

Outcome of the Global Consultation on

DZ.10 The Recording of Non-Fungible Tokens (NFTs) in Macroeconomic Statistics*

Allison Derrick
March 2023 AEG Meeting

*Prepared by Allison Derrick and Robert Kornfeld (United States Bureau of Economic Analysis) and John Mitchell, Itai Walk and Jorrit Zwijnenburg (OECD)



Outcome of the global consultation



- The draft GN was presented to the joint AEG/BOPCOM in October 2022 and **received approval** to be sent for global consultation
- The 42 complete responses received from the global consultation were **overwhelmingly supportive** of the recommendations in the GN
- **90 to 95 percent** of respondents concurred with the note's recommendations for recording NFTs
- Some respondents offered comments or suggestions, which were incorporated into the GN or addressed in the cover note

1. NFTs that convey **no ownership rights** and only allow for personal use of another asset or product
 - Recorded as **consumption**; can transform into a valuable over time
2. NFTs that convey **limited ownership rights** beyond personal use for another asset or product
 - Recorded as **assets (contracts, licenses, or leases)** if the owner can derive economic benefits from these rights
3. NFTs that convey **full ownership rights** for another asset or product
 - **Should not be separately recorded** if the associated assets or products have already been counted

Question 1: Proposed categorization

Question	Yes	No	No response	Total
1a. Do you agree with the proposed categorization of NFTs according to the rights conveyed?	41	0	1	42
1b. Are you aware of any NFTs that may fall into another category?	3	39	0	42

Question 2: Proposed recording

Question	Yes	No	No response	Total
2. Do you agree with the proposed recording of NFTs that convey...				
a. No ownership rights: recorded as consumption	39	2	1	42
b. Limited ownership rights: recorded as assets (contracts, licenses, or leases)	38	3	1	42
c. Full ownership rights: should not be separately recorded	40	0	2	42

Questions 3 and 4: Planned work, other comments

Question	Yes	No	No response	Total
3. Are you currently undertaking or planning any work to measure and/or include NFTs in the current estimates of the accounts	5	37	0	42
4. Do you have any other comments on this guidance note?	11	30	1	42

Other types of NFTs that may fall into another category

Comments: Some NFTs represent **charitable donations**.

- E.g., an NFT that represents the purchase of conservation of a particular tree, but not ownership

Dynamic NFTs can edit the information embedded in the NFT and so could change types.

Update: We added a paragraph to say these types of NFTs are expenditure on charitable donations for a specific purpose and the **NFT acts as a receipt**. We recommend they are classified in line with existing guidelines regarding expenditure relating to charitable donations.

We also added a **footnote on dynamic NFTs** as an example of how digital assets continue to evolve.

Clarification on when an NFT becomes a valuable

Comment: Could some NFTs be considered **valuables at first purchase**?

When an NFT commands a **high price** at first purchase, the purchaser likely expects that the NFT will act as a store of value.

Update: We added to para. 23 to clarify our thinking: the prices of these NFTs are **volatile** and may not maintain value over time. We recommend deferring to **existing guidelines** in the SNA/BPM as well as countries' current practices on recording valuables initially entering the asset boundary.

Comment: Could some type 2 NFTs be considered **a license to use an IP product** rather than a contract, lease, or license? The criteria for the latter category does not seem met for the type 2 NFT examples.

Update: A paragraph was added to clarify the reasoning behind the recording recommendation for these NFTs. Type 2 NFTs are **unique and permit only one user**, representing more a permit to undertake certain activities. Licenses to use an IP product (SNA 10.100) refer to licenses to use copies of an IP product, which are generally **not limited to one user**.

Comment: The **legal status** of NFTs uncertain, which complicates efforts to classify them.

Update: Yes. This uncertainty makes the classification and recording of NFTs difficult. Footnote 10 discusses some of the legal issues, but **future clarifications may be required** as NFTs mature. In general, though, NFTs with less legal rights are less likely to be classified as assets because owners may not be able to derive economic benefits.

NFT transaction fees could be conceptually different

Comment: Should **transaction fees** be treated differently for NFTs and fungible crypto assets?

Update: Since NFTs transactions take place on **the same blockchains** as fungible crypto asset transactions, we think transaction fees for both types of crypto assets can be treated similarly.

Comment: Practically speaking, how can we **implement** this guidance?

Update: Significant **measurement challenges** exist in implementing the guidance due to lack of source data. These measurement challenges are similar to those faced in measuring fungible crypto assets.

One difference is that the **NFT issuer is often known**, though the specific rights conferred by the NFT may require further research. Also, the value of the **NFT market is smaller** than that for fungible crypto assets. NFT transactions are likely a small fraction of total consumption (at least currently).

Comment: The digital asset space is **evolving quickly**, how do we know the recommendations will hold up?

In the future, new NFTs with **different arrangements of rights** could be developed that do not fit into the current categorization and classification framework.

- E.g., NFTs with limited ownership rights that are not limited to one user

Update: We agree that the examples could become out of date with new NFT developments. However, the proposed categorization and classification according to the rights conferred upon the NFT owner are **forward-looking** and cover most new types of NFTs.

Yet **NFTs are constantly evolving** due to changes in consumer preferences, technology, and policy. So, these recommendations may have to be revisited.

Does the AEG endorse the guidance note as amended to incorporate feedback from the global consultation?

References



European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank, New York (2009), “System of National Accounts 2008”. <https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

Derrick, Allison, Robert Kornfeld, John Mitchell, Itai Walk, and Jorrit Zwiijnenburg (October 2022). “The Recording of Non-Fungible Tokens (NFTs) in Macroeconomic Statistics.” 21st Meeting of the Advisory Expert Group on National Accounts, Digitalization Task Team. https://unstats.un.org/unsd/nationalaccount/aeg/2022/M21/M21_21_DZ10_NFTs.pdf

Zwiijnenburg, Jorrit, Allison Derrick, Celestino Giron, and Artak Harutyunyan (October 2022). “The Recording of Fungible Crypto Assets in Macroeconomic Statistics.” BPM6/SNA8 Update Joint Financial and Payments Systems Task Team (FITT). https://unstats.un.org/unsd/nationalaccount/aeg/2022/M21/M21_15_F18_Crypto_Assets.pdf