

The policy case for a tailor-made indicator of sustainable development for South Africa



INTRODUCTION

The world is facing multiple crises of sustainability. Most prominent in economic news is the debt/fiscal crisis in the United States and Europe. Across the African continent, poverty, disease, corruption and failures in democratic governance and education overlap with a pattern of notable economic growth in a number of countries, driven in part by a commodities boom.

Besides these socio-economic issues – and potentially aggravating them to breaking point – the world is facing the threat of climate change related to an over-reliance on increasingly expensive fossil fuels and the unsustainable over-use of other natural resources from freshwater to fisheries and forests. Sustainable development has been acknowledged as the way forward since the United Nations Conference on the Human Environment in 1972. As defined by the Brundtland Report in 1987, “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNWCED, 1987). While the term “sustainability” has been dominated by environmental issues, it has become relevant for social and economic issues.

South Africa reflects many of the world’s sustainability problems. Gains from the rise in commodity prices and debt-fueled, consumption-led growth have masked issues such as rising costs and declining competitiveness of the economy. The 21st century has seen protests over service delivery and unemployment, while (increasingly deracialised) inequality remains stubbornly ingrained in the fabric of society. South Africa is also the 13th largest carbon dioxide emitter in the world, despite the country’s relatively small population and economy.

Since 1994, South Africa has nonetheless achieved far-reaching political, economic and social changes, and has shown an increasing commitment to sustainable development. Along with its involvement in international negotiations, it has developed its own national framework. First, sustainable development is recognised as a human right in the 1996 Constitution (RSA, 1996). Second, a National Framework for Sustainable Development (NFSD) was adopted in 2008 and a National Strategy for Sustainable Development and Action Plan 2011 – 2014 (NSSD), building on the NFSD, was published as government policy on 23 November 2011 (RSA, 2011).

The NSSD provides an integrated framework to shift South Africa’s development path to sustainability. It conceptualises the three spheres of sustainable development – the economy, society and the environment – as embedded within each other, and underpinned by systems of governance. In addition, it identifies key trends and areas of intervention for all of the four constituents (governance, economy, socio-political systems and ecosystem services).

While the approach adopted reflects real interconnections, the overall relationship of the three capitals – natural, social and economic – can also be depicted as people-centered governance that balances the constraints of nature and the demands of the economy. Without proper governance, value would be extracted from nature without constraint and converted into financial rather than productive economic capital with little social capital benefits. At the same time, little value is returned from the economy to nature – for example through ecosystem restoration – leading to the imbalance that lies at the core of the modern-day sustainability challenge.

BEYOND GDP: A NEW MONITORING AND EVALUATION FRAMEWORK

Monitoring and evaluating progress towards sustainability, as well as performance, has become a priority for many nations, along with the social and environmental urgency of sustainable development. International negotiations on climate change mitigation and adaptation have also encouraged the development of sustainability assessment frameworks. Consequently, appropriate tools informing trade-offs and guiding an economy towards a sustainable path are required by policymakers.

Since its conception, Gross Domestic Product (GDP) has been the main indicator used to measure economic activity and characterise the success or failure of an economy. First developed in 1934 by Simon Kuznets for a US Congress report on how to better understand and tackle the Great Depression, GDP was meant as a measure of the country's productivity (Kuznets, 1934). It refers to the market value of all final goods and services produced within a country in a given period, essentially quantifying market production and economic exchanges.

GDP is, however, not designed to assess the welfare of a nation, as originally conceived by Kuznets, and its use to evaluate economic well-being could lead to incorrect policy decisions (Kuznets, 1934). GDP has many shortcomings when it comes to measuring sustainability; it leaves out many aspects of welfare, including: non-market transactions (such as free health insurance and households' production); quality improvements (particularly in information and communication technologies, medical activities and education); and, social and environmental externalities.

Historical and recent publications on the issue include the seminal World Bank publication *Where is the Wealth of Nations? Measuring Capital in the 21st Century* (World Bank, 2006), French President Nicolas Sarkozy's Commission on the Measurement of Economic Performance and Social Progress (Stiglitz, Sen and Fitoussi, 2009), and the UK government's Sustainable Development Commission report on Prosperity without Growth (Jackson, 2009).

South African authorities have recognised the challenges of using GDP as a measure of progress, and the National Strategy warns that a development path based "primarily on maximising economic growth – as measured by GDP [...] has resulted in an energy-intensive economy and an erosion of the resource

base: a situation that is clearly unsustainable" (RSA, 2011: p 12). The approach promoted by the NSSD suggests the need to augment GDP growth as the primary development indicator by human well-being and ecological sustainability markers, and paves the way for establishing a monitoring and evaluation system that would facilitate the assessment of progress towards sustainability.

Policymakers' commitment to monitoring, evaluating and reporting performance and progress (notably sustainability goals) has been formalised in the elaboration of a new assessment framework, the 12 Outcomes approach. This approach, developed by the Department of Performance Monitoring and Evaluation, a dedicated department created in 2010 in the Presidency, identifies the goals to reach, the means to achieve them, and the tools to assess progress. It aims at mainstreaming a results-oriented approach across all spheres of national, provincial and local government and is based on a logic model linking inputs, activities, outputs, outcomes (system-wide results) and impacts.

The framework starts with the identification of 12 outcomes covering all spheres of sustainable development (education, health, safety and security, employment, skills, infrastructure, rural development, human settlement, local government, environment, international relations, and public service) and reflecting the desired development impacts that the government seeks to achieve.

Each outcome is clearly articulated with key activities and measurable outputs and sub-outputs. A large set of specific indicators, (overlapping the development indicators published annually by the Presidency), associated with targets for 2014/2015, is used to measure the progress towards the completion of outcomes.

The 12 Outcomes approach relies on the definition of a "dashboard" – a set of indicators that captures the complexity and multidimensionality of sustainability, and is an excellent programmatic instrument to gain an overview of areas achieving or lagging in progress. Yet it is problematic at the policymaking level, particularly in informing trade-offs and in the ex-post or ex-ante evaluation of specific projects and programmes of government.

The framework, which is a detailed roadmap rather than a policymaking tool, identifies more than 200 sub-outputs and 500 indicators. Such a wide dashboard for policymaking purposes presents a

significant challenge, most notably for informing trade-offs. A dashboard must be easy to read and interpret, otherwise it risks a loss of interest for, and impact on, policymaking processes (Stiglitz et al, 2009).

For this reason, it is essential to consider one sustainability indicator which would make trade-offs explicit in the South African context. The fundamental goal is to design a scheme that would indicate if the country is on a sustainable growth path, and thus meeting one of its constitutional obligations.

Such an indicator is essential for policymakers aiming at sustainable development, to develop, monitor and evaluate evidence-based policy. In countries under financial constraint, the main difficulty continues to be making wise trade-offs. Decision-makers faced with the need to make such trade-offs would benefit from the ability to express components of economic development (e.g. employment, social capital, environmental degradation) in terms of a common unit (e.g. monetary). For example, the cost of implementing a project or investment by the state could be offset by the value of the jobs created and exacerbated by the environmental impact. Only by translating these spillovers into a common measure could their net, or combined, impact be judged.

LINKING PERFORMANCE MANAGEMENT AND SUSTAINABILITY INDICATORS

Assessing if the economy is on a sustainable path suggests using a multi-dimensional and stock-based approach (Stiglitz et al, 2009), as opposed to the single-dimensional, flow-based approach embodied by GDP. Future generations' well-being will depend on what economic, social, environmental and institutional resources the current generation bequeaths to them.

The idea is to assess if our generation is living above its means by looking at the magnitude of exhaustible stocks that we pass on to next generations. Physical capital (machines, buildings), human capital (through education and research), institutional capital (the quality of institutions) and environmental capital (natural renewable resources), as well as their quality, all affect the sustainability outlook. The challenge is to determine whether the current aggregate wealth level can be grown or (at least) maintained in the future or whether it will be forced into decline.

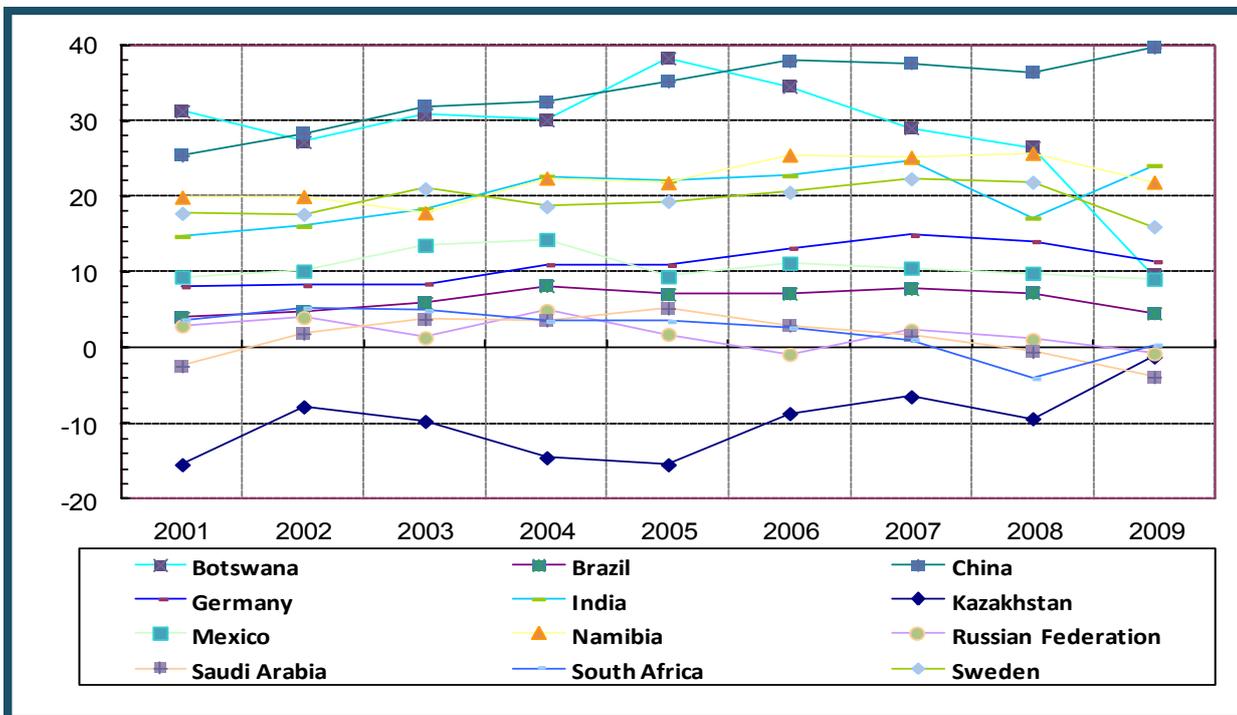
Adjusted Net Savings (ANS) – also known as genuine savings, genuine investment or real wealth – is a sustainability indicator created by World Bank economists using this “three capital” approach. Based

on the recommendations of the French Presidency's Commission on the Measurement of Economic Performance and Social Progress, ANS appears to be the “economic counterpart of the notion of sustainability” (Stiglitz et al, 2009) and the best indicator available at the time to assess whether an economy is on a sustainable path. It builds on the concepts of green national accounting but focuses on stocks rather than flows, measuring the true rate of savings in an economy after taking into account investments in human capital, the depletion of natural resources and damage caused by pollution (Bolt, Matete and Clemens, 2002).

The indicator makes the growth-sustainability trade-off explicit. A negative ANS score indicates that a country's total wealth is depleting, i.e. an unsustainable path. By extension, countries favouring current economic growth over a sustainable course and/or investments in education display depressed ANS rates. Policies leading to persistent negative ANS rates are unsustainable and should be revised to boost investment in human capital and/or decrease environmental damage.

ANS is, however, not a perfect indicator and has some imperfections that need to be addressed. For example, it does not explicitly include some forms of capital (like financial, intellectual and institutional capital). The relevance of the ANS varies from country to country as it depends on what is counted (the different forms of capital) and on the prices used to count and aggregate in a context of imperfect or non-existent valuation by markets.

Thus, the use of market prices for non-renewable resources (despite very imperfect markets and high price volatility) reduces the relevance of the ANS for resource-exporting countries such as South Africa. Similarly, the valuation of environmental degradation, through current prices of emissions credits on carbon markets, underestimates the impact of pollution on sustainability. The adjustment for environmental degradation is constrained to a set of pollutants (carbon dioxide essentially), and other critical sources of environmental damage, such as biodiversity loss, soil degradation, underground water depletion and unsustainable fisheries, are deliberately left out (due to the lack of internationally comparable data) (World Bank, 2006: p 154). As a result, in developed countries, gross savings almost exclusively drive changes over time, and capital consumption and human capital accumulation have a disproportionate impact on ANS compared to natural capital.



Adjusted Net Savings as a percentage of Gross National Income (GNI) from 2001 to 2009 for selected countries

Sources: TIPS and World Bank data

As illustrated in the figure above, the miscellaneous shortcomings of ANS result in most developed nations, as well as high-growth economies such as China and India, being on a sustainable path while many developing and emerging economies, particularly resource-exporting countries, appears unsustainable. South Africa, as a dual economy with a strong mining industry and low levels of income and savings, has, for the past three decades, had a weak level of sustainability (i.e slightly positive ANS), and even fell to unsustainability in 2008.

These conclusions call for the construction of a tailor-made sustainability indicator based on the ANS methodology, but adjusted to reflect South Africa's specific realities (e.g. dual economic system) and policy priorities (e.g. job creation, education).

The South African government has recognised the importance of developing indicators of progress and performance for current policies and for sustainable development. However, further work is required to link these sets of instruments and to design one that would: (a) give a clear indication of the country's progress on a sustainable growth path, and (b) could also inform the trade-offs policymakers have to make based on an objective approach, thereby facilitating truly evidence-based policymaking.

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