13th Meeting of the Advisory Expert Group on National Accounts, 1-3 October 2019, Washington D.C., USA

Agenda item: 2.4.1

Presentation on the objectives and progress of the sub-group on well-being and sustainability

Introduction

This note provides a short overview of the activities of the ISWGNA Subgroup on Wellbeing and Sustainability. According to the Terms of Reference, the Subgroup has the following objectives:

... produce one or more guidance notes on well-being and sustainability issues identified by the AEG as a first priority. These are:

- Unpaid household work
- Distribution of household income, expenditure and wealth
- Environmental-economic accounting
- Defining a broader framework for capturing economic activities, well-being and sustainability

The subgroup will also work to enhance the presentation of well-being and sustainability statistics, to improve the (consistent) integration between 'core' national accounts and 'satellite' accounts under a broader accounting umbrella, in line with the conclusions of the 12th AEG meeting in November 2018.

In addition to the above, two more fields of interest were identified for their relevance in capturing wellbeing and sustainability: education and human capital; and health and social conditions.

It is quite evident from the above that the Subgroup on Wellbeing and Sustainability covers very diverse topics across several domains. Because of this somewhat different nature of the Subgroup, as compared to the ones on digitization and globalization groups, it was decided to manage it slightly differently. For each of the domains, separate *area groups* have been established, as follows:

- Guidance note on unpaid household activities
- Guidance note on environmental-economic accounting
- Guidance note on distribution of household income, consumption, saving and wealth
- Guidance note on education and human capital
- Guidance note on health and social conditions
- Guidance note on the broader framework

In addition to the area groups a Steering Group, consisting of the two co-chairs, Carol Coy and Catherine van Rompaey, the area leads, and the OECD providing the secretariat of the Subgroup, has been created. The primary role of the Steering Group is to coordinate and oversee the activities of the area groups, and to monitor progress towards achieving the objectives according to the agreed time schedule. The current composition of the Steering Group and the area groups is annexed to this note.

A report on: the wellbeing and sustainability research subgroup

AEG Report – Wellbeing and Sustainability Research Subgroup

1. Introduction

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2. Means of operation and timeframes

4. Each area lead will draw on the expertise of a team of designated experts participating in the process. In the particular case of the Subgroup on Wellbeing and Sustainability, guidance provided must be coordinated with the objectives and design of a broader overall framework. This expanded framework aims to account for interactions among its new facets, along with appropriate tie-ins with the current System of National Accounts.

5. To help keep the process manageable, guidance notes prepared by the area groups will follow a standard format provided in the Terms of Reference document, and consistent across all three ISWGNA

Subgroups. As a rough guide, it has been agreed that substantive core guidance notes should not exceed 20-30 pages, to which supporting appendixes or additional references can be added if required.

6. While the format of outputs will be consistent, the nature of the undertaking in each area may vary considerably, depending on the state of development of existing standards, manual and/or guides. In areas where standards are well-developed, such as environmental-economic accounting, the exercise may be one of determining appropriate scope, while in others where work is at a more experimental stage, the nature of appropriate integration with the current SNA framework remains to be established.

7. To coordinate the activities of the area groups, the Steering Group is expected to convene via WEBEX conference every couple of months and consolidate efforts at important points in the process. It is also hoped that preliminary guidance can be presented for broader expert consultation at the General Conference of the International Association for Research in Income and Wealth (IARIW) in Oslo (August 24 – 28, 2020).

8. While detailed interim target dates have yet to be established, the following key milestones were agreed at the meeting of the Steering Group on August 27, 2019:

- A report on activities of the Subgroup for discussion at the Advisory Expert Group (AEG) on National Accounts in Washington October 1 – 3, 2019.
- A broad indication of required changes to the System of National Accounts by the end of October, 2019 to feed into later discussions at the March 2020 meeting of the UN Statistical Commission.
- Preliminary guidance notes for consultation with a broader group of experts at the IARIW general conference, August 2020.
- Final draft guidance notes for the autumn 2020 meeting of the Advisory Expert Group (AEG) on National Accounts.

3. The broader framework

9. It is considered of the utmost importance to develop metrics that cast a wider net on the monitoring of the well-being of people and the sustainability of societal developments. As (sustainable) well-being is a multidimensional phenomenon, it may not be possible to capture it in one catch-all indicator, and one thus has to agree and rely on a set of indicators which monitor the most relevant aspects. There are several ongoing initiatives in this area. The OECD Better Life Index is an example, in which eleven areas of (sustainable) well-being are being monitored: housing; income; jobs; community; education; environment; civic engagement; health; life satisfaction; safety; and work-life balance. But also the set of indicators developed for monitoring the Sustainable Development Goals (SDGs) can be grouped under this umbrella.

10. In trying to define a broader framework, the goal is to take all of this one step further, by developing a broader accounting framework that supports the monitoring and analysis of the interrelations between the various aspects of wellbeing and sustainability, thus providing a better understanding of the trade-offs and the win-wins between the various domains, and moving away from the primary focus on economic growth as the one and only indicator of progress.

11. This way of thinking about linking various areas of statistics has been developed and implemented in the area of environmental-economic accounting (SEEA 2012 Central Framework), but there are other promising initiatives as well. Furthermore, in the area of education and training, and in the field of unpaid household activities, more detailed guidance has been drafted and disseminated quite recently.

12. As a point on the horizon, one would like to see the development of an overarching accounting framework, in which statistics on economic, societal and environmental issues are integrated (not

necessarily monetised), and in which one can easily drill down into micro-datasets. It is clear that this can only be a long-term goal, also requiring the development of a suitable conceptual framework. As a more realistic goal for the nearer future, one could envision the regular compilation of certain thematic satellite accounts, such as the ones mentioned above. Having accounts for the environment, health, education and unpaid household activities, or time use more generally, compiled on a regular basis for a substantial number of countries would definitely support the monitoring and analysis of quite a number of well-being aspects. In doing so, it is not necessary to compile all accounts at a quarterly or annual basis. Some accounts, for which structural developments are the primary focus, one could think of a compilation every 2-3 years, depending on user demands and the availability of source data.

13. In developing such a broader framework, one should also acknowledge the importance of communication, especially related to the terminology that is currently being applied. Referring to the traditional set of national accounts as being the "central framework" or the "core" set of national accounts, and referring to the measurement frameworks for other areas as being satellite accounts, is not particularly helpful. One therefore also needs to rethink terminology and the content of what's currently being referred to as the central framework. Vanoli proposes, for example, to refer to the current set of national accounts as the System of National Economic Accounts (SNEA), and to include a much broader set of accounts in the central framework of national accounts. In doing so, he also presents a concise conceptual foundation for the broader set of accounts, with reference to four spheres and their related information systems: economy, people, nature and society.

14. In any case, the above also warrants a more in-depth discussion about some broad potential paths for the future of the System of National Accounts as a set of international standards:

- a) Experimentation and flexibility expansion through satellite accounts and supplementary tables where SNA includes a generalised chapter on "satellite accounts and other extensions"; with topic specific guidance contained in separate handbooks.
- b) Coherence and rigour a family of standards: build on SNA-SEEA precedent by designing a family of standards covering the broad domains economy, environmental, human, and social.
- c) Towards measuring progress expand the current SNA to cover a fuller range of wellbeing and sustainability topics beyond the current market economy focus.

3. The five areas for further consideration

15. In this section, a short description is provided for each of the five area groups. In doing so, the following points will be addressed to the extent possible at this stage of the process, without wanting to pre-empt the conclusions of any future deliberations:

- a) The scope of the specific area.
- b) An assessment on maturity of current research/practice.
- c) Potential implications for the current standards for compiling national accounts, the 2008 SNA.

Guidance note on unpaid household activities

16. The line between formal economic activity, informal activity and household activity continues to be questioned and to provide measurement challenges. While these issues are longstanding, recent developments in digital technology have led to a heightened interest and new questions on the role of unpaid household activities in the measured economy. In the past, lengthy discussions have taken place on the drawing of the SNA production boundary to exclude services generated by households for their own final consumption as well as services provided through volunteer activities. Whilst this issue has come up in several specific circumstances, a general reflection needs to be made again on whether the

production boundary should be extended for these unpaid services. The Report by the Commission on the Measurement of Economic Performance and Social Progress, more commonly referred to as the Stiglitz-Sen-Fitoussi Report, also acknowledges this point of critique, and has included a recommendation (number 5), to "broaden income measures to non-market activities", in which the latter refer to unpaid household activities. Furthermore, recently international guidance on valuing "unpaid household service work"¹ (UNECE, 2017) has been finalised.

17. It goes without saying that extending the current production boundary with unpaid household activities would have massive implications on all national accounts aggregates. Whatever the results of such a discussion, even without an extension of the production boundary, there is a clear need for developing a standardised framework, or supplementary tables, for the recording of the above services in physical and monetary terms. In physical terms, having a consistent set of data on time use, that monitors the trade-offs between paid work, unpaid work (e.g. child care, taking care of the elderly, various types of volunteer work) and the capacity for leisure activity, can provide significant insights in people's choices and quality of life. Such information can also advance the agenda of compiling (experimental) results and supplementary aggregates.

18. Other issues that may need further consideration in this context include the following:

- the need for improved (possibly alternative) data sources on time use and consumer durables;
- the relationship with the provision of "free services" that have become available due to the digitalisation of the economy (Internet, social media, etc.);
- the treatment of household volunteer work, among which the creation of freely available asset created by communities of people (Wikipedia, R, etc.);

Furthermore, a group of interested countries should be encouraged to compile experimental results.

Guidance note on environmental-economic accounting

19. The System of Environmental-Economic Accounting (SEEA) 2012 Central Framework provides an accounting framework in which environmental issues are linked, in a consistent and integrated way, with the economic activities as recorded in the current SNA. As such the SEEA provides an excellent starting point for defining supplementary tables for the broader framework within the context of national accounts. One of the discussion items would be whether to simply include the whole SEEA Central Framework into the broader framework for measuring wellbeing and sustainability. Or should, in the context of defining a broader framework of national accounts, priority be given to some of the accounts defined in SEEA?

20. Another item for discussion is what to do with the recent advances in experimental ecosystem accounting. Much progress has recently been made in defining the conceptual framework. Countries are starting to compile estimates, although the practical implementation is still considerably lagging behind the extensions of the SEEA Central Framework.

21. Finally, in moving forward the agenda of environmental-economic accounting, several other issues have been raised. The first one concerns the valuation of natural resources, which poses significant measurement challenges that need to be addressed in order to ensure international comparability. The valuation of natural assets based on the net present value (NPV) method relies on the assumption that

¹ "Guide on Valuing Unpaid Household Service Work", UNECE, New York and Geneva, December 2017. Available at: <u>https://www.unece.org/fileadmin/DAM/stats/publications/2018/ECECESSTAT20173.pdf</u>.

the commodity markets are in equilibrium, implying that the market value of the asset can be set equal to the sum of discounted (expected) future income, or resource rent, associated with the exploitation of the asset. However, as commodity prices show large swings, there is significant uncertainty about their future development and thus the value of the asset. Further research is needed to address volatile asset values where the valuation of natural assets exclusively relies on current commodity prices as being equivalent to the expected value of future incomes.

22. Secondly, whilst the SEEA follows the SNA in promoting the use of market valuation of stocks and flows which are "near-market", some stocks and flows are neither "market" nor "near-market" (such as water stocks and flows) and further guidance is needed for their valuation. Techniques to be used could include "mimicking markets" or deriving "proxy exchange values". This has a close linkage with discussions in the SNA context of valuation of mineral reserves (not currently extractable) and water resources. The valuation and recording of other assets, such as those related to stocks of renewable energy resources, may also need further elaboration, especially given the large-scale growth in these resources in the recent past and in the future. Furthermore, in the context of accounting for ecosystems (see below), some questions have been raised about the delineation of natural biological resources in the current SNA. This especially relates to the criterion of resources being managed, or not, by economic agents.

23. The third issue concerns the depletion of non-renewable natural biological resources, in particular natural timber and aquatic resources, which constitutes an important flow in the existing SEEA 2012 Central Framework. The current SNA includes the concept of depletion of a natural resource with respect to its use in production, to be recorded as an other change in the volume of assets (see para 1.47). Further research and discussion is foreseen on the practical measurement of depletion (which is linked to the valuation of natural resources, see above) and its role in the SNA sequence of accounts and main aggregates. The discussion could also include depletion of (non-renewable) mineral and energy resources, and conceptual issues on how to define the depletion of renewable resources.

24. Fourthly, a number of issues related to "losses" are not fully described in the SEEA and need to be further clarified. Notable examples include energy and water losses during the chain from original source to consumer. Whilst the SNA accounts for the recording of losses of inventories (see the Annex to SNA Chapter 6), the guidance could be further elaborated, particularly as it impacts the recording of transactions within and between industries and households.

25. Finally, the ecosystem accounting framework incorporates ecosystem services by extending the concept of production to include natural processes. The result is that ecosystem services become additional outputs within the national accounting system alongside the set of goods and services defined in the current SNA. Having been recognised as outputs produced by ecosystem units, one could consider recording these ecosystem services as being transacted within the accounting system. As such, the ecosystem accounting framework aims to treat ecosystem services and assets in a manner that is as analogous as possible to the treatment of produced assets and standard goods and services as described in the SNA. There are, however, several issues that still need further discussion, such as recording ecosystem services within a broad extended sequence of institutional sector accounts; the need for a clear articulation of the underlying economic assumptions and associated implications; guidance on valuation for non-monetary and imputed transactions; the valuation of ecosystem assets; and how measures of ecosystem degradation can be attributed to economic units (based on costs borne or costs caused). In the context of defining a broader framework of national accounts, discussion is needed whether enough progress, including the availability of estimates, has been made, or will be made in the foreseeable future, to warrant an inclusion of ecosystem accounting in the broader framework.

Guidance note on distribution of household income, consumption, saving and wealth

26. There is a clear need and expectation to go beyond measuring the size or growth of the economy and better inform on who is benefiting – how the benefits of economic activity are being distributed. A significant amount of work has already been invested in putting more focus on household (adjusted) disposable income, in addition to economic growth. This includes de-compositional analyses on which factors drive differences in economic growth versus the growth of real household disposable income, including its distribution across different household groups.

27. Significant investments have also been made in linking micro data on the distribution of household income, consumption, saving and wealth with the equivalent national accounts aggregates, leading to consistent distributional measures within the framework of national accounts, e.g. the work done by the OECD/Eurostat Expert Group on Disparities in National Accounts (EG-DNA), by the European System of Central Banks (ESCB) Expert Group on Linking Macro and Micro Data for the Household Sector (EG-LMM), and the World Income Database (DINA). Several countries have also put considerable efforts in advancing in this area, and some already compile and disseminate distributional results. As a consequence, much experience has been gained in this area, and excellent guidance on sources and methodologies is available.

28. From a conceptual point of view, this area can be considered as a "simple" breakdown of the household sector into a number of subsectors, be it based on income quintiles/deciles, composition of the household, or the type of income received. Annex 1 of the 2008 SNA already includes suggestions for the breakdown of the sector, based on the type of income received. Having said that, a number of questions have been raised in relation to the measurement and recording of household transactions and positions. An example concerns the allocation of social transfers in kind to individual households, e.g. in relation to health and education. Furthermore, the recording of non-life insurance raises questions in the case of smaller groupings for which premiums and claims do not cancel out. Questions are also raised about the exact treatment of institutional households.

29. From a more practical point of view, breaking down the households' sector requires additional details on intra-household transactions and positions, such as those related to income and capital transfers between households, and transactions in second hand goods.

30. Finally, there is also a communicational aspect to this line of work. A key point here for the statistical community is to clearly understand and communicate the differences and relative strengths and appropriate uses between distributional results based on national accounts concepts and measures of inequality and poverty based on micro-based sources. These two bodies of work can inform one another in terms of quality and coverage.

Guidance note on education and human capital

31. As the economy evolves (driven mainly by advances in technology), employment outcomes and the future of work have become an increasing concern of governments and societies. Changes in the arrangements of the production process (via globalisation, digitalisation, etc.) have real world impacts on the nature and availability of work and jobs. The role of the human capital content of labour is also growing. In turn these changes in the labour market drive changes in incomes, living standards, and wellbeing for many citizens. Understanding changes in the relationship between the production process and employment, including its human capital content, is thus critical for policy makers.

32. Despite labour being one of the two factors of production within the SNA production model, and being a fundamental component of the economic system more generally, it is not currently articulated as

a separate account within the SNA. Unlike capital, there is no labour account to enable analysis of the stock, utilization, rates of return and so forth of labour within the production process. The study of productivity continues to develop with research initiatives including KLEMS; total factor productivity; quality adjusted measures of labour; human capital and so forth. Significant changes in the 2008 SNA, such as the capitalization of R&D, came about largely through the study of the role of capital in productivity growth. Having an explicit discussion of labour in the SNA would facilitate the research and analysis of productivity measurement.

33. Productivity is the key driver of real income growth, and real income growth is in turn the main determinate of material living standards. A major contemporary puzzle is the failure of recent advances in technology to translate into wage growth and increased real incomes for many citizens. Informing this puzzle must be one of the critical measurement challenges of our time. More fully articulating the role of labour within the economy can only help with this study.

34. A related issue concerns the role of education and human capital in the production process, the labour market and its impact on people's income and wellbeing. Significant advances have been made on how to record and measure the increasing role of education and human capital, such as those included in the UNECE Guide on Human Capital², in which ample guidance is provided on the compilation of satellite accounts on education and training, and also the development of satellite account on human capital, including methodologies for measuring investments in and stocks of human capital, and how to record all of this in the SNA.

35. A further elaboration of the above issues into a set of tables that supplement the traditional framework of national accounts could support the analysis of the production process and people's wellbeing in various ways. Assuming that a full integration of human capital measures into the SNA is not feasible and desired, this line of work is not expected to have an impact on the fundamentals of the current framework of national accounts, but it may lead to additional details and clarifications in the standard set of national accounts (e.g. more details on labour input), and it may also result in supplementary tables providing more detail (e.g. on expenditures on education) and/or alternative measures (e.g. on investments and stocks of human capital).

Guidance note on health and social conditions

36. Governments are under pressure to deliver the services expected by citizens, there is pressure on budgets across the globe driven by aging populations and technology advances (particularly in health care). Issues of productivity and outcomes in health and education are at the forefront of minds in most governments. The valuation of these non-market activities is a long-standing issue that needs to be addressed continuously. Also, building on work of the Atkinson Review and research by national statistical agencies, there is a clear need to have more guidance on the volume and price measurement of non-market output. It should also be considered whether there is an appetite for the SNA to more explicitly look at outcomes and not only outputs.

37. In this respect, it is also important to further elaborate the role of health and education in the context of wellbeing. Education has already been addressed in the previous item, but also in the case of health it is considered critical to design supplementary tables which provide a link between the traditional set of national accounts, including the measurement of outputs, and the outcomes of the process of

² "Guide on Measuring Human Capital", UNECE, New York and Geneva, December 2016. Available at: <u>https://www.unece.org/fileadmin/DAM/stats/publications/2016/ECECESSTAT20166_E.pdf</u>.

producing health services. Here, reference can be made to the considerable work that has been done on the development and compilation of health satellite accounts.

38. Again, this line of work most probably won't have an impact on the fundamentals of the SNA, although a couple of issues could potentially lead to a reconsideration of current guidance. In respect of the latter, one can think of the measurement of the output value of non-market services. Also further guidance on the volume/price split could lead to changes in some of the recommendations in the 2008 SNA, although these may probably be considered as clarifications or interpretations.

ANNEX: Composition of the Steering Group and the various area groups for the ISWGNA Sub-group on Well-being and Sustainability

Co-chairs

- Carol Coy
- Catherine van Rompaey

Steering group

- Carol Coy (co-chair)
- Catherine van Rompaey (co-chair)
- Lucas Chancel (Paris School of Economics)
- Mark de Haan (Statistics Netherlands)
- Patrick O'Hagan (Consultant, former Statistics Canada)
- Christopher Payne (UK ONS)
- Dylan Rassier (US BEA)
- Richard Tonkin (UK ONS)
- Branko Vitas (ABS)
- Giuliano Amerini (Eurostat)
- Tihomira Dimova and/or Rami Peltola (UNECE)
- Jennifer Ribarsky (IMF)
- Michael Smedes (UNSD)
- Peter van de Ven (OECD, Secretariat)
- Jorrit Zwijnenburg (OECD, Secretariat)

Guidance note on unpaid household activities

- Chris Payne (UK ONS) (lead)
- Nancy Folbre (University of Massachusetts)
- Jonathan Gershuny (Centre for Time Use Research)
- Dominic Webber (UK ONS)
- Carlotta Balestra (OECD)
- Vania Etropolska (UNECE)
- Francesca Grum (UNSD) (tbc)

Guidance note on environmental-economic accounting

- Mark de Haan (Statistics Netherlands) (lead)
- David Ainslie (UK ONS) (eventually: Adam Dutton (UK ONS))
- Dennis Fixler (US BEA)
- Raúl Figueroa Díaz (INEGI, Mexico)
- Carl Obst (consultant)
- Viveka Palm (Statistics Sweden)
- Sjoerd Schenau (Statistics Netherlands)
- Alessandra Alfieri and/or Bram Edens (UNSD)
- Glenn-Marie Lange (World Bank) (eventually: Pablo Castaneda (World Bank))
- Anton Steurer (Eurostat)

Guidance note on distribution of household income, consumption, saving and wealth

- Richard Tonkin (UK ONS) (lead)
- Lucas Chancel (Paris School of Economics)
- Dennis Fixler (US BEA)
- David Johnson (University of Michigan)
- Emmanuel Manolikakis (Statistics Canada)
- Andrea Neri (Banca d'Italia)
- John Sabelhaus (Washington Center for Economic Growth)
- Amanda Seneviratne (ABS)
- Carlotta Balestra (OECD)
- Vania Etropolska (UNECE)
- Pierre Sola (ECB)
- Jose Pablo Valdes Martinez (World Bank)
- Jorrit Zwijnenburg (OECD)
- Someone from Eurostat (tbc)

Guidance note on education and human capital

- Patrick O'Hagan (consultant, former Statistics Canada) (lead)
- Ann Lisbet Brathaug (Statistics Norway)
- Barbara Fraumeni (Central University for Finance and Economics, Beijing)
- Wulong Gu (Statistics Canada)
- Alessandra Righi (ISTAT)
- Gueorguie Vassilev (UK ONS)
- Tihomira Dimova (UNECE)
- Paolo Passerini (Eurostat)
- Rami Peltola (UNECE)

Guidance note on health and social conditions

- Dylan Rassier (US BEA) (lead)
- Elisabeth Hopkins (Sweden)
- Ciara O'Shea (CSO Ireland)
- Rachel Soloveichik (US BEA)
- Paolo Passerini (Eurostat)
- Ann Lisbet Brathaug (Statistics Norway) (reviewer)
- Someone from the WHO (tbc)
- Representatives from some of the following NSOs: Brazil, Italy, Mexico, Peru, and Portugal

Guidance note on the broader framework

- Catherine Van Rompaey (Statistics Canada) (lead)
- Branko Vitas (ABS)
- Michael Smedes (UNSD)
- Peter van de Ven (OECD)
- Chris Mukiza (Statistics Uganda) (tbc)