New paradigms to measure progress

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The concept of social progress has been with us for thousands of years, from the earliest human civilisations. For modern societies, progress is often about improving wellbeing. A wellbeing framework is at the core of the Australian Treasury's organisational identity and culture. Improving the wellbeing of the Australian people is central to the Treasury's mission statement.

The Commission on the Measurement of Economic Performance and Social Progress has admirably achieved its goals of looking at the limits of GDP as a measure of progress, identifying the elements that are more relevant to the measurement of progress and assessing the feasibility of alternative measurement methodologies. The Commission's report also makes recommendations for improving the measurement of progress that will hopefully shift us to new measurement paradigms.

Improving the measures of progress is a commendable, but complex task. A shift to new paradigms to measure progress will also require a shift to new paradigms for considering and using such measures. As the Commission states, 'what we measure affects what we do'. It affects judgements about the current state of affairs and what policy responses are needed. If we develop new measures we need to ensure we use them appropriately.

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Introduction

Thank you, Enrico Giovannini for that kind introduction. And thank you, Professor Stiglitz for your stimulating presentation on the work of the Commission on the Measurement of Economic Performance and Social Progress (2009).[2]

In the time I have today, I would like to focus on three issues that need to be considered if we are to shift to new paradigms to measure progress. I will start by talking about different perspectives on progress. Then I will briefly review some of the recommendations from the Report by the Commission. Finally, and perhaps most importantly, I will address an issue I believe is of primary importance if we are to successfully shift to new paradigms to measure progress. To do so successfully, we will also need a renewed willingness to take these new measures seriously, and to use them to guide policy.

Defining wellbeing

As an economist and an adviser on government policy, I have a deep-seated professional interest in social progress. Progress is often about improving wellbeing. Progress and wellbeing mean different things to different people and organisations. Today, I will tell you a little about the perspective taken by the Australian Treasury.

Improving the wellbeing of the Australian people is central to the Australian Treasury's mission statement. We developed the wellbeing framework in the early 2000s to provide a consistent and robust understanding of wellbeing (Henry 2004; Henry 2006). The framework now sits at the core of the Australian Treasury's organisational identity and culture.

Reflecting our economic heritage, Australian Treasury's wellbeing framework adopts a generalised-utilitarian approach. Thus, in addition to income and consumption, a policy relevant assessment of wellbeing, both at the individual and social level, can in principle depend on health, education, social connectedness, crime rates, air and water quality, biodiversity, and a myriad of other aspects of life experience that people have reason to value.

The Australian Treasury's wellbeing framework has five dimensions (Box 1). They are:

- the level of freedom and opportunity that people enjoy;
- the aggregate level of consumption possibilities;

2 Papers and presentations from the 3rd OECD World Forum on Statistics, Knowledge and Policy are available at www.oecdworldforum2009.org.

- the distribution of consumption possibilities;
- the level of risk that people are required to bear; and
- the level of complexity that people are required to deal with.

GDP is an important element of our framework because it provides an indication of the aggregate level of consumption possibilities that society is able to enjoy (although, as the Commission's report makes clear, it is an imperfect measure of consumption possibilities).

The dimension of wellbeing that stands at the heart of Treasury's framework is freedom and opportunity. Treasury's perspective on freedom and opportunity has been influenced heavily by the work of Amartya Sen on the contribution that 'substantive freedoms' make to development.

According to Sen, the true measure of human development is that an individual has the capabilities necessary to lead the kind of life they value (Sen 1999). Capabilities allow an individual to fully function in society. They are not income and, while they include basic civil rights and political freedoms, they are not limited to 'rights'.

Thus, Treasury is interested in the capabilities that Australians have to lead lives that they value. This is similar to the perspective the Commission takes on quality of life. The Report says that 'what really matters are the capabilities of people, that is, the extent of their opportunity set and of their freedom to choose among this set, the life they value'.

The wellbeing framework also reinforces Treasury's strongly held conviction that trade-offs matter deeply. Most policy reforms involve trade-offs within or between dimensions of wellbeing. These trade-offs can be complex and multidimensional. Decisions regarding policies involving such trade-offs require judgements to be made which value different aspects of social welfare. Ultimately, these decisions are rightly made by the political process — that is, in Australia's system of government, by the Parliament.

Box 1: The Australian Treasury’s wellbeing framework

Freedom and opportunity

Freedom and opportunity refers to the capabilities that Australians have to lead lives that they have reason to value. Capabilities allow an individual to fully function in society. Sen (1983) identifies some basic capabilities: ‘to meet nutritional requirements, to escape avoidable disease, to be sheltered, to be clothed, to be able to travel, and to be educated’. Other capabilities, such as the capability to live without shame or to participate in the activities of the community, are relative to community standards. Thirty years ago being computer literate was not necessary to participate fully in society, but it is now. In a developed country like Australia, enhancing people’s capabilities requires going beyond merely avoiding basic deprivations.

Consumption possibilities

The level of consumption possibilities refers to society’s command over resources to obtain goods and services to satisfy the needs and wants of its members. This concept should be considered in its broadest sense. It encompasses traditional economic concepts of income as well as less tangible concepts such as the application of political authority. It includes market and non-market goods and services, both material and intangible. It sees value in voluntary work, personal and professional relationships, the quality of the physical environment, education, and health and leisure.

Distribution

Distribution has spatial and temporal dimensions. It refers to the spread of all aspects of consumption possibilities across the population, including across different societal groups, geographic regions and generations.

Risk

Risk refers to the intrinsic uncertainty in possible outcomes that is present in almost all decisions (Banerjee and Ewing 2004). In this broadest conceptual sense, risk impacts on all individuals, and is everywhere in the economy and society. People have different preferences toward risk. All else being equal, it would be expected that wellbeing would be improved if there is a better match between risk preferences and risk borne. Achieving this is complicated by the fact that contexts, paths and perceptions matter (Kahneman 2003).

Complexity

Complexity refers to the number of considerations, and the interconnections between those considerations, that are relevant to many economic and broader social decisions. Complexity is sometimes imposed by governments (for example, the tax code) seeking to respond to a range of stakeholders in the community with disparate interests.

The Treasury wellbeing framework is one approach to thinking about wellbeing and social progress. Other approaches, such as those taken by the Commission, the OECD’s Global Project and the Australian Bureau of Statistics, which reflect their organisations’ perspectives and purposes, also have much value (ABS 2001; ABS 2009 and

Giovannini et al. 2009). Indeed, given the broad scope of the wellbeing concept, it is often useful to consider a number of approaches to wellbeing.

Measuring wellbeing

Conceptualising and measuring wellbeing are distinct endeavours. Treasury's wellbeing framework, for example, is qualitative. On the other hand, the Australian Bureau of Statistics' publication *Measuring Australia's Progress* (ABS 2009) provides both a conceptual framework, as well as indicators to measure progress.

The broad range of perspectives that people and organisations bring to wellbeing and progress means that there is a need for a similarly broad range of measurements and indicators that can be usefully employed to assess wellbeing and progress.

The Report by the Commission on the Measurement of Economic Performance and Social Progress (2009) makes a remarkable contribution to the continuing debate and discussion about how best to measure wellbeing and progress. It has admirably achieved its goals of looking at the limits of GDP as a measure of progress, identifying the elements that are more relevant to the measurement of progress and assessing the feasibility of alternative measurement methodologies.

The Report will be an important input to discussions and debate at the international and national level through forums such as these, the OECD's Global Project more broadly, and the endeavours of national statistical agencies.

While many of the measurement issues have been canvassed before, the Report speaks with an authority that arises from the eminence of those on the Commission, and it provides constructive ideas for how producers of statistics can improve the measurement of wellbeing.

I do not want to spend a lot of time reviewing the Report and its recommendations, but I would like to highlight a few of its key messages.

The context for measuring wellbeing and progress

Perhaps one of the crucial messages of the Report is its emphasis on the importance of improving the measurement of progress.

What we measure affects what we do. Statistical indicators affect judgements about the current state of affairs, trade-offs between the dimensions of wellbeing, appropriate policy responses, what societies and individuals value and their goals.

The Report also highlights the need for a statistically literate society. Statistics are a feature of modern life and users of statistics need to be aware of: the measures that are available; their strengths and weaknesses; and how to use them appropriately.

Improving measurements

The Report makes a number of specific recommendations to improve how we measure progress. Again, instead of going into detail, I would just like to note a few key points.

As the Report acknowledges, we have long been aware of the limitations of GDP as a measure of economic performance and wellbeing (for example, Australian Treasury 1964 and Australian Treasury 1973). We need to improve how we measure economic activity and economic performance, especially as it relates to quality and non-market services.

We also need to improve how we measure wellbeing. For some aspects of wellbeing, like material living standards, we have reasonably good measures. For others, like health and education, we have proxy measures. These are serviceable, but we could improve on them. For yet other aspects, like political voice or social connectedness, there are few measures available and we need to develop more.

Perhaps one of the most novel and welcome aspects of the Report from my perspective is its discussion of sustainability. Sustainability is an issue that to date has tended to be looked at in isolation from other issues. For example, there are often separate processes for considering long-term fiscal sustainability (in reports produced by Treasuries or Finance Departments) and the sustainability of the environment in discussions of climate change. But, as the Commission points out, the sustainability of social progress needs to take into account all of the dimensions of sustainability.

Of particular importance is the Report's emphasis on considering wellbeing and sustainability separately. The two concepts are closely intertwined, not least because wellbeing may be affected by intergenerational considerations; for example, whether our children will be able to enjoy the same environmental biodiversity that we do.

The key focus of sustainability is on a comparison between the present and the future. Sustainability requires that at least the current level of wellbeing be maintained for future generations. It requires the simultaneous preservation or increase in several stocks, such as the quantities and qualities of renewable natural resources, human capital, social capital and physical capital. Perhaps some of our greatest measurement challenges are in this area.

Putting it into practice

Improving the measures of progress is a commendable, but complex task. A shift to new paradigms to measure progress will also require a new willingness to take the new measures seriously, and to use them to inform policy choices.

We already have some measures of wellbeing and sustainability, and we are looking to develop others. But little will change if those making the decisions that affect peoples' lives — governments, communities and individuals — are not willing and able to look beyond economic performance and consider how their decisions affect wellbeing and progress.

This is why it is important for public policy institutions to have a framework that includes a role for wellbeing and sustainability. We at the Australian Treasury have found it valuable to have such a framework — because it encourages a broader analysis of the impacts of policy that goes beyond a focus on GDP and material considerations (Henry 2004 and Henry 2006). Given our favourable experience, I would encourage others to introduce such a framework as an organising principle into their organisations.

To achieve a simultaneous shift in measurement and the use of measures, we will have to acknowledge that all measures have their limitations. We will need to use both qualitative and quantitative data. And we will need a range of indicators. Summary indexes can be useful, but they cannot provide the full spectrum of information on progress that we need.

In reflecting on the current global financial crisis, the Commission is surely right that 'better measures may enable us to steer our economies better through and out of crises'. But better measures alone will not be sufficient. We must be willing and able to use them.

On this point, it is instructive to reflect upon the failure of economists to warn of the increasing fragility of the global financial system in the years leading up to the current crisis.

Economists have the tools and skills that would have enabled them to issue such warnings but, with a few notable exceptions, they did not do so. Why? In part, the answer has to do with the discipline's general focus on, and interest in, models in which financial markets are efficient and well functioning, and market participants know what they are doing.

This has meant that we have paid too little attention to real-world phenomena like long-lived asset price bubbles, or herd-like behaviour in financial markets. Of course, some economists have studied these phenomena, but they are not yet part of the mainstream economic consensus.

The tools economists have at their disposal, such as including behavioural features in their models, may not be perfectly suited to examining the possibility and impacts of such phenomena. But they do exist and it may be possible to develop more. The key point is that economists must be willing and able to use these tools.

The same is true of measuring progress. Yes, we need to improve on the measures we have, and we must develop new measures. But, if we are to use these measures to steer our societies through crises, then we must learn to use these measures appropriately, taking into account their limitations, using qualitative data when quantitative data are not available, considering behavioural influences, adjusting for possible shifts over time, and using a wide range of indicators to get a better understanding of what is happening in our societies.

Conclusion

Improving how we measure wellbeing is important for gauging economic performance, social progress and sustainability. It is also of vital importance for policy. Shifting to a new paradigm for measuring progress is a big and complex task. If we are to be successful in this endeavour, the development of this new paradigm will need to be accompanied by a renewed willingness to take these new measures seriously, and to use them to guide policy.

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