DZ.3 Treatment of "Free" Digital Products in the "Core" National Accounts

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Background

Many kinds of free services are available online

Digital platforms that are free to use

Free apps, online games that are free to play

Most suppliers of free services in the digital economy are *market producers*

Outputs of market producers are valued by their price

This has generated concerns about the measurement of free products of digital economy, with some arguing that they're missing from GDP and others arguing that they belong in a supplementary measure of economic growth

The Two Work Streams

Core Account guidance, which is the topic of this presentation, will clarify the measurement of free products from digital platforms and other market producers

Satellite Account guidance will provide a framework for an alternative perspective on the free digital platforms

Existing Guidelines related to Free Products

Non-market producers: Free products from governments and nonprofit institutions serving households are valued at their cost of production

In-kind transactions: Imputed income to the recipient of the unpriced item funds an imputed expenditure on the item

• Imputing extra output of free services would entail imputing extra income

Distinction between GDP volume growth and GDP in current prices

Other relevant definitions include production, the production boundary, assets, transactions, and externalities/spillovers (which are not transactions)

Related Guidance being developed for the New SNA: Data as an Asset

Observable phenomena are an input into production of data assets Data assets are produced, but Observable Phenomena are not produced

Option chosen for the Core Accounts: Free services of platforms are paid for indirectly

"Free" platforms* funded by advertising and collection of users' observable phenomena (OP) are often said to be missing from GDP

The platform's advertising revenue covers the cost of supplying the free services that attract users to the platform

The advertisers recover their cost as part of the price of the advertised product

Users of the free services therefore pay for them indirectly

The platform may also supply free services so that it can collect OP to create data assets But the amount spent just to acquire OP may not be feasible to measure

^{*} *Platforms* are service providers that facilitate interactions between two or more parties

Free products: Understanding the current SNA treatment



Economics of Free Platforms

Platforms benefit from <u>network externalities</u>: the more users are on the platform the more valuable the platform is to other users and potential users

- Making the pdf reader free increases demand for the pdf editor
- A larger audience makes the platform's services more valuable to advertisers

Platforms usually have a funder side and a free or subsidized side The mark-ups paid by the platforms' funders subsidize the free services The funders recover this cost as part of transactions facilitated by the platform

Bundling approach to Free Products in General

Both platforms and non-platform market producers often supply free or below-cost products as part of the **bundle** of outputs they sell

The free products help sell other products, and the mark-ups on those products cover the cost of supplying the free products

Assets that are free to Use

Open-source software and user-generated content posted on platforms are important assets that are free to their user

No change in SNA production boundary: Households' production of free software and content as a leisure activity is outside the boundary

Freedom to copy a software original does not preclude the software original from being an asset of its creator

Production of open-source software originals at places of employment may already be counted as own-account investment in software

Free software often helps sell priced services such as support for users, other software or software upgrades, or advertising, and free apps may also collect users' OP

Price and volume indexes

Changes in the availability of free products as part of a bundle conceptually represent price changes

But the assumptions needed to quantify the price and volume impact of the appearance of a new free product may be too uncertain for compiling the national accounts