Preface – National Accounting: Old Questions Revisited, Plus Some New Ones

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Whether or not the national accounts were 'one of the great inventions' of the past century (Landefeld, 2000), they have certainly been one of the most influential. They are the lens through which we have viewed economic progress, focused ultimately on the growth in real GDP. As a result, governments promising to deliver progress to their citizens have been evaluated by that metric, and made policy decisions in order to deliver it. This issue of *Economie et Statistique / Economics and Statistics* provides a timely overview of key critiques – some old and some new – of the national accounts.

It is timely not only because the process of preparing the revision of the System of National Accounts (SNA) by 2025 is under way, but also because the world economy has experienced its biggest decline in GDP in our memories due to the global pandemic. This is the moment to evaluate how well the national accounts still serve as what Hicks (1942) described as the 'social framework'. The questions raised in this issue, all priorities in the current process of SNA revision, concern both old critiques of the national accounts for omitting important aspects of economic welfare (distribution, non-monetary production, sustainability), and also newer critiques concerning the treatment of globalisation and digitalisation within the existing framework.

To begin with the long-standing questions, **Didier Blanchet and Marc Fleurbaey** in their paper put it succinctly: although the measure of real incomes provided by the national accounts captures an essential aspect of economic welfare, it omits non-monetary components, and can tell us nothing about long-term sustainability. These two problems differ in character.

When it comes to non-monetary contributors, there have been proposals for a number of alternative composite indicators, such as metrics of environmental damage or income inequality. The well-known Human Development Index is one example. These tend to fall foul of their arbitrary choice of components and weights. There is now a substantial literature on the measurement of subjective well-being, but it presents some unresolved challenges and ambiguities. The authors therefore favour a third approach, calculation of equivalent incomes as an inclusive measure taking into account differing non-monetised circumstances such as health or employment status. The relevance of direct measures of subjective well-being is also discussed by **Jérôme Accardo**, in a paper on the contributions of social statistics to the 'beyond GDP' literature: evaluations of non-market household production, disaggregation of accounts across categories of households for a better assessment of growth inclusiveness, etc.

Inclusivity is also the focus of the paper by **Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez and Gabriel Zucman,** which describes their Distributional National Accounts (DINA), a method of assigning income and wealth to different groups

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in a manner fully consistent with the SNA methodology. Their results show substantial increases in inequality – including a global increase since 1980 despite the growth of China and India – but with substantial differences across countries. Given the way the pandemic is amplifying existing inequalities, it seems likely distribution will remain in sharp focus, in a welcome return to the tradition of early national accountants including Simon Kuznets.

When it comes to sustainability, and the position of future generations, the statistical and conceptual challenges are greater. As Blanchet and Fleurbaey note, an assessment of sustainability necessarily involves forecasts to value stocks of wealth, which they suggest falls outside the remit of statistics production. Two aspects of sustainability seem critical to understanding economic welfare, however. One is human capital, which World Bank work estimates to be empirically the most important component of comprehensive wealth (World Bank, 2018). The other is natural capital and in particular climate. In his paper, **Nicolas Canry** discusses integrating measurement of human capital in the national accounts, as a component of investment rather than consumption, while **Jean-Marc Germain and Thomas Lellouch** discuss of ways towards an environmental economic accounting that would include the climate debt. Given recent progress in developing the Standard for Environmental Economic Accounts (UN) and its application in some countries (e.g. the Office for National Statistics in the UK), as well as broader interest in the measurement of produced and non-produced capitals (Zenghelis *et al*., 2020), statistics for sustainability seem sure to make progress.

Turning to the newer challenges, the need to understand the interaction between the phenomena of globalisation and the national accounts has become pressing as supply chains and the role of large multinationals comes into sharper focus. **Marie-Baïanne Khder, Jérémi Montornès and Nicolas Ragache** examine how the notorious upward revision of Ireland's 2015 annual GDP growth in Ireland to 26% has reflected tax-related relocation of intangible assets by multinationals. **Niamh Holton, Margaret Kinsella, Oisín Mangan, Shaun McLaughlin and Patrick Quill** explore inconsistencies between the national accounts and balance of payments data for Ireland, related to methodological differences in the measurement of R&D and intangible intellectual property assets. The approach to measurement needs to be guided by the questions being addressed. Is the aim to have a picture of domestic economic activity, in which case the impact of multinationals needs to be captured in separate indicators, or to understand the impact of, say, tax policies on international integration?

However, as **Didier Blanchet** points out in his paper, the importance of multinationals operating extended supply chains across borders means it is increasingly difficult to define a 'domestic' economy, particularly given the ease with which intangible factors and assets can be relocated. Globalisation here overlaps with digitalization, which has seen the growing importance of intangibles including data, and of large multinationals providing digital services – some 'free' to users – in many countries.

Derek Burnell and Amani Elnasri argue that digitalization does not pose conceptual challenges to the national accounts, although it does require careful attention to data collection and more co-operation between national statistical agencies. They estimate that measurement issues related to digitalization do not help explain much of the slowdown in Australia's multifactor productivity growth (in line with findings by Syverson, 2017 and Byrne *et al*., 2016, for the US) – although they note that free digital goods may offer consumer surplus benefits that lie outside the SNA production boundary.

However, the location of the production boundary is precisely one of the questions raised by considering whether the national accounts serve as a useful framework for assessing economic progress. If so much activity affecting people's economic welfare lies outside the production boundary, is the boundary usefully located?

The other question is the distinction between nominal magnitudes and 'real' or 'volume' measures, which raises some longstanding issues about the extent to which GDP and the national accounts can capture changes in economic welfare (Coyle, 2020). Here, **Lorraine Aeberhardt, Florian Hatier, Marie Leclair, Benoît Pentinat and Jean-Denis Zafar** explore the price/quantity split for areas affected by digitalization such as communications, free digital services and online products, concluding that in the French case measurement errors of this type are not enough to account for the productivity slowdown. **Mo Abdirahman, Diane Coyle, Richard Heys and Will Stewart** consider the specific example of prices for telecommunications services in the UK, where potential price profiles range from almost flat in the official index to a 90% decline in a unit value index, with corresponding implications for that sector's real growth and productivity. Finally, drawing together these conundrums about price/quantity splits and the production boundary, **Alexandre Bourgeois** considers different possible treatments of free digital services, concluding that the various approaches address somewhat different questions.

There are indeed different questions we try to answer using the national accounts, from narrower questions about production to fundamental questions about economic welfare, and it can sometimes seem that this is the wrong tool for the job. However, GDP is so universally used as shorthand for progress – and rightly so at times of recession – that the national accounts framework has to respond to the fundamental questions addressed in this issue about the extent to which it can capture economic welfare. If all of the changes that are so clearly affecting our lives, from climate change to digitalization, lie outside the limits of the framework, the framework will no longer be serving its purpose. ☐

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