# Crypto, tokens and DeFi: navigating the regulatory landscape[1]

## Executive summary

**Addressing the risks posed by cryptoassets has become a pressing issue for policymakers.** Cryptoasset markets have experienced cycles of growth and collapse, often resulting in large losses for investors. These markets pose risks which, if not adequately addressed, might undermine consumer protection, financial stability and market integrity. While the turmoil experienced in these markets at the end of 2022 has so far not led to wider contagion, the outcome might have been worse had the cryptoasset markets and the traditional financial system been more interconnected.

**Policymakers are considering their response to crypto-related risks.** Potential lines of action, which are not mutually exclusive, include banning specific activities, isolating cryptoasset markets from the traditional financial system, regulating cryptoasset activities in a manner akin to traditional finance and developing alternatives that improve the efficiency of the traditional financial sector (Aquilina et al (2023)). These lines of action will be contingent on the risks posed to the provision of financial services by the various activities involving cryptoassets and their underlying technology, referred in this paper under the umbrella term of distributed ledger technology (DLT). For lines of action which consider regulating cryptoasset activities, the question depends on policymakers' assessment of which risks posed by cryptoassets and related activities should be captured by regulation and whether those risks are captured by existing regulation or if there are gaps that need to be addressed.

**This paper provides an overview of policy measures taken in 19 jurisdictions to address the risks associated with activities that incorporate cryptoassets and DLT programmability capabilities in financial services.**[2] In this paper cryptoasset activities are classified into three categories based on the proposed taxonomy by the FSB:[3] (a) issuance; (b) operation of a DLT infrastructure; and (c) service provision (eg wallet, custody, payment, exchange, lending). For the overview of policy measures, initiatives are classified into three categories depending on whether they address the risks associated with (i) centrally managed cryptoasset activities; (ii) community-managed cryptoasset activities;[4] or (iii) users' direct exposures to cryptoassets and related activities.

**Different types of policy measure across jurisdictions include bans, restrictions, clarifications, bespoke requirements and initiatives to facilitate innovation.** As these measures tend to reflect the evolution of market developments, most current initiatives target centrally managed cryptoasset activities, with a particular focus on service provision.

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2 The jurisdictions covered in this paper are Australia, Belgium, Canada, China, the European Union, France, Germany, Hong Kong SAR, Italy, Japan, the Netherlands, the Philippines, Singapore, South Africa, Spain, Switzerland, the United Arab Emirates, the United Kingdom and the United States.

3 See FSB (2022c).

4 These refer to activities managed (ie, operated and governed) by a community of participants in public DLT networks organised under decentralised arrangements.

**For centrally managed issuance activities, current regulatory initiatives focus mainly on issuers of security tokens and stablecoins**. All the jurisdictions we cover here require issuers of security tokens to comply with securities regulation. Some are developing frameworks for issuers of stablecoins used for payment. The proposed initiatives introduce licensing, capital and reserve requirements but differ across countries in terms of terminology, type of license, redemption rights and standards for governance and risk management practices. Only a small number have adopted a regulatory framework for issuers of stablecoins used for other purposes. Furthermore, only a few have clarified whether securities laws apply to issuers of utility tokens.

**Initiatives related to centrally managed infrastructure activities mainly explore the benefits and risks from traditional financial intermediaries' use of DLTs and their programmability capabilities.** Some jurisdictions are collaborating in pilot testing use cases of DLT-based infrastructures for the clearing and settlement of payments and securities. Others are facilitating innovation in a controlled environment through bespoke licensing regimes and sandboxes. Only one jurisdiction has issued DLT-specific guidance.

**Initiatives related to centrally managed service provision activities often extend the regulatory perimeter to new non-bank centralised intermediaries.** Most jurisdictions have introduced authorisation, prudential, anti-money laundering/combating the financing of terrorism (AML/CFT) and consumer protection requirements. Regulatory approaches include establishing bespoke frameworks, introducing specific derogations from the applicable legislation, issuing clarifications on how existing payments or securities regulation apply, and restricting or prohibiting certain activities.

**In relation to community-managed activities, policy measures aim at addressing the risks posed by native tokens and DeFi protocols.** For activities where native tokens are involved, some authorities rely on a broad interpretation of "rights" attached to a native token to define if it is a security and thus clarify the application of securities regulation. Others use concrete examples for additional guidance. For DeFi protocols, most initiatives were in the form of analytical papers. At present, only one authority in the covered jurisdictions has issued guidance on the adoption of smart contracts. Another has clarified the applicable requirements related to decentralised exchanges and staking activities. A few authorities have taken enforcement actions addressing AML/CFT and investor protection risks posed by certain protocols. A small number have introduced initiatives to facilitate the adoption of protocols with certain features by traditional financial intermediaries under a trusted environment.

**For risks associated with users' direct exposures to cryptoassets and related activities, initiatives tend to reflect the evolution of cryptoasset markets.** All the jurisdictions covered have issued warnings to retail investors about the risks posed by cryptoassets, and some of these warnings target specific types of cryptoasset (eg native tokens, security tokens and non-fungible tokens). A few jurisdictions have banned the distribution of certain cryptoassets to retail investors and others have imposed restrictions on promotional activities. For wholesale investors, no jurisdiction has so far introduced rules to mitigate risks stemming from traditional financial institutions investing in cryptoassets.

**Policymakers may face further challenges as cryptoasset markets evolve and DLT programming capabilities are applied to new use cases.** Continuous efforts will be needed to understand novel business models and their underlying risks, to build or maintain the skills and capacity to adequately assess potential implications on financial markets and to adjust policy responses promptly. Only with sufficient resources and access to timely and reliable information will authorities be able to assess future risks to the financial system.

**The global nature of cryptoassets poses significant challenges that require effective cooperation and coordination among national and international regulators.** Jurisdictions cannot entirely mitigate the risks associated with cryptoassets if policy measures are susceptible to gaps and inconsistencies across borders. A coordinated response is essential. In this context, international standards that promote a consistent regulatory framework will play a key role in preventing regulatory arbitrage and a fragmented regulatory environment that could undermine financial stability.