Beyond-SNA: How replacing the System of National Accounts by WISE accounts could revolutionize input-output analysis

Topic: Input-Output Accounts (3)
Author: Rutger Hoekstra
Co-Authors: Fabian Rocha Aponte, Kirsten S. WIEBE

Gross Domestic Product (GDP) dominates public discourse. It is often viewed as a measure of societal progress, despite the fact that many academics and institutions explicitly warn against this interpretation. As a result, many â€œBeyond-GDPâ€• metrics have been proposed which claim to be a better measure of societal progress.

Beyond-GDP measurement systems provide either an index or a dashboard of indicators. However, these proposals are rarely embedded in a coherent accounting framework. This paper argues this is a mistake because the success of GDP is cannot be separated from the broader success of the System of National Accounts (SNA). The SNA, which accounts for economic stocks and flows, allow society to analyse the drivers of historical economic developments. The SNA data also serve as a basis for macro-economic models which help societies make decision about the future and potential policies. Rather than â€œBeyond-GDPâ€• we need to go â€œBeyond-SNAâ€•.

Based on decades of literature and initiatives, this report informs a Beyond-SNA strategy. A comparable approach was followed by the System of Environmental and Economic Accounts (SEEA) which provides environmental data which is consistent to the SNA. The SEEA-SNA combination has facilitated many insights such as the â€œdecouplingâ€• of environmental pressures and GDP, â€œcarbon footprintsâ€• and environment-economic models etc.

However, a Beyond-SNA strategy needs to be broader than environmental phenomena. The report provides the architecture for a new interdisciplinary accounting framework. It is not a full statistical manual, but rather a high-level description of the main features and sub-accounts. It is based on the existing frameworks (e.g. SNA and SEEA) as well scientific and grey literature. These â€œWISE accountsâ€• are based on three concepts: Wellbeing (average current wellbeing), Inclusion (distribution of wellbeing) and Sustainability (future wellbeing). These dimensions are increasingly being used by international initiatives such as the UN High-Level Expert Group (HLEG) on Beyond-GDP. The interdisciplinary WISE accounting framework is unique in 3 ways:

It quantifies stocks/flows of the economic, social and environmental systems in multiple units (money, mass, people, time, etc)

It (e)valuates wellbeing, inclusion and sustainability using methods from various scientific schools of thought, thereby linking it to all the major Beyond-GDP indexes and dashboards.

It is a global framework rather than a national one (the SNA has a national perspective), although the WISE accounts do of course have country-level data

This report also shows that the conceptual WISE accounts are empirically feasible, by leveraging and integrating various existing databases. A concrete suggestion about the way forward is provided. Three considerations are given: 1) The implementation would require global and interdisciplinary statistical collaboration. 2) The WISE Accounts should be simultaneously developed with WISE â€œpost-growthâ€• policy models. 3) It would be fruitful to pilot the WISE accounts in a region or country (e.g. the European Union) with good statistical infrastructure and modelling capacity.

The WISE accounts provide an opportunity to broaden the questions which input-output could tackle. It will enable IO models which links wellbeing, inequalities and planetary boundaries in a consistent empirical and modelling framework. Currently, the project WISE Horizons is working on developing the WISE account, based on the IMF's MARIO database.