



It's About Time for a Change: Broadening the SNA Framework to Account for Sustainability and Well-being

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Abstract:

Economic growth, or the volume growth of GDP, can be considered as the single most successful macro-economic indicator, having showed its policy relevance since the depression of the 1930s. For many decades, it has basically defined whether the economy is successful or not, or even more broadly whether societal developments are going in the right or wrong direction. As such, it has largely driven, and continues to drive, the policy agenda. GDP actually does a pretty good job as an indicator of (monetary) economic activity. However, when it comes to monitoring well-being of people, including the future sustainability of this well-being, economic growth has many fallacies and caveats. The link between continuous increases of GDP and enhancing (sustainable) well-being is more and more questioned, debated and considered totally flawed. From an environmental perspective, navigating on GDP alone may show to be the shortest route to disaster.

For the above reasons, there is an increasing user demand for arriving at better metrics that provide a more encompassing measure of developments in (sustainable) well-being. It may not be possible to find what is considered by some as the holy grail, an alternative catch-all indicator, that provides a perfect monitoring instrument for well-being, which also takes into account the present-day losses (or gains) in the possibilities to generate future well-being. The pursuit of such an indicator may show to be a dead end road. Well-being is a multi-faceted phenomenon that may only be captured by a dashboard of indicators, such as for example the OECD Better Life Index.

The paper argues in favour of trying to define and populate an underlying conceptual and statistical accounting framework for the indicators which are typically considered relevant for well-being and its future sustainability. A further enrichment of the central framework of national (monetary) accounts, by including and combining a standard range of accounts on environment, health, education and time use, could provide an excellent tool for enhanced policy analysis. All of these additions need not necessarily be defined in monetary terms, although monetising (degradation of) ecosystems could further support the urgency of dealing with environmental sustainability.

Keywords:

Economic growth; national accounts; OECD Better Life Index; sustainability; well-being

1. Introduction

1. Kenneth Boulding once noted that “*anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist*”¹. Amongst others, Philipsen (2015) shows the ridiculousness of continuously pushing for a 3% growth of world GDP, which would result in a doubling of the world economy every quarter of a century, and leading to a world economy which by the end of the 21st century would be eight times larger than the current one. Adding another century would lead to a 128-fold multiplication of the current level of economic activity. All of this is not to say that compiling GDP-numbers is pretty much useless. Clearly, monitoring and analysing economic activities are important in their own right, for example to support policies for designing a financially sustainable economy. But that should not lead to policies that continuously and exclusively beat the drum of an unconditionally higher GDP. For what purpose? For whom? Economic growth cannot be the ultimate objective of a society. As many have said, we need a better navigation system that guides policy towards the enhancement of well-being of people, without jeopardising the sustainability of well-being for future generations to come. But often voices become much softer, or even silent, when it comes to concrete alternatives which could provide clearer guidance for the future direction of societal developments, have a rigorous and conceptually sound underlying measurement framework, and – last but not certainly least – are easy to communicate.

2. Whatever the case, the quite alarming societal developments call for further action to arrive at better metrics that provide a more encompassing measure of developments in (sustainable) well-being. It may not be possible to find what is considered by some as the holy grail, an alternative catch-all indicator, that provides a perfect monitoring instrument for well-being, which also takes into account the present-day losses (or gains) in the possibilities to generate future well-being. The pursuit of such an indicator may show to be a dead end road. Well-being is a multi-faceted phenomenon that may only be captured by a dashboard of indicators, such as for example the OECD Better Life Index; see <http://www.oecdbetterlifeindex.org/>.

3. This short paper includes a proposal to broaden the traditional framework of national accounts into an accounting framework that can support the analysis of dashboards of indicators for measuring well-being and sustainability. It thus tries to provide a linking pin between the current set of national accounts and the dashboards of indicators. After a short description, in Section 2, of initiatives closely related to the current system of national accounts, Section 3 of this paper goes one major step further, by presenting an outline of such a broader accounting framework, which is considered practically feasible in a relatively short time period. Section 4 concludes with some suggestions on the way forward in implementing such an approach.

2. Current initiatives closely related to the current system of national accounts

4. One of the most influential initiatives to arrive at a better understanding of well-being is the “Report by the Commission on the Measurement of Economic Performance and Social Progress” by Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi (Stiglitz et al, 2009). The report contains various recommendations, among which the first five are directly related to macro-economic statistics, as follows:

1. When evaluating material well-being, look at income and consumption rather than production.
2. Emphasise the household perspective.
3. Consider income and consumption jointly with wealth.
4. Give more prominence to the distribution of income, consumption and wealth.
5. Broaden income measures to non-market activities.

5. The main thrust of these five recommendations is to not only look at (developments in) GDP, but also to household disposable income, the distribution of income, consumption and wealth, and the

¹ United States Congress, House (1973) Energy reorganization act of 1973: Hearings, Ninety-third Congress, first session, on H.R. 11510, page 248.

free services provided by unpaid household activities (taking care of children and elderly people, cooking meals at home, cleaning, etc.). As such, the Report also recognises that the system of national accounts is much more than GDP alone, a mistake that is often being made, if not explicitly then at least implicitly. The system of national accounts contains a complete and consistent set of accounts that describe all (economic) transactions and positions for households, corporations, government, etc.

6. Importantly, the Report does not contain a recommendation to objectively capture well-being in a single metric, by for example monetising all aspects that have a positive or negative impact on well-being. The same holds for trying to capture (environmental) sustainability, by monetising all negative externalities from economic activities on the environment. The Report considers well-being as a multi-dimensional phenomenon, and preference is given, at least for the time being, to define the various aspects that affect well-being, and then select indicators for monitoring the developments for each of these aspects. As a follow-up to the 2009 Report, a High Level Expert Group (HLEG), the secretariat of which was provided by the OECD, was set up in 2013 to continue the work of the Stiglitz-Sen-Fitoussi Commission. Their report “Beyond GDP. Measuring what counts for economic and social performance” (see Stiglitz et al., 2018) makes, amongst others, a plea for the “capital approach”, in which progress is monitored by the development of economic, human and environmental capital, and by the vulnerability and resilience of systems.

7. In response to the Stiglitz-Sen-Fitoussi Report, and also motivated by the OECD Inclusive Growth Agenda, among which the work on broader measures of well-being (see e.g. the OECD Better Life Index), several initiatives have been taken forward in the area of national accounts as well, with the objective to put more focus on (the distribution of) household disposable income, instead of GDP:

- The dissemination of a dashboard on households’ economic well-being; see <http://www.oecd.org/sdd/na/household-dashboard.htm>.
- The dissemination of a quarterly news release on “growth and economic well-being”; see e.g. <http://www.oecd.org/sdd/na/Growth-and-economic-well-being-oecd-02-2019.pdf>.
- A [working paper](#) on the decomposition of differences between GDP growth and growth in real disposable income.
- A [working paper](#) on the impact of valuing unpaid household activities.
- Aligning micro data on the distribution of income and consumption to national accounts, to arrive at distributional information that is consistent with macro-economic indicators; see e.g. the latest [working paper](#) on this topic.

8. Furthermore, much effort has been put into the further development and dissemination of environmental-economic accounts. These accounts are based on the System of Environmental-Economic Accounting – Central Framework (SEEA-CF), which the UN Statistical Commission endorsed in 2012 as a global standard for compiling such accounts. In addition to an extended accounting for natural assets, and perhaps more importantly from a monitoring perspective, the SEEA-CF includes a set of physical flow accounts, in which natural inputs, products and residuals are linked to economic activities. Physical supply and use tables are included for energy, water, and various material flows (emissions to air, emission to water, and solid waste). Another part of the framework concerns a more prominent accounting for environmental activities, by identifying economic transactions within the system of national accounts which mainly relate to “... *economic activities whose primary purpose is to reduce or eliminate pressures on the environment or to make more efficient use of natural resources*” (§ 1.30 of SEEA-CF). A final set of accounts breaks out environmental taxes, subsidies and similar transfers.

9. The uptake of implementing SEEA-consistent accounts has been very good, with currently 69 countries having programmes on environmental-economic accounting. The goal for 2020 is to have at least 100 countries with ongoing, well-resourced programmes in line with SEEA-CF. All of this is a major step forward, which will allow for a better monitor and analysis of the externalities of economic activities in the form of emissions, and of the growth of environment-friendly activities. Furthermore, an improved accounting for mineral and energy resources would make it possible to calculate a Gross

Domestic Product, which is not only adjusted for depreciation of produced assets, but also adjusted for depletion of natural resources.

10. However, much more needs to be done. The economy and the society at large are embedded in and depending on the limitations provided by Planet Earth. From a sustainability perspective, the most important assets are ecosystem assets. § 2.31 of SEEA 2012 – Experimental Ecosystem Accounting (SEEA-EEA) defines ecosystems as “... *spatial areas comprising a combination of biotic and abiotic components and other characteristics that function together*”. These assets provide ecosystem services, benefits used in economic and other human activity, a rather euphemistic formulation for services on which human and other life depends. In SEEA-EEA, three main types of services are distinguished: (i) provisioning services (e.g. timber from forests); (ii) regulating services (e.g. forests proving carbon sinks); and (iii) cultural services (e.g. the pleasure of visiting a national park). However, ecosystems accounting is not straightforward at all. In physical terms, consensus has more or less been achieved on the way forward. However, accounting for the monetary value of the stocks of ecosystem assets, and their degradation over time, is a slightly different story. Notwithstanding the complexity, much progress has been made in recent years, and work is ongoing to further improve methodologies. In future, all this work could potentially lead to the compilation of physical and monetary estimates for stocks and degradation of ecosystems.

3. A broader framework of “national accounts”

11. Although the above initiatives are important in their own right, it is 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. An important example of capturing well-being by a limited set of indicators is the OECD Better Life Index, 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. For each of these aspects, regional and interpersonal distributions are also taken into account. If inequalities of say income, wealth, health, education, etc. coincide, the impact on well-being for the relevant people at the bottom of these distributions can be very detrimental indeed.

12. It is proposed here 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 well-being, thus providing a better understanding of the trade-offs and the win-wins between the various domains. For example, what’s the relationship between on the one hand the output of the medical industry and unpaid household activities on care for (non-)household members, and on the other hand the health outcomes of people, and how does this affect, for example employment and government finance. How to improve health outcomes? Should we spend more money on prevention, on development of pharmaceuticals, on improving medical techniques, and how much money are we willing to spend? To answer this type of questions and to provide a link with relevant outcome indicators, one may consider supplementing the traditional set of national accounts data on the production of medical goods and services and government finance, with more detailed business statistics on the medical industry, granular administrative data on medical treatments, and hours spent on relevant time use categories. In the first stages of development, it may not be possible to define a framework that covers all indicators, and for reasons of practical feasibility, it is advisable to limit the framework to a subset of indicators; see also below.

13. This way of thinking about linking various areas of statistics has been developed and implemented in the area of environmental sustainability (see e.g. the above on SEEA), but there are other promising initiatives as well. For example, quite a number of countries have done work on health satellite accounts, while more and more work is being done on exploiting administrative data on medical treatments, to arrive, for example, at better measures for the volume changes in the provision of health

services. Furthermore, in the area of education and training, a conceptual framework for compiling satellite accounts² for education, training and human capital has been developed; see UNECE (2016). The same is true for satellite accounts on unpaid household activities (see UNECE, 2017), where various attempts have been made to integrate numbers from the time use surveys with the hours worked in paid employment, and to value the services provided within households. In respect of the latter, a framework, which combines the traditional national accounts with more granular and more timely data on time use, would provide an excellent tool for monitoring and analysing shifts in time spent between paid activities, unpaid household activities and leisure time. Such shifts are considered highly relevant for the measurement of people's well-being, whether this may concern activities benefiting people's own well-being (e.g., work-life balance, leisure), other people's well-being (e.g., childcare, eldercare, volunteering), or both (e.g., socialising). Furthermore, it would be great to have additional information on e.g. digital activities, such as time spent on social media, search activities, etc., thus allowing for an alternative way of measuring consumer surplus that may arise from the digitalisation of the society³.

14. More generally, 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 in the 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 included in the OECD Better Life Index, and other dashboards at international and national level. 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.

15. In developing such a broader framework, one should acknowledge the importance of communication. 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. In line with Vanoli (2017), we need to rethink terminology and the content of what's currently being referred to as the central framework. Vanoli proposes 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. One would perhaps even want to go a step further when it comes to the term for the current set of national accounts, and refer to it as the System of National Monetary Accounts, to make clear that economy is more than a consistent set of monetary transactions and positions. Furthermore, Vanoli 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. A similar plea for a new and comprehensive "System of Global and National Accounts", including an in-depth analysis and description of how such a system should look like can be found in Hoekstra (forthcoming). Hoekstra argues for a distinction of four sets of interrelated accounts, three describing the environment (Global Environmental Accounts), the society (Global Societal Accounts) and the economy (Global Economic Accounts), and one describing distributional aspects (Global Distribution Accounts). A separate set of Global Quality Accounts is distinguished for the definition and recording of key indicators that can be derived from the other three accounts, to provide a summary on whether things are moving in the right direction.

² A satellite account is a set of accounts that are linked to, but distinct from, the central framework of national accounts. One type involves some rearrangement of central classifications and the possible introduction of complementary and/or more detailed elements, which do not change the underlying concepts of the SNA in a fundamental way. A second type of satellite analysis is mainly based on concepts that are alternatives to those of the SNA. These include a different production boundary, an enlarged concept of consumption or capital formation, an extension of the scope of assets, and so on.

³ It won't be possible to achieve the requested granularity and timeliness by applying traditional survey methods; more thinking is needed about the potential of big data to compile time use data, or at least to supplement current data collection methods.

4. The way forward

16. The development of a full-scale conceptual framework for capturing all aspects of (sustainable) well-being may be too demanding and time-consuming. Here, a more pragmatic approach is being proposed, to get things moving forward relatively quickly. Relatively quickly, as following this approach, it may still take quite some time to define the conceptual framework, including the templates, discuss these proposals and have them endorsed at the international level, and – last but certainly not least – to get all of this implemented by countries.

17. In its 49th meeting held on 6-9 March 2018, the UN Statistical Commission agreed to develop guidance notes on three priority areas for which further clarifications and guidance are needed in the context of the further development of the 2008 System of National Accounts: (i) digitalisation, (ii) globalisation, and (iii) well-being and sustainability. For each of these areas, dedicated Task Forces have been set up in the first half of 2019, with the goal of delivering draft guidance notes in the course 2020. The Terms of Reference of the Task Force working on well-being and sustainability includes, in addition to unpaid household activities, environmental-economic accounting, and distribution of income, consumption and wealth, the following explicit reference: “defining a broader framework for capturing economic activities, well-being and sustainability”. In moving forward quickly, one would prefer to keep the group of people actively contributing to the drafting of the guidance notes relatively small, but it is also considered of the utmost importance to involve, at some stage, specialists from other areas of expertise (environment, social issues, education, health, time use, etc.) as well. One should avoid at all costs that the development of this broader framework of “national accounts” is looked upon as a form of economic imperialism. The objective is to arrive at a consistent framework, which covers much more than the economy alone.

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