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BANK FOR INTERNATIONAL SETTLEMENTS

Prudential Treatment of Cryptoasset Exposures – Overview

Introduction

Cryptoasset markets are rapidly evolving and reshaping the financial landscape. The proliferation of cryptoasset trading platforms, innovative financial products, and the growing interest from retail and institutional investors, even within the traditional banking sector, are driving this trend.

Although the global banking system's exposures to cryptoassets are relatively low, the multitude of microprudential risks introduced by cryptoassets underscore the importance of having a strong global prudential framework to mitigate the underlying risks.

The string of high-profile failures of numerous crypto companies in 2022 further accentuates these needs.

To this end, the Basel Committee on Banking Supervision (BCBS) published its final standard on the prudential treatment of cryptoasset exposures that same year.

In this suite of tutorials, we examine the BCBS standard and discuss the minimum requirements for bank exposures to cryptoassets under Pillars 1, 2 and 3 of the Basel Framework.

Cryptoasset Risks

Cryptoassets are a type of private sector digital asset that depends primarily on cryptography and distributed ledger technology (DLT) or similar technology. There are many cryptoasset instruments, and their risk characteristics vary.

Certain types of cryptoassets are subject to extreme price volatility and may increase risks for banks as exposures increase. These risks include credit, market, liquidity and operational risks (including fraud and cyber risk); anti-money laundering/countering the financing of terrorism (AML/CFT) risk; and legal and reputational risks.

Distributed Ledger Technology (DLT)

DLT is the technological infrastructure and protocols that allow simultaneous access, validation and record updating across a networked database.

Risk Transmission Channels

Beyond the risks to individual banks, there are a number of transmission channels through which these risks might have implications for financial stability. These include:

- financial sector exposures to cryptoasset-related financial products and entities that are financially impacted by cryptoassets
- wealth effects, that is, the degree to which changes in the value of cryptoassets might impact their investors, with subsequent knock-on effects on the financial system
- confidence effects, through which developments concerning cryptoassets could impact investor confidence in cryptoasset markets and the broader financial system
- the extent of cryptoasset use in payments and settlements

Direct connections between cryptoassets and traditional financial markets are limited at present. Nevertheless, given the rapid evolution of cryptoasset markets and the significant data gaps on their size and interlinkages with the financial system, it is difficult to determine the full scope of cryptoasset use in traditional finance.

In Practice - Risks to Financial Stability

The Financial Stability Board (FSB) 2022 report Assessment of Risks to Financial Stability from Crypto-assets outlines recent developments in cryptoasset markets and their implications for global financial stability.

Cryptoassets – Terminology

The following definitions are used in the BCBS standard on cryptoasset exposures.

Term	Definition
Cryptoassets	Private digital assets that depend primarily on cryptography and DLT or similar technologies
Digital Asset	A digital representation in value that can be used for payment or investment purposes or to access a good or service. This does not include digital representations of fiat currencies
Stablecoins	Cryptoassets that aim to maintain a stable value relative to a specified asset or a pool or basket of assets
Tokenised Traditional Assets	Dematerialised securities (securities that have been moved from physical certificates to electronic book-keeping) that are issued through DLT or similar technologies
Unbacked Cryptoassets	Cryptoassets that are neither tokenised traditional assets nor stablecoins

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Standard on Prudential Treatment of Cryptoasset Exposures

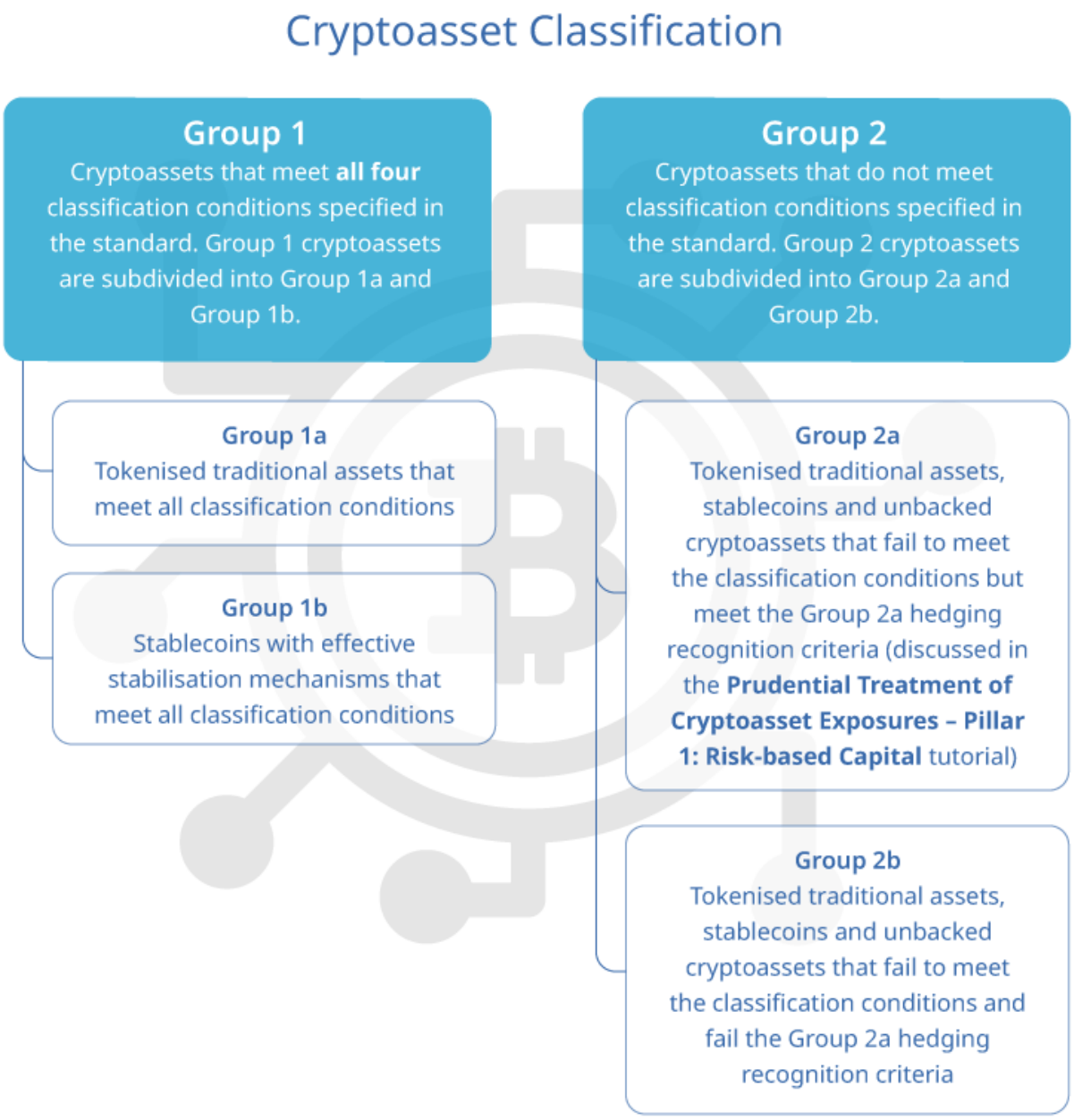
The BCBS finalised its standard on the prudential treatment of cryptoasset exposures in December 2022. The standard outlines minimum regulatory, supervisory review and disclosure requirements of bank cryptoasset exposures under the Basel Framework.

The standard focuses on private sector digital assets. The treatment of central bank digital currencies is beyond its scope. Internationally active banks in BCBS member jurisdictions are expected to adopt the standard by 1 January 2025.

Cryptoasset Classification

For purposes of determining credit, market and liquidity risk requirements, the standard requires that banks must regularly review and classify cryptoassets into two broad groups – Group 1 or Group 2, with the latter imposing more onerous regulatory requirements than the former.

The classification of bank cryptoasset holdings is driven by whether the underlying exposures adhere to all four classification conditions noted in the standard. The conditions are detailed on the pages that follow.



Classification Condition 1

Classification condition 1 requires that the cryptoasset be a tokenised traditional asset (Group 1a) or have a stabilisation mechanism (for example, stablecoins) that is effective at all times in linking its value to a traditional asset or a pool of traditional assets (Group 1b).

Meeting Condition 1 and Being Classified as Group 1a

To meet this condition and be classified as Group 1a, tokenised traditional assets must:

- be digital representations of traditional assets using cryptography or DLT to record ownership
- pose the same level of credit and market risk (including counterparty credit risk) as the traditional form of the asset
- receive the same legal rights as direct ownership of traditional assets without the need to redeem or convert the tokenised assets into traditional assets first

Meeting Condition 1 and Being Classified as Group 1b

To meet classification condition 1 and be classified as Group 1b, stablecoins with a stabilisation mechanism must:

- be redeemable for a predefined amount of a reference asset or assets
- minimise fluctuations in their market value relative to the peg value and include a framework to verify that the stabilisation mechanism works
- enable risk management similar to the risk management of traditional assets
- allow for sufficient information to verify ownership rights of the reserve assets upon which the value of the stablecoin is dependent
- pass a redemption test to ensure the reserve assets are sufficient to enable the cryptoassets to be redeemable at all times for the peg value
- be regulated by a supervisor that imposes prudential capital and liquidity requirements on the issuer
- not reference other cryptoassets as underlying assets or use protocols to increase/decrease the supply of the cryptoasset

Classification Conditions 2, 3 and 4

In addition to classification condition 1, all Group 1 cryptoassets must meet three additional classification conditions as follows:

Classification Condition 2

All rights, obligations and interests in the cryptoasset are clearly defined and legally enforceable in all jurisdictions where the asset is issued and redeemed. In addition, the applicable legal framework must ensure settlement finality, which needs to be backed by a legal review of the cryptoasset arrangement to ensure this condition is met.

Classification Condition 3

The functions of the cryptoasset and the network on which it operates, including the DLT on which it is based, must be traceable and operated to mitigate and manage any material risks. These risks include credit, market and liquidity risks; operational risks (including outsourcing, fraud and cyber risk) and risk of loss of data; and various non-financial risks, such as data integrity, operational resilience and AML/CFT risks.

Classification Condition 4

Entities that execute redemptions, transfers, storage or settlement finality of the cryptoasset, or manage or invest reserve assets, must: (i) be regulated and supervised, or subject to appropriate risk management standards; and (ii) have in place and disclose a comprehensive governance framework. These entities include operators of the transfer and settlement systems, wallet providers, administrators of the stabilisation mechanism and custodians of the reserve assets.

Additional Requirements for Group 1 and Group 2 Cryptoassets

In addition to classifying cryptoasset exposures as Group 1 and Group 2 based on whether they meet the specified classification conditions, such exposures are subject to additional requirements as follows:

Group 1 – Infrastructure Add-on

All Group 1 exposures may be subject to an add-on to risk-weighted assets (RWAs) to cover infrastructure risk.

This add-on is subject to the discretion of authorities and can be activated based on any observed weaknesses in the infrastructure, such as the DLT, on which cryptoassets are based.

Group 2 – Aggregate Limit

Group 2 cryptoasset exposures are subject to an aggregate exposure limit of 2% of a bank's Tier 1 capital. However, Group 2 cryptoasset exposures should not generally be higher than 1% of a bank's Tier 1 capital.

Any breach of the 1% limit must be immediately corrected, with the portion of Group 2 exposures exceeding the 1% limit being subject to a 1250% risk-weight.

Classification Responsibilities

Banks and supervisors have responsibilities in relation to the classification of cryptoasset exposures.

Banks

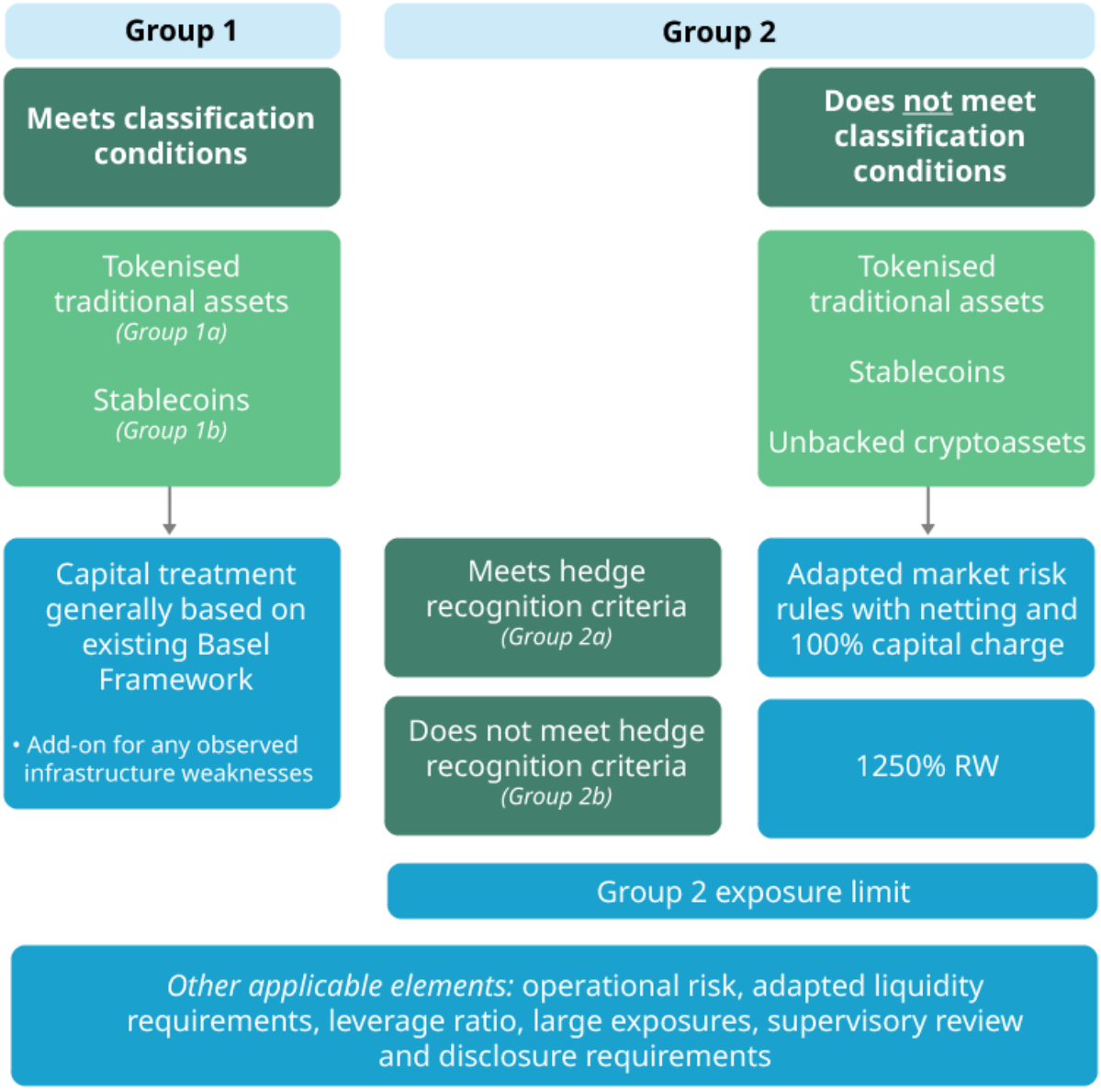
Banks must assess whether their cryptoasset exposures are compliant with the four classification conditions and determine whether such exposures are classified as Group 1 (a or b) or Group 2 (a or b). Banks must fully document the information used to make such judgments and make the documentation available for supervisory review.

Supervisors

Supervisors should assess and review banks' classification analyses and decisions and should have the power to override classification decisions if needed. In carrying out reviews, a bank's supervisor can rely on independent third-party assessors with the requisite expertise and the assistance of other regulators overseeing the entities' management of risks related to the functions noted in the classification conditions.

Structure of the BCBS Standard

The diagram illustrates the structure of the BCBS standard on cryptoasset exposures. Further details on various aspects of minimum regulatory, supervisory review and disclosure requirements are covered in subsequent tutorials in this suite.



Review Question

Which of the following statements is true?

- All types of cryptoassets are eligible for Group 1 designation.
- Group 2 cryptoasset exposures are subject to an aggregate limit of no more than 2% of a bank's Tier 1 capital. (correct answer)
- Supervisors are responsible for regularly classifying cryptoasset exposures into Group 1 or Group 2.

Only tokenised traditional assets and stablecoins with effective stabilisation mechanisms are eligible to be included in Group 1, provided they adhere to the four classification conditions. Unbacked cryptoassets are not eligible for Group 1.

Although Group 2 cryptoasset exposures are subject to an aggregate limit of no more than 2% of a bank's Tier 1 capital, the exposures should generally be no higher than 1%.

Banks are responsible for initially classifying cryptoasset exposures into Group 1 or Group 2, while supervisors oversee, review and, if needed, can override the bank's classification decisions.