

## MINUTES ADVISORY GROUP ON MEASURING GDP IN A DIGITALISED ECONOMY Paris, 10 November 2017

### WELCOME AND OPENING REMARKS

1. Following the welcome and opening remarks, the Chair, Eric Strassner (US BEA) introduced the meeting explaining the aim was to build a framework for measuring GDP in a digitalised economy drawing on efforts taking place in member countries. A tour de table was organised where participants from the Advisory Group<sup>1</sup> introduced themselves (see attendance list of participants).

### INTRODUCTION AND SCENE-SETTING

2. Vincenzo Spiezza (OECD/STI) gave a presentation on the policy needs for measuring the digital economy highlighting the milestones of digital economy/ICT measurement at the OECD and the measurement challenges. He said the main measurement needs related to the SNA were (1) value of e-commerce (particularly cross-border) (2) data and information should be a priority for National accountants in particular in the area of price deflators and own-account production and (3) new production activities enabled by digital technologies (new business models, new forms of work). We need to develop synergies between ICT surveys and expenditure surveys to have consistency in data and information. He also emphasised that more conceptual work was needed.
3. Following the presentation, the Chair outlined that digitalisation is not new but the measurement challenge has increased since the nineties.
4. Peter van de Ven (OECD/STD/NAD) asked what types of statistics were needed on data, information and the production boundary, i.e. statistics on investment or on the current production process. He also flagged that in national accounts mixed income is imputed because compensation of employees does not exist for self-employed. Nadim Ahmad (OECD/STD/TCS) highlighted that only the costs of the physical maintenance of the construction of the databases are included as produced capital rather than the data embedded in the database itself. Paul Konijn (Eurostat) asked what Vincenzo meant when he said that the industry breakdown is not reliable. Gary Dunnet (Statistics New Zealand) remarked following Nadim's comment that at his office computer infrastructure is now based in the cloud and that capturing the offshore service provider is difficult.
5. Vincenzo responded that data was clearly an asset which needs to be further investigated and is not dealt with within the SNA asset boundary. He informed the group about a new firm survey on data value (asking questions about the value of data bought and generated within the firm). **Vincenzo stated that he would be happy to share the survey results and any information that can help with regards to measuring the value of data.**
6. Vincenzo confirmed that the cloud is changing the rules of the game as more firms switch to purchasing services instead of investing in capital assets. Regarding classifications, he meant that unincorporated household production was not extensively separately identified noting also that a

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<sup>1</sup> See Proposal to Create an Informal Advisory Group on Measuring GDP in a Digitalised Economy, STD/CSSP(2016)16. It was created by the Committee on Statistics and Statistical Policy (CSSP) to advance the measurement agenda related to measuring the digital economy from a macroeconomic perspective.

growing part of self-employed is now in IT and not in agriculture anymore. Nadim flagged that inequality is not framed around compensation of employees in which case mixed income was good enough (which was not necessarily the case for productivity measurement).

## **POTENTIAL SATELLITE ACCOUNT FRAMEWORK FOR MEASURING GDP IN A DIGITALISED ECONOMY**

7. Jennifer Ribarsky (OECD/STD/NAD) presented the proposed framework as well as the results of the survey on the digital economy typology which includes responses from 19 members of the Advisory Group on Measuring GDP in a Digitalised Economy<sup>2</sup>. Jennifer noted that the majority agreed with the multidimensional scope of the proposed framework but specified a need to further disaggregate industries and products. She explained that an additional dimension was added to the overarching framework to explain what is in, and what is out, of the SNA production boundary.
8. **A tour de table showed that there was broad support for the overarching framework.** Paul Konijn (Eurostat) expressed appreciation for the proposed framework classifying whether the production was inside or outside of the national accounts production boundary was a new and welcomed feature. He noted the overlap in concept between “digitally ordered” (i.e. e-commerce), “platform enabled” and “digitally delivered”. He asked if the enablers are the same as the ICT sector. Sanjiv Mahajan (UK Office for National Statistics) noted some refinement might be needed especially for enablers. He asked where ordering something by manually typing an email would fit in. He suggested a market, non-market dimension as well as a “where dimension”. Gian Paolo Oneto (Istat, Italy) flagged the need to test the framework also asking about the meaning of the data/information box. Ann Lisbet Brathaug (Statistics Norway) agreed on the need to test the framework but wondered what to test. She said that not everything in the framework was clear to her. For example, she did not consider digitally ordered bread as a digital product. Matthew MacDonald (Statistics Canada) was in general supportive of the framework, noting that the elements were not mutually exclusive. He flagged the challenge in measuring the activities of non-resident platforms. Maarten van Rossum (Statistics Netherlands) expressed appreciation regarding the framework but said policy analysts are interested in the changes in value chains, which were not apparent in this framework. Eljas Tuomalla (Statistics Finland) noted the inclusion of the production boundary was useful. Eric Strassner (US BEA) was fully supportive of the framework but asked how to operationalise it.
9. Jennifer agreed with the need to test the framework and said that some concepts were overlapping on purpose and that the “where” was included in the framework as one of the institutional sectors (i.e., the rest of the world). Nadim Ahmad (OECD/STD/TCS) agreed with the need to operationalise the framework, and he noted that the notion of product is fundamental to link with supply and use tables. He also emphasised that the box on information and databases was there because the exchange of data is central in the digital world. He emphasised the **satellite account is ambitious in the amount of detail because it aims at articulating transactors and**

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<sup>2</sup> OECD (2017), Summary of Responses of the Advisory Group: Survey of on Digital Economy Typology STD/CSSP/WPNA(2017)1. The Advisory Group consists of members from national statistical offices, Eurostat, IMF, and UN, as well as members of the OECD Working Party on the Measurement and Analysis of the Digital Economy (WPMADe).

**transactions that are important as well as trying to capture where we feel that mismeasurement is happening. It is however only a starting point that is open to revisions.**

### *General discussion on the proposal*

10. Nadim Ahmad (OECD/STD/TCS) noted that the framework could be expanded. It was probably incomplete, as for the moment only current prices were looked at. The framework should be extended to cover capital stock, capital services, as well as the price-volume split, which is very important.
11. Regarding the question on the breakdown of products based on the nature of transactions, Paul Konijn (Eurostat) asked if Amazon is an intermediation platform and wondered about its residency, Matthew MacDonald (Statistics Canada) agreed with the breakdown, but highlighted the challenge identifying the actors. Gary Dunnet (Statistics New Zealand) found the framework feasible, but he noted it was difficult to easily identify the actors in business registers. Ann Lisbet Braathaug (Statistics Norway) expressed some doubts about being able to operationalise the framework. Gian Paolo Oneto (Istat, Italy) noted again the useful framework and said that even if little is feasible for the moment, these questions should be tackled now and statisticians should think about how to make it feasible because there is a lot of interest. Eljas Tuomalla (Statistics Finland) as well as Stefan Hauf (Destatis, Germany) agreed on the usefulness, the Finnish delegate commented on the usefulness of distinguishing non-resident and resident platforms. Eric Strassner (US BEA) found quite helpful to see a breakdown by product also flagging the measurement issues.
12. Jennifer noted that indeed the intermediation platforms would include Amazon and eBay. It was noted that if the good is produced abroad, the framework allows for a disaggregation showing if the good was domestically produced or imported. Nadim emphasised that information on imports of products digitally ordered from counterparts could be possibly obtained in the future through household surveys.

### *Discussion on digital goods and services and enablers of the digital economy*

13. The group discussed if 3D printing transactions should be separately identifiable within the satellite account and they seemed to agree that 3D printing is different from other products but there was no consensus on whether to separately identify it as a category of “digital goods”. The group then noted the similarity of the discussion with that of music or airline ticket ordering (i.e. treatment as payment of a service) when the discussion focused on the appropriate flows that should be recorded with respect to 3D printing (should payments for the ‘blueprint’ be treated as payments for a service if separately invoiced, or for a good if ‘bundled’). The group (except for Sebastian Reborá (Central bank of Chile) (who advocated excluding the case of intermediate consumption of ICT products) also seemed to think that ICT goods are digitally enabling both when satisfying SNA investment and when they are part of intermediate consumption (IC).
14. Jennifer Ribarsky (OECD/STD/NAD) reminded the group that distinguishing goods and services is an old debate; the same issue concerns contract manufacturing (e.g., whether the manufacturer is producing a good or a service). She pointed that in the area of international trade, this distinction matters, even if it becomes somewhat artificial. **She concluded that the majority of the Advisory Group considered ICT products as enabling the digital economy, noted a consensus on including both ICT products that are considered as investment and IC, but no consensus on**

**3D printing however it was premature to exclude it from the framework, as there is a high degree of interest in identifying transactions in goods made from 3D printing.**

15. On **digital services**, the members were then asked if they agree that services that cannot be digitally delivered are not digital services (as it is the case for transport), even if the intermediation services between consumers and producers are themselves digital. Matthew MacDonald (Statistics Canada), Thomas Schachl (Statistics Austria) and Ann Lisbet Brathaug (Statistics Norway) agreed. However, Matthew MacDonald indicated that if there are policy needs on the value of services that are purchased via a digital intermediary then this can be separately identified but the services should not (necessarily) be considered as a digital service (e.g., transportation services). Sanjiv Mahajan (UK Office of National Statistics) agreed with Matt as said that we run the risk of 100% of the economy of being digital if we took such a wide definition. Paul Konijn (Eurostat) asked if electronic documents should be treated as eBooks and noted television services are pretty digital. Regarding television, Gian Paolo Oneto (Istat, Italy) commented that usually communication and transmission services are bundled. The Chair agreed on the need to think about the television case.
16. Jennifer Ribarsky (OECD/STD/NAD) **concluded based on feedback from the Advisory Group that digital intermediation services are digital services, and that services that cannot be digitally delivered are not digital services. She said it was less clear what other types of services should be included.** Regarding electronic documents, she asked how much different from books these are. She explained that “enablers” mean that these actors are enabling the digital economy to happen and took note of the bundling issue. Nadim Ahmad (OECD/STD/TCS) **noted that for some products, the line would need to be drawn by convention to determine if they are digital services or not.**
17. The question of whether free services should be estimated within the satellite account framework was then raised. Gary Dunnet (Statistics New Zealand) noted that free services (such as free TV) are interesting for discussing consumer surplus. Paul Konijn (Eurostat) agreed with the need to consider free services. Paul also noted that he was unclear what was included within the intermediary platforms category and **called for a clearer distinction and delineation of what digital platforms are included.** Jennifer explained that the paper expressed the need for a clear distinction of platform categories as for instance Spotify and Netflix are not charging intermediation fees for their content. She also clarified that free digital services would be recorded under the product f category in the satellite account. Sanjiv Mahajan (UK Office for National Statistics) noted it would be difficult to monetise Wikipedia and the derived consumer benefit. Maarten van Rossum (Statistics Netherlands) noted that free digital services should be included as these are relevant for households, but guidelines would be needed on how to do this. Matthew MacDonald (Statistics Canada) agreed on the need to separate digital intermediation but wondered how to proceed. Regarding free services, he suggested to focus on market activities first. Nadim Ahmad (OECD/STD/TCS) welcomed the comments and noted **the need to develop guidance on certain elements to assist countries in making estimates.**
18. The discussion then focused on **Digital industries**, Jennifer Ribarsky (OECD/STD/NAD) remarking that in some sense, as is the case for electricity, digitalisation affects all industries. She asked if the group agreed with the un-incorporated household/corporation split, if the ICT sector should be separately identified as enabling industries, and if other enablers could/should be identified and if it was possible to separately identify platforms in business registers.
19. Eric Strassner (US BEA) noted that ICT should be definitely included as an enabling sector, and telecommunication infrastructure should also be included. He noted that it would be difficult to

identify platforms in the business register even if they are probably covered. Paul Konijn (Eurostat) noted that the breakdown was agreeable depending on the supply or use side considered. He also wondered whether the industry classification could flow the same principles as the product classification. **One could define digital industries as firms that produce digital products.** Sanjiv Mahajan (UK Office for National Statistics) agreed with the breakdown but noted that regarding the business registers, identifying platforms would represent a lot of work, noting trade association information could be useful in that prospect. Gary Dunnet (Statistics New Zealand) agreed with all the statements noting that in his national business register, some flags could help identify platforms. Maarten van Rossum (Statistics Netherlands) noted the difficulty of identifying platforms and that they can be classified anywhere in the business register. Matthew MacDonald (Statistics Canada) flagged that for identifying platforms, an international profiling exercise would be needed. Stefan Hauf (Destatis) agreed with the un-incorporated households and corporations split, he said that the ICT as an enabling sector was agreeable but adding telecommunication infrastructure would be going too far. Dacil Jimenez Delgado (Telefonica, Spain) noted that some platforms start selling mobile phones (e.g., Google phones), blurring the picture.

20. Jennifer Ribarsky (OECD/STD/NAD) clarified that enabling industries would be computer and software industries, one could also further disaggregate a company such as Google by kind of activity (broken down by category (Search, Google phone etc.)). Nadim Ahmad (OECD/STD/TCS) took note that Eurostat would have a preference to complement the use table with a fully articulated supply table. He recognised that the draft satellite account currently only provides an abbreviated production account. In reply to Ann Lisbet Brathaug (Statistics Norway) asking about the nature of the table, Nadim Ahmad explained that the satellite account is a use table with a component of supply.
21. Concluding the meeting, Nadim noted the **need to finalise the framework, clarifying the categories, adding for instance the definition of intermediary platforms. Written comments would be invited by 8 December 2017 also from Advisory Group members which are not present at the meeting.**
22. **The Chair thanked the group for the discussion, noting that the WP MADE would share with the group the information collected in their data survey.**

Informal Advisory Group on Measuring GDP in Digitalised Economy  
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