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The Political Economy of Measuring the Sustainable Development Goals

Abstract

In March 2017 the United Nations Statistical Commission adopted a measurement framework for the UN Agenda 2030 for Sustainable Development, comprising of 232 indicators designed to measure the 17 Sustainable Development Goals (SDGs) and their respective 169 targets. The scope of this measurement framework is so ambitious it led Mogens Lykketoft, President of the seventieth session of the UN General Assembly, to describe it as an 'unprecedented statistical challenge'.

This paper outlines some of the key differences between the Millennium Development Goals and the SDGs, before detailing some of the measurement challenges involved in compiling the SDG indicators. The paper also examines some of the unanticipated consequences arising from the mechanisms put in place to measure progress from both a statistical and political economy perspective.

Key words: SDGs MDGs, Net Official Development Assistance, National Statistical Offices, National statistical systems, South South, Global Indicator Framework, unanticipated consequences.



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Introduction

'It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair...' So begins Charles Dickens' classic novel - *A Tale of two Cities*. Although written in 1859, the comparisons drawn in these opening lines seem extraordinarily apropos when thinking about official statistics today. Never has the worth of official data and statistics enjoyed such a dichotomous existence. Statistics have never been more recognized as a critically important tool for supporting decision making and providing public accountability, and yet simultaneously statistics have never been so irrelevant to public discourse. Today as official statistics compete with myriad informational sources, all claiming to be authoritative, it seems that Postman (1985: xix) may have been right to summarize Huxley's prophesy as 'truth would be drowned in a sea of irrelevance'. Evidence informed policy is squaring-up and going toe-to-toe with the post-truth of policy-based evidence and the fallacy of *post hoc ergo propter hoc*. For statistics it is without question the best of times and the worst of times.

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDG) Global Indicator Framework (GIF) therefore come at a fascinating moment in the history of data and statistics. The age of data revolution, an age when the gulf between facts and alternative facts has seemingly never been greater. That framework, adopted by the United Nations (UN) Statistical Commission in 2017, comprises 232 statistical indicators designed to measure the seventeen 2030 Agenda goals and their respective 169 targets.¹ The aim of the GIF is to provide good quality, verifiable evidence on progress towards achieving the 2030 Agenda. But populating those indicators and providing the evidence poses enormous challenges. This paper outlines some of the measurement challenges involved in compiling the SDG indicators and examines some of the unanticipated consequences arising from the mechanisms put in place to measure progress from a broad political economy perspective.

Organisation of the paper

The remainder of this article is presented in six sections. The next section provides a short history of the SDGs and their predecessor, the Millennium Development Goals (MDGs), and identifies some of the most important differences between the two. The following two sections outline some of the challenges involved in measuring the SDGs and speculate on what the cost of the GIF might be. The fourth section highlights two important implications and opportunities for countries: firstly, the need to put in place a National Statistical System (NSS); and secondly, the need to develop a national data infrastructure so that the NSS can maximize the potential of administrative data. Section five postulates on the unintended consequences that may arise from the existing process. A brief conclusion closes the paper.

1. From MDGs to SDGs

At the beginning of 2016, the SDGs replaced the MDGs that had been in place since the turn of the century. Before going any further, it is useful to briefly review the history of the MDGs and explain how they differ from their successor, the SDGs.

¹ These indicators were adopted by the UN Statistical Commission in March 2017 (see UNSC 48 – E/CN.3/2017/35) and were subsequently endorsed by the United Nations Economic and Social Council (ECOSOC) in June 2017 and by the United Nations General Assembly on 6 July 2017 (see A/RES/71/313).

1.1 The MDGs

After several attempts to build an international consensus on development priorities for the twenty-first century, and following the publication of the UN Secretary General's Millennium Report, *We the Peoples: The Role of the United Nations in the 21st Century* (Annan, 2000), which outlined the challenges for development in a globalized world, 189 member states finally adopted the Millennium Declaration (UN, 2000) at the fifty-fifth General Assembly, designated the 'Millennium Summit'. This declaration committed nations to reducing extreme poverty by 2015. The following year, in August 2001, the UN Secretariat published the MDGs – described by Hulme (2009: 4) as 'the world's biggest promise.'

The MDGs, described as a road map for world development, reflected the understanding of development at the time and attempted to bring governance and coordination to the global development agenda. Although a voluntary programme, unsupported by any legally binding instruments or formal UN resolutions, the MDG framework was nevertheless politically and morally compelling, and was seen (if implicitly) as a reformulation of the Millennium Declaration. They were adopted, in this spirit, as the framework for international development cooperation until 2015. Thus, the MDGs were not, strictly speaking, a formal intergovernmental mechanism, but rather an initiative driven by the UN Secretariat. A downside of this approach was the criticism that the MDGs did not fully reflect the will of the peoples or the views of their sovereign governments. On the other hand, the process was relatively light and driven by subject matter experts, resulting in a limited set of focused goals and targets.

While the MDGs had eight goals and twenty-one targets, dealing with issues such as gender, disease, shelter and education, the primary and explicit aim was to reduce extreme poverty and hunger. The twenty-one targets were each accompanied by one or several predefined indicators. These indicators were the benchmarks against which progress was assessed. The MDGs achieved some notable successes, albeit with considerable help from a rapidly developing China, which dramatically improved global aggregates. For example, between 2000 and 2015 more than 1 billion people were lifted out of extreme poverty, and under-five child mortality was halved (UN, 2015b). The actual measurement of progress was only partially successful, however. After fifteen years, developing countries could only populate, on average, two-thirds of MDG indicators (United Nations Conference on Trade and Development, 2016).

1.2 The SDGs

In 2012, at the UN Rio+20 Conference on Sustainable Development (United Nations Development Programme, 2012), member states of the UN met to create a new, global agenda for sustainable development. The outcome document, *The Future We Want* (UN, 2012), mandated the UN to develop a 'post 2015' global development programme to replace, but build, on the momentum of the MDGs.

Cognisant of criticisms of the MDGs, in particular, that they pushed a donor (developed country) driven agenda, excluded any discourse critical of the Washington Consensus and did not fully reflect the views of peoples or governments from the developing world, the SDG process from the outset aimed to create a bottom-up people-centred development agenda. To do so, an unprecedented global consultation was undertaken. Specialised panels were held to facilitate inter - governmental discussions, with the result that 193 governments expressed their opinion. The online 'My Word' survey amassed over 7 million responses (Bhattacharya & Kharas, 2015). Civil society organisations, citizens, scientists, academics and the private sector from around the world were consulted through various fora and given an opportunity to express their views.

Based on this feedback, the UN General Assembly Open Working Group proposed that seventeen goals be put forward to the General Assembly for approval in September 2015 (UN, 2013b). This proposal laid the ground for the new SDGs and the global development agenda between 2015 and 2030. In brief, it proposed that a set of SDGs be selected to build on the foundations of the MDGs but to adopt a much broader scope, attempting to not only end extreme poverty and eradicate hunger but also foster global prosperity in an economically and environmentally sustainable way. This expansion of scope arose from an attempt to move beyond the symptoms of poverty and hunger and begin to address the causes – the pillars of social cohesion, economic stability and

environmental sustainability, and many of the other interrelated issues that contribute directly or indirectly to poverty, hunger and inequality, such as peace, stability, human rights and good governance. The SDGs would be 'action oriented, global in nature and universally applicable' (UN, 2013b: 4), and were described by Ban Ki-moon (UN, 2015a), former Secretary General of the UN, as the 'to do list for planet and people'.

Following three years of consultation and negotiation, involving thousands of people, *Transforming Our World: The 2030 Agenda for Sustainable Development* (UN, 2015d) was formally adopted by 193 heads of government, including 150 heads of state on 25 September 2015. Those goals are universal, integrated and transformative, applicable to all nations and cover the whole sustainability agenda: poverty, human development, the environment and social justice.

1.3 Reaction to the SDGs

Not surprisingly a programme the size and scale of the 2030 Agenda has attracted much comment and provoked mixed reactions, both positive and negative. On the negative side, Easterly (2015), no lover of plans in the first place², wrote-off the SDGs as 'Senseless, Dreamy and Garbled.' The sheer scope and scale of the SDGs also came in for considerable criticism. So much so, *The Economist* (2015a) famously baptised the SDGs the 'Stupid Development Goals', dryly quipping that 'Moses brought ten commandments down from Mount Sinai. If only the UN's proposed list of Sustainable Development Goals (SDGs) were as concise.' The same article argued that the SDGs were so 'sprawling and misconceived' that they would only 'betray the world's poorest people.' Certainly, from a statistics perspective, the criticism that '169 commandments means, in practice, no priorities at all' (*The Economist*, 2015a) is not far off the mark. Measuring, validating and communicating 232 indicators will be difficult and expensive, begging the question whether some parsimony might have been prudent. Kanbur et al. (2016: 13) argued that the SDGs should be viewed as a platform from which to 'choose and winnow down' a relatively small set of indicators. The lack of priority has further fuelled concerns that in moving from 21 MDG targets to 169 SDG targets there will be a fragmentation of effort and resources. Those defending the SDGs have put forward the optimistic counterargument that more targets must mean more funding. It remains to be seen who is correct.

But it is easy to criticise the SDGs. Even those who defend the 2030 Agenda would accept that it has flaws. But they will also, with some justification, point out that the SDGs mark the first time in human history that the nations of the world have reached an accord on a comprehensive vision, supported by goals and targets, for the development of our civilisation on planet Earth. Most will also accept that many of the 169 targets could have been better. As Bhattacharya & Kharas (2015) note, 'some are clearly not achievable and these may undercut the overall credibility of the package' but, as they also point out, this is the price of democracy. It reflects compromise and a desire for consensus. And this is an important point – the SDG goals and targets arise from a negotiated text and represent global agreement. Almost inevitably this will result in some inconsistencies and some flab but public good issues such as climate change or environmental sustainability cannot be realistically addressed any other way. Sandler-Clarke (2015) identified several reasons why the SDGs are better than the MDGs. First among this list is the fact that the SDGs are more 'globally cooperative' than the MDGs, meaning that they are, unlike the MDGs, the outcome of detailed international negotiations that involved middle-income and low-income countries, they are universal and apply to all countries, and they are more holistic in coverage, covering poverty reduction and inequality, sustainability and economic growth with job creation.

Many have welcomed the broad vision of the SDGs, and in particular the inclusion of climate and environmental targets, which are viewed as important and urgent, both from a developmental and an existential perspective (Intergovernmental Panel on Climate Change, 2007; World Bank, 2010). Development and climate experts alike welcomed the precautionary approach, agreeing that it would be imprudent to ignore the growing body of evidence that suggests climate is an issue that must be addressed in both the developed and developing worlds. However, the lack of priority noted above has raised concerns that countries have not yet acknowledged

² Easterly (2006: 185) has argued that 'aid agencies are rewarded for setting goals rather than for reaching them.'

the potential trade-offs between economic, social and environmental goals (Basnett & Bhattacharya, 2015). Although not the most robust or unbiased source, but nevertheless indicative, an analysis of tweets with '#SDGs' in the days following the launch of Agenda 2030 suggests that Goal 13 (climate change) and Goal 8 (economic growth) were the most cited. 'Data' also featured prominently, with an apparent recognition that data will be needed, both as a life blood for decision-making and to track SDG implementation (Warren, 2015).

1.4 The difference between MDGs and SDGs

Clearly the concept of development between the MDGs and the SDGs has evolved considerably to include economic, environmental and governance issues. As a result, the SDGs are very different in scope, complexity and ambition than the MDGs. The focus on 'leaving no-one behind' also appears to place more emphasis on individual development and human rights than previously. As noted previously they are the product of an extensive and very inclusive participatory process, including not only intergovernmental machinery but also citizens, civil society and private industry. The SDGs have set out to finish the job begun by the MDGs, this time eradicating world hunger and poverty, not just reducing them. But 'zero' targets will most likely be very difficult to achieve and will require that poverty and hunger are tackled in the poorest and most underdeveloped regions of the world. The past performance of the MDGs may lead some to underestimate the challenge ahead. Many previous successes were helped significantly by developments in China. Progress in China over the next fifteen years is unlikely to be as impressive. Unlike the MDGs, the SDGs must address issues of peace and security. This is an important step as experts predict that the majority of those experiencing extreme poverty in the future will live in conflict-affected states. It is therefore sobering to observe that as the curtain closed on the MDGs, the UN High Commissioner for Refugees (2015) stated that 2014 had seen the highest number of recorded refugees and displaced people since World War II (almost 60 million).

As already outlined, the scope of Agenda 2030 is far broader than that of the previous MDGs. The SDGs are a universal, 'integrated, indivisible set of global goals' (UN, 2013b). In other words, development is no longer just an issue for developing countries and the provision of development aid is no longer just an issue for the developed world. This added complexity and ambition brings greater risks and there are concerns that the sheer scale of Agenda 2030 will pose major challenges for implementation and resourcing. Certainly, OECD Development Assistance Committee (DAC) members can expect to face increasing pressure to provide more Official Development Assistance (ODA) from developing countries. The wider scope of the SDGs, and the consequent increased demands for resources, has generated much discussion on whether a new measurement tool is required; one that would capture not only DAC funding, but other sources too, including south-south cooperation. The OECD (2015) has proposed a new measure - *Total Official Support for Sustainable Development* (TOSSD). This new measure has proven controversial and has attracted some criticism (for example, see Besharati, 2016), mainly from developing countries, where there are fears it will dilute existing funding commitments and exempt the North of their 'responsibilities.'

Another challenge for all countries and their national statistical systems will be the monitoring and evaluation of the SDGs. Unlike the MDGs, the SDGs from the very beginning formally recognized the need to incorporate a monitoring and evaluation mechanism to ensure accountability and benchmark progress. The General Assembly Open Working Group noted that 'It will be important to improve the availability of and access to data and statistics disaggregated by... characteristics relevant in national contexts. There is a need to take urgent steps to improve the quality, coverage and availability of disaggregated data to ensure that no one is left behind' (UN, 2013b: 4). This call was further reinforced by the subsequent report of the UN Secretary General's Independent Expert Advisory Group on a Data Revolution for Sustainable Development, *A World That Counts* (2014), which highlighted the need for but also the opportunities to improve data.

2. Measuring the SDGs

From a statistical perspective the implications of the 2030 Agenda for the accompanying GIF are enormous. So much so, statisticians have been heard asking whether the GIF is a mandate or a burden. Not only have the number of goals and targets increased considerably (the MDGs had 8 goals, 21 targets and 60 indicators whereas the SDGs have 17 goals, 169 targets and 232 indicators), but so also has the complexity of these targets. A simple illustration of the complexity is available from the *Data Disaggregation Compilation Table* (IAEG-SDG, 2018b). This matrix details the minimum set of disaggregation required for each indicator. The level of disaggregation varies considerably by indicator. For example, the “minimum required disaggregation dimension” demanded by Target 1.3³ is: sex; age; employment status; disability status; pregnancy; work-injury victims; and income. For Target 10.2⁴ the “minimum required disaggregation dimension” is: sex; age; disability status; race; ethnicity; origin; religion; and other economic or social status. The scope of Agenda 2030 is also far wider than that of its predecessor, attempting to span the full spectrum of development issues, including not only aspects of society, economy and the environment but also institutional coordination. The intricacies and ambition of this challenge led Mogens Lykketoft, President of the seventieth session of the UN General Assembly, to describe it as an ‘unprecedented statistical challenge’ (Lebada, 2016).

This unprecedented statistical challenge arose from criticisms of the data in the MDG process, which in turn led the High-Level Panel of Eminent Persons to call for a data revolution in their report *A New Global Partnership* (UN, 2013a). Following this report, the then Secretary General of the UN, Ban Ki-moon, established the Independent Expert Advisory Group on a Data Revolution for Sustainable Development, asking the group to translate the broad-brush concept of a data revolution into something more concrete. In their report, *A World That Counts*, the expert group advanced several interesting ideas, but the underlying message stressed throughout was the need to better align data availability and decision-making cycles – more data, better data and above all faster data. The report also raised the thought-provoking idea that, in a data-driven world, the inability to access data should in itself be a measure of inequality.

Compared with the 169 targets set out by the SDG programme, the MDGs’ requirements were modest, both in number and complexity (United Nations Statistics Division, 2008). Yet at the end of the MDG life cycle in 2015, countries could populate, on average, only 68 per cent of MDG indicators (United Nations Conference on Trade and Development, 2016). Nevertheless, at the forty-seventh session of the United Nations Statistics Commission, the seventieth session of ECOSOC and at the seventy-first session of the UN General Assembly, governments agreed to populate the 232 indicators proposed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) for the GIF.

Apart from resource constraints, there are also other technical and political complications that will make measuring the SDGs a challenging task. The first challenge facing statisticians was to clarify what it was they were being asked to measure. This was easier said than done. Deciphering or interpreting exactly what is meant by the agreed text of *Transforming our World: The 2030 Agenda for Sustainable Development* was not always straightforward. Lack of clear definitions and inconsistent use of terminology are just some examples of where statisticians, in selecting appropriate indicators, were forced to decide what the targets actually mean. For example, what is meant by ‘sustainable’? Does it just mean environmentally sustainable, or does it also mean economically sustainable, or socially sustainable? Environmentalists will naturally assume it means environmentally sustainable, but economists will equally assume it means economic sustainability. Are they both correct? The next question is how long a trend should be exhibited before it can be considered sustainable – will this be the same for economic or environmental variables? Or what about economic stability? Target 17.13⁵ calls for global macro-economic stability. Although there is no consensus on what this means, it has been agreed it will be measured by a dashboard of indicators. The composition of this dashboard will effectively

³ Target 1.3 - Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.

⁴ Target 10.2 - By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

⁵ Target 17.13 - Enhance global macroeconomic stability, including through policy coordination and policy coherence.

determine whether the 2030 Agenda adopts an orthodox or heterodox view of the global economy. What are the 'basic services' or the 'new technologies' referred to in Target 1.4⁶ and are they the same in all parts of the world? This might seem like pedantry, but it matters when you are trying to design an appropriate measurement. A plethora of seemingly commonly understood words⁷ caused comprehension problems and challenges of consistent interpretation across the 169 targets, requiring the construction of a SDG ontology (United Nations Environmental Programme, 2015) to make progress.

Other important decisions are still to be made. For example, how will changes in the composition of groups be dealt with. Over the course of fifteen years, several Least Developed Countries (LDCs) are likely to graduate. According to the UN Department of Economic and Social Affairs, Vanuatu are expected to graduate in 2020, Angola in 2021, Bhutan in 2023 and São Tomé and Príncipe, the Solomon Islands and perhaps Bangladesh in 2024. What are the implications of this for time-series analyses? Twenty four of the 169 targets explicitly mention LDCs. When we target an annual growth in GDP of 7 percent in the LDCs (Target 8.1⁸) or a doubling in the share of employment in industry for LDCs (Target 9.2⁹) or a doubling of LDCs share of global exports (Target 17.11¹⁰), what do we mean by LDCs? Will rates of change be calculated using the original composition in 2015 or the group as it will be composed in 2030? A relatively straightforward decision, but one where the choice will, most likely, lead to quite different results.

Another challenge is the lack of priority within complex and sometimes rather muddled targets. This has proven particularly thorny, as statisticians were instructed by their political masters to limit the number of indicators to one indicator per target.¹¹ Take Target 17.19¹², for example. This target combines two completely different and unrelated issues (the measurement of progress beyond GDP and supporting statistical capacity-building). This problem, not uncommon to many targets, poses a dilemma. Which element of the target should be measured? Both are very important, but both are also very complex. The challenge of how to properly measure progress is a highly contentious issue, hotly debated by economists, social scientists, environmentalists and statisticians (MacFeely, 2016), and would probably need a whole dashboard of indicators to do justice to this one issue. Equally, the best way to approach statistical capacity-building is also being actively discussed and reassessed (Jütting, 2016). But the idea that such a cocktail of issues could sensibly be amalgamated into a single indicator is absurd. The Economist (2015b), citing Target 4.7¹³ as an example, put it bluntly, simply saying, 'try measuring that.' Although the scope of the 2030 Agenda is universal and applies to all countries, clearly not all targets are relevant to every country. Striking a balance between national and global demands has proven challenging. For example, Target 3.3¹⁴ targets the eradication of a wide variety of diseases, many of which are not prevalent across the globe. As a result, statisticians have selected two statistical indicators, targeting HIV and tuberculosis, as the appropriate global indicators. So not all elements of the target are

⁶ Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

⁷ Access, adverse, adequate, appropriate, basic, benefit, efficient, effective, informal, infrastructure, integration, promote, resilience, resource, sustainable and vulnerable.

⁸ Target 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.

⁹ Target 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.

¹⁰ Target 17.11: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.

¹¹ Numerate readers will have noted that this guideline was not respected, as 169 targets resulted in 232 indicators. In truth, to measure the targets properly, closer to 500 indicators would probably be required.

¹² Target 17.19: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP and support statistical capacity building in developing countries.

¹³ By 2030, ensure all learners acquire the knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

¹⁴ Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases. A decomposition of this target reveals 7 elements, several of which comprise many sub-elements: (1) AIDS; (2) tuberculosis; (3) malaria; (4) tropical diseases; (5) hepatitis; (6) water-borne diseases; and (7) other communicable diseases. Tropical diseases would typically mean infectious diseases that thrive in hot, humid conditions, such as malaria, schistosomiasis, onchocerciasis, lymphatic filariasis, Chagas disease, African trypanosomiasis, and dengue. Water borne diseases include cholera, typhoid, polio, hepatitis, scabies and botulism. Other important communicable diseases would include influenza. Target 3.3 or Goal 3 does not address non communicable diseases, such as, cancers, cardiovascular diseases, stroke, diabetes, obesity, alzheimers, cataracts or other kidney and lung diseases at all.

addressed and thus some elements of the target must be ignored and remain unquantified. While this might make sense from a global perspective, it may not necessarily make sense from a regional or national viewpoint. For example, the control of dengue fever is not a big issue globally but is very important in South-East Asia. Not surprisingly, when the dust settled, researchers criticized the indicators for being reductionist (Mair et al., 2018).

Tensions between national and global perspectives have also arisen regarding the question of who supplies the data. Countries, anxious to keep control over messaging, perhaps not unreasonably, are anxious that only official national data are used to populate the SDG indicators. But there are some circumstances where this approach may not necessarily be the best approach. Targets, such as 16.5¹⁵ or 16.6¹⁶, which deal with corruption, bribery and the accountability of institutions, provide perfect examples of why it might make sense to use external or unofficial data as official data may not exist or may not be sufficiently trustworthy to provide an independent, impartial picture of such sensitive matters. Another exception might be where a single source could provide better-quality and globally more consistent data than the amalgamation of multiple individual country data sets. This might be applicable to targets such as 15.1¹⁷ that deal with forest, drylands, wetlands and mountain regions governed by international agreements. Arguably superior quality and internationally comparable data could be derived from satellite imagery. Despite the best efforts of international organizations, internationally comparable data will be a real challenge for the SDG GIF. Many of the targets (and consequent indicators) fall well outside the scope of traditional official statistics and thus are not guided by agreed international measurement standards. Even for those indicators that fall within the scope of traditional official statistics, there will be a wide variety in general quality and adherence to international standards across countries.

Using alternative sources to official national data might also be reasonable where problems with the data exist. Problems with data could mean anything from errors or inaccuracies, non-adherence to international standards, incompleteness or data gaps, inconsistencies over time, or imbalances. A good example of where this might arise is the asymmetries that frequently exist between bilateral trade data sets. From a global perspective, unbalanced trade data are not especially useful, and so steps are taken to remove these asymmetries. But this may lead to a mismatch between official national statistics and official international statistics. This issue is not unique to international trade, 'problems' with national data exist across all statistical domains. For the moment, the challenge of how to balance the needs of national and global interests remains unresolved. Despite the best efforts of countries and IOs, internationally comparable data will be a real challenge for the GIF. Furthermore, it is not clear how countries will balance the requirements of their own national development plans with those of the SDGs, or how statistical systems will be expected to serve the data demands of both (MacFeely & Barnat, 2017).

The goals and targets of the 2030 Agenda are underpinned by the ambition that 'no one gets left behind' (UN, 2015d). This ambition was translated for statisticians by Mogens Lykketoft, President of the seventieth session of the UN General Assembly, as 'leaving no one uncounted' (Lebada, 2016). In principle this is fine, but such a literal translation does not make much sense from a statistical perspective. The purpose of official statistics, with a few exceptions such as population censuses, is not to account for every single person, but rather to provide general aggregate, anonymised information on population cohorts of interest. This is a fundamental difference between producing official statistics and audited accounts. Apart from issues of confidentiality, the cost of realizing the ambition of 'leaving no one uncounted' would be prohibitive and not financially viable for even the best-resourced and most efficient statistical systems. The challenge for the global statistical system is how to sufficiently improve the granularity of data to satisfy this new political ambition, but in a way that prioritizes the measurement of the poorest and most vulnerable and does not divert scarce resources into generating fruitless levels of disaggregation.

¹⁵ Target 16.5: Substantially reduce corruption and bribery in all their forms.

¹⁶ Target 16.6: Develop effective, accountable and transparent institutions at all levels.

¹⁷ Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services – in particular forests, wetlands, mountains and drylands – in line with obligations under international agreements.

The far reaching ambition of the 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. To elaborate this problem and facilitate the population of the GIF the IAEG-SDG has classified all SDG indicators in to three tiers on the basis of their conceptual development and availability of data. The tiers are:

Tier 1: the indicator is conceptually clear, has an internationally established methodology, standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.

Tier 2: the indicator is conceptually clear, has an internationally established methodology, standards are available, but data are not regularly produced by countries.

Tier 3: no internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested.

Table 2.1
Number of SDG Indicators by Tier

Tier Classification	December 2016		December 2017		December 2018		May 2019	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1	81	35	93	40	101	44	104	45
2	57	25	66	28	84	36	88	38
3	88	38	68	29	41	18	34	15
Multiple	4	2	5	2	6	3	6	3
Total	230	100	232	100	232	100	232	100

Source: Derived from Inter-Agency and Expert Group on Sustainable Development Goal Indicators (2019)

In April 2019, the IAEG-SDG reported that 45 per cent of the selected indicators were classified as Tier 1 (see Table 2.1). Furthermore, they reported that 15 per cent of the indicators remained classified as Tier 3. While Table 2.1 shows the not inconsiderable improvements in conceptual development and data availability that has been made since 2016, it also highlights the magnitude of the task still facing the global statistical community. Table 2.1 shows the conversion rate to Tier 1 was slower between December 2017 – 2018 than between December 2016 – 2017 and that there were no additional conversions to Tier 1 between December 2018 and April 2019. These results should not be surprising. The low hanging fruit were naturally picked first, but now we see clear evidence that the conversion rate to Tier 1 is slowing. We can expect most of the changes in the next few years to be between Tiers 3 and 2, as conceptual work is developed. However, the conversion from Tier 2 to Tier 1 will be lagged by several years, as it will take time to establish new data collections. An additional cautionary footnote is also warranted. Research undertaken by Dang and Serrjuddin (2019) of the World Bank suggests that not all Tier 1 indicators are actually populated, and that in fact only 19% of the required GIF data are available.

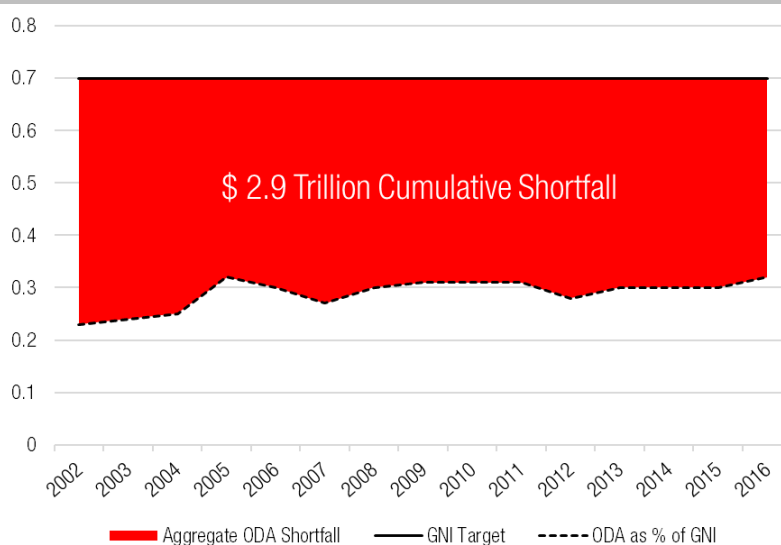
3. The cost of measurement

The SDGs, unlike their predecessors, the MDGs, are universal and apply to all signatories. As noted above, the development agenda has broadened, far beyond simply reducing extreme poverty, to now encompass the survival of our planet, improving equity and freedom in our societies, and trying to develop a more stable and sustainable economic model. In other words, implementing the SDGs is not a developing-world challenge but rather a global one, with many topics of direct relevance for developed countries. One of the implications of such a broad and ambitious development agenda is the price tag. Estimates vary, but Ambassador Macharia Kamau of Kenya, who co-chaired the SDG intergovernmental consultative process, estimates that implementing the SDG agenda could cost somewhere between \$3.5 trillion and 5 trillion per year (Deen, 2016). The Economist (2015a) described their estimate, of between \$2 trillion and 3 trillion per year (or the equivalent of 4 per cent of global GDP), as 'unfeasibly expensive'. The Intergovernmental Committee of Experts on Sustainable Development Financing (2014) estimated the value of investment in infrastructure required to achieve the eradication of poverty alone at between \$5 trillion and 7 trillion annually.

Even for developed countries with relatively advanced and sophisticated statistical systems the demands arising from the SDG monitoring framework are immense. When you consider that in 2018 almost a third of the proposed 232 indicators are classified as Tier III (see Table 2.1), meaning they are not supported by formal statistical methodology or concepts, you begin to understand the extent of the problem. Developing the statistical concepts and collecting the data required for the GIF will not be inexpensive either. The Global Partnership for Sustainable Development Data estimates around \$650 million per year is needed to collect data to support the 2030 Agenda, of which only \$250 million is currently funded (Runde, 2017). PARIS21 (2015: 11) has estimated that 'funding for statistics needs to be increased from current commitments of between US\$300 million and 500 million to between US\$1 billion and 1.25 billion by 2020.' The PARIS21 estimates cover a wider remit than just SDG indicators, and presumably this explains some of the difference in scale between the two estimates. But irrespective of which estimate of the costs is used; all estimates clearly exceed existing funding. More recently PARIS21 (2018) has estimated that ODA devoted to data and statistics (\$591 million in 2015 and \$623 million in 2016) accounts for only one third of 1% of ODA.

Figure 3.1

Net Official Development Assistance (Total) as a % of Gross National Income, 2002 – 2017



Source: OECD DAC: <https://data.oecd.org/oda/net-oda.htm> and authors own calculations.

To put these numbers in perspective, total Official Development Assistance (ODA) contributions from the OECD Development Assistance Committee members¹⁸, averages about \$113 billion per year (in current prices).¹⁸ So there is clearly an expectation that additional funding will be made available for development aid. While new revenue streams, such as private funding, philanthropy, south-south cooperation and public–private partnerships, are all expected to be part of the mix, there will unquestionably be mounting pressure on the wealthier nations of the world to live up to the promises made at Monterrey in 2002 to contribute 0.7 per cent of their Gross National Income (GNI) to ODA (UN, 2003) – most particularly as these commitments were reaffirmed during the third Conference on Financing for Development in 2015 (UN, 2015c). Since Monterrey the cumulative shortfall in ODA between 2002 and 2016 for DAC countries stood at over \$2.4 trillion (current prices) or \$2.9 trillion in 2016 (constant) prices. Since 2015, and the commencement of the 2030 Agenda, the average country effort hasn't changed appreciably (see Figure 3.1) and remains well short of the 0.7% target. Thus, one can reasonably expect international pressure to grow on this front, in particular as a growing proportion of ODA is diverted to Europe, away from developing countries, to deal with the migrant crisis.

4. Implications and Opportunities for NSOs

Beyond the compilation of the SDG indicators themselves, there are a number of issues, most notably the development of NSSs and accessing, organizing and using administrative data that will be essential to delivering on the commitments that governments have made.

4.1 National Statistical Systems

The UN, has long championed the importance of NSSs¹⁹ in their Handbooks of Statistical Organization, the latest version (UN Statistics Division, 2003) being no exception. PARIS21 (2004) too has advocated this cause, developing guidelines for NSSs back in 2004 - the 'National Strategies for the Development of Statistics.' More recently the Sustainable Development Solutions Network (2015) has stressed the importance of NSSs for the production of official statistics. So too has the Addis Ababa Action Agenda of the Third International Conference on Financing for Development in July 2015, noting 'National statistical systems have a central role in generating, disseminating and administering data' (UN, 2015e).

If the reasons to put a formal NSS in place were not already clear, then the 2030 Agenda has surely provided sufficient justification. A single NSO cannot possibly meet the demands posed by the SDG monitoring framework alone and will require a coordinated approach across many national agencies and government departments. Furthermore, the bulk of these demands will not be met by traditional survey data or statistics and will rely to a very large extent on administrative data (see next section). Finally, and perhaps most importantly, many of the data required are far beyond the scope and expertise of a typical NSO: water resource management (6.5)²⁰, energy efficiency and intensity (7.3)²¹, labour rights (8.8)²², financial market regulation (10.5)²³, corporate sustainability reporting (12.6)²⁴, fish stock regulation (14.4)²⁵, coastal conservation (14.5)²⁶,

¹⁸ 13 Author's own calculations based on OECD DAC statistics (Table 1: Net Official Development Assistance) 2002–2016.

¹⁹ A NSS can be defined as the group of organizations or agencies (or specialist statistical units within those organizations or agencies) who together collect, process and disseminate official statistics on behalf of the government of a country. Or more comprehensively, organizations or agencies producing any of the steps identified in the Generic Statistical Business Process Model (UNECE, 2013) on behalf of the government of a country.

²⁰ Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

²¹ Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

²² Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

²³ Target 10.5: Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations.

²⁴ Target 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

²⁵ Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

²⁶ Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

corruption (16.5)²⁷, investment promotion (17.5)²⁸ and policy space (17.15)²⁹, to name a few. The statistical demands arising from the 2030 Agenda provide a perfect example of why a NSS is necessary.

NSOs will be expected to coordinate the ‘sign off’ or validation of methodology and data used in the compilation of the 232 indicators. This will be very challenging as many SDG indicators fall well outside the normal scope of a typical NSO mandate, and so will present some unique challenges. Sourcing, validating and linking data to compile indicators for these targets will require a combination of statistical and subject matter expertise. It further reinforces the importance of having a functioning and efficient statistical system³⁰, as much of the data and technical expertise will not be normally available from a NSO but will come from other government and public service departments and offices. For many countries this may require dedicating resources to SDG indicators in order to coordinate both the validation of data and metadata throughout the NSS and organize a reporting mechanism back to the various international custodian agencies. It may also require changes in national statistical legislation.

The prioritisation of country data (AEG-SDG, 2018) places additional pressures on countries to collect a lot of new data and compile a host of new indicators. As already outlined, the experiences of trying to populate the MDG indicators and the fact that only 45 percent of the SDG indicators are classified as ‘Tier I’ should give pause for thought. In fact, the SDG indicators, in general, must surely pose a dilemma for NSOs and NSSs. Given the challenges discussed above, National Statisticians must be wondering how much resources should they commit to measuring global goals, some of which may not be a priority or particularly relevant for their country? Should they prioritise global goals over national goals set out in their own national development plans? Should they invest in developing and collecting data for indicators that may only have a best before date of December 2030? Or should they focus on indicators that make sense at national level? Kanbur et al. (2016: 6) note that a ‘smorgasbord’ of global goals ‘cannot be a specific guideline for national policy.’

4.2 Administrative data

Although there has been much talk and excitement about big data, and its potential for compiling official statistics and SDG indicators, relatively little attention has been paid to the importance of administrative data³¹. This is a shame, as in the short to medium term, administrative data are likely to be a much richer source of useable data than big data. In the context of compiling SDG indicators, administrative data are likely to become more important as it is clear that for many of the SDG indicators, survey data will not be sufficient, and that compilation will require the use and integration of administrative data (UNCTAD, 2016; MacFeely and Barnat, 2017). But more broadly, accessing and using administrative data is existentially essential for a statistical system (MacFeely & Dunne, 2014). Typically, a wide variety of statistics, ranging from national accounts and international trade to crime and agriculture statistics are all either partially or fully dependent on the availability of administrative data.

But arguably, NSOs could use the opportunity presented by the Agenda 2030 to explain to governments how administrative data could play an even greater role, not just for statistics, but for the efficient management of the state (see MacFeely and Dunne, 2014). Fostering and cultivating a national data infrastructure and a NSS, with an increased emphasis on exploiting administrative data, is of immediate relevance to the SDGs,

²⁷ Target 16.5: Substantially reduce corruption and bribery in all their forms.

²⁸ Target 17.5: Adopt and implement investment promotion regimes for least developed countries.

²⁹ Target 17.15: Respect each country’s policy space and leadership to establish and implement policies for poverty eradication and sustainable development.

³⁰ MacFeely and Barnat (2017) provide a template for what they consider to be the most important elements or pillars necessary for a modern statistical system: a robust legal framework; functioning institutional coordination; and a logical data infrastructure.

³¹ Administrative or public sector data are information which is collected as a matter of routine in the day-to-day management or supervision of a scheme or service or revenue collecting system. In other words, across public services, a huge volume of administrative records is collected, maintained and updated on a regular basis. These data pertain to the wide range of administrative functions in which the state is involved, ranging from individual and enterprise tax payments to social welfare claims or education or farming grants. Typically, these administrative records are collected and maintained at the lowest level of aggregation, i.e. at individual transaction level. The interactions of individual taxpayers, applicants and recipients make these data very rich from an analytical perspective.

particularly Targets 9.1³² and 17.19³³, which deal with developing infrastructure and improving statistical capacity. Of critical importance for NSOs and NSSs is to secure legal access to administrative data. Looking towards the future, NSOs may need to start considering, whether a broader definition of administrative data that includes private sector sources, such as that adopted by the Conference of European Statisticians in 2000 (UNECE, 2000) is required. The UN Economic Commission for Europe (2018) have recommended changes to statistical legislation, for this reason, to ensure NSOs or NSSs have access to all data sources necessary for statistics. MacFeely and Barnat (2017) have made similar recommendations, arguing that in order to future-proof statistical legislation, consideration should be given to mandatory access to all appropriate secondary data, including some important, commercially held data.

5. Some unanticipated consequences

According to the American cultural and intellectual historian T.J. Jackson Lears (Cohen, 2013) 'All history is the law of unintended consequences.' It is not surprising then that a development plan as broad as the UN 2030 Agenda and the implementation of the SDG GIF should throw up a few surprises. This section of the paper examines what some of these surprises and their consequences might be. It is of course early in the life of the SDGs to assess and understand fully the impact or implications of unintended consequences. Nevertheless, we are almost four years into a fifteen year agenda; so how long should we wait? Furthermore, as some implications are already evident it not premature to start considering what they might mean for the 2030 Agenda, for statistics and for development.

The delegation of the selection and measurement of the statistical indicators to the UN Statistical Commission was a major triumph. It was an explicit recognition of the need for apolitical, independent and impartial official statistics to measure progress and that consumers and compilers of statistics should be separate. As Rosling et al. (2018: 236) eloquently put it 'a long jumper is not allowed to measure her own jumps.' It also responded to the views expressed by many, that the 2030 Agenda needed an effective performance system with clear metrics measuring progress towards each goal (Costanza et al, 2016; Jacob, 2017).

However, the SDG targets are not targets in the normal sense of the word – they are, for the most part, not clear time delimited objectives but rather general, often complex, aspirations which left generous space for interpretation. Thus in handing over the measurement task to the statistical community, the interpretation of the targets was effectively delegated too. Many heads of state and policy mandarins might be surprised by, or even contest, this statement. But it was statisticians who selected the indicators that specifically defined what the 2030 Agenda text actually meant. This is an important point because the SDG indicators do not simply measure the 2030 Agenda, they define it. As noted above, the composition of the dashboard selected to measure 17.13 will effectively determine whether the 2030 Agenda adopts an orthodox or heterodox view of the global economy. Equally, how statisticians interpret the word 'illicit' when designing the indicator for target 16.4³⁴ will determine whether tax evasion or corporate profit shifting is included or not. Statisticians were also encouraged to design SMART indicators. This seemingly simple instruction was anything but as there are several interpretations of the SMART acronym, all which yield very different outcomes. For example the A in SMART can mean variously: achievable; assignable; ambitious; or agreed. Equally the R can mean relevant, realistic or resourced. At first glance this may seem like semantics, but not so. For example, trackable or time-bound (two of the meanings attributable to T) indicators are two very different things. In making these decisions, statisticians have effectively determined what the SDG targets mean. The indicators selected, are the performance metrics for the 2030 Agenda and thus will have direct consequences for whether the 2030 Agenda is judged a success or a failure.

With 169 SDG targets, many of which are multidimensional, there was an understandable fear of indicator proliferation. After all, the MDGs had only 21 targets but 60 indicators, a ratio of 3:1. The idea of 500 plus

³² Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

³³ Target 17.19: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP and support statistical capacity-building in developing countries.

³⁴ Indicator 16.4.1: Total value of inward and outward illicit financial flows (in current United States dollars).

indicators was not attractive. Hence the ambition of one indicator per target. But there are a number of consequences to measuring a multifaceted target with a single indicator. The first and most obvious being that, unless a composite indicator or a multidimensional dashboard can be designed, several elements of the target must be sacrificed. The use of single discrete indicators thus introduces the risk that unmeasured aspects of a target will be ignored, and interconnections between different elements of the target (or other targets) will remain unseen and poorly understood. An obvious worry from a policy perspective are the implications for consequent behaviour and the risk that *only* what gets measured gets done. Another concern is how to interpret or infer patterns from narrow indicators to broad targets. For example, target 17.4 is a complex, multidimensional target³⁵ represented by a single indicator³⁶. In this case a variety of complex issues, such as: long-term debt sustainability; debt financing; debt relief; debt restructuring; and external debt have all been shoe-horned into a single indicator. Furthermore, indicator 17.4.1 doesn't really address any of the target elements directly or adequately. This raises questions as to how one should interpret progress towards target 17.4. In fact, very few of the SDG indicators fit the specifications of the target exactly; most are to some extent or other, proxies. Furthermore, most of the selected SDG indicators were originally designed for another purpose. It is important to understand what that original purpose was, so that its appropriateness as an SDG indicator can be assessed. In other words, very few SDG indicators are bespoke indicators, deliberately designed, for the purpose for which they are now being used. Most (to date) are recycled indicators. This will matter when the trends and patterns identified by the indicator are extrapolated and applied to all elements of the broader target. The small print (otherwise known as metadata) will be very important when analysing the SDG results.

One of the biggest challenges posed by the 2030 Agenda for statisticians is that some of the SDG targets deal with phenomena that arguably cannot be measured comprehensively if at all. Cited above, Target 4.7 is a good example. Target 17.16³⁷ is another. This is not a criticism of the target nor the aspirations contained therein, simply that some issues are by their nature nebulous and defy quantitative measurement. But as quantification and metrics have irrevocably become part of society's zeitgeist, no one is questioning whether this approach is sensible or achievable - it is now accepted that everything can and must be measured. In an era of governance by numbers, the management clichés of 'measure what you treasure' or 'what gets measured gets done' rule supreme. But as Muller (2018: 8) points out 'measurement may become counterproductive when it tries to measure the unmeasurable and quantify the unquantifiable.' While no one can credibly challenge the logic of evidence informed decision making, arguably statisticians also have an important role in advising what can and cannot be sensibly measured. If the SDG GIF is to be useful, it is essential that users understand the limits of these types of performance indicators. The point is not to disparage quantification but simply to recognise and understand its biases and limitations (Tenner, 2018). This will be especially important for donors should they make funding decisions conditional on these indicators.

A surprising result, perhaps, of the preparatory work to develop a SDG GIF is that many member states appeared not to fully understand the distinction between national and international official statistics and the significance of having both. This misunderstanding extended beyond political circles and included also representatives from NSOs. The SDGs brought this distinction into sharp focus. Confusion on this topic, which and subsequent tensions became most evident and acute during the discussions on formulating the '*Guidelines on Data Flows and Global Data Reporting for Sustainable Development Goals*' document (Inter-Agency and Expert Group on Sustainable Development Goal Indicators, 2018b). Arguably many of these tensions could have been avoided if early in the process, the exact purpose of the SDG GIF had been communicated clearly to member states, and the distinction between global and national indicators had been made clear. Kapto (2018: 135) summarised it well, saying "A tense debate is taking place on data flows from national to regional to global levels, and on custodian agencies' role in harmonizing national data for global comparability, as countries assert their sovereignty over national data." In any event, the insistence by some member states that official country data should be prioritised may be counter-productive as it may place enormous burden on

³⁵ Target 17.4 - Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries (HIPC) to reduce debt distress.

³⁶ Indicator 17.4.1 - Debt service as a proportion of exports of goods and services.

³⁷ Target 17.16: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.

countries. It may also, inadvertently, undermine the role of IOs which play an important role in compiling harmonized official international statistics, which often involves amending or imputing national data. The 'country first' approach, while to some extent understandable, is nevertheless somewhat incongruous with statements the same countries make vis-a-vis data revolution, big data and geo-spatial information. It may ultimately be counter-productive too given the paucity of data available in many developing countries. Limiting the SDG indicators to official statistics supplied by countries may simply result in many SDG indicators remaining unpopulated.

The 2030 Agenda may have a profound influence on the shape and organization of official statistics in the future. As noted above, many policy discussions are running far ahead of available statistics, and so the SDGs are likely to be the driving force, or *raison d'être*, for many statistical advances in the coming years, both in terms of statistical concepts and methodology but also in terms of statistical organization and the use of new data sources. It is very important that all NSSs engage actively in these discussions. As Harari (2018: ix) notes 'history gives no discounts.' Countries that do not engage will not be exempt from the consequences. This may have three unexpected consequences: first may be the impact on statistical organization, second the prioritisation of big data over other potential data sources, and finally reputational risk:

1. Statistical organization - the demand for new statistics may inadvertently open the door to the outsourcing or privatization of official statistics if the existing system fails to deliver on the huge expectations that appear to exist. There is a real risk that if the UN statistical system cannot fill the vacuum created by the Tier II and III indicators then someone else will.
2. Big Data - there is growing pressure on NSOs to try and harness big data to compile statistics. This in of itself is not problematic, although expectations should be realistic (see MacFeely, 2019), but it may distract from developing administrative data sources and NSSs, which arguably will be more useful (MacFeely and Barnat, 2017).
3. Reputational risk - given the very short timeframe in which the GIF was developed without any appreciable additional resources, a lot has been achieved. But the SDG GIF may still disappoint the high expectations, and this in turn may undermine the UN Statistical Commission. Thus, for a variety of reasons the SDG GIF is likely to have lasting implications beyond the 2030 Agenda.

Statistics has perhaps also inadvertently highlighted fault lines within the 'global south.' While the global south has complained about the proposed TOSSD, they have failed to offer any viable alternative³⁸. The suspicion is this inertia stems from the fact that some of the larger southern 'donors' simply do not want their south-south cooperation activities highlighted or quantified, as measurement is likely to reveal that some south-south principles, in particular, 'horizontal' are honoured more in the breach than the observance. Perhaps it also signifies some cultural ambivalence towards measurement or making evidence publicly available. Whatever the reasons, the void has allowed the OECD, a 'northern institution', to take advantage of the situation and push forward with their proposed metric (see UN Statistical Commission, 2019).

The SDG indicators have to some extent hijacked the discussion on what statistics and data are required to support sustainable development. What has often been lost in the debate thus far is that the SDG indicators are only performance metrics - they will tell us whether a target is being achieved or not. This focus on indicators risks relegating statistics to the downstream role of monitoring and evaluation. But a key role of statistics should be to inform policy decisions – this upstream or diagnostic role seems to have been, to some extent, lost in discussion. There has been relatively little discussion on what additional data are required to inform and design integrated policies in order to implement actions to achieve the SDG targets. It is important that the data and statistics required to undertake risk assessments, formulate policy or design early warning systems are not forgotten about during the discussions on resource mobilisation or capacity development.

³⁸ There have been some notable exceptions, such as the Network of Southern Think-Tanks (NeST), who have tried to galvanize and coordinate intellectual thinking in the south. See also Besharati and MacFeely (2019) for a wider discussion of this topic.

6. Conclusion

It is a fascinating time in the evolution of data, statistics and information. Traditional data sources are being blended with new digital data sources, statistics are being compiled and disseminated by a bewildering array of providers, and the authority of scientific based information is being challenged by populism and fake news. Into this mix, the 2030 Agenda and the SDG GIF has been added.

The 2030 Agenda represents the first ever democratically forged agreement on development and will guide global development for the next ten or fifteen years. Unlike the MDGs, the SDGs goals and targets are a negotiated text agreed by governments. It is the most ambitious development plan ever conceived. The SDG indicators too are complex and in many cases are breaking new statistical ground. Many of the issues being measured will not be straight forward or inexpensive. The resource implications are not trivial and as yet have not really been addressed. Consequently, NSOs face a dilemma; whether to focus their constrained resources on compiling SDG indicators or trying to compile basic economic and social statistics.

While recognising the challenges, the push for independent statistics should be applauded. The UNSC and the IAEG-SDG has made tremendous progress. Despite a range of constraints, the SDG GIF was assembled in record time. Nevertheless, critics of the SDG indicators have criticised them for being reductionist and of watering down the ambition of the goals and targets (Fukuda-Parr and McNeill, 2019; Engle Merry, 2019; Razavi, 2019). But statistics are by definition reductionist. The question is whether in the unavoidable distillation process the essence of the target has been faithfully captured or not. There is no question that some indicators have missed their target. Indicator 17.19.2³⁹ would appear to be an excellent example. Target 17.19, as explained already, combines the issues of 'beyond GDP' and statistical capacity building. Statistical capacity building is addressed in Indicator 17.19.1⁴⁰, but Indicator 17.19.2 counts the number of countries that have conducted a 'population and housing census in the last 10 years and have achieved 100 per cent birth registration and 80 per cent death registration.' The relevance to the beyond GDP debate is not immediately obvious. Others probably have watered down the original ambition. But this was almost unavoidable given the complexity of most targets and the aspiration to have only one indicator per target.

This article has outlined some of the measurement challenges, and unanticipated consequences, emerging from the 2030 Agenda. Of course, unanticipated consequences are not necessarily a bad thing. The 2030 Agenda and the SDG GIF has provided a real opportunity to reshape and redefine the role of NSOs, to engage in new partnerships and build wider data ecosystems, and to develop new statistical concepts and methodologies. The ambition of the 2030 Agenda provides an open door to consider bolder solutions, such as, implementing an accreditation mechanism for unofficial statistics; building data infrastructure in developing countries; harnessing big data. The 2030 Agenda arguably provides an opportunity to reclaim an authoritative role in today's contested information space and reassert the pre-eminence of facts – to explain what is going on in the world today and challenge the exaggeration, lies, newspeak, obfuscation, gibberish, mumbo-jumbo, nonsense and mendacity that is peddled daily. But not all unanticipated consequences are benign either. There will be challenges too. Not least, is whether the 2030 Agenda demands too many performance metrics. Will this forest of information make it easier to understand whether progress is being made or not? At the time of writing we are already one quarter way through the 2030 Agenda and only 45 per cent of the GIF is populated comprehensively. As noted above, this has created a vacuum. This risk and others identified in the paper must be carefully managed.

³⁹ Indicator 17.19.2: Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration.

⁴⁰ Dollar value of all resources made available to strengthen statistical capacity in developing countries.

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