CHAPTER 6

Conclusion

Abstract In this final chapter we review how the producers of official statistics are responding to calls to go beyond GDP, and how statistics are intended to support the attainment of the Sustainable Development Goals. We have concentrated on the actual and potential uses of official statistics, taking a teleological approach in our assessment. Usage and users form one of three pillars underpinning official statistics, along with methodological quality and trustworthiness. We reach five broad conclusions and we propose that the kinds of statistics covered by the Fundamental Principles of Official Statistics are considered as public statistics, to be produced not only by the national statistical offices but also by other organisations which, crucially, share and can demonstrate commitment to the principles. We finish with seven specific recommendations, including that national statistical offices need a better understanding of how public statistics are used.

Keywords Public statistics · User engagement
6.1 Overview

We were prompted to write this book by the increase in the number of calls to go beyond GDP (gross domestic product) in driving, assessing, and evaluating the progress of nations. These concerns were amplified by the financial crisis of 2008–2009 and subsequently by increasing recognition of environmental threats to us all. The 2015 commitment of every member country in the UN to transforming our world, through a 15-year programme for sustainable development, led us to our main title—From GDP to Sustainable Wellbeing. The agenda includes goals for wellbeing and for sustainable economic growth, and there is an explicit commitment to developing broader measures of progress to complement GDP. GDP and the sustainable development indicators are official statistics (along with perhaps more familiar statistics such as consumer price indices and the unemployment figures). This triggered the question in our subtitle: Changing statistics or changing lives? Put that another way, are the new statistics just to be used to track how governments are doing in reaching the sustainable development goals, with any possible consequent changes in how we are living our lives, or are beyond GDP statistics also intended to help businesses, civil society, and the public work out how to change their lives? And in short, our conclusion is that we feel that wellbeing and sustainable development measures are being undervalued, with a concentration of use on recording progress, rather than helping change things, especially now we are experiencing the COVID-19 pandemic and are beginning to imagine new norms for economies, societies, and the planet.

Deconstructing the full title gave four points of departure for our essay, which we set out in Chapter 1. First is the notion of social progress. This is a complex phenomenon with multiple aspects and probably best defined through measures of the things that matter, such as better education, improved health, poverty reduction, increased wealth, and safeguarding the natural environment. The second building block comprises the systems of official statistics that are charged with serving governments, the economy, and the public with data about the economic, demographic, social, and environmental situation. We observe that national statistical offices (NSOs) are far from the only compilers and publishers of data in support of sustainable development, peace, and security. The expectation remains that NSOs are an indispensable element in the information system
of a democratic society, dispensing high quality, useful and trusted information, as the UN’s fundamental principles of official statistics require (United Nations 2014).

The third departure point was to note the concept of GDP, with all its strengths and limitations, and that it is an official statistic. National and international statistics offices are the joint keepers of the concept of GDP and are responsible for measuring it. In our brief exploration of the beyond GDP agenda, the fourth of our starting points, we found that this embraces the definition and measurement of current wellbeing together with an assessment of the sustainability of current activities for the wellbeing of future generations.

In subsequent chapters, we examined how these four strands are working in the context of measuring progress, wellbeing, and sustainable development in broader ways, not just in terms of GDP. We often came up with the same, largely-unanswered questions concerning precisely how new measures and indicators are intended to be used. Instead, there are mainly general statements about using indicators to assist in the work of implementing the sustainable development goals, or to view policy through a wellbeing lens. It is fine to assert that quality, accessible, timely, and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind. Such data may well be a key to decision-making, but evidence specifically on how beyond GDP indicators are being used is elusive.

This seems to follow a well-established pattern. Frederiksen and Gudmundsson (2013, p. 1) report that “Indicators conceived and developed to monitor the societal change in various sectors have been produced in huge amounts during the recent decades, including for environmental and sustainability policies” and that “The discourse on indicators mostly expresses an expectation that indicators are instrumental to policy decisions – that they are conceived, developed, produced, reported or otherwise handed over, and ultimately serving as evidence for decision-making”. However, “decades of research on the role of evidence for decision-making have argued that this direct, instrumental use of evidence for policy is seldom taking place, whereas evidence may inform and influence policy processes in several other ways, playing multiple roles at different stages of policy-making”. This disjoint, between aspiration and practice in the use of indicators, was again found in the EU-funded Policy Influence of Indicators (POINT) research project. For example,
that “In most of the studies, the civil servants are main users, while politicians and the public are intended but less likely users” (Frederiksen et al. n.d., p. 6). This and other findings are amply illustrated in the set of concluding papers from that project (Frederiksen 2013).

Where requirements for indicators are apparent, they can, not surprisingly, be varied. There is still demand for GDP to be measured, albeit with improvements to reflect the modern economy. UKPLC, for example, is campaigning that “Business, political, charity and not for profit decision makers need more and better data in a world that is becoming less reliable, more technologically fast paced and policy volatile ... Primarily, we attribute the source of error in current methods to be a failure to record the economic contribution of the so-called gig economy, which is predominantly internet driven/enabled and thus able to develop faster than start-up businesses were ever able to in the past” (https://www.ukplc.uk.com/). While this campaign recognises that developments to UK economic statistics are under way, it is frustrated with the pace of improvements (Dent 2020). Requirements like this sit legitimately alongside the demand for wider measures of progress.

The range of official statistics and methodologies used to compile them are evolving to meet new needs and to exploit new data sources. Preparing Chapters 1 and 2 reminded us of the strengths of the official statistics system, with its many developments in data collection techniques, analytical methods and professional codes and standards. Some suggestions for readers wanting further details of methodological developments are given in Table 6.1. In Chapter 5 we drew attention to what Deborah Ashby, the current President of the Royal Statistical Society, recently described as an explosion in computational power that has led, in turn, to an explosion in data. There is no shortage of data by which to address societal problems through the collection and classification of facts, as those who gathered in the 1830s and formed the Royal Statistical Society envisaged.

### 6.2 Five Broad Conclusions

Despite all the innovation in official statistics and in new sources of data, we conclude that the vision of “A world with data at the heart of understanding society and decision-making” (www.rss.org.uk/manifesto) is not yet fully realised. There is more to be done to maximise the public value of official statistics, especially in ensuring sustainable wellbeing. We draw
five broad conclusions from what we have explored, considered, and summarised in this book.

First, technical and methodological standards are crucial in delivering official statistics. They are embedded in official statistics and supported by protocols, procedures, skills, and capability, whether in the ongoing delivery of statistical outputs or in the development of new statistics and new data sources. In the terminology of project and programme management, technical assurance is generally given due attention in official statistics.

Second, while technical quality is necessary it is not sufficient. We conclude that there is considerable scope for official statisticians to devote more attention to those aspects of quality that address the fitness for purpose of their products and outputs. User assurance protocols, procedures, skills, and capability generally need honing and spreading more widely across the official statistics system. There are exemplars of good practice but, overall, official statisticians should give considerably greater
and more sustained attention to users, potential users, and to the utility of the statistics they produce.

Third, more trust has to be earned by the producers of official statistics. A simple formulation is that the trustworthiness of official statistics is based on their technical quality and on their usefulness. It is more complicated than that, given that the public can judge trustworthiness also on how politicians and others use, or even misuse, official statistics. However, it seems clear to us that improving use and usefulness of official statistics should be a major determinant in increasing trust in official statistics. As the UNECE (2018, p. 10) discovered, “Users who trust official statistics most also seem to value them most highly” and “Business users and decision makers tend to value and trust official statistics less than government users”.

Fourth, official statistics were born and grew to maturity before the internet age. There were far fewer sources of information competing with official government sources. Information was mediated by fewer organisations, among whom there were clear authoritative channels, such as public service broadcasters and newspapers aiming to provide the record of the day. The internet has enabled more people to reach official statistics more easily. The web is indeed worldwide, connecting, providing inter-connections unrestrained by geography and, with some notable exceptions, unfettered by differences in language. But there are also many more sources, offering in some cases disparate readings of the statistics (sometimes even fake news), making access to reliable official statistics more challenging. This has also happened alongside a shift in many political economies, with government functions generally being reduced and private companies providing what citizens still see as public services.

Our fifth broad conclusion is more about the way in which official statistics are treated, and perhaps have always been treated. Novelist David Lodge (2002, p. 266) has one of his characters display “a rather old-fashioned Enlightenment faith in the perfectibility of society through the application of science”. We agree this would be rather a fine way of proceeding, with statistics part of science. However, it is not like that. Even David Hume, a titan in the Scottish Enlightenment, displayed “a stunning diminution of the role that reason plays in human life … matched by a great expansion of the roles played by custom, habit, passion and the imagination”, according to one biographer (Rasmussen 2019, p. 23). The latter roles are found in politicians and members of the public alike.
Taking these all together convinces us that democracies need statistics, to paint a picture of society and then, also, perhaps ideally, to enable society to progress. However, it is far from clear precisely how official statistics do this in the contemporary information space. Kelman (1985, p. 379) presented evidence from the development of official statistics in the US that argues “that government became deeply involved in information-gathering for reasons that had little to do with any assistance that such information could provide private individuals”. Rather, the main reasons were as an aid to legislation, as a source of patriotic pride for all citizens, as a signal from society of recognition to individual groups, and as a statement by society about the special value of knowledge (p. 365). These suggest a significant role for official statistics, bound up in the way in which society operates; they are part of the culture. Official statistics do provide a language to summarise the state of society, the economy, the natural environment and how these are changing, but this language is also moderated, for example as to which groups in society are recognised, and which are not, and over what we mean by progress.

Much as we are fans of statistics, we should at this point say that we also recognise other ways of drawing attention to the state of the world, which can appeal more to custom, habit, passion, and the imagination. For example, Canadian photographer and filmmaker Edward Burtynsky “has been travelling the planet making astonishing images of landscapes. In Burtynsky’s landscapes we see the Earth we live on right now: a place humans have hacked up, carved up, blown up, spilled on and recycled. ‘I want to use my images,’ Burtynsky said in his 2005 TED Prize acceptance speech, ‘to persuade millions of people to join in the global conversation on sustainability’” (Doerr 2018, p. 166). Susan Sontag is also convinced that photographic images have made profound changes to our way of looking at the world, creating a feeling of reality. The caveat is that the photographer can no longer be “thought to be an acute but non-interfering observer” taking impersonal, objective images. Rather, she presents as a fact that “photographs are evidence not only of what’s there but of what an individual sees, not just a record but an evaluation of the world” (Sontag 2008, p. 88). There is a read-across here to the compilation of statistics, how they are curated and presented as both a record and an evaluation of the world. But do people read and respond to statistics, even when presented graphically, in the way in which they see images?

It is far from clear how official statistics are used and what their role will be from here on. As we anticipated from the outset, although we remain
convinced of what the broad role should be, as set out in the *Fundamental Principles*, we have not come to a definitive answer how this will be played out. We have touched on a number of challenges facing official statistics, some of which are implicit in the opportunities for NSOs, such as big data and data science, discussed in Chapter 5. These challenges are known and well described elsewhere (e.g. Evans et al. 2019, p. 4). We conclude by stressing the importance and the urgency of taking forward debate and discussion in order to reach a consensus on the role of official statistics. It is reassuring to see that there are already places starting to appear (online of course) in which this can be progressed. In particular, we encourage everyone to participate in the discussions hosted on Official Statistics (https://officialstatistics.com/), a platform for individuals and institutions in the field of statistics in all parts of the world, supported by the International Association for Official Statistics.

It would be tempting to build up a theory-of-change model for how the SDGs are to be achieved and how official statistics play a wider role in enhancing wellbeing. However, we are not convinced either of the value or of the practicality of doing this. There are many different players and agents: national and local government, inter-governmental and non-governmental organisations, corporations, financial institutions and individuals. Each may have their own aims, within which the aim of promoting the wellbeing of the population and of the natural environment may be at best subsidiary. The examples we have found that might identify where official statistics might be most effectively used in moving beyond GDP are all high-level and abstract. Fioramonti (2017, p. 37) proposes a political economy approach in which “post-GDP indicators connect top-down trends”, such as UN reforms and climate change regulations, with “bottom-up pressures” such as civil society and the wellbeing economies we referred to in Chapter 3, and enabled by “new technologies”. Radermacher (2019, p. 534) analyses the relationships between “data, facts, policy/politics” and identifies the key actors and activities found in the relationships between each of these, again in broad terms.

### 6.3 Our Recommendations

Turning to what might be done, we envisage that the official statistics system will be most effective if it is no longer configured only in terms of government-funded organisations. Rather, we propose that the kinds of statistics covered by the *Fundamental Principles* are considered as
public statistics, to be produced not only by existing NSOs but also by other organisations which, crucially, share and can demonstrate commitment to the principles. As we have repeatedly stressed, this especially has to deliver high levels of user and potential user engagement. An example of bringing other organisations into the scope of official statistics is found in the UK, where the Office for Statistics Regulation encourages other producers of data, statistics, and analysis to adopt the Code of Practice for Statistics on a voluntary basis and to publish a statement of compliance (https://www.statisticsauthority.gov.uk/code-of-practice/voluntary-application-of-the-code/).

The case for public rather than official statistics can be made on grounds of principle, around improving public confidence in the numbers that underpin the progress of society. The point is that it is the numbers that are essential for society to function, not that the providers of this public service are themselves necessarily part of the public sector. This is particularly relevant in the complex web flow of information, where it is more important to be able to assess whether or not to trust figures as you come across them, rather than having to go to a limited number of outlets to get the figures. Think of “the great looms of information” described by Olga Tokarczuk, quoted in Chapter 4.

There is also a pragmatic imperative. As for example MacFeely and Nastava (2019, p. 311) have pointed out, “The far reaching ambition of the [UN’s] 2030 Agenda has led to development targets that are well ahead of available official statistics and statistical concepts. In many cases, appropriate statistical methodologies do not yet exist from which to generate indicators”. Their proposal is that “official statistics switch from a purely production or manufacturing based model to a mixed business model: one combining the manufacture of official statistics with the franchising of production under license”, with accreditation based on the Fundamental Principles. The point of that is to help identify reliable and trustworthy sources of relevant information, to meet user needs, as we discussed in Chapters 2, 3, and 5.

We finish with seven specific recommendations:

1. NSOs need a better understanding of how public statistics are used. At the beginning of this book we slipped in a mention of teleology, signalling that we would be seeking understanding of the uses and purposes of official statistics. We have found this lacking and so we encourage NSOs to take the lead in addressing
this. It is not about building a full, detailed, overarching description of how official statistics are, or could be, used but it does need to be fit for the greater degree of user engagement that we recommend below, including recognising different segments within the potential user base. One promising way forward on data to support the SDGs is the initial phase of research carried out by the ONS (n.d.) about users of its SDG website, identifying four main types of user: concerned citizen; connected influencer; fact gatherer; involved analyst. There is a relevant literature within organisational and management studies on the importance of measurement in business decision-making, much building on the work of Frederick Taylor (1967). This will also apply to policy-making and the delivery of public services, where government statistics are used within an organisation, but less so to the more general use of official statistics across society. The development of non-financial business reporting is a reminder of the need to look at the use of statistics in specific ways. Where statistics are used in information aimed at empowering citizens, those preparing the information need to aware that how information is presented can be relevant to changing behaviour. For example, showing life expectancy in terms of years lost due to persisting in smoking is more effective than referring to years gained by quitting (Halpern et al. 2004, p. 39).

2. **NSOs need to engage more, and more continually, with users and prospective users of data and statistics, including over the design and implementation of tools to access data and statistics.** We have addressed this in the context of national wellbeing elsewhere (Allin and Hand 2017, pp. 364–366), as has the Statistics User Forum (2019, Annex 1, para 16) more generally in its evidence to a Parliamentary committee, but we are not being prescriptive on the detail of engagement, as long as effective engagement is put in place. Although we recognise that social media is pervasive (see recommendation 5 below), it gives rise to a rather superficial sense of engagement if NSOs give too much weight to the counts of shares and likes for the material that they post.

3. **All proposals for new measures should be explicit on how they are to be used.** A policy to measure something, even to bring together the latest research and data to give a clear picture, is unlikely to be adequate in tackling social and environmental issues
and inequalities. Intended use can then be shared around policy and research communities (e.g. VanderWeele et al. 2020).

4. **NSOs should join with statistical societies, educators, and media organisations in raising the level of statistical literacy in the population.** Life skills and media-handling skills should include greater understanding of statistics and the ability and confidence to ask questions about statistics presented in the media. We spotted recently that a UK government minister was reported as implored the public to “take some simple steps before sharing information online, such as always reading beyond the headline and scrutinising the source” (Proctor 2020). There is research and advice available on how to engage as an active citizen online (e.g. Oremus 2020). Many people will still need help in scrutinising the source of statistics and there is a great opportunity to build and raise the “public statistics brand” as something that people can trust.

5. **NSOs must use social media alongside other ways of publishing, publicising, and engaging with users.** Work on user engagement is likely to confirm that social media are important but should not crowd out other channels of communication.

6. **NSOs should work with others to turn indicators and statistics into messages and accurate narratives that can be understood, trusted, and used by people and businesses.** In terms of wellbeing, this is likely often to be along the lines of summarising the likely impact on wellbeing now and in the future by doing X rather than Y.

7. **NSOs already publishing indicators of national wellbeing should take the lead in introducing a single, summary measure of national wellbeing.** A Parliamentary committee considered the pros and cons of this for UK statistics in 2013/2014, coming to the recommendation that “The Government and ONS should not at this stage attempt to define a headline measure for overall well-being, or for overall subjective well-being, and should not contemplate such a move until a measurement track-record has been built up on the component measures, they have achieved a reasonable level of public familiarity, and a general consensus has been reached on their value and usefulness” (Environmental Audit Committee 2014, Conclusions para 11). Value and usefulness have been subsequently endorsed, especially through the UN’s 2030 Agenda, and a measurement track-record has certainly been established, not only by the UK. As to public familiarity, we endorse
the case made by Hall and Rickard (2013, p. 22), that wellbeing measures “need to be disseminated (and sometimes combined into a single composite index) in such a way as to help move debate and discussion beyond the traditional focus on GDP”. This applies even more now. The lessons learned from doing that will then need to be applied in assessing overall progress towards the 2030 SDGs, where there could be up to 240 indicators to summarise.

We borrow the words of MacFeely and Nastava (2019, p. 324) about their proposal to apply to ours: this “is not a panacea. Myriad problems will remain, new and unforeseen ones will arise. But it may unleash the untapped productivity and creativity of a wider data ecosystem”. Like them, we are particularly concerned that the SDGs should be met by 2030. With only ten years to go, at the time of writing this, the OECD has warned that progress towards the achievement SDGs is uneven, both across and within countries. Tackling COVID-19 is now putting enormous pressures on governments, people, and households and is, of course, the primary focus for the present. This is nevertheless highlighting the importance of having relevant, trustworthy, and timely statistics. All countries, not just lower income countries, appear to be facing challenges in delivering statistics, which need to be urgently addressed. But having public statistics is not enough. There needs to be more debate, informed by the statistics, on the major changes that may well be necessary in our societies and our economies. We trust that the issues we have raised will be discussed, considered and applied, ensuring that we all have—and use—the reliable information we need, drawing on the ever-changing data landscape.

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