IS POLICY MAKING MEASURING UP?
Rethinking how we measure the success of a nation
Chartered Accountants Australia and New Zealand

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Chartered Accountants are increasingly being asked to go beyond the obvious and consider social and environmental factors when measuring the impact of their advice. In an increasingly global world it has also become hard to avoid comparing nations when measuring success. The latest in our future[inc] series Is policy making measuring up? Rethinking how we measure the success of a nation explores how global demands have changed the way we think about and measure success and what the results really mean.

Typically success is reflected by the welfare of a nation and with the Gross Domestic Product (GDP) used as a means of comparison. However, GDP is a narrow measure, and by currently tying our measures of success to GDP growth, are we missing the impact of policy on the things that we most value? For example: our family, health, security, the environment and a high calibre education.

 Whilst measures of productivity and our GDP are important and will continue to be, it would be remiss to continue to just stop there as we would leave out addressing the things that really matter. This is an important conversation we need to have to ensure that the way we look at society, government and business captures the future we are already stepping into.

I'd like to thank the team at EY for contributing to Is policy making measuring up? by bringing the right mix of policy and business sector experience into this important discussion. Chartered Accountants Australia and New Zealand would also like to thank the many individuals involved in the consultation and production of this paper.

I hope you enjoy our thinking and encourage you to join the conversation.

Mel Ashton FCA
President designate
Our Gross National Product, now, is over $800 billion dollars a year, but that Gross National Product – if we judge the United States of America by that – that Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armored cars for the police to fight the riots in our cities. It counts Whitman’s rifle and Speck’s knife, and the television programs which glorify violence in order to sell toys to our children.

Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything, in short, except that which makes life worthwhile.

ROBERT F. KENNEDY
FORMER SENATOR, UNITED STATES OF AMERICA
REMARKS AT THE UNIVERSITY OF KANSAS, MARCH 18, 1968
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In the quest for measuring progress and being able to compare this progress against other nations, welfare has become synonymous with Gross Domestic Product (GDP). Yet GDP is not a welfare measure: rather it is a measure of economic activity. Interest is growing in communities, governments and internationally as to how a more complete picture of progress can be shown, one which recognises environmental and social outcomes as well as economic aspects. Accounting professionals themselves are increasingly being asked to go beyond the direct financial metrics of businesses, and consider wider sustainability impacts and interactions. Chartered Accountants Australia and New Zealand have sought to identify what needs considering in the policy making process in order to allow the economies to cope with global demands and developments.

**EXECUTIVE SUMMARY**

At its core, government is responsible for ensuring the welfare of its citizens.

**IS POLICY MAKING MEASURING UP?**

So how should we measure the future? Central to this question is an understanding of what we value in our lives, and research conducted by the Australian Bureau of Statistics suggests that stakeholders (government, industry, individuals) hold a broad set of values. Some appear to correlate well with GDP, while others have a poor (or potentially negative) relationship to GDP. At the same time, a range of indices have been developed that could be embraced to measure the future. These can broadly be grouped into four categories: corrections to existing GDP accounts; indices that measure aspects of wellbeing directly; composite indices which include GDP; and indicator suites. Each has its strengths and weaknesses, but all present a different window onto what society values as progress.
In Figure 1, a comparison of GDP per capita and alternative progress metrics is presented for Australia and New Zealand. Since 1970, GDP per capita has grown significantly in both countries: at the same time alternative measures of progress are poorly correlated with this change in GDP. Yet in many ways, these alternative measures of progress are a closer reflection of the values that society holds.

RETHINKING HOW WE MEASURE PROGRESS

While alternative measures of national progress have been developed, GDP remains the dominant, almost universal, measure of progress. Alternative measures of national progress can be used alongside GDP: such an approach supports a closer relationship between what society values and what is being measured, and allows greater understanding of how successful current growth priorities are in delivering progress towards society’s values.

From a range of alternative measures, we focus on the Social Progress Index as a potential key step in bringing broader progress measures into policy-making and the public domain. A roadmap to support implementation suggests that government has a key role in delivering this change, but is unlikely to be successful without the support of a wide range of stakeholders. But successful adoption of additional national progress measures will provide us with the ability to manage what we value and will be a significant step towards ensuring that national progress reflects our values.
What gets measured gets managed.* This maxim is often applied in business environments, but its message is equally applicable for other organisations.

Government should have a rigorous focus on measurement and management, as it is the role of government to ensure the welfare of its citizens. The measurement of key aspects of welfare not only allows an evaluation of existing policies, but provides guidance for government in evaluating policies for further enhancing national welfare, and driving national progress.

Globally, government has come to see successful policy being largely synonymous with GDP, and its growth over time. Yet GDP is not at its core a welfare measure; rather, it is a measure of economic activity. The measurement of GDP, combined with the simplicity and comparability of a single metric, has led to GDP management becoming the objective of government policy. However, this creates a tension: while government is able to measure GDP as a proxy for national progress, GDP is insensitive to much that a nation truly values (Figure 2).

A range of organisations, including communities, governments, and NGOs, have sought to identify and promote a more complete picture of progress, one which recognises social and environmental

* This quote is often attributed to Peter Drucker (1909–2005), Clarke Professor of Social Sciences and Management at Claremont Graduate School, California.
outcomes as well as economic aspects. This has been supported by reports published by several international bodies, including the Commission on the Measurement of Economic Performance and Social Progress\(^2\), and the European Union’s Beyond GDP report\(^3\). These, and other reports, call for a re-evaluation and understanding of what society genuinely values, and question whether this is truly reflected in our current tools for measuring national progress.

This paper is a contribution to that question, as well as to the ongoing commitment of Chartered Accountants Australia and New Zealand to thought-provoking commentary and analysis. Chartered Accountants Australia and New Zealand represents accounting and business professionals and strives to uphold financial integrity through a commitment to acting in the public interest. Accounting professionals themselves are increasingly being asked to go beyond the direct financial metrics of businesses, and consider wider sustainability impacts and interactions.

![Figure 2: The Elements of Societal Wellbeing, in Relation to the Scope of What GDP is Able to Measure\(^1\)](image)
In our thought leadership series, *future*[inc], we set out priorities for policy makers to allow nations to cope with future global challenges and developments. *future*[inc] outlines a plan for growth by gathering different perspectives on public policy, and stimulating a dialogue on how to meet the challenges ahead. *future*[inc] involves the application of business tools to the governance of a nation, reasoning that government should adopt the same long-term focus and level of rigour in measurement towards success as business. To support a robust public policy debate in Australia and New Zealand, we analysed the strengths, weakness, opportunities and threats (SWOT) which collectively shape both the countries in order to develop a plan for prosperity. Inherent in this SWOT analysis is a view of what success looks like, as this strongly influences public policy goals: success, in this case improving societal welfare, must be measurable if it is to be managed.

This paper supports the debate around how Australia and New Zealand can best support development goals by focussing on macro-reporting metrics that present a more holistic and accurate measure of national progress. The limits to the GDP focus are considered, potential alternatives for parallel reporting frameworks are examined, and key roles in the adoption of additional national progress assessment are set out.

**AUSTRALIAN AND NEW ZEALAND INITIATIVES**

In both Australia and New Zealand, different initiatives have been pursued to improve national non-financial measurement.

**MEASURES OF AUSTRALIA’S PROGRESS, AUSTRALIA**

In Australia, recognition of the importance of a more holistic view of national progress led to the development and revision of Measures of Australia’s Progress (MAP) by the Australian Bureau of Statistics (ABS). In 2013, ABS published *Is Life Getting Better in Australia, Measures of Australia’s Progress* to explore precisely this question. The multiple indicators of MAP were published in addition to GDP data, allowing a deeper understanding of the successes, and areas for improvement.

The recent announcement of a planned ABS expenditure reduction will see the discontinuation of MAP. While MAP was just one of a wide range of alternative measures that go beyond standard GDP assessment, its loss raises an important question: how can the evolution of long term national progress measurement be best supported in an environment focused on short term economic targets?

**TUPURANGA AOTEAROA PROGRESS INDICATORS, NEW ZEALAND**

The New Zealand national progress indicators Tupuranga Aotearoa were developed as a dashboard for understanding how well the population is living, how resources are being distributed and what is being left for future generations. The 16 indicators are intended to raise awareness and inform debate around issues surrounding change in national progress. They build upon a range of previous social indicator initiatives such as Big Cities Quality of Life, The Social Report and the Family Whanau & Wellbeing Project, all of which have helped to develop the national analytical capability of new indicators. The indicators are grouped between three dimensions of social, environmental and economic and the overlap between them.
Indicators can be used to support decision-making throughout the policy cycle, but their relevance to decision-making is strongly influenced by how representative they are of the objective being measured.

From a GDP perspective, Australia has out-performed all other OECD economies over the past two decades. During the global financial crisis of 2008-09, Australia was the only OECD economy not to fall into a (technical) recession. New Zealand GDP growth has been more volatile over the same period, experiencing two quarters of negative GDP growth in 1998/99, and six quarters of negative economic growth during 2008/10: between these low points, GDP growth peaked at 5-6% per annum.

Do these figures present the full picture of national progress in Australia and New Zealand, or in other countries? To answer this, we must first step back and ask what it is that we really value. Only then is it possible to determine which indicators are best suited to assessing progress towards these collective aspirations.

‘Measuring progress – providing information about whether life is getting better – is perhaps the most important task a national statistical agency undertakes.’ Brian Pink, The Australian Statistician, November 2012
What do we value?

A fundamental question around measuring national progress is: What do we value? The answer to this question should be the driver of our choice of metrics for measuring national progress. In 2012, the Australian Bureau of Statistics (ABS) undertook a review of the Measures of Australia’s Progress (MAP). This review, which included consultation with governments, businesses, community and academic sectors across Australia, focussed on the key question: What is important to you for national progress? The findings were summarised into 26 values, and grouped into four overarching domains (Figure 3): while the economy was one of the four domains, GDP growth did not feature as one of the values identified. This would suggest that, for Australia at least, the maximisation of GDP is not in itself something that individuals’ value.

For some of the values identified, GDP may be a robust proxy measure. For example, the aspiration of a Sustainable Economy (an economy that sustains or enhances living standards into the future) could correlate well with rising GDP. However, for other values GDP appears to be a poor proxy: A Fair Go (a fair society that enables everyone to meet
their needs), Fair Outcome (an economy that supports fair outcomes), Sustaining the environment (manage the environment sustainably for future generations), and Participation (opportunity to have a say in decisions that affect their lives), are examples where it is not clear that GDP is a good measure of societal values.

Indeed, some measures that correlate well with GDP appear to be the opposite of the values identified by the ABS. The Fair Outcomes value identified by MAP is of particular interest, as it suggests that individuals value equity within the economy. However, experience from a range of countries suggests that increasing national wealth (GDP per capita) is associated with increasing rates of economic inequality (Gini co-efficient*). This shows the limitation of using a narrowly defined metric as a proxy for widely differing values.

A fundamental question around measuring national progress is: WHAT DO WE VALUE? The answer to this question should be the driver of our choice of metrics for measuring national progress.

CHARACTERISTICS OF A SUCCESSFUL INDICATOR

So how should a successful indicator be judged? UNICEF, building on work by The World Health Organisation (WHO) and Itad, propose a set of ‘SMART’ criteria that summarise the necessary characteristics of effective indicators:

- **Specific**: indicators must validly reflect progress towards your identified goal, regardless of contextual bias, to reduce the ability for users to misinterpret the findings.
- **Measurable**: indicators must be sufficiently defined and reliable that they are able to be compared over time and across geographical locations. This unambiguity must also allow them to be verifiable, so that regardless of whom collects the data the results could be repeated.
- **Achievable**: in order to remain in use, indicators require an adequate institutional capacity for collecting and measuring data, and must remain affordable and worthwhile to calculate.
- **Relevant**: indicators must exist to satisfy a need to measure progress towards a desired goal and help decision making towards the goal’s progress.
- **Time-bound**: Indicators must be sensitive to changes in the system they measure, and be able to be calculated at relevant frequency intervals so that decisions making can occur in a timely manner.

GDP meets three of these criteria: it is Measurable, Achievable, and Time-bound. However, it is not Specific (it does not measure national progress or welfare directly), while its Relevance to the broad set of values identified in MAP varies significantly. As these limitations have been identified, alternative measures of welfare and national progress have been developed, and implemented in some jurisdictions.

* Gini co-efficient: a measure of the distribution of income amongst citizens in a country. In general, the higher the Gini co-efficient, the greater the income inequality in the population.
WHAT ARE OTHERS DOING?

While GDP is the default international measure and comparator for national progress, there are examples where additional measures have been pursued by countries keen to better understand national progress from a more holistic perspective. Below are four examples of how governments have attempted to use indicators such as Gross Progress Indicator (GPI), Social Progress Indicator (SPI) and Green GDP – some of which have proven to be successful, others less so. The European Commission has also developed their suggested roadmap for moving beyond GDP, where lessons can be drawn from.

GENUINE PROGRESS INDICATOR (GPI) USED IN POLICY REFORM IN LOCAL GOVERNMENTS, MARYLAND, UNITED STATES

In the United States, Maryland has been the first state to incorporate the use of GPI into their policy tool kit. The Governor of Maryland, Martin O’Malley, explains the motivation for this shift has been from the recognition that ‘no one indicator paints a full picture of a city, state or country’s progress’. Maryland has used GPI to guide strategic planning and development that is tailored to meet the state’s needs in terms of wellbeing. Maryland’s success at analysing how policy decisions affect social wellbeing has motivated other states, such as Vermont and Oregon, to consider doing the same.

SOCIAL PROGRESS INDICATOR (SPI) USED IN POLICY REFORM, PARAGUAY

Alternative indices have already been integrated into national decision making by some governments. In 2013, the Paraguayan Government became the first country to adopt SPI as a national metric of performance, supported by a grouping of government, private sector and civil society organisations (#Progreso Social Paraguay) that are seeking to advance social progress in Paraguay. Similar to the opportunities highlighted in Case Study 3 for Australia and New Zealand, SPI indicators were used to identify areas of greatest deficits that required policy action. These social diagnostics have been able to guide cross-governmental coordination, and build public-private partnerships, by focusing on clearly articulated common goals.
The common theme from these examples is the desire to look beyond GDP for indicators of national progress. But to understand why these initiatives are looking to indicators other than GDP, it is important to understand what GDP delivers.
THE USE (AND ABUSE) OF GDP

‘The welfare of a nation can scarcely be inferred from a measurement of national income.’ Simon Kuznets, 1934, report to US Congress

Gross Domestic Product (GDP) is widely cited as a measure of national progress, both historically and as a future goal. Yet GDP does not measure national progress directly; rather, it measures the value of goods and services produced by an economy within a given time period*. While the rate of growth of GDP, and GDP per capita, are often used to compare economic performance between different countries, GDP continues to be used as a proxy measure of societal wellbeing. This is not without basis, as there is a relationship between economic growth and some aspects of wider societal development; however, to understand GDP’s relationship with national progress, it is important to first understand what GDP is and does, and its limitations.

* Australian System of National Accounts defines GDP as “the total market value of goods and services produced in Australia after deducting the cost of goods and services used up (intermediate consumption) in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation)”.
**GDP as a Metric**

GDP measures raw economic activity over a given period, by consolidating consumer spending, savings, investments, government spending, income, imports and exports. GDP is a measure of production, and does not consider non-monetary transactions. GDP can be useful for answering questions such as:

- How fast is the economy growing?
- What is the pattern of spending on goods and services?
- What percent increase in production is due to inflation?
- How much of the income produced is being used for consumption as opposed to investment or savings?

In many countries, GDP is used to infer answers to a much larger set of questions than those set out above. However, given the specific boundary for what GDP measures, its relevance to other (non-production value) questions has been challenged in the Commission on the Measurement of Economic Performance and Social Progress, and the European Union’s Beyond GDP Report. While alternative measures exist to analyse how a society is progressing, GDP remains the central measure presented by political leaders and policymakers to demonstrate national progress in Australia and New Zealand, and globally.

**GDP Growth as a Goal**

For many countries, consistent and long-term growth in GDP is a specific goal of national policy setting; examples include Indonesia (target GDP growth rate of around 6% through to 2025), China (7.5% in 2014) and the G20 group of advanced economies (greater than 2% per year over the next five years). These growth targets and expectations reflect the aspiration of the countries to expand their economies, and the wealth generated has the capacity to support a wide range of services for their citizens, from improved health care to transport and communications infrastructure.

Yet while the pursuit of growth has been the driver of economic policy and discussion in many economies, there are emerging examples of issues outside of the traditional goods and services view of the economy that are rapidly rising up the social and political agenda. Growing concerns over increasing income inequality, intergenerational equality, or the environmental consequences of growth (see Case Study 1) in wealthy and rapidly developing countries demonstrates the importance of non-economic factors in measuring national progress.

**Case Study 1: China, GDP and Environmental Boundaries**

Growth in China’s GDP has averaged 9.6% per annum since 2000; however, the undesired environmental and social consequences of rapid economic growth, such as the public health risks associated with their urban pollution crises, are beginning to exert an influence on policy. Describing pollution in China as ‘nature’s red-light warning against the model of inefficient and blind development,’ Premier Li Keqiang has highlighted pollution as a key policy issue to be addressed, while maintaining strong economic growth. This linking of growth and pollution demonstrates the very real impact that externalities such as pollution can have on growth and on the non-GDP values of citizens.
LIMITATIONS OF GDP

While GDP itself is not a flawed indicator, it has been misused and misunderstood. Today, growth in GDP is often presented and understood as synonymous with national progress or growth in societal welfare, yet it was not intended as a measure of these. This misapplication of GDP may reflect a lack of knowledge regarding the purpose of measuring GDP, and its use as a national progress indicator. GDP measures the economic value of a subset of activities in an economy, and is not the measure of national progress and welfare that it is often presented to be.

SACRIFICING INCLUSIVENESS FOR MEASURABILITY

Simon Kuznets, the chief architect of the United States National Accounting System who assisted in developing GDP, emphasised that GDP was a specialised tool to be used for analysing a narrow segment of society’s economic activity, not the state of society as a whole. Part of this is the sacrifice of inclusivity for measurability, where goods and services that contribute to the complete picture of an economy, but are not characterised by a monetary exchange, are ignored by GDP. These include:

- Unpaid childcare and family care
- Time spent by volunteers and acts of charity
- ‘Odd jobs’
- Illegal earnings.

Just as GDP excludes non-monetary goods and services, it also ignores other aspects of society that are valued by populations but do not have a monetary figure attached.

VALUING PRODUCTIVE AND DESTRUCTIVE ACTIVITIES

As GDP sums the value of goods and services irrespective of their role or purpose, it does not distinguish between productive and destructive activities. For example, the construction sector will contribute more to national GDP due to infrastructure rebuilding following a significant natural disaster such as the Canterbury earthquakes than at other times (see Case Study 2).

CASE STUDY 2: The effect of the Canterbury earthquakes on New Zealand’s long term GDP growth

The 2010 and 2011 Canterbury Earthquakes caused widespread damage to Christchurch and the surrounding region, with many businesses suffering major damage and losses, and long term disruption to normal operations. The New Zealand Treasury estimated that the equivalent of almost 20% of New Zealand’s GDP would be required for the rebuild. While the immediate economic impact of this disruption to business had a negative effect on New Zealand’s national GDP, economists predicted the disaster would have a net positive effect on long term GDP levels.

The clean-up after the earthquake has boosted demand in certain sectors such as utilities, construction, safety, and social assistance. Private and public capital that may have been directed to activities such health care capacity and education is instead required to support rebuilding activities. As GDP does not distinguish between productive and destructive flows of goods and services in the economy, this spending to rebuild Christchurch will appear as growth in the economy.

This example demonstrates the limitations of an economic assessment tool that is insensitive to the activity it is measuring. While growth in GDP is widely viewed as a societal good, few would agree large-scale infrastructure damage to support GDP growth is desirable.
As an aggregate measure of value, GDP IS NOT SENSITIVE to the distribution of wealth within a country.

WEALTH DISTRIBUTION
As an aggregate measure of value, GDP is not sensitive to the distribution of wealth within a country. With income inequality having been linked to greater social unrest, increased crime and lower worker productivity, all of which diminish the health of a nation, specific measures such as the Gini coefficient have been developed which provide a metric of wealth inequality within a country.

THE ‘THRESHOLD EFFECT’
The correlation between increasing GDP per capita and other measures of national progress tends to be strongest at lower GDP levels, with the rate of change in welfare (as measured by indicators such as the Social Progress Index) tending to decrease at higher GDP per capita levels. This is potentially due to the costs associated with income inequality, losses of community cohesion, sense of purpose, connection with nature, interpersonal relationships, knowledge and various others.

At the time GDP was first introduced, most countries were positioned below this threshold: as a result, growth in GDP was well-correlated with improved welfare. Over time, GDP has become embedded in our national perception of growth. However, as national wealth has increased the relationship between GDP and improved welfare has become weaker: although the continued focus on GDP growth suggests that policymakers believe this relationship remains strong.

THE RESILIENCE OF GDP AS A METRIC
Despite these limitations, GDP remains the primary measure of national progress for almost all countries. Yet its limitations have also prompted research into alternatives to this narrow economic measure of country performance. The following section examines some of these options for measuring the success of nations.
In an evolving, information-based society, access to data and understanding its implications is central to making informed decisions. Multidimensional indicators for measuring societal progress are increasingly being demanded from investors, NGOs and communities. At the same time, indices that reflect a broader set of values than economic activity can be used to support and guide policy development and evaluation.

A wide range of alternative indices exist, each with their strengths and weaknesses. Costanza, Hart, Posner and Talbert (2009) set out a classification framework for measures of national progress, simplifying the grouping and evaluation of different families of indices: this framework has been adopted and adapted here.

**ALTERNATIVE INDICES**

**CORRECTIONS TO EXISTING GDP ACCOUNTS**

These indicators attempt to augment and modify GDP, by integrating it with other economic data that reflect societal wellbeing. In doing so, the indicators should capture more of the economy’s externalities. These indices can leverage the existing information infrastructure on which GDP rests; however, they can experience similar difficulties as GDP in attaching a monetary value on changes to social and natural capital. Examples of these indicators include the *Index of Sustainable Economic Welfare/Genuine Progress Indicator*, Green GDP and Genuine Savings.
INDICES THAT MEASURE ASPECTS OF WELLBEING DIRECTLY
Unlike GDP, these measures do not attempt to measure economic activity, but instead focus on changes in environmental, social or human capital directly. Advocates of these indices argue that GDP should not be included, as it was never intended to act as a measure of welfare. In this way they avoid the risks of applying market values to sustainability issues, although monetary indicators tend to be better understood than physical indicators by businesses, the media, and communities. Examples of these indicators include the Social Progress Index (SPI), Ecological Footprint (EF) and Biocapacity (BC), Subjective Wellbeing and Gross National Happiness.

Case Study 3 sets out the recent findings of the SPI for Australia and New Zealand. Analysis of the underlying data behind the SPI, all of which is publicly available, allows ‘what-if’ scenarios to be evaluated. Using this data, Case Study 3 identifies the impact of targeted improvement in specific values for Australia (versus New Zealand and best-in-class results): these results demonstrate a way in which the SPI (and other) results can be used to identify specific policy areas that support broader welfare gains.

COMPOSITE INDICES WHICH INCLUDE GDP
The developers of these indices were mindful that increases to GDP can impact wellbeing, and therefore include GDP as one of the composites. Their strengths and weakness are similar to the composite indices which do not include GDP, but are also able to provide a frame of reference for both social and economic development. These indicators are able to create a comparison point between social and economic development; however, there is subjectivity surrounding which indicators should form part of the aggregate. Examples of these composite indices include the Human Development Index (HDI), Living Planet Report and Happy Planet Index.

Case Study 4 sets out the HDI results for a selection of countries, including Australia and New Zealand. For the countries shown, the compound annual growth rate of HDI in Australia is less than New Zealand, and less than half that of Norway. More generally, HDI appears to correlate with GDP per capita growth rates, with developed and developing countries clustering around lower and higher growth rates respectively.

INDICATOR SUITES
Indicator suites include several measurement tools, sacrificing the simplicity of a single index, for a more holistic view of national progress. Indicator suites or ‘dashboards’ have been a widespread approach for attempting to track and compare sustainable development. They require the collection of different indicators with direct or indirect bearing on national progress. Sustainable Development dashboards gained public’s attention through their use by international organisations, e.g. United Nations, OECD and Eurostat. However, the heterogeneity of indicators can make it difficult to establish a hierarchy between indicators, lack comparability between countries, and may require an understanding of the context they exist in (e.g. high fertility rates may be beneficial to progress in some countries, and detrimental in others). Examples of these indicator suites include the Millennium Development Goals and the (now discontinued) Measure of Australia’s Progress.

‘Multidimensional indicators for measuring societal progress are increasingly being demanded from investors, NGOs and communities.’
CASE STUDY 3: Using alternate indices to direct optimum policy action: SPI

The Social Progress Index (SPI) measures social progress directly, by ensuring the indicators selected are: social and environmental related; outcomes (rather than inputs); actionable; and relevant to all countries. SPI is based on 54 individual indicators which can provide a cumulative single figure indicator for social progress, or an aggregation under 3 main components: Basic Human Needs, Foundations of Wellbeing, and Opportunity. The SPI’s ability to produce either a single figure ranking facilitates comparison, while the breakdown of performance within categories can be used to both understand current performance in more detail, and support targeted policy development to improve performance.

The chart (below) shows an example of the performance of Australia and New Zealand against the leading SPI indicators. Australia and New Zealand combined is the single highest performing region against SPI, with New Zealand ranked as 1st globally, while Australia is ranked 10th. To improve its performance under SPI, Australia could chose to focus on the categories of ‘Access to Information and Communications’, ‘Ecosystem Sustainability’ and ‘Tolerance and Inclusion’, as these hold the greatest opportunity for improvement: it is these categories where Australia performs least well relative to New Zealand. Consider the category of ‘Ecosystem Sustainability’: New Zealand out-scores Australia more in this category than any other, while both Australia and New Zealand score poorly compared to worlds best practice. This finding suggests that there is the potential for both countries to draw upon international examples when developing initiatives and policies for improving performance in this category.

More broadly, the insights provided by the SPI could be used to develop well-targeted policies that drive improved welfare outcomes. For example, were Australian policies related to ‘Access to Information and Communications’, ‘Ecosystem Sustainability’ and ‘Tolerance and Inclusion’ successful in equalling New Zealand’s performance, Australia’s overall ranking would rise from 10th to 3rd in the SPI, behind only New Zealand and Switzerland.

FIGURE 4: 2013 RANKING OF AUSTRALIA AND NEW ZEALAND AGAINST SPI INDICATORS, COMPARED TO THE PERFORMANCE RANGE OF OTHER OECD COUNTRIES UNDER THE SPI FRAMEWORK.

- Indicates of Basic human needs
- Indicators of Foundations of wellbeing
- Indicators of Opportunity

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<td>Shelter</td>
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<td>Access to information and communications</td>
<td>Health and wellness</td>
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<td>Personal rights</td>
<td>Personal freedom and choice</td>
<td>Tolerance and inclusion</td>
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**CASE STUDY 4: Global growth in GDP vs HDI**

The Human Development Index (HDI) is a measure of the impact economic growth and human development has had on human wellbeing, administered by the United Nations Development Programme (UNDP).\(^1\) It is a composite index of life expectancy, educational attainment and income; all of which are readily accessible and have historic data available through the Systems of National Accounts (SNA), or the UNESCO Institute for Statistics database. UNDP publishes an annual Human Development Report giving a snapshot of how different nations are performing, making it a useful source for government to refer to.

The chart illustrates how the threshold effect has affected growth in both the economy and ‘wellbeing’ (as defined by the HDI). Developed countries, such as Australia and New Zealand, rest within an area of low GDP/capita and HDI growth as relative gains are more difficult to achieve. While growth in GDP in Australia has been comparable to that experienced in Sweden or Norway, the relative gains in HDI have not been. Countries such as China and India have yet to reach their ‘threshold limit’, and thereby have experienced an accelerated growth in both indices.

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**FIGURE 5:** COMPOUND ANNUAL GROWTH RATE OF HDI AGAINST GDP/CAPITA BETWEEN 1980 AND 2010, AND TOTAL 2010 GDP (US$ BILLION)\(^2,18,19\)

*GDP represented is for the UK, which includes England.*
EXAMPLES OF ALTERNATIVES TO GDP APPLIED TO AUSTRALIA AND NEW ZEALAND

The routine collection and calculation of both GDP and alternative index data across a wide range of countries allows longer-term trends between indices to be identified, and the longer-term difference in the assessment of national progress to be identified.

AUSTRALIA

The approximate doubling of real GDP per capita in Australia between 1970 and 2005 was not matched by an equivalent increase in other established welfare measures (Figure 6). Indeed, while GDP per capita in Australia grew at a compound annual growth rate of 2% from 1970 to 2008, all other indicators (with the exception of HDI) fell.

Until the mid-1970s, GPI per capita and Ecological Footprint per capita principally mirrored increases in GDP per capita; however, growing income inequality in the 1970s, coupled with growing environmental and social degradation, caused GPI per capita and Ecological Footprint per capita to fall sharply after this point.20 The simultaneous fall of Ecological Footprint per capita and Biocapacity per capita may suggest that while natural resource consumption rates continue to accelerate, the environmental degradation associated per unit of extraction and usage is lessening. The cumulative effect of this is a trade-off of natural resources and capital, which are excluded from the measurable scope of GDP, for increased economic growth. HDI and Life Satisfaction have remained largely constant, despite the rises in GDP per capita.

**FIGURE 6: COMPARISON BETWEEN GDP/CAPITA AND SEVERAL ALTERNATE INDICES**

All indicators are trended averages indexed to 1970 = 100.
NEW ZEALAND

Over the same period, real GDP per capita in New Zealand increased around 75%, corresponding to a compound annual growth rate of 1.4%. In contrast to Australia, many alternative indices increased over time, with the exception of biocapacity which fell significantly (Figure 7).

New Zealand has experienced significant fluctuations in GPI per capita and Ecological Footprint per capita, while GDP per capita has increased more steadily. Kubiszewski et al. linked the role of the strong central government between 1970 and 1984, followed by a shift to policy based on deregulation and globalisation, as the primary cause of the decoupling between GPI per capita and GDP per capita around this time. A renewed business confidence post-reform continued to put stress on the environment, reflected in the increase in Ecological Footprint per capita and decrease in biocapacity per capita. Similar to Australia, HDI and Life Satisfaction have marginally increased over time, although New Zealand performed better in both indices compared to Australia.

FIGURE 7: COMPARISON BETWEEN GDP/CAPITA AND SEVERAL ALTERNATE INDICES

![Graph showing comparisons between GDP/capita, Ecological footprint/capita, GPI/capita, Biocapacity/capita, Life satisfaction, and HDI for New Zealand from 1965 to 2015.](Adapted from: Kubiszewski, Costanza, Franco, Law, Talberth, & Jackson, 2013)

All indicators are trended averages indexed to 1970 = 100.
1. National progress is distinct from economic growth: society recognises a wide range of values, yet economic growth measures a very narrow aspect of society. While GDP may act as a proxy for some of these values, the selection of indicators that measure society’s values will be different to those that measure economic growth.

2. Different national progress measures will relate differently to economic growth: for Australia and New Zealand, there is considerable divergence between growth and progress measures over time. This may be linked to ‘the threshold effect’, as human wellbeing and GDP appear to correlate more strongly in countries with low GDP per capita, but also reflects the different societal values that are represented by the different measures.

3. No single measure is able to define all aspects of societal progress: when approaching decision making, it is necessary to consider what it is that policy development is seeking to achieve, and which indicator will best provide a true measure of change in that value.

4. Indices that allow performance to be benchmarked internationally can be a powerful tool for catalysing action: countries have differing strengths and weakness, and these differences will be reflected in the indices used to measure and benchmark growth. The ability to observe these strengths and weaknesses, and to identify opportunities to improve performance, is strongly supported by indices that facilitate comparison.

Given these findings, what is the opportunity for change? The following section sets out a potential roadmap for incorporating a broader measure of national progress into decision-making, and the roles that different stakeholders can play in making this happen.
ROADMAP FOR THE FUTURE

The implementation of an additional metric for measuring national progress will have implications across a wide range of stakeholders. It will also require leadership, with different stakeholders being responsible for key implementation steps.
DELINEATING CHANGE

The inconsistency between what society values and what is measured by our current growth focus provides an opportunity for a more informative, and relevant, approach to measuring national progress. Providing policymakers with a metric that is more aligned to peoples’ values will inform decision-making and evaluation in a far more targeted manner; at the same time, engagement with stakeholders will be improved, as national progress would be discussed in the context of what was identified as most valuable to them.

‘Providing policymakers with a metric that is more aligned to peoples’ values will INFORM DECISION-MAKING AND VALUATION in a far more targeted manner.’

But this is not to say that our current, GDP-based approach needs to be abandoned. Indeed, there are a number of SMART criteria that GDP delivers very well: the consistency of measurement of GDP, and its almost universal comparability between nations, are attributes that should not be lightly dismissed. But deeper insight into how our values are supported by GDP, and how policy can be developed and evaluated in a manner that fits our values while meeting traditional growth targets, would both support the policy process, and support the achievement of outcomes that are directly valued by society.

This benefit can be delivered by maintaining the current GDP measurement and reporting process, and alongside it implementing an alternative metric that provides insight into how well our ‘growth’ objective is delivering those aspects that society values. Such a parallel reporting process, which has obvious similarities to the way in which sustainability metrics and goals are reported by business alongside traditional financial statements, would provide both a broader backdrop to the measurement of national progress, and a reporting framework that resonates with a wide range of stakeholders.
The SPI is one alternative metric that fits this purpose. With a focus on social values, it covers a broader range of values identified through the MAP initiative in Australia than GDP (see Figure 8). As such, it provides a complimentary measure of national progress compared to GDP, across a wider range of values. And by delving into the components of SPI, rather than relying solely on the headline result, policymakers can better understand the opportunity for improvement across a range of values, and evaluate policy outcomes (rather than policy approach) in comparison to peers.

Implementing a parallel reporting approach using a metric such as SPI will require support from a range of stakeholders, and this is considered next in our stakeholder roles and roadmap.

**Figure 8: Areas of common values between MAPS (coloured boxes) and SPI (overlay box).**
STAKEHOLDER ROLES AND NEEDS
GOVERNMENTS AND NGOs
Government has a central role to play in the development, support and adoption of alternative indices for measuring the future. From the systems that underpin data collection to international agreement over data sharing and comparable metrics, government is uniquely positioned to incentivise alternative approaches to measuring welfare. At the same time, NGOs can influence strongly the direction and timeliness with which government acts, ensuring that the measures pursued by government best reflect what society values.

STATISTICAL AGENCIES AND INTERNATIONAL BODIES
Statistical Agencies and International Bodies have a central role in the operation of alternative measures of national progress, from data collection to establishing common standards and definitions. Creating a supportive framework within which alternative measures can be developed and deployed is fundamental to their mainstream adoption.

BUSINESS AND INVESTORS
Business and investors rely on accurate, relevant data as a key input to decision-making. An increasing emphasis by the business and investor community on indices that provide a more holistic measure of the future will incentivise provision of that data.

MEDIA AND COMMUNITIES
Media and communities will be influential in the adoption and embedding of alternative measures in broader public policy debate. By including alternative measures of the future within its broader coverage of public policy issues, the media can provide a platform for a robust debate over what public policy is seeking to achieve. By adopting this discussion of broader metrics of national progress, communities can show the relevance of this data to contemporary political issues.

AUSTRALIAN SOCIETY FOR PROGRESS & WELLBEING
In Australia, a public policy think tank, Global Access Partners (GAP) formed a taskforce to consider measures of social progress. The taskforce, which included senior government, industry and academic representatives, met to consider fresh and inclusive definitions of economic and social progress and their integration into national policy. The group found significant support among policy makers for such measures and agreed that existing efforts could increase their impact through better communication and coordination. In a final report delivered in May 2011, the GAP Taskforce on Progress in Society recommended the establishment of a permanent, membership-based organisation – the Australian Society for Progress & Wellbeing – to drive consolidation of existing measurement frameworks and encourage their adoption by decision makers. Chartered Accountants Australia and New Zealand is a founding partner of the Society, and this is just one example of how a range of stakeholders have collaborated together to bring measures of progress and wellbeing to the forefront of decision makers’ attention.
### Roadmap

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<tr>
<th>Category</th>
<th>Action</th>
<th>Explanation</th>
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<tbody>
<tr>
<td><strong>Leadership</strong></td>
<td>Use leadership position to drive discussion</td>
<td>Public interest in and understanding of alternative welfare metrics is influenced by the use and presentation of these metrics</td>
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<td></td>
<td>Consensus over goals</td>
<td>Global consensus over the role of economic systems as a means to improving wellbeing, supported by consistent methods for measuring wellbeing</td>
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<td>Setting the growth discussion</td>
<td>Re-framing the discussion around national progress allows a wider set of issues to be discussed as part of a future vision</td>
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<td><strong>Indicator</strong></td>
<td>Ensure indicator reliability</td>
<td>Ensure that indicators reflect the issue that is being measured and are reliable</td>
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<td></td>
<td>Adopt appropriate indicators</td>
<td>Progress indicators must reflect the collective values and aspirations of a nation, which may change with time</td>
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<tr>
<td></td>
<td>Focus on national progress over growth</td>
<td>By focussing discussion on national progress, a broader set of issues facing society and individuals is recognised and managed</td>
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<td></td>
<td>Leverage wider datasets</td>
<td>Integrated indicators can give a more inclusive view of the direction that the nation is progressing in</td>
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<td><strong>Data</strong></td>
<td>Invest in social and environmental data collection infrastructure</td>
<td>While national account systems are generally well developed, social and environmental indicators may not be at the same stage of development</td>
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<td></td>
<td>Standardise methods and definitions</td>
<td>Standard data collection methods and definitions will lower costs, and support transparency and reliability for alternative metrics</td>
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<td>Enable international comparison</td>
<td>Indicators that provide benchmarks of performance towards national progress allow for inter-country comparisons. This can help to catalyse action and identify areas of strength and weakness</td>
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<td></td>
<td>Facilitate data sharing</td>
<td>International data sharing will be vital in accelerating this process. Australia and New Zealand have existing robust information infrastructure that can be leveraged and adapted to alternative measures</td>
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**Stakeholder’s Role:**

- **Primary**
- **Secondary**
- **Other**
Is policy making measuring up? Rethinking how we measure the success of a nation.

GDP remains the dominant metric by which nations judge their own performance, and the performance of others. At the same time, a range of alternative approaches have been developed, which emphasise different aspects of progress, and appear to more strongly reflect the values by which we measure national progress.

These alternative measures should not been seen as a threat to the established approach. It is evident that the measurement of GDP is firmly entrenched in national and international economic analysis, and it continues to have relevance today. Companies are recognising that financial reporting is not the limit of stakeholder concern, and are increasingly reporting on additional non-financial metrics of their activities. Measuring and reporting of national progress should evolve in a similar manner, as nations should consider not just how much they grow, but how they grow.

A core government responsibility is to ensure the welfare of its citizens, and this is best supported through the use of measurement tools that reflect the values of the citizens. GDP has proven to be a powerful tool for measuring and comparing economic activity in the past, and its simplicity, linearity and universality have made it an attractive measure. Adopting an additional reporting metric such as the SPI, to be used alongside existing growth assessment, would add to our understanding of national progress, and support the measurement and management of those things that we value. Without such indicators, communities are less able to hold governments accountable for delivering the future that citizen’s value.

To achieve this vision, many stakeholders will need to play a part. Arguably government has the key role, and citizens the most to gain, but successful adoption will require action from business, investors, media, international organisations and statistical agencies. This will provide us with the ability to manage what we value and will be a significant step towards ensuring that national progress reflects our values.

From its inception almost 70 years ago, GDP was recognised as an incomplete measure of national progress.
Nations should consider not just how much they grow, but HOW THEY GROW
REFERENCES


