

ADVICE PAPER

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RESPONSE TO THE UK PARLIAMENT ENVIRONMENTAL AUDIT COMMITTEE'S INQUIRY ON 'ALIGNING THE UK'S ECONOMIC GOALS WITH ENVIRONMENTAL SUSTAINABILITY'.

Gross Domestic Product (GDP) is an effective measure of national income, in its narrow sense as measuring economic output, and has demonstrable utility in informing macro-economic policy decisions and the efficacy of key policy interventions over time. However, GDP is not a measure of the achievement or otherwise of other policy objectives.

This inquiry provides an opportunity to reassess the current policy framework and determine whether it is fit for purpose. We contend that, within the current framework, there are too many objectives that are described too diffusely. To help provide the appropriate context for assessing policies and programmes, a set of clear, limited, and conceptually rigorous governmental objectives should be developed, as to some extent has been attempted by the Scottish Government in the development of the National Performance Framework (NPF). As discussed below, this requirement of clarity applies more widely than just for the objective of environmental sustainability.

The achievement of some objectives may be best assessed in terms of output, as measured by GDP or Gross Value Added (GVA). In the context of other policy objectives, such as inclusive growth, levelling-up, reaching net zero emissions, the just transition, and the wellbeing economy, other measures will be appropriate, in some instances these will need to be used alongside GNP and in other cases in place of GNP.

We would caution against any search for a single new replacement measure. Policy decisions are judgements (decisions made with uncertainty), rather than calculations related to an agreed single metric. The joint consideration of multiple objectives would be best improved by developing coherent policy narratives and missions, before assembling and using available evidence to monitor progress made against agreed and explicit objectives and subsequently inform decision-making.

Absolute clarity is required on the objectives *per se*, along with agreement on how to measure, and, if feasible, quantify the attainment of these objectives. One suggested approach would be to develop a suite of alternative measures that can be widely understood and can command enough support to permit such measures to be placed alongside GDP in the decision-making process. This is much preferred to the search for one all-embracing measure; and should also assist in the placing of more emphasis on addressing longer-term goals.

Summary

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Before any decision is made on policies, taxes, or major investments (including assessment of options) an assessment of impact against agreed objectives should be undertaken. Decisions should be taken after an explicit and transparent consideration of the extent of 'benefits' (positive or negative) against each objective. This will aid decision-making by making clear to all the level of achievement, or otherwise, of multiple or co-benefits.

To be effective, the number of agreed objectives will have to be relatively small and widely agreed – unlike the NPF in Scotland, which is a valuable experiment, but has had limited policy impact and received minimal public attention so far.

Finally, it is imperative that any agreed objectives, and the methods for their measurement, are reviewed at regular intervals.

Introduction

- 1 The Royal Society of Edinburgh (RSE), Scotland's National Academy, welcomes the opportunity to provide its views on the UK Parliament Environmental Audit Committee's inquiry on aligning the UK's economic goals with environmental sustainability. Our response was facilitated through an RSE working group which included RSE Fellows and members of the Young Academy of Scotland with significant practitioner and research experience across the economy, environment, biodiversity, health and wellbeing sectors. In doing so, our response builds on similar ideas raised in previous RSE policy advice papers, including:
- Just Transition Commission Interim Report:
 A Response to Scottish Government (June 2020)¹
- The Environment, Climate Change and Land Reform Committee: Green Recovery (August 2020)²
- Response to the Scottish Parliament Finance and Public Administration Committee:
 Scottish Budget 2022/23 and Fiscal Framework (August 2021)³
- Response to the Scottish Government's Tax Policy and the Budget Consultation (October 2021).⁴

- Q1. How does the way the Government currently uses GDP in setting macro-economic policy affect the development of environmental policy and of cross-departmental action to achieve the UK's environmental goals?
- 2 The RSE acknowledges that GDP is an established and effective measure of economic activity which has demonstrable utility in informing macro-economic policy decisions and aiding the identification of longitudinal trends.
- 3 The development of GDP from the Tableau Economique through to more sophisticated contemporary measures of national income has required a considerable amount of time and intellectual effort from economists, statisticians and academics, which should not be underestimated.
- 4 However, GDP offers a relatively narrow assessment of economic output. Indeed, there are many important overall objectives and contributions to wider economic welfare that current measures of GDP do not capture. Examples here include inequality, the role (very often undertaken by women) as carers, and environmental degradation. We therefore contend that the current policy framework requires revision to ensure that the full set of agreed and specified objectives are taken into account in decision-making, and any negative externalities incurred through attempts to achieve increased GDP are not overlooked.

¹ https://rse.org.uk/expert-advice/advice-paper/just-transition-commission-interim-report/

² https://rse.org.uk/expert-advice/advice-paper/green-recovery/

³ https://rse.org.uk/expert-advice/advice-paper/rse-response-to-scottish-budget-2022-23-and-the-fiscal-framework/

 $^{{\}tt 4~https://rse.org.uk/expert-advice/advice-paper/tax-policy-and-the-budget/}$

⁵ As highlighted by Dasgupta, P. (2021) The Economics of Biodiversity: The Dasgupta Review; see also Stiglitz, J.E. (2009) GDP fetishism. *The Economists' Voice*, 6(8) [online] Available at: https://www.degruyter.com/document/doi/10.2202/1553-3832.1651/html; and Fitouss, J.P., Sen, A.K. and Stiglitz, J.E. (2011) *Mismeasuring Our Lives: Why GDP Doesn't Add Up*, The New Press, New York.

- 5 Similarly, we contend that calls for a more all-encompassing measure of national income that gives greater emphasis to environmental factors underplay the important role Environmental Impact Assessments play in ensuring that investment and policy decisions account for environmental impacts. As a result, rather than developing an all-encompassing measure of national income to address environmental objectives, we contend that the creation of a suite of performance indicators would be a more effective solution.
- Q2. How could GDP or other current measures of macro-economic activity, more fully account for human and natural capital assets? What are the challenges and/or opportunities in moving to a way of measuring economic progress which takes greater account of such assets?
- **Q4.** How could Professor Dasgupta's conception of 'inclusive wealth' be made operational as an economic measure?
- **6** As introduced in point 5, we believe it to be difficult, both conceptually and practically, to achieve widespread agreement on a conceptual measure of GDP that incorporates various environmental factors (such as those explored by Dasgupta) in a way that commands widespread agreement. 6 A great deal more work would need to be done to generate the data and methodology required to produce a practical measure that would meet the statistical standards required for a measure of national income to be classified as a national statistic. Given the urgency of the environmental and biodiversity crises we face, resources could be used more effectively to develop a suite of performance measures, and anchoring policy developments to these through Environmental Impact Assessments.
- 7 A preferred approach is to develop a set of indicators, within which Government can clearly articulate its relative preferences. This should be underpinned by the development of coherent policy narratives and missions, followed by the monitoring of progress through the assembly and use of relevant evidence. This approach acknowledges that policy decisions

- are judgements made in the context of uncertainty, as opposed to precise calculations determined by a singular agreed metric. Quantitative measures (often available nationally) are very valuable, if they are feasible and relevant to the policy objectives. However, there is also value in more qualitative evidence, even if only available more locally (e.g., from local case studies or specific groups of people) which illustrate experiences of relevant issues and the ways they may be addressed by policies.
- 8 Crucially, any alternative or reconfigured measures of national welfare must meet the criteria established by the Office for National Statistics (ONS) and the Royal Statistical Society for constituting a national statistic. This requires clearly agreed and reliable data sources and procedures for collecting and processing that data reliably. This would ensure that any potential statistical glitches are identified and reported in a timely manner, and that the resulting statistic meets standards for statistical reliability at aggregate, sub-national, or constituency levels. Such requirements are essential to avoiding complex annual oscillations in figures which would be difficult to communicate to the public in an accessible manner.
- 9 Similarly, these measures must resonate with the public and command enough support to counter the emphasis that is currently placed on increasing economic output at all costs. Some specific policy interventions may potentially have an adverse impact in terms of GDP but will still be seen as appropriate when wider policy objectives are considered, which may be better measured by other indicators. The adoption of any objectives should be accompanied by specific metrics/performance indicators that adhere to a set of established rules, such as the European Commission's proposal that metrics should be Relevant, Accepted, Credible, Easy and Robust, whilst also, we would contend, being Few in number. 7 An example of such a metric might be an account and target for material flows through the economy, such as the extraction and use of raw materials, as an indicator of performance against the UK Government's recent Circular Economy Package.8 Circularity is a key element in delivering environmental sustainability.

⁶ Samuelson, P. A. (1949) Evaluation of Real National Income, Oxford Economic Papers, 2(1): 1-29 [online] Available at: https://academic.oup.com/oep/article-abstract/2/1/1/2360396?redirectedFrom=fulltext.

⁷ European Commission (2019) A Starting Guide on Creating KPIs and Measuring Success for PES [online]
Available at: https://op.europa.eu/en/publication-detail/-/publication/91e255c0-e5b2-11ea-ad25-01aa75ed71a1/language-en.This RACER+F framework would (1) provide the context for more rational, considered policy interventions which account for the negative consequences of striving for increased GDP, (2) acknowledge the contribution of often marginalised roles, such informal carers, to the economy, and (3) tackle negative externalities such as climate change, biodiversity loss, socio-economic disparities, and health inequalities. Crucially, this approach could be applied at global, regional, national, and sub-national levels, demonstrating the scalability of such a measure.

³ UK Government (2020) Circular Economy Package policy statement [online] Available at: https://www.gov.uk/government/publications/circular-economy-package-policy-statement.

- 10 Social Accountability Matrices and Social Cost-Benefit Analyses may also be of value in some instances to analyse the costs/benefits and winners/losers of specific policy interventions, and hence provide greater transparency and clarity on the inherent complexities embedded within the policy making process. Crucially, however, such processes should consider the importance of non-monetised benefits, such as biodiversity and ecosystem services, to overall wellbeing.
- 11 Indeed, to more fully account for natural capital assets, and specifically the importance of achieving net zero emissions targets, the potential of international climate change and biodiversity summits (such as CoP26 and CoP15 respectively) as platforms for radical policy change should be maximised. For example, the draft agreement of CoP15 (15th United Nations Biodiversity Conference of the Parties) acknowledges the seriousness of the biodiversity crisis, and underscores the need to fully integrate 'biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies, accounts, and assessments of environmental impacts at all levels of government and across all sectors of the economy, ensuring that all activities and financial flows are aligned with biodiversity values.'10 It is essential that this thinking is reflected in domestic policy decisions.
- 12 Aside from natural capital, current economic measures of macro-economic prospects should also take account of other stocks of capital, such as (1) Knowledge (the value of radical new ideas) and (2) Innovation (as described in the UK Innovation Strategy). However, if such factors are to be included in any measure of prosperity, greater clarity will be required around how the macro-economic outcomes of such economic developments will be assessed.

- 13 In addition, any measure of macro-economic economic activity which more fully accounts for human and natural capital assets should draw from existing attempts to do so. For example, the use of wellbeing frameworks to refocus Government strategic planning in Wales to achieve specific outcomes beyond conventional economic outcomes is a case in point. This approach underscores how 'triple win' policy interventions can improve current and future wellbeing whilst also (1) encouraging high-quality, inclusive green jobs (2) investing in social infrastructure (3) broadening the uptake of lifelong learning to those who need it most (4) strengthening health promotion and prevention (5) raising the wellbeing of disadvantaged children and young people (6) actively investing in reinforcing trust in others and in institutions.12
- 14 These elements could be incorporated within the Scottish Government's draft fourth National Planning Framework (NPF4), currently under development, which is envisioned to work with the Scottish Government's wider programmes and strategies (including infrastructure and economic investment) to contribute to a number of high level outcomes, including: (1) meeting the housing needs of people living in Scotland including the needs of elderly and disabled people (2) increasing the population of rural areas of Scotland (3) improving equality and eliminating discrimination (4) meeting any targets relating to the reduction of emissions of greenhouse gases (5) securing positive effects for biodiversity.¹³

⁹ New Economics Foundation (2013) Economics in policy-making 4: Social CBA and SROI [online] Available at: https://www.nefconsulting.com/wp-content/uploads/2014/10/Briefing-on-SROI-and-CBA.pdf.

¹⁰ For further information on this, please see p.96 of UNEP (2019) Global Resources Outlook 2019: Natural Resources for the Future We Want [online] Available at: https://wedocs.unep.org/handle/20.500.11822/27517.

⁽¹⁾ Under knowledge, one example of a radical new idea pertains to the development of mRNA vaccines (2) The strategy outlines priorities for developing an innovation led economy, and a vision for the UK to be a global hub of innovation by ensuring that research, development, and innovation institutions serve the needs of businesses and places across the UK. For more information, see: UK Government (2021) UK Innovation Strategy: leading the future by creating it [online]

Available at: https://www.gov.uk/government/publications/uk-innovation-strategy-leading-the-future-by-creating-it; see also: Scottish Government (2017) Scotland CAN DO: an innovation action plan for Scotland [online] Available at: https://www.gov.scot/publications/scotland-innovation-action-plan-scotland/.

¹² OECD (2020) How's Life? 2020 [online] Available at: https://www.oecd-ilibrary.org/economics/how-s-life/volume-/issue-_9870c393-en; see also, What Works Wellbeing (2021) Using a wellbeing approach to build forward [online]
Available at: https://whatworkswellbeing.org/blog/using-a-wellbeing-approach-to-build-forward/?mc_cid=980901f9f9&mc_eid=UNIQID.

¹³ Scottish Government (2021) Scotland 2045: fourth National Planning Framework – draft: integrated impact assessment – non-technical summary [online] Available at: https://www.gov.scot/publications/scotland-2045-scotlands-fourth-national-planning-framework-draft-integrated-impact-assessment-non-technical-summary/documents/.

- 15 In developing a more holistic assessment of macro-economic activity, and to improve inequality and tackle discrimination, the UK Government should utilise their forthcoming White Paper on the 'Levelling up' strategy as an opportunity to refocus their strategy through enhanced clarity on specific objectives and how achievements will be measured. This should assist the development of a cost-effective - relative to agreed objectives policy approach which counters geographical and socio-economic inequalities. This would also permit heightened transparency on levelling up funding decisions, policies calling for increased investment in social infrastructure and public services (such as community centres and childcare), and the funding of preventative health services, alongside a focus on improving employment, skills, and education in deprived areas.14
- **Q7.** How might the public, businesses, financial institutions, and the financial system react to any move away from GDP as the primary indicator of prosperity? What challenges could this present for policymakers, and how might these be overcome?
- 16 All policies must be explained and justified including a move away from a focus on economic output as the sole economic objective. A series of public communication campaigns may be required to explain the justification for a move from a focus on GDP alone to the introduction of a suit of alternative measures.¹⁵
- 17 The UK Government should consider how individuals and private sector organisations can be persuaded to make decisions which also reflect multiple, agreed, objectives. In some instances, this may necessitate Government intervention in the market to adjust prices, imposed by decision-makers (for example through price-based carbon trading schemes which align standard commercial considerations with high-level environmental goals) and lead to outcomes more likely to be in line with the agreed set of policy objectives. Crucially, more work will be needed to gain political consent on key assessment criteria for policies, including the development of good alternative metrics that command recognition, so that the policies can be shown to be based on sound evidence relating to relevant criteria in addition to price-based indicators. The Government should also focus on finding ways of better aligning individual incentives with net zero targets for society as a whole, to both stimulate and motivate behaviour change and allow individuals to self-assess their own performance relative to important collective priorities.
- 18 Finally, the UK Government should draw from international examples of moving away from GDP, as exemplified by New Zealand's progressive Wellbeing Budget, which rather than relying on purely economic metrics, includes broader outcomes such as human health, safety, and flourishing as metrics to assess the relative success of policies. ¹⁶

¹⁴ UK Parliament Public Services Committee (2021) Refocus 'levelling up' strategy funds, peers tell government. [online]
Available at: https://committees.parliament.uk/committee/430/public-services-committee/news/155286/refocus-levelling-up-strategy-and-funds-peers-tell-government/.

¹⁵ Stiglitz, J.E. (2009) GDP fetishism. The Economists' Voice, 6(8) [online] Available at: https://www.degruyter.com/document/doi/10.2202/1553-3832.1651/html.

Further information on New Zealand's 2021 Wellbeing Budget is available online at: https://www.treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2021-securing-our-recovery-html#:~:text=Wellbeing%20Budget%202021%3A%20 Securing%20our%20recovery%20highlights&text=tackling%20inequality%20and%20child%20poverty,meet%20their%20basic%20material%20needs

${\it Additional Information}$

Any enquiries about this Advice Paper should addressed to Alfie Gaffney (email: agaffney@therse.org.uk).

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