



More than GDP: Measuring What Matters

Report of the Round Table on Measuring Economic
Performance and Social Progress in Scotland

ACKNOWLEDGEMENTS:

The work of the Round Table was funded by the Carnegie UK Trust and delivered in partnership with the Sustainable Development Commission.

This report was written by Maf Smith and Sylviane Herren, with support from Shelagh Young, Anne Marte Bergseng, Jan Bebbington, Martyn Evans, Sasha Trifkovic, Caroline St Johnston and Maria Bell.

The Round Table is grateful for the contributions of the following people who attended Round Table discussions and shared their experiences: Paul Allin (Office of National Statistics); Stephen Hall (Defra); Trudi Sharp and Rob Wishart (Scottish Government); Stephen Noon (Scottish National Party), and Jane Saren (Scottish Labour Party).

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May 2011

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Round Table Members

Professor Jan Bebbington (Round Table Chair)	Professor of Accounting and Sustainable Development, University of St Andrews
Angus Hogg (Round Table Vice Chair)	Vice Chair, Carnegie UK Trust
Sir John Elvidge KCB	Permanent Secretary of the Scottish Government from 2003 to 2010
Tricia Henton	Director of Environment and Business at the Environment Agency 2006 to 2010 & previous CEO of SEPA
Kaliani Lyle	Scotland Commissioner, Equalities and Human Rights Commission & Board member of the Office of the Scottish Charity Regulator (OSCR)
Professor Duncan MacLennan CBE	School of Geography & Geosciences, University of St Andrews
Iain Macwhirter	Columnist and Broadcaster & Rector of the University of Edinburgh
Ian McKay	Director of Scottish Affairs, Royal Mail Group
Stewart Murdoch	Director of Leisure & Communities, Dundee City Council & Board member of International Association of Community Development
Martin Sime	Chief Executive, Scottish Council for Voluntary Organisations (SCVO)
Douglas Sinclair CBE	Chair of Consumer Focus Scotland & Deputy Chair of the Accounts Commission for Scotland
Dr Karen Turner	Reader in Economics, University of Stirling Management School, Research Associate at the Fraser of Allander Institute & ESRC Climate Change Leadership Fellow
Martyn Evans (Co-secretary of the Round Table)	Chief Executive, Carnegie UK Trust
Maf Smith (Co-secretary of the Round Table)	Scotland Director, Sustainable Development Commission

Foreword and Executive Summary



Foreword from the Chair and Vice Chair

Most people understand that Gross Domestic Product (GDP) is a unit of economic activity, but far fewer can accurately describe what it measures. Put simply, GDP measures the 'busy-ness' of our economy. But is a growing economy busy doing the right things? Making our economy do more will not necessarily lead to the things we want. Over time GDP has taken centre stage in the minds of the public and policy makers as the critical measure of progress. Yet included in GDP are 'defensive expenditures' which attempt to put right problems we would be better avoiding in the first place. Tackling crime, treating ill health, responding to emergencies, and cleaning up pollution or putting right environmental damage all contribute more to GDP than avoiding crime, ill-health or environmental damage. Our over-reliance on GDP makes it difficult for politicians to back policies that are good for society or the environment, but which might hamper an increase in GDP.

A growing list of organisations and individuals now say that our over-reliance on GDP means we undervalue quality of life and the health of our environment. GDP is not even adequate as a measure of our economic performance. Our Round Table has reviewed a wide evidence-base to make recommendations on how Scotland should develop better measurements of what matters.

Building on the ground-breaking work in Scotland of setting a national performance framework over 2007-2011, there are some important lessons for the governments of the UK. Governments should organise their work around growing the well-being for their people. They should also use a performance framework to help properly measure and report on aspects of economic performance, quality of life and sustainability, as aspects of well-being. Such frameworks must be used to hold Governments to account.

A key theme throughout this report is our recognition of the progress made over the last four years by the Scottish Government in developing the National Performance Framework (NPF). As one of our members put it: "The most important fact about the NPF is that it exists". The innovative work and thinking in developing it should not be overlooked, and those involved in its inception deserve praise.

However, we are very concerned that through the ebb and flow of politics – and with regular elections – there is a significant risk of all this experience being lost and the framework itself being abandoned either now or in the future. **Our Round Table is clear that all governments need a framework now and over the long term**, and must seek to learn from and take forward the work of the Scottish administration over 2007-2011. **Economies need a performance framework that clarifies longer term goals, organises effort and is underpinned by a core set of indicators that helps us measure progress toward this long-term goal.**

Governments can use such a framework to set out their programme for government and, in turn, others can use it to better hold Government to account. **Governments across the UK need to engage with and be guided by our recommendations and the work of the Stiglitz Report.**

These governments also need to work alongside civil society to host **a much wider debate about the aspirations of Scotland**. Our Round Table wants to see the UK's governments shift attention from a sole focus on expanding GDP to delivering well-being for all. To do that, we need to develop **a wider and deeper understanding that our goal is well-being.**

The work of our Round Table has not been technical. We have not tried to set out a full set of well-being indicators that can simply be adopted. Instead we are aiming to do two things. Firstly, we are offering practical advice on how to adopt the findings of the Stiglitz Report. Secondly, we want to start a wider debate in civil society and government about the importance of well-being. We want Scotland and the other governments across the UK to lift their sights, and focus on a fuller, more rewarding end goal of increased well-being for all.

Professor Jan Bebbington & Angus Hogg

Executive Summary

“Because what we choose to measure and how we construct our measures can have such an important role in the decisions that are made, it is important that there be an open and public discussion of our system of metrics.”

Joseph Stiglitz¹

This report explores the complex issues hidden behind two simple questions: what is Progress and what is Prosperity? It argues that GDP is an insufficient and misleading measure of whether life in Scotland is improving or not. It takes the findings of the 2009 Stiglitz Report,² which emerged from the Commission set up by President Sarkozy to advise on how better to measure economic performance and social progress. It recommends that the new Scottish Government applies these to creating a performance framework better able to deliver, measure and report on economic performance, quality of life, sustainability and well-being. The report also shows that over-reliance on GDP as a measure makes it difficult for politicians to back policies that are good for society or the environment if they might hamper an increase in GDP.

The Scottish Round Table which created this report was established by the Carnegie UK Trust³ to look in more detail at how to better measure economic performance and social progress in Scotland. We were concerned to ensure that the strong social structures and healthy environment, necessary to create a flourishing Scotland, were not overlooked as a result of working to measures mainly focused on economic activity. In short, we are advising that the Scottish Government should measure what matters.

In the short-term, Scotland’s new Government needs to learn from the experience of measuring a wider set of indicators through the National Performance Framework (NPF) and **engage with and be guided by the recommendations of the Stiglitz Report to create a new framework with new indicators.**

In the medium term – which we see as being across the next parliamentary term – the Scottish Government should work alongside wider civil society to host **a much wider debate about the aspirations of Scotland, the relevance of well-being as a goal** and how we can develop better measures of well-being that resonate with the wider population.

Our two main recommendations for the short and medium term lead us to four key factors in applying the Stiglitz Report to Scotland.

1. When the Scottish Government chooses what it measures, it is by default defining what matters, and what it focuses attention and resources on;

Our Round Table is clear that too much emphasis is currently placed on the importance of GDP as a measure of progress. It is an important indicator but not one that should predominate. It should simply be one of a small select number of indicators used to track economic performance and social progress.

Through its NPF the previous administration made an attempt to move in this direction. That Framework can be a building block in helping Scotland go beyond GDP; by creating Scotland’s ‘GDP Plus’ dashboard of headline indicators.

2. Whatever the Scottish Government measures, the critical issue is connecting this measurement to the actions that help move Scotland towards its end goal;

While the new Government needs to consider how to improve on any framework or dashboard, more critical is working to ensure that it is better used in policy making and in clearly aligning work across each part of government.

Over the last four years, Scotland’s Government used the NPF to improve how performance was measured. We saw this as a significant development in how government is organised. Certainly others outside of Scotland have much to learn from this recent experience. However, we do not see that in practice our Government used the Framework to its full potential, or that it led to more informed or joined up-decisions.

The Scottish Government made the NPF the responsibility of national and local government. Next, Government must look more closely into how to build a sense of shared responsibility and partnership in both deciding the contents of a framework, and then in aligning the work of local government and agencies to ensure effective partnerships on the ground.

3. To achieve well-being we need to look at how we measure, deliver and hold Government to account;

Over the last four years, Parliamentary accountability has not been based around the Framework. This has meant that, outside of the civil service and Cabinet, few people have understood how to use the Framework to scrutinise Government performance. Government's chosen method of reporting – *Scotland Performs* – is thorough but technical, and does not encourage a debate about how better to organise government and develop and deliver better coordinated policies. It is also not very well known outside central government. *Scotland Performs* should be maintained – it is critical that statistics are easy to access and use and seen as objective – but our preference would be for Government to report annually against any dashboard or framework it sets itself.

A critical factor is the need for wider civil society to also hold Government to account. What we choose to measure defines what is important, and what Government focuses its effort on. If we want Government to be more ambitious and focus on delivery of well-being, wider open and public discussion will be crucial.

4. Having reviewed in detail the 12 recommendations of the Stiglitz Report, we are of the firm view that they are relevant and timely and the new Government needs to make their implementation a priority;

Below we set out our 12 recommendations, with advice from our Round Table on how to implement the findings of the Stiglitz Report. If the Scottish Government wants to be better at delivering well-being through having a healthy economy, and by tackling inequalities in our society, then it needs to take the Stiglitz Report seriously and look closely at our findings to see how they can be implemented in Scotland.

While our focus has been on Scotland, our findings are relevant across the UK. The UK's four governments all need to better understand how to measure well-being and report on their own performance. Our Round Table was established in Scotland in part because of existing Scottish interest in this topic. We also see that other governments can learn from Scotland's experience in using performance frameworks. It is vital that the UK's four governments take lessons from each other in reviewing and applying the Stiglitz Report. We would like to see more cooperation on this vital topic.

“critical factor is the need for wider civil society to also hold Government to account. What we choose to measure defines what is important, and what Government focuses its effort on. If we want Government to be more ambitious and focus on delivery of well-being, wider open and public discussion will be crucial.”

Stiglitz Report

Summary of the Round Table's Recommendations

Recommendation 1:

Focusing on delivering economic growth as the end rather than the means is inadequate. Our collective purpose should be improving people's well-being, so the time is right for Scotland to shift its emphasis from measuring economic production to measuring people's well-being.

Recommendation 2:

The Scottish Government should continue to measure GDP but measures of national income and consumption need greater prominence and weight if it is to better track economic performance.

Recommendation 3:

The Scottish Government's Council of Economic Advisers should review its recommendations on measuring the Scottish economy, taking into account our Report and the expertise now available through Professor Stiglitz's membership.

Recommendation 4:

Material well-being needs to be measured at a household level. In any headline indicator set the Scottish Government should publish measures of household consumption alongside its current measure of household income.

Recommendation 5:

The Scottish Government must supplement measures on income distribution with ones that show distribution of wealth and consumption. The Government also needs to measure inequalities in other dimensions such as health, housing and education which are central to quality of life.

Recommendation 6:

The Scottish Government needs to measure the contribution of the household to the Scottish economy. A practical way to begin this would be to produce comprehensive and periodic accounts of household activity that sit as satellite accounts to the core national accounts.

Recommendation 7:

The Scottish Government needs to better measure the contribution of the third sector to the Scottish economy. A practical way to begin this would be to produce comprehensive and periodic accounts of the third sector that sit as satellite accounts to the core national accounts.

Recommendation 8:

Civil Society organisations should lead a national debate about what really matters for Scotland. This debate should feed into decisions by future Scottish governments on the long-term goal or goals for Scotland and how to measure progress towards the goal(s).

Recommendation 9:

In any high level dashboard, the Scottish Government should better report on subjective views about well-being. We recommend including both the measure of the Warwick-Edinburgh Mental Well-being and an index of well-being.

Recommendation 10:

While reorganisation of a performance framework to aid better communication and understanding across government and wider civil society will be important, Government's main challenge for the next four years is to look more carefully at delivery across the wider public sector. There needs to be clearer lines of shared responsibility across the public sector, if delivery is to be properly coordinated.

Recommendation 11:

The decision, to cease monitoring and reporting against a Scottish sustainable development indicator set, was a step backwards. Use of a sustainable development indicator set as part of any performance framework is needed. Without such a sub-dashboard, Government cannot properly track levels of economic, human and environmental stocks vital for our future well-being.

Recommendation 12:

To properly measure the state of the environment, Government needs to use separate indicators on climate change and biodiversity but could also include an aggregate indicator such as ecological or carbon footprint. Given Scotland's statutory targets on climate change, Government needs to develop a better climate change indicator. The focus of any indicator should be to report on cumulative emissions reduction, not simply on recording percentage reductions towards the 80% target.

The 12 Stiglitz Report Recommendations

The ‘unifying theme’ of the Stiglitz Report is that the time is ripe for our measurement system to *shift emphasis from measuring economic production to measuring people’s well-being*. The Report distinguishes between an assessment of *current well-being* and an assessment of *sustainability* (i.e. whether this can last over time). Current well-being has to do with both economic resources, such as income, and with non-economic aspects of peoples’ lives. Whether this well-being can be sustained over time depends on whether stocks of capital that matter for our lives (natural, physical, human, social) are passed on to future generations.

The Stiglitz Report makes 12 recommendations divided between the three topics of Classical GDP Issues, Quality of Life and Sustainability. These recommendations are summarised below.

Classical GDP Issues

1. When evaluating material well-being, look at income and consumption rather than production.
2. Emphasise the household perspective.
3. Consider income and consumption jointly with wealth.
4. Give more prominence to the distribution of income, consumption and wealth.
5. Broaden income measures to non-market activities.

Quality of Life

6. Quality of life depends on people’s objective conditions and capabilities. Steps should be taken to improve measures of people’s health, education, personal activities and environmental conditions. In particular, substantial effort should be devoted to developing and implementing robust, reliable measures of social connections, political voice, and insecurity that can be shown to predict life satisfaction.

7. Quality of life indicators in all dimensions covered should assess inequalities in a comprehensive way.
8. Surveys should be designed to assess the links between various quality of life domains for each person, and this information should be used when designing policies in various fields.
9. Statistical offices should provide the information needed to aggregate across quality of life dimensions, allowing the construction of different indexes.
10. Measures of both objective and subjective well-being provide key information about people’s quality of life. Statistical offices should incorporate questions to capture people’s life evaluations, hedonic experiences and priorities in their own surveys.

Sustainability

11. Sustainability assessment requires a well-identified dashboard of indicators. The distinctive feature of the components of this dashboard should be that they are interpretable as variations of some underlying “stocks”. A monetary index of sustainability has its place in such a dashboard but, under the current state of the art, it should remain essentially focused on economic aspects of sustainability.
12. The environmental aspects of sustainability deserve a separate follow-up based on a well-chosen set of physical indicators. In particular there is a need for a clear indicator of our proximity to dangerous levels of environmental damage (such as that associated with climate change or the depletion of fishing stocks).

Chapter 1

Background to our Scottish Round Table



1. Background to our Scottish Round Table

“The economic crisis doesn’t only make us free to imagine other models, another future, another world. It obliges us to do so.”

President Nicholas Sarkozy⁴

1.1 The Commission on the Measurement of Economic Performance and Social Progress

In February 2008, Nicholas Sarkozy asked Joseph Stiglitz, Amartya Sen and Jean Paul Fitoussi to create the Commission on the Measurement of Economic Performance and Social Progress to review how statistics are used to measure progress in the economy and society. It had the following objectives:

- To identify the limits of GDP as an indicator of economic performance and social progress, including the problems with its measurement;
- To consider what additional information might be required for the production of more relevant indicators of social progress; to assess the feasibility of alternative measurement tools;
- To discuss how to present the statistical information in an appropriate way.

The Commission’s 2009 report, which we refer to as the Stiglitz Report, has been hugely influential. It builds on an increasing volume of academic and professional literature looking at how to improve measurement of economic performance and wider social progress. The Report is significant and its timing, coming in the midst of one of the worst financial, economic and social crises in post-war history, is highly appropriate.

A number of countries, including the UK, are looking at the findings of the Stiglitz Report. Indeed, its authors were aware that the findings of the Report applied not only to France but to all countries. One of their key recommendations was that:

“At the national level, Round Tables should be established, with the involvement of stakeholders, to identify and prioritise those indicators that carry the potential for a shared view of how social progress is happening and how it can be sustained over time.”

Our Scottish Round Table, set up by the Carnegie UK Trust and SDC Scotland, is a direct response to this recommendation. Both organisations have long been interested in this topic. The Carnegie UK Trust has the objective to promote well-being and has been working since 1913 in this field. The SDC acted as independent adviser to the four governments of the UK until its closure in March 2011 and has taken a close interest in the role of Government indicators and wider questions about redefining prosperity. This work culminated in its groundbreaking report *Prosperity without Growth?* written by SDC’s Economics Commissioner Professor Tim Jackson.⁵

Our work also builds on, and has been influenced by, the 2009 *Measuring What Matters* Dundee conference, hosted by the Community Development Alliance Scotland in partnership with the International Association for Community Development, the Carnegie UK Trust and the Scottish Community Development Centre.⁶

1.2 The work of the Scottish Round Table

We met across winter 2010-11 to review the findings of the Stiglitz Report and make recommendations about applying it in Scotland. Twelve members were invited to receive written and verbal submissions, to discuss key issues arising from the evidence, to offer advice and input to the secretariat and to direct the findings and writing of the report into its work.

We agreed terms of reference stating that we would “consider the findings of the 2009 Stiglitz Report and make recommendations to the Scottish Government and other interested stakeholders on relevance and application to Scotland of the Report’s findings. In doing this the Round Table will take account of Scotland’s current experience of working within a National Performance Framework, as well as previous and current work on additional measures that is seen as relevant to discussions.”

Membership was drawn from across Scottish society. Members took part as individuals but brought expertise and a range of experience from their current and previous work. The Group was chaired by Professor Jan Bebbington, SDC's Vice Chair for Scotland, with Angus Hogg, Vice Chair of the Carnegie UK Trust, taking the role of Vice Chair. Biographies of Round Table members are set out in Appendix 1.

The Round Table was supported by a secretariat led by Maf Smith, Director of SDC Scotland, and Martyn Evans, Chief Executive of the Carnegie UK Trust.

The full set of technical papers prepared for each of the three meetings is available online on both the Carnegie UK Trust and SDC Scotland websites. In addition to this report, the secretariat has produced three online Annexes which set out in more detail (a) relevant factors from SDC's *Prosperity without Growth?*, (b) analysis of other relevant work on measuring progress and (c) detailed recommendations about the Scottish Government's original National Performance Framework. A list of all Annexes and Technical Papers is included in Appendix 2.

“ *At the national level, Round Tables should be established, with the involvement of stakeholders, to identify and prioritise those indicators that carry the potential for a shared view of how social progress is happening and how it can be sustained over time.* ”

Chapter 2

The Importance of Redefining Prosperity



2. The Importance of Redefining Prosperity

“This is the logic of free market capitalism: the economy must grow continuously or face an unpalatable collapse. With the environmental situation reaching crisis point, however, it is time to stop pretending that mindlessly chasing economic growth is compatible with sustainability. We need something more robust than a comfort blanket to protect us from the damage we are wreaking on the planet.”

Tim Jackson⁷

2.1 Introduction

Prosperity consists of more than material wealth. Prosperity has vital social and psychological dimensions. It includes the ability to give and receive love, to enjoy the respect of peers, to contribute useful work and to have a sense of belonging and trust in the community. Material wealth brings us food, shelter and security but, beyond a certain level of development, the relationship between economic growth and increased prosperity weakens.

An important component of prosperity is the ability to participate meaningfully in the life of society. This view of prosperity has much in common with Amartya Sen’s vision of development as ‘capabilities for flourishing’. Such an approach emphasises functional capabilities (such as the ability to live to old age, engage in economic transactions, or participate in political activities). Poverty can be seen as the deprivation of capability.

We made use of the SDC’s *Prosperity without Growth?* report alongside our review of the Stiglitz Report. While Round Table members had differing views on some of the findings of the SDC report, we are clear that it asks challenging and relevant questions about if and how growth can become sustainable and provides a strong evidence base helpful for those wanting to look carefully at definitions of prosperity.

2.2 Exploring the links between GDP and well-being

There is a strong and necessary call for increasing incomes in poorer nations. But in societies where material needs are broadly met and disposable incomes are increasingly dedicated to different ends such as leisure, social interaction and the acquisition of desirable goods, our appetite for increases in material consumption remains strong.

In fact, our view of our own prosperity and economic well-being is now largely played out through relative effects. What matters more than the absolute level of income is whether we have more or less than those around us.⁸ This is particularly true in highly unequal societies where income disparities signal significant differences in social status. Income is used to confirm status and sometimes authority, power and class as well. Income also provides access to the ‘positional’ or status goods that are so important in establishing our social standing.

It appears that being at or near the top of the pile matters in terms of health, happiness and subjective well-being.⁹

There is an assumption that increased GDP will lead to improvements in health, education or people’s life satisfaction but the data shows that the relationship is far from simple.

For example, Figure 1 maps life expectancy against average annual income levels in 177 different nations. The pattern is similar to the one observed when looking at the relationship between life satisfaction and income.

The difference between the poorest and the richest countries is striking, with life expectancies as low as 40 years in parts of Africa and almost double that in many developed nations. But the advantage of being richer as a nation shows diminishing returns. As income rises, the additional benefits in terms of increased life expectancy are reduced.

Some low-income countries have life expectancies that are on a par with developed nations. For example, Chile (with an average per capita annual income of \$12,000) has a life expectancy of 78.3 years, greater than that of Denmark (whose average income is almost three times higher at \$34,000). It is also possible to find countries with incomes in the same range as Chile (e.g. South Africa and Botswana) where life expectancy is 30 years lower.

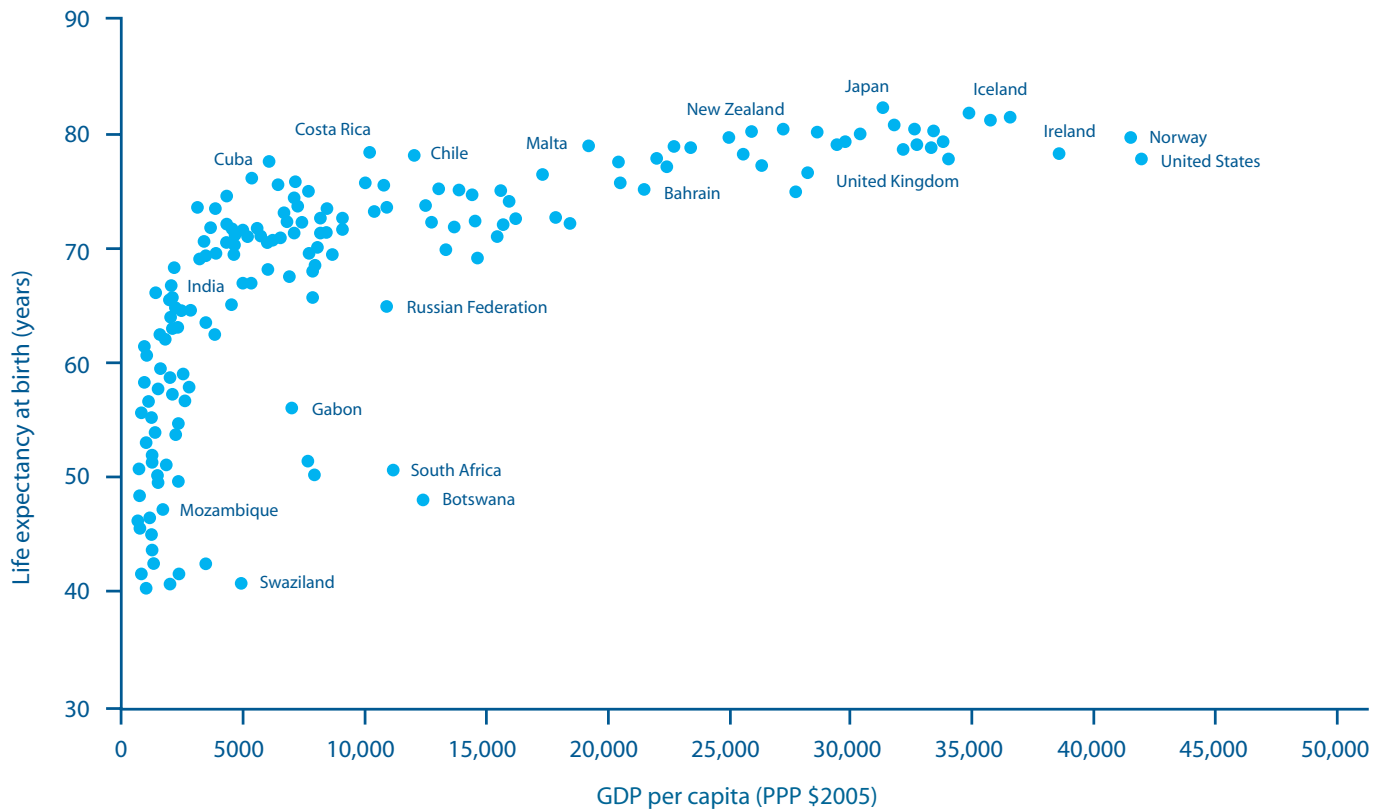


Figure 1: Life Expectancy at Birth vs Average Annual Income¹⁰

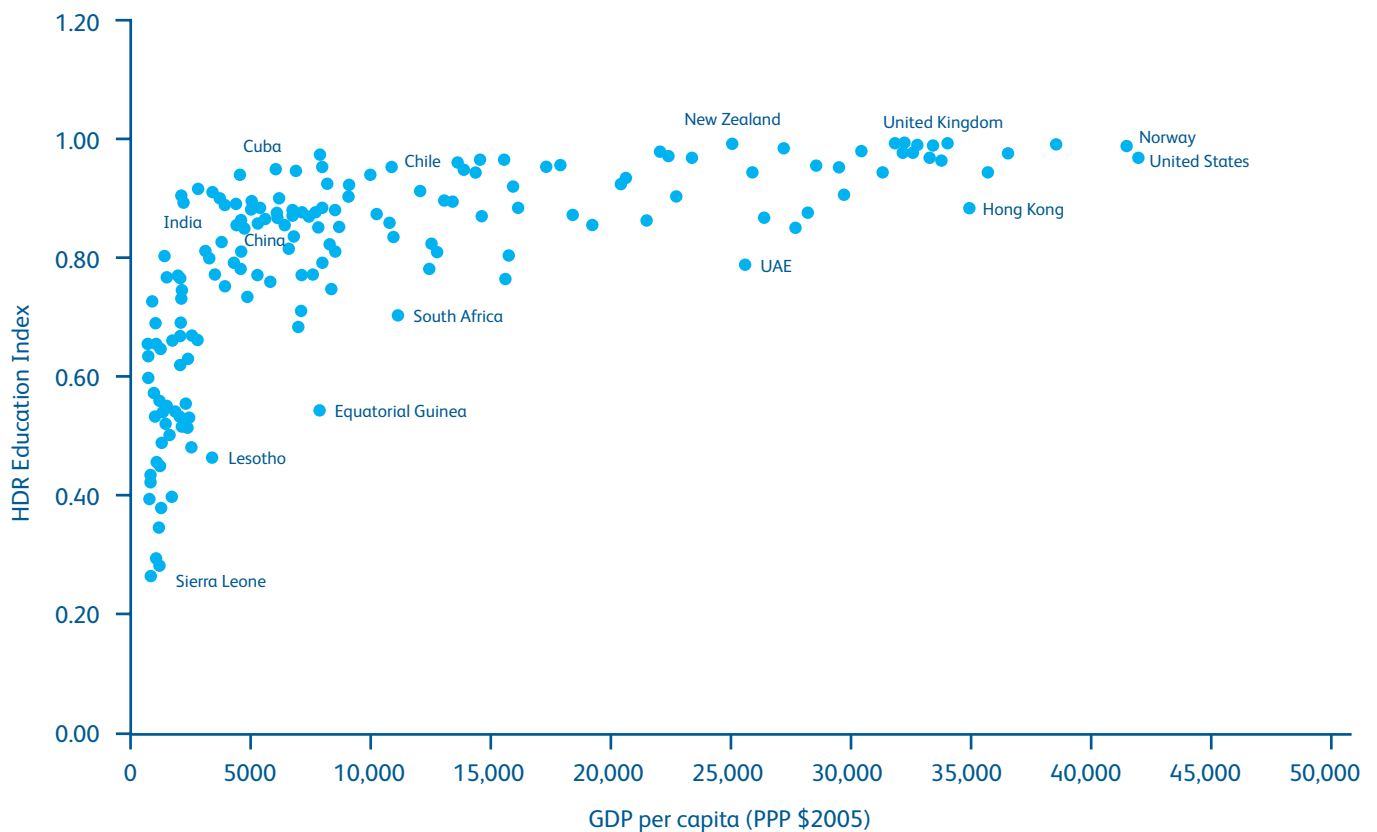


Figure 2: Participation in Education vs. Income Per Capita¹¹

The ambivalent relationship between income and health indicators is echoed in the relationship between income and education. Figure 2, from the Human Development Report's Education Index – based on a composite of educational participation rates – illustrates the same disparity between the very poor and the very rich. It also shows the familiar pattern of diminishing returns with respect to income growth.

Again, it is possible to find low income countries providing educational participation rates that are as high as the most developed nations. Kazakhstan, with an average income of less than \$8,000, scores higher on the index than Japan, Switzerland or the US, countries with income levels four and five times higher. Equally though, it is not hard to find countries with income levels of \$8,000 whose educational participation rates are only two thirds of those in most developed nations.

Interestingly, there is no hard and fast rule here on the relationship between income growth and improved flourishing. The poorest countries certainly suffer extraordinary deprivations in life expectancy, infant mortality and educational participation. But as annual incomes grow beyond about \$15,000 per capita, the returns to growth diminish substantially. Some countries achieve remarkable levels of flourishing with only a fraction of the income available to richer nations.

International data clearly shows the limits of growth in being able to deliver ongoing improvements in our well-being. Beyond a certain point – certainly reached in Scotland – economic growth alone cannot be relied on to deliver ongoing well-being. **It is clear that Scotland needs to develop a better**

understanding of what other actions – for example tackling inequalities, providing better housing, putting more focus on preventative health care – **are pivotal for delivering well-being. And once identified, Scotland needs to make sure these measures are tracked, reported on, and seen as being of equal importance to GDP in charting Scotland's progress.**

We refer to this as 'GDP-plus'. By this we mean creating a set of well-being indicators that go beyond and add to GDP as a measure of progress.

2.3 What does GDP actually measure?

Our principle macroeconomic indicator is GDP. We have questions about why it sits at the head of the table. It is clearly useful and important but it is important to be clear what it actually measures and what we can deduce from it.

Broadly speaking, GDP is a measure of the 'busy-ness' of the economy. It counts up – in different ways – three types of economic activity within a particular geographical area (usually a nation). The first type of GDP account measures expenditures on goods and services in the economy and tells us what people and government spend or invest. The second type (income) tells us what people earn and the third (output) tells us how much value firms produce. Our economy is said to be in balance when the first type (our aggregate demand) equals the sum of the second and third (our aggregate supply). That is when expenditure equals income. The different calculations all come up with more or less the same total and can be thought of as measuring the volume of economic flow at different points around the circular economy.

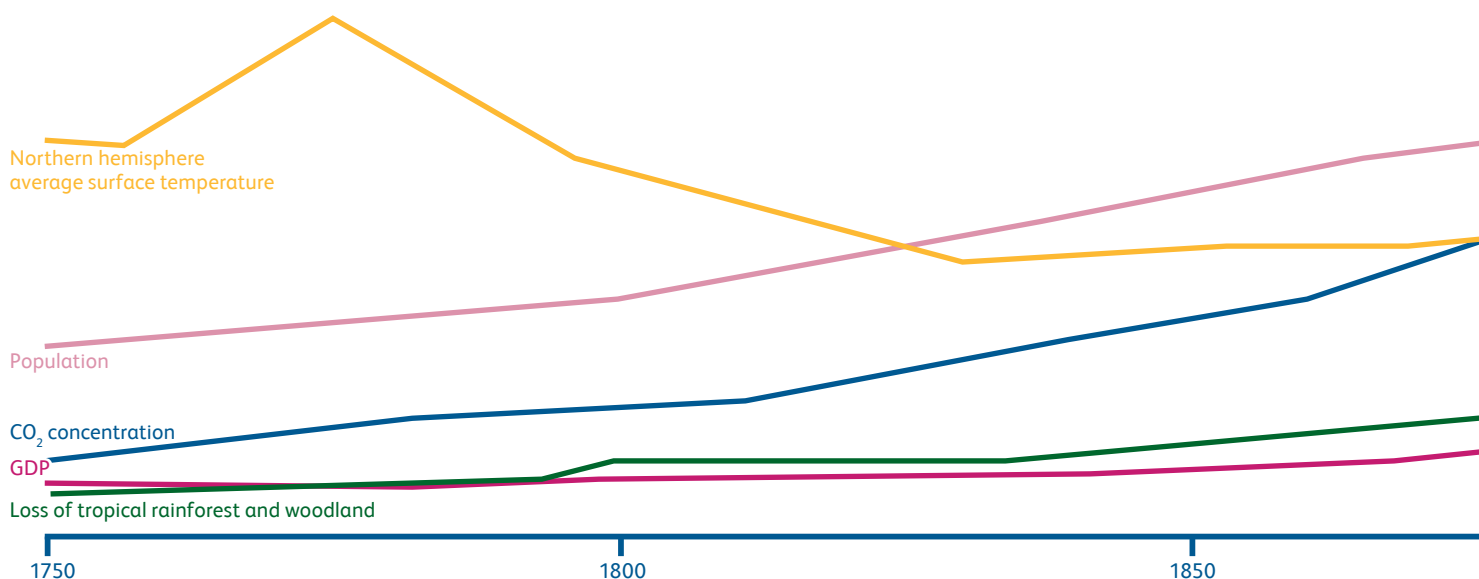


Figure 3: Major Global Trends, 1750 to 2000¹²

What does GDP not measure?

In a nutshell, GDP is a monetary measure of things exchanged on markets. It is a limited measure because it does not address what happens outside markets even when these activities result from or impact on economic activity. These can be positive (e.g. housework, caring and voluntary work) or negative (e.g. ecological and social damage from economic activities). The shortfalls of GDP as a useful measure of even economic well-being are summarised in the following points. The GDP measure fails to:

- Account for changes in the asset base (depreciation of capital stocks and level of indebtedness);
- Adjust for the costs associated with the degradation and depletion of natural capital (finite resources and ecosystem services) generated through economic activities;
- Incorporate the real welfare losses from having an unequal distribution of income;
- Correct for defensive expenditures (costs of crime, car accidents, industrial accidents, family breakdown);
- Account for non-market services such as domestic labour and voluntary care.

GDP excludes many activities that contribute to human well-being, such as parenting or volunteering so it is clearly not a good measure of overall well-being. It also fails as a reliable measure of economic well-being. Including defensive expenditures that stem from activities or events that can seriously undermine economic (let alone overall) well-being seems perverse.



2.4 The dilemma of growth

Prosperity without Growth? argues that the current model of economic growth is unsustainable. It also acknowledges that lack of growth currently leads to instability. It asks whether it is possible that continued economic growth is a *necessary condition* for a lasting prosperity. This is the dilemma of growth.

Figure 3 below gives a stark reminder of the crisis facing our planet. Consumption of resources is rising rapidly, biodiversity is plummeting and just about every measure shows the troubling impact humans are having on the Earth. These figures suggest that, if we are serious about safeguarding our planet’s ability to sustain us, we must reshape our economy.

Material possessions play an important symbolic role in our lives as well as enabling us to participate in the life of society. As Adam Smith noted, “with the greater part of rich people, the chief enjoyment of riches consists in the parade of riches.”¹³ There is some statistical correlation between economic growth and key human development indicators. Economic *resilience* – the ability to protect jobs and livelihoods and avoid collapse in the face of external shocks – really does matter. Basic capabilities are threatened when economies collapse.

Growth is our default mechanism for preventing collapse. In particular, market economies have placed a high emphasis on

labour productivity. Continuous improvements in technology mean that more output can be produced for any given input of labour. Crucially, this process leads to fewer people being needed to produce the same amount of goods. This explains why such importance is placed on economic growth to provide employment. A key means of doing this is to encourage greater levels of consumption to stimulate greater demand. The dangers of relying on financial speculation and personal borrowing, as tools to encourage consumption and economic activity, are obvious since the economic collapse. Figure 4 shows how personal debt in the UK has increased while savings have fallen. Clearly using debt to increase spending fuels economic growth in the short-term but cannot be seen as sustainable.

We are clear that better measurements of economic performance, that track production alongside consumption, and measures that capture how strong Scotland’s economy is at a household level, will be important to help us track the sustainability of our economy.

Is Decoupling a Myth?

Scotland’s focus on ‘sustainable economic growth’ signals an attempt to align its economic activity to an idea of a more virtuous path to growth. Scotland’s commitment to reduce greenhouse gas emissions to 80% of their 1990 level by 2050

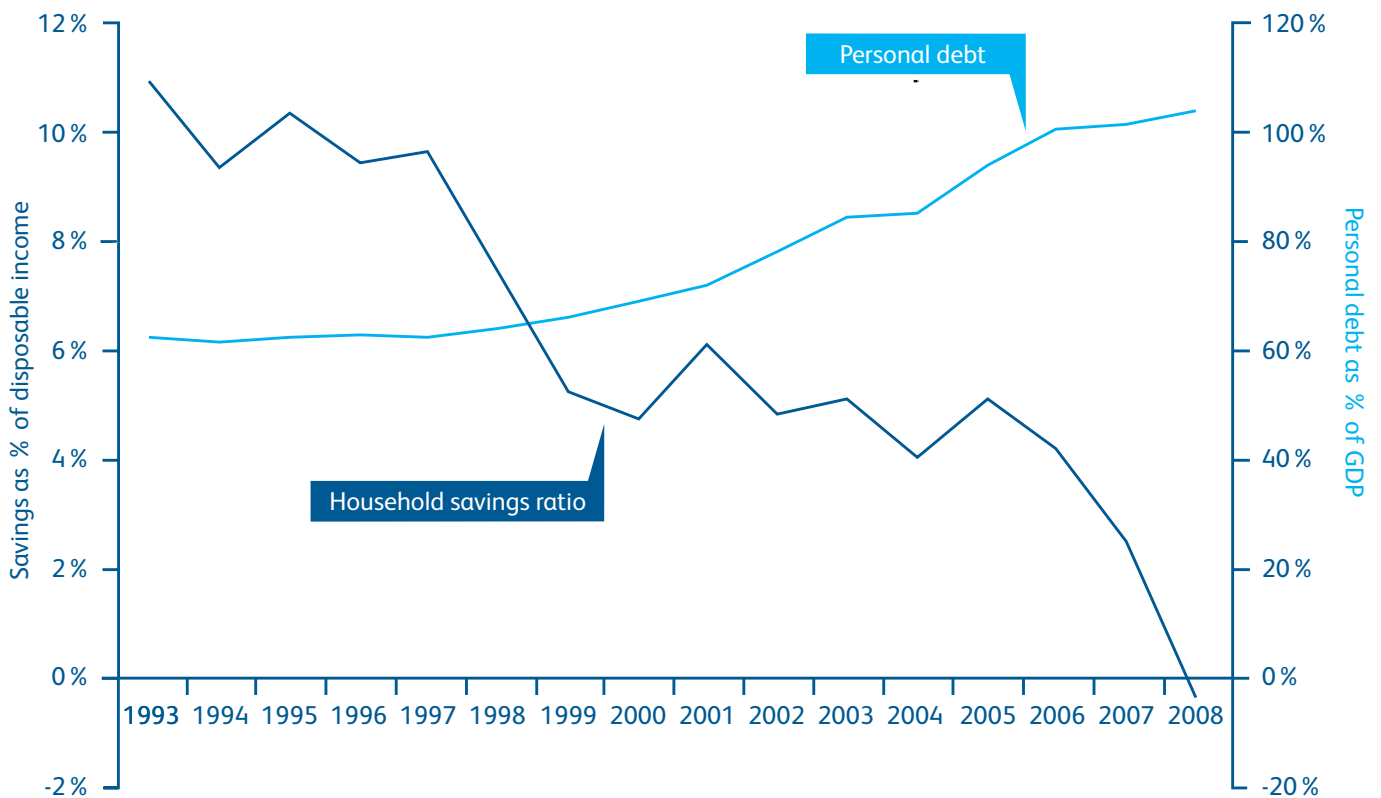


Figure 4: UK Consumer Debt and Household Savings 1993-1998¹⁴

is the most obvious example of this. Its use of ecological footprint as a measure of consumption is also relevant.

One remedy frequently proposed for the negative impacts associated with economic growth is ‘decoupling’ growth from its problematic elements. This means achieving ‘good growth’ and stopping ‘bad growth’. The decoupling argument relies on finding ways of reducing material throughput per unit of economic activity.

It is vital to distinguish between ‘relative’ and ‘absolute’ decoupling. Relative decoupling refers to a situation where resource impacts decline relative to the GDP. Impacts may still rise but they do so more slowly than the GDP. The situation in which resource impacts decline in absolute terms is called ‘absolute decoupling’. We believe this latter

situation is essential if economic activity is to remain within ecological limits.

Evidence for declining resource intensities (relative decoupling) is relatively easy to identify. The energy required to produce a unit of economic output declined by a third in the last 30 years, for instance. Global carbon intensity fell from around one kilo per dollar of economic activity to just under 770 grams per dollar.¹⁵

Evidence for overall reductions in resource throughput (absolute decoupling) is much harder to find. The improvements in energy (and carbon) intensity noted above were offset by increases in the scale of economic activity over the same period. Global carbon emissions from energy use have increased by 40% since only 1990 (the Kyoto base year).¹⁶

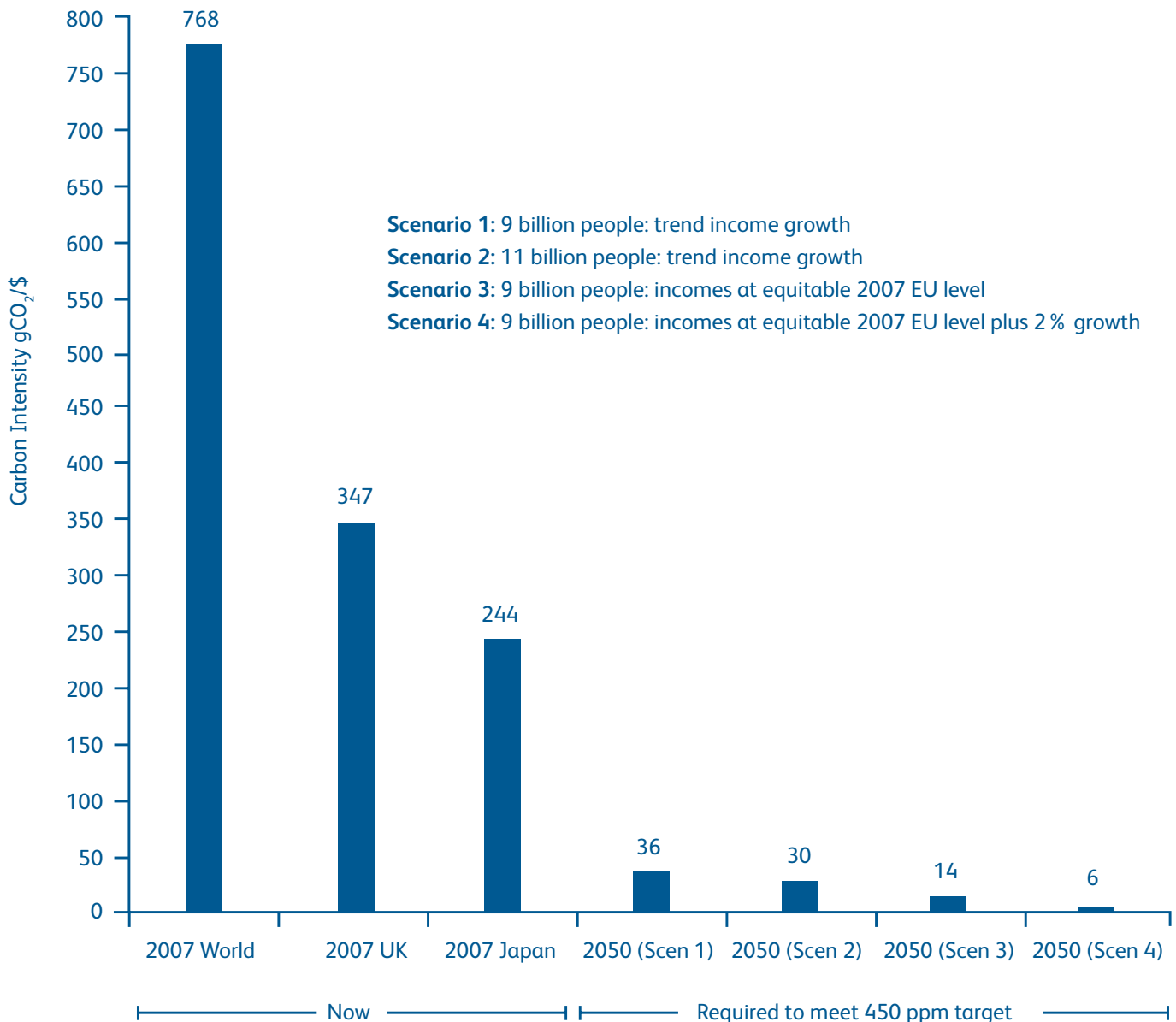


Figure 5: Carbon Intensities Now and Required to Meet 450ppm Target¹⁷

Lord Stern has argued that stabilising atmospheric carbon at 500 parts per million (ppm) would mean investing 2% of GDP each year in carbon emission reductions.¹⁸ Based on the most recent Intergovernmental Panel on Climate Change (IPCC) recommendations, international effort is now focused on meeting a recommended 450 ppm target by 2050. Figure 5 shows that to meet this 450ppm target, while treating the world's nine billion people equitably, global carbon intensity will need to fall to six grams per dollar of output, a level almost 130 times lower than it is today. Factor in the wider capital needs for resource efficiency, material and process substitution and ecological protection, and the sheer scale of investment becomes an issue.

Many people are aware of the need to cut greenhouse gas emissions. It is also important to highlight the need to decouple growth from wider resource use (see Figure 6 below). There are rising global trends in a number of other resources – a range of different metals and several non-metallic minerals for example. Worryingly, in some cases, even relative decoupling is not happening. Resource productivity in the use of some structural materials (e.g. iron ore, bauxite, cement) has been declining globally since 2000, as the emerging economies build up physical infrastructures, leading to *accelerating* resource throughput. The scale of improvement required is daunting.

The message here is not that decoupling is unnecessary. On the contrary, absolute reductions in throughput are essential. The question is: 'how much is achievable? How much decoupling is technologically and economically viable?'

A significant economic focus in Scotland has been the development of renewable energy sources. It is clear that these technologies are going to be important, not just in Scotland but internationally, to help deliver reductions in our emissions. **So an economic strategy that supports the development of a low carbon economy in Scotland is vital. But we must do this knowing it is not just to increase our own GDP but to move our economy onto a more sustainable model.**

Prosperity without Growth? tells us that we need to develop a better understanding of the relationship between economic performance and well-being and move on from the assumption that further economic growth will go on delivering greater prosperity. A Scottish Economic Strategy needs to recognise that economic development is only one element of work needed to deliver well-being across Scotland. Any performance framework needs to better track the economic, social and environmental sustainability of our actions, and better measures of progress, taking note of the Stiglitz Report, will be critical in helping us track prosperity.

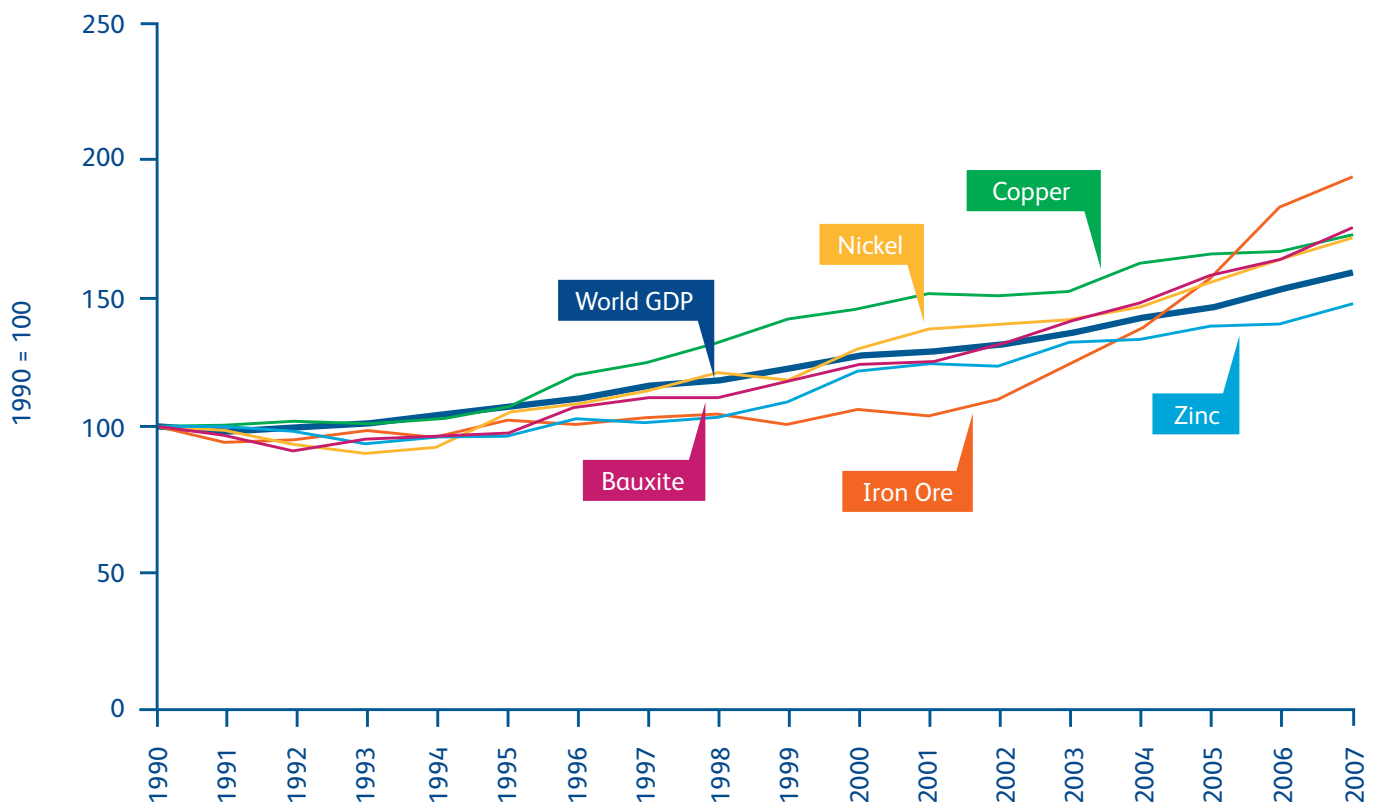


Figure 6: Global Trends in Primary Metal Extractions: 1990-2007¹⁹

Chapter 3

The Relevance of the Stiglitz Report to Scotland



3. The Relevance of the Stiglitz Report to Scotland

“Statistical indicators are important for designing and assessing policies aiming at advancing the progress of society, as well as for assessing and influencing the functioning of economic markets.”

The Stiglitz Report²⁰

3.1 Introduction

It is a paradox that as society has grown more complex and the amount of information we produce has increased, so the reliance on a decreasing number of key indicators has risen. At the top of this pile of preferred indicators sits our Gross Domestic Product (GDP). GDP has become accepted shorthand for the performance and health of our economy, as well as a proxy for benchmarking well-being and prosperity in society.

A significant volume of literature has grown up questioning this over-reliance on GDP as an indicator. The Stiglitz Report is one of the most authoritative critiques. It reviewed “the limits of GDP as an indicator of economic performance and social progress, including the problems with its measurement”, considered “what additional information might be required for the production of more relevant indicators of social progress”, assessed “the feasibility of alternative measurement tools”, and discussed “how to present the statistical information in an appropriate way.”²¹

We believe that what we measure matters. It affects what we choose to do. If we measure the wrong thing, if our measures are flawed, if wider perceptions about what we are measuring are inaccurate or if we make deductions from our measurements not supported by data, then our decisions may be distorted. This means our long-term progress will be undermined.

Early questioning of the over-reliance on GDP as a measure of progress highlighted the false choices that are often made between promoting GDP and protecting the environment.²² There has also been increasing concern that we are not sufficiently tackling well-being, or wider concerns about persistent inequality.²³

The Stiglitz Report anchors itself firmly in the economic crisis during which it was published. It notes that: “It is perhaps going too far to hope that had we had a better measurement

system, one that would have signalled problems ahead, so governments might have taken early measures to avoid or at least to mitigate the present turmoil. But perhaps had there been more awareness of the limitations of standard metrics, like GDP, there would have been less euphoria over economic performance in the years prior to the crisis.”²⁴

We are keen that Scotland learns from the economic crisis and thinks more carefully about what it measures. Scotland needs to ensure we have a better set of wealth accounts – the ‘balance sheets’ of the economy – that would give a more comprehensive picture of assets, debts and liabilities.

The 12 Stiglitz Report recommendations set out in detail how economic performance and social progress can be better measured. These recommendations are based on two key messages which are worth re-emphasising here.

Firstly, the Stiglitz Report distinguishes between: “an assessment of current well-being and an assessment of sustainability, whether this can last over time. Current well-being has to do with both economic resources, such as income, and with non-economic aspects of peoples’ lives (what they do and what they can do, how they feel, and the natural environment they live in). Whether these levels of well-being can be sustained over time depends on whether stocks of capital that matter for our lives (natural, physical, human, social) are passed on to future generations”.²⁵

The second key message and ‘unifying theme’²⁶ of the Stiglitz Report, is that the time is ripe for our measurement system to **shift emphasis from measuring economic production to measuring people’s well-being**. Measures of well-being should be put in a context of sustainability; that is the ability of society to maintain well-being over time.

The Stiglitz Report recommends a change of emphasis so that we know as much about well-being as we do about economic production, but it does not see this shift leading to a dismissal of GDP or the importance of measuring economic production.

Stiglitz and his fellow Commissioners are clear that GDP provides answers to many important questions but it is not sufficient alone because there appears to be an increasing gap between the information contained in aggregate GDP data and what accounts for people's well-being.

The Stiglitz Report argued for “the development of a statistical system that complements measures of market activity by measures centred on people's well-being and by measures that capture sustainability... There are several dimensions to well-being but a good place to start is the measurement of material well-being or living standards”.²⁷

Current well-being has to do with both economic resources, such as income, and with non-economic aspects of peoples' lives. Whether these levels of well-being can be sustained over time depends on whether relevant assets or stocks are passed onto future generations. If our economy makes us richer in the short-term but poorer in the long-term, this is not sustainable. If rising inequality threatens the longer term cohesion of society, this is not sustainable. If our activities as a society (or economy) breach environmental limits, we will struggle to manage the repercussions. This, of course, is not sustainable.

The Stiglitz Report builds from these key messages to a set of recommendations under three headings: Classical GDP Issues, Quality of Life and Sustainability. The Report's 12 recommendations are set out at the start of our report. In the next section we summarise the main findings under these three headings.²⁸

3.2 Summary of the Stiglitz Report recommendations

Classical GDP Issues

The Stiglitz Report's first recommendation is that we need to shift our focus from production measures to measures of income and consumption in order to better measure well-being.

Sustainable development sees the economy as a **means to an end**. Our economy can help us to get what we want – **societal well-being** – while respecting environmental limits. GDP measures total production in our economy, yet we know that consumption, income and wealth relate far more closely to actual and perceived well-being, both of individuals and businesses. This is backed up by surveys of individual attitudes to well-being.²⁹

The Scottish Round Table was fascinated by the '**well-being paradox**', which is that, despite growing income and consumption

levels we are experiencing stationary or declining levels of subjective well-being.³⁰ Clearly rising material living standards are not always accompanied by rising levels of life-satisfaction.

This has implications for both the choice of indicators for measuring our material living standards and how these are used alongside other indicators. The Stiglitz Report sets out five recommendations on how to improve measurement of economic progress:

- Measure people's material living standards. To do this we need to use income and consumption, rather than production (Stiglitz Recommendation 1).
- Ensure measures capture the perspective at the level of the household (Stiglitz Recommendation 2). Importantly, this means making adjustments for government services in kind, such as health care, education and social services, which individual households rely on for well-being.
- Give measures of wealth the same status as those of income and consumption. Our ability to consume is important in securing our material well-being, but this is linked to levels of wealth as well as income (Stiglitz Recommendation 3). While financial wealth is obviously critically important, so too is the measurement of social and environmental wealth. These three aspects of wealth are also central in linking present and future well-being.
- Give more prominence to distribution of income, consumption and wealth (Stiglitz Recommendation 4). While rising income levels would be expected to bring material benefits, the distribution of any rise in average income is also important to well-being. Unequal societies are found to generate a loss of welfare.³¹
- Account properly for the services that households produce for themselves. Household services (e.g. care support) play an important role in well-being but are not properly recognised in official income and production measures (Stiglitz Recommendation 5). A solution to this lies in broadening income measures to non-market activities through the use of satellite accounts.³²

Quality of Life

The second focus of the Stiglitz Report is the fact that well-being is determined by more than material living standards and conventional economic measures. It asks how multi-dimensional measures of well-being – including health, education and environmental conditions – can be incorporated. It also looks at the difficulties of measuring objective (e.g. levels of crime) and subjective (e.g. perception of crime or fear of crime) elements of well-being.

This is a challenging area. Unlike measuring our material standard of living (these are well established and use money

as a standard measuring unit), other factors seen as relevant to our quality of life are not routinely measured using standard units. They also do not get traded on markets or given a value which is tracked.

Most agree that money is not everything. Despite this, there has been little agreement on how to measure those non-monetary things that make life worth living. As Robert Kennedy famously said in 1968, GDP “measures everything in short, except that which makes life worthwhile”.³³ Closer to home, Oscar Wilde defined a cynic as someone who knows the price of everything but the value of nothing. The challenge here is to understand and devise measures for the value of the things that matter.

One reason for GDP’s dominance as a measurement is the shared international understanding of what is being measured. It is undeniable that economic growth has brought vital improvements to people’s material well-being. Few people can explain what GDP measures, but we have been content to trust it as a measure because past experience shows a link between economic growth and human progress.

Can we be certain this historical link shows causality? Might it only be correlation? We have almost certainly become over-reliant on GDP as a benchmark for our success, despite increasing concerns about what is left out of this measure. Despite the potential for disagreement on what constitutes quality of life and the risk of creating new imperfect measures, it is clear that governments need better measures of our quality of life to help them set policy. If people are to play a part in safeguarding and improving their well-being, and that of others, we need new but easy-to-understand measures too.

The Stiglitz Report is clear that defining well-being requires a multi-dimensional definition which takes the following into account:

- Material living standards (income, consumption and wealth);
- Health;
- Education;
- Personal activities including work;
- Political voice and governance;
- Social connections and relationships;
- Environment (present and future conditions);
- Inequality, in economic as well as physical or environmental factors.

Many of these are missed by conventional income measures. The Stiglitz Report draws on Amartya Sen’s Capabilities

Approach to describe the approach needed to develop new measures. This way of thinking is echoed in the Scottish Government’s Purpose of creating a flourishing Scotland. The Stiglitz Report recommends that governments should:

- Use both subjective and objective measures to track well-being (Stiglitz Recommendations 6 & 7). For example, it is useful to know about people’s fear of crime alongside the actual crime rate. We should also resist the temptation to monetise any measurement. For example, while it is good to know the total value of health services in a country, this measure cannot be used as a proxy for overall levels of health;
- Try to capture the interdependencies between the various dimensions of quality of life (Stiglitz Recommendation 9). For example, although one can be both unhealthy and materially wealthy, statistics show levels of ill-health are most prevalent in the poor and that multiple disadvantages can also have a cumulative negative effect;
- Measure inequalities (Stiglitz Recommendation 8). A critical factor in the measurement of well-being is the relative positions of individuals in society. There is plenty of evidence to show that being at the top of the pile matters in terms of bringing greater access to some services and benefits (e.g. health, accommodation, life expectancy);³⁴
- Finally, given the potential wealth of data, and the need to report on a number of headline indicators, *aggregating* the rich array of measures in an effective way is necessary but will be challenging (Stiglitz Recommendation 10).

Sustainable Development and Environment

The third focus of the Stiglitz Report is on measuring the potential for future well-being. It approaches this issue by looking at ‘stocks’ that we have at our disposal today and that will be passed on to future generations. Such ‘stocks’ could be social (e.g. a resilient community), environmental (e.g. a stable climate and healthy biodiversity), and economic (e.g. levels of credit or the absence of debt).

The Report is clear that ‘sustainability’ must be measured separately as a sub-set of any wider indicator set. It also warns against measuring these stocks solely in monetary terms (except for economic stocks). Monetising the measurement of stocks is especially problematic for monitoring environmental assets if they are irreplaceable, or hard to replace.

Crucially, measurement of such assets depends on science rather than economics. An economic approach tends to undermine sustainability because it assumes that all types of capital can be substituted for one another. This is not the case as some impacts on the environment are irreversible. For example, climate change science tells us that once emission levels reach a certain point, the impacts that result (e.g. rising greenhouse gas emissions) could accelerate the melting of the Greenland ice-sheet, causing the release of methane from the tundra, a shifting of the North Atlantic currents, increases in global temperature and rapid biodiversity loss, none of which can be reversed in any meaningful sense. The work of Nicholas Stern on the economics of climate change shows us that it will be much more cost effective to mitigate against climate change, rather than trying to react to its consequences later.³⁵

This problem also relates to another critical consideration of the Stiglitz Report: that it is important that the indicators we use tell us how near to dangerous levels of environmental damage (such as the risks of climate change or the depletion of fishing stocks) we are.

Recommendations 11 and 12 in the Stiglitz Report show how to improve measurement of sustainability by:

- Measuring future economic, environmental and social stocks using a well-identified dashboard of indicators (Part One of Stiglitz Recommendation 11) Using separate indicators that track physical levels and limits. Given the important role of environmental assets in supporting well-being, these assets require separate indicators. Monetised indicators of environmental assets should be avoided (Part Two of Stiglitz Recommendation 11)
- Making sure indicators of environmental sustainability show us how near or far we are from dangerous levels of environmental damage (Stiglitz Recommendation 12)

“ *The Report is clear that ‘sustainability’ must be measured separately as a sub-set of any wider indicator set. It also warns against measuring these stocks solely in monetary term (except for economic stocks). Monetising the measurement of stocks is especially problematic for monitoring environmental assets if they are irreplaceable, or hard to replace.* ”

Chapter 4

How has Scotland been Measuring
Economic Performance and Well-Being?



4. How has Scotland been Measuring Economic Performance and Well-Being?

“The train of progress hurtles down the tracks with us as its passengers. Whether we have good seats or bad, whether we enjoy or complain about the view, it rarely feels as though it is us setting the destination. Rationality can tell us how best to get from A to Z but without deeper reasoning we cannot decide where Z should be.”

Matthew Taylor³⁶

4.1 Introduction

The Stiglitz Report is clear that what is measured matters. It also clearly focuses on measurement and not policy. Similarly, our Round Table is interested in how Scotland should measure its progress, not in the policies that it chooses to deliver this progress. However, what we measure shapes what we collectively pursue – and what we pursue determines what we measure.

This means that, while detailed, our recommendations are not merely technical. They have a more ambitious reach than that, and they set out more fundamental challenges about our goals as a society. Because of this we have seen our role as starting a debate, rather than providing technical, detailed views on how Scotland should measure progress in future.

Scotland is not starting from a blank sheet of paper. Much has already been done to better measure performance and to align the government’s efforts to better deliver this performance. The Round Table is very supportive of the work by politicians and civil servants that led to the creation of Scotland’s *National Performance Framework* (NPF), published by the last Government in September 2007.³⁷

The NPF set out the longer term aims of the SNP Government and how it sought to measure and report progress towards achieving them. It is the most innovative and forward-thinking attempt since devolution to track Scotland’s progress and performance. It is clear that the NPF has been a significant driver inside the Civil Service, and was not far short of becoming the manual of the Scottish Government. This reach also extended into local authorities through the related Single Outcome Agreements (SOAs). However, in Parliament, which must hold the Government to account, and civil society, which must help inform the work of both Government and Parliament, the NPF seems little known and even less understood.

Our starting point is that Scotland’s Government needs a performance framework like the NPF. This outcomes-based approach to tracking performance across the public sector, which sets out progress towards a longer term set of objectives, has proved effective over the last four years. Now, the twin challenges are firstly how to make improvements in light of new thinking – in particular the Stiglitz Report – and secondly, how to foster wider understanding of the worth of organisational frameworks like the NPF so that their use becomes the norm for government in Scotland, not a one-off experiment.

We are clear that these objectives need to be framed around well-being, not economic growth. However, it is not our role to pre-judge what priorities political parties might set for themselves. We simply want to see the next Government and the Parliament take seriously the 12 recommendations in the Stiglitz Report.

Scotland’s Government will not be able to do this without a performance framework of some kind. Below we briefly review the NPF. In the next chapter we make recommendations on how to structure, use and develop a future performance framework across the next term of Government.

4.2 Scotland’s National Performance Framework

Introduction

The Scottish Government was clear upon election in May 2007 that it would look to introduce a new, outcomes-based approach to performance, which would focus “government on the key long-term challenges for Scotland and will enable, and encourage, more effective partnership working right across the public sector and with stakeholders. The whole of the public sector will, for the first time, be expected to contribute to one overarching Purpose and all performance management systems will therefore be aligned to a single, clear and consistent set of priorities.”³⁸

Early on it announced the scrapping of all departments and the adoption of a single Purpose, backed up by five Strategic Objectives. The NPF itself was published in November 2007, and for the first time set out in detail what the Government intended. This new Scottish model was heavily influenced by the approach of the State of Virginia in the USA, though its development was different from that taken in Virginia, where the model was developed over time after wide civil society involvement.

The NPF set out a single Purpose: **“To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.”**

This Purpose has been backed up by nine Purpose Targets, five Strategic Objectives, 15 National Outcomes and 45 National Indicators. The SNP’s 2007 Manifesto committed to report annually on performance through a “Health of the Nation” report. In practice, once in Government it published progress reports online through a “Scotland Performs” website that included up to date information tracking each indicator.

In reviewing the NPF, our Round Table relied on expertise around the table, discussions with invited experts, and information from the 2008 and 2010 Assessments of the SDC. We also asked the secretariat to analyse how well the NPF met the Stiglitz Report recommendations.

4.3 Advice of the Scottish Government Council of Economic Advisers

Annexe 3 sets out more detail about other relevant work on additional measures of progress.³⁹ This section focuses on the work of the Scottish Government’s Council of Economic Advisers.

Established in 2007, the Council of Economic Advisers was set up to advise the First Minister on the best way to improve Scotland’s sustainable economic growth rate. The Council has since met quarterly and published annual reports with recommendations. In late 2010, Professor Joseph Stiglitz became a member of this Council.

In its first Annual Report the Council looked at the role and measures of GDP. It noted that:

“We are not drawing attention here to the point which is often, and justifiably, made that there are many important aspects of human welfare that GDP measurement leaves out... There is more to life than

economics, but our brief is to deal with those aspects of Scottish life that are to do with economics. Our concerns are, therefore, narrower: with the extent to which GDP does correctly reflect Scottish economic performance in terms of the evolution of the material output of Scotland and the material standard of living of people in Scotland.”⁴⁰

The Council felt that a measure of Gross National Income (GNI) might be more relevant as an indicator of living standards in Scotland. To illustrate this point, they highlighted the fact that, in 2007, 15% of Scotland’s GDP came from Scotland’s (then) two major banks, yet this was due to significant international trading rather than operations distinct to Scotland.

The Council made two recommendations to the Scottish Government that are relevant to us. Firstly, they noted that the quality of economic statistics in Scotland does not yet meet the needs of government and asked for further work. Secondly, they recommended use of other measures of economic performance alongside GDP:

“We have listed many reasons why it would be inappropriate to focus solely on reported Scottish GDP data – or any other single indicator – in evaluating Scottish economic performance. GDP is so widely accepted internationally as a measure that it would be wrong not to use it, or to seek to alter the estimates of it that are available using the conventions which have been defined by the United Nations and which have achieved international recognition. But we will wish to use many other measures of performance in the course of our work and urge Ministers to do the same.”⁴¹

In its response to the Council’s recommendation, the Government emphasised that: “We agree that other measures of performance such as earnings would provide helpful input into understanding the Scottish economy. However, there are a number of limitations which constrain the potential use of earnings data as a key indicator of performance at the current time.”⁴²

It is clear that both the Council and the Scottish Government recognised the need for developing better measures of economic performance. We understand how they were constrained by the fact that much data is only available at a UK level. Following on from the Stiglitz Report, we would like to see the new Scottish Government task the Council (should they still exist and if not, another appropriate body) to look afresh at this issue using our recommendations.

Chapter 5

Evaluating Scotland's Approach to Measurement of Progress



5. Evaluating Scotland's Approach to Measurement of Progress

"I fully understand that you are purely committed to means and not ends."

James Hacker

"As far as I am concerned, Minister, there is no difference between means and ends."⁴³

Sir Humphrey Appleby

5.1 Introduction

Scotland's new Government stands at a critical point. Between October 2007 and May 2011, the NPF acted as the organisational framework for the Scottish Government. It was published in October 2007, two years before the Stiglitz Report. In some ways, this means that the NPF was ahead of the curve of political thinking, however, Scotland now risks being left behind as other countries grapple more effectively with the findings of the Stiglitz Report.

Scotland needs to learn from experience of the last four years, and put in place a new performance framework that fulfils the requirements of the Stiglitz Report. To aid Government in this task we will now map existing work in Scotland against the 12 recommendations set out in the Stiglitz Report.

The nine Purpose Targets

A critical recommendation of the Stiglitz Report is that Government cannot expect to accurately measure progress using a single indicator, so must use a 'dashboard' that sets out a mixture of critical individual and aggregate indicators. We are of the strong view that Scotland has already embraced this concept and that the Purpose Targets were an attempt at establishing such a dashboard. The last administration described them as "specific benchmarks for sustainable economic growth [which can also] ensure that growth is shared by all of Scotland"⁴⁴ and noted that "together, these targets help define the characteristics of the economic growth that we want to see – a growth that is sustainable, cohesive and which builds solidarity in all of Scotland's regions. They also set a whole new level of ambition for economic performance, not only over the lifetime of this term of the Parliament, but for the long-term."⁴⁵

Scotland's 2007-11 Purpose Targets

Indicator	Target
Economic Growth (GDP)	<ul style="list-style-type: none"> To raise the GDP growth rate to the UK level by 2011 To match the growth rate of small independent EU countries by 2017
Productivity	<ul style="list-style-type: none"> To rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017
Participation	<ul style="list-style-type: none"> To maintain our position on labour market participation as the top performing country in the UK and to close the gap with the top five OECD economies by 2017
Population	<ul style="list-style-type: none"> To match average European (EU15) population growth over the period from 2007 to 2017, supported by increased healthy life expectancy in Scotland over this period
Solidarity	<ul style="list-style-type: none"> To increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017
Cohesion	<ul style="list-style-type: none"> To narrow the gap in participation between Scotland's best and worst performing regions by 2017
Sustainability	<ul style="list-style-type: none"> To reduce emissions over the period to 2011 To reduce emissions by 80% by 2050

Unfortunately, the Targets do not sufficiently accord with the recommendations in the Stiglitz Report. We argue that the new Government should start with a revised set that better measure economic performance and social progress.

The application and use of these Purpose Targets has been weak in practice. In particular, it is hard to see how reporting against these Targets has been linked to decision-making. Government focused on a wider set of Outcomes and failed to put these Purpose Targets centre stage in either reporting on progress or in decision making. This indicates there is a need to develop a clearer performance framework that has a more easily understandable and coherent structure.

Scotland's Single Purpose

An important element of our work has been the use of Amartya Sen's **Capabilities Approach**, which was also used in the Stiglitz Report. Sen asks if people have "capabilities for flourishing" and insists that the key questions we should be asking are around how well people are able to function in any context. For example, are people well-nourished? Can they take part in the life of community? Can they find worthwhile jobs?⁴⁶

In 2007, Government set out a Single Purpose to define its direction of travel. This Purpose – "To focus Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth" – is itself based on the notion of flourishing, something we strongly support.

However, the strong assumption that economic growth is the key driver to ensure capabilities for all of Scotland to flourish is highly problematic. This correlation is not always obvious as the following analysis will show.

We have broken down our consideration of the Stiglitz Report into seven separate tests which are:

- Moving from production to material well-being;
- Measuring material well-being at the household level;
- Measuring distribution and inequalities;
- Measuring non-market activities;
- Capturing objective and subjective dimensions of quality of life;
- Improving our understanding of cross-cutting issues;
- Measuring current and future sustainability.

The NPF only satisfactorily meets one of these tests. Three are partially covered and three not covered. A detailed analysis is set out online in Annexe ²⁴⁷ and related technical papers. A full assessment of the NPF is available in an online set of

papers, but a summary of this work is set out in the Table below. Next we summarise our findings on each of the seven tests and make recommendations for what action the new Government should take to meet them.

5.2 Meeting the Stiglitz Report Recommendations through a Scottish performance framework

Moving from production to material well-being

In line with most governments and economies, measuring economic performance is of primary importance to Scotland's Government. In looking at the limits of GDP as a useful indicator, the Stiglitz Report is clear that not only should we not expect GDP to be a useful barometer of wider well-being and quality of life, having a society solely or primarily focused on economic progress itself is inadequate. Like Stiglitz, our Round Table is clear that we need to go further than this: that the time has come to *shift emphasis from measuring economic production to measuring people's well-being*.





Such a move will not be easy. It will require a much wider conversation throughout society. After all, Government already measures many things relevant to well-being and sustainability. But one measure – GDP – has taken on too great a significance. Its movement is tracked relentlessly, and any increase taken as undeniable proof of success and advancement in our society. In truth, GDP measures only one aspect of economic growth. And economic growth is only one means to the end we seek. We need to agree a better end-goal and measure progress towards it properly.

Scotland's new Government needs to follow through on the Stiglitz Report's key recommendations, and make a clear statement on the importance of well-being as its end-goal.

Recommendation 1:

Focusing on delivering economic growth as the end rather than the means is inadequate. Our collective purpose should be improving people's well-being, so the time is right for Scotland to shift its emphasis from measuring economic production to measuring people's well-being.

A clear example of how Government has struggled to break away from over-reliance on GDP as a measure of success can be seen in the 2007-11 Purpose Targets. Two of the nine targets are GDP-based, while the third measures relative economic productivity. Yet, as the Scottish Government's Council of Economic Advisers has made clear, GDP alone cannot properly track economic performance. To have a proper measure of how economic activity affects people's

Issue	Stiglitz Report Recommendation	Relevant element of NPF	Rating	Recommendation
From production to well-being	1	Purpose Targets: Economic Growth, Productivity, Solidarity, Participation		Government has relied too heavily on GDP as an indicator of economic performance. GDP has its place in a longer list of economic measures, but greater importance should be given to measures of net national income, real household income and consumption.
Household perspective	2	Purpose Targets: Solidarity Plus: National Outcomes and National Indicators		Government has measured income and relative income through its Solidarity Target. However, it should consider factoring in the use of government services (e.g. health and care services) as part of the measurement of material living standard.
Distribution/ inequalities	4, 8	Purpose Targets: Solidarity, Participation Plus: National Outcomes and National Indicators		The Stiglitz Report recognises the importance of measuring relative income. The Scottish Government should undertake to measure loss of welfare triggered by inequalities in all dimensions of quality of life.
Non-market activities	5	Purpose Targets: Productivity, Participation Plus: National Indicators		The Purpose Targets do not measure non-market activities (e.g. third sector and household activity). Government has used an indicator of third sector turnover, but this misrepresents its true value, which is to deliver non-market goods.
Subjective/ objective measures	6, 7	Purpose Targets: Economic Growth, Productivity, Solidarity, Participation Plus: National Outcomes and National Indicators		The NPF has made use of subjective and objective measures. However, these need to take account of a wider group of non-economic issues, including other freedoms important to Scottish life (e.g. participation in democracy). Government should use the WEMWS as a headline indicator, and develop another relating to subjective well-being.
Cross-cutting issues	8, 9	Purpose Targets: Economic Growth (GDP), Plus: Government's single Purpose and National Indicators		The hierarchy of the NPF is not sufficiently clear. Government has focused on delivery of Outcomes, but needs to make more of a set of Purpose Targets as an overall dashboard to measure progress towards its Purpose.
Sustainability	3, 11, 12	Purpose Targets: Sustainability, Solidarity, Productivity		Current Sustainability Purpose Targets only consider greenhouse gas emissions, and the wider set of indicators used is insufficient. A dedicated set of sustainability indicators are required that better measure future economic, environmental and social stocks. Environmental indicators (e.g. on greenhouse gas emissions) need to be reframed to show distance from limits or dangerous levels.

well-being, a wider set of measures than GDP should be used. The Stiglitz Report is clear that people's material living standards are more closely linked to net national income and consumption.

The Scottish Government must begin to use other measures of economic performance alongside GDP. If its Council of Economic Advisers is retained, it could play a useful future role for Scotland's Government by helping to explore the relevant parts of the Stiglitz Report. The Council should be asked to give an updated comment on its previous Recommendations and Scottish Government progress.

Recommendation 2:

The Scottish Government should continue to measure GDP but measures of national income and consumption need greater prominence and weight if it is to better track economic performance.

Recommendation 3:

The Scottish Government's Council of Economic Advisers should review its recommendations on measuring the Scottish economy, taking into account our Report and the expertise now available through Professor Stiglitz's membership.

Measuring material well-being at the household level

The Stiglitz Report makes clear that if we want to follow trends in the material living standards of Scottish people, then it is important to use measures of household income and consumption.

Measuring material well-being from the perspective of the Scottish household would mean taking account of payments between sectors such as taxes going to government, social benefits coming from government, and interest payments on household loans going to banks. If done properly, any measures of household income and consumption should also reflect the contribution of in-kind services provided by government, such as healthcare and education.

Over the last four years, Government has had a measure of overall income through its Solidarity Purpose Target. This is a good start, but to fully meet the Stiglitz Report's second recommendation, the new Government needs to introduce a measure of consumption. It must also look at how these household level measurements can take account of in-kind public services.

Recommendation 4:

Material well-being needs to be measured at a household level. In any headline indicator set, the Scottish Government should publish measures of household consumption alongside its current measure of household income.

Measuring distribution and inequalities

Between 2007 and 2011, Government measured income alongside "the income earned by the three lowest income deciles as a group" through its Solidarity Purpose Target. We welcome this. However, their Participation and Cohesion Purpose Targets measured participation in the labour market (at the UK & regional level) as a means of providing a more equitable distribution of the benefits of growth.

This means that the Scottish Government's approach over the last four years has been to assume that inequalities should be tackled through increasing growth. It is worth highlighting that the labour market is often seen as the panacea to tackle inequalities. This goes against the multi-dimensional approach recommended by the Stiglitz Report.

We looked at the Equality and Human Rights Commission's (EHRC) Equality Measurement Framework (EMF).⁴⁸ The EMF is a good illustration of the Stiglitz Recommendations, as it is based on the capabilities approach to assess inequalities in all dimensions of well-being.

The last Scottish Government actively looked into how to use the EMF in measuring success in tackling inequality. As well as continuing its work with the EHRC on measuring equality, to meet the Stiglitz Report's third recommendation, the new Scottish Government must also collect data on the distribution of income, consumption and wealth.

To be most effective, Government should use measures that show average and median income, consumption and wealth. It also needs to report (as it had previously) what is happening in the lowest income/wealth deciles. We agree with the Stiglitz Report findings that tracking experiences across different income/wealth deciles is important to properly measure a range of quality of life outcomes. This point is returned to below.

Recommendation 5:

The Scottish Government must supplement measures on income distribution with ones that show distribution of wealth and consumption. The Government also needs to measure inequalities in other dimensions such as health, housing and education, which are central to quality of life.

Measuring non-market activities

The way in which Scotland's economy and society function has changed significantly over time. Most relevant here is the shift away from people receiving services from other family members or their community to purchasing them on the market. This is particularly apparent in child-care and social services.

With GDP as our conventional measure, such a shift is seen as a rise in income. But when such services are purchased rather than gained for free, the current measures may actually mask a fall in living standards.

Many services that households produce for themselves are not captured by official income and production measures, yet they make up an important part of economic activity. As the Stiglitz Report makes clear, this is an area fraught with difficulties. We follow the Stiglitz Report in recommending that the Scottish Government should start with information about how people spend their time, that can be compared over the years and across countries. This would involve production of comprehensive and periodic accounts of household activity as satellites to the core national accounts.

Recommendation 6:

The Scottish Government needs to measure the contribution of the household to the Scottish economy. A practical way to begin this would be to produce comprehensive and periodic accounts of household activity that sit as satellite accounts to the core national accounts.

Prosperity without Growth? makes clear that the services provided by the third sector are of similar importance. Over the last 20 years there has been a marked shift towards looking to the third sector to provide an increasing number of national and local services; a trend that is likely to continue. Much of this activity is captured in GDP figures.

However, while the third sector overlaps government and private activity, it is motivated not by delivering economic growth, but provision of services that meet charitable or community aims. While the third sector will be motivated to provide services efficiently, it often does not have the same motivation to act as productively as the rest of the economy. Scotland measures productivity (i.e. GDP per hour worked), yet the third sector depends on a substantial level of voluntary labour, tends to provide services that are labour intensive (e.g. care) and may even have an objective to maximise use of labour (e.g. employment creation, or providing employment to those with particular physical or mental health issues).

In other words, this sector is unproductive by conventional standards (economists refer to this as Baumol's 'disease'). A focus on productivity might discriminate against Scotland's third sector if it undermines what is the real goal: providing meaningful work (i.e. helping people's capabilities for flourishing) and the positive contribution to community that these sectors provide.

Over the last four years, Government has measured the turnover of the social economy through the NPF. However, we have concluded that seeking to represent success of the social economy – by distilling this down to an economic indicator of the level of activity – risks repeating the mistake of measuring economic progress simply through GDP. A more comprehensive approach is required.

Recommendation 7:

The Scottish Government needs to better measure the contribution of the third sector to the Scottish economy. A practical way to begin this would be to produce comprehensive and periodic accounts of the third sector that sit as satellite accounts to the core national accounts.

Capturing objective and subjective dimensions of quality of life

We met with the Office of National Statistics (ONS), which has been developing new measures of national well-being for the UK Government. Its first task was consulting on what factors people judge make their lives worthwhile.⁴⁹

The previous administration tracked the work of the ONS closely and the next Government will clearly need to decide how it might use any resulting national statistics in its own work. However, we agree strongly with the Stiglitz Report's view that gathering information to help measure quality of life must go beyond people's self-reporting and capturing their perceptions. It must also include measurement of their 'functionings' and freedoms.⁵⁰

We initially found the language of 'functionings' and freedoms difficult. In the end we were clear that if we are to make well-being the primary goal for Scotland this will necessitate adopting different measures, terms and descriptions. If we want to be sure there are "opportunities for all in Scotland to flourish", we must have indicators that help measure such flourishing, but we also need Scottish civil society to lead a robust and honest conversation about what really matters.

We agree with the Stiglitz Report 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.”⁵¹

Our first and primary recommendation highlights the need to shift Scotland’s collective purpose away from economic growth and onto well-being. But our nation is hooked on the notion of simplistic causality: economic growth goes up, we all benefit. This belief is rarely challenged in the mainstream – for example in news coverage of the recession – so it is not surprising that Government is still expected to deliver economic growth so that other benefits become possible. This makes it extremely difficult for any government to make this shift and tie itself to the mast of well-being, rather than staying down below to forever toil in the engine of growth.

What is now needed is a wider discussion involving Scotland’s civil society organisations. In particular we want to see an inclusive debate take place on what matters to Scottish people, communities and businesses. Oxfam Scotland’s work surveying people throughout Scotland on how they define wealth could help inform this much-needed debate. However, we see the need for an even more profound discussion on this subject. After all, Scottish Government already measures many, many indicators of economic, social and environmental progress. What is missing is recognition of the need to better define the end-goal, and lift our attention from the means.

We are committed to staying involved in this debate. But without wider agreement on the need to set well-being as the purpose and end-goal of Scotland’s Government, it will be impossible for the key findings of the Stiglitz Report to take root.

In taking forwards this work, we would like to see civil society and Government learn from ‘Growth in Transition’ initiatives now being taken forwards in several countries.⁵²

Recommendation 8:

Civil Society organisations should lead a national debate about what really matters for Scotland. This debate should feed into decisions by future Scottish governments on the long-term goal or goals for Scotland and how to measure progress towards the goal(s).

What measures we choose to help us track these functionings and capabilities will always be a value judgement, but as the Stiglitz Report notes: “while the precise list of the features affecting quality of life inevitably rests on value judgements,

there is a consensus that quality of life depends on people’s health and education, their everyday activities (which include the right to a decent job and housing), their participation in the political process, the social and natural environment in which they live and the factors shaping their personal and economic security”.⁵³

We believe that to effectively track the functionings and capabilities of Scotland and its people, the Scottish Government will need to use a range of subjective and objective measures. Government already tracks a wide range of objective measures – which the New Economics Foundation describes as ‘drivers of well-being’⁵⁴ – as well as subjective ones. We particularly welcome the use of an Indicator of Mental Well-Being by the Scottish Government.⁵⁵ The Warwick-Edinburgh Measure of Well-Being is an internationally recognised system, and Government needs to continue its use, and make more of the reported findings. Mental well-being is a key factor in overall well-being, and because it is influenced by a range of social factors it is a reasonable indicator of broad government performance.

Oxfam Scotland is looking to measure people’s own views of prosperity and develop these into a ‘Humankind Index’. The Scottish Government should look more closely at this work, as well as that of ONS and the New Economics Foundation. We would like to see the new Government make a commitment to develop an index of subjective well-being or life satisfaction, and work with key stakeholders to develop and then report on such an indicator within the next four years of Government.

Recommendation 9:

In any high level dashboard, the Scottish Government should better report on subjective views about well-being. We recommend including both the measure of the Warwick-Edinburgh Mental Well-being and an index of well-being.

Improving our understanding of cross-cutting issues

The NPF is very large and eclectic, and it is possible that its effectiveness is diminished because of its heterogeneity. It was constructed quickly leaving little time to test indicators with stakeholders. We believe lack of exploration of the links between different indicators has reinforced, but not tested, the idea that economic growth will help progress other areas critical to well-being.

We are also concerned about the complexity of the NPF and the relationship between its four different levels. Scotland’s Government needs to think about how to make a performance framework more easily understandable and

communicable. We would recommend separating out a set of purpose targets (or dashboard) and indicators from a list of outcomes, areas of work and key manifesto commitments. In this way, targets and indicators would be there to track long-term trends and progress, could be statistically robust and reported against, at least annually. Outcomes and other commitments need to support delivery of these longer-term targets and describe the actions that Government will seek to achieve over a four-year term.

Such changes would make a performance framework easier to use, while also improving the likelihood of effective scrutiny by Parliament and wider civil society.

However, we are clear that the priority for the new Government will be to ensure better alignment of the targets and indicators of a framework with the wider work of Scotland's public sector. More effort is needed to link a performance framework into the work of local authorities and community planning partnerships (CPPs) in particular. Over the last four years, we have seen the Scottish Government and local authorities agree a set of Single Outcome Agreements (SOAs) in an attempt to ensure shared delivery between these two layers of government. In practice, differences between each of the 32 sets of local authority SOAs make it difficult to track performance across local government.

A performance framework brings with it the opportunity to encourage joint delivery across outcomes or indicators. As such, it should be of great benefit to CPPs. These partnerships are made up of key public, private and community organisations working together to agree priorities on the planning and provision of services. But there is not a clear enough acknowledgement of the interdependence of each partner in the planning process, or clarity around the different roles of stakeholders. For local partners it has often not been clear how to use the NPF alongside SOAs, community plans or local government strategic plans.

We also see that a dilemma of community planning partnerships is that they are voluntary, not statutory, partnerships. Their duty relating to CPPs is only to participate in community planning. And it is only local authorities – which have a statutory best value duty – that are held to account for the contribution to community planning. We see therefore, there is a question about whether it is credible or realistic to continue to rely on a voluntary partnership where the governance and accountability arrangements are not fit for purpose.

We concluded that perhaps the greatest weakness in the NPF has been a lack of both a shared understanding as to how to use it on the ground, and a shared responsibility over its delivery.

While it was not a significant part of our deliberations, we see that there is certainly an argument for putting community planning partnerships onto a statutory basis in order to clarify accountability and governance. The present system is not delivering what is required and does not hold partners properly to account for their performance in delivering outcomes. The next Government therefore needs to think through carefully what structures are needed that actually deliver, and which properly share out, responsibility.

Recommendation 10:

While reorganisation of a performance framework to aid better communication and understanding across government and wider civil society will be important, Government's main challenge for the next four years is to look more carefully at delivery across the wider public sector. There needs to be clearer lines of shared responsibility across the public sector, if delivery is to be properly coordinated.

Measuring of current and future sustainability

The Stiglitz Report is clear that if we are to better track economic performance we need to better measure Scotland's wealth. As the financial crisis has reminded us, the levels of debt and savings are critical to the sustainability of our economy and therefore our well-being. Having the opportunity to consume (to meet our needs and wants) over time is an important component of well-being which requires both income and wealth. Without the two, the danger is that consumption becomes fuelled by debt spending, which is of course unsustainable.

The Stiglitz Report is also clear that alongside tracking of financial stocks like wealth, we need to track stocks which tell us about future prospects for our environment and quality of life. Put another way, do we have any surplus or any stockpile that can be called upon in the future? If not, and we are living in debt, then we can expect a future deterioration in our well-being as our quality of life or environment deteriorates.

The notion of stocks is especially useful for economic and environment assets. For measuring social assets, it would be better if we talked about social resilience or the handing on of cultural values to the future generations (for example maintaining mutually supportive communities, something that

the New Economics Foundation measures through its National Accounts of Well-Being). Measuring human capital is a complex issue, as it could be considered both a social and economic asset.

To measure future stocks, it is essential for Government to know what resources are available today **and** how to manage these in ways that make it possible to maintain and further develop this resource over time.

The Stiglitz Report is clear that the issue of sustainability is a complex one, taking into account stocks available for future generations. A separate dashboard of indicators is needed if we are to properly measure and be able to better track how current performance strengthens or weakens our future sustainability.

We strongly recommend that the Scottish Government learns from current UK work and puts in place a small, focused sub-dashboard of sustainability indicators as part of any performance framework. In 2006, the Scottish Executive published a set of sustainable development indicators. Initially these were maintained by the last Government but were superseded in 2009 by the NPF. Our review of the NPF shows that it does not have a sufficient 'sustainability dashboard' within the overall set of indicators. Given this, it is disappointing that the last Scottish Government ceased tracking and publishing progress on its own sustainable development indicators in 2009. It now trails behind the UK Government in this area.

Recommendation 11:

The decision to cease monitoring and reporting against a Scottish sustainable development indicator set was a step backwards. Use of a sustainable development indicator set as part of any performance framework is needed. Without such a sub-dashboard, Government cannot properly track levels of economic, human and environmental stocks vital for our future well-being.

The NPF contained two Purpose Targets that were referred to as Sustainability Targets. They tracked short-term (to 2011) and long-term (to 2050) delivery against Scotland's climate change targets. Alongside them the National Indicators contained up to nine measures that could be classed as tracking environmental issues. While inclusion of such environmental indicators is positive, more work is needed.

In particular, the Stiglitz Report is clear that we should be tracking the proximity to causing environmental damage

through breaching environmental limits. The NPF adopted its climate change targets two years before the Scottish Parliament passed its Climate Change Act. With the Act in place and the publishing of Scotland's greenhouse gas budgets, the Government could now adopt a better indicator of progress showing how we are contributing to the avoidance of climate change. What matters is not simply the overall progress to a long (or even short) term target, but the cumulative amount of greenhouse gas emissions avoided.

The NPF clearly did not give sufficient attention to measurement of environmental assets such as biodiversity. The wider Indicator set included measures of biodiversity, waste, fish stocks, protected nature sites and ecological footprint. There is a lack of comprehensiveness in the choice of these measures and none sufficiently embed the notion of environmental limits.

While the use of an aggregate indicator such as ecological footprint is a positive step, the Stiglitz Report warns against the use of composite indicators in isolation. We are also aware of methodological and measurement issues that perhaps limit the effectiveness of ecological footprint as an indicator. Any aggregate indicators should only be used as shorthand to track wider performance. Unless such indicators are helping paint a general picture of how near or far we are from environmental targets, and inviting us to look more closely at the detail of the various components, then they fail to be useful.

Our recommendation is that the Scottish Government should take a hybrid approach to deal with the complexity of measuring environmental aspects of sustainability; namely a limited number of indicators – or 'micro-dashboard' – that can sit within a performance framework and properly measure critical economic, human and environmental capital or stocks.

Recommendation 12:

To properly measure the state of the environment, Government needs to use separate indicators on climate change and biodiversity but could also include an aggregate indicator such as ecological or carbon footprint. Given Scotland's statutory targets on climate change, Government needs to develop a better a climate change indicator. The focus of any indicator should be to report on cumulative emissions reduction, not simply on recording percentage reductions towards the 80% target.

Chapter 6

Concluding Comments



6. Concluding Comments

“Our time has become, in many respects, one of forgetting ends and sacralising means.”

Tzvetan Todorov⁵⁶

Our subject – statistics – might seem as dry as dust to some, but the assumptions that have to be challenged and the issues that are raised are critical, complex ones that are relevant to every household, community and business in Scotland. So returning to our opening questions, what is prosperity, well-being and the role of economic growth?

In short, we have not been able to fully answer these questions, but we are clear that some of our accepted notions of prosperity need to be challenged. Reliance on economic growth leads us to forget the importance of human relationships, of social capital and of the undermining influence of inequality. It leads us to forget, in Sir Martin Holgate’s words “that the world’s economy is a wholly-owned subsidiary of the world’s ecology”.⁵⁷ Without a strong, healthy environment there is no prospect of long-term well-being for Scotland.

Scotland needs a measure of progress that is not based solely on the size of economy. Simon Kuznets, the leading economist who helped to develop measures of national economic performance, cautioned against over-interpretation of measures like GDP, saying that “the welfare of a nation can scarcely be inferred from a measure of national income.”⁵⁸ Early economists such as John Stuart Mill also saw the limits to economic growth. Mill predicted that once economic growth had delivered prosperity, a ‘stationary’ economy would emerge in which we could focus on human improvement: “There would be as much scope as ever for all kinds of mental culture, and moral and social progress... for improving the art of living and much more likelihood of it being improved, when minds cease to be engrossed by the art of getting on.”⁵⁹

In Scotland, there is a need to rebalance our focus on increasing economic growth with increasing our well-being. There is a role for Scotland’s civil society organisations in taking this debate to a new level and out to a wider audience. Like most countries, Scotland needs to break free from the over-simplified conception that *economic growth* and *prosperity* amount to the same thing. Economic growth can deliver prosperity, but it can also deliver or cause negative developments, such as increasing inequality or over-reaching natural environmental limits.

We agree with the Stiglitz Report’s fundamental point that because of the complexity of our modern world – including our advanced and diverse economy – we need to break our focus on economic growth and instead focus our effort on delivering well-being, now and into the future. We need to be very concerned with how our economy is performing but we should not expect a strong economy to automatically deliver all that is important to us.

Over the last four years, Scotland’s Government has used a ‘Single Purpose’ to spell out its long-term ambition for the country. This is welcome, but our view is that this needs wider ownership which will come from agreeing our longer-term aspirations from the bottom-up. We also feel that the Scottish Government has been distracted from this long-term vision and instead has concentrated on the intermediary step of “sustainable economic growth”.

Following on from the recent economic crisis, many see the need to restate the importance of substantive and ethical considerations in science, commerce and politics. Matthew Taylor of the RSA frames this by asking “How can we make it easier to ask ‘is this the right thing to do’?”⁶⁰

We have forgotten that our end-goal of increased well-being is the one that we need to focus on. Concentrating on economic growth is no guarantor of longer-term success. A good archer knows that to hit the target, you need to focus on the far away target, not at the middle distance.

The point we make is that what is measured matters. There are things that matter which we do not currently measure because we have not found satisfactory measurement instruments, but we are increasingly coming to see that these things are not insignificant. Increasingly, the measurement of quality of life and well-being will become important in helping us to focus on this longer-term aim.

We endorse work we have seen internationally on what is becoming known as ‘Growth in Transition’. The notion of growth, and what we mean by it, is in transition. We now have an increased understanding of how our economy is

over-reaching the environmental limits we need to live within. Alongside this there is a better understanding that inequality affects us all, not just those at the bottom. Short-term economic growth does not automatically deliver long-term prosperity. **We need the next Scottish Government, local authorities and wider civil society to work together and explore the notion of ‘Growth in Transition’ in more detail.**

Our discussions have also concluded that measuring a country’s GDP is critically important. But we have sought to put too much responsibility on the small shoulders of this single indicator. One number cannot tell us all we need to know. We believe it is a case of not shooting the GDP messenger, but accepting that there are other carriers of valuable information that we need bring into the mix. Scotland needs to select a small number of these indicators that, between them, can reliably tell us how we are doing. We call this ‘GDP Plus’. By this we mean creating a set of well-being indicators that seek to go beyond and add to GDP as a measure of progress.

To measure our economic performance we need to put more effort into tracking consumption and wealth rather than focusing on production. This means GDP needs to step down from its place at the head of Scotland’s table of indicators. As one of the Round Table members commented in the discussions, “...in my 25 years running a business, I never once needed to know what my GDP was.” His business did need to know its turnover, savings and debt however. The same goes for our national economy.

We need to measure economic progress at the household level. This will help us know if individuals and families throughout Scotland are doing better. We also need to improve how we measure the contribution that public services – particularly healthcare – make to well-being. The same is true for the activity and contribution of the household economy – for example informal care services, or the value of our leisure time and the role of the voluntary sector. And finally, we need to track, not just the average, but progress across different sections of the population. This would give information about the relative winners and losers and where to focus extra attention.

A critical step in taking well-being rather than economic growth as our goal will be to develop better measures of progress to assess our quality of life. No single indicator can be expected to do this. Scotland needs a small group of indicators – each having similar weight and importance.

Scotland’s NPF is an attempt at this; its nine Purpose Targets could be seen as a version of the Stiglitz Report’s ‘dashboard’ of indicators. The problem remains that too many of Scotland’s Purpose Targets are based around monetary measures. Developing a better dashboard will be necessary so we can properly measure the economic performance and social progress described above.

There is clearly merit in the Scottish Government looking at the development of a subjective measure of people’s well-being. Learning from the Office of National Statistics and organisations such as Oxfam Scotland and the New Economics Foundation will be helpful here. In the meantime, Scotland’s existing measure of mental health should be used as a headline indicator.

A future dashboard must set out economic performance (focused on measuring national levels of consumption and wealth and not just GDP); include a measure that gives the perspective of Scottish households; and use a small number of indicators that show our quality of life. These indicators need to be a mixture of subjective and objective ones, and could be aggregate indicators.

“*We have forgotten that our end-goal of increased well-being is the one that we need to focus on. Concentrating on economic growth is no guarantor of longer-term success. A good archer knows that to hit the target, you need to focus on the far away target, not at the middle distance.*”

We are clear that measuring quality of life or well-being is not about trying to measure happiness. Perhaps this scepticism is simply a Scottish reflex. As the Scottish poet Alexander Smith noted, “Happiness never lays its finger on its pulse.”⁶¹ Certainly, we were sceptical of the role of government in delivering happiness, though Governments are responsible for many things from which happiness can flow. Tellingly, the Stiglitz Report is also concerned by the misconceptions that the word happiness conjures up.

Bhutan uses a well-publicised measure of ‘Gross National Happiness’ and several organisations are proposing measures of happiness. For example, the New Economics Foundation have published a Happiness Index. In looking at these we could not avoid being suspicious about the emphasis some have placed on happiness. We were concerned that this emphasis could lead one to assume that if you are poor but happy all is well in society. We disagree with such an assumption and our work is aimed mainly at seeking a change in how Scotland sees and measures its progress. As a result we have steered clear of discussions of happiness in this report.

Scotland needs to re-introduce a set of sustainability indicators that allow us to track expected future

progress. It is important that we understand not just current economic performance and well-being, but how current performance will impact on our children or our children’s children. We know that the next generation will still be working to get Scotland out of the social and economic problems that the current economic crisis has got us into. The Stiglitz Report sees that better measures would almost certainly have been helpful in warning us of this coming problem. We are also worried that inequalities throughout Scotland are becoming embedded and harder to shift. This will affect us all, not just those at the bottom. The science is also clear that global environmental issues, such as biodiversity and climate change, are certain to impact on our long-term well-being if they are not tackled in the short- and medium-term.

Until 2009, Scotland had a set of sustainability indicators. We were disappointed to find that use of these indicators has stopped. The Stiglitz Report is clear that the topic of sustainability is complex and that it needs a dedicated indicator set. At a UK-level, work is going on to revise the existing sustainable development indicator set (from 68 to 28) and we would like to see this work replicated in Scotland. The Scottish Government must dust off Scotland’s mothballed sustainable development indicator set, review it and re-establish it alongside and as part of any performance framework that measures current economic performance and social progress.

Our hope is that this report will make it easier for those interested in Scotland’s current and future economic performance and social progress to advance this debate and start taking some practical steps. We hope as well that our conclusions make it easier to apply the good work of the Stiglitz Report to Scotland.

“ *The Scottish Government must dust off Scotland’s mothballed sustainable development indicator set, review it and re-establish it alongside and as part of any performance framework that measures current economic performance and social progress.* ”

Appendices



Appendix 1: Biographies of the Scottish Round Table Members



Professor Jan Bebbington – (Round Table Chair)

Jan holds a chair in Accounting and Sustainable Development at the University of St Andrews. She is also the Director of the St Andrews Sustainability Institute.

Her research interests focus around the themes of corporate reporting on sustainable development, full cost accounting and modelling as well as governance for sustainable development. Jan has worked with many organisations who are seeking to model their sustainable development impacts and to transform their activities.

Jan was also an external advisor to the Scottish Cabinet Sub-Committee on Sustainable Scotland. Between July 2006 and March 2011, Jan was the Sustainable Development Commission's Vice-Chair (Scotland).

Angus Hogg – (Round Table Vice Chair)

Having spent 15 years in local Government supply management, Angus founded Panda Litho Ltd, a print and design company in the late 1970s. The company expanded over the years, making various acquisitions in Edinburgh



and Blantyre. In 2000 all operations were centralised in a new factory in Rosyth. Disposing of his interests in 2003, he then established a Business Consultancy, the Lomond Partnership, and the following year, Eden River Associates.

In 1996 he was appointed a Trustee of the Carnegie Dunfermline and Hero Fund Trusts and was Chair of those Trusts from April 2006-2008. In 2004, he became a Trustee of the Carnegie UK Trust and was Chair in the year 2008-2009. He currently chairs The Royal Dunfermline Partnership: a public/private company whose remit is to create the vision for Dunfermline through to 2020 and beyond. He is also a Director of CAN LLP a Charity Advice Network Company



Sir John Elvidge KCB

Sir John was Permanent Secretary to the Scottish Government from 2003-2010, following a 37 year career in the Civil Service which also included responsibility during 1998-1999 for coordination of

domestic policy for the UK Government as a member of the Cabinet Secretariat.



Tricia Henton

Tricia is the recently retired Director of Environment and Business at the Environment Agency. She is a geologist/geographer with over 35 years experience in environmental management and

sustainable development. She spent 13 years with Aspinwall & Co, building their consultancy business in Scotland before joining Scottish Environment Protection Agency at its inception as Director of Environmental Strategy and then Chief Executive. She returned briefly to consultancy with Enviros before joining the EA.

Tricia currently holds a number of non-executive director positions including the Coal Authority and British Geological Survey Boards and is a Trustee of the British Trust for Ornithology and Royal Botanic Gardens Edinburgh. She has chaired or participated in numerous Government, Ministerial and other advisory groups, and has an extensive senior level record in strategic thinking allied with knowledge and experience of how Government and the private sector work.



Kaliani Lyle

In April 2010, Kaliani was appointed as the new Scotland Commissioner by the Government Equalities Office for the Equality and Human Rights Commission Scotland. She leads the Scotland

Committee which is involved in working strategically with the Scottish Government, Local Authorities, UK Government and Parliament to ensure equality and human rights are at the heart of all work carried out in Scotland.

She was the Chief Executive of Citizens Advice Scotland working to protect peoples' rights and give voice to the most excluded individuals in Scotland, and was a leading anti-apartheid campaigner and Chief Executive of the Scottish Refugee Council.



Professor Duncan MacLennan CBE

Duncan is an international expert on the development of cities, the renewal of neighbourhoods and the economics of housing. After a long career at the University of Glasgow, where he directed the Centre for Housing and Urban Research (1982-1996), the ESRC Cities Programme (1996-1999) and the Centre for Public Policy on Regions, he worked in senior government and academic posts in both Australia and Canada. After moving to Canada in 2005 he held a joint appointment as Professor of Urban Economic Policy at the University of Ottawa and as Chief Economist at the Federal Department for Infrastructure.

Duncan has advised governments on housing policy in the UK, Poland, France, Sweden, Ireland, New Zealand, Canada and Australia. He has also served as Principal Consultant to the OECD. In 1997, he was awarded a CBE in recognition of his contribution to housing and renewal policies in the UK and is also an honorary member of both the UK Royal Town Planning Institute and the Chartered Institute of Housing.



Iain Macwhirter

Iain is the award-winning political commentator for the Sunday Herald and the Herald. Born in London but raised in Edinburgh, he joined the BBC straight from Edinburgh University, where he was doing a post-graduate degree in politics, and became the BBC's Scottish Political Correspondent in 1987. In 1989 he moved to London to present political programmes for BBC network television such as 'Westminster Live' and 'Scrutiny'. He was a member of the Westminster Lobby for nearly ten years. Iain also presented one-off documentaries for BBC 2, on politically related themes, including one on the House of Commons art collection, and was a co-presenter on budget and election programmes.

While still a BBC presenter in the early 1990s, Iain began writing political commentaries. He was, successively, political columnist for Scotland on Sunday, The Scotsman, and The Observer. In 1999 he returned to Scotland to launch the Sunday Herald – the first new quality Sunday newspaper in nearly 20 years – and to present the BBC's 'Holyrood Live' TV programmes from the Scottish Parliament, thrice weekly, until 2006. He continues to appear as a political commentator on BBC programmes on a regular basis. Iain has also been a regular contributor to Finance magazine and the New Statesman and writes for the Guardian online and in print. He has contributed to numerous books and journals about the constitution and is a frequent contributor to public debates and conferences. He is also Rector of the University of Edinburgh.



Ian McKay

Ian is Director of Scottish Affairs for the Royal Mail Group (Royal Mail, Post Office Ltd and Parcelforce Worldwide) in Scotland, joining the company in August 2003. He is a member of the Scottish Committee of the Institute of Directors and the Executive Committee of the Scottish Council for Development and Industry. Ian is also a member of the UK NHS Pay Review Body and sits on the Board of Lothian Buses.

He was previously a Trustee of the Edinburgh UNESCO City of Literature Trust and a member of the Advisory Group of Arts & Business in Scotland. Before joining Royal Mail Group, Ian was Assistant General Secretary of the Educational Institute of Scotland (EIS), Scotland's largest teacher professional association.



Stewart Murdoch

Trained in Urban and Regional Planning, Community Education and Management, Stewart worked for 15 years in Glasgow for not-for-profit organisations.

He was involved in setting up the Community Central Halls, a multi-funded community development trust which provided a wide range of services, including the management of a 600-seat concert hall and theatre and was the Trust Director between 1980 and 1990.

In 1990, he moved to Tayside as Regional Community Education Organiser and following local government reorganisation in 1996, he was appointed Manager of Neighbourhood Resources & Development for Dundee City Council.

In 2003, Stewart was appointed as Head of Communities Department and in September 2005 became Director of Leisure, Arts and Communities for Dundee City. He chairs the Dundee Cultural Agencies Network and the Learning & Culture Theme of the Dundee Partnership and has served on a number of national committees for the Scottish Government and CoSLA. Stewart has several years experience as an Associate HMIe and currently chairs the Scottish Community Development Centre and is the Scottish representative on the boards of the Community Development Foundation and the International Association for Community Development.



Martin Sime

Martin is Chief Executive of SCVO (Scottish Council for Voluntary Organisations), a post he has held for 19 years. SCVO is the umbrella body for the voluntary sector in Scotland and has over 1300 members.

SCVO assists the sector to represent its interests to the public and government, provides common services and manages capacity building programmes.

Martin is a Board member of ACOSVO, the Chief Officers Network and has also served on the New Deal Task Force and the Expert Panel on Procedures for the Scottish Parliament. He is currently Treasurer of Civicus, a global civil society network, and is an Advisor to the Christie Commission on Public Service Reform.

Prior to joining SCVO Martin worked for 10 years in the mental health field, latterly as Director of the Scottish Association for Mental Health (SAMH). Prior to this he has been an academic researcher and a sheep farmer on the Isle of Lewis.



Douglas Sinclair CBE

Douglas was appointed the Chair of the Scottish Consumer Council in May 2006 and Chair of Consumer Focus Scotland in January 2008. Consumer Focus Scotland was formed from a merger of Scottish

Consumer Council, Energywatch Scotland and Postwatch Scotland.

Douglas has held posts as Chief Executive at Ross & Cromarty District Council, Central Region Council, COSLA and Fife Council. Douglas is also Deputy Chair of the Accounts Commission of Scotland.



Dr Karen Turner

Karen is a Reader in the Division of Economics at Stirling Management School (University of Stirling). She is also a Research Associate of the Fraser of Allander Institute (Department of Economics,

University of Strathclyde) and has just completed her role as one of six Climate Change Leadership Fellows funded by the Economic and Social Research Council (RES-066-27-0029).

Since her PhD studies at the University of Strathclyde in 1999-2002, Karen's main research area is investigating and modelling energy-economy-environment interaction in and between regional and national economies. Her current research focuses in particular on accounting for pollution embodied in trade flows to facilitate the measurement of carbon footprints, and on investigating the source and magnitude of rebound effects that may erode (or entirely offset) energy savings from increased energy efficiency.

Appendix 2: List of Technical Annexes Prepared for the Scottish Round Table

List of Annexes

Annexe 1: Prosperity without Growth? Summary

A summary report of the key arguments in Professor Tim Jackson's report. It examines the connections and conflicts between sustainability, growth, and wellbeing.

Annexe 2: Evaluating Scotland's Approach to Measurement of Progress

A review of the National Performance Framework against seven tests established by SDC. Includes suggestions of how the NPF could be adapted, to help guide work on any successor frameworks.

Annexe 3: Other Relevant Work on Measuring Progress

Outline of other work reviewed by our Round Table, including Scotland's Sustainable Development Indicator Set and the Government's Additional Measures of Progress Group.

List of Technical Papers

1.1: Introduction & Analysis to the Stiglitz Report

Introduction to the Stiglitz Report, its conclusions and arising questions to the Round Table.

1.1.1: GDP Issues

Annex to Paper 1.1, a more in-depth look at the strengths and weaknesses of GDP as a measure of economic well-being.

1.1.2: Quality Of Life

Annex to Paper 1.1, a brief outline of three different conceptual approaches set out in the Stiglitz Report to measure quality of life: subjective well-being, capabilities and fair allocations.

1.1.3: Sustainability

Annex to Paper 1.1, an analysis of different approaches to including valuation of the environment into sustainability indicators.

1.2: Monitoring Performance – NPF Review

Analysis of the alignment of the NPF and sustainable development, and the NPF's effectiveness in supporting moves towards a more sustainable Scotland.

2.1: NPF vs. Stiglitz

A review the structure of the NPF against the 12 recommendations set out in the Stiglitz Report, as reviewed at the Round-Table's first meeting.

2.1.1: NPF Summary

Outline of the structure of Scottish Government's NPF.

2.2: The Capabilities Approach

Outline of Sen's approach, which conceives a person's life as a combination of various functionings and capabilities.

2.3: EHRC's Equality Measurement Framework

Summary of the Commission's Equality Measurement Framework and an outline of how the Commission and others are using it as a tool for change.

3.1: Growth in Transition

Short examination of why current models of economic growth threaten longer term well-being, economic performance and environmental conditions and summary of international initiatives to explore this further.

3.2: Mental Health and Quality of Life

A review of existing Scottish Government analysis of mental and emotional well-being.

These papers can be viewed at the Carnegie UK Trust website: www.carnegieuk.org

Appendix 3: Endnotes

- 1 Speech by Joseph Stiglitz at the launch of the Report by the Commission on the Measurement of Economic Performance and Social Progress. See www.stiglitz-sen-fitoussi.fr/en/index.htm
- 2 Stiglitz, J. Sen, A. & Fitoussi, J.P. (2009) Report by the Commission on the Measurement of Economic Performance and Social Progress. See www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf
- 3 In partnership with the then Sustainable Development Commission Scotland
- 4 President Sarkozy, speaking at the launch of the Report by the Commission on the Measurement of Economic Performance and Social Progress. See www.stiglitz-sen-fitoussi.fr/en/index.htm
- 5 Sustainable Development Commission (SDC) (2009) Prosperity without Growth?, p.55
- 6 Measuring What Matters conference report (2009). A report on the conference held on 27 March 2009 at West Park Conference Centre, Dundee. See www.iacdglobal.org/events/measuring-what-matters-conference-0
- 7 Jackson, T. (2008) *What politicians dare not say*. New Scientist, 18th October 2008, pp.42-43
- 8 Evidence of the importance of relative income was first highlighted by Richard Easterlin (1972). For more recent confirmation see Easterlin 1995, Dolan et al 2006 & 2008
- 9 See for example, Wilkinson, R. (2000) *Mind the gap – an evolutionary view of inequality and health*. London: Weidenfeld and Nicholson, or Dittmar, H. (2008) *Consumer Culture, Identity and Well-Being*, The European Monographs in Social Psychology series.
- 10 Data taken from statistics compiled for the Human Development Report, available online at the UNDP website: <http://hdr.undp.org/en/statistics>
- 11 Data taken from statistics compiled for the Human Development Report. See above
- 12 New Scientist (2008) Special Report: How our economy is killing the earth. See www.newscientist.com/article/mg20026786.000-special-report-how-our-economy-is-killing-the-earth.html. Data shown in the graph is available from www.newscientist.com/article/dn14950-special-report-the-facts-about-overconsumption.html
- 13 Smith, A. (1776) An Inquiry into the Nature and Causes of the Wealth of Nations
- 14 SDC (2009). Source data from the Office of National Statistics
- 15 Intergovernmental Panel on Climate Change (IPCC) (2007), Fourth Assessment Report, p4
- 16 US Energy Information Administration (2008) International Energy Annual, Table 1.8
- 17 SDC (2009) p.55. Source data from the EIA (2008), IPCC (2007) as well as the International Monetary Fund and the United Nations
- 18 Stern, N. (2007) The Economics of Climate Change, HM Treasury. In his 2007 Report Stern concluded that meeting a 550ppm stabilisation target would cost 1% of GDP. He rejected the possibility of achieving a more stringent target because it would be “very difficult and costly to aim to stabilize at 450ppm”. He later revised this view, estimating that the cost of meeting a 500ppm target would be up to 2% of GDP. Price Waterhouse Coopers have estimated the costs of achieving a 50% reduction in global carbon emissions at 3% of global GDP. For Stern’s revised estimate see: ‘Cost of tackling global climate change doubles, warns Stern’, *The Guardian* 26 June 2008 (www.guardian.co.uk/environment/2008/jun/26/climatechange.scienceofclimatechange). For PwC estimate see: ‘Time for deeds not words’, *The Guardian*, 3 July 2008 (www.guardian.co.uk/environment/2008/jul/03/carbonemissions.climatechange)
- 19 SDC (2009) p.52. Source data from the US Geological Survey Statistical Summaries.
- 20 Stiglitz, Sen & Fitoussi (2009) p.7

- 21 Stiglitz, Sen & Fitoussi (2009) p.7
- 22 See for example Daly, H. *Steady-State Economics* (1977). For a current summary of Daly's work see 'A Steady State Economy': www.sd-commission.org.uk/publications.php?id=775
- 23 Particularly influential has been the work of Wilkinson, R. & Pickett, K. (2009) *The Spirit Level – why more equal societies always do better*. London: Penguin
- 24 Stiglitz, Sen & Fitoussi (2009) p.9
- 25 Stiglitz, Sen & Fitoussi (2009) p.11
- 26 Stiglitz, Sen & Fitoussi (2009) p.12
- 27 Stiglitz, Sen & Fitoussi (2009) p.12
- 28 For more detailed analysis see Technical Paper 1.1: Introduction & Analysis to the Stiglitz Report.
- 29 For example, see Defra (2009), 'Sustainable development indicators in your pocket'. London: Department for the Environment, Food and Rural Affairs. Available at <http://www.defra.gov.uk/sustainable/government/progress/data-resources/sdiyp.htm>
- 30 Jackson, T. (2008) "Where is the 'well-being dividend'? Nature, structure and consumption inequalities", *Local Environment*, 13:8, 703 -723
- 31 Wilkinson, R., Pickett, K. (2009)
- 32 Satellite Accounts are defined by the UK's Office for National Statistics as a Framework that enables attention to be focused on a certain field or aspect of economic and social life. They are produced in the context of national accounts but are more flexible as they allow concepts, definitions, accounting rules and classifications to be changed, where it improves analysis. For example, Household Satellite Accounts can measure the value of unpaid work in households. For example UK Household Satellite Accounts are available at <http://www.statistics.gov.uk/hhsa/hhsa/index.html>
- 33 Robert Kennedy was speaking at the University of Kansas in March 1968. Kennedy was describing Gross National Product rather than GDP, but the quote is still highly appropriate. The USA used GNP rather than GDP until 1991 as its primary measure of total economic activity. A fuller quote would be:
- "Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. 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 armoured 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. And it can tell us everything about America except why we are proud that we are Americans."
- 34 Defra (2009), or Wilkinson, R. (2000) *Mind the gap – an evolutionary view of inequality and health*. London: Weidenfeld and Nicholson
- 35 Stern, N. (2007)
- 36 Taylor, M. (2010) *Twenty-first century enlightenment*, RSA, pp.24-25
- 37 Scottish Government (2007) *Scottish Budget Spending Review*, Chapter 8
- 38 Scottish Government (2007) p45

- 39 See Annexe 3: Other Relevant Work on Measuring Progress. This includes: the Scottish Government's 2006 Additional Measures of Progress group, its 2006-2009 Sustainable Development Indicator Set and relevant work of its Council of Economic Advisers. From the UK, we considered the UK Office of National Statistics' work on measures of well-being, Defra work on sustainable development indicators, and the Equality and Human Rights Commission's Equality Measurement Framework. From outside government we looked at relevant work of the New Economics Foundation, the Glasgow Centre for Population and Health, and Oxfam Scotland.
- 40 Scottish Government (2008) First Annual Report of the Council of Economic Advisers, December 2008
- 41 Scottish Government (2008)
- 42 Scottish Government (2009) The Scottish Government's Response to the First Annual Report of the Council of Economic Advisers
- 43 Yes Minister (1982) *The Whisky Priest*. Exchange between Jim Hacker MP and Sir Humphrey Appleby.
- 44 Scottish Government (2007) p.44
- 45 Scottish Government (2007) p.44
- 46 Sen, A. (1998) 'The living standard'. Chapter 16 in Crocker, D. And T. Linden (eds) (1998) *The Ethics of Consumption*. New York: Rowman and Littlefield, 287-311.
- 47 See Annexe 2: Evaluating Scotland's Approach to Measurement of Progress
- 48 EHRC (2009) 'Developing the Equality Measurement Framework: selecting the indicators', London: Equality and Human Rights Commission. Also see the Technical Paper provided by the EHRC for the Round Table's 2nd meeting
- 49 See www.ons.gov.uk/well-being. Also see ONS (2010) 'There is more to life than GDP but how can we measure it?', *Economic & Labour Market Review*, Vol4 No9. London: Office for National Statistics
- 50 This part of the Stiglitz Report is based heavily on **Amartya Sen's Capabilities approach**. More information on this is contained in a Technical Paper submitted to the Round Table's 2nd meeting.
- 51 Stiglitz, Sen & Fitoussi (2009), p.15
- 52 See for example the Austrian International Conference 'Growth in Transition/Wachstum im Wandel' (www.growthintransition.eu/conference). Also relevant is the EU Commission's 2009 report 'GDP and beyond: Measuring progress in a changing world' (www.beyond-gdp.eu)
- 53 Stiglitz, Sen & Fitoussi (2009), p.15
- 54 New Economics Foundation (2011) *Measuring our progress: the power of well-being*
- 55 Scottish Government (2008) *Well? What do you think? 4th National Survey of Public Attitudes to Mental Wellbeing and Mental Health Problems*
- 56 Todorov, T. (2009) *In Defence of the Enlightenment*. Atlantic Books. Quoted in Taylor M. (2010)
- 57 Holgate, M. (2010) *The World Environment in 2070*. Lecture to the 1970 Club, Edinburgh, 28th September 2010
- 58 Kuznets, S. (1934) *National Income, 1929-1932*. 73rd US Congress, 2nd session, Senate document no.124, p.7
- 59 Mill, J.S. (1848) *Principles of Political Economy*
- 60 Taylor, M. (2010) p.27
- 61 Smith, Alexander (1863) *Dreamthorp: Essays written in the Country*

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Andrew Carnegie House
Pittencrieff Street
Dunfermline
KY12 8AW

Tel: +44 (0)1383 721445

Fax: +44 (0)1383 749799

Email: info@carnegieuk.org

www.carnegieuktrust.org.uk



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Scottish charity SC 012799 operating in the UK and Ireland
Incorporated by Royal Charter 1917

ISBN 978-0900259814



9 780900 259814