest rate risk, currency fluctuations, or credit exposure. Spot contracts, unlike derivatives, involve the immediate settlement of an asset at the current market price, typically within two business days.⁵⁴

Derivatives regulation in both Europe and the United States underwent significant reforms following the 2008 financial crisis, which exposed systemic risks stemming from the lack of transparency, counterparty risk, and excessive leverage in over-the-counter (OTC) derivatives markets.⁵⁵ In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 introduced comprehensive regulatory oversight of derivatives through the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC).⁵⁶ Key provisions included mandatory clearing of standardized OTC derivatives through central counterparties (CCPs),⁵⁷ trade execution on regulated platforms such as Swap Execution Facilities (SEFs),⁵⁸ real-time trade reporting to swap data repositories,⁵⁹ and stricter capital and margin requirements for uncleared derivatives.⁶⁰ The Volcker Rule further restricted banks from engaging in proprietary trading in derivatives to reduce speculative risks.⁶¹

In Europe, the European Market Infrastructure Regulation (EMIR),⁶² enacted in 2012 and amended by EMIR Refit,⁶³ established similar requirements, mandating central clearing for standardized OTC derivatives,⁶⁴ risk-mitigation techniques for non-centrally cleared contracts,⁶⁵ and trade reporting to

52. Dell’Erba, *supra* note 2, at 1621.

53. *Id.*

54. *Id.*; Jason Fernando, *Derivative*, INVESTOPEDIA (last updated Dec. 31, 2025), <https://www.investopedia.com/terms/d/derivative.asp> [<https://perma.cc/77LA-QXB8>].

55. See Org. for Econ. Coop. & Dev., G20 LEADERS’ STATEMENT, *supra* note 49.

56. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929-Z, 124 Stat. 1376, §712 (2010) (codified at 15 U.S.C. § 780).

57. See *id.* §723 (adding Section 2(h) to the Commodity Exchange Act).

58. See *id.* §733 (adding Section 5(h) to the Commodity Exchange Act).

59. Securities Exchange Act of 1934 §13, 15 U.S.C. §78m.

60. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929-Z, 124 Stat. 1376, §731 (adding section 4s to the Commodity Exchange Act).

61. *Id.* §619 (adding section 13 to the Bank Holding Company Act).

62. Council Regulation 648/2012, 2012 O.J. (L 201) 1 (EU).

63. Council Regulation 2019/834, 2019 O.J. (L 141) 42 (EU).

64. Council Regulation 648/2012, art. 4 2012 O.J. (L 201) 1 (EU).

65. *Id.* art. 11.

authorized trade repositories.⁶⁶ Additionally, the Markets in Financial Instruments Directive II (MiFID II)⁶⁷ and its accompanying regulation (MiFIR)⁶⁸ imposed enhanced pre- and post-trade transparency obligations on derivative transactions,⁶⁹ particularly for those traded on organized markets. The Central Securities Depositories Regulation (CSDR)⁷⁰ and Bank Recovery and Resolution Directive (BRRD)⁷¹ also contributed to strengthening market resilience by improving settlement efficiency and ensuring the orderly resolution of financial institutions active in derivatives markets.

Both regulatory frameworks aimed to reduce systemic risk, enhance market integrity, and improve transparency, though implementation has differed, with the U.S. framework focusing on direct market intervention through regulatory mandates, and Europe's approach emphasized a broader, principles-based methodology. Over time, regulatory cooperation between the CFTC, SEC, and European Securities and Markets Authority (ESMA) has aimed to align cross-border derivatives oversight to prevent market fragmentation and ensure global financial stability.

B. Crypto-derivatives

Crypto-derivatives started as instruments tied to the value of bitcoin (BTC).⁷² The first ever BTC derivative was arguably a futures contract launched around November 2011 on a platform called ICBIT, when BTC hardly traded above \$4.⁷³ The contract provided exposure to the USD/BTC rate and settled in bitcoins. This structure appealed particularly to early traders in the cryptocurrency space who aimed to accumulate and invest in bitcoins. It was also convenient for platforms as they could operate without relying on fiat currency. Eventually, derivative products that were margined and settled in cryptocurrency started being labelled as 'inverse', emphasizing a departure from markets where cryptocurrencies were treated akin to fiat-settled commodities. This context would lead the first BTC derivative to be marketed today as an inverse futures contract.⁷⁴

66. *Id.* art. 9.

67. Council Directive 2014/65, 2014 O.J. (L 173) 349 (EU).

68. Council Regulation 600/2014, 2014 O.J. (L 173) 84 (EU).

69. *Id.* art. 8.

70. Council Regulation 909/2014, 2014 O.J. (L 257) 1 (EU).

71. Council Directive 2014/59, 2014 O.J. (L 173) 190 (EU) (establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council).

72. Kate Yang, *History of Crypto Derivatives*, CRYPTO.COM (Feb. 2021), https://assets.ctfassets.net/hfgyig42jimx/20KXA1MOn6wQ67mOMFhgil/acacfffb1a367331b601892842bc7983/Crypto.com_Macro_Report_-_History_of_Crypto_Derivatives.pdf [<https://perma.cc/L2L2-J76C>].

73. *Id.* at 8; *ICBIT Derivatives Market (USD/BTC Futures Trading) - LIVE*, BITCOIN FORUM (Nov. 3, 2011), <https://bitcointalk.org/index.php?topic=50817.0> [<https://perma.cc/FM4G-HWCG>]. For BTC historical data, see *Bitcoin Historical Data*, INVESTING.COM, <https://www.investing.com/crypto/bitcoin/historical-data> [<https://perma.cc/3DSX-CRG4>] (last visited Feb. 19, 2026).

74. Dell'Erba, *supra* note 2, at 1632.

Crypto-derivative contracts can be classified as either linear or inverse, depending on their payoff structure. These contracts derive their value from BTC prices quoted in a chosen currency, typically USD or Tether (USDt). Due to inefficiencies across crypto markets, prices can vary significantly between exchanges, leading to the use of a composite price index—a weighted average of BTC prices from multiple sources—to determine the final settlement price within a timeframe of 10 to 30 minutes before settlement. Linear contracts have a direct relationship with BTC price movements. If denominated in USD, they settle and require margining in USD. If referenced in a BTC/USD index, they are denominated, margined, and settled in BTC. However, derivatives can be quoted in either currency of the index pair, shifting from a linear ($y=mx$) to a non-linear ($y=1/x$) payoff structure. For example, a BTC/USD futures contract has a linear USD payoff but a non-linear BTC payoff.⁷⁵

Crypto-derivatives are usually highly leveraged contracts (often maxing at 125x) and margin amounts are necessary to open and maintain derivatives positions. Initial margin (IM) and maintenance margin (MM) refer respectively to the minimum amount required to enter a position and the minimum percentage of the value of that position traders are required to hold to prevent automated liquidation.⁷⁶ IM requirements may be calculated slightly differently between exchanges, but it is always an inverse function of leverage and a direct function of the position size.⁷⁷ On the other hand, MM is proportional to the position size but is calculated regardless of the level of leverage a trader selects.⁷⁸ Nevertheless, platforms typically provide risk limits, namely IM, MM and maximum levels of leverage per different types of contract and position size.⁷⁹

The most popular crypto-derivatives in the market are perpetual swaps (or perpetual futures), and crypto-options and quantos. Perpetual swaps, or perpetual futures, resemble traditional futures but lack an expiry date, allowing positions to be held indefinitely. This creates uncertainty in the correlation between spot and futures prices, complicating risk transfer. To anchor perpetual prices to the reference index, a funding mechanism is used, where

75. *Id.* at 1633.

76. *Id.* at 1634 (quoting *Leverage and Margin of Perpetual Futures Contracts*, LBANK, <https://support.lbank.site/hc/en-gb/articles/900001655503-Leverage-and-Margin-of-Perpetual-Futures-Contracts> [https://perma.cc/2ZKQ-YTTM] (last visited July 26, 2025)).

77. See *Initial Margin (USDT Contract)*, BYBIT (last updated Nov. 25, 2025, 3:06 PM), <https://www.bybit.com/en/help-center/article/Initial-Margin-USDT-Contract> [https://perma.cc/WRY8-Z95F]; *Leverage and Margin in Coin-Margined Futures Contracts*, BINANCE (last updated Jan. 1, 2026), <https://www.binance.com/en/support/faq/leverage-and-margin-in-coin-margined-futures-contracts-be2c7d9d95b04a7e8044ed02dd7dfe5c> [https://perma.cc/6TED-J3RA].

78. See *Maintenance Margin (Inverse Contract)*, BYBIT (last updated Jan. 6, 2026, 5:04 PM), <https://www.bybit.com/en/help-center/article/Maintenance-Margin-Inverse-Contract> [https://perma.cc/YS9T-HQAT]; *What's Margin in Futures? How Does It Work?*, POLONIEX, <https://support.poloniex.com/hc/en-us/articles/6670524566423-What-s-margin-in-Futures-How-does-it-work-> [https://perma.cc/5NM9-Q7V6] (last visited Feb. 19, 2026); *Leverage & Margin*, BINANCE, <https://www.binance.com/en/futures/trading-rules/quarterly/leverage-margin> [https://perma.cc/NR7G-6ABK] (last visited Feb. 19, 2026).

79. *Risk & Open Interest Limits*, BITMEX, <https://www.bitmex.com/app/riskLimits> [https://perma.cc/UGE8-K69K] <https://www.bitmex.com/app/riskLimits>; *Risk Limit (USDC Perpetual & Futures)*, BYBIT (Nov. 25, 2025), <https://www.bybit.com/en/help-center/article/Risk-Limit-USDC-Contract> [https://perma.cc/M5UY-C7SQ].

longs and shorts exchange funding payments (typically every eight hours). If the perpetual trades at a premium, longs pay shorts, incentivizing selling and price convergence.⁸⁰ If at a discount, shorts pay longs, pushing the price up.⁸¹ Funding payments depend on the mark value of the position and the funding rate, which comprises an interest component (proxy for holding costs) and a premium/discount component.⁸² Perpetuals also resemble currency swaps but without an initial notional exchange or expiry date. They are even closer to rolling spot forex contracts (RSFs)—currency-based contracts for difference (CfDs)—which let traders profit from price movements of an underlying pair, exchanging differences between closing and opening rates at set intervals without maturity.⁸³ Both CfDs and RSFs are high-risk instruments, leading to their prohibition in the U.S. but regulated acceptance in the EU and UK.⁸⁴ Perpetual swaps share RSFs' advantages, such as low margin requirements (cheap leverage) and no need for rollovers, making them the most traded crypto-derivatives.⁸⁵ However, these same features also heighten risk and potential market instability, especially with inverse payoffs.

Crypto-options represent a more sophisticated category of derivatives compared to futures and perpetuals, as they allow traders to hedge and profit not only from price movements but also from volatility. Their pricing depends on factors known as the Greeks—delta, gamma, theta, and rho.⁸⁶ Most crypto-options are European-style, meaning they can only be exercised at expiration, and are priced based on a composite index. However, determining the correct pricing model depends on the legal classification of the underlying

80. Dell'Erba, *supra* note 2, at 1649.

81. Every exchange has a different calculation methods and funding intervals. See Adam Hayes, *Perpetual Futures: What They Are and How They Work*, INVESTOPEDIA (Aug. 20, 2024), <https://www.investopedia.com/what-are-perpetual-futures-7494870> [<https://perma.cc/84XJ-ZA3Y>].

82. See, e.g., *Perpetual Contracts Guide*, BITMEX (last visited Feb. 19, 2026), <https://www.bitmex.com/app/perpetualContractsGuide> [<https://perma.cc/F98F-49MM>].

83. See *Contract for Difference (CFD), Rolling Spot Forex e Opzioni Binarie: Tra Rischio e Scemmassa!*, COMMISSIONE NAZIONALE PER LE SOCIETA E LA BORSA, <https://www.consob.it/web/investor-education/opzioni-binarie> [<https://perma.cc/3RPJ-3JMY>]. See *Public Statement on Identifying Derivatives Withing the Scope of the National product Intervention Measures on CFDs*, European Sec. and Markets Authority (Feb. 24, 2026), https://www.esma.europa.eu/sites/default/files/2026-02/ESMA35-243228190-8024_-_Public_statement_on_derivatives_in_scope_of_the_CFD_product_intervention_measures.pdf [<https://perma.cc/GH45-DAPX>] (recent ESMA Statement comparing certain perpetuals to CFDs).

84. See Richard Berry, *Why You Can't Trade CFDs in America Plus Three Better Alternatives*, GOOD MONEY GUIDE (Jan. 29, 2025), <https://goodmoneyguide.com/usa/can-you-trade-cfds-in-america/> [<https://perma.cc/E8FN-2E7T>]; Press Release, ESMA Adopts Final Product Intervention Measures on CFDs and Binary Options (June 1, 2018), <https://www.esma.europa.eu/press-news/esma-news/esmabi-adopts-final-product-intervention-measures-cfds-and-binary-options> [<https://perma.cc/5ZP4-U6XW>]; Press Release, *FCA Highlights Continuing Concerns About Problem Firms in the CFD Sector*, FINANCIAL CONDUCT AUTHORITY (Dec. 1, 2022), <https://www.fca.org.uk/news/press-releases/fca-highlights-continuing-concerns-about-problem-firms-cfd-sector> [<https://perma.cc/52WJ-X3XV>].

85. Dell'Erba, *supra* note 2, at 1637.

86. See JOHN C. HULL, *OPTIONS, FUTURES, AND OTHER DERIVATIVES* 417-18 (8th ed. 2012). See also *Understanding Options Greeks in Crypto Trading*, BINANCE (Dec. 14, 2023), <https://www.binance.com/en/blog/futures/understanding-options-greeks-in-crypto-trading-91001745549966134> [<https://perma.cc/VJ2W-4KJ8>].

asset.⁸⁷ FX models like Garman-Kohlhagen or Dupire apply to currency pairs,⁸⁸ while Black-Scholes is used for securities or commodities.⁸⁹ The lack of a risk-free rate in crypto complicates pricing, which could be improved with a taxonomy of crypto-assets.⁹⁰

A key example in crypto-finance is quanto options, which are settled in a different currency than their underlying asset. Direct quantos function like traditional quantos, with a predetermined conversion rate (X), while inverse quantos introduce a new exotic structure where the payoff mimics inverse options but is denominated in another currency.⁹¹ For example, in a BTC inverse quanto, the strike price (K) is set at 40,000, the BTC index price ranges from 20,000 to 60,000, and the conversion factor to ETH (X) is 0.06.

Retail traders can often access options through decentralized option vaults (DOVs) which are smart contract-based AMMs where users deposit funds. DOVs act as automated investment funds, selecting strategies, executing trades, and distributing premia from sold options among depositors.⁹²

II. Comparative Analysis of the Law of Crypto-Derivatives

This section provides a comparative analysis of the applicable laws governing crypto-derivatives, clarifies the methodology used, summarizes the state-by-state analysis (available under Annex I), identifying key trends and reasons for divergence.

A. The Importance of a Comparative Approach and its Implications

The analysis adopts a comparative, functional approach to identify emerging trends,⁹³ key divergences, and potential risks that could undermine both financial stability and investor protection.

87. To the best of the author's knowledge, the issue was first formalized in Carol Alexander, Ding Chen & Arben Imeraj, *Crypto Quanto and Inverse Options*, 33 *MATHEMATICAL FIN.* 1005 (2023).

88. See UWE WYSTUP, *FX OPTIONS AND STRUCTURED PRODUCTS 1* (2d ed. 2017).

89. See, e.g., Ai Jun Hou, Weining Wang, Cathy Y. H. Chen & Wolfgang Karl Härdle, *Pricing Cryptocurrency Options*, 18 *J. FIN. ECONOMETRICS* 250, 262-69 (2020) (BTC options are priced as security-based options using a stochastic volatility with a correlated jump (SVCJ) model); see also Jovanka Lili Matic, Natalie Packham & Wolfgang Karl Härdle, *Hedging Cryptocurrency Options*, 26 *REV. DERIVATIVES RSCH.* 91 (2023).

90. Alexander et al., *supra* note 87, at 1013.

91. *Id.* at 1016-17.

92. See Polygon Technology, *Best Practices for Building Decentralized Option Vaults – Pt 1*, PARADIGM (Oct. 4, 2022), <https://www.paradigm.co/blog/decentralized-option-vaults-part-1> [<https://perma.cc/U35C-T7CK>]; QCP Capital, *An Explanation of DeFi Options Vaults (DOVs)*, MEDIUM (Dec. 12, 2021), <https://qpcapital.medium.com/an-explanation-of-defi-options-vaults-dovs-22d7f0d0c09f> [<https://perma.cc/9VQU-JNLR>].

93. See Jan Hendrik Dalhuisen, *The Role and Importance of Comparative Law Analysis in International Finance* (SSRN Working Paper, Jan. 2024), <https://ssrn.com/abstract=4698150> [<https://perma.cc/B69Z-5AHH>] (on the importance of comparative analysis); Edoardo D. Martino, Hossein Nabilou & Alessio Maria Paces, *Comparative Financial Regulation: The Analytical Framework*, (ECGI, Law Working Paper No. 726/2023, Jul. 2023), <https://ssrn.com/abstract=4522348> [<https://perma.cc/FY94-JJPY>]; Lawrence A. Cunningham & David T. Zaring, *The Three or Four Approaches to Financial Regulation: A Cautionary Analysis Against Exuberance in Crisis Response*, 78 *GEO. WASH. L. REV.* 39 (2009).

As the BIS noted, individual jurisdictions cannot adequately mitigate the risks associated with cryptoassets if regulatory measures remain fragmented, inconsistent, or subject to jurisdictional gaps.⁹⁴ Therefore, an internationally coordinated response through the establishment and implementation of global standards that ensure a coherent and harmonized regulatory framework will be critical to curbing regulatory arbitrage and preventing the emergence of a fragmented regime that could jeopardize financial stability.⁹⁵ Comparing how jurisdictions regulate these instruments highlights areas where harmonization can reduce systemic vulnerabilities and strengthen the global regulatory environment.

Since the introduction of Bitcoin in 2008, supranational bodies have, for over a decade, largely refrained from active engagement in the regulation of digital assets.⁹⁶ This prolonged absence of supranational coordination has contributed to a fragmented regulatory landscape and divergent approaches among authorities in leading financial centers.

The sole exception to this absence of supranational coordination has been in the area of anti-money laundering and countering the financing of terrorism (AML/CFT), which emerged as a central concern in response to the rapid, borderless, and largely unregulated adoption of Cryptoassets since their early years.⁹⁷ In 2014, the Financial Action Task Force (FATF) published its first report—employing the terminology of ‘virtual currency’—in which it identified potential money laundering and terrorist financing risks associated with these instruments.⁹⁸ The FATF’s recommendations were subsequently implemented with relative speed across its membership, with some jurisdictions even anticipating the organization’s publications.⁹⁹ This disparity in responsiveness between the FATF and national authorities can be attributed to (i) the underlying drivers of the FATF’s standard-setting mandate, namely the issuance of binding measures to prevent the misuse of virtual assets for illicit purposes,¹⁰⁰ and (ii)

94. See Denise Garcia Ocampo, Nicola Branzoli & Luca Cusmano, *Crypto, Tokens and DeFi: Navigating the Regulatory Landscape*, FIN. STABILITY INST. 5 (May 2023), <https://www.bis.org/fsi/publ/insights49.pdf> [<https://perma.cc/6WNL-2RLF>].

95. *Id.*

96. See Int’l Org. of Sec. Comm., *IOSCO Research Report on Financial Technologies (Fintech)* (Feb. 2017), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD554.pdf> [<https://perma.cc/UBR4-HGNH>].

97. See Rodrigo Coelho, Jonathan Fishman & Denise Garcia Ocampo, *Supervising Cryptoassets for Anti-Money Laundering*, FIN. STABILITY INST. 1-2 (Apr. 2021), <https://www.bis.org/fsi/publ/insights31.pdf> [<https://perma.cc/9MDQ-BGMR>].

98. See Fin. Action Task Force, *Virtual Currencies: Key Definitions and Potential AML/CFT Risks*, <https://www.fatf-gafi.org/en/publications/Methodsandrends/Virtual-currency-definitions-aml-cft-risk.html> [<https://perma.cc/U26W-QF39>] (last visited Mar. 10, 2026).

99. See, e.g., Fin. Crimes Enf’t. Network, *Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies* (Mar. 18, 2013), <https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering> [<https://perma.cc/ZV8C-4SWP>].

100. See Fin. Action Task Force, *Virtual Assets*, <https://www.fatf-gafi.org/en/topics/virtual-assets.html> [<https://perma.cc/C5JZ-K7RT>]. FATF warns that “[w]ithout proper regulation, virtual assets also risk becoming a safe haven for the financial transactions of criminals and terrorists. The FATF has been closely monitoring developments in the cryptosphere and has issued global, binding standards to prevent the misuse of virtual assets for money laundering and terrorist financing. In recent years, some countries have started to regulate the sector, while others have prohibited virtual assets altogether. However, most countries have yet to

the consequences for members failing to comply, most notably the prospect of ‘grey-listing’.¹⁰¹ The emphasis placed on AML/CFT concerns suggests that national regulators have consistently prioritized mitigating these categories of risks over prudential and broader financial stability considerations in the regulation of digital assets and related activities.

Unsurprisingly, the development of institutional securities regulation has lagged considerably. At the national level, only limited investor-protection measures—primarily in the form of warnings—began to emerge in 2014,¹⁰² gaining greater prominence during the subsequent waves of initial coin offerings (ICOs).¹⁰³ At the international level, multilateral institutions did not devote sustained attention to digital assets until 2019.¹⁰⁴ This shift was largely prompted by the announcement of the international stablecoin initiative ‘Libra,’ promoted by Meta (then Facebook), which generated significant official and unofficial pushback from regulators and supranational bodies owing to its potential systemic implications given the scale of the firms involved.¹⁰⁵ A more

implement effective regulations. These gaps in the global regulatory system have created significant loopholes that can be exploited by criminals, terrorists and rogue regimes.”

101. See Fin. Action Task Force, *Black and Grey Lists* (last updated Feb. 13, 2026), <https://www.fatf-gafi.org/en/countries/black-and-grey-lists.html> [<https://perma.cc/N2T5-9PKK>]. When the FATF places a jurisdiction on its grey list, it signals that shortcomings in the jurisdiction’s anti-money laundering and counter-terrorist financing frameworks must be addressed. Grey-listed countries are expected to implement an agreed action plan to remedy such gaps. Although grey listing does not carry automatic sanctions, it may damage investor confidence, limit access to international finance, and weaken a nation’s reputation. Persistent failure to comply may escalate to blacklisting, which triggers mandatory countermeasures and severe reputational consequences. In practice, most jurisdictions on the grey list demonstrate a political willingness to reform, and many are removed from the list within a few years.

102. See Apolline Blandin et al., *Global Cryptoasset Regulatory Landscape Study*, CAMBRIDGE CTR. FOR ALTERNATIVE FIN. 34 (2019). The authors note that “[t]he first official report mentioning cryptoassets by a regulatory authority was published in 2011 by the French AML regulator Tracfin, followed by the European Central Bank in 2012 (Figure 4). By 2014, 93% of analyzed jurisdictions had their first official statement published. Interestingly, the vast majority (75%) of initial statements were issued in 2013, the same year the market experienced the largest bubble since the inception of Bitcoin in 2009.”

103. See Marco Dell’Erba, *Initial Coin Offerings: The Response of Regulatory Authorities*, 14 N.Y.U. J. L. & BUS. 1107 (2018); Andrew Whitworth & Nicola Bilotta, *Cryptoassets and the Lack of International Regulatory Coordination*, IAI PAPERS NO. 25, 2025, at 12; see also *Policy Recommendations for Crypto and Digital Asset Markets: Final Report*, INT’L ORG. OF SEC. COMM’NS 2023.

104. See *Crypto-Assets: Implications for Financial Stability, Monetary Policy, and Payments and Market Infrastructures*, ECB OCCASIONAL PAPER NO. 223, at 7 (2019); *Issues, Risks and Regulatory Considerations Relating to Crypto-Asset Trading Platforms: Consultation Report*, INT’L ORG. OF SEC. COMM’NS 1 (2019); *Issues, Risks and Regulatory Considerations Relating to Crypto-Asset Trading Platforms: Final Report*, INT’L ORG. OF SEC. COMM’NS 1 (2020); *Crypto-Assets: Work Underway, Regulatory Approaches and Potential Gaps*, FIN. STABILITY BD. (2019); *Investigating the Impact of Global Stablecoins*, G7 WORKING GRP. ON STABLECOINS 1 (2019); ESMA, *Advice on Initial Coin Offerings and Crypto-Assets*, 42 (2019); *Regulatory Issues of Stablecoins*, FIN. STABILITY BD., 2019, at 1; Press Release, G20, G20 Press Release on Global Stablecoins (October 17-18, 2019); Official Statement, Int’l Org. of Sec. Comm’ns, Statement on IOSCO Study of Emerging Global Stablecoin Proposals, (Nov. 4, 2019).

105. For background information on Libra, see generally AN INTRODUCTION TO LIBRA 12 (2019). For responses to the launch of Libra, see Ben Bain & Austin Weinstein, *Facebook Says Libra Won’t Launch Until Regulators Satisfied*, BLOOMBERG (July 15, 2019); Amanda Simmons, *Regulating Libra: Will Legal and Regulatory Uncertainty Prevent the Launch of Facebook’s Cryptocurrency Project?*, 16 J. BUS. & TECH. L. 83 (2021). See also *Global Regulators and*

substantive supranational response materialized in 2022, when IOSCO established the Fintech Task Force (FTF) and subsequently released its Crypto-Asset Roadmap,¹⁰⁶ setting the foundation for its activities in this domain.¹⁰⁷ Nonetheless, the absence of prior coordination and the delayed engagement of international standard-setting bodies¹⁰⁸ have contributed to divergent national approaches and a fragmented regulatory landscape¹⁰⁹

This context underscores the need for a cross-border analysis and a systematic comparative framework focusing on several structural dimensions of crypto-derivatives. Such an approach is essential to formulate policy recommendations that can effectively address the concerns recently raised by multi-lateral bodies,¹¹⁰ which have not yet advanced a fully harmonized action plan in this area. More broadly, comparative analysis enables policymakers to better understand why certain regulatory approaches succeed in specific contexts while failing in others, thereby informing more effective regulatory design and harmonization strategies. In the case of transitional financial products such as crypto-derivatives, a comparative approach is particularly useful, as it provides

Politicians React to Facebook's Libra Cryptocurrency Initiative, THE BLOCK (June 20, 2019, 11:08 AM), <https://www.theblockcrypto.com/post/28280/global-regulators-andpoliticians-react-to-facebooks-libra-cryptocurrency-initiative> [<https://perma.cc/2VM6-YBY4>] (providing a list of negative reactions from politicians about Libra).

106. See IOSCO *Crypto-Asset Roadmap for 2022-2023*, INT'L ORG. OF SEC. COMM'NS, 2022 <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD705.pdf> [<https://perma.cc/66YA-VKTN>].

107. On the rise of supranational initiatives, see *Policy Recommendations for Crypto and Digital Asset Markets: Final Report*, INT'L ORG. OF SEC. COMM'NS, 1 (2023) (“[t]he FTF was established in March 2022 to develop recommendations to the Board of IOSCO and thereafter to oversee the implementation of IOSCO’s regulatory agenda for Fintech and crypto-assets”); *Prudential Treatment of Cryptoasset Exposures*, BASEL COMM. ON BANKING SUPERVISION, 2022, <https://www.bis.org/bcbps/publ/d545.pdf> [<https://perma.cc/72C6-4PB7>]; *Disclosure of Cryptoasset Exposures*, BASEL COMM. ON BANKING SUPERVISION, 2024, <https://www.bis.org/bcbps/publ/d580.htm> [<https://perma.cc/85JX-U8FW>]; *High-Level Recommendations for the Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Final Report*, FIN. STABILITY BD., 2023, <https://www.fsb.org/wp-content/uploads/P170723-2.pdf> [<https://perma.cc/YV8R-K9LB>]; *Elements of Effective Policies for Crypto Assets*, IMF (2023), <https://www.imf.org/-/media/files/publications/pp/2023/english/ppea2023004.pdf> [<https://perma.cc/L67W-64H7>]. More recently, see *Thematic Review Assessing the Implementation of IOSCO Recommendations for Crypto and Digital Assets Markets*, INT'L ORG. OF SEC. COMM'NS6 (2025) (noting that “risks to investor protection and market integrity remain within the fast-evolving crypto-asset ecosystem”),

108. Whitworth & Bilotta, *supra* note 103, at 9, “[i]t is difficult to find an area of international financial regulation with as little regulatory cooperation and convergence as the cryptoasset sector”.

109. *2nd Global Cryptoasset Regulatory Landscape Study*, CAMBRIDGE CTR. FOR ALT. FIN. 13 (2024) (“The global regulatory landscape remains fragmented, likely reflecting disparate policy preferences, institutional constraints of financial authorities across jurisdictions, and different assessments of risks. . .[e]ven among those that regulate cryptoassets, different approaches are taken. This regulatory divergence presents an acute challenge for regulators and supervisors, in a market that is digital and inherently transnational.”)

110. See, e.g., *G20 Crypto-Asset Policy Implementation Roadmap: Status Report*, FIN. STABILITY BD., 2024 [hereinafter G20 Report] (“Crypto-assets derivatives are negotiated both on regulated and unregulated/non-compliant trading platforms. This impedes a precise calculation of the full size of the market. Some trading platforms, mostly multi-function crypto-asset intermediaries, offer products with very high leverage (up to 125 times) even to retail clients, with no disclosure on the volumes of such transactions”).

a foundation for determining the type of harmonization most suitable for a given regulatory environment.¹¹¹

Effective international regulatory governance is widely recognized as yielding positive policy and market outcomes¹¹² and is consistently reaffirmed as a central objective of multilateral institutions.¹¹³ As authors Maggetti and Ewert observe, multi-level regulatory governance systems require systematic comparative evaluation to assess their development, effectiveness, and legitimacy across diverse institutional contexts and policy domains.¹¹⁴ In the case of digital assets, the sector has evolved in a fluid, unstructured, and transnational manner since its inception,¹¹⁵ presenting jurisdictions with three broad policy options: inaction,¹¹⁶ prohibition,¹¹⁷ or the establishment of a bespoke regulatory framework. Within the latter category, authorities have either extended

111. Giandomenico Majone, *Regulation in Comparative Perspective*, 1 J. COMPAR. POL'Y ANALYSIS 309 (1999).

112. See Surendra Reddy Challapalli, *Benefits and Constraints Associated with the Harmonization of Financial Regulations: An Overview*, 23 ASIAN J. ECON. BUS. & ACCT. 49 (2023).

113. See Official Statement, G7 Finance Ministers and Central Bank Governors' Statement (Oct. 25, 2024) ("We welcome the first status report on the G20 Crypto-Asset Policy Implementation Roadmap and reaffirm our commitment to implement effective regulatory and supervisory frameworks consistent with the FSB's recommendations and standards and guidance established by SSBs. We also reiterate our support to the FATF's initiatives on accelerating global implementation of its standards on virtual assets and to its work on emerging risks, including from DeFi arrangements, stablecoins, and peer-to-peer transactions"); for a different perspective, see Beth A. Simmons, *The International Politics of Harmonization: The Case of Capital Market Regulation*, 55 INT'L ORG. 589 (2001) ("Contrary to arguments that underlie neoliberal institutionalism, the international arrangements that have developed are not uniformly Pareto-superior to uncoordinated national policies. Some governments have resisted 'harmonized' regulations precisely because within their jurisdiction the costs exacted from such regulations are higher than the benefits conferred. In some cases, harmonization has been coerced; in others it has been the best available response to a changed regulatory environment over which smaller jurisdictions typically have little control. Theories that rest on joint gains will seriously misspecify the mechanisms at work in these cases").

114. Martino Maggetti & Christian Ewert, *Comparative Regulatory Regimes and Public Policy*, in THE PALGRAVE HANDBOOK OF PUBLIC ADMINISTRATION AND PUBLIC MANAGEMENT IN EUROPE 635 (Sandra Van Thiel & Edoardo Ongaro eds., 2018).

115. Garrick Hileman & Michel Rauchs, *Global Cryptocurrency Benchmarking Study*, CAMBRIDGE CTR. FOR ALTERNATIVE FIN. App. C (2017) (identifying the specific dispersion of crypto users is a challenging exercise, but as of the date of the report, the phenomenon was already global, with cryptocurrency adoption "most advanced in North America and Europe, but an increasing number of activity (and users) can be observed in other regions as well, with activity growing relatively quickly in some emerging countries in Asia, Latin America, and Africa and the Middle East." *Id.* at 107. Consistent findings have been identified in another attempt to map grassroots adoption by country prepared by Chainalysis in 2021, evidencing statistically relevant usage of cryptocurrencies in over 140 countries. See *First Ever Geography of Cryptocurrency Report is Here*, CHAINALYSIS, (Sept. 16, 2020) <https://www.chainalysis.com/blog/geography-of-cryptocurrency-report-announcement/> [<https://perma.cc/T6ND-ZL62>]).

116. In countries such as Panama and, until recently, Seychelles – which are both deemed Emerging and Developing Economies according to IMF (World Economic Outlook Database - Groups and Aggregates), CCAF noted in 2024 "how CGAP, a network of more than 35 development organisations founded in 1995 and hosted at the World Bank, has argued that consumer risks related to cryptoassets are so high in EMDEs that it is 'no longer an option' for financial authorities to maintain a 'wait and see' approach to regulation." See *2nd Global Cryptoasset Regulatory Landscape Study*, *supra* note 109, at 13.

117. This is the case of China. See Todd Griffith & Danjue Clancey-Shang, *Cryptocurrency Regulation and Market Quality*, 84 J. INT'L FIN. MKTS. INSTS. & MONEY 101744 (2023).

existing financial services regulations to encompass this new asset class¹¹⁸ or introduced tailored, ad hoc regimes.¹¹⁹ Irrespective of the approach adopted, cryptoasset regulation has thus far developed through a fragmented, bottom-up trajectory. This trajectory has not yet witnessed either the decisive emergence of a regulatory hegemon or the early assumption of leadership by supranational governance structures. A well-documented trend in capital markets regulation is the early emergence of such a hegemon national policymaker that assumes the role of lead trend-setter.¹²⁰ In parallel, multilateral bodies typically act as mitigants against the negative externalities arising from divergent approaches adopted by competing jurisdictions.¹²¹ In the case of digital assets, as noted above, this pattern has not materialized, notwithstanding the efforts of a few emerging crypto hubs to attract industry participants from the outset.¹²² This atypical dynamic has likely contributed to the regulatory fragmentation identified in this research.

The purpose of this comparative approach extends beyond cataloguing the regulatory frameworks adopted by a limited set of jurisdictions. Rather, it

118. As noted in the case of Germany and ADGM, the former US administration adopted a “regulation by enforcement” approach. See Alexandros G. Kazimirov, *Regulation by Enforcement: A Retrospective of the SEC’s Vision for Digital Assets and an Alternative European Model*, STAN. J. BLOCKCHAIN L. & POL’Y (2025).

119. As demonstrated by the establishment of Dubai’s Virtual Asset Regulatory Authority (VARA). See *Dubai’s VARA Publishes Full Market Product Regulations*, SIMMONS & SIMMONS (Feb. 10, 2023), <https://www.simmons-simmons.com/en/publications/cldyc9b5i00z4u7l0teus0qm5/dubai-s-vara-publishes-full-market-product-regulations> [<https://perma.cc/E9TG-TW3M>].

120. For an interesting analysis on the role of hegemon policy makers (primarily the U.S. and, to a lesser extent, the U.K., in the capital markets context) in shaping the regulatory framework applicable to a given phenomenon, see Beth A. Simmons, *The International Politics of Harmonization: The Case of Capital Market Regulation*, 55(3) INT’L ORG. 589 (2001).

121. Simmons explains this dynamic as follows:

Suppose the world’s reaction to the initial move causes a high negative externality for the first mover. Rather than meekly retracting a regulatory innovation, regulators in the dominant financial center anticipate costly foreign resistance and mobilize political pressure to change the reactions of important foreign regulators. In fact, it would be reasonable to expend political resources up to the cost of the negative externality it is importing. If the negative externality is very costly, we should see the dominant financial center exerting a good deal of political pressure. We should also observe efforts to minimize the costs of addressing these externalities. For example, if the sources of the externalities are distinct or if the externality is divisible, we could expect the United States to target its pressure accordingly. Where the source of the externality is uncertain or constantly shifting, or where the externality is not easily targeted, the dominant center might engage multilateral institutions as a more efficient way to press for regulatory change in foreign jurisdictions. However, if the negative externalities experienced or anticipated by the dominant center as a result of the reactions of the rest of the world are small, there is no reason to expect a very active international component to the regulatory change. In this case the United States should not care whether the rest of the world adopts the policy innovation.

The role of multilateral institutions flows from the hegemon’s anticipation of externalities. These institutions can be created and used strategically by the dominant financial center to achieve its desired regulatory outcome—the mitigation of negative externalities—in an economical fashion.

Id. at 597.

122. See Blandin et al., *supra* note 102; *2nd Global Cryptoasset Regulatory Landscape Study*, *supra* note 108 (providing an overview of the main crypto hubs and their respective frameworks).

highlights the institutional and interpretative challenges that arise from regulatory fragmentation, ultimately underscoring the need for enhanced international regulatory governance and greater cross-border coordination. The analysis demonstrates that regulatory approaches to derivatives—and their underlying assets—are highly nuanced, producing a complex framework in which (i) product features, (ii) underlying assets, and (iii) marketability must all be considered to determine the applicable treatment. As this Article makes clear, the regulation of crypto-derivatives does not converge around these three dimensions, nor does it reveal substantially similar approaches across jurisdictions. This lack of convergence undermines regulatory clarity, giving rise to interpretative ambiguities regarding definitions and scope, while also generating significant disparities in the operational requirements imposed on firms engaged in cross-border activities. Greater harmonization would alleviate these issues by fostering a level playing field, reducing the risks of regulatory arbitrage, and ultimately strengthening investor protection.¹²³

A comparative approach is therefore instrumental in deriving policy implications that reinforce the case for harmonization—an objective that must once again be directed toward supranational bodies rather than individual jurisdictions.

To substantiate this thesis, the analysis demonstrates that national approaches addressing these issues in isolation have produced a fragmented regulatory patchwork that is susceptible to regulatory arbitrage, detrimental to investor protection, and potentially conducive to systemic risks.

B. Methodology

Jurisdictions were selected for this analysis according to five key criteria: their prominence as traditional financial hubs; their significance in digital asset markets; the nature of their regulatory stance on digital assets, including the presence of dedicated frameworks; their capacity to attract crypto-derivatives trading firms; and prevailing enforcement trends.

The analysis includes the United States (US), Canada, the European Union (with particular attention to developments in France and its regulatory approach), Singapore, Hong Kong, the British Virgin Islands, Switzerland, Seychelles, the United Arab Emirates (specifically Abu Dhabi Global Market and Dubai), and the United Kingdom. Previous research on crypto-trading platforms in the crypto-derivatives space identified the rise of offshore centers, notably the British Virgin Islands and Seychelles, which are included in this study.¹²⁴ Switzerland has leveraged its ecosystem to become a global crypto-friendly jurisdiction, characterized by a flexible, principle-based approach and a collaborative environment between regulators and entrepreneurs, leading to the development of the “Crypto Valley.” The European Union, consistent with its rule-based tradition, has positioned itself as a standard-setter in the crypto space with the Market in Crypto-Assets Regulation (MiCAR).¹²⁵ The

123. See Sumit Agarwal et al., *Inconsistent Regulators: Evidence from Banking*, 129 Q. J. ECON. 889 (2014).

124. See generally Dell’Erba, *supra* note 21.

125. Council Regulation 2023/1114, 2023 O.J. (L 150) 40 (EU).

United Kingdom, Abu Dhabi Global Market, and Dubai have made strides to become emerging crypto hubs. Singapore and Hong Kong have embraced the crypto-economy from the outset, contributing to the development of market practices such as Initial Coin Offerings (ICOs).¹²⁶ Meanwhile, the US and Canada, home to some of the world's most developed capital markets, have been more cautious in adopting crypto, opting for stringent enforcement strategies.¹²⁷

The analysis also considers enforcement strategies regarding crypto-derivatives within the selected jurisdictions. The results indicate that only the United States and Canada implemented effective enforcement strategies, while supervisors in other jurisdictions limited their actions to issuing warnings, which never culminated in enforcement measures comparable to those observed in the United States and Canada.

C. The Comparative Analysis of the Jurisdictions

After reviewing the legal and regulatory framework for derivatives across eleven financial hubs—covering both traditional and digital asset markets—several key conclusions and observations emerge.

Before examining the core elements of divergence and convergence, it is crucial to first consider how legislators define certain products when bringing them within the regulatory scope. This taxonomy is fundamental, as it determines whether a particular regulatory framework applies to derivatives as a whole or only to specific subsets. This issue becomes even more significant in the case of “closed-ended” definitions—where only explicitly listed products qualify as derivatives or where definitions reference specific structural elements of a product. For instance, the British Virgin Islands (BVI) takes a narrow approach, defining “options” as the right to acquire or dispose of one of four specific asset types.¹²⁸ In contrast, other jurisdictions adopt broader

126. *Singapore and Hong Kong are Leading Hubs for Initial Coin Offerings*, CONSULTANCY.ASIA (Sept. 25, 2018), <https://www.consultancy.asia/news/1402/singapore-and-hong-kong-are-leading-hubs-for-initial-coin-offerings> [<https://perma.cc/VH4J-SDTE>].

127. For an analysis of the enforcement regulation in the United States, see Marco Dell'Erba, *From Inactivity to Full Enforcement: The Implementation of the “Do No Harm” Approach in Initial Coin Offerings*, 26 MICH. TELECOMM. & TECH. L. REV. 175 (2020); see also Yuliya Guseva, *The SEC, Digital Assets, and Game Theory*, 46 J. CORP. L. 629 (2021); Douglas S. Eakeley et al., *Crypto-Enforcement Around the World*, 94 S. CAL. L. REV. POSTSCRIPT 99 (2021). Autorité des Marchés Financiers, *XT.com & CoinEx*, (updated Aug. 1, 2025), <https://www.lautorite.qc.ca/en/general-public/media-centre/news/major-issues/xtcom-coinex> [<https://perma.cc/46GQ-QLWD>]. Recently, for Canada, we note the actions by QAMF that led to significant rulings by the Financial Markets Administrative Tribunal. These decisions targeted two foreign-based crypto-asset trading platforms: XT.com and CoinEx.com. The Tribunal found that both platforms had violated Quebec's securities and derivatives laws in two key ways:

1. They functioned as securities and derivatives dealers without proper registration with the AMF
2. They distributed securities and derivatives without having a prospectus approved by the AMF

128. Paragraph 5, Schedule 1 of SIBA defines options as “options to acquire or dispose of—(a) an investment falling within any other paragraph of this Schedule; (b) any currency; (c) palladium, platinum, gold or silver; or (d) an option to acquire or dispose of an investment falling within subparagraph (a), (b) or (c) of this paragraph.” Securities and Investment

definitions that can accommodate novel products such as crypto-options. A clear example of this more expansive approach can be found in the Abu Dhabi Global Market (ADGM).¹²⁹

The table below seeks to provide a visual representation of our findings.

Jurisdiction	US	EU	BVI	SG	HK	CH	ADGM	UAE (Dubai)	Seychelles	Canada	UK
Type of Derivative											
Cash Settled											
Swap	X	X	X	/	~	X	X	X		X	X
Option	X	X		/	~	X	X	X		X	X
CFD	X	X	X	/	~	X	X	X	X	X	X
Future	X	X	X	/	~	X	X	X	X	X	X
Physically Settled											
Swap	X	~	X	/	~	~	X	X		X	~
Option	X	~		/	~	~	X	X		X	~
CFD	X	X	X	/	~	~	X	X	X	X	X
Future	X	~	X	/	~	~	X	X	X	X	X
Other Settlement¹³⁰											
Swap	X	*	X	/	~	X	X	X		X	*
Option	X	*		/	~	X	X	X		X	*
CFD	X	X	X	/	~	X	X	X	X	X	X
Future	X	*	X	/	~	X	X	X	X	X	*
Legenda											
X	Covered under existing legislation										
~	Only unlisted are out of scope										
/	for as long as not listed on MAS Approved Exchange. If not, but offered to retail by local authorized institution, certain obligations apply. If underlying qualifies as security or as currency, regulated. In other instances, unregulated										
*	The framework is unclear / case-by-case analysis required depending on the instrument features										

Business Act (Revised Edition 2020), art. 1, ¶¶ 5–7 (British Virgin Islands), https://www.bvifsc.vg/sites/default/files/securities_and_investment_business_act.pdf [<https://perma.cc/XCP5-E6BR>] (last visited Mar. 10, 2026).

129. The ADGM Rulebook states:

Options to acquire or dispose of—

- (a) a Financial Instrument (other than one of a kind specified by this paragraph);
- (b) currency of any country or territory;
- (c) a commodity of any kind;
- (d) a right to receive a Cash settlement, the value of which is determined by reference to—
 - (i) the value or price of an index, interest rate or exchange rate; or
 - (ii) any other rate or variable; or

(e) an option to acquire or dispose of an investment of the kind specified by this paragraph by virtue of sub-paragraph (a), (b), (c) or (d).”

See ABU DHABI GLOBAL MARKET (ADGM), ADGM GLOBAL MARKET RULEBOOK §94 (2015).

130. For example, despite cash settlement, parties agree for stablecoin as cash-equivalent.

1. *Divergences in Treatment but Convergences in “Structural Components”*

Structural components—such as the label of OTCs and ETDs, as well as definitions crafted around the financial purpose¹³¹ of the derivative contract—are generally recognized across all the countries reviewed, irrespective of the underlying asset. From a contractual type perspective, the classification of derivatives into (i) options, (ii) swaps, (iii) futures, and (iv) forwards appears to apply consistently to crypto-derivatives across all jurisdictions. Notably, none of the jurisdictions examined have adopted a specific, standalone definition of “crypto-derivative” as a distinct category.

In practice, the unique nature of the underlying asset has not led to the creation of entirely new products in the traditional market, nor to the development of new regulatory categories to address them. To the contrary, due to a combination of factors described below, the regulatory treatment applicable to such instruments may, (i) in absolute terms be entirely different from the framework applicable to those based on traditional assets (e.g., financial assets, currencies, or commodities) and may, (ii) in relative terms diverge across jurisdictions. This duality of differences represents the most significant divergence between crypto-derivatives and traditional derivatives.

For illustrative purposes, and from a traditional vs. crypto perspective, it is worth noting that traditional derivatives, such as options, are generally regulated¹³² in a fairly harmonized manner across all the jurisdictions considered in our analysis. In contrast, when the underlying asset of such instruments is a crypto-asset, we observe jurisdictions—such as the BVI and Seychelles—that leave these instruments outside their regulatory perimeter. It is also valuable to shift perspective and consider how, within the crypto-derivatives space, a structural component such as settlement mechanisms can further affect how the product is treated across different jurisdictions.

As outlined in the table above, the regulatory treatment of cash-settled crypto-derivatives presents similarities across jurisdictions, but with two notable exceptions—BVI and Seychelles—and these derivatives generally fall under existing regulatory frameworks in the jurisdictions we reviewed. However, as long as they remain unlisted, all cash-settled crypto-derivatives in Hong Kong and Singapore fall outside the scope of the regulatory net in those jurisdictions.

Interestingly, when it comes to physically settled, unlisted crypto-derivatives, six jurisdictions—namely the European Union, Hong Kong, British Virgin Islands, United Kingdom, Switzerland, and Seychelles—place certain types of derivatives outside their regulatory frameworks. This exemption primarily applies to swaps and options, reflecting a divergence in how different jurisdictions approach the regulation of crypto-derivatives, particularly when such instruments are not publicly listed.

In contrast, the United States, Canada, the Abu Dhabi Global Market (ADGM), and Dubai have adopted more comprehensive regulatory approaches. These jurisdictions regulate the full suite of crypto-derivatives through a

131. For example, considering whether the product has a hedging or speculative purpose.

132. From a classification and prudential perspective, i.e. classification as security and subsequent application of securities law to firms engaging in regulated services involving such assets.

combination of different methodologies. The United States and Canada employ a regulation-by-enforcement approach, while ADGM has enacted a formal, codified regulatory framework for crypto-derivatives. Similarly, Dubai applies a broad, expansive interpretation of its regulatory scope, whether through formal codification or informal enforcement mechanisms (see section 2b below).

An analysis of the jurisdictions chosen by major crypto-derivatives firms reveals a preference for offshore hubs that offer a broader range of exceptions and exclusions. Among these, Singapore, Hong Kong, and Seychelles are the most frequently selected. However, recent trends indicate a shift toward Dubai, as an increasing number of firms, including exchanges such as OKX, Binance, Deribit, are choosing to establish themselves there following the introduction of the Virtual Assets Regulatory Authority (VARA), which provides a clear regulatory framework for crypto oversight.¹³³

Moreover, firms seeking to enter markets such as the United States and Canada face significant barriers, as entry requires obtaining the relevant licenses. Attempting to access these markets without proper authorization exposes offshore firms to heavy fines and other enforcement actions,¹³⁴ highlighting the regulatory challenges of cross-border crypto-derivatives trading.

2. Rationale

The divergences in the regulatory treatment of crypto-derivatives can be attributed to four key aspects: three related to the *taxonomy* of derivatives, and one linked to diverging *policy* attitudes. These four aspects—settlement dynamics, the definition of eligible underlying assets, marketability, and policy attitude—collectively explain the divergent regulatory approaches to crypto-derivatives across jurisdictions, with each jurisdiction's approach reflecting a unique balance of legal, economic, and policy considerations.

a. Taxonomy

Across the majority of the jurisdictions analyzed, there is a general consistency in the cornerstones of derivative taxonomy, although the specific content of such taxonomy diverges as discussed below. The taxonomy typically hinges on three main aspects: (i) settlement dynamics, (ii) definition of eligible underlying assets, and (iii) marketability.

i. Settlement

Derivatives are generally either cash-settled, where parties exchange a single sum representing the net value of their positions, or physically settled, through the physical delivery of the underlying asset. Depending on whether the settlement for a specific derivative is cash or physical, the instrument may fall outside the regulatory perimeter. The emergence of stablecoins as an alternative settlement medium further complicates the treatment of stablecoin-settled instruments. At the EU level, in the aftermath of MiCAR, which aims

133. *Public Register*, VIRTUAL ASSETS REGUL. AUTH., GOVT. OF DUBAI, <https://www.vara.ae/en/licenses-and-register/public-register/> [<https://perma.cc/N2SP-263G>] (last visited Mar. 10, 2026).

134. See *infra* Annex 2.

to regulate crypto-assets while excluding those qualifying as financial instruments,¹³⁵ we note the approach adopted by ESMA in its recent Guidelines on the conditions and criteria for the qualification of crypto-assets as financial instruments.¹³⁶ This approach exemplifies the complexity of the issue. When considering crypto-derivatives, ESMA seems to disregard the medium of settlement, a move that could be seen as divergent from the text of MiFID and its stance during the consultation phase preceding the Guidelines.¹³⁷ Specifically, ESMA treats stablecoin-settled derivatives as equivalent to cash-settled ones, thus bringing them fully within MiFID's scope, following the approach promoted by the AMF in France in 2018.¹³⁸ This position likely results from a substance-over-form approach that reflects industry trends, where most crypto-derivatives are settled in stablecoins.

However, other jurisdictions, including the US, Canada, and Abu Dhabi Global Market (UAE), tend to disregard the asset involved in settlement for regulatory purposes due to the broader definitions of derivatives in their laws. These definitions do not refer to specific underlying assets or settlement features. In Canada, however, the settlement timeframe provides an additional potential trigger for securities regulation. A crypto "pseudo-spot" contract that does not involve immediate delivery is treated as a derivative contract and thus falls under the regulatory framework for derivatives rather than spot transactions.¹³⁹ This approach creates additional uncertainty for crypto firms, as they are subject to case-by-case technological and contractual analysis to determine the appropriate regulatory framework. This is especially relevant for foreign firms, for whom specific exemptions may apply to foreign derivatives dealers, while other exemptions or registrations may apply to money service businesses, which are likely relevant in the context of crypto-spot activities.

135. As these would fall under traditional financial services legislation, in particular, MiFID and MiFIR.

136. Eur. Sec. & Mkt. Auth., *Final Report: Guidelines on the Conditions and Criteria for the Qualification of Crypto-Assets as Financial Instruments* (2024), https://www.esma.europa.eu/sites/default/files/2024-12/ESMA75453128700-1323_Final_Report_Guidelines_on_the_conditions_and_criteria_for_the_qualification_of_CAs_as_FIs.pdf [<https://perma.cc/5CPG-DL5J>].

137. In fact, certain derivatives falling under MiFID remit explicitly refer to cash settled instruments only. *See, e.g.*, Council Directive 2014/65, 2014 O.J. (L 173) 349 (EU).

138. Autorité Des Marchés Financiers, *Analysis of the Legal Qualification of Cryptocurrency Derivatives* (2018), <https://www.amf-france.org/en/news-publications/news/analysis-legal-qualification-cryptocurrency-derivatives> [<https://perma.cc/X5Y4-KKVD>].

139. Immediate delivery will be considered to have occurred if:

- (a) there is immediate transfer of ownership, possession and control of the crypto-asset and the user is free to use, or otherwise deal with, the crypto-asset without any further involvement with, or reliance on, the platform or its affiliates, and the platform or any affiliate retaining any security interest or any other legal right to the crypto-asset; and
- (b) following the immediate delivery, the user is not exposed to insolvency risk (credit risk), fraud risk, performance risk or proficiency risk on the part of the platform.

Canadian Sec. Adm'rs, *CSA Staff Notice 21-327, Guidance on the Application of Securities Legislation to Entities Facilitating the Trading of Crypto Assets* (Jan. 16, 2020), https://www.osc.ca/sites/default/files/pdfs/irps/csa_20200116_21-327_trading-crypto-assets.pdf [<https://perma.cc/WW3D-W9CV>].

ii. Underlying

Certain jurisdictions, such as the BVI and Seychelles, include certain derivatives—particularly options—within their regulatory perimeter only if they have one or more “eligible” underlying assets. These assets are typically listed in the legal definitions and include fiat currencies, commodities, or securities or other financial instruments. As a result, derivatives with crypto-assets as underlying may fall outside the regulatory scope, unless the crypto-assets themselves meet the definition of an eligible underlying asset. However, in the context of other instruments, such as contracts for difference (CFDs), the legal definitions often refer to “any property,” as seen in the Seychelles and BVI. The relevance of the underlying asset is also emphasized in the ISDA Digital Asset Derivatives Definitions,¹⁴⁰ which, interestingly, refrain from defining digital assets but instead refer to “Reference Assets.”¹⁴¹ If such an approach were applied when defining derivatives, the gap for certain instruments with digital assets as the underlying asset would be addressed.

iii. Marketability

Depending on whether a derivative is admitted to and trades on a trading venue, the instrument may fall under the local definition of a derivative and, as such, be subject to the applicable financial services regulatory framework. This may apply regardless of the nature of settlement (e.g., in the context of Switzerland and France) and can be a sufficient criterion in itself (e.g., in the context of Hong Kong and, with respect to local trading venues, Singapore) to bring the asset within the regulatory net.

b. Policy Attitude

When looking at discretionary policy choices, we observe three notable approaches influencing the regulatory treatment of derivatives across the reviewed jurisdictions. These approaches can be summarized as follows:

Some jurisdictions, such as Singapore, adopt a light-touch approach. Most crypto-derivatives remain unregulated, except for those listed on approved exchanges or those with securities or currencies as underlying assets. This approach stems from concerns that regulating “digital payment token[s]”¹⁴² offered by

140. ISDA, *DIGITAL ASSET DERIVATIVES DEFINITIONS* (2023). These definitions are designed for use by participants in privately negotiated transactions to document non-deliverable digital asset forwards and options referencing Bitcoin (BTC) or Ether (ETH). The Digital Asset Definitions are intended for use in confirmations of individual transactions governed by the ISDA Master Agreement.

141. *Id.* at 8 (defining “Referenced Assets” as “the digital asset specified as such”).

142. Payment Services Act 2019 (No. 2 of 2019) §2(1) (Sing.). Digital payment tokens are defined as follows:

...[A]ny digital representation of value (other than an excluded digital representation of value) that —

- (a) is expressed as a unit;
- (b) is not denominated in any currency, and is not pegged by its issuer to any currency;
- (c) is, or is intended to be, a medium of exchange accepted by the public, or a section of the public, as payment for goods or services or for the discharge of a debt;
- (d) can be transferred, stored or traded electronically; and
- (e) satisfies such other characteristics as the Authority may prescribe.

non-approved entities could create misplaced confidence in volatile products, potentially increasing their availability to retail investors.

However, the Monetary Authority of Singapore (MAS) has imposed conduct-of-business obligations on local firms offering such products to retail clients. This light-touch approach, while significant, appears to be the exception rather than the rule among the jurisdictions considered in our research.

Other jurisdictions, like the UAE, implement an expansive interpretation aimed at creating a bespoke regulatory framework. The UAE's Virtual Asset Regulatory Authority (VARA) exemplifies this approach. Despite a seemingly restrictive definition of virtual assets under UAE law, VARA has effectively filled the regulatory gap by broadly interpreting the concept of virtual assets. While the federal regulatory framework may not directly address crypto-derivatives, VARA has taken an innovative stance by regulating crypto-derivatives based on the underlying virtual asset rather than the derivative contract itself, thereby acknowledging the specificity resulting from such assets and the inadequacy of a traditional framework built upon different premises. As the designated regulator for virtual asset activities and products, VARA now oversees crypto-derivatives and related activities conducted by firms within the Emirate.

Finally, certain jurisdictions, including the US, Canada, and the UK, rely on existing rules and regulation by enforcement. In these jurisdictions, crypto-derivatives are treated as fully captured by the existing regulatory framework, unless a few limited exemptions apply. This has led to numerous enforcement actions, particularly targeting offshore firms serving the local market without meeting registration requirements. The UK's Financial Conduct Authority (FCA) has been proactive with warnings and product intervention bans, limiting retail access to certain crypto-derivatives. These initiatives demonstrate a strong focus on consumer protection above any other policy objective. Meanwhile, regulators in Canada and the US have imposed substantial penalties on crypto firms. Notably, the US Commodity Futures Trading Commission (CFTC) reported that digital asset cases accounted for almost 50% of its docket¹⁴³ during the 2023/2024 fiscal year, with one of the largest penalties being imposed on Binance.¹⁴⁴

Examining the enforcement strategy in greater detail reveals four key aspects. First, regarding the distinction between traditional financial hubs and offshore hubs, traditional financial centers (such as the US and Canada) have shown a highly proactive enforcement approach, particularly against offshore firms operating in the local market without the required registrations. To our knowledge, offshore jurisdictions have not been similarly active with enforcement actions themselves, despite few of the firms targeted by on-shore jurisdictions actions are indeed incorporated in their territory. Interestingly, in 2023 the Financial Services Authority (Seychelles regulator) issued a public notice informing market operators that notwithstanding the fact that several crypto

143. Press Release No. 8939-24, CFTC, CFTC Awards Over \$1 Million to Whistleblower Who Aided a Digital Assets-Related Investigation, (Aug. 8, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8939-24> [<https://perma.cc/5YH7-V9C2>].

144. Press Release No. 8837-23, CFTC, Federal Court Enters Order Against Binance and Former CEO, Zhao, Concluding CFTC Enforcement Action (Dec. 18, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8837-23> [<https://perma.cc/L8LJ-DJ5Wv>].

firms were operating from the island, “whilst these companies are established in the Seychelles and are featured on the Register of International Business Companies, they are not authorized or licenced to offer VA or VASP services, under any Seychelles laws”.¹⁴⁵ In doing so, FSA specified that “the Seychelles currently does not have a legislative or regulatory framework for VA or VASP, and as such these entities are not licensed, regulated or supervised for VA or VASP purposes in the Seychelles”.¹⁴⁶

Second, there has been a substantial increase in enforcement activity in the US. The US, being one of the largest crypto markets in terms of institutional adoption and crypto projects,¹⁴⁷ has been increasingly active with its enforcement activities. In fact, while there have been very few actions from 2015 to 2021 (60 in total),¹⁴⁸ we have focused our attention, on 75 actions from 2022,¹⁴⁹ 2023,¹⁵⁰ and 2024.¹⁵¹ The most relevant enforcements related to joint actions by the CFTC and other US authorities¹⁵² and primarily concerned firms active in the retail space.

Third, another key aspect concerns the choice between issuing warnings and initiating enforcement proceedings. While such actions generally refer to the lack of registration under the local virtual asset service providers framework (generally designed for AML/CFT purposes), we have noticed that

145. Press Release, Fin. Serv. Auth. & Registrar of Cos., Caution Regarding Virtual Asset Services Being Provided by Companies Registered Under the International Business Companies Act (Dec. 1, 2023).

146. *Id.* However, in 2024 the FSA introduced its framework, requiring firms operating in or from the Seychelles to be registered with the authority. The new framework came into effect on January 1, 2025, with the Virtual Service Providers Act 2024. Virtual Service Providers Act, 2024 Act No. 12/2024) (Sey.). For an overview of the legal framework currently into force, see *Legal Framework*, FIN. SERV. AUTH. SEYCHELLES, <https://fsaseychelles.sc/vasp/legal-framework> [<https://perma.cc/DKC8-LPZ8>] (last visited Feb. 6, 2026).

147. See Alex Thorn & Gabe Parker, *Crypto & Blockchain Venture Capital – Q4 2024*, GALAXY RSCH. (Jan. 15, 2025) (stating that the most capital invested went to startups headquartered in the U.S. (46%) in Q4 2024).

148. From 2015-2021, 41 out of 60 actions involved alleged failure to register with CFTC. See *Trends in CFTC Virtual Currency Enforcement Actions*, CORNERSTONE RSCH., (2022), <https://www.cornerstone.com/wp-content/uploads/2026/01/Trends-in-CFTC-Virtual-Currency-Enforcement-Actions-2015-2021.pdf> [<https://perma.cc/NF2Z-HZJA>].

149. Press Release No. 8613-22, CFTC, CFTC Releases Annual Enforcement Results (Oct. 20, 2022), <https://www.cftc.gov/PressRoom/PressReleases/8613-22> [<https://perma.cc/KZP4-4M2A>].

150. Press Release No. 8822-23, CFTC, CFTC Releases FY 2023 Enforcement Results (Nov. 7, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8822-23> [<https://perma.cc/HCF9-6YJG>].

151. Press Release No. 9011-24, CFTC, CFTC Releases FY 2024 Enforcement Results (Dec. 4, 2024), <https://www.cftc.gov/PressRoom/PressReleases/9011-24> [<https://perma.cc/Q9TY-F32V>].

152. Press Release No. 8825-23, CFTC, Binance and Its CEO, Changpeng Zhao, Agree to Pay \$2.85 Billion for Willfully Evading U.S. Law, Illegally Operating a Digital Asset Derivatives Exchange, and Other Violations (Nov. 21, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8825-23> [<https://perma.cc/F2QN-5E6K>]; see also Press Release No. 8938-24, CFTC, CFTC Obtains \$12.7 Billion Judgment Against FTX and Alameda (Aug. 8, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8938-24> [<https://perma.cc/3KUN-XGY6>]; Press Release No. 8884-24, CFTC Charges KuCoin with Operating Illegal Digital Asset Derivatives Exchange (Mar. 26, 2024), <https://www.cftc.gov/PressRoom/PressReleases/8884-24> [<https://perma.cc/P52S-M5XF>].

several regulators, such as VARA,¹⁵³ AMF,¹⁵⁴ BaFIN,¹⁵⁵ and FCA,¹⁵⁶ have been active in issuing warnings rather than fully fledged enforcement actions. Few of the firms facing such warnings do also offer crypto-derivatives products, but we have seen that most of these warnings refer to lack of registration under the aforementioned regimes rather than traditional financial services regulation.

Finally, when examining the violations contested in enforcement cases, the majority of actions identified relate to the failure to register with the competent authorities concerning the activities performed. Aside from this core breach, a subset of breaches, arising from the failure in having implemented the controls otherwise required from regulated firms, were identified. To a lesser extent, other enforcement actions mainly referred to fraudulent activities and scams. This trend seems to be common also when looking at other enforcement actions not directly involving crypto-derivatives but rather crypto activities/offering.¹⁵⁷

III. Main Issues

A. Regulatory Arbitrage

Traditional derivative contracts are inherently cross-border, and this characteristic has contributed to increasing interconnection and complexity in global financial markets. Crypto-derivatives are no different; their nature is similar, and therefore their cross-border dimension could trigger regulatory arbitrage issues.

The comparative analysis provided in this Article suggests that the sources of regulatory arbitrage may stem from different factors, which can be categorized as (i) formalistic, (ii) substantial, and (iii) policy-related.

As noted above, from a formal perspective, the definition of derivatives—focused on the financial logic of each instrument—leaves little room

153. See Press Release, Virtual Assets Regul. Auth., VARA Continues to Strengthen Enforcement Programme, Issues Fines and Public Warnings Against Engaging with Unlicensed Virtual Asset Firms, (Oct. 9, 2024), <https://www.vara.ae/en/regulations/regulatory-notice/vara-strengthens-enforcement-program-issues-fines-and-a-public-warning-against-engaging-with-unlicensed-virtual-asset-firms> [<https://perma.cc/HF2K-9GNZ>].

154. Autorité Des Marchés Financiers, *Cryptoassets: the Autorité des Marchés Financiers Warns the Public About the Activities of Several Fraudulent Market Participants and Publishes a New “Blacklist”*, (June 5, 2024), <https://www.amf-france.org/en/news-publications/news-releases/amf-news-releases/cryptoassets-autorite-des-marches-financiers-warns-public-about-activities-several-fraudulent-market#xtor=EREC-22> [<https://perma.cc/UL9E-3RUE>].

155. See *BaFin Warns Against Websites*, BaFIN (Feb. 3, 2025), https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Verbrauchermitteilung/unerlaubte/2025/meldung_2025_02_03_coincapitals_net_und_easyinvestingpro_com.html and [<https://perma.cc/C7VW-8NFQ>] ; *Cryptoadviseruk.com: BaFin Investigates Crypto Advisor UK Limited*, BaFIN (June 16, 2023), https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Verbrauchermitteilung/unerlaubte/2023/meldung_2023_06_16_cryptoadviseruk.html [<https://perma.cc/KBL2-JXVW>].

156. *Consumer Warning on Binance Markets Limited and the Binance Group*, FINANCIAL CONDUCT AUTHORITY (June 26, 2021), <https://www.fca.org.uk/news/news-stories/consumer-warning-binance-markets-limited-and-binance-group> [<https://perma.cc/3G2M-BRUV>].

157. For an overview of the SEC alleged violations by type, see *SEC Cryptocurrency Enforcement 2025*, CORNERSTONE RSCH., <https://www.cornerstone.com/insights/reports/sec-cryptocurrency-enforcement/> [<https://perma.cc/9JP2-WGMX>] (last visited Mar. 10, 2026).

for regulatory arbitrage. However, when considering the definition of the underlying assets, nuances arise that enable regulatory arbitrage, particularly due to open- or closed-ended approaches. Jurisdictions adopting a closed-ended approach have hindered their ability to keep pace with technological innovation. In the context of crypto-assets, if the definition of a derivative does not include specific underlyings—such as options in the BVI or Seychelles—then instruments having as underlying such out-of-scope assets would fall outside the local regulatory framework.

Regarding substantial factors, some financial centers (e.g., Panama) do not see the need or policy objective to regulate certain instruments, such as specific crypto-related products. This may stem from the underdevelopment of the local financial ecosystem, which lacks regulatory sophistication or a clear policy objective to address these instruments.

Another factor may be the contrast between offshore market players and those in established marketplaces. Offshore jurisdictions, with lighter compliance and no local substance requirements, appeal to firms working with unsophisticated counterparties. These market participants are typically less concerned with the regulatory robustness of their providers, leading firms to minimize compliance investments when possible. Offshore jurisdictions often encourage this regulatory arbitrage to attract foreign firms, with the lack of supervision having limited local impact, as these firms typically target international clients. This creates negative externalities beyond local borders. However, some jurisdictions, like Dubai and Abu Dhabi, have leveraged policymaking and regulation to attract businesses by offering clear regulatory environments, introducing tailored frameworks for crypto-assets, or expanding existing frameworks to accommodate them.

On the other hand, the US and Canada have opted for a different approach. Relying on their already established capital markets, they have implemented rigorous securities enforcement actions in recent years without pursuing regulatory clarity through policymaking.

B. Investor Dynamics (Retail Access vs Professional) and Investor Protection

None of the jurisdictions examined provides any limitation to retail investors for accessing the crypto-derivatives trading.

None of the jurisdictions examined imposes any limitations on retail investors' access to crypto-derivatives trading. The emergence of new trading platforms has contributed to the creation of more informal markets, making it easier for unsophisticated investors to take an active role. Developments in crypto-trading platforms have also had a significant cultural impact. New digital market venues, such as apps and DApps, have fundamentally changed how financial markets operate, with the key characteristic of being open 24/7. The increased accessibility and informality of these platforms have led to a shift in societal attitudes toward markets and trading.¹⁵⁸ Retail, often non-sophisticated, investors can access financial platforms, allowing them to trade listed derivatives with no restrictions imposed by regulators or market

158. See Dell'Erba, *supra* note 18, at 39-40.

participants. This differs from the traditional finance (TradFi) landscape, where derivatives are generally reserved for professional counterparties, and only certain market actors—such as firms with direct electronic access (DEA) or regulated firms that are members of a multilateral trading facility (MTF)—have direct access to trading venues.¹⁵⁹

Historically, the main rationale behind intermediate access has been to ensure adequate safeguards for efficient markets and investor protection.¹⁶⁰ Policymakers sought to protect less sophisticated investors by imposing a series of organizational, conduct of business, and prudential requirements on intermediaries enabling market access. In practice, these requirements led to the introduction of various protections aimed at addressing market failures, such as agency issues,¹⁶¹ ranging from suitability and appropriateness assessments¹⁶² to best execution¹⁶³ and transparency.¹⁶⁴ In particular, looking at the European market, derivatives have historically been considered a complex product,¹⁶⁵

159. *Id.* A Multilateral Trading Facility (MTF) under MiFID II (Markets in Financial Instruments Directive II) is a type of trading venue that facilitates the exchange of financial instruments between multiple third-party buyers and sellers. It operates in a non-discretionary manner, meaning it follows transparent and pre-established rules for trade execution without favoring any participant. MTFs were introduced under MiFID I and further refined under MiFID II to enhance competition, transparency, and investor protection in European financial markets.

160. For an interesting overview in the context of DEA and commodity derivatives, see *Principles for the Regulation and Supervision of Commodity Derivatives Markets—Final Report*, INT'L ORG. OF SEC. COMM'NS 66 (Jan. 2023); While IOSCO notes several advantages in enabling access to trading venues to non-financial firms, it also acknowledges the relevant risks, and notes that:

Against the potential risks that may stem from DEA, the market or the market intermediary should not offer DEA unless adequate pre-trade information is provided, and both regulatory and financial controls. Regulators should retain the power to allow or prohibit any form of DEA as well as to establish requirements in the DEA area, including pre-trade controls and risk limits, and should also exercise regulatory oversight over the decisions made by clients, intermediaries, and exchanges.

(p. 67).

161. Council Directive 2014/65/EU, art. 24, 2014 O.J. (L 173) 349 (EU).

162. See *id.* art. 25(3), the obligation imposed on investment firms requiring them to ask the client or potential client to provide information regarding that person's knowledge and experience in the investment field relevant to the specific type of product or service offered or demanded so as to enable the investment firm to assess whether the investment service or product envisaged is appropriate for the client.

163. See *id.* art. 37, provides for the obligation to execute orders on terms most favourable to the client or agency obligations to the client, considering, in the context of retail, total consideration as the key element; a US perspective, the SEC adopts a similar approach requiring that "a money manager should consider the full range and quality of a Broker's services in placing brokerage including, among other things, the value of research provided as well as execution capability, commission rate, financial responsibility, and responsiveness to the money manager." Securities and Exchange Commission, Exchange Act Release No. 34-23170, 17 C.F.R. pt. 241 (1986)

164. See Directive 2014/65/EU art. 24.

165. Comm. of Eur. Sec. Reg., MiFID Complex and Non-Complex Financial Instruments for the Purposes of the Directive's Appropriateness Requirements⁴, (May 14, 2009), https://www.esma.europa.eu/sites/default/files/library/2015/11/09_295.pdf [<https://perma.cc/N2M5-8VVN>]; see also CESR, MiFID Complex and Non-Complex Financial Instruments for the Purposes of the Directive's Appropriateness Requirements—Q&A16 (Nov. 3, 2009), https://www.esma.europa.eu/sites/default/files/library/2015/11/09_559.pdf [<https://perma.cc/WA6L-Z36F>]; Eur. Sec. and

requiring investment firms¹⁶⁶—especially brokers—to conduct an appropriateness assessment when offering their services, including execution-only services,¹⁶⁷ for instruments not classified as non-complex. Nowadays, however, firms such as Binance, albeit with certain jurisdictional restrictions,¹⁶⁸ and Deribit¹⁶⁹ enable direct access to such products without intermediation, effectively allowing retail clients to access these complex products without the equivalent safeguards offered by traditional financial institutions for other, less exotic derivatives.

C. Systemic Risks

The regulations currently in place, directly or indirectly addressing crypto-derivatives, do not include any risk-mitigation techniques related to systemic risk.

How should systemic risk be approached in the context of crypto-derivatives?

A key issue is understanding the size of systemic risk and its relationship to traditional finance (TradFi). While there has been significant debate about the systemic risks posed by the crypto-economy¹⁷⁰ and global

Markets Auth., Guidelines on Complex Debt Instruments and Structured Deposits, 4(Feb. 4, 2016), https://www.esma.europa.eu/sites/default/files/library/2015-1787_-_guidelines_on_complex_debt_instruments_and_structured_deposits.pdf [<https://perma.cc/4GVS-NDAN>]. In the aftermath of MiFID II, ESMA published guidelines for the assessment of whether financial instruments either “incorporate a structure which makes it difficult for the client to understand the risks involved” or “make it difficult for the client to understand the risk of return of the cost of exiting the product before term.”

166. Directive 2014/65/EU art. 25(3)-(4).

167. When services are provided under the execution-framework, investment firms are generally exempted from performing such appropriateness assessment. However, when complex instruments are involved, such as crypto derivatives, such exemption would not apply. See Eur. Sec. and Markets Auth., Guidelines on Certain Aspects of the MiFID II Appropriateness and Execution-Only Requirements (Jan. 3, 2022), https://www.esma.europa.eu/sites/default/files/library/esma35-43-2938_gls_appropriateness_ex-only.pdf [<https://perma.cc/47WS-JYUE>].

168. See Binance disclaimer: “Options trading is restricted for users from certain regions. Only certain users will be eligible to act as Option Writers. By trading Options on Binance, you will be subject to the terms of the Binance Options Service Agreement.” *Binance Options Opens Applications for Options Writing Access*, BINANCE (Apr. 17, 2023), <https://www.binance.com/en/support/announcement/detail/ac3cf6a7bbff42be98e7f2538df496ae> [<https://perma.cc/7SSD-5MCS>].

169. See *Deribit Exchange Membership Terms – Deribit FZE*, DERIBIT SUPPORT (Jan. 26, 2026), <https://support.deribit.com/hc/en-us/articles/25944532191645-Deribit-Exchange-Membership-Terms-Deribit-FZE> [<https://perma.cc/X4CG-5H45>] (“You acknowledge that the exchange services offered by the Exchange to Members may depend on the member classification, and that certain services may therefore not be available to all types of Members. Subject to Applicable Law, Retail Investors may trade in the following instruments provided that relevant leverage limits and margin requirements met: long positions in options, long positions in options on futures, futures contracts, and perpetual contracts.”).

170. U.S. Dep’t of Treasury, *Report on Digital Asset Financial Stability Risks and Regulation* (2022), <https://home.treasury.gov/news/press-releases/> [<https://perma.cc/W77G-JDWM>]; Azar et al., *The Financial Stability Implications of Digital Assets*, FED. RSRV. BANK OF N.Y. STAFF REPORTS, No. 1034 (Sept. 2022), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr1034.pdf?sc_lang=en [<https://perma.cc/B4Q7-CD95>]; Hermans et al., *Decrypting Financial Stability Risks in Crypto-Asset Markets*, EUROPEAN CENTRAL BANK (May, 2022), <https://www.ecb.europa.eu/myracloud-blocked/?r=OWRjY2Q3YjliMTU1YWU0Y2M3Njcw>

stablecoins,¹⁷¹ there has been little discussion on the systemic risks specifically associated with crypto-derivatives. One of the causes of the 2008 financial crisis was the enormous exposure of derivatives compared to traditional non-derivative transactions, with their size playing a significant role. While the overall outstanding number of crypto-derivative contracts remains limited in absolute terms, this perspective changes when considering the relative size within the crypto-market, where derivatives account for 70% of the trading activity. The market crashes in the crypto-winter, in particular those involving the crashes of FTX, algorithmic stablecoins Terra and Luna, and the hedge fund Three Arrows Capital (3AC) in 2022 have triggered important market sell-off, underscoring interconnections and liquidity risks in the crypto-economy. Among them, the case of 3AC is especially relevant for the purposes of this work, as it was a prominent player in the crypto investment world, managing billions of dollars in assets and heavily involved in the DeFi (decentralized finance) and notably in the crypto-derivatives markets. The firm's downfall was triggered by a combination of factors, including the significant loss in value of major cryptocurrencies (in particular Bitcoin and Ethereum) in the bear market of 2022, poor risk management, and over-leveraging of its positions. Three Arrows had borrowed substantial amounts of money to place large bets on volatile crypto-assets, and when the market turned against them, they were unable to meet margin calls, leading to a cascading series of liquidations. The firm eventually filed for bankruptcy in July 2022, which caused significant disruption in the broader crypto market.¹⁷² Interestingly, at that time, products such as BTC ETFs and options on such products¹⁷³ were unavailable, and the role of traditional firms in crypto seemed limited to VC firms or a few isolated cases of crypto-friendly banks. This availability has changed over the last two years, as traditional financial institutions have entered the crypto space.¹⁷⁴ While the potential for spillover effects from crypto to traditional markets has been fairly

MDlmNTY5ZjNiZj M1ODllZDA3MzYwY2JmN2I5&t=MWU3MDFmMDIwNTMyZDg5NT EwL01hci8yMDI2OjE4OjM0OjE1ICswMTAw&w=YjE0NTA1ODExYjRmNGUz MGE1ZmY1OTJjOGFwODRiNmU4ZjgxMGE5YTvkYzRmNTg3 [https://perma.cc/7ESR-77SW]; Hacibedel & Perez-Saiz, *Assessing Macrofinancial Risks from Crypto Assets*, INT'L MONETARY FUND WORKING PAPER WP/23/214 (2023), <https://www.imf.org/-/media/Files/Publications/WP/2023/English/wpiea2023214-print-pdf.ashx> [https://perma.cc/JF9V-B578]; Consultative Group of Directors of Financial Stability, *Stability Risks from Cryptoassets in Emerging Market Economies*, BANK FOR INT'L SETTLEMENTS 7 (Aug. 2023), <https://www.bis.org/publ/bppdf/bispap138.pdf> [https://perma.cc/V5LT-22Y8].

171. *High-Level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangement—Final Report*, FINANCIAL STABILITY BOARD, 1 (July 17, 2023), <https://www.fsb.org/2023/07/high-level-recommendations-for-the-regulation-supervision-and-oversight-of-global-stablecoin-arrangements-final-report/> [https://perma.cc/ZGR8-GQGK]; U.S. Dept of Treasury, *President's Working Group on Financial Markets, Report on Stablecoins* (Nov. 2021), <https://home.treasury.gov/news/press-releases/jy0454> [https://perma.cc/MP57-UF8K]; *Investigating the Impact of Global Stablecoins*, BANK FOR INT'L SETTLEMENTS 5 (Oct. 2019), <https://www.bis.org/cpmi/publ/d187.pdf> [https://perma.cc/F5FP-5ZJA].

172. See Soon, *supra* note 22.

173. *IBIT: iShares Bitcoin Trust ETF Option Chain*, OPTIONCHARTS, <https://optioncharts.io/options/IBIT/option-chain> [https://perma.cc/YVF4-M8KQ] (last visited Feb. 9, 2026).

174. *Goldman Sachs Reportedly Exploring To Offer New Crypto Trading Options*, CRYPTONARY (July 25, 2024), <https://cryptonary.com/goldman-sachs-reportedly-exploring-to-offer-new-crypto-trading-options/> [https://perma.cc/3FWK-HR6Q].

limited to date (with a few notable examples, such as US crypto-friendly banks suffering from the crypto turmoil in 2022), the increasing number of traditional financial players entering the crypto markets, as well as the interactions between crypto firms and traditional institutions, may heighten such risks.

In such a scenario, national supervisory authorities could be reluctant to grant authorization to systemically important market actors to avoid potential economic and financial disruption in their local markets and/or damage their reputations as financial watchdogs. However, given the transnational nature of the activity and the market actors, such a conservative approach could still prove ineffective, leaving national markets exposed to significant risks.

While these risks could be mitigated by a strong supervisory and enforcement stance against offshore firms serving the local market without the necessary local licenses,¹⁷⁵ as well as a restrictive interpretation of the principle of reverse solicitation,¹⁷⁶ we argue that direct supervision (potentially achieved through pilot programs and sandbox environments) would be the most appropriate approach. An alternative stance would be inefficient, as it would fail to foster the development of appropriate regulatory strategies that encourage sound financial innovation and market practices. Instead, it could enable a race to the bottom,¹⁷⁷ with companies seeking to set-up their businesses in offshore jurisdictions eager to attract systemically important market actors to boost their role in the crypto-economy.¹⁷⁸ Due to the international rather than local client base of these actors, offshore jurisdictions would be generally less concerned by potential risk of adverse impacts on their local consumer markets

From a risk management perspective, several key areas of focus emerge, including, but not limited to: (i) risk mitigation techniques already outlined under EMIR for non-centrally cleared OTC derivative transactions, which could potentially apply to crypto-derivatives; (ii) cyber risk management; (iii) enhanced counterparty due diligence; and (iv) strengthened organizational requirements, including the segregation of functions and entities. While the first two areas will be expanded on in the next paragraph, it is important to highlight that counterparty selection and ring-fencing are critical issues in the crypto space. Regarding the former, the crypto-derivatives market remains

175. Such as the one adopted by the CFTC, with more than 120 actions since 2015 against crypto firms. But, also, looking at the EU, the Netherlands, where DNB imposed an administrative fine on Coinbase Europe Limited for providing crypto services without the legally required registration and Belgium. In addition, in Belgium where FSMA ordered Binance to cease offering or providing any exchange services between virtual currencies, legal currencies, and custody wallet services in 2023.

176. See the approach adopted by Eur. Sec. and Market Auth., *Report On The Guidelines On Reverse Solicitation Under The Markets In Crypto Assets Regulation (2024)*, https://www.esma.europa.eu/sites/default/files/2024-12/ESMA35-1872330276-1899_-_Final_report_on_GLS_on_reverse_solicitation_under_MiCA.pdf [<https://perma.cc/A8E2-HA88>].

177. See Roberta Romano, *The Need for Competition in International Securities Regulation*, 2 THEORETICAL INQUIRIES L. 387, 388 (2001) (mentioning “the absence of a uniform international regulatory scheme” as a benefit to investors).

178. For instance, the Digital Assets and Registered Exchanges Act passed in the Bahamas in 2020, which led FTX to relocate from Hong Kong. In the aftermath of FTX scandal, the Bahamas intervened with DARE Act 2024 which further included crypto derivatives in its scope: *Media-Release-The-Bahamas-Introduces-Transformative-Digital-Asset-Legislation-The-DARE-Act-2024.pdf*.

relatively small, which limits the number of OTC players by nature. There are only around 15 firms—such as Galaxy Digital, Wintermute, GSR, B2C2, Cumberland, and Orbit Markets—that dominate the OTC derivatives market, interacting with each other and with key firms and stakeholders. From a venue perspective, the dominance of three exchanges¹⁷⁹ creates significant concentration risks. Furthermore, the business models of these firms tend to span multiple business lines, as they do not restrict themselves to trading but also expand into other areas, including OTC trading, market making, asset management, and venture capital (VC).¹⁸⁰

Liquidity risks could also arise from the quality of the collateral and from poor collateral management practices. High-quality collateral is scarce in the economy, meaning highly illiquid collateral—especially in the context of highly speculative environments like those associated with crypto-derivatives—could be a well-known source of risk. Moreover, poor collateral management practices could result in under- or over-collateralization, which would be particularly concerning given that the benefits of blockchain and smart contracts might not be fully realized. For example, a simple solution could involve coding a smart contract that, based on the balance held in a counterparty's wallet during a derivative transaction, triggers immediate liquidation or an automatic margin call. This would ensure the necessary assets are transferred from the counterparty's wallet, potentially eliminating counterparty risk and preventing over-collateralization.

Crypto-derivatives are often traded by or through centralized intermediaries, like traditional financial markets. However, crypto markets lack many of the safeguards present in the traditional space, such as central clearing counterparties, disclosure and reporting requirements, clear segregation across market participants, and significant standardization of contractual documents and laws. Some of these safeguards, such as standardization and regulatory harmonization, are—and will remain—essential, particularly if they incorporate some of the policy recommendations outlined below. On the other hand, technological innovation presents a potential solution to address certain gaps, especially in the context of clearing, where decentralized exchanges like dYdX have pioneered on-chain derivatives trading.¹⁸¹ However, while smart contracts and on-chain, decentralized, and disintermediated systems may reduce counterparty risks, they remain vulnerable to cybersecurity threats and fraud¹⁸² and may pose access challenges for less sophisticated counterparties.

179. See *Exchange Review: December 2024*, CCData (Dec. 2024), [https://cdn.prod.website-files.com/63e3774c88285e5c6cbf3b9d/675074a6a8a7ecc199819075_ER_December_Final%20\(4\).pdf](https://cdn.prod.website-files.com/63e3774c88285e5c6cbf3b9d/675074a6a8a7ecc199819075_ER_December_Final%20(4).pdf) [<https://perma.cc/395X-JQL2>].

180. For reference, Galaxy Digital is active across multiple verticals (trading, venture capital, and asset management), as is Wintermute (venture capital, trading, and market making), while GSR operates primarily in trading and market making.

181. dYdX is a decentralized exchange specializing in derivatives such as perpetual futures, margin trading, and spot trading. See Lipsa Das, *What Is dYdX Exchange?*, LEDGER ACADEMY (Mar. 7, 2024) (updated Jul. 25, 2024), <https://www.ledger.com/academy/what-is-dydx-exchange> [<https://perma.cc/X66T-TMYJ>].

182. Catherine Carpentier-Desjardins et al., *Mapping the DeFi Crime Landscape: An Evidence-Based Picture*, 11 J. CYBERSECURITY 1 (2025).

IV. Policy Recommendations

Based on the comparative analysis and the regulatory issues highlighted in Section III, the following policy recommendations are provided to contribute to the development of appropriate policies that address key concerns and anticipate potential issues.

A. Regulatory Governance

A fundamental question systematically connected to the issues raised in the context of FinTech, the crypto-economy, and DeFi is regulatory governance: who should be responsible for developing appropriate policies to effectively address crypto-derivatives?

As mentioned earlier, in the aftermath of the 2008 financial crisis, the G20 called for harmonized regulation to overcome obstacles arising from national fragmentation,¹⁸³ particularly in the derivatives market.¹⁸⁴ Subsequently, North American and European regulators developed a largely convergent regulatory framework, harmonizing the treatment of OTC derivatives, trading, and post-trading requirements to mitigate liquidity and counterparty risks, as well as potential spillover effects that could lead to systemic risks. Similarly, the regulation of crypto-derivatives should rely on international initiatives. Crypto-derivatives are inherently transnational products and, even more so than traditional derivatives, are detached from certain jurisdictions due to the characteristics of blockchain, crypto, and DeFi. This would necessitate the involvement of the FSB, IOSCO, and BIS in developing an appropriate prudential framework. In this scenario, the engagement of major global regulators, particularly ESMA, national European authorities, and the CFTC and SEC, would provide the ideal setting for pursuing harmonization and bringing clarity.

B. The Approach to the Definition

A key issue when dealing with financial innovation is whether to adopt a formal definition. In this case, adopting a functional definition through hard law would be the most suitable solution. Such a definition would be technology-neutral, open to innovation, and dynamic. It would also align with the principles of “same activities, same risks, same rules.” A reference to the economic substance does not necessarily require defining the formal structure of the financial product, as the latter is not inherently relevant and may lead to a “form over substance” approach.

A market-driven definition of crypto-derivatives could be phrased as an instrument whose value depends on the value of one or more underlying crypto-assets. This definition, resembling Hull’s definition of derivatives in

183. G20 Rsch. Group, *Declaration of the Summit on Financial Market and the World Economy*, UNIV. OF TORONTO (Nov. 15, 2008), <https://g20.utoronto.ca/2008/2008declaration1115.html> [<https://perma.cc/4KRJ-5VWW>].

184. G20 Rsch. Group, *G20 Leaders’ Statement: The Pittsburgh Summit*, UNIV. OF TORONTO (Sept. 25, 2009), <https://www.oecd.org/g20/summits/pittsburgh/G20-Pittsburgh-Leaders-Declaration.pdf>.

general,¹⁸⁵ encompasses crypto-derivatives regardless of their listed or unlisted nature or the applicable settlement arrangements. Instead, these aspects could be considered by regulators to exempt specific types of products and transactions entered into for non-financial purposes (if any).

C. Why Adopt a Hard Law Solution?

Such a solution would effectively mitigate the risks of regulatory arbitrage, ensuring the highest levels of harmonization in a highly transnational context. However, this approach would also require a broad and uniform definition of crypto-assets, such as the one proposed by IOSCO.¹⁸⁶ The need for such an approach is consistent with the position adopted by ESMA, which, through soft-law tools, appears to be seeking to address legislative gaps caused by a static, closed-ended set of definitions. This approach is likely to cause confusion and divergent applications among NCAs.

The alternative scenario, with no definition provided, would result in a weaker framework relying on *lex mercatoria* mechanisms. This would introduce the risk of regulatory fragmentation and the possibility that only private parties or bodies would regulate the phenomenon.

Furthermore, an overly liberal approach might encourage market players, particularly those based offshore, to avoid the application of licensing requirements and/or regulatory restrictions by designating foreign laws as applicable to contracts entered with onshore counterparties. The latter, potentially subject to more stringent local laws, could end up transacting with an unregulated player and be subject to an unclear or unsuitable legal framework. While it may be argued that a sophisticated counterparty would negotiate extensively and ultimately refrain from engaging with such an offshore firm, a retail client would not benefit from the same level of bargaining power. Last but not least, as demonstrated by the location choices of numerous crypto firms, significant liquidity has moved offshore rather than onshore, potentially leading to a search for better liquidity beyond borders, regardless of regulatory certainty.

D. Reporting

The core goal of achieving market efficiency in securities regulation is connected to mandating pre-trade transparency on stock exchanges and trading platforms, requiring public disclosure of bid and ask prices, trading volumes, and other relevant market data. It also involves enforcing post-trade transparency by ensuring that details such as the prices and volumes of executed trades are publicly available.¹⁸⁷ Although derivatives markets have largely been exempt from these transparency obligations, the 2008 financial crisis marked a turning point for regulators, who implemented a series of reforms to increase

185. See HULL, *supra* note 86.

186. An asset, sometimes called a “digital asset,” that is issued and/or transferred using distributed ledger or blockchain technology – IOSCO POLICY RECOMMENDATIONS FOR CRYPTO AND DIGITAL ASSET MARKETS FINAL REPORT.

187. Dan Awrey, *The Mechanisms of Derivatives Market Efficiency*, 91 N.Y.U. L. REV. 1104, 1157 (2016).

transparency in this market sector.¹⁸⁸ In the pre-2008 crisis market, OTC derivatives were often associated with market opacity, raising concerns about regulators' inability to monitor systemic risks, particularly counterparty and liquidity risks.¹⁸⁹

Despite concerns about their ability to promote greater market efficiency, reporting and disclosure requirements serve as tools for regulators to obtain more information about derivatives.¹⁹⁰ In the context of a market segment that is largely unknown, under-monitored, and under-regulated, such as crypto-derivatives, reporting requirements could help regulators and supervisors better understand this market, thereby facilitating the development of appropriate regulatory strategies. Regulators could also test different reporting requirements to assess the feasibility of various measures.

Consistent with the idea of technology neutrality in prudential regulation, reporting requirements for crypto-derivatives should be harmonized with those for traditional derivatives whenever they present the same risk profile. This approach has been proposed by the ESMA and subsequently adopted by Hong Kong and has been implemented in the UK by the Bank of England, which treats crypto-derivatives as commodity derivatives for reporting purposes.

E. Regulatory Status of a Firm Dealing with Crypto-Derivatives

Firms dealing with crypto-derivatives should be subject to the same authorization, prudential, and organizational requirements as those that apply to financial intermediaries. Furthermore, given the specific additional risks associated with crypto-assets as an asset class, a dedicated set of rules and requirements should apply. These requirements would affect traditional areas such as segregation of functions and entities, enhanced cybersecurity, KYC, risk management, and counterparty selection. They would also encompass novel areas, such as 'smart contract management'. This would involve requiring firms engaged in DeFi activities related to derivatives trading to audit, or procure audits of, the smart contracts with which they interact, and to ensure that they can manage automated margin calls arising from the inherent volatility of crypto-assets.

Moreover, given the importance of second- and third-line controls in such firms, regulators should ensure that individuals in these functions meet

188. *Id.* at 1157. As the author suggests, this is the case of § 727 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, as supplemented by regulations detailing the information to be reported. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 727, 124 Stat. 1376, 1696 (2010); see also Swap Data Recordkeeping and Reporting Requirements, 17 C.F.R. pt. 45 (2012).

189. See Financial Stability Board, *Review of OTC Derivatives Market Reform* (June 29, 2017), <https://www.fsb.org/uploads/P290617-1.pdf> [<https://perma.cc/JMF8-VY92>]. These vulnerabilities encompassed the accumulation of substantial counterparty exposures among market participants without adequate risk management; the threat of contagion due to the intricate web of interconnections within the market; and the lack of transparency regarding overall counterparty credit risk, which, during periods of financial stress, led to a collapse in confidence and a severe liquidity shortage. The financial crisis resulted in the failure or heavy losses of several major derivatives market participants.

190. *Id.*

fit-and-proper criteria, with a focus on digital asset expertise and regulatory technology awareness.

Finally, the adoption of tools capable of on-chain transaction monitoring, from both market abuse and KYT perspectives, is essential to ensure sound and efficient markets.

F. Strengthening Investor Protection

Limiting access to crypto-derivatives to professional investors or intermediaries, as is the case with traditional derivatives, is a necessary improvement.

Other potential solutions include risk disclosure. However, literature has raised doubts about the effectiveness of disclosure mechanisms in fully protecting investors.¹⁹¹ Additional technical difficulties in understanding how these products are structured further complicate this issue.

G. Prudential Requirements

The prudential treatment of crypto-derivatives creates major issues. Although crypto-derivatives do not pose a systemic risk in the sense of interconnection between the crypto-economy and TradFi, as they represent a systemic risk internal to the crypto-economy, and could present the same issues as traditional derivatives. In 1994, the Basel Committee on Banking Supervision (BCBS) issued one of the first comprehensive papers on prudential supervision of banks' derivatives activities.¹⁹² Building on these principles, which were significantly developed and strengthened following the GFC, a set of prudential requirements for traditional derivatives activities has been designed and applies to regulated firms. These can be summarized as capital requirements, ensuring a resilient buffer to absorb shocks; risk management requirements, promoting sound and prudent handling of risky activities; margin requirements, controlling excessive leverage and mitigating the impact of market volatility; and reporting and disclosure requirements, facilitating oversight and monitoring at the supervisory level.

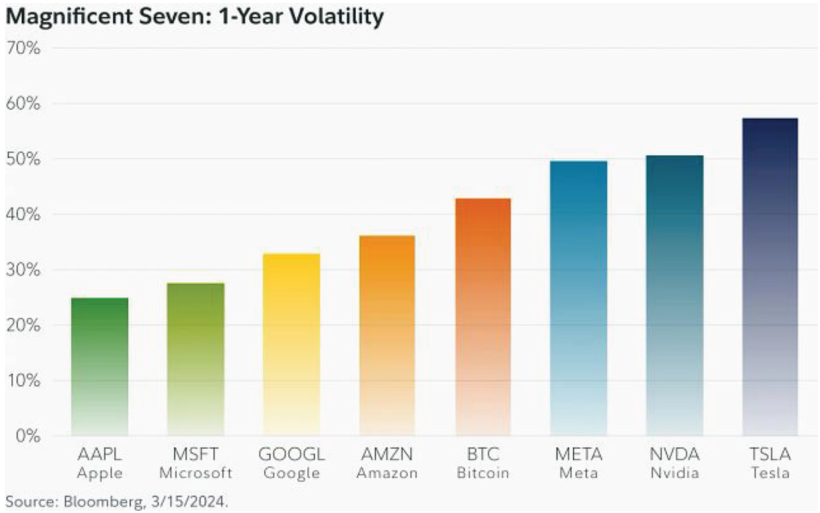
To fully implement technological neutrality, crypto-derivatives should be treated like any other derivative contract with the same risk profile. For example, volatility—often cited as a distinguishing feature of crypto-assets—has been scrutinized extensively. However, as demonstrated in a recent study by Fidelity, Bitcoin's volatility, compared with that of the Magnificent 7, does not appear to be an outlier.¹⁹³

191. Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669 (1984). See also Luca Enriques & Sergio Gilotta, *Disclosure and Financial Market Regulation*, in EILIS FERRAN, NIAMH MOLONEY, & JENNIFER PAYNE, *THE OXFORD HANDBOOK ON FINANCIAL REGULATION* (2014). See also Emiliós Avgouleas, *The Global Financial Crisis and the Disclosure Paradigm in European Financial Regulation: The Case for Reform*, 6 EUROPEAN COMP. AND FIN. L. REV. 4 (2009).

192. Basel Comm. on Banking Supervision, *Prudential Supervision of Banks' Derivatives Activities* (Dec. 1994), <https://www.bis.org/publ/bcbs17.htm> [<https://perma.cc/D7HZ-HD6P>].

193. Zack Wainwright, *A Closer Look at Bitcoin's Volatility*, FIDELITY DIGITAL ASSETS (May 1, 2024), <https://www.fidelitydigitalassets.com/research-and-insights/closer-look-bitcoins-volatility> [<https://perma.cc/5TLT-MXYW>].

Fig. 1. 1-Year Volatility among the Mag 7 (blue chip stocks)¹⁹⁴

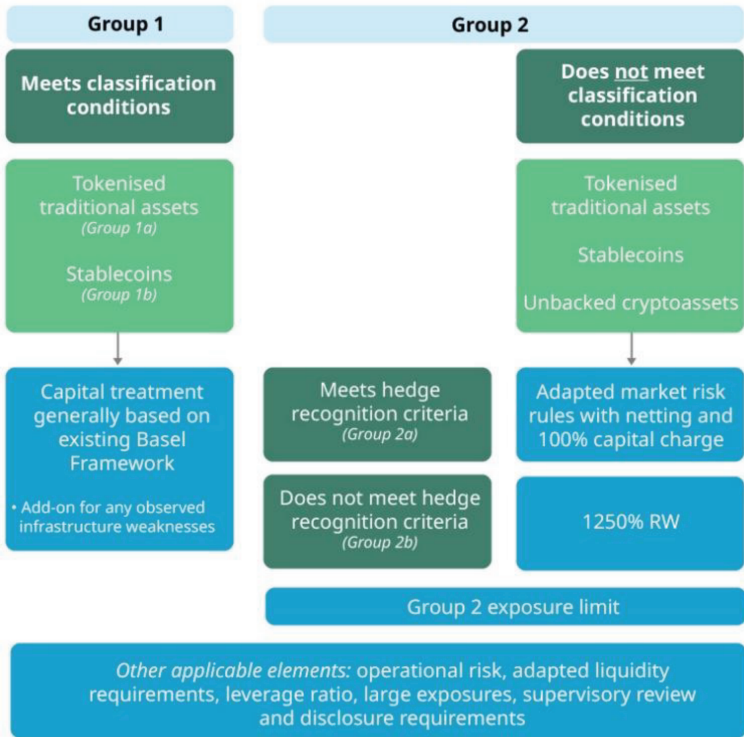


Hence, treating an option on BTC differently from an option on TSLA for prudential purposes, particularly in terms of capital requirements, based solely on volatility, would reflect a technology bias that policymakers should avoid. Such an approach would contradict the long-standing principle of technological neutrality.

In December 2022, the BCBS finalised its standard on the prudential treatment of crypto-asset exposures. The standard outlines minimum regulatory, supervisory review, and disclosure requirements of banks' crypto-asset exposures under Pillars 1, 2, and 3 of the Basel Framework¹⁹⁵ The proposed framework could be summarised as in Figure 2.

194. *Id.*

195. Basel Comm. on Banking Supervision, *Prudential Treatment of Cryptoasset Exposures – Executive Summary* (May 31, 2023), <https://www.bis.org/bcbs/publ/d545>. [<https://perma.cc/2C5U-MUM6>].

Fig. 2. Overview of the Proposed Crypto-asset prudential framework¹⁹⁶

Interestingly, exposure to crypto-assets obtained through derivatives is also considered.¹⁹⁷ Even more notable is the approach taken toward Group 2 exposures, where a “risk qualification” of crypto-derivatives is conducted, distinguishing between riskier and less risky derivatives based primarily on factors such as whether the derivative is listed, its clearing features, and the reliability of pricing for its underlying asset.¹⁹⁸ While this tiered approach may seem sensible in principle, it suffers from two structural biases:

196. *Id.*

197. “When calculating market risk capital requirements for Group 1 crypto-assets under the Simplified Standardised Approach, as defined in [MAR40], banks must apply the following specifications: (1) All instruments, including derivatives and off-balance sheets positions that are affected by changes in Group 1 crypto-assets prices must be included.” *Id.* at 15. The same approach is adopted, *mutatis mutandis*, for Group 2 crypto-assets. *Id.* at 22 (“For Group 2a crypto-assets, the SSA ([MAR40]) will include a separate risk class with its capital requirement.”). All instruments, including derivatives and off-balance sheets positions that are affected by changes in Group 2a crypto-assets prices must be included.”).

198. *Id.* at 18 (“Group 2 crypto-assets that are assessed to meet all three of the following hedging recognition criteria, will be classified as Group 2a: (1) The bank’s crypto-asset exposure is one of the following: (a) A direct holding of a spot Group 2 crypto-asset where there exists a derivative or exchange-traded fund(ETF)/exchange-traded note (ETN) that is traded on a regulated exchange that solely references the crypto-asset, (b) A derivative or ETF/ETN that references a Group 2 crypto-asset, where the derivative or ETF/ETN has been explicitly approved by a jurisdiction’s markets 18 Prudential treatment of crypto-asset exposures regulators for trading or the derivative is cleared by a qualifying central

(1) it treats crypto-assets differently from other asset classes without specific evidence that the financial profile of these products (see the example above) is substantially different from traditional assets, and (2) crypto-firms often operate as intermediaries outside the scope of the BCBS remit. While such measures may effectively prevent or hinder institutional adoption, they could also drive crypto firms to continue their activities within a crypto-shadow market, artificially “kept in the dark” by institutional policymakers. The result would be regulatory arbitrage and fragmentation, potentially escalating into systemic risks.

Conclusion

The regulation of crypto-derivatives remains highly fragmented, with jurisdictions adopting divergent approaches driven by settlement dynamics, definitions of eligible underlying assets, marketability, and policy attitudes. This regulatory inconsistency creates arbitrage risks, exposes retail investors to speculative products without adequate safeguards, and heightens systemic vulnerabilities due to poor collateral management and market concentration. While crypto-derivatives largely replicate traditional financial structures, their cross-border nature necessitates a coordinated regulatory response.

To address these challenges, policymakers should establish a functional, technology-neutral definition of crypto-derivatives, implement robust reporting and prudential standards, and restrict retail access to high-risk instruments. Without harmonized oversight, the market remains susceptible to instability, undermining both investor protection and financial integrity. A proactive regulatory strategy—aligned with post-2008 financial reforms—can balance innovation with stability, ensuring that crypto-derivatives evolve within a secure and resilient framework.

counterparty (QCCP), (c) A derivative or ETF/ETN that references a derivative or ETF/ETN that meets criterion (b) above, (d) A derivative or ETF/ETN that references a crypto-asset-related reference rate published by a regulated exchange.”).

Annex I – Regulation of Jurisdictions

UNITED STATES OF AMERICA

Applicable Law: In the United States, the Commodity Futures Trading Commission (CFTC) is the primary regulator for derivatives that reference commodities based on the Commodity Exchange Act of 1936 (as amended) (CEA).

These derivatives include futures, options, and swaps. However, the CFTC’s jurisdiction does not extend to spot transactions, forward transactions involving physical commodities, or foreign exchange (FX) forwards and swaps.

The term “commodity” has a broad definition under the CEA¹⁹⁹, encompassing virtually any asset, rate, or other underlying reference used to create a derivative, with the notable exceptions of onions and motion-picture box-office receipts. Importantly, the CFTC has significant enforcement authority to combat manipulation and fraud in commodity markets, including those involving spot transactions.

The definition of a commodity encompasses securities; however, derivatives linked to a single security or a narrow-based index of securities are governed either exclusively by the Securities and Exchange Commission (SEC), as in the case of security-based swaps and security options, or jointly by the SEC and the CFTC, as in the case of security futures.

Security futures, being classified as both securities and futures, are subject to dual regulation by the SEC and the CFTC.

Derivatives Definition: The CFTC Glossary provides the following definition of derivative:

a financial instrument, traded on or off an exchange, the price of which is directly dependent upon (i.e. derived from) the value of one or more underlying security, equity indices, debt instruments, commodity, other derivative instruments, or any agreed upon pricing index or arrangement (e.g., the movement over time of the Consumer Price Index or freight rates).²⁰⁰

However, more granular definitions are provided under the Commodity Exchange Act (CEA) and, despite its limited legal value, the CFTC Swaps Report Data Dictionary, as follows: Swap: Commodity Exchange Act (CEA), 7USC Section 1(a)(47). The term “swap” means any agreement, contract, or transaction:

- that is a put, call, cap, floor, collar, or similar option of any kind that is for the purchase or sale, or based on the value, of 1 or more interest or other rates, currencies, commodities, securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind;
- that provides for any purchase, sale, payment, or delivery (other than a dividend on an equity security) that is dependent on the occurrence, non-occurrence, or the extent of the occurrence of an event or contingency associated with a potential financial, economic, or commercial consequence;

199. 7 U.S.C. §§ 1a, 9.

200. *Glossary*, CFTC, <https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/CFTCGlossary/index.htm#D> [<https://perma.cc/75LY-8KF8>] (last visited Feb. 10, 2026).

- that provides on an executory basis for the exchange, on a fixed or contingent basis, of 1 or more payments based on the value or level of 1 or more interest or other rates, currencies, commodities, securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind, or any interest therein or based on the value thereof, and that transfers, as between the parties to the transaction, in whole or in part, the financial risk associated with a future change in any such value or level without also conveying a current or future direct or indirect ownership interest in an asset (including any enterprise or investment pool) or liability that incorporates the financial risk so transferred, including any agreement, contract, or transaction commonly known as—
 - i. an interest rate swap;
 - ii. a rate floor;
 - iii. a rate cap;
 - iv. a rate collar;
 - v. a cross-currency rate swap;
 - vi. a basis swap;
 - vii. a currency swap;
 - viii. a foreign exchange swap;
 - ix. a total return swap;
 - x. an equity index swap;
 - xi. an equity swap;
 - xii. a debt index swap;
 - xiii. a debt swap;
 - xiv. a credit spread;
 - xv. a credit default swap;
 - xvi. a credit swap;
 - xvii. a weather swap;
 - xviii. an energy swap;
 - xix. a metal swap;
 - xx. an agricultural swap;
 - xxi. an emissions swap; and
 - xxii. a commodity swap;

(iv) that is an agreement, contract, or transaction that is, or in the future becomes, commonly known to the trade as a swap;

(v) including any security-based swap agreement which meets the definition of “swap agreement” as defined in section 206A of the Gramm-Leach-Bliley Act (15 U.S.C. 78c note) of which a material term is based on the price, yield, value, or volatility of any security or any group or index of securities, or any interest therein; or

(vi) that is any combination or permutation of, or option on, any agreement, contract, or transaction described in any of clauses (i) through (v).

Future: Commodity Exchange Act (CEA) - An agreement to purchase or sell a commodity for delivery in the future: (1) at a price that is determined at initiation of the contract; (2) that obligates each party to the contract to fulfil the contract at the specified price; (3) that is used to assume or shift price risk; and (4) that may be satisfied by delivery or offset.

Option: Commodity Exchange Act (CEA), Section 1a(36) - A contract that gives the buyer the right, but not the obligation, to buy or sell a specified

quantity of a commodity or other instrument at a specific price within a specified period of time, regardless of the market price of that instrument.

CFDs: A contract for difference (CFD) is similar to a total rate of return swap except that payment only occurs once on the contract expiration date. A CFD may have a single stock, a basket of stocks, or an index as its underlying reference asset.

Crypto-derivatives: The classification of crypto-assets under US federal law is currently one of the most debated topics, with different views and stances adopted by the CFTC, which has stated on multiple occasions²⁰¹ that crypto-assets are commodities, while the SEC has sought, with few limited exceptions, to bring the majority of crypto-assets under its remit, deeming those “investment contracts” and thus securities. These inconsistencies created significant uncertainties and enforcement actions across the industry, as further outlined in the dedicated appendix.

While the CFTC generally considers digital assets to be commodities under Section 1a(9) of the CEA, the SEC holds jurisdiction if a digital asset is classified as a security, with a few exceptions.

We are of the view that crypto forwards, swaps, options, futures, and CFDs would fall under CFTC remits and existing financial services legislation unless an exclusion applies. In the context of swaps, and aside from the exclusion for securities swaps falling under the remit of the SEC, three potential exclusions may apply, namely:

- **FX Forward and Swap Exclusion:** this would unlikely apply as crypto-assets have not been classified as currencies²⁰² The position may appear more nuanced when dealing with stablecoins, and it will be interesting to determine how the new administration will address such products after banning, as part of one of the first executive orders, the issuance of US CBDCs.

201. Whether in public statements, industry guidance, staff guidance or administrative proceedings, *See The Commodity Futures Trading Commission: Effective Enforcement and the Future of Derivatives Regulation Before the S. Comm. on Agric., Nutrition, and Forestry, 111th Cong. 55 (2014)* (statement of Timothy Massad, Chairman of the Commodity Futures Trading Commission), https://www.agriculture.senate.gov/imo/media/doc/Testimony_Massad1.pdf [<https://perma.cc/4UNE-S6W9>]; *Customer Advisory: Understand the Risks of Virtual Currency Trading*, CFTC, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/understand_risks_of_virtual_currency.html [<https://perma.cc/7HXY-TRAR>] (last visited Mar. 10, 2026); *Introduction to Virtual Currency*, CFTC, https://www.cftc.gov/sites/default/files/idc/groups/public/%40customerprotection/documents/file/oceo_aivc0218.pdf [<https://perma.cc/FPZ3-NEA5>]; In the Matter of: Coinflip, Inc., D/b/a Derivatbit, and Francisco Riordan, Respondents, CFTC No. 15-29, 2015 WL 5535736, at *3; In the Matter of: TeraExchange LLC, Respondent, CFTC No. 15-33, 2015 WL 5658082 (Sept. 24, 2015).

202. “Bitcoin is a ‘virtual currency’, defined here as a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value but does not have legal tender status in any jurisdiction. Bitcoin and other virtual currencies are distinct from ‘real’ currencies, which are the coin and paper money of the United States or another country that are designated as legal tender, circulate, and are customarily used and accepted as a medium of exchange in the country of issuance.” In re Coinflip, Inc., CFTC Docket No. 15-29, 2015 WL 5535736, at 2 (Sept. 17, 2015).

- **Forward Contract Exclusion:** This exclusion has been part of commodity regulation since 1922 and has been preserved in every amendment to the CEA, including the Dodd-Frank Act. The forward contract exclusion applies to:
 - Contracts for the sale of a nonfinancial commodity
 - For deferred shipment or delivery
 - That the parties intend to physically settle

To qualify for the forward contract exclusion, a contract must meet the following criteria:

- It must be a contract between commercial market participants
- It must be for the sale of a nonfinancial commodity
- It must be for deferred shipment or delivery
- Both parties must intend to physically settle the transaction
- The primary purpose must be to transfer ownership of the commodity, not just its price risk

Trade Option Exclusion: a crypto-option may qualify for this exemption, while still being subject to various requirements, if, amongst others:

1. Such a commodity option transaction must be offered by a person who has a reasonable basis to believe that the transaction is offered to an offeree as described in (2) below. In addition, the offeror must be either:
 - (i) An eligible contract participant, as defined in section 1a(18) of the Act, as further jointly defined or interpreted by the Commission and the Securities and Exchange Commission or expanded by the Commission pursuant to section 1a(18)(C) of the Act; or
 - (ii) A producer, processor, or commercial user of, or a merchant handling the commodity that is the subject of the commodity option transaction, or the products or by-products thereof, and such offeror is offering or entering into the commodity option transaction solely for purposes related to its business as such;
2. The offeree must be a producer, processor, or commercial user of, or a merchant handling the commodity that is the subject of the commodity option transaction, or the products or by-products thereof, and such offeree is offered or entering into the commodity option transaction solely for purposes related to its business as such; and
3. The commodity option must be intended to be physically settled, so that, if exercised, the option would result in the sale of an exempt or agricultural commodity for immediate or deferred shipment or delivery.

In the United States, individuals or entities engaging in specific types of commodity derivatives activities—particularly those involving derivatives based on digital assets classified as commodities—are generally required to register with the Commodity Futures Trading Commission (CFTC) and become members of the National Futures Association (NFA). This requirement extends to the following categories of market participants:

- i. **Futures Commission Merchants (FCMs):** These are entities that solicit or accept orders for the purchase or sale of futures contracts, options on futures, retail off-exchange forex contracts, or swaps, and that accept money, other assets, or extend credit to customers to facilitate such orders.
- ii. **Introducing Brokers (IBs):** Introducing brokers are individuals or organizations that solicit or accept orders for futures contracts, forex, commodity options, or swaps but do not handle customer funds or extend credit to support these transactions.
- iii. **Commodity Trading Advisors (CTAs):** CTAs are individuals or entities that, for compensation or profit, provide advice—directly or indirectly—on the value or advisability of trading futures contracts, options on futures, retail off-exchange forex contracts, or swaps.
- iv. **Commodity Pool Operators (CPOs):** A CPO operates a pooled investment vehicle that trades in commodity interests and solicits funds for this purpose, either making trading decisions itself or engaging a commodity trading advisor to do so.
- v. **Swap Dealers:** These are organizations that hold themselves out as dealers in swaps, make markets in swaps, or engage in swap transactions as a regular business activity. Entities engaging in only a minimal amount of swap dealing activity may qualify for a *de minimis* exemption from registration.

Registration and Exemptions: Unless an exclusion or exemption applies, individuals or entities operating in these roles must register with the CFTC and join the NFA. Specific exemptions or exclusions may apply, particularly for overseas entities. However, relying on an exemption does not necessarily relieve the individual or entity of all regulatory obligations, such as disclosure requirements.

Disclosure Requirements: The NFA has established disclosure guidelines for CPOs and CTAs engaging in activities involving derivatives based on digital asset commodities. These guidelines emphasize the importance of transparent communication with clients and investors, but do not constitute an exhaustive list of required disclosures. CPOs and CTAs are advised to consider additional disclosures beyond the areas outlined, which include:

- **Unique Features of Virtual Currencies:** characteristics that distinguish digital assets from traditional commodities or financial instruments
- **Price Volatility:** the potential for significant and rapid fluctuations in the value of digital assets
- **Valuation and Liquidity:** challenges in determining accurate valuations and the availability of market liquidity for digital assets
- **Cybersecurity Risks:** threats to the security of digital asset systems, including wallets and exchanges
- **Opaque Spot Markets:** limited transparency in the pricing and operations of certain digital asset markets
- **Virtual Currency/Digital Asset Exchanges, Intermediaries, and Custodians:** risks associated with reliance on third parties for transactions, custody, or market access
- **Regulatory Landscape:** the evolving and sometimes uncertain legal and regulatory framework governing digital assets

- Technology: risks and limitations inherent in the underlying blockchain or distributed ledger technologies
- Transaction Fees: costs associated with executing and settling transactions involving digital assets

Under NFA Interpretive Notice 9073²⁰³, any CPO or CTA conducting transactions involving virtual currencies or digital assets—whether as part of a commodity pool, exempt pool, or managed account program—must prominently include a prescribed disclosure language in offering documents, client communications, or other relevant materials. This was recently repealed following the NFA proposal in October 2025,²⁰⁴ in consideration of the evolution of the digital assets ecosystem, and amendments to the Compliance Rule 2-51. The impact of the repeal is to expand the rule’s anti-fraud provisions to cover all digital asset commodities that have a related commodity interest product certified by a registered entity or approved by the CFTC.²⁰⁵

Under NFA Compliance Rule 2-22, CPOs and CTAs are explicitly prohibited from stating or implying that they have been sponsored, recommended, or approved by the NFA. This rule is particularly relevant to CPOs and CTAs involved in activities with customers or counterparties concerning underlying or spot virtual currencies.

Any CPO or CTA engaging in such activities is required to provide prescribed disclosure language to its customers or counterparties at or before the time of engagement in underlying or spot virtual currency or digital asset activities.

Enforcement: Enforcement was an effective tool of indirect regulation employed by both the SEC and the CFTC. As to the latter, we note that the CFTC, as the regulator responsible for overseeing crypto (deemed commodities) derivatives, accounted for almost half of its 2023 enforcement actions (more than 49% of all actions filed during that period) against crypto firms.²⁰⁶

CANADA

Applicable Law: There is no federal statutory framework governing securities law in Canada, as each province has its own securities regulator that enacts specific provincial legislation. The Canadian Securities Administration (“CSA”), however, generally acts as an umbrella regulatory body that includes provincial securities commissions and, among other

203. Nat’l Futures Ass’n, *Compliance Rule 2-36: Requirements for NFA Members Engaging in Virtual Currency Activities*, <https://www.nfa.futures.org/members/ib/regulatory-obligations/virtual-currency.html> [https://perma.cc/543H-4G86].

204. Tim Elliott, Email to Christopher Kirkpatrick, Office of the Secretariat, CFTC, National Futures Association: Repeal NFA Interpretative Notice 9073 (Oct. 1, 2025), <https://www.nfa.futures.org/news/PDF/CFTC/2020-2029/20251001-Repeal-interp-9073-virtual-curr-2-51.pdf> [https://perma.cc/3U77-TC3E].

205. IQ-EQ, *NFA repeals Interpretive Notice 9073 and Amends Compliance Rule 2-51: What it Means for Digital Asset Market Participants* (Dec. 19, 2025), <https://iqeq.com/insights/nfa-repeals-interpretive-notice-9073-and-amends-compliance-rule-2-51-what-it-means-for-digital-asset-market-participants/> [https://perma.cc/SZ33-V7VR].

206. *CFTC Charges Binance and Former CEO Changpeng Zhao with Willful Evasion of U.S. Law*, CFTC (June 5, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8822-23> [https://perma.cc/N5AC-TAFF].

things, is tasked with harmonizing the securities regulatory framework across Canada. Quebec's *Autorité des Marchés Financiers* ("AMF") and the Ontario Securities Commission ("OSC"), along with other provincial securities regulators, require compliance (unless otherwise specified) with CSA notices and other CSA regulatory initiatives on crypto-assets. Moreover, the Financial Transaction and Reports Analysis Center of Canada ("FINTRAC") is Canada's financial intelligence unit and anti-money laundering and the financing supervisor.

In Canada, derivatives are governed by provincial legislation. It is important to note that, unlike securities laws, which are relatively harmonised across Canadian jurisdictions, the regulations governing OTC and exchange-traded derivatives vary significantly across provinces and territories.

For the purposes of identifying the applicable regulatory framework, Canada distinguishes exchange-traded derivatives ("ETDs") from OTC derivatives.

As to the former, in different provinces, definitions of ETD vary.

In Ontario, commodity futures and options on commodity futures are ETD and are regulated by the *Commodity Futures Act*. Listed options (other than options on commodity futures) are Securities Derivatives and are regulated under the *Securities Act* (Ontario) and specifically by OSC Rule 95-502.

In Manitoba, commodity futures and options on commodity futures are ETD. Listed options (other than commodity futures options) are ETD and are regulated under *The Securities Act* (Manitoba).

In every other Canadian jurisdiction, all listed futures and options are ETD (regulated in Quebec under the *Derivatives Act* and in every other jurisdiction under the local *Securities Act*).

On September 28, 2023, the securities regulatory authorities of Alberta, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, and Yukon adopted *Multilateral Instrument 93-101 Derivatives: Business Conduct and Proposed Companion Policy 93-101 CP Derivatives: Business Conduct* setting out a comprehensive regime for regulating the business conduct of dealers and advisors in the OTC derivatives market. The rule, which will take effect on September 28, 2024, establishes fundamental obligations for dealers and advisors that align with international standards and include requirements on fair dealing, conflicts of interest, suitability, reporting non-compliance, and record-keeping. The BCSC intends to adopt a substantially similar rule at a later date. In addition, the CSA reviewed the comments submitted in response to the consultation on proposed amendments to trade reporting rules incorporating harmonized international derivatives data standards developed by the IOSCO Committee on Payments and Market Infrastructure. It is preparing the amendments for adoption. Finally, the CSA conducted research and is currently preparing to publish for comment proposed amendments to *National Instrument 94-101 Mandatory Central Counterparty Clearing of Derivatives*, updating the list of OTC derivatives that are mandated to be cleared by a central counterparty.²⁰⁷

207. 2024-2025 *Year in Review*, CAN. SEC. ADM'RS 39 <https://www.securities-administrators.ca/year-in-review/> [<https://perma.cc/8TUZ-QLXC>] (last visited Feb. 10, 2026).

Derivatives Definition: Derivatives can be generally distinguished between:

- FX Derivatives:
 - Forward foreign exchange transactions;
 - Foreign exchange swaps;
 - Foreign exchange options; and
 - Any transactions incorporating a component of any of the above
- Securities Derivatives: these are deemed investment contracts and, as such, securities
 - Physically settled FX Derivatives;
 - Physically settled commodity derivatives. A derivative with a financial commodity underlying (such as a currency) is not a Commodity Derivative, as in this case, it would very likely fall under the definition of FX Derivative.

Crypto-derivatives: To determine the approach adopted by Canadian authorities to crypto-derivatives, it is necessary to assess how crypto assets are regulated in general.

In the absence of a dedicated regulatory framework for digital assets in Canada, the Canadian Securities Administrators (CSA), an umbrella organization encompassing the provincial and territorial securities regulators, has proactively addressed the evolving landscape through the issuance of several Staff Notices. These notices, particularly Staff Notice 21-329, provide guidance to crypto-asset trading platforms and seek to adapt existing securities legislation to encompass digital assets, drawing on principles established in landmark cases like *Pacific Coast Coin Exchange v. Ontario (Securities Commission)*. Notably, the determination of whether a virtual currency constitutes a security, and thus falls under securities regulation, hinges on the application of the “investment contract” test, as articulated by the Supreme Court of Canada in the aforementioned case.

In recent developments, the CSA has broadened its regulatory purview to encompass arrangements that qualify as securities or derivatives by virtue of their classification as “crypto contracts.” As we will delve into further, the implications of such categorization as a security or derivative include obligations pertaining to distribution (such as prospectus requirements) and the necessity for registration as a dealer and/or marketplace. Staff Notice 21-327 elaborates on the specific circumstances under which the CSA will deem “any entity that facilitates transactions relating to crypto-assets” to be subject to the requirements of securities legislation concerning platform recognition and dealer registration. Notably, the CSA has issued a cautionary note that securities legislation may extend to platforms facilitating the buying and selling of crypto-assets, even those classified as commodities, because a user’s contractual right to the crypto-asset may itself constitute a derivative. This determination turns on whether the platform is merely providing users with a contractual right or claim to an underlying crypto-asset, rather than immediate delivery²⁰⁸

208. See Staff Notice 21-327: *Guidance on the Application of Securities Legislation to Entities Facilitating the Trading of Crypto Assets*, CAN. SEC. ADM’RS (Jan. 16, 2020), https://www.osc.ca/sites/default/files/pdfs/irps/csa_20200116_21-327_trading-crypto-assets.pdf [<https://perma.cc/37GN-PUJ3>]. Immediate delivery will be considered to have occurred if: (a) there is immediate transfer of ownership, possession and control of the crypto-asset and the user is free to use, or otherwise

of the crypto-asset itself. While regulatory bodies will conduct a comprehensive assessment of all terms embedded in the relevant contract or instrument, the CSA has adopted the view that, in the absence of immediate delivery of the crypto-asset, securities legislation generally applies.

Enforcement: The local regulator in nearly all Canadian jurisdictions has been highly proactive in addressing breaches of licensing requirements by entities that offer Contracts for Differences or FX Derivatives to the public, as well as those that market and sell Binary Options. In every Canadian province and territory, the sale of Binary Options with a duration of less than 30 days to individuals or entities established by individuals is prohibited.

In 2023-2024, it was reported that CSA was active in 15 crypto-related matters through enforcement action to protect the integrity of capital markets. Notably, out of more than 1,050 investor alerts, 50% concerned crypto-assets.

EUROPEAN UNION

Applicable law: The legal and regulatory framework covering derivatives key instruments governing derivatives regulations in the EU is spread around few statutory instruments, with the most relevant being:

- MiFID II²⁰⁹
- MiFIR²¹⁰
- EMIR²¹¹

Derivatives Definition: It has been argued over time that the EU legislator failed to provide a conceptual, substance-based definition of derivatives. Instead proposing a series of circular definitions, created potential inconsistencies among Member States.²¹²

Without the ambition to treat the scope of the definition of derivatives extensively under EU law, reference shall be made to the definition proposed under MiFIR and MiFID II, which ought to embed the former definition under EMIR²¹³ However, such definition(s) consists of a mere reference to MiFID,

deal with, the crypto-asset without any further involvement with, or reliance on, the platform or its affiliates, and the platform or any affiliate retaining any security interest or any other legal right to the crypto-asset; and (b) following the immediate delivery, the user is not exposed to insolvency risk (credit risk), fraud risk, performance risk or proficiency risk on the part of the platform. Other factors to be considered include: (a) the contractual arrangements between the platform and the user; (b) whether there is immediate settlement of the transaction; (c) whether there is margin and leverage trading; (d) typical commercial practice with regard to immediate delivery; (e) whether there is immediate transfer to a user's wallet; and (f) who has ownership, possession or control over the transferred crypto-asset.

209. Council Directive 2014/65, 2014 O.J. (L 173) 349 (EU).

210. Council Regulation 600/2014, 2014 O.J. (L 173) 84 (EU).

211. Council Regulation 648/2012, 2012 O.J. (L 201) 1 (EU).
on OTC derivatives, central counterparties and trade repositories

212. Matthias Lehmann & Fabian Schinerl, *The Concept of Financial Instruments: Drawing the Borderline Between MiFID and MiCAR*, 19 *CAP. MKTS. L.J.* 330 (2024).; Evariest Callens, *Derivative Contracts in EU Law: Never Mind the Definition?*, 22 *J. CORP. L. STUD.* 641, 661–75 (2022).

213. From a first look, the definition proposed under EMIR still contains references to MiFID I (“financial instrument as set out in points (4) to (10) of Section C of Annex I to Directive 2004/39/EC as implemented by Article 38 and 39 of Regulation (EC) No 1287/2006”) and fails to include the transferable securities mentioned in art. 4(1)(44) (c) MiFID II. ESMA, *Interactive Single Rulebook: MiFID II, Article 4 (Definitions)*, <https://>

in that it defines derivatives as those financial instruments (1) defined in point (44)(c) of Article 4(1) of Directive 2014/65/EU; and (2) referred to in Annex I, Section C (4) to (10) thereto. Leaving aside the complexities arising from references to securities, a term which has not been defined yet in a harmonized fashion across the EU.²¹⁴ it may be argued that such a definition encompasses a broad range of derivatives and might well capture crypto-derivatives, especially considering the “catch-all” instrument referred to under let. C(10), to be read in conjunction with the provisions of MiFID Org. Reg. Article 7(1).

Let. C(10) refers to “*Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates or inflation rates or other official economic statistics that [1] must be settled in cash or may be settled in cash at the option of one of the parties other than by reason of default or other termination event, as well as any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned in this Section, which [2] have the characteristics of other derivative financial instruments, having regard to whether, inter alia, [3] they are traded on a regulated market, OTF, or an MTF*²¹⁵”

While the criteria stipulated under items 1 (i.e. cash settlement) and 3 (i.e. listing on specified trading venues) appear straightforward, the definition under item 2 requires further clarification. These clarifications are set out under the aforementioned MiFID Org. Reg. Article 7(1).

For the purposes of Section C(10), a derivative contract relating to an underlying referred to in that section shall be considered to “*have the characteristics of other derivative financial instruments*” where one of the following conditions is satisfied:

www.esma.europa.eu/publications-and-data/interactive-single-rulebook/mifid-ii/article-4-definitions [https://perma.cc/5HTM-R3PU] (last visited Feb. 6, 2026). However, applying the principle of *lex posterior derogat legi priori*, one should look at the combined reading of: (1) the definition proposed by MiFID II under article 4(1)(49) and (2) the definition proposed under Article 2(1)(29) of MiFIR (Regulation (EU) No 600/2014). Council Regulation 600/2014, 2014 O.J. (L 173) 84 (EU), <https://eur-lex.europa.eu/eli/reg/2014/600/oj/eng> [https://perma.cc/M7JM-34JW]. Considering that, also in the light of a teleological approach, EMIR sought to replicate MiFID I definition in respect of derivatives, following the entry into force of MiFID II, it appears reasonable that the derivatives covered under the first limb of MiFIR definition should also be covered under EMIR. This approach is further validated by ESMA in its Final Report. ESMA, *Final Report: Guidelines on the Conditions and Criteria for the Qualification of Crypto-Assets as Financial Instruments* (Dec. 17, 2024), <https://www.esma.europa.eu/sites/default/files/2024-12/ESMA75453128700-> [https://perma.cc/5CPG-DL5J]. (outlining ESMA’s clarifications on the obligations under Regulation (EU) No 648/2012 of the European Parliament and the Council of July 4, 2012, on OTC derivatives, central counterparties (as amended by Regulation (EU) 2019/834 of the European Parliament and of the Council of May 20, 2019 (EMIR Refit)). The latter considers, among others, securities derivatives (covered warrants, investments certificates, and structured products). See P. Lucantoni, EMIR, in *EUROPEAN FINANCIAL SERVICES LAW: ARTICLE-BY-ARTICLE COMMENTARY* 1563, 1581-1582 (M. Lehmann et al. eds., 2019).

214. Filippo Annunziata, *Speak, If You Can: What Are You? An Alternative Approach to the Qualification of Tokens and Initial Coin Offerings* (Bocconi Legal Stud. Rsch. Paper No. 2636561, Feb. 2019), <https://doi.org/10.2139/ssrn.3332485>.

215. See MiFID II, Annex 1, Section C (10). Emphasis and brackets added by the authors.

- (a) it is settled in cash or may be settled in cash at the option of one or more of the parties, otherwise than by reason of a default or other termination event;
- (b) it is traded on a regulated market, an MTF, an OTF, or a third country trading venue that performs a similar function to a regulated market, MTF or an OTF;
- (c) the conditions laid down in paragraph 1 are satisfied in relation to that contract. Such paragraph provides that a contract [1] which is not a spot contract²¹⁶ and [2] which is not for commercial purposes, shall be considered as having the characteristics of other derivative financial instruments where [3] it satisfies the following two conditions:
 - (a) it meets one of the following criteria (hereinafter referred to as “**Listed Derivative Criteria**”):
 - (i) it is traded on a third country trading venue that performs a similar function to a regulated market, an MTF or an OTF;
 - (ii) it is expressly stated to be traded on, or is subject to the rules of, a regulated market, an MTF, an OTF or such a third country trading venue;
 - (iii) it is equivalent to a contract traded on a regulated market, MTF, an OTF or such a third country trading venue, with regards to the price, the lot, the delivery date and other contractual terms;
 - (b) it is standardized so that the price, the lot, the delivery date and other terms are determined principally by reference to regularly published prices, standard lots or standard delivery dates (the “**Standardization Criteria**”).

(The Standardization Criteria and the Listed Derivative Criteria shall be referred to as the “**Criteria**”).

Crypto-derivatives: The Authors argue that while the majority of crypto-derivatives²¹⁷ generally fall under the scope of MiFID II (and thus EU financial services legislation), certain types of crypto-derivatives, namely bespoke OTC derivatives:

- (1) entailing a physical settlement and, we argue,
- (2) those entailing a settlement by way of stablecoins delivery (e.g. BTC/USDT, settled in an e-money token or an asset reference token) (“**Stablecoin Settled Derivatives**”)

might fall outside such harmonized definitions as they would hardly meet the Criteria and end up being treated differently across EU Member States²¹⁸

216. A spot contract for the purposes of paragraph 1 shall be a contract for the sale of a commodity, asset or right, under the terms of which delivery is scheduled to be made within the longer of the following periods:

- (a) 2 trading days;
- (b) the period generally accepted in the market for that commodity, asset or right as the standard delivery period.

A contract shall not be considered a spot contract where, irrespective of its explicit terms, there is an understanding between the parties to the contract that delivery of the underlying is to be postponed and not to be performed within the period referred to in paragraph 2

217. We are of the view that, for as long as cash settled, perpetual swaps, options, futures and CFDs would fall under the definition of financial instruments.

218. E.g. as financial product under Italian law.

In order to support our conclusion, a high-level overview of the main initiatives/considerations moved at EU level on crypto-derivatives to date is necessary.

Treatment of Crypto-derivatives Across the EU & Recent Initiatives:

The treatment of crypto-derivatives under EU law has been partly addressed across various Member States, whether through product intervention measures,²¹⁹ restricting the sale of certain crypto-derivatives to retail clients,²²⁰ dedicated analysis on the eligibility of crypto assets as underlying of derivatives (and the classification of such derivatives, to the extent these are cash settled, as financial instruments²²¹), and, recently, through the ESMA Consultation on the qualification of crypto assets as financial instruments²²² and its resulting Guidelines²²³ issued on the December 17, 2024, following industry consultation and response.²²⁴ In these Guidelines, ESMA touched upon the subject, amongst others, on whether crypto-assets bearing rights similar to derivatives, but which would be settled in crypto-assets, EMTs, or ARTs, instead of cash, would fall under MiFID.

We summarize below the main considerations set out in the Guidelines and our first set of considerations.

219. At EU level, see, for instance, ESMA issued dedicated product intervention measures to restrict leverage on cryptocurrency CFDs to a maximum of 2:1 at the outset. This means investors must provide at least 50% of the contract's total value when opening a position. Earlier, the leverage ratio was set at 5:1, requiring only 20% of the CFD's value as an initial investment. Eur. Sec. & Markets Auth., *Frequently Asked Questions: ESMA's Product Intervention Measures in Relation to CFDs and Binary Options Offered to Retail Investors* (Mar. 27, 2018), https://www.esma.europa.eu/sites/default/files/library/esma71-98-125_faq_esmas_product_intervention_measures.pdf [<https://perma.cc/6NNP-RXZE>].

220. For examples of the product intervention measure passed in respect of crypto-CFDs in Spain, see ESMA, *Opinion on Product Intervention Measures on CFDs and Other High-Risk Products Proposed by CNMV*, ESMA35-335435667-4345 (Jul. 10, 2023), https://www.esma.europa.eu/sites/default/files/2023-07/ESMA35-335435667-4345_Opinion_on_product_intervention_measures_on_CFDs_and_other_high_risk_products_proposed_by_CNMV.pdf [<https://perma.cc/TX6R-3X7G>].

221. For examples in France, see the AMF Paper, *Analysis of the Legal Qualification of Cryptocurrency Derivatives*. Notably, AMF further emphasised that as result, online platforms which offer cryptocurrency derivatives fall within the scope of MiFID 2 and must therefore comply with the authorisation, conduct of business rules, and the EMIR trade reporting obligation to a trade repository. Above all, these products are subject to the provisions of the Sapin 2 law, and notably the ban of advertisements for certain financial contracts. Autorité des Marchés Fin., *Analysis of the Legal Qualification of Cryptocurrency Derivatives* (n.d.), <https://www.amf-france.org/sites/institutionnel/files/resource/Analysis%20of%20the%20legal%20qualification%20of%20cryptocurrency%20derivatives.pdf> [<https://perma.cc/N2UU-TJ2V>] (last visited Mar. 10, 2026).

222. ESMA, *MiCA Consultation Paper: Guidelines on the Qualification of Crypto-Assets as Financial Instruments*, ESMA75-453128700-52 (Jan. 29, 2024), https://www.esma.europa.eu/sites/default/files/2024-01/ESMA75-453128700-52_MiCA_Consultation_Paper_-_Guidelines_on_the_qualification_of_crypto-assets_as_financial_instruments.pdf [<https://perma.cc/3FXZ-WKN8>].

223. ESMA, *Final Report: Guidelines on the Conditions and Criteria for the Qualification of Crypto-Assets as Financial Instruments*, ESMA75-453128700-1323 (Dec. 17, 2024), https://www.esma.europa.eu/sites/default/files/2024-12/ESMA75453128700-1323_Final_Report_Guidelines_on_the_conditions_and_criteria_for_the_qualification_of_CAs_as_FIs.pdf [<https://perma.cc/3FXZ-WKN8>].

224. See CCData, *supra* note 20 (Q3 consultation).

It is relevant to point out that, as part of the Guidelines, ESMA emphasizes that the Guidelines “*should not be interpreted as a definitive classification nor substitute or affect the necessary case-by-case analysis*”, hence requiring industry participants to independently carry out their case-by-case analysis.

Guideline no. 5 refers to two different scenarios, namely (1) where one or more crypto-assets are the underlying of a derivative contract and (2) where the crypto-asset itself can be deemed a derivative given its feature.

As to the latter, ESMA requires an analysis as to whether: (i) the rights of the crypto-asset holders are contingent upon a contract based on a future commitment (which can be either a forward, an option, a swap or a future), creating a time-lag between the conclusion and performance of the obligations under such contract; (ii) the crypto-asset’s value is derived from that of an underlying asset²²⁵ and (iii) follows the settlement modalities as referred to in Annex I Section C, points (4)-(10) of MiFID II.

Two additional considerations are made and namely:

- The standalone existence of the crypto-asset and its source of value: The underlying is the basis for determining the value or payoff of the derivative. The value of the crypto-asset should also depend on changes in the value of the underlying reference asset. If a crypto-asset does not derive its value from specified underlying assets as defined in MiFID II, but exists as a standalone crypto-asset, it should be distinguished from a derivative contract;
- The differences from asset-referenced tokens and derivatives: when the value of a token is established through reserved assets, this token should be considered as an asset-reference token within the meaning of MiCA and not as a derivative. On the contrary, when the value or performance of the token is established by synthetically referencing another asset or right or a combination thereof, national competent authorities and financial market participants should analyse whether it should be qualified as a financial instrument.

As to the former, ESMA stated that “contracts relating to a crypto-asset, a basket of crypto-assets or an index on crypto-assets as an underlying should be qualified as financial instruments within the meaning of MiFID II as it captures derivative contracts, which refer to an underlying such as assets, rights, obligations or indices.”

ESMA provides two specific examples of contracts involving crypto-assets and deemed to be classified as crypto-derivatives, namely perpetual futures²²⁶

225. ESMA, *MiCA Consultation Paper: Guidelines on the Qualification of Crypto-Assets as Financial Instruments*, (Jan. 29, 2024), https://www.esma.europa.eu/sites/default/files/2024-01/ESMA75-453128700-52_MiCA_Consultation_Paper_-_Guidelines_on_the_qualification_of_crypto-assets_as_financial_instruments.pdf [<https://perma.cc/3FXZ-WKN8>] (“E.g. the underlying is commodity like gold, oil or gas; the token has link with securities, foreign exchange, rates, credit, or other financial underlying instruments; the trade involve actual European Emission Allowances or equivalents like Certified Emission Reductions; the token’s link to climatic variables, freight rates, inflation rates, or other official economic statistics; whether the token representing a cash-settled arrangement based on the difference between open and closing trade prices, the token’s design or use primarily for transferring credit risk.”).

226. According to ESMA, while these instruments may not have a direct equivalent in traditional finance, their economic functions can however be similar somehow to warrant

and the case of a crypto-asset designed as a prearranged sale agreement where one party agrees to buy a certain amount of specific crypto-assets at a future date for a predetermined price.

Looking at the rationale backing ESMA argument on the eligibility of crypto-assets as an underlying instrument, this conclusion comes as the term “asset”, mentioned when referring to eligible underlying for derivatives, is not defined within MiFID II. Such notion should be interpreted in broad terms, resulting in covering assets such as crypto-assets.

However, ESMA provides a clear caveat when stating “*Therefore, given the broad range of possible eligible underlying assets, crypto-derivatives could be considered as such provided that the crypto-asset derivative falls under one of the categories of derivative contracts under Section C of Annex I of MiFID II* (emphasis added).”

Furthermore, ESMA touches upon the topic of settlement in the context of crypto-derivatives²²⁷ laying the following remarks:

- National competent authorities and financial market participants should carefully consider whether the form of settlement, whether in cash or through any crypto-assets, may affect the fundamental general classification of the product (i.e. between crypto-assets regulated under MiCA and financial instruments), if **all other inherent characteristics** and functions of derivative contracts in accordance with MiFID II are fulfilled by a product;
- The form of settlement, whether in cash or through any crypto-assets, would not necessarily affect the fundamental nature of the product. While the method of settlement is **an important consideration**, the general characteristics of the product ought, according to ESMA, not likely to be inherently altered by the settlement medium. As illustrated in the example below (in the context of Instrument B), we tend to disagree.

Case-by-Case Assessments

Let's take, for example, an OTC physically settled forward BTC<>USDT (“Instrument A”) and an OTC Stablecoin settled forward BTC<>ETH (“Instrument B”), which would qualify as Stablecoin Settled Derivative, and determine their nature.

Instrument A: We believe Instrument A would not be falling under MiFID II, despite certain of its features. In fact, by looking at its underlying and its financial features, could, at first glance, be captured under the catch-call instrument referred to under let. C(10). This seems the case as it would be deemed (i) a derivative contract (ii) relating to an asset not otherwise

classification as derivative contracts under MiFID II. Despite their unique structure, perpetual futures should be treated as derivative contracts as they involve an agreement between parties to exchange the performance of an underlying asset over time, and their value is derived from the price movements of that asset. Furthermore, national competent authorities and financial market participants should thus ensure that tokenised perpetual futures are assessed against the criteria set out in Annex I Section C, points (4)-(10) of MiFID II, acknowledging their growing significance in the crypto-asset markets. ESMA, *Interactive Single Rulebook: MiFID II, Annex I*, <https://www.esma.europa.eu/publications-and-data/interactive-single-rulebook/mifid-ii/annex-i> [<https://perma.cc/WT76-9F6V>] (last visited Feb. 6, 2026).

227. See ESMA, *Guidelines on the Conditions and Criteria for the Qualification of Crypto-Assets as Financial Instruments*, Guideline 5 § 55, 44, (Dec. 17, 2024).

mentioned in Section C(10). BTC as underlying would fall under the “assets” definition.

However, such a forward would fail to meet two other conditions, i.e. (i) to be **cash settled** at the option of one of the parties other than by reason of default or other termination, and (ii) to have the **characteristics of other derivative financial instruments**.

To determine what would be deemed cash-settlement, ESMA looks at the settlement conditions in MiFID II and the Commission Delegated Regulation (EU) 2017/565, considering that cash settlement would arise where parties exchange **cash payments** based on the difference between the contract price and the market value of the underlying reference. The notion of cash seems to be covered by the Regulation 2018/1672/EU which refers to currency, bearer negotiable instruments, and commodities used as highly-liquid stores of value and prepaid cards.

In conclusion, such an instrument would also very likely fail to meet the criteria, as (i) it would be cash-settled; (ii) it would be unlisted; and (iii) its terms would be generally bespoke and likely negotiated, thus lacking the standardization criteria.

Instrument B: With respect to Stablecoin Settled Derivatives, the regulatory framework appears more nuanced in view of the approach outlined in the Guidelines when the settlement features of a product may (or may not) alter the classification of the contract as financial instrument as otherwise.

While ESMA seems to consider the “cash settlement” as sufficient but not necessary element for a derivative to be deemed a financial instrument, one may argue that such approach does not seem to be adhering to the letter of the law.

In fact, the definition of cash, as we have outlined above, does not encompass crypto-assets, and the wording of point C(10) of Annex I of MiFID II seems clearly to exclude unlisted physically settled derivatives which do not meet the Criteria. We note, in fact, that elsewhere in the Guideline, ESMA looks at whether, to be itself classified as a derivative, a crypto-asset “(iii) follows the settlement modalities as referred to in Annex I Section C, points (4)-(10) of MiFID II”. This seems to strengthen our argument that a Stablecoin Settled Derivative, for as long as it fails to meet the Criteria, ought not to fall under the scope of MiFID II nor of MiCAR. This conclusion is reached without prejudice to the approach adopted by other national authorities at national level, such as in France by the AMF.²²⁸

In fact, the latter noted that:

Cash settlement is not conducted in lieu of the delivery of the underlying, as the wording might suggest. When the parties to a financial contract choose cash settlement as their execution method, it means that the debtor at the settlement date will have to pay its counterparty the price difference between when the contract was entered into and when it is settled,²²⁹ In practice, this price difference is settled in euros (or in another currency with legal tender), hence the name

228. Autorité des Marchés Financiers, *Analysis of the Legal Qualification of Cryptocurrency Derivatives* (Mar. 23, 2018), <https://www.amf-france.org/sites/institutionnel/files/resource/Analysis%20of%20the%20legal%20qualification%20of%20cryptocurrency%20derivatives.pdf> [<https://perma.cc/W4ET-EPBP>].

229. This difference is determined differently according to the type of financial contract (option, CFD, future/forward) but always gives rise to a single cash flow.

“cash settlement”, but it could just as easily be settled using another asset, such as a cryptocurrency, without that having any bearing on how the contract is classified.²³⁰

We note that, for the purpose of the French regulator, Instrument B would fall under the scope of its financial legislation.²³¹

UNITED KINGDOM

Applicable law: The legal and regulatory framework covering derivatives key instruments governing derivatives regulations in the UK is spread around several key statutory instruments, with the most relevant being:

- Financial Services and Markets Act 2000 (“FSMA”) as amended
- Financial Services and Markets Act 2023 (“FSMA 2023”)
- FSMA (Regulated Activities) Order 2001 (“RAO”) as amended
- FSMA (Financial Promotion) Order 2005 (“FPO”)
- Financial Services Act 2012 (“FSA”)
- FCA Handbook rules and guidance

Derivatives Definition: A first but quite comprehensive definition of derivatives is proposed under the FCA Handbook where defines derivatives are defined as:

- “a contract for differences, a future or an option (see also securitised derivative).
- those financial instruments defined in article 2 (1)(24)(c) of MiFIR or referred to in paragraphs 4 to 10 of Part 1 of Schedule 2 to the Regulated Activities Order.”²³²

The following products are outside the scope of UK MiFID provisions but are subject to the local financial regulatory regime:

- Physically settled options on palladium, platinum, gold or silver; and
- Physically settled futures where the contract is deemed to be for investment purposes (and which fall outside the scope of UK MiFID provisions).²³³

230. *Id.*

231. Autorité des Marchés Financiers, Analysis of the Legal Qualification of Cryptocurrency Derivatives 6 (Mar. 23, 2018), <https://www.amf-france.org/sites/institutionnel/files/resource/Analysis%20of%20the%20legal%20qualification%20of%20cryptocurrency%20derivatives.pdf> [https://perma.cc/W4ET-EPBP]. This categorization would be in good company, as the AMF deems other crypto-derivatives, including CFDs, Binary Options and Rolling Spot Forex, cash-settled. These considerations are based on the following assessment: “*In the case of CFDs, their very name – “financial contracts for difference” – indicates that they are exclusively cash-settled. The idea behind these products is to enable investors to gain exposure to the underlying (whatever it may be) without the drawbacks of physical ownership*14; - Binary options resemble short-term or very short-term bets. Physical delivery of the underlying would be at odds with the rationale of such products; - Rolling spot forex products have an economic structure that means they are like CFDs. The AMF considers that these three types of cryptocurrency derivatives are cash-settled.”

232. *Derivative*, FINANCIAL CONDUCT AUTHORITY, <https://handbook.fca.org.uk/glossary/G279?timeline=true> [https://perma.cc/HQ9Y-QBCW] (last visited Mar. 10, 2026).

233. UK law/regulations that implemented Council Directive 2014/65/EU of the European Parliament and of the Council of May 15, 2014, on markets in financial instruments amending Directive 2002/92/EC and Directive 2011/61/EU.

Notably, derivatives are not classed as transferable securities under UK law, except Exchange Traded Derivatives (“ETDs”).

More specifically, Art. 83 to Art. 85 of the RAO define, respectively, Options,²³⁴ Futures,²³⁵ and CFDs.²³⁶ These definitions should be supplemented,

234. Options to acquire or dispose of—

- (a) a security or contractually based investment (other than one of a kind specified by this article);
- (b) currency of the United Kingdom or any other country or territory;
- (c) palladium, platinum, gold or silver; or
- (d) an option to acquire or dispose of an investment of the kind specified by this article by virtue of paragraph (a), (b) or (c). Financial Services and Markets Act 2000 (Regulated Activities) Order 2001, SI 2001/544, arts. 83–85 (UK), <https://www.legislation.gov.uk/uksi/2001/544/arts/83-85> [<https://perma.cc/742E-KSMV>].

235.

- (1) Subject to paragraph (2), rights under a contract for the sale of a commodity or property of any other description under which delivery is to be made at a future date and at a price agreed on when the contract is made.
- (2) There are excluded from paragraph (1) rights under any contract which is made for commercial and not investment purposes.
- (3) A contract is to be regarded as made for investment purposes if it is made or traded on a recognised investment exchange, or is made otherwise than on a recognised investment exchange but is expressed to be as traded on such an exchange or on the same terms as those on which an equivalent contract would be made on such an exchange.
- (4) A contract not falling within paragraph (3) is to be regarded as made for commercial purposes if under the terms of the contract delivery is to be made within seven days, unless it can be shown that there existed an understanding that (notwithstanding the express terms of the contract) delivery would not be made within seven days.
- (5) The following are indications that a contract not falling within paragraph (3) or (4) is made for commercial purposes and the absence of them is an indication that it is made for investment purposes—
 - (a) one or more of the parties is a producer of the commodity or other property, or uses it in his business;
 - (b) the seller delivers or intends to deliver the property or the purchaser takes or intends to take delivery of it.
- (6) It is an indication that a contract is made for commercial purposes that the prices, the lot, the delivery date or other terms are determined by the parties for the purposes of the particular contract and not by reference (or not solely by reference) to regularly published prices, to standard lots or delivery dates or to standard terms.
- (7) The following are indications that a contract is made for investment purposes—
 - (a) it is expressed to be as traded on an investment exchange;
 - (b) performance of the contract is ensured by an investment exchange or a clearing house;
 - (c) there are arrangements for the payment or provision of margin.
- (8) For the purposes of paragraph (1), a price is to be taken to be agreed on when a contract is made—
 - (a) notwithstanding that it is left to be determined by reference to the price at which a contract is to be entered into on a market or exchange or could be entered into at a time and place specified in the contract; or
 - (b) in a case where the contract is expressed to be by reference to a standard lot and quality, notwithstanding that provision is made for a variation in the price to take account of any variation in quantity or quality on delivery.

Id.

236. (1) Subject to paragraph (2), rights under—
- (a) a contract for differences; or

when dealing with certain investment firms, credit institutions and management companies authorized under Part 4A of the FSMA, by MiFID definitions, ultimately leading to the application of the same considerations set out above.

Crypto-derivatives: In 2018, the FCA stated that “*Cryptocurrency derivatives are capable of being financial instruments under the Markets in Financial Instruments Directive II (MIFID II), although we do not consider cryptocurrencies to be currencies or commodities for regulatory purposes under MiFID II*”. In this Statement, it clearly included cryptocurrency futures, options and CFDs²³⁷, without, other than in the context of CFDs, looking at the settlement features of the derivative.

The FCA has, from 6 January 2021, banned the sale, marketing, and distribution of derivatives (i.e. contract for difference – CFDs, options and futures) and exchange traded notes that reference unregulated transferable cryptoassets by firms acting in, or from, the United Kingdom to retail consumers.

In doing so, under COBS 22.6, it has introduced a definition of crypto-derivatives which reads as follows: “*A derivative where the underlying is, or includes, an unregulated derivative transferable cryptoasset or an index or derivative relating to an unregulated transferable cryptoasset*”. To fully appreciate the scope of this definition, the terms “derivative” and “unregulated transferable cryptoasset” shall be analyzed.

Conversely, “unregulated transferable cryptoasset” is defined as “a cryptographically secured digital representation of value or contractual rights that uses distributed ledger technology and which:(a) is capable of being traded on or transferred through a platform or other forum; (b) is not limited to being

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- (b) any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss by reference to fluctuations in—
 - (i) the value or price of property of any description; or
 - (ii) an index or other factor designated for that purpose in the contract.
 - (2) There are excluded from paragraph (1)—
 - (a) rights under a contract if the parties intend that the profit is to be secured or the loss is to be avoided by one or more of the parties taking delivery of any property to which the contract relates;
 - (b) rights under a contract under which money is received by way of deposit on terms that any interest or other return to be paid on the sum deposited will be calculated by reference to fluctuations in an index or other factor;
 - (c) rights under any contract under which—
 - (i) money is received by the Director of Savings as deposits or otherwise in connection with the business of the National Savings Bank; or
 - (ii) money is raised under the National Loans Act 1968 under the auspices of the Director of Savings or treated as so raised by virtue of section 11(3) of the National Debt Act 1972;
 - (d) rights under a qualifying contract of insurance.

Id.

237. See Financial Conduct Authority, *Cryptocurrency Derivatives* (Apr. 6, 2018), <https://www.fca.org.uk/news/statements/cryptocurrency-derivatives> [<https://perma.cc/A64G-J7RX>]. For a definition of those derivatives under the Statement: **Cryptocurrency futures** – a derivative contract in which each party agrees to exchange cryptocurrency at a future date and at a price agreed by both parties. **Cryptocurrency contracts for differences (CFDs)** – a cash-settled derivative contract in which the parties to the contract seek to secure a profit or avoid a loss by agreeing to exchange the difference in price between the value of the cryptocurrency CFD contract at its outset and at its termination. **Cryptocurrency options** – a contract which grants the beneficiary the right to acquire or dispose of cryptocurrencies.

transferred to its issuer in exchange for a good or service, or to an operator of a network that facilitates its exchange for a good or service; (c) is not electronic money; (d) is not a specified investment; (e) is not a representation of ownership or other property right in a commodity; and (f) is not money issued by a central bank,”²³⁸

While the definition of Futures and the one of CFD seem generally broad enough to cover crypto-derivatives, it appears that the Options definition including crypto-derivatives as underlying may fall out of scope.

Furthermore, in terms of reporting, the Bank of England specified that, as a principle, derivatives based on cryptoassets should be reported under the asset class of the cryptoasset they are based on.²³⁹ This means that when dealing with derivatives having security (e.g. equity-like) tokens as underlying, these should be reported as equity derivatives. Derivatives not clearly falling into one of the specified asset classes should be reported under the asset class most closely resembling the derivative and, in the context of BTC or ETH derivatives, these would need to be reported under the commodity asset class. Derivatives based on cryptoassets should not, however, be reported under the currency asset class, since cryptoassets don't have an ISO 4217 currency code required for currency derivatives.

Considering the above definition above, the following takeaways should apply:

- **Specified investment and captured under the Sale Ban:** If the underlying asset of the derivative is unregulated under UK financial services law (i.e. not captured under let. (c) to (f) of the above definition), then it is typically characterized as crypto-derivative captured by the above sale ban and, in our view, falls under the definition of specified investment under the RAO;
- **Specified investment, but not captured under the sale ban:** If the underlying asset of the derivative is regulated under UK financial services law (i.e. captured under let. (c) to (f) of the above definition), then it seems to fall outside the definition of crypto-derivative for the purposes of the Sale Ban, but should, however, fall under the definition of specified investment under the RAO. This would be the case for a derivative having as underlying a security token (i.e. a tokenized security or a token having the features of a specified investment itself), as well as a token having as underlying fiat currency, e.g. a stablecoin.
 - Without prejudice to the above, OTC physically settled crypto-derivative forwards could fall outside the of the RAO and the FPO for the same considerations raised under MiFID II.

BRITISH VIRGIN ISLANDS

Applicable law: The main regulatory framework applicable to derivatives in the BVI is set out under the Securities and Investment Business Act, 2010 (“SIBA”).

238. Financial Conduct Authority, *Unregulated Transferable Cryptoasset*, <https://handbook.fca.org.uk/glossary/G3407u> [<https://perma.cc/Q339-ADJ6>] (last visited Mar. 10, 2026).

239. Bank of Eng. Fin. Pol’y Comm., *UK EMIR Reporting Q&As*, <https://www.bankofengland.co.uk/financial-stability/trade-repository-data/uk-emir-reporting-qas> [<https://perma.cc/3BN3-ZRJE>] (last visited Feb. 9, 2026).

Definition of Derivative: While no specific of “derivative” is provided, the SIBA lists under Schedule 1 a list of “investments” which include, amongst others, various derivatives such as Options (Paragraph 5)²⁴⁰, Futures (Paragraph 6)²⁴¹ and CFDs (Paragraph 7)²⁴²

Crypto-derivatives: The treatment of crypto-derivatives under the SIBA has been assessed and clarified under a dedicated Guidance issued by the BVI Financial Services Commission²⁴³ For example, futures and CFDs, involving a crypto-asset, fall under the definition of Investments (within the meaning of SIBA) if conducted for investment purposes).

However, when options are involved, a different conclusion shall be reached as only where a crypto-asset is deemed an investment under schedule 1 of SIBA, and that investment becomes the subject of an option to acquire or dispose, such option would be covered under SIBA. Conversely, if the crypto-asset does not qualify as such, e.g. BTC, then options having such crypto-asset underlying would fall outside the scope of SIBA. In view of this nuance, few crypto firms have chosen BVI as their jurisdiction of choice for their crypto-options business.

HONG KONG

Applicable Law: The key regulatory framework covering derivatives in Hong Kong is set out under the Securities and Futures Ordinance as, amended from time to time (“SFO”).

240. Paragraph 5, Schedule 1 of SIBA defines options as “options to acquire or dispose of – (a) an investment falling within any other paragraph of this Schedule; (b) any currency; (c) palladium, platinum, gold or silver; or (d) an option to acquire or dispose of an investment falling within subparagraph (a), (b) or (c) of this paragraph.” Securities and Investment Business Act (Revised Edition 2020), art. 1, ¶¶ 5–7 (British Virgin Islands), https://www.bvifsc.vg/sites/default/files/securities_and_investment_business_act.pdf [<https://perma.cc/XCP5-E6BR>].

241. Paragraph 6, Schedule 1 of SIBA defines futures as “(1) Rights under a contract for the sale of a commodity or property of any other description under which delivery is to be made at a future date and at a price agreed upon when the contract is made, other than a contract made for commercial and not investment purposes. (2) A contract shall be regarded as made for investment purposes if it is made or traded on an investment exchange, or made otherwise than on such an exchange but expressed to be as traded on such an exchange or on the same terms as those on which an equivalent contract would be made on such an exchange. (3) A contract not falling within subparagraph (2) shall be regarded as made for commercial purposes if, under the terms of the contract, delivery is to be made within seven days.” *Id.*

242. Paragraph 7, Schedule 1 of SIBA includes the definition of “contracts for differences” as: “(1) Rights under – (a) a contract for differences; or (b) any other contract the purpose or intended purpose of which is to secure a profit or avoid a loss by reference to fluctuations in – (i) the value or price of property of any description; or (ii) an index or other factor designated for that purpose in the contract, other than a contract where the parties intend that the profit is to be obtained or the loss avoided by taking delivery of any property to which the contract relates. (2) This paragraph does not apply to rights under a contract under which money is received by way of deposit on terms that any interest or other return to be paid on the sum deposited will be calculated by reference to fluctuations in an index or other factor.”

243. British Virgin Islands Fin. Servs. Comm’n, *Guidance on Regulation of Virtual Assets in the Virgin Islands* (BVI) (July 10, 2020), https://www.bvifsc.vg/sites/default/files/guidance_on_regulation_of_virtual_assets_in_the_virgin_islands_bvi_final.pdf [<https://perma.cc/VS2A-7W75>].

Definition of Derivatives: Derivatives may be classed as financial products²⁴⁴ and more in detail fall within the definition of Securities²⁴⁵ and/or,

244. According to the SFO, Schedule 1, financial product (金融產品) means—

- (a) any securities;
- (b) any futures contract;
- (c) any collective investment scheme;
- (d) any leveraged foreign exchange contract;
- (e) any structured product

Securities and Futures Ordinance (Cap. 571) (H.K.) (updated Aug. 24, 2025), <https://www.elegislation.gov.hk/hk/cap571> [<https://perma.cc/A7QV-32XR> 1].

245. According to the SFO, Schedule 1, securities (證券) means—

- (a) shares, stocks, debentures, loan stocks, funds, bonds or notes of, or issued by, a body, whether incorporated or unincorporated, or a government or municipal government authority;
- (b) rights, options or interests (whether described as units or otherwise) in, or in respect of, such shares, stocks, debentures, loan stocks, funds, bonds or notes;
- (c) certificates of interest or participation in, temporary or interim certificates for, receipts for, or warrants to subscribe for or purchase, such shares, stocks, debentures, loan stocks, funds, bonds or notes;
- (d) interests in any collective investment scheme;
- (e) interests, rights or property, whether in the form of an instrument or otherwise, commonly known as securities;
- (f) interests, rights or property which is interests, rights or property, or is of a class or description of interests, rights or property, prescribed by notice under section 392 of this Ordinance as being regarded as securities in accordance with the terms of the notice; (Amended 8 of 2011 s. 14)

(g) a structured product that does not come within any of paragraphs (a) to (f) but in respect of which the issue of any advertisement, invitation or document that is or contains an invitation to the public to do any act referred to in section 103(1)(a) of this Ordinance is authorized, or required to be authorized, under section 105(1) of this Ordinance, (Added 8 of 2011 s. 14) but does not include—

- (i) shares or debentures of a company that is a private company within the meaning of section 11 of the Companies Ordinance (Cap. 622); (Amended 28 of 2012 ss. 912 & 920)
- (ii) any interest in any collective investment scheme that is—
 - (A) a registered scheme as defined in section 2(1) of the Mandatory Provident Fund Schemes Ordinance (Cap. 485), or its constituent fund as defined in section 2 of the Mandatory Provident Fund Schemes (General) Regulation (Cap. 485 sub. leg. A);
 - (B) an occupational retirement scheme as defined in section 2(1) of the Occupational Retirement Schemes Ordinance (Cap. 426); or
 - (C) a contract of insurance in relation to any class of insurance business specified in Schedule 1 to the Insurance Ordinance (Cap. 41); (Amended 12 of 2015 s. 144)
- (iii) any interest arising under a general partnership agreement or proposed general partnership agreement unless the agreement or proposed agreement relates to an undertaking, scheme, enterprise or investment contract promoted by or on behalf of a person whose ordinary business is or includes the promotion of similar undertakings, schemes, enterprises or investment contracts (whether or not that person is, or is to become, a party to the agreement or proposed agreement);
- (iv) any negotiable receipt or other negotiable certificate or document evidencing the deposit of a sum of money, or any rights or interest arising under the receipt, certificate or document;
- (v) any bill of exchange within the meaning of section 3 of the Bills of Exchange Ordinance (Cap. 19) and any promissory note within the meaning of section 89 of that Ordinance;
- (vi) any debenture that specifically provides that it is not negotiable or transferable (excluding a debenture that is a structured product in respect

depending on the circumstances, Futures²⁴⁶ or leveraged foreign exchange contracts under the SFO.

Crypto-Derivatives: In 2017, SFA issued a circular²⁴⁷ clearly setting out that certain crypto-derivatives, such as exchange-listed BTC futures fall under the scope of the SFO as futures contracts. Furthermore, in the same circular SFA emphasized that cryptocurrency options, swaps, and contracts for differences, depending on their terms and features, may be regarded as “*securities*” as defined under the SFO.

Later in December 2023, SFA issued a joint circular (“2023 Circular”) introducing the concept of a VA-related product.²⁴⁸ There, the SFA explained that VA-related products refer to products which (a) have a principal investment objective or strategy to invest in virtual assets; (b) derive their value principally from the value and characteristics of virtual assets; or (c) track or replicate the investment results or returns which closely match or correspond to virtual assets. These VA-related products have been defined as complex products, and generally subject to distribution restrictions.

Furthermore, in 2024, the Financial Services and the Treasury Bureau (“FSTB”) issued a consultation paper on a legislative proposal to regulate OTC spot trading of certain VAs (“VA OTC services”) under the existing Anti-Money Laundering and Counter-Terrorist Financing Ordinance (“AMLO”) (“**Consultation Paper**”). The Consultation Paper does not directly address the taxonomy of what would be deemed “VA derivative” but proposes to restrict firms offering VA OTC services from engaging in VA derivatives offering.

In conclusion, while structured products entailing crypto assets and certain listed crypto futures fall fairly and squarely within the perimeter of the

of which the issue of any advertisement, invitation or document that is or contains an invitation to the public to do any act referred to in section 103(1)(a) of this Ordinance is authorized, or required to be authorized, under section 105(1) of this Ordinance); (Amended 8 of 2011 s. 14)

- (vii) interests, rights or property which is interests, rights or property, or is of a class or description of interests, rights or property, prescribed by notice under section 392 of this Ordinance as not being regarded as securities in accordance with the terms of the notice.

Id.

246. According to the SFO, Schedule 1, *futures contract* (期貨合約) means—

- (a) a contract or an option on a contract made under the rules or conventions of a futures market;
- (b) interests, rights or property which is interests, rights or property, or is of a class or description of interests, rights or property, prescribed by notice under section 392 of this Ordinance as being regarded as futures contracts in accordance with the terms of the notice, but does not include interests, rights or property which is interests, rights or property, or is of a class or description of interests, rights or property, prescribed by notice under section 392 of this Ordinance as not being regarded as futures contracts in accordance with the terms of the notice.

Id.

247. *Circular to Licensed Corporations and Registered Institutions on Bitcoin Futures Contracts and Cryptocurrency-Related Investment Products*, H.K. MONETARY AUTH. & SEC. & FUTURES COMM’N (Dec. 11, 2017), <https://apps.sfc.hk/edistributionWeb/gateway/EN/circular/doc?refNo=17EC79> [https://perma.cc/2RUB-LNBM].

248. *Joint Circular on Intermediaries’ Virtual Asset-Related Activities*, H.K. MONETARY AUTH. & SEC. & FUTURES COMM’N 2 (2023), <https://brdr.hkma.gov.hk/eng/doc-ldg/docId/getPdf/20231222-1-EN/20231222-1-EN.pdf> [https://perma.cc/8SE2-236B].

SFO, from a combined interpretation of the scope of “future contract,” where references to a “future market” is made, and “security,” especially as it includes rights, options, or interests in respect of shares, stocks, debentures, loan stocks, funds, bonds or notes, it seems that certain **OTC-traded crypto-derivatives** that have an underlying digital asset that does not qualify as a security and/or as future itself are not captured by such terms and therefore fall outside the SFO. However, these may qualify as VA-related products and be subject to certain sales restrictions arising from their “complex nature,” as set out under the 2023 Circular.

Furthermore, we note that in March 2024, the Hong Kong Monetary Authority (HKMA) and the Securities and Futures Commission (SFC) issued a joint further consultation paper (Consultation Paper) on enhancements to the Over-the-Counter (OTC) derivatives reporting regime for Hong Kong to mandate – (1) the use of Unique Transaction Identifier (UTI), (2) the use of Unique Product Identifier (UPI), and (3) the reporting of Critical Data Elements (CDE).

As part of this consultation, the HKMA and SFC introduced a reporting requirement, effective from September 2025, also with respect to crypto-derivatives, i.e. when the underlying of a derivative is a crypto-asset, enabling the utilization of the Digital Token Identifier (DTI) for reporting purposes. In doing so, they acknowledged that the underlying of such crypto-derivatives investments cannot be classified under the existing traditional five asset classes: interest rates, foreign exchange, credit, commodities, and equities.

SINGAPORE

Applicable law: Derivatives are generally subject to the provisions of the Securities and Futures Act 2001 (SFA) and its secondary legislation, considering, in particular, the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 and the Securities and Futures (Prescribed Underlying Thing) Regulations 2020. Derivatives generally fall under the definition of Capital Markets Product (“CMP”), leading to the considerations set out hereunder.

Definition of derivatives: Before assessing whether crypto-derivatives fall under the existing framework applicable to “traditional” derivatives, it seems worth to look into the existing regulatory definition of derivatives under Singapore law. Differently from other jurisdictions analysed thus far, Singapore provides a quite extensive definition of derivatives.

A derivatives contract means: (a) any contract or arrangement where: (i) a party to the contract or arrangement is, or may be required to, discharge all or any of its obligations under the contract or arrangement at some future time; and (ii) the value of the contract or arrangement, is determined (whether directly or indirectly, or whether wholly or in part) by reference to, is derived from or varies by reference to, either of the following: (A) the value or amount of one or more underlying things;²⁴⁹ (B) fluctuations in the values

249. This definition has been recently amended through the Securities and Futures (Prescribed Underlying Thing) Regulations 2020 to include:

- (a) in relation to a futures contract traded on an organised market that is established or operated by any recognised market operator — any intangible property that is not a payment token;

or amounts of one or more underlying things; or (b) any contract or arrangement that is, or that belongs to a class of contracts or arrangements that is, prescribed by the Local Regulator; but does not include: (i) securities; (ii) units in a collective investment scheme; (iii) spot contracts; (iv) a deposit, where accepted by a Singapore licensed bank, merchant bank or finance company; (v) any contract of insurance in relation to any class of insurance in relation to any class of insurance business specified in the Insurance Act, Chapter 142 of Singapore or (vi) any contract or arrangement that is, or that belongs to a class of contracts or arrangements that is, prescribed by the Local Regulator (see for example, Securities and Futures (Prescribed Excluded Derivatives Contracts) Regulations 2018 which refers essentially to commodity derivatives if: (1) the contract or arrangement is for the purpose of fulfilling the needs of the day-to-day operations of the business of one or more of the parties to the contract or arrangement; and (2) subject to any settlement option (i.e. an option under which the parties to the contract or arrangement may settle part or all of the amounts owing by one party to the other party by payment of cash instead of delivery of the commodity or commodities, as the case may be) that may be agreed amongst the parties to the contract or arrangement - (i) the seller of the underlying commodities is required to deliver the underlying commodities; and (ii) the buyer of the underlying commodities is required to take delivery of the underlying commodities).

A securities-based derivatives contract is defined as: “any derivatives contract of which the underlying thing or any of the underlying things is a security or a securities index, but does not include any derivatives contract that is, or that belongs to a class of derivatives contracts that is, prescribed.”²⁵⁰ Under the Securities and Futures (Prescribed Excluded Derivatives Contracts) Regulations 2018, for the purposes of the definition of “Derivatives Contract”, a contract or arrangement for the sale and purchase of one or more commodities (called underlying commodities) is prescribed not to be a derivatives contract if:

- a) the contract or arrangement is for the purpose of fulfilling the needs of the day-to-day operations of the business of one or more of the parties to the contract or arrangement; and
- (b) subject to any settlement option that may be agreed amongst the parties to the contract or arrangement — (i) the seller of the underlying commodities is required to deliver the underlying commodities; and (ii) the buyer of the underlying commodities is required to take delivery of the underlying commodities.²⁵¹

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- (b) in relation to a futures contract traded on an organised market that is established or operated by any approved exchange —
 - (i) any payment token; and
 - (ii) any intangible property;
 - (c) in relation to a derivatives contract (other than a futures contract) traded on an organised market that is established or operated by any approved exchange — any payment token.

Securities and Futures (Prescribed Underlying Thing) Regulations 2020, §2 (Sing.).

250. Securities and Futures Act 2001, §2 (Sing.).

251. Securities and Futures (Prescribed Excluded Derivatives Contracts) Regulations 2018, §2 (Sing.)

In general, certain exotic derivatives are not currently regulated in Singapore. In this regard, “Unregulated Derivatives” presently means OTCs which do not have units in a CIS, a commodity, a financial instrument (which is defined to include any currency, currency index, interest rate, interest rate instrument, interest rate index, securities or securities index), the credit of any person, and/or any other prescribed underlying thing as underlying asset. Examples include OTC swaps relating to weather derivatives and, as discussed below, derivatives on certain crypto-assets.

Crypto-derivatives: In order to assess the treatment of crypto-derivatives, it is necessary to assess the definition of “crypto-asset” under Singapore law.

Crypto assets may fall within the definition of a digital payment token (DPT) under the Payment Services Act 2019 (PS Act),²⁵² or a capital markets product (CMP) under the Securities and Futures Act 2001 (SFA).²⁵³

This distinction is quite relevant in that a crypto-derivative having a CMP as underlying (i.e. token qualifying as CMP) would be deemed a securities-based derivatives contract and be subject to the SFA. Furthermore, the MAS specified that where the underlying a token has value is permanently fixed to one or more currencies, this would still fall under the SFA and not qualify as DPT.²⁵⁴

Crypto-derivatives having DPT as underlying. These include contracts-for-differences and futures contracts. MAS clarified in the Guidelines on Provision of Digital Payment Token Services to the Public that it does not regulate such derivatives unless they are offered by an approved exchange (“AE”) under the SFA. Interestingly, they reached this conclusion on the basis that “Payment Token Derivatives as a general asset class are not yet suitable to be regulated. Payment tokens tend to exhibit high volatility and are intrinsically difficult to value and the same applies to Payment Token Derivatives,” and consequently the MAS’ response that:

At this point, MAS will not regulate non-AE Payment Token Derivatives. MAS is of the view that regulating Payment Token Derivatives offered by non-AE entities (including digital payment token service providers under the Payment Services Act (“PS Act”)) will confer misplaced confidence in such highly volatile products that could lead to a wider offering to retail investors. MAS also notes that retail participation in such products remains relatively low, and will continue to monitor developments in this area. This calibrated approach also provides institutional investors a regulated alternative

252. Defined in the Payment Services Act 2019, digital payment token means: Any digital representation of value (other than an excluded digital representation of value) that — (a) is expressed as a unit; (b) is not denominated in any currency, and is not pegged by its issuer to any currency; (c) is, or is intended to be, a medium of exchange accepted by the public, or a section of the public, as payment for goods or services or for the discharge of a debt; (d) can be transferred, stored or traded electronically; and (e) satisfies such other characteristics as the MAS may prescribe. Payment Services Act 2019, §2 (Sing.).

253. A ‘capital markets product’ is defined as: “[a]ny securities, units in a collective investment scheme, derivatives contracts, spot foreign exchange contracts for the purposes of leveraged foreign exchange trading, and such other products as the MAS may prescribe as capital markets products.” Securities and Futures Act 2001, §2 (Sing.).

254. “A derivatives contract referencing a token which value is permanently fixed to one or more currencies is not considered a Payment Token Derivative, and thus not subject to the additional measures for retail investors. However, it is still a derivatives contract regulated under the SFA.” *Response to Feedback Received: Proposed Regulatory Approach for Derivatives Contracts on Payment Tokens*, MONETARY AUTH. OF SING. 7 (2020).

to gain exposure to the underlying assets, while the industry transforms and develops alternative products that may be suitable to a wider group of investors.²⁵⁵

The position currently adopted by MAS in Singapore could be summarized as follows:²⁵⁶

- **Crypto-derivatives listed on AE:**²⁵⁷ Direct oversight. These products are subject to regulatory requirements and supervisory oversight.
- **Crypto-derivatives offered by MAS-regulated intermediaries and offered to retail clients in Singapore:** Indirect supervision. MAS has issued circulars to all financial institutions to comply with additional measures if they offer crypto products to retail investors. These include requirements for warnings tailored to the risk of transacting in crypto products in informational materials provided to investors, restrictions on advertisement, and additional margins to be collected from retail investors to mitigate the risk of large losses from trading in volatile and leveraged products.
- **Crypto-derivatives having a token qualifying as CMPs or currency(ies) as underlying:** regulated under the SFA.
- **Other crypto-derivatives** (e.g. unlisted, offered on venues other than Approved Exchanges and/or offered by non-MAS-regulated intermediaries):²⁵⁸ Unregulated.

UAE - DUBAI (EXC. DIFC) AND ADGM

In January 2026, the UAE government published two new laws relating to regulation of the capital markets and the replacement of the Securities and Commodities Authority (SCA) as regulator with the Capital Markets Authority (CMA). Federal Decree-Law No. (32) sets out the role of the CMA, including its objectives, powers and executive and governance arrangements. Federal Decree-Law No. (33) provides information on the types of financial activities and financial entities subject to the regulation, licensing, supervision and oversight of the CMA. Both laws came into force on 1 January 1, 2026, although there is a one-year period for entities and individuals to adjust their status in accordance with the provisions of Federal Decree-Law No. (33).

Applicable law: The provision and marketing of financial products in ‘mainland’ UAE (excluding the financial free zones) is regulated by: (a) the UAE Central Bank (the CBUAE), the UAE’s federal banking regulator and monetary authority; and (b) the UAE Securities and Commodities Authority (the SCA), the UAE’s federal securities and commodities regulator.

255. *Response to Feedback Received: Proposed Regulatory Approach for Derivatives Contracts on Payment Tokens*, MONETARY AUTH. OF SING. 4 (2020).

256. Parliament, *Reply to Parliamentary Question on Regulation of Crypto Derivatives on Approved Exchanges* (Jan. 6, 2020), <https://www.mas.gov.sg/news/parliamentary-replies/2020/reply-to-parliamentary-question-on-regulation-of-crypto-derivatives-on-approved-exchanges> [<https://perma.cc/M6GN-87Q8>] (Sing.).

257. Securities and Futures (Prescribed Underlying Thing) Regulations 2020, §2 (Sing.).

258. “MAS is of the view that while overseas exchanges are not prohibited by MAS from offering Payment Token Derivatives, such Payment Token Derivatives will not be regulated by MAS under the SFA.” *Response to Feedback Received: Proposed Regulatory Approach for Derivatives Contracts on Payment Tokens*, MONETARY AUTH. OF SING. 4 (2020).

From a derivatives standpoint, the legislative and regulatory framework is set out under the following instruments:

- Federal Law No. 14 of 2018 regarding the Central Bank and Organization of Financial Institutions and Activities (“2018 Law”)
- UAE Central Bank Regulations regarding the Licensing and Monitoring of Exchange Business 2014 (“UAE Exchange Business Regulations”)
- Decision No. (22/R.M) of 2018 Concerning the Regulation of Derivatives Contracts (the SCA Derivatives Regulation)
- SCA Chairman Decision No. 13/R.M. of 2021 on the Rulebook of Financial Activities and Mechanisms for Adjusting Positions (the “Rulebook”)

In the context of crypto-assets, the position in mainland UAE has been further complicated by Law No. (4) of 2022 on the Regulation of Virtual Assets in the Emirate of Dubai (DVAL), which was published in February 2022. In particular, the DVAL established an Emirate-level framework for the regulation of virtual assets in Dubai via the establishment of the Dubai Virtual Assets Regulatory Authority (VARA) as the competent body responsible for the regulation, control and oversight of virtual asset activities in Dubai. The SCA has, in turn, delegated licensing responsibility for virtual assets activities in Dubai to the VARA in accordance with the provisions of Cabinet Resolution No. 111 of 2022 on the Regulation of Virtual Assets and Service Providers (the SCA Virtual Assets Delegation Resolution).

For the purposes of this Article, particular emphasis will be made on the approach adopted by VARA vis-à-vis SCA in relation to crypto-derivatives.

Derivatives Definition: As mentioned above, for onshore financial products, SCA retains its competence.

The Rulebook specifically includes “Derivatives Contracts” as a sub-category of “Securities,” with these being financial products, and therefore the same principles will apply to Derivatives as to shares and notes from an SCA perspective.

At federal level, two definitions of derivatives are provided as follows:²⁵⁹

- **Derivative Contracts:** Financial contracts of a specific value determined by the contracting parties. Such contracts derive their value from the value of the Underlying Securities and are dependent on the change of value of such securities. Underlying Securities are defined as the securities, the foreign securities, or the local or foreign indexes.
- **Commodities Contracts:** Contracts for Commodities,²⁶⁰ indexes, currencies, or other financial instruments approved by the SCA such as options contracts and future contracts. The Definition (commodities contracts) has been amended pursuant to the decision of the Chairman of the Board of Directors of the Authority No.(8/RM) of 2022.

259. *Glossary of Terms*, CAP. MKT. AUTH. (U.A.E.) 2-3 (2022), <https://www.sca.gov.ae/assets/aa00868c/the-financial-terms-dictionary.aspx> [<https://perma.cc/MQ7W-ADKZ>].

260. *Id.* Commodity means any goods of a fungible nature that are capable of being delivered, including metals and their ores and alloys, agricultural products, and energy such as electricity, and which are not contrary to public policy in the UAE. Commodities are defined as: “Agricultural crops, metals, natural resources or any other goods traded under contracts.”

Crypto-derivatives: We look at the treatment of crypto-derivatives under SCA and under VARA framework.

SCA: As to the former, the SCA issued a set of Guidelines,²⁶¹ where it provided its position on Digital Commodity Derivatives Contract.²⁶² The position provided was as follows:

Although the digital commodity derivatives contracts are in the form of an encrypted asset that can be traded or transferred digitally, it is considered a security subject to the legislations regulating traditional securities, taking into account any technological requirements that the SCA may impose from time to time as the case may be to enable proper use within a secure digital environment.

In such document, it also introduced a set of restrictions for financial consulting companies in virtual assets and, among the various restrictions, it also included trading restrictions on financial derivatives associated with a particular virtual asset subject to their consultation.

From a reading of the definition of “commodity” provided above, one may argue that crypto assets may fall under the definition of “goods of a fungible nature that are capable of being delivered” if the concept of “delivery” is construed in a very broad manner, i.e. by referring to the delivery of the private key of a crypto-asset, effectively enabling the transferee to control such asset and/or the transfer of the crypto asset to one wallet to another. For example, such interpretation could be adopted if one were to adopt the same approach as ESMA when considering the concept of “physically settled” in its Guidelines.²⁶³ In considering the concept, ESMA explains:

“Physically settled” incorporates a broad range of delivery methods and includes:

- i. physical delivery of the relevant commodities themselves;
- ii. delivery of a document giving rights of an ownership nature to the relevant commodities or the relevant quantity of the commodities concerned (such as a bill of lading or a warehouse warrant); or,
- iii. another method of bringing about the transfer of rights of an ownership nature in relation to the relevant quantity of commodities without physically delivering them (including notification, scheduling or nomination to the operator of an energy supply network) that entitles the recipient to the relevant quantity of the commodities.

However, to the knowledge of the authors, there is no such guideline in the UAE.

On the other hand, considering the definition of commodity and the separate definition of virtual asset,²⁶⁴ it can be argued that the latter are digital

261. *Guidelines: Regulation of Virtual Assets and Virtual Assets Services Providers*, SEC. & COMMODITIES AUTH. (U.A.E.) 6 (2023), <https://www.sca.gov.ae/assets/2f70b3b8/guidelines-regulation-of-virtual-assets-and-virtual-assets-services-providers.aspx> [https://perma.cc/P558-PHAL].

262. *Id.* (using the term “digital commodity contracts,” but not defining it).

263. *Guidelines: On the Application of C6 and C7 of Annex 1 of MiFID II*, EUR. SEC. & MKT. AUTH. 6 (May 6, 2019), https://www.esma.europa.eu/sites/default/files/library/esma-70-156-869_guidelines_on_c6_c7_application_of_mifid_ii_annex_1.pdf [https://perma.cc/FYR4-K6VT].

264. A digital representation of the value that can be digitally traded or transferred which can be used for investment purposes. This does not include digital representations of fiat currencies, securities or other funds. *Glossary of Terms*, CAP. MKT. AUTH.3 (U.A.E.) (2022) (U.A.E.).

representations of value rather than a “good capable of being delivered.” As such, derivatives having virtual assets as underlying would not fall under the definition of securities or commodities derivatives.

This interpretation is also supported and justified by the approach adopted by VARA in claiming its jurisdiction over crypto-derivatives as set out below.

In January 2026, the UAE government published two new laws relating to regulation of the capital markets and the replacement of the Securities and Commodities Authority (SCA) as regulator with the Capital Markets Authority (“CMA”).²⁶⁵ Federal Decree-Law No. (32) (the “Decree”) sets out the role of the CMA, including its objectives, powers and executive and governance arrangements. The Decree provides information on the types of financial activities and financial entities subject to the regulation, licensing, supervision and oversight of the CMA. Both laws came into force on 1 January 2026, although there is a one-year period for entities and individuals to adjust their status in accordance with the provisions of the Decree.

The Decree does not define itself “Derivatives” but rather includes them under the definition as Securities, listing under item 10 “Any contract, right, option, or derivative related to any securities or tradable products”. Tradable Products include “Indicators, currencies, interest rates, commodities (including metals, natural resources, and agricultural products), provided that transactions are limited to hedging contracts such as futures and options, and any other asset traded through contracts approved by the Board”. An additional linked definition is provided in respect of “Financial Products for Trading” defined as “Financial products include securities, foreign securities, virtual assets for investment purposes, and any other financial product falling within the Authority’s jurisdiction”.

These developments bring some uncertainties around the treatment of crypto derivatives as well as on the scope of the definition of commodities. Authors believe that the considerations set out above would still hold true in the absence of new regulations by SCA/CMA.

VARA: VARA does not define crypto-derivatives within its regulatory framework. However, VARA’s mandate has been designed around virtual assets and activities and services related to such assets, regardless the financial wrapper involved.

It offers, however, a broad definition of virtual asset, as “A digital representation of value that may be digitally traded, transferred, or used as an exchange or payment tool, or for investment purposes. This includes virtual tokens, and any digital representation of any other value as determined by VARA”.

Based on market practices, we have seen several firms moving in to Dubai so as to leverage the approach adopted by VARA in attracting its oversight on crypto-derivatives considering the nature of the underlying, i.e. a virtual asset, rather than its wrapper, i.e. the derivative contract.

Looking at crypto-derivatives, VARA has recently issued few licenses to firms offering their services in the context of crypto-derivatives, such as Binance, OKX and Deribit. However, to date, no such authorizations were given to OTC firms.

265. Federal Decree-Law No. (33) (2025), <https://www.sca.gov.ae/assets/download/86f55732/federal-decree-law-no-33-of-2025-en-regulation-of.aspx> [https://perma.cc/SD7W-UJQ7]; Fed. Decree-Law No. (32) (2025), <https://www.sca.gov.ae/assets/download/63e30eb2/federal-decree-law-no-32-of-2025-en-capital-market-authority.aspx> [https://perma.cc/37D6-24SF].

ADGM

Applicable law: The main legal framework applicable to derivatives in ADGM is set out under the FSMR.

Derivatives Definition: Under the FSMR, Derivative or Derivative Contract means “Specified Investments” falling within paragraphs 94 to 96 of Schedule 1 or, so far as relevant to such investments, any investment falling within paragraphs 98 or 99 of Schedule 1.

Paragraph 94 refers to Options,²⁶⁶ Paragraph 95 to Futures,²⁶⁷ and Paragraph 96 to CFDs.²⁶⁸ Additionally, Paragraph 98 refers to Rights to or in-

266. Paragraph 94 provides:

(1) Options to acquire or dispose of—

- (a) a Financial Instrument (other than one of a kind specified by this paragraph);
- (b) currency of any country or territory;
- (c) a commodity of any kind; (d) a right to receive a Cash settlement, the value of which is determined by reference to—
 - (i) the value or price of an index, interest rate or exchange rate; or
 - (ii) any other rate or variable; or
- (e) an option to acquire or dispose of an investment of the kind specified by this paragraph by virtue of sub-paragraph (a), (b), (c) or (d).

Financial Services and Markets Regulations 2015, sched. 1, pt. 3, para. 94 (U.A.E.).

267. Paragraph 95 provides:

(1) Subject to sub-paragraph (2), rights under a contract for the sale of a commodity or property of any other description under which delivery is to be made at a future date and at a price agreed on when the contract is made. (2) There are excluded from sub-paragraph (1) rights under any contract which is made for commercial and not investment purposes. (3) A contract is to be regarded as made for investment purposes if it is made or traded on a Recognised Investment Exchange, or is made otherwise than on a Recognised Investment Exchange but is expressed to be as traded on such an exchange or on the same terms as those on which an equivalent contract would be made on such an exchange. (4) A contract not falling within sub-paragraph (3) is to be regarded as made for commercial purposes if under the terms of the contract delivery is to be made within seven days, unless it can be shown that there existed an understanding that (notwithstanding the express terms of the contract) delivery would not be made within seven days. (5) The following are indications that a contract not falling within sub-paragraph (3) or (4) is made for commercial purposes and the absence of them is an indication that it is made for investment purposes— (a) one or more of the parties is a producer of the commodity or other property, or uses it in his business; (b) the seller delivers or intends to deliver the property or the purchaser takes or intends to take delivery of it. 255 (6) It is an indication that a contract is made for commercial purposes that the prices, the lot, the delivery date or other terms are determined by the parties for the purposes of the particular contract and not by reference (or not solely by reference) to regularly published prices, to standard lots or delivery dates or to standard terms. (7) The following are indications that a contract is made for investment purposes— (a) it is expressed to be as traded on an investment exchange; (b) performance of the contract is ensured by an investment exchange or a clearing house; (c) there are arrangements for the payment or provision of margin. (8) For the purposes of sub-paragraph (1), a price is to be taken to be agreed on when a contract is made— (a) notwithstanding that it is left to be determined by reference to the price at which a contract is to be entered into on a market or exchange or could be entered into at a time and place specified in the contract; or (b) in a case where the contract is expressed to be by reference to a standard lot and quality, notwithstanding that provision is made for a variation in the price to take account of any variation in quantity or quality on delivery.

Id. para. 95.

268. Paragraph 96 provides:

(1) Subject to sub-paragraph (2), rights under— (a) a contract for differences; or (b) any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss

terests in investments,²⁶⁹ while paragraph 99 to Shari'a-compliance Specified Investments. We also note the recent introduction of sections 99A (Structured Products), relevant in the context of crypto-assets given the broad definition proposed under the FSMR²⁷⁰

Crypto-derivatives: The Abu Dhabi Global Market (ADGM) financial free zone, has taken a proactive approach through its regulator, the FSRA, which has clarified its stance on crypto-derivatives through multiple guidelines and statutory instruments.

As a general remark, ADGM introduced a definition of virtual assets²⁷¹ (further identifying “Accepted Virtual Assets”) falling under its regulatory perimeter as “Commodities” rather than as Specified Investments,²⁷² hence requiring a firm to provide its activities in respect of such assets to be regulated or otherwise exempted.²⁷³

by reference to fluctuations in— (i) the value or price of property of any description; or (ii) an index or other factor designated for that purpose in the contract. (2) There are excluded from sub-paragraph (1)— (a) rights under a contract if the parties intend that the profit is to be secured or the loss is to be avoided by one or more of the parties taking delivery of any property to which the contract relates; (b) rights under a contract under which money is received by way of deposit on terms that any interest or other return to be paid on the sum deposited will be calculated by reference to fluctuations in an index or other factor; (c) rights under a Contract of Insurance.

Id. para. 96.

269. Paragraph 98 provides: “(1) Subject to sub-paragraph (2), any right to or interest in anything which is specified by any other provision of this Part. (2) Sub-paragraph (1) does not include anything which is specified by any other provision of this Part.” *Id.* para. 98.

270. (1) In this Regulation a “Structured Product” is a Financial Instrument comprising rights under a contract where: (a) the gain or loss of each party to the contract is ultimately determined by reference to the fluctuations in the value or price of property of any description, an index, interest rate, exchange rate or a combination of any of these as specified for that purpose in the contract (the “underlying factor”) and is not leveraged upon such fluctuations; (b) the gain or loss of each party is wholly settled by cash or set-off between the parties; (c) each party is not exposed to any contingent liabilities to any other counterparty; and (d) there is readily available public information in relation to the underlying factor; but excludes any rights under a Financial Instrument: (e) where one or more of the parties takes delivery of any property to which the contract relates; (f) which is a Debenture; or (g) which is a Contract of Insurance.

271. ADGM Fin. Servs. & Mkts. Regulations (FSMR), *Definitions* (amended Feb. 17, 2020), <https://en.adgm.thomsonreuters.com/rulebook/258-definitions> [<https://perma.cc/2A58-GCBZ>] (defining “Virtual Asset” as “a digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status in any jurisdiction. A Virtual Asset is - (a) neither issued nor guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the community of users of the Virtual Asset; and (b) distinguished from Fiat Currency and E-money.”).

272. ADGM Fin. Servs. & Mkts. Regulations, *Guidance – Regulation of Digital Security Offerings and Virtual Assets Section 4.2* (Feb. 24, 2020), https://en.adgm.thomsonreuters.com/sites/default/files/net_file_store/ADGM1547_19331_VER04240220.pdf [<https://perma.cc/FN87-6K5M>] (“[t]herefore from a regulatory policy perspective, Virtual Assets are treated as commodities, instead of Specified Investments as defined under the FSMR.”); *see also* FSRA, *Guiding Principles for Virtual Assets Regulation and Supervision* (Sept. 12, 2022) [https://en.adgm.thomsonreuters.com/sites/default/files/net_file_store/FSRA_Guiding_Principles_for_Virtual_Assets_Regulation_and_Supervision_\(IA\)_202209012_FINAL.pdf](https://en.adgm.thomsonreuters.com/sites/default/files/net_file_store/FSRA_Guiding_Principles_for_Virtual_Assets_Regulation_and_Supervision_(IA)_202209012_FINAL.pdf) [<https://perma.cc/ZZT8-3K2Z>]; ADGM, *Guidance on Regulation of Virtual Asset Activities* (Dec. 18, 2023) [https://en.adgm.thomsonreuters.com/sites/default/files/net_file_store/Guidance-Regulation_ofVirtual_Asset_Activities_in_ADGM_\(VER05.181223\).pdf](https://en.adgm.thomsonreuters.com/sites/default/files/net_file_store/Guidance-Regulation_ofVirtual_Asset_Activities_in_ADGM_(VER05.181223).pdf) [<https://perma.cc/Q96P-YV7K>].

273. *See* FSMR, Section 5A.

In this respect in line with the policy treatment of Virtual Assets as commodities, Derivatives of Virtual Assets are regulated as Commodity Derivatives and hence, are a type of Specified Investment under the FSMR. Consequently, Market intermediaries and market operators dealing in such Derivatives and Collective Investment Funds will need to be approved by FSRA as FSP holders, Recognised Investment Exchanges, or Recognised Clearing Houses, depending on the activities provided in respect of such assets.

SWITZERLAND

Applicable Law: Switzerland regulates crypto-derivatives across multiple sources, the key ones being:

- Financial Market Supervision Act of 22 June 2007 (“FINMASA”);²⁷⁴
- Federal Act on Financial Institutions of 15 June 2018 (the “FinIA”);²⁷⁵
- Ordinance on Financial Institutions (the “FinIO”);²⁷⁶
- Federal Act on Financial Services of 15 June 2018 (the “FinSA”);²⁷⁷
- Ordinance on Financial Services (the “FinSO”);²⁷⁸
- Debt Enforcement and Bankruptcy Act of 11 April 1889 (“DEBA”);²⁷⁹
- Banking Act of 8 November 1934 (“BA”);²⁸⁰
- Banking Ordinance of 30 April 2014 (“BO”);²⁸¹
- Swiss Code obligations (“SCO”);²⁸²
- Financial Market Infrastructure Act of 19 June 2015 (“FinMIA”);²⁸³
- Financial Market Infrastructure Ordinance of 25 November 2015 (“FinMIO”);²⁸⁴
- Ordinance of the Swiss Financial Market Supervisory Authority on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of December 2015 (“FinMIO-FINMA”).²⁸⁵

274. Federal Act on the Financial Market Supervisory Authority (Financial Market Supervision Act, FINMASA) of 22 June 2007 (2025), <https://www.fedlex.admin.ch/eli/cc/2008/736/en> [<https://perma.cc/2P59-X5N3>].

275. Federal Act on Financial Institutions of 15 June 2018 (2024), <https://www.fedlex.admin.ch/eli/cc/2018/801/en> [<https://perma.cc/UY57-RFTL>].

276. Ordinance on Financial Institutions of 6 Nov. 2019 (2025), <https://www.fedlex.admin.ch/eli/cc/2019/763/en> [<https://perma.cc/3NMJ-X67D>].

277. Federal Act on Financial Services of 15 June 2018 (2024), <https://www.fedlex.admin.ch/eli/cc/2019/758/en> [<https://perma.cc/N2ET-5GVQ>].

278. Ordinance on Financial Services of 6 Nov. 2019 (2022), <https://www.fedlex.admin.ch/eli/cc/2019/759/en> [<https://perma.cc/2JFX-HGAF>].

279. Federal Act on Debt Enforcement and Bankruptcy as of 11 Apr. 1889 (2026), https://www.fedlex.admin.ch/eli/cc/11/529_488_529/en?version=20241231 [<https://perma.cc/NTR6-NPWQ>].

280. Federal Act on Banks and Savings Banks of 8 Nov. 1934 (2024) (2024), <https://www.fedlex.admin.ch/eli/cc/2004/221/en> [<https://perma.cc/DYL4-AFF4>].

281. Federal Ordinance on Banks and Savings Banks of 30 April 2014 (2025).

282. Code of Obligations of 30 March 1911 (2025).

283. Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 19 June 2015 (2024), <https://www.fedlex.admin.ch/eli/cc/2015/853/en> [<https://perma.cc/3JPL-FAJC>].

284. Ordinance on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 25 November 2015 (2025), <https://www.fedlex.admin.ch/eli/cc/2015/854/en> [<https://perma.cc/QPD7-598B>].

285. FINMA Ordinance on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 3 December 2015 (2023), <https://www.fedlex.admin.ch/eli/cc/2015/855/en> [<https://perma.cc/28JP-24HY>].

Derivatives Definition: Under Swiss law, securities (Effekten) are financial instruments that are: (i) standardised; (ii) suitable for mass trading; and (iii) either certificated securities (Wertpapiere), uncertificated securities (Wertrechte), derivatives or intermediated securities (Bucheffekten).²⁸⁶ Art. 2 lit. c, FinMIA defines derivatives as financial contracts which: (i) are not cash transactions; and (ii) whose value depends on one or several underlying assets.²⁸⁷

According to Art. 3 lit. a item 5 FinSA, such products are deemed Financial Instruments, and, according to Art. 2 lit. b, they fall under the definition of securities.

The term “financial contract” is not explicitly defined in either the act or the ordinance.²⁸⁸ Instead, the dispatch refers to these contracts as “bilateral agreements.” As a result, the FMIA relies on a general definition of derivatives, while certain products are specifically excluded from its application through a designated “negative list”²⁸⁹ as described below.

Structured Products (derivatives that consist of a combination of a derivative and another financial instrument, or a combination of various derivatives, such as tracker certificates or reverse convertibles) are subject to a dedicated framework in Switzerland.

As mentioned above, the following are not considered derivatives in accordance with Art. 94 FinMIA:

- a. structured products such as capital-protected products, capped return products and certificates;
- b. securities lending and borrowing;
- c. derivatives transactions relating to goods that:
 1. must be physically delivered,
 2. cannot be settled in cash at a party’s discretion, and
 3. are not traded on a trading venue or an organised trading facility.

Crypto-derivatives: Swiss regulation adopts a technology-neutral and principle-based approach.²⁹⁰ Switzerland does not impose a specific regulatory framework for token-related activities. Instead, it applies the same legal provisions governing financial service providers to those offering token-related services, ensuring consistency within the regulatory environment.

On the backbone of such principles, crypto-derivatives generally fall into traditional financial services legislation.

However, the Authors consider that certain OTC crypto-derivatives require physical delivery of its underlying assets. Stablecoin settled derivatives would likely fall under the Art. 94 FinMIA exemption. In the context of digital assets, the delivery of private key and/or the transfer of the crypto asset from a

286. Art. 3 lit. b FinSA.

287. Art. 2 lit. c FMIA.

288. See Dispatch regarding FMIA dispatch, 7513.

289. Fed. Council, *Legal Framework for Distributed Ledger Technology and Blockchain in Switzerland* (2018), <https://www.news.admin.ch/news/message/attachments/55153.pdf> [<https://perma.cc/2QVZ-DBLK>].

290. Randy Priem, *Distributed Ledger Technology for Securities Clearing and Settlement: Benefits, Risks, and Regulatory Implications*, FIN. INNOV. 16 (2020), <https://doi.org/10.1186/s40854-019-0169-6>.

wallet to another could be interpreted as equivalent to the physical delivery of the underlying asset.

SEYCHELLES

Seychelles has been able to attract a significant number of crypto firms over the last ten years. According to our data, we have identified more than 14 crypto-derivatives firms currently operating in or from the Seychelles. The decision of the firms to be based in the Seychelles is likely due to the light regulatory framework addressing crypto-assets in the Seychelles until recently.

In fact, in response to the Financial Action Task Force's (FATF) updated recommendation 15 on New Technologies, the Seychelles National Anti-Money Laundering Committee (NAC) has initiated steps to effectively regulate Virtual Asset Service Providers (VASPs). The Financial Services Authority (FSA) will be the primary authority responsible for authorizing and supervising these entities.

The new framework was approved in August 2024 through the Virtual Asset Service Providers Act ("VASPA"), 2024, which came into force, providing a grandfathering period to firms currently active in the Seychelles.²⁹¹ According to the grandfathering period, firms need to submit their application by December 31, 2024.

Notably, the VASPA does not address crypto-derivatives,²⁹² and as such, it is necessary to consider whether these are covered under the traditional financial services framework applicable to derivatives.

Applicable Law: The SECURITIES ACT (Act 8 of 2007) ("Securities Act") represents the cornerstone of financial services legislation in the Seychelles.

The Securities Act contemplates a definition of "securities" by referring to a list of instruments listed in Schedule 1 thereunder. Such list includes:

- Shares and fund units
- Debentures
- Warrants entitling the holder to subscribe for the securities listed above
- Certificates or other instruments which confer contractual or proprietary rights in respect of any security listed above, being a security held by a person other than the person on whom the rights are conferred by the certificate or instrument; and the transfer of which may be effected without the consent of that person
- Certain options
- Certain futures
- Contracts for differences

For the purpose of this section, it is worth outlining the definition of the former three instruments above vis-a-vis crypto-derivatives.

291. See Virtual Asset Service Providers Act art. 42 (2024).

292. As the definition of virtual assets under the VASPA refers to "a digital representation of value that can be digitally traded or transferred and can be used for payment or investment purposes and does not include digital representation of fiat currencies, securities and other financial assets."

Futures: Futures having crypto assets as underlying should fall under the definition of Futures as these are defined as: “Rights under a contract for the disposal of a commodity or *property of any other description under which delivery is to be made at a future date and at a price agreed upon when the contract is made other than a contract made for commercial and not investment purposes.* (. . .).”²⁹³

We reach this conclusion considering that:

- (i) the letter of the law refers to “property of any other description” as subject to the rights in question. This construct seems broad enough to include crypto-assets which have been generally deemed eligible to be a subject to property claims;
- (ii) it is very unlikely to deal with crypto-derivatives structured for commercial purposes, especially considering listed derivatives and/or the common margin arrangements generally conceived for crypto futures. A potential exception may be raised in the context of arrangements entered into by exchanges or other crypto firms with the view to support part of its

293. Seychelles Sec. Act (2007) (relevant as mention of “property of any description” demonstrates that definition is broad enough to encompass crypto).

- “(a) A contract is to be regarded as made for investment purposes if it is made or traded on a Seychelles Securities Exchange or recognized overseas securities exchange or made otherwise than on a Seychelles Securities Exchange or recognized overseas securities exchange but is expressed to be as traded on such an exchange or on the same terms as those on which an equivalent contract would be made on such an exchange.
- (b) A contract not falling within paragraph 7 is to be regarded as made for commercial purposes if under the terms of the contract delivery is to be made within seven days.
- (c) The following are indications that a contract not falling within paragraph 7 or 8 is made for commercial purposes and the absence of them is an indication that it is made for investment purposes –
 - (i) one or more of the parties is a producer of the commodity or other property or uses it in his business; or
 - (ii) the seller delivers or intends to deliver the property or the purchaser takes or intends to take delivery of it.
- (d) It is an indication that a contract is made for commercial purposes that the prices, the lot, the delivery date or other terms are determined by the parties for the purposes of the particular contract and not by reference (or not solely by reference) to regularly published prices, to standard lots or delivery dates or to standard terms.
- (e) The following are indications that a contract is made for investment purposes –
 - (i) it is expressed to be as traded on a securities exchange;
 - (ii) Performance of the contract is ensured by a securities exchange or a clearing house; or
 - (iii) There are arrangements for the payment or provision of margin.

7. For the purposes of paragraph 6, a price is to be taken to be agreed on when a contract is made –

- (a) notwithstanding that it is left to be determined by reference to the price at which a contract is to be entered into on a market or exchange or could be entered into at a time and place specified in the contract; or
- (b) in a case where the contract is expressed to be by reference to a standard lot and quality notwithstanding that provision is made for a variation of the price to take account of any variation in quantity or quality on delivery.”

commercial activities (i.e. inventory building and management) and/or for risk management purposes.

Contracts for differences: The Securities Act treats as securities rights under –

- (a) a contract for differences; or
- (b) any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss by reference to fluctuations in –
 - (i) the value or price of property of any description; or
 - (ii) an index or other factor designated for that purpose in that contract other than–
 - (A) Rights under a contract if the parties intend that the profit is to be secured or the loss is to be avoided by one or more of the parties taking delivery of any property to which the contract relates; or
 - (B) Rights under a contract under which money is received by way of deposit on terms that any interest or other return to be paid on the sum deposited will be calculated by reference to fluctuations in an index or other factor.

The broad wording adopted in such provision seems to clearly capture CFDs having crypto assets as underlying. The only relevant exception could be the one set out under let. b(ii)(A), effectively carving out certain contracts entailing physical settlement.

However, adopting a formalistic reading of the law, it seems that this exception applies only to the term “*any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss by reference to fluctuations in an index or other factor designated for that purpose in that contract*”. This is the result of the use of the disjunction “or” in two different places as well as the location of this exception (A), which we see placed after the conjunction “other than” under let. b(ii) rather than on a standalone basis so as to cover both contracts for differences under let. a and similar instruments covered under let. b(i) and (ii).

Options: Options having crypto-assets as underlying ought to fall outside the scope of the definitions of options under the Securities Act. The latter defines options as: *Options to acquire or dispose of* –

- (a) a security falling in any other paragraph of this Schedule;
- (b) any currency;
- (c) any precious metal; or
- (d) an option to acquire or dispose of a security falling within this paragraph by virtue of subparagraph (a), (b) or (c) of this paragraph.

We reach this conclusion as crypto-assets²⁹⁴ do not fall under the scope of let. (a) to (d).

294. For as long as the crypto-asset itself does not qualify as any of the instruments described under let. (a) to (d).

Annex II – Enforcement Actions

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
		USA		
9/24/2024	CFTC	Section 4d(a)(1) of the Commodity Exchange Act (the “Act”), 7 U.S.C. §6d(a)(1)	The CFTC filed charges against four entities: cryptominertrade.com; Expert Stocks Zone; FalconForexBot; and swiftminingexpert.com for failing to register as future commissions merchants. Each complaint seeks an order directing the entities to cease and desist from committing violations of the Commodity Exchange Act and CFTC regulations	CFTC Charges Four Entities for Failing to Register as FCMs CFTC
9/4/2024	CFTC	7 U.S.C. § 6(a)	The CFTC settled with Uniswap Labs regarding allegations that it contributed to a digital assets protocol that allowed users to trade leveraged tokens in violation of the CEA. As part of the settlement, Uniswap agreed to cease any future violations of 7 U.S.C. § 6(a) pertaining to sales of leveraged tokens to U.S. investors and pay a civil monetary penalty of \$175,000.	CFTC Issues Order Against Uniswap Labs for Offering Illegal Digital Asset Derivatives Trading CFTC
9/3/2024	CFTC	7 U.S.C. § 6(a)	The CFTC initiated an administrative proceeding ordering cryptominertrade.com, which purported to be regulated by the CFTC, to cease and desist from acting as an unregistered futures commission merchant.	In the Matter of cryptominertrade.com
9/3/2024	CFTC	7 U.S.C. § 6(a)	The CFTC initiated an administrative proceeding ordering Expert Stocks Zone, which purported to be regulated by the CFTC, to cease and desist from acting as an unregistered futures commission merchant.	In the Matter of Expert Stocks Zone

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
9/3/2024	CFTC	7 U.S.C. § 6(a)	<p>The CFTC initiated an administrative proceeding ordering FalconForexBot, which purported to be regulated by the CFTC, to cease and desist from acting as an unregistered futures commission merchant.</p>	In the Matter of FalconForexBot
9/3/2024	CFTC	7 U.S.C. § 6(a)	<p>The CFTC initiated an administrative proceeding ordering swiftminingexpert.com, which purported to be regulated by the CFTC, to cease and desist from acting as an unregistered futures commission merchant.</p>	In the Matter of swiftminingexpert.com
5/13/2024	CFTC	7 U.S.C. §§ 6d(a)(1), 1a(28)	<p>The CFTC settled with Falcon Labs, a Seychelles entity, for providing U.S. persons access to digital asset derivatives trading platforms. Falcon Labs purportedly collected net fees of approximately \$1,179,008 from customers entering digital asset derivative transactions intermediated by Falcon Labs. The order requires \$1,179,008 in disgorgement and a \$589,504 civil monetary penalty. The order recognizes that Falcon Labs also voluntarily improved its controls for identifying the location of customers, after the CFTC filed its complaint against Binance.</p>	<p>CFTC Issues Order Against Crypto Prime Brokerage Firm for Unlawfully Providing U.S. Customers Access to Digital Asset Derivatives Trading Platforms CFTC</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
1/17/2024	CFTC	7 U.S.C. § 9(1); 17 C.F.R. § 180.1(a)(1), (3)	<p>The CFTC alleged that Debiex used romance scam tactics to induce customers to open and fund digital asset trading accounts resulting in the misappropriation of roughly \$2.3 million from five customers. The CFTC alleged that Debiex used social media platforms, to initiate contact with many of the customers. Zhāng Chéng Yáng was named as a relief defendant because Debiex used his digital asset wallet to misappropriate at least one customer's funds.</p>	CFTC v. Debiex (defendant), Zhāng Chéng Yáng (relief defendant)
9/7/2023	CFTC	CEA §§ 4(a), 4d(a)(1), 5h(a)(1); Regulations 37.3(a)(1), 42.2	<p>The CFTC settled with Deridex for developing, deploying, and maintaining the Deridex Protocol, which offered leveraged trading of alleged digital asset derivatives to retail and institutional users in the U.S., without registering with the CFTC as a swap execution facility or a designated contract market. Additionally, Deridex operated as an unregistered futures commission merchant and failed to conduct know-your-customer diligence as part of a customer identification program, as required of futures commission merchants. The settlement required a \$100,000 civil monetary penalty.</p>	CFTC Issues Orders Against Operators of Three DeFi Protocols for Offering Illegal Digital Asset Derivatives Trading CFTC

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
9/7/2023	CFTC	CEA § 4a	<p>The CFTC settled with ZeroEx for developing and deploying the 0x Protocol that allegedly allowed retail and institutional users in the U.S. the ability to trade leveraged tokens created by third parties on a peer-to-peer basis, including through its front-end user interface Matcha. The settlement required a \$200,000 civil monetary penalty.</p>	<p>CFTC Issues Orders Against Operators of Three DeFi Protocols for Offering Illegal Digital Asset Derivatives Trading CFTC</p>
9/7/2023	CFTC	<p>CEA §§ 4(a), 4d(a)(1), 5h(a)(1); Regulations 37.3(a)(1), 42.2</p>	<p>The CFTC settled with Opyn for developing and deploying the Opyn protocol, which allegedly offered trading of digital asset derivatives to traders in the U.S. without registering with the CFTC as a swap execution facility or a designated contract market. The CFTC alleged that the Opyn protocol was accessible to users in the United States through Opyn’s website; by accessing the Opyn Protocol through a particular (unnamed) decentralized exchange; and by accessing the Opyn protocol directly through an (unnamed) blockchain explorer. As a result, Opyn also allegedly operated as an unregistered futures commission merchant and failed to conduct know-your-customer diligence as part of a customer identification program, as required of futures commission merchants. The settlement required a \$250,000 civil monetary penalty.</p>	<p>CFTC Issues Orders Against Operators of Three DeFi Protocols for Offering Illegal Digital Asset Derivatives Trading CFTC</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
8/28/2023	CFTC	17 C.F.R. §§ 5.2(b)(1), 5.3(a)(6)(1), 5.3(a)(6)(ii); 7 U.S.C. §§ 6b(a)(2)(A), (C), 2(c)(2)(C)(iii)(1)	<p>The CFTC alleged that defendants violated various provisions of the CEA and CFTC regulations through engaging in a large-scale fraud scheme purporting to offer U.S. customers the opportunity to trade in leveraged contracts and commodities including precious metals, digital asset commodities, broad-based stock indices, and oil. On November 14, 2023, the court granted an injunction prohibiting future violations of the CEA, freezing a portion of defendants' corporate assets and appointing a receiver. On March 7, 2024, plaintiff filed a request for sanctions against the CFTC for making misrepresentations to the court while seeking an ex parte temporary restraining order to freeze defendants' assets.</p>	Commodity Futures Trading Comm'n v. Traders Glob. Grp., Civil Action 23-11808 (ZNQ) (TJB) Casetext Search + Citator
7/24/2023	CFTC	CEA §§ 4b(a)(2)(A)-(C), 4m(1), 4o(1)(A), 4o(1)(B), 6b(a)(2)(A)-(C), 6m(1), 6o(1)(A), 6o(1)(B), Reg. 4.20(a)(1), Reg. 4.20(a)(b), Reg. 4.20(a)(c), Reg. 4.21, Reg. 4.22	<p>The CFTC charged defendants Michael and Amanda Griffs with defrauding over 100 people and failing to register with the CFTC in connection with operating a commodity pool scheme to trade digital asset commodity futures contracts. The defendants owned a real estate business, and purportedly contacted colleagues and customers of their business, and offered digital asset commodity futures contracts, without having any relevant experience. Defendants raised \$6 million dollars which they allegedly misappropriated for their own personal purchases.</p>	CFTC Charges Tennessee Husband and Wife Realtors for Operating a \$6 Million Digital Assets Commodity Pool Scheme CFTC

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
6/22/2023	CFTC	CEA §§ 6(c)(1), 4b(a)(2)(A) and (C), 4o(1)(A) and (B), s 2(c) (2)(C)(iii)(1)(cc) and 4m(1); Reg. 180.1(a)(1)-(3), 5.2(b), 5.3(a)(2)(i), 4.20(c)	The CFTC alleged that defendant operated a fraudulent scheme whereby he solicited and subsequently misappropriated tens of millions of dollars from over 100 participants for the alleged purpose of trading in commodity interests, digital assets, and retail foreign currency transactions.	CFTC Charges New York Man with Misappropriating Over \$21 Million in Commodity Pool Scheme CFTC
6/22/2023	CFTC	CEA §§ 4b(a)(2)(A)-(C), 6b(a)(2)(A)-(C), Reg. 5.2(b)(1)-(3)	In the CFTC's first action involving "pig butchering," a scam involving cultivating a romantic relationship with a potential customer and "fattening" them up with falsehoods before soliciting them to participate in a fraudulent financial opportunity. The CFTC charged Zhu and his company Justby International Auctions for allegedly misappropriating over \$1.3 million in customer funds intended for digital asset trading. On December 7, a default judgment was ordered which required the defendants to pay a \$4,000,000 civil monetary penalty and \$1,352,843 in restitution.	Federal Court Orders California Resident and His Corporation to Pay Over \$5 Million in Restitution and Penalties in a Romance Fraud Scheme CFTC

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
6/6/2023	CFTC	CEA §§ 6(c)(1), Reg. 180.1(a) (1)-(3)	The CFTC settled with Levine for making false representations by pretending to be a seller of bitcoin, to induce investors to send \$5 million to an attorney (Phillip Reichenhal) for the purported purchase of Bitcoin (see also CFTC v. Philip Reichenhal below). Levine also allegedly failed to return investor funds or deliver the bitcoin as promised. The court ordered Levine to cease and desist from CEA violations, and pay \$5,375,000 in restitution.	CFTC Charges Alleged Bitcoin Seller and Former Attorney with Multi-Million Dollar Bitcoin Fraud, Imposes Over \$5 Million in Restitution CFTC
6/6/2023	CFTC	CEA §§ 6(c)(1), Reg. 180.1(a) (1)-(3)	The CFTC resolved claims against Reichenhal for using his position as an attorney to falsely represent that he would act as an escrow agent to induce investors to send him \$5 million for the purported purchase of Bitcoin. After receiving the funds, Reichenhal allegedly failed to return the investors' funds or bitcoin. Without admitting or denying the allegation, Reichenhal agreed to an order which ordered him to cease and desist from CEA violations and pay approximately \$5,375,000 in restitution.	CFTC Charges Alleged Bitcoin Seller and Former Attorney with Multi-Million Dollar Bitcoin Fraud, Imposes Over \$5 Million in Restitution CFTC
4/11/2023	CFTC	CEA § 6(c)(1) and Reg. 180.1	The CFTC charged a New York resident with fraudulently soliciting retail investors to invest in a digital asset trading fund and misappropriating over \$1 million. The CFTC seeks restitution, disgorgement, civil penalties, permanent trading and registration bans, and a permanent injunction. The defendant has already pled guilty to defrauding clients in a related criminal case in the Eastern District of New York.	CFTC Charges New York Resident with Fraud and Misappropriation in Digital Assets Trading Scheme CFTC

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
3/27/2023	CFTC	CEA §§ 4(a) or alternatively 4(b) and Regulation 48.3, 4c(b) and Regulation 32.2, 4d, 5h(a)(1) and Regulation 37.3(a)(1), Regulation 166.3, Regulation 42.2, Regulation 1.6	<p>The CFTC charged Binance with numerous violations of the CEA and CFTC regulations for operating the digital asset exchange through an opaque web of corporate entities and increasing its U.S. presence. On December 14, 2023, the CFTC settled with Zhao and Binance. Zhao agreed to personally pay a \$150 million civil monetary penalty and Binance agreed to disgorgement of \$1.35 billion and to pay a civil monetary penalty of a further \$1.35 billion. Samuel Lim, Binance's former Chief Compliance Officer, also agreed to pay a \$1.5 million penalty.</p>	<p>CFTC Charges Binance and Its Founder, Changpeng Zhao, with Willful Evasion of Federal Law and Operating an Illegal Digital Asset Derivatives Exchange CFTC</p>
2/28/2023	CFTC	CEA § 6(c)(1) and Regulation 180.1(a)(1)-(3)	<p>The CFTC charged Nishad Singh, an FTX senior executive, with fraud by misappropriation and with aiding and abetting fraud committed by FTX related to digital asset commodities. These charges are related to those previously filed by the CFTC against FTX and its other executives. Singh agreed to the entry of a proposed consent order of judgment as to his liability on the charges in the complaint. The court permanently prohibited the defendant from engaging in trading or activities involving commodity interests or digital asset commodities, soliciting funds for such purposes, controlling, or directing trading, holding any position that requires registration with the CFTC, or gaining registration with the CFTC. The court will determine the amount of restitution, disgorgement, and civil monetary penalty at a future time.</p>	<p>CFTC Charges FTX Co-Owner with Fraud by Misappropriation and Aiding and Abetting Fraud Related to Digital Asset Commodities CFTC</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
1/9/2023	CFTC	CEA §§ 6(c)(1), 6(c)(3), 9(a)(2); Reg. 180.1(a), and Reg. 180.2	<p>The CFTC alleged that Eisenberg unlawfully obtained over \$110 million in digital assets from Mango Markets, a decentralized digital asset exchange, through a scheme involving creating anonymous accounts, inflating the price of MNGO on multiple exchanges, and using the inflated value to withdraw the assets. The case has been stayed pending the conclusion of a parallel criminal case.</p>	<p>CFTC Charges Avraham Eisenberg with Manipulative and Deceptive Scheme to Misappropriate Over \$110 million from Mango Markets, a Digital Asset Exchange CFTC</p>
12/13/2022	CFTC	CEA §§ 6(c)(1) and Reg. 180.1(a)	<p>The CFTC filed a case on December 13, 2022, against Samuel Bankman-Fried, FTX Trading Ltd. (FTX.com), and Alameda Research LLC. The CFTC claimed that the defendants committed fraud and made material misrepresentations related to the sale of digital commodities, purportedly resulting in the loss of over \$8 billion in FTX customer deposits. The CFTC further alleged that from May 2019 to November 11, 2022, FTX customer assets were commingled with Alameda's funds. The defendants are also alleged to have misappropriated these funds for personal use, including luxury real estate, political contributions, and high-risk investments. In its ongoing litigation, the CFTC seeks restitution, disgorgement, civil monetary penalties, permanent trading and registration bans, and an injunction against further violations of the Commodity Exchange Act (CEA) and CFTC regulations. The civil proceedings are stayed until the conclusion of a parallel criminal case.</p>	<p>CFTC Charges Sam Bankman-Fried, FTX Trading and Alameda with Fraud and Material Misrepresentations CFTC</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
11/3/2022	CFTC	CEA § 6(c)(1) and Reg. 180.1(a)(1)-(3)	<p>The CFTC filed and settled charges against Rounsville for misrepresenting that he was the CEO of, and soliciting customers to, a website platform engaged in alleged managed virtual currency trading. Rounsville is subject to a \$177,000 civil monetary penalty, and is permanently banned from soliciting or trading in commodity interests and virtual currencies, or registering with the CFTC in any capacity.</p>	<p>CFTC Penalizes and Permanently Bans Texan from Trading and Registration for Virtual Currencies Fraud CFTC</p>
10/31/2022	CFTC		<p>The venture capital firm Haun Ventures petitioned the CFTC to clarify the obligations and rights of individuals participating in DAOs following the CFTC's action against Ooki DAO. Haun Ventures argued the precedent set in Ooki DAO created uncertainty among builders and participants and discouraged innovation.</p>	<p>Haun's Petition for Rulemaking – DAO-Participant Liability</p>
05/10/2022	CFTC	CEA § 4m(1), 4o(1)(A)-(B), 6(c)(1), Regulation 180.1	<p>CFTC charged Sam Ikkurty a/k/a Sreenivas I Rao (Ikkurty) of Portland, Oregon, Ravishankar Avadhanam of Aurora, Illinois, and Jafia LLC, a company Ikkurty owns in Florida, with fraudulently soliciting at least \$44 million for participation interests in a so-called income fund invested in digital assets and other instruments. The enforcement action also charges the defendants with operating an illegal commodity pool and failing to register as a Commodity Pool Operator. The complaint alleges that since at least January 2021, the defendants have used a website, YouTube videos, and other means to solicit more than \$44 million from at least 170 participants to purchase, hold and trade digital</p>	<p>CFTC Charges Oregon and Illinois Residents and Florida Company in \$44 Million Misappropriation in Ongoing Digital Asset and Commodity Futures Fraud CFTC</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
9/30/2022	CFTC	CEA §§ 4(a) (or alternatively, 4(b) and Regulation 48.3), 4d, 6(c)(1) and Regulation 180.1(a), 6(c)(3), 9(a)(2) and Regulation 180.2, Regulation 42.2	The CFTC charged Digitex LLC and its founder and CEO Adam Todd for failing to register the crypto futures exchange, and for manipulating the price of the DGTX token. On July 5, 2023, the Court issued a default judgment and granted a permanent injunction against Todd and the companies he controlled, requiring them to pay over \$15 million.	Federal Court Orders Digital Asset Derivatives Platform and Florida Resident to Pay More than \$15 Million for Multiple Violations of the Commodity Exchange Act CFTC
9/22/2022	CFTC	CEA §§ 4(a), 4d and Reg. 42.2	The CFTC charged Ooki DAO, the successor to bZeroX that allegedly operated the same software protocol, with purportedly offering leveraged and margined retail commodity transactions in digital assets, engaging in activities only futures commission merchants can perform, and failing to adopt a customer identification program. On October 3, 2022, the court granted the CFTC's motion for alternative service via Ooki's "help chat box," with contemporaneous notice by posting in the Ooki DAO's online forum. On June 9, 2023, a default judgment required Ooki DAO to pay a civil monetary penalty of \$643,542, imposed permanent bans on trading and registration, and ordered the shutdown of Ooki DAO's website.	CFTC Imposes \$250,000 Penalty Against bZeroX, LLC and Its Founders and Charges Successor Ooki DAO for Offering Illegal, Off-Exchange Digital-Asset Trading, Registration Violations, and Failing to Comply with Bank Secrecy Act CFTC

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
9/22/2022	CFTC	CEA §§ 4(a), 4d(a)(1) and Reg. 42.2	The CFTC filed settled charges against bZeroX, LLC and its founders for designing and deploying the bZx Protocol which accepted orders and facilitated margined and leveraged retail commodity transactions without registering as a futures commission merchant and without performing KYC diligence as part of a customer identification program. The settlement ordered a \$250,000 civil penalty and required respondents to cease and desist from further violations of the CEA and CFTC regulations.	Dissenting Statement of Commissioner Summer K. Mersinger Regarding Enforcement Actions Against: 1) bZeroX, LLC, Tom Bean, and Kyle Kistner; and 2) Ooki DAO CFTC
8/11/2022	CFTC	CEA § 6(c)(1) and Reg. 180.1(a)	The CFTC filed a civil enforcement action against Rathnakishore Giri and his companies, NBD Eidetic Capital, LLC, and SR Private Equity, LLC. The CFTC alleged that these entities and individuals engaged in a fraudulent scheme involving digital asset trading, purportedly soliciting over \$12 million and at least 10 bitcoins from more than 150 customers.	CFTC Charges Ohio Man and His Companies with Fraudulently Soliciting Over \$12 Million and Misappropriation in a Digital Asset Trading Scheme CFTC
10/1/2020	CFTC	CEA § 4(a) or, alternatively, §4 (b); CEA § 4c(b) and Reg. 32.2; CEA § 4d; CEA § 5h(a)(1) and Reg. 37.3(a)(1); Reg. 166.3; Reg. 42.2	The CFTC claimed BitMEX violated the CEA by offering leveraged cryptocurrency derivatives trading to U.S. customers without proper approval as a Designated Contract Market or Swap Execution Facility. They also alleged BitMEX operated as an unregistered Futures Commission Merchant by accepting bitcoin for margin and acting as a counterparty in leveraged retail commodity transactions.	20-cv-8132

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
Canada				
15/02/2024	QAMF	Securities Act (S 11, 148) Derivatives Act (S54, 82)	On February 15, 2024, the Tribunal administratif des marchés financiers (TMF) issued a decision in the case of AMF v. Zypto SP Zoo. The Autorité des marchés financiers (AMF) brought action against Zypto SP Zoo and other respondents for alleged violations of Quebec's Securities Act. The TMF concluded that the respondents had illegally solicited and sold investment contracts in the form of cryptoassets called FCF and ZYPTO through various trading platforms. The Tribunal determined that these activities constituted a distribution of securities without a prospectus and ordered several preventive and protective measures to prevent the dissipation of assets collected from investors	AMF v. Zypto SP Zoo, 2024 QCTMF 8
29/04/2024	QAMF	Securities Act (S 11, 148) Derivatives Act (S54, 82)	On April 29, 2024, the Financial Markets Administrative Tribunal (TMF) issued a decision in the case of AMF v. Allard, involving Vincent Allard and Pyrole Capital inc. The Autorité des marchés financiers (AMF) alleged that the respondents committed market fraud and manipulated the price of the BALD token, a cryptoasset created by Allard. The Tribunal found compelling evidence that BALD was deployed on a decentralized exchange to manipulate its value, resulting in profits exceeding CAD \$7 million over two days	AMF v. Allard, 2024 QCTMF 42
03/05/2024	QAMF	Securities Act (S 11, 148)	The Financial Markets Administrative Tribunal (TMF) issued a decision in the case of AMF v. Latreille on May 3, 2024. The Autorité des marchés financiers (AMF)	AMF v. Latreille, 2024 QCTMF 24 (May 3)

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
27/12/2023	QAMF	Securities Act (S 11, 148)	<p>This case involved Élan Future inc. and its director Jérôme-Olivier Malo. The AMF alleged:</p> <ul style="list-style-type: none"> • Distribution of securities (ELAN cryptoassets) without a prospectus • Acting as unregistered securities dealers • Misuse of investor funds <p>The Tribunal issued freeze orders on the company's assets and prohibited securities activities. In May 2024, the AMF obtained the appointment of a provisional administrator for the company.</p>	AMF v. Élan Future inc., 2023 QCTMF 93
14/11/2023	QAMF	Securities Act (S 11, 148) Derivatives Act (S54, 82)	<p>This case involved the crypto trading platform CoinEx. The Tribunal found that CoinEx:</p> <ul style="list-style-type: none"> • Acted as an unregistered securities and derivatives dealer • Distributed securities without a prospectus • Created and marketed derivatives without authorization <p>The Tribunal imposed a \$2 million administrative penalty on CoinEx entities and ordered them to block access to their website for Quebec users within two months</p>	AMF v. Coinex Global Limited, 2023 QCTMF 75

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
15/02/2024	QAMF	Securities Act (S 11, 148) Derivatives Act (S54, 82)	On February 15, 2024, the Tribunal administratif des marchés financiers (TMF) issued a decision in the case of AMF v. Zypto SP Zoo. The Autorité des marchés financiers (AMF) brought action against Zypto SP Zoo and other respondents for alleged violations of Quebec's Securities Act. The TMF concluded that the respondents had illegally solicited and sold investment contracts in the form of cryptoassets called FCF and ZYPTO through various trading platforms. The Tribunal determined that these activities constituted a distribution of securities without a prospectus and ordered several preventive and protective measures to prevent the dissipation of assets collected from investors	AMF v. Zypto SP Zoo, 2024 QCTMF 8
05/09/2023	OSC	Subsection 127(1) and Section 127.1 of the Securities Act, RSO 1990, c S.5	The OSC issued a <u>Statement of Allegations against Phemex Limited and Phemex Technology PTE. Ltd.</u> (Phemex or the Respondents), a Singapore-incorporated company that operates the Phemex crypto trading platform. Phemex operates an online platform on which investors can trade securities and derivatives, including crypto assets. While the platform may currently be inaccessible to those using an Ontario IP address; the OSC alleges that it was previously available to Ontario residents between November 25, 2019, to January 6, 2023, and therefore squarely falling within the jurisdiction of Ontario securities laws.	https://www.capitalmarketstribunal.ca/sites/default/files/2023-09/soa_20230905_phemex.pdf

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
2022	OCM	Notification for registration from the OSC	Ontario Capital Markets Tribunal imposed severe sanctions on an unregistered CTP, including a permanent market ban.	https://www.nortonrosefulbright.com/en/knowledge/publications/4e93f0e8/overview-2024-securities-regulation-of-activities-involving-crypto-assets-in-canada
2023	TMF	CSA staff notices 21-327, 21-329, 21-330, 21-332	TMF imposed a \$2 million penalty and ordered the closure of a non-compliant CTP's website.	https://www.nortonrosefulbright.com/en/knowledge/publications/4e93f0e8/overview-2024-securities-regulation-of-activities-involving-crypto-assets-in-canada

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
April 21, 2021	OSC	<p>subsection 5(3) of the Securities Commission Act, 2021, SO 2021, c 8, Schedule 9.</p>	<p>Earlier in March 2021, the OSC issued a press release stating that crypto asset trading platforms that offer trading in derivatives or securities to persons or companies located in Ontario must contact OSC staff to discuss how to bring their operations into compliance with Ontario securities law. On April 20, 2021, Staff sent Binance an Enforcement Notice setting out its preliminary view that Binance was operating in contravention of securities law requirements. In June 2021, Binance announced the cessation of operations in the province, with an online statement declaring: “Ontario (Canada) has become a restricted jurisdiction... Binance can no longer continue to service Ontario-based users.” The statement went on to instruct Ontario residents to close their positions by 31 December 2021 but, despite this announcement and because of the intrinsic borderless nature of crypto, many Ontario residents continued to access the platform, prompting further action from the OSC. As a result of its failure to adhere to this announced cessation of sales, in early 2022, the OSC notified the defendants of its intention to seek a cease trade order.” Following an investigation, the court issued an order to Binance in May 2023, requesting “communications...regarding Ontario, or Canada generally. In May 2023, Binance publicly announced its withdrawal from all of Canada, urging users to close positions by 30 September that year.</p>	<p>https://www.osc.ca/sites/default/files/2024-05/ord_20240430_reasons-binance-holdings.pdf</p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
June 2022 (date of class action lawsuit filed)	CMT	Section 133 Ontario Securities Act	<p>Binance, the world's largest crypto asset trading platform, sold crypto-derivatives products to Canadians from 2019 to early 2022 through its website. These instruments have been held to be securities by the Capital Markets Tribunal, therefore requiring issuers of such instruments to file a prospectus and deliver it to investors. Binance did not register with the Ontario Securities Commission (OSC) or seek an exemption from registration. Binance did not file a prospectus with respect to any of its securities offerings</p>	<p><i>Lochan. v. Binance Holdings Limited, 2023 ONSC 6714</i></p>
Australia				
December 2024	ASIC	Corporations Act 2001	<p>According to ASIC, between 7 July 2022 and 21 April 2023, Binance offered crypto derivative products to 505 Australian retail investors who were incorrectly classified as wholesale clients, representing 83% of its Australian client base. Retail clients trading financial products, such as crypto derivative products, are entitled to significant rights and protections under Australian financial services laws. These include the requirement to receive a product disclosure statement and access to a compliant dispute resolution scheme. Additionally, Binance was obliged to make a target market determination in accordance with design and distribution obligations.</p>	<p><i>24-283MR ASIC sues crypto company Binance Australia Derivatives for consumer protection failures ASIC</i></p>

Date	Authority	Legal Basis	Content of the Action	Case Name/Link
April 2023	ASIC	Corporations Act 2001	ASIC cancelled the Australian financial services licence held by Oztures Trading Pty Ltd trading as Binance Australia Derivatives (Binance). The licence cancellation was effected in response to a request to cancel received from Binance. This follows on from ASIC conducting a targeted review of Binance financial services business in Australia, including its classification of retail and wholesale clients	23-091MR <i>Binance Australia Derivatives – AFS licence cancelled</i> ASIC
Singapore				
September 2023	MAS	Securities and Futures Act 2001 and Securities and Futures (Licensing and Conduct of Business) Regulations	MAS issued 9 year prohibition orders against 2 directors of Three Arrows Capital for contraventions of local laws, including failure to notify MAS of employment of representative, provision of false information relating to carrying out a regulated activity and failure to have in place appropriate risk management framework.	MAS issues Prohibition Orders against Three Arrows Capital's Zhu Su and Kyle Livingston Davies