



RECORDING OF CRYPTO ASSETS - AN UPDATE

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Background



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





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

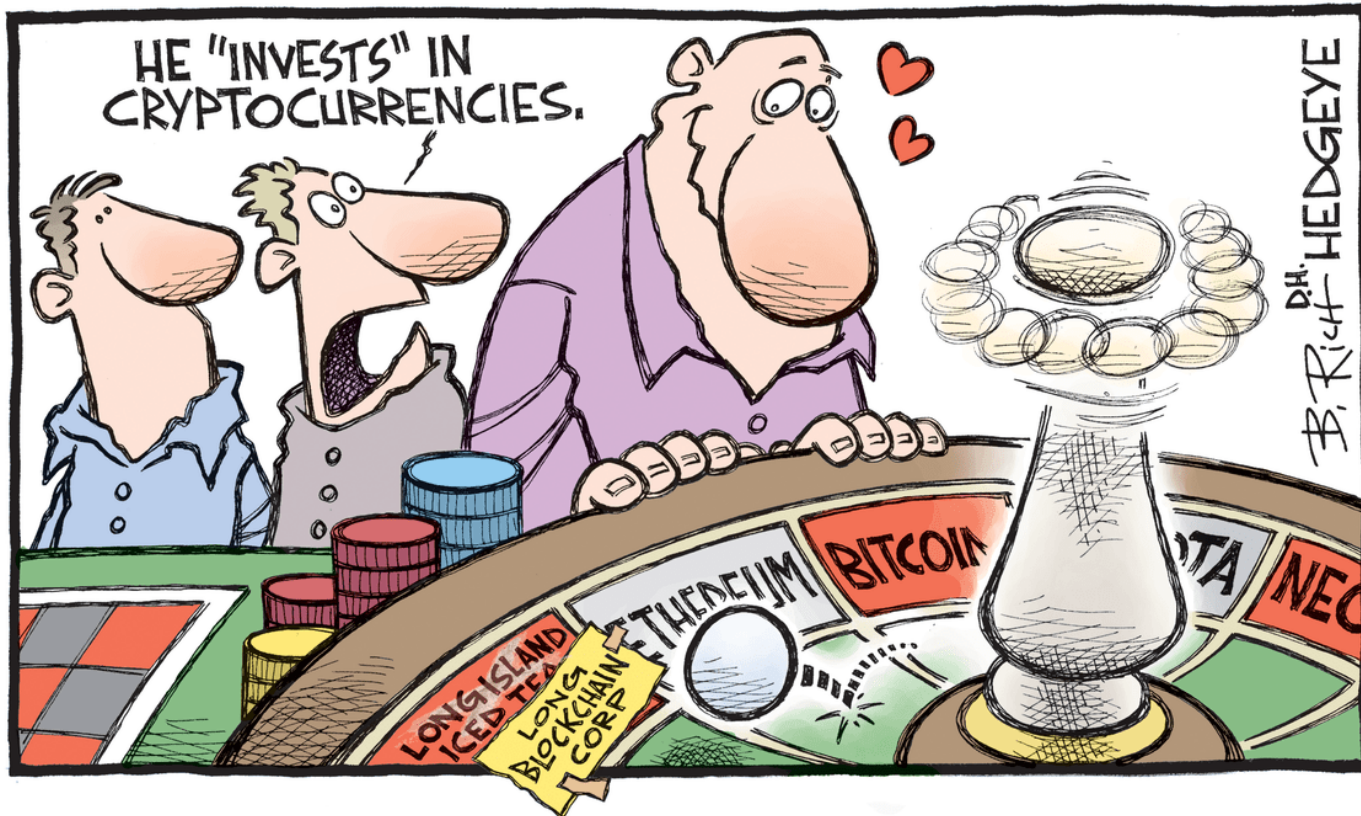


Follow-up to consultation

- 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
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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)**



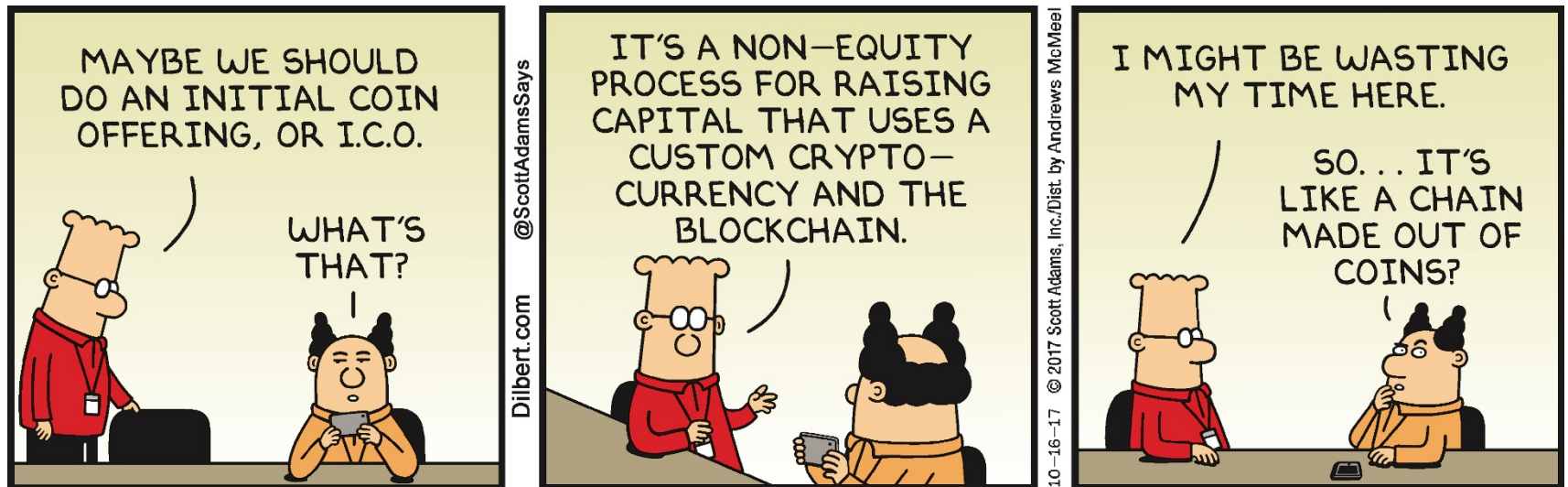
Recording of crypto assets

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





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



Statistical measurement

- 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



Summary of updated proposal

- **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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