RECORDING OF CRYPTO ASSETS - AN UPDATE

ADVISORY EXPERT GROUP ON NATIONAL ACCOUNTS
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• Proposal for updated **crypto asset categorisation**
• **Updated proposal** for their recording in SNA
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Background
The emergence of **crypto assets** led to increasing requests for advice on their recording, particularly as they are not referred to in current statistical manuals.

In response, **two papers** were drafted in 2018 dealing with the issue:

- Paper on crypto assets presented to IMF Committee on Balance of Payments Statistics (**BOPCOM**)  
- Paper on how to deal with Bitcoin and other cryptocurrencies in the System of National Accounts presented to the OECD Working Party on Financial Statistics (**WPFS**)

Both papers were put forward to the **Advisory Expert Group** on National Accounts (AEG) for consultation.
AEG consultation

EXPLAIN TO ME HOW BITCOIN WORKS.

AND DON'T GIVE ME THE CONDESCENDING SIMPLE VERSION FOR MANAGERS. I WANT A FULL TECHNICAL EXPLANATION.

EARLY CIVILIZATIONS HAD NO CONCEPT OF ZERO.

GO ON.
Outcome of AEG consultation

• **AEG agreed on the recording** as proposed in the IMF and OECD papers ...

• ... but “any recording guidance currently developed for crypto assets **should be considered as interim**, pending clearer future developments of crypto assets”

• “**Further research is needed** on the recording of crypto assets with particular emphasis on their use as medium of exchange or store of value”

• It also stressed the **need for more specific definitions** for the various types of crypto assets

• Guidance is needed on the **product and industry classification** of mining activities
Follow-up to consultation

- The **BOPCOM paper** has been already been updated to reflect the interim guidance (IMF, 2019)
- In the meantime, **further reflection** on definitions and recording of crypto assets
- Taking into account **new types of crypto assets** that have emerged (e.g. stablecoins)
- Re-assessing some initial guidance
- Exploring possibilities for **output classification**
Updating crypto asset categorisation
Recap: What are crypto assets?

• Main characteristics:
  – Digital representations of value
  – Exchanged via peer-to-peer architecture (i.e. negotiable instruments)
  – Based on cryptography (avoiding double spending problem, e.g. Blockchain)

• Main motivation:
  – Transact without the intervention of a third party
  – Creation of alternatives to traditional financial instruments
Types of crypto assets

- **Cryptocurrencies** (intended as general medium of exchange)
  - Traditional cryptocurrencies (not backed by an asset)
  - **Stablecoins** (backed by asset or seignorage-based)
  - ...

- **Crypto tokens**
  - **Asset** tokens (represent debt or equity claim on the issuer)
  - **Payment** tokens (used as medium of exchange within a platform)
  - **Utility** tokens (provide holders future access to goods or services)
  - Hybrid tokens (combining aspects of other tokens)
  - ...

- A lot of different **terminology, classifications and definitions** are used

- **New crypto assets** may easily emerge
Need for updated categorization of crypto assets

- Trying to come up with **appropriate definitions** and clear delineations between groups of crypto assets
- Addressing some of the concerns as expressed in AEG consultation
- Not aiming for a taxonomy of crypto assets
- The aim is to **assist compilers** in accurately recording crypto assets in the National Accounts
- Relevant criteria may relate to:
  - **Existing SNA guidance** for distinguishing between different types of assets
  - **User demands** for specific type of information
Possible distinctive criteria

• The **role** of the asset:
  – Acting as a general medium of exchange
  – Acting as medium of exchange within a platform/network
  – Providing a financial claim on the issuer (including future access to goods or services)
  – Acting as a store of value

  **Specific question:** Does it concern the actual or the intended role?

• The **existence of a corresponding liability**

• The **issuer** of the asset

• The supply of and **control** over the asset

• The **technique** underlying the asset

• The **creation** of the asset
Possible distinctive criteria

- **The role of the asset:**
  - Acting as a general medium of exchange
  - Acting as medium of exchange within a platform/network
  - Providing a financial claim on the issuer (including future access to goods or services)
  - Acting as a store of value

  *Specific question:* Does it concern the actual or the intended role?

- **The existence of a corresponding liability**
- **The issuer of the asset**
- The supply of and control over the asset
- The technique underlying the asset
- The creation of the asset
Proposal for categorisation

- **Crypto assets acting as general means of payment**
  - With a corresponding liability, issued by a monetary authority
  - With a corresponding liability, not issued by a monetary authority
  - Without a corresponding liability

- **Payment tokens**
  - With a corresponding liability
  - Without a corresponding liability

- **Security crypto assets**
  - Debt security crypto assets (including utility tokens)
  - Equity crypto assets
  - Derivative crypto assets

- **Crypto assets acting as a store of value**
  - With a corresponding liability
  - Without a corresponding liability

- ...
Updating guidance on recording of crypto assets
Are all crypto assets with the asset boundary?

The AEG agreed that crypto assets are within the asset boundary of the SNA:

- Ownership is well defined for crypto assets
- They provide economic benefits to holder

The only exception may be payment tokens without a corresponding liability, as they only act as medium of exchange within a platform, but are not convertible into cash or another asset.

The AEG is asked to reflect on this.
Recording of crypto assets

Acting as general means of payment

- With a **corresponding liability, issued by monetary authority**
  - Financial asset as there is a corresponding liability
  - Similar to traditional fiat currency
  - **Proposal:** Record as ‘currency’ (AF.21)

- With a **corresponding liability, not issued by monetary authority**
  - Financial asset as there is a corresponding liability
  - Different from traditional fiat currency
  - **Proposal:** Record as separate category under ‘currency and deposits’ (AF.2)

- **Without a corresponding liability**
  - There is no corresponding liability
  - However, for fiat currencies this claim is often a matter of convention
  - They serve the same role of fiat currency
  - **Proposal:** Record as separate category under ‘currency and deposits’ (AF.2)
Recording of crypto assets

**Payment tokens**

- **Definition:** Crypto asset acting as a medium of exchange within a platform or network

- **With a corresponding liability**
  - Redeemable with the issuer (i.e. convertible into cash or other asset)
  - Financial asset as there is a corresponding liability
  - Negotiable (although limited to platform or network) debt instrument
  - **Proposal:** Record as separate category under ‘debt securities’ (AF.3)

- **Without a corresponding liability**
  - Not redeemable with the issuer
  - Only medium of exchange within platform
  - **Proposal:** Reconsider recording it as an asset
Recording of crypto assets

Security tokens

• **Debt security tokens**
  – Negotiable instruments serving as evidence of debt
  – Also includes utility tokens (as they represent a claim on the issuer and can be exchanged peer-to-peer)
  – Financial assets as there is a corresponding liability
  – **Proposal**: Record as *‘debt securities’ (AF.3)* with separate category for utility tokens

• **Equity tokens**
  – Provide holder with residual claim on the assets of issuer
  – **Proposal**: Record as *‘equity’ (AF.51)*

• **Derivative tokens**
  – Provide right to buy (or sell) a particular instrument or commodity
  – **Proposal**: Record as *‘financial derivatives’ (AF.7)*
Recording of crypto assets

**Acting as a store of value**

- **With a corresponding liability** (e.g. stablecoins)
  - Financial asset as there is a corresponding liability
  - Not (yet) qualifying as ‘currency and deposits’ (AF.2)
  - Seem to resemble negotiable instruments serving as evidence of debt
  - Alternatively, they could be regarded as a form of equity
  - **Proposal**: Record as ‘debt securities’ (AF.3)

- **Without a corresponding liability** (e.g. traditional cryptocurrencies)
  - There is no corresponding liability
  - Can be regarded as an outcome of production
  - Despite high volatility in their value, they mainly seem to serve as alternative form of investment
  - AEG expressed a preference to record them as a specific type of valuables
  - **Proposal**: Record as separate category under ‘valuables’ (AN.13)
Guidance on recording of creation of crypto assets

MAYBE WE SHOULD DO AN INITIAL COIN OFFERING, OR I.C.O.
WHAT’S THAT?

IT’S A NON–EQUITY PROCESS FOR RAISING CAPITAL THAT USES A CUSTOM CRYPTO–CURRENCY AND THE BLOCKCHAIN.

I MIGHT BE WASTING MY TIME HERE.

SO... IT’S LIKE A CHAIN MADE OUT OF COINS?
Recording of the creation of crypto assets

- Crypto assets **with corresponding liability**
  - These are the **result of a financial transaction** in which there is a simultaneous creation of an asset and liability

- Crypto assets **without corresponding liability**
  - Depends on assessment of ‘mining’ activity
  - AEG expressed preference to regard it as a **form of production**
  - AEG expressed preference to value output as sum of transaction fees and value of newly mined crypto assets
  - Remaining question: **What product class and what industry?**
    - Mining of metal ores (Section B - Division 07)
    - Other mining and quarrying (Section B - Division 08)
    - Computer programming activities (Section J – Division 62)
    - Information service activities (Section J – Division 62)
    - Financial service activities (Section K)
Statistical measurement of crypto assets
Currently, the most critical challenge is the **data collection** for crypto assets’ transactions and positions.

The AEG confirmed that transactions and/or stocks of crypto assets are currently largely not included in their national accounts.

Furthermore, no specific data sources are yet known that may be available to obtain more information.

Underlying cryptography could be a starting point, supplemented with information requests from major exchange platforms.
Questions for AEG
Questions for the AEG

• Reflect on the **criteria to classify** crypto assets
  – Are these the relevant criteria (role, issuer and corresponding liability)?
  – With regard to ‘role of the asset’: should we focus on the actual or intended role?

• Reflect on the **proposed categorization and classification** according to SNA categories
  – Most proposals are in line with outcome AEG consultation
  – How to treat payment tokens without a corresponding liability?

• Reflect on the **industry and product classification** of mining activities and the resulting output
• **Crypto assets acting as general means of payment**
  – With liability, issued by mon. authority – ‘Currency’ (AF.21)
  – With liability, other – *Separate category under ‘Currency and deposits’ (AF.2)*
  – No liability – *Separate category under ‘Currency and deposits’ (AF.2)*

• **Payment tokens**
  – With liability – *Debt securities (AF.3)*
  – No liability – No asset

• **Security crypto assets**
  – Debt security crypto assets – *Debt securities (AF.3)*
  – Equity crypto assets – *Equity and investment fund shares (AF.5)*
  – Derivative crypto assets – *Financial derivatives (AF.7)*

• **Crypto assets acting as a store of value**
  – With liability – *Debt securities (AF.3)*
  – No liability – *Valuables (AN.13)*

• ...
Thank you for your attention

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