

Submission to Australian Treasury, "Measuring What Matters" Consultation  
Russel Cooper, Honorary Professor, School of Business, UNSW Canberra  
Member/Visiting Fellow, Public Sector Research Group  
7 February 2023

## Introduction

I am a retired professor of economics. I maintain a continuing research interest in economics, particularly in areas of applied econometrics, consumer demand, economic growth and development, poverty and inequality, productivity and economic welfare.

In seeking a firm foundation for Australia's efforts to lift living standards, Budget Statement 4, 'Measuring What Matters', suggests that the metrics employed in the OECD's 'Framework for Measuring Well-being and Progress', with its attention to international comparability, make an ideal starting point. International efforts to date have generated a 'dashboard of indicators' approach. The Treasury's statement points out the need for specific adaptation to suit Australian conditions and priorities. A national well-being framework should ideally be evidence-based, cover a broad range of aspects of well-being, and be capable of some acceptable form of integration of diverse indicators into a small number of key aggregates that retain international comparability. Together, these make a challenging list of requirements.

This submission provides comments and suggestions related to conceptual issues and measurement issues.

### (1) Conceptual issues

There is an enormous literature on the concept of well-being, with contributions from a variety of disciplines, including from philosophy, psychology, sociology and economics. This attests to the importance of the topic.

The problem: Arguably because of the subjective basis of the concept, the illusive nature of measurement, the objective requirements of policy advice and the contestability of ideas, progress on a national framework of measurement has been slow. National statistics give, at best, outputs (or sometimes just inputs). But well-being really relates to outcomes. The task is admittedly difficult, but there is a need for greater transparency in the construction of a well-being framework. My suggestions here are general, rather than specific. They are made largely to provide background to related measurement issues covered in the next section.

Suggestion 1.1: A national well-being framework should separately identify but also indicate the links between outputs and outcomes that have been utilised in the presentation of results. To do this, the nature of outcomes from a well-being perspective need to be transparently described so that they can be understood. The United Nations System of National Accounts (SNA) already provides a framework for measurement of economic outputs, and this also allows economic statistics to be compared consistently across countries following the methodology of the World Bank's International Comparison Program (ICP). These statistics could all be categorised as outputs, not outcomes, but even here the links are currently less than transparent from the perspective of public accessibility. For example, even a key conceptual construct such as the link from an economy's national accounts definition of 'consumption' to the ICP's definition of 'actual individual consumption' lacks some transparency. Publicly available information suggests that this involves allocating 'government individual expenditure' (largely, apparently, transfer payments) to various private consumption categories, such as education and health. But there is not enough publicly available information on the breakdown of these reallocations into current versus capital expenditures. Such a breakdown would be helpful if the data are to be used as input into indicators of sustainability and intergenerational well-being. The ICP's definition of 'government collective expenditure' is also opaque at the publicly accessible level.

Suggestion 1.2: Economic outputs can usefully be ranked across economies (of course, they already are), but indicators of well-being outcomes should not be ranked. Improvements in outcome indicators in any given

country are obviously good, and if the average across countries is improving (on an appropriate measure) this is also good, but changes relative to the average (viz. hop-skipping of country rankings on some indicator) are nothing to be proud of. It speaks of a competitive comparison that is incompatible with a non-partisan interest in human well-being.

Suggestion 1.3: Mindful of the caveat in 2 above, economic outputs can usefully be ranked not only internationally but also regionally (at the sub-national level). Of course, this is currently being done in many countries, but it needs to be extended (subject to the necessary size requirements to retain individual confidentiality) not only to smaller regional units, but by various demographic and socio-economic groupings.

Suggestion 1.4: Special attention needs to be given to public goods. Apart from difficulties of measurement of output, the presence of externalities makes the measurement of outcomes even more difficult. There is also an issue of comparison in per capita terms versus whole of economy terms. For example, in an era of heightened international tensions, defence expenditure may be seen as providing a public good that is not well recognised in more peaceful times. The capacity of a country to provide adequate safety for its citizens can vary a lot with the size of a country in raw population terms, regardless of the country's level of economic development. Attention needs to be given to how the various aspects of individual well-being, some dependent on per capita indicators but others on whole-economy indicators, can usefully be combined - or even if they can be combined. Aspects of well-being related to environmental quality and access to health infrastructure have a population dimension in a globalised world. The overall quality of educational infrastructure and access to ideas also have a population dimension.

## (2) Measurement issues

Officially produced national economic data, and by the same token ICP data, are objective in the sense that they are not based on opinion, however, the degree of reliability varies by data type and source, and the degree of usefulness varies by purpose.

Problem 2.1: The appropriate unit of measurement for well-being comparisons. In international comparisons, economy-wide data are not typically used for making well-being inferences. Instead, they are mainly used to indicate economic, and to some extent also political, status. There is also a growing acceptance, following the ICP methodology, for the idea of making international comparisons in purchasing power parity (PPP) terms, rather than relying on tradition exchange rate (EXR) based comparisons. In general, this is apt for purposes of measurement of outputs – which, notwithstanding this choice, should ideally next be evaluated further for their well-being outcomes. However, there are some aspects of well-being for which EXR-based measures may be more meaningful than PPP-based measures. Recent ICP results have been used to indicate the ascendancy of the Chinese economy, given that it has now overtaken the USA in economy wide terms measured on a PPP basis. However, the PPP valuation relates to purchasing power within an economy. The Chinese economy, impressive as its growth has been, is nowhere near the size needed to command the same value over resources on the world stage as the economy of the USA can command.

Suggestion 2.1: Arguably, as evidenced by the spread of the COVID-19 pandemic, globalisation is ongoing. Any one economy cannot really have a meaningful economic impact on the world stage unless it interacts with the outside world. At this point EXR conversion is necessary to place a value on the extent of the interaction. This is a contributing factor to individual economic well-being that cannot be accounted for on either a PPP basis or on a per capita basis. Therefore, although it cannot be the basis for all material well-being indications, economy-wide GDP in EXR-based terms must be taken into consideration in an overall assessment of the well-being of individuals in an economy. Additionally, following the trend to develop PPP-based regional statistics, these need also to be made available in two forms – presumably on a local currency unit (LCU) based measure within a jurisdiction, but also on a regional purchasing power parity (RPP) basis.

Problem 2.2: Interpretation of per capita versus economy-wide measures. When the focus is on aspects of a country's well-being that affect the individual, it would seem natural to turn to measures in per capita terms. Based on ICP results for 2017, whether measured on a PPP or an EXR basis, there is a major re-ranking of economies relative to economy-wide measurement, with a significant reduction in the ranking of the large but relatively less developed economies such as China and India. The improvement in the rankings of small relatively wealthy economies is expected, but the significant jump in rankings of Ireland and Brunei Darussalam can be questioned from the perspective of well-being measurement. Deaton and Schreyer (2022) discuss the case of Ireland and also that of Luxembourg. In both cases, and for different reasons, it is clear that GDP per capita is not a good measure of individual material well-being for these economies.

Suggestion 2.2: In moving from whole-economy to per capita based measures, it would be helpful to also be able to generate the same measures on a per household basis.

Problem 2.3: Production versus consumption. The ICP favours the use of actual individual consumption as a more appropriate measure for an analysis of well-being than GDP. This involves a re-allocation of what the ICP terms individual government expenditures from government to consumers. The resultant per capita measure is also PPP-based. Based on the ICP2017 results, this more appropriate measure of individual material well-being leads to further significant re-rankings, notably the strong rise of the USA, a significant rise for Australia, a slight reduction for Luxembourg, a more significant reduction for Ireland and a very significant reduction for Brunei Darussalam. Although 'actual individual consumption' is not an aggregate expenditure category that is available for individuals to allocate across consumption categories based on market-priced purchases, it is relevant for well-being assessment in that it takes into account more outputs that can provide well-being to an individual than their freely allocated total expenditure decision can provide. However, another category of output that also provides a contribution to individual well-being is their access to public goods. There are several problems in integrating public goods and services to provide an extended measure of (imputed) actual individual consumption. These include pricing of public goods and services and also measurement of externalities.

Suggestion 2.3: Following the output/outcome distinction, the public good pricing problem could be allocated to the output measurement aspect of this problem, and the valuation of externalities could be allocated to the outcome measurement problem. That would go some way, though only a small way, to filling what currently seems to be a gap in recognition of the role of public goods, services and especially critical infrastructure in for example health, education and defence. This suggestion is very tentative, since this submission has not covered the issue of the output-outcome link. That 'missing link' will need to be taken up at a later stage.

Problem 2.4: Summary statistics versus distributional detail. There seems to be no real prospect for understanding differences in well-being due to inequality from national aggregate data. Distributional data would be helpful, and if it is based on the distribution of actual individual consumption in PPP-terms this could be very useful. Moreover, the distribution of accessibility to public goods and services also needs to be taken into account, as does the distribution of opportunities and the resulting distribution of capabilities. At this time, this submission cannot make a viable suggestion on how to provide the missing data, even though it is critical to a balanced non-partisan framework for economic well-being. The submission has attempted to avoid consideration of the use of any measures that cannot be validated in an (ideally) objective manner. Consequently, a consideration of the pros and cons of subjective well-being measurement, despite the huge literature and apparent continuing interest across a range of disciplines, does not feature at all for the current submission.

#### Reference

Deaton, A. & P. Schreyer (2022), 'GDP, Well-Being and Health: Thoughts on the 2017 Round of the International Comparison Program', *Review of Income and Wealth*, 68:1,1-15. Doi: 10.1111/row.12520