

**IPPR Commission on Economic Justice** 

# Measuring What Matters

Improving the indicators of economic performance

Discussion Paper Catherine Colebrook

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### The IPPR Commission on Economic Justice

# The IPPR Commission on Economic Justice is a landmark initiative to rethink economic policy for post-Brexit Britain.

Launched in November 2016, the Commission brings together leading figures from across society – from business and trade unions, civil society organisations and academia – to examine the challenges facing the UK economy and make practical recommendations for reform.

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The Commission's Interim Report, *Time for Change: A New Vision for the British Economy*, was published in September 2017. Its Final Report will be published in autumn 2018.

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### Summary

Over recent years there has been increasing concern among economists and statisticians, and a variety of commentators and organisations in civil society, about whether the current range of economic indicators accurately measure key aspects of economic behaviour and performance.

This discussion paper sets out two key propositions on the way we measure the economy and define economic success:

# 1. New technologies, business models and economic goals require significant improvements in the measurement of key economic statistics.

We divide the key areas for improvement into three categories:

#### **Better measurement**

The Office for National Statistics (ONS) is working hard to address a range of measurement challenges, but the following issues merit further attention:

- The changing quality of goods and services. Currently, quality change for certain products, and technological products in particular, is likely to be understated, leading to an underestimation of both gross value added (GVA) and productivity.
- **'Intangible' investment.** A richer understanding of new forms of investment could help to solve the puzzle of low productivity growth since the financial crisis.
- The impact of digitalisation. Swathes of previously monetised activity have moved out of the 'production boundary' captured by gross domestic product (GDP). We may need to measure them in other ways.
- **Multinationals' capital flows.** Profit shifting by companies to minimise UK tax liabilities is likely to be increasing the current account deficit, and reducing GDP. These effects need to be better understood.

#### **Better data**

Significant improvement is needed in available data on the nature and distribution of the UK's wealth, and on regional economic performance. The Digital Economy Act 2017, which gives new data-sharing powers to government departments, could facilitate this.

#### **Better policy evaluation**

The quality of policy evaluation work across government is variable, with most departments outsourcing their evaluations to some extent. Tax reliefs are accorded less scrutiny than spending – an imbalance that has no justification. Robust evaluation is particularly important in the context of the government's new, more overtly interventionist approach to industrial strategy.

#### To address these issues we propose:

- the ONS should publish an evaluation of its current programme of economic statistics development, as a way of proving that further investment in our economic statistics, beyond the current investment programme, would represent value for money
- the National Audit Office should review the use of commissioning to carry out evaluation across government, and propose improvements to the current mix of approaches taken by departments

 the Cabinet Office should establish a What Works Centre for industrial strategy, with the aim of building an evidence base for industrial policies, and ensuring that any new policies are properly evaluated.

# 2. New indicators of economic outcomes can better define and measure the goals of economic policy.

Currently, the focus on a small number of production indicators, notably GDP, narrows economic debate and perpetuates the myth that economic growth encompasses all other economic goals. GDP has a number of shortcomings if the goal is to understand societal welfare: it excludes unpaid work; does not take account of environmental resource use; ignores distributional concerns; and because it does not consider who is gaining from growth, is only weakly correlated with wellbeing.

A number of different approaches have been taken to correct for these shortcomings, and to produce alternative, broader measures of output and welfare. These include adjustments to GDP, such as the Genuine Progress Indicator, and subjective measurements of personal wellbeing or happiness.

While some improvements to GDP can definitely be made, we conclude that it is important to retain it as a measure of market production. Subjective wellbeing surveys provide valuable information but are not in themselves substitutes for production and other indicators.

Consistent with previous academic work on this topic, we therefore argue that production, wellbeing and sustainability indicators should be tracked as distinct variables, and reviewed in tandem through the use of a 'dashboard' of multiple indicators.

**We propose a dashboard of five outcome indicators,** to be updated annually, which would directly measure our progress against the outcomes the IPPR Commission on Economic Justice (and the public) wants the economy to deliver – broadly-shared prosperity, justice and sustainability.

Our chosen indicators are:

- 1. the distribution of the gains from growth
- 2. poverty among children and adults
- 3. the level of wellbeing, disaggregated by income
- 4. the gap between the median income of the poorest region of the UK and the richest
- **5.** the gap between projected carbon emissions and the cost-effective path to decarbonisation.

Together, these indicators reveal how broadly the economy distributes its rewards, whether it is succeeding at reducing poverty, whether people feel satisfied with their lives, and our progress at moving to an environmentally sustainable model of growth. These five indicators are not the only ways of measuring these goals. But between them we believe they would capture the current performance of the economy in achieving the outcomes that matter most.

To ensure that the government is committed to their improvement, we recommend that the Treasury publish a report alongside each annual update, assessing performance by each measure.

### Introduction

Economic indicators are the viewfinder through which we see our economy. If they only give us a partial – or worse, inaccurate – perspective on the way the economy is evolving, we will struggle to identify problems, and be in the dark about whether we've solved them.

Over recent years there has been increasing concern among economists and statisticians, and a variety of commentators and organisations in civil society, about whether the current range of economic indicators accurately measure both the key aspects of economic behaviour, and the economy's performance and success.

This discussion paper makes two propositions, which we put forward for debate:

- 1. New technologies, business models and economic goals require significant improvements in the measurement of key economic statistics. Measurement challenges are becoming more acute as our economy experiences rapid change. At the same time, there is an increased awareness that our geographical and wealth imbalances need to be better understood in order to be addressed – which requires better data. Finally, the prospect of an activist industrial strategy requires a more robust approach to policy evaluation than we have at present.
- 2. New indicators of economic outcomes can better define and measure the goals of economic policy. Currently, the focus on a small number of production indicators narrows economic debate and perpetuates the myth that economic growth encompasses all other economic goals. Instead, we propose a dashboard of indicators that directly measure our progress against the outcomes we want the economy to deliver – broadly shared prosperity, justice and sustainability. These new indicators would refocus the public's and policymakers' attention on a far broader measure of economic success.

The evidence and arguments for these propositions are gathered together in the following chapters. We welcome responses.

## 1. New technologies, business models and economic goals require significant improvements in the measurement of key economic statistics

The collection of accurate economic statistics is challenging, and becoming more so. Technological change means that the quality of products is improving rapidly, and that businesses are able to operate in new ways. Statistics agencies are therefore engaged in a continual process of catch-up to ensure that their measurement of the economy reflects reality – the UK's statistics authority, the Office for National Statistics (ONS), is no exception.

Emerging economic priorities also have implications for how we choose to measure and assess the economy. Wealth inequality is higher than income inequality and rising, but the quality of the available wealth data limits the certainty with which we can draw conclusions, and therefore take action to address it. In addition, although there is an awareness that regional economic inequalities must be tackled, in part through a new, more activist approach to industrial policy, an effective industrial strategy relies on robust policy evaluation and more granular, high-frequency regional data than is currently available.

The ONS is fully aware of these data and measurement challenges, and is midway through an extensive programme of reinvention, prompted by the independent review of economic statistics conducted for the government in 2016 by Charles Bean (Bean 2016). The ONS publishes its progress and plans in its annual Economic Statistics and Analysis Strategy (ESAS). We have taken the ONS's stated priorities for 2018–19 into account in deciding which measurement issues to focus on in this discussion paper (ONS 2018a).

We have broken down this issue into three categories relating to: measurement, data, and policy evaluation.

#### **BETTER MEASUREMENT**

#### Quality

There are three distinct but related problems in assessing the quality of the goods and services we consume. They are: how to measure the change in the quality of a product or service when that quality is changing rapidly; how to cope with the introduction of new products; and how to estimate the quality of service sector activity, including public services, when it is not directly observable.

#### Measuring quality change over time

To understand how the economy is changing over time, statisticians have to convert their estimate of GDP from a nominal value (the sum of all cash prices paid for goods and services) to a 'real' value (one that strips out price inflation). This depends on an accurate assessment of the proportion of any price rise which is attributable to a change in quality rather than a 'pure' price increase. This is clearly an easier task in the case of, say, a loaf of bread, the quality of which improves only gradually if at all, than for a mobile phone, which can change beyond all recognition over a short period of time.

Quality matters, because underestimating a quality improvement leads to an overestimate of the change in price of that good or service over time (or, in the case of data services, the real-terms price *decrease*). This leads to an *underestimate* of the gross value added (GVA), and therefore also the productivity, of the industrial sector that makes those products or provides those services (Coyle 2014).

Accurately assessing how much of a change in price can be attributed to a quality change, rather than a 'pure' price increase, has long been a challenge to statisticians. But the speed with which technologies are now evolving makes accurate quality measurement both more difficult and more important than ever (see box for an example).

#### The challenge of quality measurement - the example of telecoms

The 2016 Bean Review of Economic Statistics recommended that the ONS improve the way it accounts for quality when it calculates price inflation (Bean 2016). To that end, one of the first discussion papers to be released by the new Economic Statistics Centre of Excellence (ESCoE) focuses on measurement of quality (and therefore the true level of producer prices) in the telecommunications services sector – that is, the sector concerned with the transmission of data (Abdirahman 2017).

The ESCoE paper concludes that real prices of telecommunications services have experienced much larger falls than is currently assumed in national statistics: by between 35 and 90 percentage points in the period 2010–15.

Although this sounds dramatic, the ONS concludes that there are no implications for productivity or for the gross value added (GVA) of the economy as a whole. This is because the additional GVA created by the telecommunications services sector is 'netted off' against the GVA created by business users of those services (Heys 2018). However, it certainly would increase the GVA and productivity of the telecommunications services sector relative to the rest of the economy, which had looked puzzlingly low given advances in the sector.

The ONS is some way from incorporating this new intelligence into its producer price indices; further exploration (and a narrowing of the rather wide range for the deflator that the ESCoE paper presents) will be necessary first. But it suggests that detailed scrutiny by the ESCoE in the coming months and years will yield further such revelations, and in so doing, cause us to rethink the relative productivity of our industrial sectors.

#### New products

The emergence of new products presents an additional source of quality – and therefore price – mismeasurement. Although new products go straight into our measures of output as soon as firms start selling them, they only get included in price indices once they have reached a given level of prevalence in sales data.<sup>1</sup> The consequence is that measures of consumer and producer prices only start to reflect the price changes of these products once some of the price reduction (or quality improvement) has already happened. At any given time, our price indices therefore have an upward bias.

<sup>1</sup> http://ec.europa.eu/eurostat/statistics-explained/index.php/HICP\_methodology#Prices\_for\_ new\_products

More importantly, new products bring benefits to the consumer, either through increased choice, which is arguably a welfare gain in and of itself (Coyle 2014) or because they meet a need that was previously not being satisfied, or not being satisfied as well. This value is uncaptured by standard measures of income, GDP and prices – its impact is recorded only through increased expenditure, and then subsequent price movements, which either increase or reduce real incomes.

#### Measuring the quality of services, including public services

Services now account for around 80 per cent of economic output, with manufacturing as a proportion of GDP falling from 28 per cent to 10 per cent between 1970 and 2015 (ONS 2017a and Rhodes 2018). The lower measured productivity of services relative to manufacturing is a key reason for our poor productivity performance (Jacobs et al 2016).

To what extent, however, does this lower productivity growth reflect a measurement problem, rather than a genuine productivity problem? Measuring service sector value added is much more difficult than the equivalent process for manufacturing, mainly because the quality of a service, and therefore its value to the recipient, is more difficult to assess. The broadness of our service sector categorisation under the System of Industrial Classification (SIC) doesn't help: as the Bean review noted, we have only 51 industry categories for services, against 44 for manufacturing, when services output is eight times that of manufacturing (Bean 2016).

The market price can provide a guide to the value added in the case of services offered privately. But in the case of public services, such as education and healthcare, there is no market price. The ONS uses the method proposed in the 2005 Atkinson review (ONS 2005) to calculate productivity: it estimates the volume of outputs produced (number of children educated; number of people treated) and calculates productivity as the difference between the growth in this output and the labour inputs used (such as teachers' and doctors' salaries) (ONS 2015). It updates these estimates every two years, although it is trialling new methods to produce more timely estimates (ONS 2017b).

Clearly this method creates a significant risk that statisticians will miss vital changes in the quality of services provided – such as through the introduction of new medical treatments, or the use of technology in classrooms. In fact, quality improvements could bring about *reductions* in measured productivity, if they only appear as more expensive inputs, but don't change the outputs as currently defined.

#### Does this mean we don't have a productivity problem?

It is important to note at this point that measurement error cannot account for the entirety of our poor productivity performance, for two reasons. First, there is a clear structural break in UK productivity at the point of the 2009 recession – in the 10 years leading up to the financial crisis, annual productivity growth in the UK averaged 1.8 per cent; in the decade since the crisis, it has averaged just 0.2 per cent (ONS 2018b).

The second reason is the UK's poor performance relative to other countries. Virtually all countries use the UN System of National Accounts (SNA), which prescribes a method for calculating value added. And yet the UK's productivity is lower than that of its peers, even on a within-sector basis (Dolphin and Hatfield 2015).

Measurement issues are undoubtedly obscuring the true picture of UK productivity performance, however. The ONS acknowledges that its method for measuring public sector productivity is not perfect, and made its improvement a priority in its 2017 Economic Statistics and Analysis Strategy (ESAS). It was closely involved in the Public Value Review led by Sir Michael Barber, which published its final report in November 2017, and which proposed a new Public Value Framework to help structure the way government departments and HM Treasury think about productivity in the public sector (Barber 2017). The framework is being piloted with departments over the coming months.

Quality change, however, is on the back-burner: it is one of the issues filed under 'longer-term research priorities' in the draft 2018 ESAS. We would argue that it should have a higher priority, as its effect on our understanding of the economy is profound, and likely to become more so.

#### Intangibles

The UK invests less, by the current UN SNA definition of investment, than our peers in Europe and the US (Jacobs et al 2016). However, broadening out the definition of investment to include more types of 'intangible' investment could alter this picture – and could help us develop a much more sophisticated understanding of how the knowledge-driven UK economy generates insights and innovation. More prosaically, it is also important for ensuring that the UK collects the right amount of tax from multinationals.

When economic statistics were first developed in earnest in the 1940s, only spending on physical capital – buildings and machines – was counted as investment. In recent years, and in recognition of the fact that spending on a variety of non-material items can have durable benefits in much the same way as physical capital, the internationally agreed definition of investment has been broadened to include spending on research and development (R&D), on original artistic outputs, and on computer software development.

These are relatively uncontroversial additions, and easy to measure. But several categories of intangible investment still remain outside the national accounts, including product design, training, market research and branding, and business process re-engineering (Haskel and Westlake 2017).

#### TABLE 1.1

Framework for measuring intangible assets

Broad category	Type of intangible asset	Description (from Corrado Hulten Sichel)	Capitalised in the national accounts?
Computerised information	Software and databases	This includes knowledge embedded in computer programmes and computerised databases	Yes
Innovative Property	Research and development		Yes
	Mineral exploration and evaulation	This includes knowledge acquired through scientific research and development, product development and non-scientific inventive and creative activities.	Yes
	Entertainment, literary and artistic originals		Yes
	Design		No
	Financial product innovation		No
Economic competencies	Branding		No
	Organisational capital	in firm-specific human and structural	No
	Firm-specific training	resources, including brand names.	No

Source: Office for National Statistics, 'Experimental estimates of investment in intangible assets in the UK: 2015' (ONS 2018c)

Given that the UK economy is particularly focused on services and knowledge, intangible investment is likely to be playing a more significant role in our productivity and innovation performance relative to countries that have a more traditionally capital-intensive economic model, like Germany (OECD 2013). The way that intangible investment is evolving over time could help to explain a variety of economic challenges, from recent poor productivity growth to inequality (Haskel and Westlake 2017).

In recognition of this fact, the ONS has begun to produce experimental statistics on intangible investment, using the broader definition developed by Corrado et al (2005). It finds that intangible investment was £134.2 billion in 2015 – very close to the £141.7 billion invested in tangible assets that year (ONS 2018c), and three times the level included in the national accounts, which use the narrower definition (see figure 1.1). The slowdown in intangible investment growth since the financial crisis a decade ago is put forward by Haskel and Westlake (2017) as one potential cause of the UK's flatlining productivity growth.

#### **FIGURE 1.1**

### Under the broader definition of intangibles, tangible and intangible investment are similar in scale

Market sector tangible and intangible investment in current prices, UK, 1997–2015



Source: Office for National Statistics, 'Experimental estimates of investment in intangible assets in the UK: 2015' (ONS 2018c)

Note: grey bar denotes 2008–9 recession

By its nature, it is conceptually more difficult to measure intangible investment than tangible investment. The rate at which intangible investment depreciates is also a key methodological issue: some training courses will have longer-lasting benefits to the business than others, while a database of contacts may quickly become outdated. This new data therefore needs a significant amount of work before it can be considered robust enough to be included in GDP, which the ONS recognises. It is important that this development work continues, even if the broader range of intangibles remains outside the national accounts.

#### Digitalisation and the production boundary

Gross domestic product (GDP) is by no means the only indicator we should be interested in when we come to appraise the economy. But it serves a vital function, as a summary measure of all monetised (that is, paid for) activity, or production, undertaken within a country's borders. As such, our aim should be to ensure that, over time, it continues to represent the best possible estimate of the level of market activity taking place.

There are challenges to achieving this. For example, activities can cross the socalled production boundary and go from being classed as market activity to being non-market, and vice versa, depending on who is doing them and whether they are being paid. This makes it more difficult to determine from the data whether activity is really rising or falling as the growth rates suggest. For example, the increased participation of women in the labour market since the 1940s has meant the mass-contracting out of domestic labour, previously unpaid and excluded from GDP, to paid workers (Costa 2000). This is likely to have had the effect of boosting countries' GDP over and above the volume of genuinely additional work being done (Pilling 2018).

Technological innovations such as the supermarket self-checkout, online banking and travel booking, and the rise of digital goods with zero marginal cost, have had three kinds of effects: they have moved activities out of the production boundary altogether; greatly reduced their measured contribution to GDP; or made activity much more difficult to monitor and classify as either 'market' or 'non-market'. There is little doubt that the combined effect of recent technological change has been to push down on measured GDP, and that that effect is likely to be increasing as digital and related technologies proliferate (Coyle 2017).

Activities moving outside of the production boundary is not of itself a measurement problem: the rise of online travel booking, for example, represents a genuine reduction in monetised activity, which economic statistics accurately reflect. But other innovations, such as the creation by individuals of 'free' online entertainment, encyclopaedias, or open source software, may be significant enough in scale, and close enough in nature to their market equivalents, to warrant inclusion within the national accounts (ibid).

Changes to the definition of the production boundary tend to be made at the international level, rather than by individual countries acting unilaterally. The UN System of National Accounts (SNA) is the reference manual that sets the international standard for national accounting, and of the 193 UN member states, around 175 are compliant with either the SNA 2008, or its predecessor the SNA 1993 (UNSD 2017a).

Work is already under way at the international level to address concerns about the impact of digitalisation on GDP. In 2016, the OECD's Committee for Statistics and Statistical Policy (CSSP) created an Advisory Group on Measuring GDP in a Digitalised Economy, with representatives from Eurostat, the IMF and UN as well as national experts. The group is currently working towards agreement of a digital economy typology, and the creation of a satellite account to measure it. It aims to agree the accounting framework by the end of 2018 (UNSD 2017b and OECD 2017a).

In the UK, the Economic Statistics Centre of Excellence (ESCoE) has examined the nature of the impact of the digital economy on the national accounts, but so far the ONS has not translated this into a plan of action for improving how it measures the digital economy. As Coyle (2017) suggests, the ONS could begin to add more types of household production to the household satellite account as a first step to improving our understanding of substitutions across the production boundary.

#### Multinationals

Differences in national tax regimes drive multinationals' behaviour, and result in a disparity between where activity actually happens, and where it is reported for tax purposes (Blakeley 2018). Multinationals have an incentive to establish a legal presence, or to locate their intellectual property (IP), in relatively low-tax jurisdictions, as ways of reducing their tax liabilities. The UK, as a relatively high-tax jurisdiction, is likely to be experiencing two effects on its statistics as a result: gross national income will be underestimated, as multinationals report that the bulk of their activities have taken place elsewhere; and the current account deficit will be overstated, as income flows out of the UK to the lower-tax jurisdiction (Bean 2016).

The impact of these strategic company decisions on estimates of economic activity could be significant. When in 2015 the statistics authorities in the Republic of Ireland included in Irish GDP those international corporations that had switched their base to the country, real GDP leapt up 26 per cent on the previous year (CSO 2016).

Clearly, profit shifting is an international problem that goes beyond measurement, and it requires a coordinated response on the part of tax authorities. A separate IPPR paper for the Commission on Economic Justice discusses the options for tackling corporate tax avoidance (Blakeley 2018).

The ONS recognises that it needs to understand multinationals' behaviour more deeply, and is currently piloting an approach now adopted in Ireland: it has created an International Business Unit (IBU), which is tasked with liaising with the 25 to 30 multinationals with the biggest UK operations, to gain a better understanding of their activities. It hopes that, by making an effort to keep abreast of multinationals' plans to restructure, it can anticipate GDP-moving changes to their activities, such as a relocation of their headquarters.

It is not yet clear that the IBU will be able to extract the information it needs simply through conversations like this, as companies are unlikely to reveal the full extent of their tax avoidance activities to the ONS. Further, the initiative will not be used to adjust estimates of GDP and net income flows to 'correct' for tax avoidance distortions: it will simply try and be ready to account for re-domiciling and profit shifting activities as they happen.

#### **BETTER DATA**

#### **Regional data**

The ONS collects the vast majority of its information via surveys, which are expensive to administer, and for which response rates are falling (UKSA 2017). This means that the sample sizes are robust for national-level analysis, but soon thin out once the data is disaggregated by region. Users of the data are therefore accustomed to making a trade-off between geographical specificity, and the grain of detail available. In addition, data is only available with a long lag: regional productivity data for 2016 was only published in January 2018, for example (ONS 2018d).

Looking ahead, demand for high-quality, granular regional data will only grow, for three reasons. First, the UK's forthcoming exit from the European Union could have profound economic impacts, which are likely to differ significantly across regions. Second, good regional data is an essential precondition to effective devolution of powers to the regional tier of government – otherwise it will be impossible for regional policymakers to see the effects of their decisions. And, third, industrial strategy has the explicit objective of boosting regional economies – better regional data will be essential if we are to know whether it is working (HMG 2018).

The ONS has made improvement of its regional data a priority, and from December 2017 began publishing experimental statistics on regional 'balanced GVA', which combines estimates of GVA using the income and production methods, and makes use of VAT returns as well as surveys (Fenton and West 2017). Combining two methods for estimating GVA has meant that the ONS is able to provide a finer grain of industrial and regional detail.

This is undoubtedly an improvement, but there is more to be done. Regional data is still generally produced at a lower frequency than the national equivalent (annually rather than quarterly); there are currently no estimates of interregional trade (although ESCoE has recently explored the potential to do this: see Greig et al 2018); the level of industry detail regionally is limited; and regional measures of income and productivity depend on the use of national deflators, which have methodological drawbacks, as discussed in the box below.

More widespread use of administrative data, and VAT data in particular, is likely to offer the best and lowest-cost way of improving regional economic data, as Bean (2016) concluded. Part 5 of the Digital Economy Act 2017 gives government the power to share personal information across organisational boundaries 'to improve public service delivery' – this means the potential for much more data sharing between the ONS and HMRC, and a move away from survey methods.

#### **Regional prices and regional productivity**

To understand regional economic performance, we need reliable estimates of regional productivity. That, in turn, requires regional deflators. At present, price collection (done via survey) does not allow for the creation of regular regional price indices: the ONS publishes regional price data only every six years (ONS 2018d). Real regional GVA, and as a result productivity, is therefore estimated using a national price deflator (ONS 2017c).

There are clear methodological problems with this approach. Prices vary from region to region, primarily because land costs – an input cost for all businesses with premises, as well as a component of living costs for all residents – vary across the country, with costs in the South East in particular being much higher than elsewhere. The most recent update found that prices in London were 7 per cent higher than the UK average in 2016, while in Northern Ireland they were 2.3 per cent lower (see figure 1.2) (ONS 2018e).

#### FIGURE 1.2

#### **Regional price levels vary**

Regional consumer price level relative to national price level, 2016



Source: Office for National Statistics, 'UK relative regional consumer price levels for goods and services for 2016'(ONS 2018e)

The ONS believes that regional price variation will become less of a problem as the proportion of purchases made online increases, and we move towards universality of prices.<sup>2</sup> While this is certainly true, we are

<sup>2</sup> Conversation with ONS deputy chief economist Richard Heys

some way from reaching that point: only 17 per cent of all retail spending is currently done online (ONS 2017d), and the proportion and nature of purchases made online is likely to vary by region.

The new ONS Data Science Campus is investigating the scope for using web scraping techniques, as well as scanner data, as an input to price indices in the future. The ONS is also working on moving data collection from paper surveys to online submissions.

#### Wealth data

The Commission on Economic Justice (CEJ) has explored the nature of wealth inequality in the UK, finding that wealth inequality is twice the level of income inequality, and rising (Roberts and Lawrence 2017).

The distribution of wealth matters because wealth confers advantages over and above the income it provides. It translates into economic security – a key determinant of wellbeing – and, because it gives the holder greater scope to take risks and invest in new ventures, it confers opportunity (ibid). Understanding the evolution of wealth inequality is therefore essential in assessing the performance of the economy.

The Wealth and Assets Survey (WAS) is the key data source for understanding the nation's wealth, but it has significant shortcomings. First is its coverage: it looks only at Great Britain, not the UK. Second, it does not provide satisfactory information about the upper tail of the wealth distribution, since households at the top of the income distribution have a much lower response rate (Alvaredo et al 2015). Third, the WAS gathers data at the household level, meaning it cannot be used to model the effect of tax changes on individuals. Academics have tended to use administrative data provided by HMRC, and the HMRC distribution of personal wealth national statistics (HMRC 2016) in particular, to supplement the WAS and explore wealth holdings at the top of the wealth distribution, but the two sources do not map on to one another.

A further challenge relates to funding. Currently the WAS is funded by a consortium of government departments, one of which has recently withdrawn funding, meaning the WAS has a current funding shortfall that the ONS is looking to fill (ONS 2018a).

As academics working in the field have argued, administrative data provided by HMRC on the wealth of individuals is a critical input to estimates of the distribution of wealth (Alvaredo et al 2016). The ONS should be properly funded to join together the two sources of information about wealth to produce better estimates of the wealth of the richest UK residents.

#### **BETTER POLICY EVALUATION**

A key conclusion arising from the CEJ's work is the need for government to play a more significant role in steering the economy to achieve better performance and outcomes. The necessary complement to this change in ethos is a systematic, transparent and sophisticated approach to policy evaluation. It is essential that, if government is to spend public money advancing particular societal goals, it knows when and how it has succeeded, and learns from its failures.

Currently, oversight and quality control of evaluation activity across government is incomplete. Government departments and local authorities manage their own policy evaluation activity, guided by the Treasury's *Magenta Book* (HM Treasury 2011). The key oversight body is the Public Accounts Committee (PAC), supported by the National Audit Office (NAO). The NAO undertakes examinations of specific policies and programmes to assess value for money, and conducts investigations to support PAC enquiries (NAO 2017).

These PAC enquiries are often scathing of the quality of evaluation work. In December 2016, for example, its report on the evaluation by the Department for Communities and Local Government (DCLG) of its Troubled Families programme concluded that the department had been 'evasive' in explaining the reasons for delays to the publication of the evaluation, and that when it was finally published the DCLG had 'over-claimed' the extent to which the programme had worked (PAC 2016).

The lack of robust evaluation evidence is even more acute when it comes to tax reliefs, which are accorded less scrutiny in general than spending. The PAC concluded in a 2015 report that, 'While HMRC accepts the need for reporting the costs of tax reliefs, it does not see the merit in assessing the economy, efficiency and effectiveness of reliefs, or considering their cost effectiveness alongside that of alternative policy instruments such as spending programmes' (PAC 2015). When evaluations of reliefs are carried out, the extent to which they influence policy is limited: a 2015 HMRC review of the Capital Gains Tax Entrepreneurs Relief, for example, concluded that there had been little discernible effect on owner-managers' behaviour (IFF Research 2015), but the relief remains in place, and in fact has since been extended (HM Treasury 2016).

The NAO last reviewed the quality of evaluation across government in 2013, when it found that spending on evaluation had been cut by £3 million (around 7 per cent) in the three years since 2010, and concluded that there were significant issues with both the coverage and the quality of evaluation evidence (NAO 2013).

More recently, the Institute for Government commissioned the independent charity Sense about Science to do a spot check of government policy proposals, to see how well a selection of departments 'showed their workings' for the policies they proposed in the year to July 2017 (Brown 2018). It found the quality of departments' evaluation plans to be the most disappointing aspect of their policy planning, with well over half of the plans examined giving no detail at all of whether or how the proposed policy was to be evaluated (ibid).

One aspect of evaluation activity that should be reviewed is the contracting out of evaluations to external organisations. Although it is now a few years old, the NAO's 2013 review of evaluation found that most departments commissioned consultants, charities, trusts or academics to carry out some or all of their evaluations, and the NAO noted that there was no clear rationale for the variation in departments' approaches (NAO 2013).

The What Works Network (WWN) was established in 2013 with funding from the Government, the Economic and Social Research Council (ESRC), and the Big Lottery Fund. Its objective is to ensure that public policy is informed by evidence, using a combination of collation and synthesis of existing evidence, encouraging policymakers to use evidence when making policy, and carrying out its own policy evaluations. It now consists of 10 centres which work to increase the supply of evidence for a range of policy areas, including education, local growth, wellbeing and policing. A review of the WWN five years on concludes that more needs to be done to ensure that policies are evaluated robustly, in order to create the evidence base for future policy decisions (WWN 2018).

To date, the initiative has only focused on economic policy from a local growth perspective, and there are no plans to create a centre that looks at the Government's industrial strategy or other areas of economic policy (ibid). This looks like a significant oversight, given that the Government has recently announced its intention to spend in excess of £3 billion on industrial policy interventions (HMG 2018). It is widely agreed that evaluation is a crucial element of making an activist industrial strategy as effective as possible (Rodrik 2004, Jacobs et al 2017).

#### **CONCLUSION AND RECOMMENDATIONS**

The ONS is working hard to improve the way it measures the economy, and the way it communicates its work to the public. It has received the funds to do this as a result of the Bean review, but that finance is not guaranteed for the long term, while the modern economy can be expected to keep changing, and presenting new challenges to those trying to measure it.

To ensure that the benefits of investing in better economic measurement are recognised in any future spending decisions, there is a strong case for the ONS to publish an evaluation of the programme of economic statistics development it has undertaken with the money it received from the Treasury following the Bean review. The Public Accounts Committee should review this evaluation, and if it concludes that the programme has been cost-effective, it should recommend that the Government extend the funding stream, in order for the ONS to continue to improve the quality of economic statistics.

In the meantime, the ONS should continue to address the measurement issues raised above, and to expand regional and wealth data in consultation with users.

To improve the quality of policy evaluation across government, the NAO should review the use of commissioning, and propose improvements to the current mix of approaches taken by departments. We would recommend that the Cabinet Office establish a What Works Centre for industrial strategy, with the aim of building an evidence base for industrial policies, and ensuring that any new policies are properly evaluated.

### 2. New indicators of economic outcomes can better define and measure the goals of economic policy

#### **GDP AS A PROXY FOR ECONOMIC SUCCESS**

How should economic success be measured? Since the 1950s, gross domestic product (GDP) has towered above all other measures as the ultimate distillation of economic performance. But it wasn't originally designed for that purpose; it was developed to serve as an accounting tool to monitor production and assist with resource planning during the second world war. Its design, and the inclusion of public spending in particular, meant that it reinforced the interventionist government policies advocated by one of its inventors, John Maynard Keynes, which aimed to stabilise demand and raise welfare. But the measure itself was never intended as a proxy for welfare or wellbeing (Coyle 2014).

There are several well-known flaws with relying on GDP if the goal is to understand welfare rather than simply output.

- The exclusion of unpaid work. By definition, GDP does not include domestic, voluntary or caring work for which no money changes hands. The ONS has now begun to measure unpaid work in a household satellite account, and put its value at £1 trillion in 2014 56 per cent of the size of the monetised economy, as measured by GDP, that year (ONS 2016a). Since GDP looks only at the activities that individuals engage in that are captured by the 'market', it gives no indication of the degree to which our economic growth is dependent on unpaid work to support it, or whether that unpaid work is falling disproportionately on one particular group (such as women).
- The exclusion of environmental resource use and damage. GDP does not take account of how economic development is depleting natural assets, and therefore the degree to which growth is environmentally sustainable. All forms of production growth, however resource-depleting, are valued equally. The ONS, together with the Department for Environment, Food and Rural Affairs (DEFRA), has created a balance sheet for the UK's natural capital, taking an ecosystem services approach, but it is separate from the national accounts and published to a different timetable, and there is minimal evidence of it influencing economic debate (ONS 2018f). The economy rests on ecological foundations but GDP ignores them more or less completely.
- Its weak performance as an indicator of welfare. GDP is a measure of national income, and as such, clearly has some correlation with overall welfare. However, it does not tell the complete story. First, the *distribution* of income has a major bearing on overall social welfare, which is not captured by an aggregate national measure. Second, there are a variety of other contributors to welfare which may not be correlated with rising income, and indeed may be associated negatively with it, such as mental health, social cohesion and environmental quality. For these reasons, if the gains from growth are distributed sufficiently unevenly, with the additional income flowing to the already-rich, or if the nature of the work being created by the economy contributes to a rise in the prevalence of mental ill-health, growing GDP could actually be associated with *lower* social welfare.

#### Is the solution to expand GDP?

There have been attempts to 'reform' GDP to try and make it a better proxy for social welfare. The most well-known of these is the Genuine Progress Indicator (GPI), originally developed as the Index of Sustainable Economic Welfare in the late 1980s and early 1990s by Herman Daly and John Cobb (Talberth 2012). It aims to improve on GDP in three ways.

- It differentiates between welfare-enhancing expenditure (such as on education, or improving public spaces) and 'defensive' expenditure (such as replacing a broken window after a burglary, or cleaning up after a natural disaster, or commuting) – deducting the latter from GDP.
- 2. It weights income growth according to who is receiving it, in recognition of the fact that people on low incomes get greater benefit from a given amount of extra income than people on higher incomes.
- 3. It values and includes unpaid work alongside paid work.

The approach has been taken up and applied in several regions and countries, with the US state of Maryland committing to publishing formal GPI accounts in 2010.<sup>3</sup> The Genuine Progress Program, run by the think tank the Centre for Sustainable Economy, aims to make incremental improvements to the GPI method as data availability improves, and to encourage take-up of the measure at the city, regional and national level.<sup>4</sup>

The Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), established by President Sarkozy of France, took a different approach. Led by economists Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi, the commission was tasked with identifying the problems with GDP as an indicator of economic performance and social progress, deciding what the best alternative or complementary indicators might be, and suggesting how to present them (Stiglitz et al 2008).

It concluded that, while the measurement of GDP could certainly be improved to take account of structural economic change and the nature of modern economies, it should remain a 'pure' measure of production and income, but should be supplemented by separate environmental and wellbeing measures. Its reasoning was persuasive.

First, in its core purpose, which is to measure and track the value of the goods and services produced within an economy's borders, GDP remains an effective, unambiguous and important statistic. Although (as discussed) there are a number of challenges in measuring economic activity accurately, the principle that GDP should be a measure of market production is important. Adding in non-market metrics risks making it more difficult to interpret, and more arbitrary.

Second, broadening out the definition of GDP would mean making subjective judgements about what exactly should be included, and with what weight. To take an example: not all unpaid 'work' can be unequivocally classified as work – some people may choose to do childcare over taking paid employment (they may even view it as leisure time). Including unpaid work in GDP would therefore force a judgement around what proportion of unpaid work should be included, and how. Similarly, not all commuters necessarily view commuting as a 'bad' to be deducted from their wellbeing. The more interpretive GDP becomes, the more its credibility could be questioned.

Third, GDP is an internationally recognised indicator as defined by the UN System of National Accounts. Standardised indicators are needed to compare countries in

<sup>3 &</sup>lt;u>http://dnr.maryland.gov/mdgpi/Pages/default.aspx</u>

<sup>4</sup> https://sustainable-economy.org/new-measures-progress/

economic size and performance. We have limited ability to opt out of international economic statistics, even if we were convinced of the merits of doing so.

Stiglitz et al (2008) concluded that the better approach would be to devote more attention to alternative measures that supplement GDP, rather than changing the nature of GDP itself. In deciding which aspects of the market-based economy were most relevant for wellbeing, the CMEPSP recommended:

- looking at **income and consumption rather than production**, since these give a better indication of living standards and purchasing power
- focusing on **household income rather than GDP per capita**, since GDP can decouple from income, as we have seen since the financial crisis (IPPR 2017)
- looking at **wealth alongside income and consumption**, since wealth determines future as well as current wellbeing, and offers intrinsic benefits (Roberts and Lawrence 2017)
- looking at the distribution of income, consumption and wealth as well as the average, since the social welfare impacts of an income rise depend on which proportion of the population receives it.

#### **Direct measures of wellbeing**

These market-based proxies of (or contributors to) wellbeing can be supplemented with direct measures of wellbeing.

As countries become richer, they don't necessarily become happier (Layard 2005). This realisation on the part of policymakers and academics has prompted extensive research, at both the national and international level, to understand happiness (or wellbeing) and its relationship to economic and social factors.

Internationally, the World Happiness Report (WHR), authored by leading academics in the field, including Richard Layard and Jeffrey Sachs, is the most comprehensive survey of global wellbeing. Published annually, it ranks 156 countries by their levels of subjective happiness (and 117 countries by the happiness of their immigrant populations) (Heliwell et al 2018). The report draws on the results of a global survey conducted by Gallup World Poll surveys, which gauges both the level of wellbeing, and the relative importance of the variables that support it: including income, life expectancy, social support, freedom, trust and generosity. The 2018 WHR found Finland to be the happiest country (ibid).

The ONS asks four personal wellbeing questions as part of the Annual Population Survey:

Overall, how satisfied are you with your life nowadays?

Overall, to what extent do you feel the things you do in your life are worthwhile?

Overall, how happy did you feel yesterday?

Overall, how anxious did you feel yesterday?

Data on subjective wellbeing drawn from these questions is published annually in the ONS release *Personal well-being in the UK*, an output of the ONS Measuring Wellbeing programme, which has published wellbeing data with National Statistics status since 2010 (ONS 2018g). The ONS reports the data disaggregated by age, and by gender. Its 'Measuring national wellbeing' website presents time series for the four indicators, and whether they have improved or deteriorated, as part of a suite of 41 indicators that track a range of aspects of individual and social life, including issues such as health, crime and environment.<sup>5</sup>

<sup>5</sup> https://www.ons.gov.uk/visualisations/dvc364/dashboard/index.html

#### Presenting information in multiple dimensions: the dashboard approach

Following the conclusion of the Stiglitz commission (CMEPSP) that production, wellbeing and sustainability indicators should be tracked as distinct variables, and reviewed in tandem, it has been widely accepted that 'dashboards' of several indicators are a better way of measuring both wellbeing and overall economic performance than attempting to combine multiple variables into a single composite indicator.

The OECD's Better Life Initiative has taken this idea forward internationally, and has developed a dashboard that allows for international comparisons across 50 indicators, even offering users the option of prioritising certain aspects of life to see how countries compare (OECD 2017b). Other countries have also adopted a dashboard approach, including Australia and New Zealand.<sup>6</sup> In 2015, 193 countries signed up to the UN 2030 Agenda for Sustainable Development, which set out 17 Sustainable Development Goals, underpinned with 169 targets covering economic growth, social inclusion and environmental protection.

In the UK, the ONS publishes two dashboards: its large 'national wellbeing' dashboard (discussed above), which is supplemented by an 'economic wellbeing' dashboard of 10 indicators specifically looking at economic wellbeing, published quarterly (ONS 2014a). The choice of economic wellbeing indicators was informed by the CMEPSP, and are:

- gross domestic product (GDP) per head
- net national disposable income per head
- · real household disposable income per head
- real household final consumption expenditure per head
- real median equivalised household income
- whole economy net wealth per head
- household net wealth per head
- perception of financial situation (a subjective assessment of individuals' own financial situation over the past 12 months)
- unemployment rate
- inflation.

Each update presents time series charts of all 10 indicators, and shows whether they have improved or deteriorated relative to the last release (with the exception of inflation, as there isn't an objectively 'good' or 'bad' movement in the price index).

While the dashboard is a useful supplement to the national accounts, it is based on a very narrow view of economic performance. First, although looking at per capita measures of wealth, consumption and household income is better than aggregate GDP, the dashboard includes no indicators on the *distribution* of income and wealth, and whether they are becoming more equitable or less so.

Second, with fully six of the 10 indicators measuring some variant of per capita wealth or income, the dashboard includes no recognition of non-market measures of welfare or performance, such as household or care work or environmental sustainability.

Third, it fails to reflect key features of the labour market. The unemployment rate on its own tells us nothing about the duration of unemployment, how much is structural rather than frictional, about under- and over-employment or about levels of inactivity not recorded as unemployment. In all these ways the ONS dashboard offers a highly restricted view of what constitutes economic welfare or performance.

<sup>6</sup> http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2013~Main%20 Features~Homepage~1 and http://archive.stats.govt.nz/browse\_for\_stats/snapshots-of-nz/nzprogress-indicators/Home.aspx

While there are clear advantages to using dashboards to summarise a range of information, it is an approach that could have diminishing returns. The two ONS dashboards together display 51 indicators. It could be argued that, in a quest for comprehensiveness, the ONS has reduced the extent to which its dashboards cut through to the public consciousness. To date, there is limited evidence from the economic debate, either in the media or in parliamentary exchanges, that they have attracted anything like the attention or profile of the standard economic indicators such as GDP. Selecting a small number of outcome indicators, while necessarily limiting how much information can be conveyed, could be a better way of focusing debate on the things that matter most.

#### **A NEW ECONOMIC DASHBOARD**

What would a smaller and more focused dashboard of indicators include? Any choice must inevitably be subjective, based on a specific view of how 'economic success' should be judged and of the most important goals of economic policy. The IPPR Commission on Economic Justice is focused on the goals of broadly shared prosperity, justice and sustainability (IPPR 2017). We have therefore selected five indicators which between them would reveal how the economy is performing in these respects.

Others have tried to shift attention to outcome measures such as these before, with limited success (see for example Jeffrey and Michaelson 2015). The key to getting a new dashboard to 'stick' is for the government to be held to account for the economy's performance at delivering those outcomes, through an explicit reporting requirement.

#### Key indicator 1: The distribution of the gains from growth

An economy is only working well if people at all levels of income take a share in its success. This can be measured by looking at the distribution of the income growth experienced over the previous year, by income decile.

A well-functioning economy would distribute more of the gains from growth to the lower half of its income distribution, to ensure a gradually falling level of income inequality. In a poorly performing economy the majority of gains would go to those with already higher incomes.

Using the IPPR tax-benefit model, we have estimated the share of income growth that went to each income decile in 2017/18. We have used the Family Resources Survey (FRS) 2015/16, together with Office for Budget Responsibility (OBR) estimates for key economic aggregates, to distribute 2017/18 disposable income across the population of the UK. Disposable income is net of taxes and benefits, but before housing costs. It would also be possible to present it in terms of 'original' incomes, which would measure how the economy distributed its gains before government redistribution through the tax and benefits system.

Our analysis suggests that the bottom 50 per cent of the income distribution received just 18 per cent of the income growth generated by the economy last year.



Just 18 per cent of income growth in 2017/18 went to the bottom 50 per cent of the income distribution

The share of 2017/18 disposable income growth received by each income decile

Source: IPPR analysis using IPPR tax-benefit model using Department for Work and Pensions, 'Family Resources Survey: financial year 2015/16' (DWP 2017)

#### Key indicator 2: Poverty among children and adults

A priority for all economies should be the reduction of poverty over time, both in relative and absolute terms, as both a percentage of the population and in absolute numbers. Where possible this should be achieved by giving people the opportunity to improve their circumstances, through work or education. But the state should also provide a safety net that keeps a household's income above the poverty line.

There are several alternative measures of poverty. One can look at the number of people living on *absolute* low incomes, defined as below 60 per cent of the median income in a given base year, or at numbers on *relative* low incomes, defined as below 60 per cent of the median income in the most recent year for which data is available. Poverty rates are reported both before housing costs (BHC) and after housing costs (AHC), since housing costs ameliorating poverty rates.

Using the IPPR tax-benefit model, we have modelled the change in absolute poverty (using a base year of 2016/17), both before and after housing costs, between 2016/17 and 2017/18, dividing the total into adults, children, and within that, young children.

We find that poverty among adults declined 2.5 per cent over the period, with 155,000 fewer adults living in absolute poverty in the most recent year (after housing costs). However, child poverty increased by 1.4 per cent over the same period, equivalent to 56,000 more children living in poverty.

**Poverty among adults has fallen in the past year, while child poverty has risen** *Percentage change in absolute poverty, 2016/17 to 2017/18* 



Source: IPPR analysis using IPPR tax-benefit model, using Department for Work and Pensions, 'Family Resources Survey: financial year 2015/16' (DWP 2017) Notes: Absolute poverty is defined as income below 60 per cent of UK median income in the year 2016/17.

AHC: after housing costs; BHC: before housing costs

#### Key indicator 3: The level of wellbeing, disaggregated by income

The economy is a key driver of wellbeing. Financial security, good work and a decent standard of living are essential conditions for people to thrive. As the economy is currently configured, large numbers of people do not enjoy financial security, nor are they engaged in high-quality work that allows them the time and money to pursue other interests. To understand the degree to which the economy is generating good outcomes for the population, we therefore need to make use of a measure of subjective wellbeing.

If the goal is to understand how successfully the economy generates meaningful work for its citizens, and the degree to which it gives them the freedom and autonomy to live the lives they want to live, we focus on the 'satisfaction' question posed as part of the ONS Measuring National Wellbeing Programme: *How do you evaluate your life (i.e. how satisfied are you with your life)?* 

We would ideally want to see responses to the question disaggregated by the income of the respondents, to gauge and track differences in wellbeing across income deciles.

Currently, the ONS presents the results to the four subjective wellbeing questions disaggregated by age group and by gender, but not by income decile. The last time the ONS published the results by income group was in an ad hoc article published in 2014, using 2011/12 data, and using income quintiles rather than deciles. The data showed that wellbeing was lowest, by all four of the wellbeing measures, for the lowest-income quintile (although the confidence intervals around these results reduce the certainty with which conclusions can be drawn) (ONS 2014b). The results are reproduced in figure 2.3.



Wellbeing is lowest, by all measures, for the lowest-income quintile

Relationship between personal wellbeing and different income quintiles, compared to the middle quintile, after controlling for individual characteristics

One challenge with making annual comparisons is the size of the confidence intervals,<sup>7</sup> which mean that changes in wellbeing over a 12-month period may not be statistically significant. For this reason, the ONS tends to make comparisons over longer timeframes; in the latest release (February 2018), for example, it compared life satisfaction in the 2016/17 year with 2011/12, breaking the results down by age group. Even with larger changes to work with, the results were still not significant for older age groups, where the sample size is smaller (figure 3a of ONS 2018g).

We have used the wellbeing by age data to produce time series for selected age groups (see figure 2.4). We would like to see this presentation used for a new dataset that disaggregates the results by income decile, rather than by age.

7 The ranges within which we can say with 95 per cent certainty that the 'true' wellbeing levels for the underlying population lie – or more simply, the margin of error.

Source: Office for National Statistics, 'Income, expenditure and personal well-being, 2011/12' (ONS 2014b)

**Life satisfaction has risen over time for all age groups** Life satisfaction in the UK for selected age groups



Source: Office for National Statistics, 'Personal well-being in the UK QMI' (ONS 2016b) Note: Respondents are asked to rate their life satisfaction on a scale of 1–10, where 1 is 'not at all' and 10 is 'completely'. A rating above 7 is interpreted to mean high or very high life satisfaction.

# Key indicator 4: The gap between the median income of the poorest region of the UK, and the richest

The UK is deeply geographically imbalanced, and has been for many decades, primarily as a result of the UK's nations and regions' different industrial compositions, and the decline of manufacturing relative to services (Jacobs et al 2016). Looking at UK average income, or even income growth by income decile, does not adequately isolate these disparities.

As noted above, regional price indices are only published every six years. This means that it is not currently possible to express developments in regional incomes in 'purchasing power parity' terms – that is, how disposable incomes compare given differences in regional price levels. (The same income goes further in regions such as Wales and Northern Ireland than it does in London). But looking at how incomes vary across regions in nominal terms is still useful for understanding the disparities in living standards – and the unbalanced nature of the economy.

We have produced this data using the IPPR tax-benefit model, taking a similar approach to that of the Institute for Fiscal Studies in its annual report on living standards, poverty and inequality in the UK (Cribb et al 2017). We find that in 2017/18, median weekly disposable incomes in the poorest region of the UK, Northern Ireland, were 10 per cent lower than the UK median, while in the South East they were 12 per cent higher than the median. If we take into account housing costs – which are higher in the more expensive areas – although inequality reduces, disposable income is still 18 per cent higher in the richest region than in the poorest region.

**Median incomes are highest in the South East, and lowest in Northern Ireland** Median household income: % gap between regions and the UK median, 2017/18



Source: IPPR analysis using IPPR tax-benefit model, using Department for Work and Pensions, 'Family Resources Survey: financial year 2015/16' (DWP 2017)

Notes: Household income is weekly equivalised disposable income

#### Key indicator 5: The gap between projected carbon emissions and the costeffective path to decarbonisation

To comply with the 2015 Paris climate change agreement, the UK needs to achieve an almost complete decarbonisation of its economy by around the middle of this century (IPPR 2017). This will require active policies to reduce emissions in the fields of power, heat, transport, industry and agriculture. Underpinning these policies government has legislated, under the terms of the Climate Change Act 2008, for a series of 'carbon budgets' or total emissions permitted for the UK in a five-year period. The independent Committee on Climate Change (CCC) has set out a projected cost-effective path to decarbonisation, and reports annually on whether the UK's emissions are on track to meet it (CCC 2017).

In its most recent report, the CCC notes that, though the UK's emissions in 2016 were slightly lower than had been forecast in the previous year's report, overall the forecast remained above the level required for cost-effective decarbonisation (ibid). The only way to focus attention on this most critical of issues is to show how progress falls short of our ambition, as legislated for in successive carbon budgets.

Our fifth outcome indicator to be included in the dashboard is therefore the gap between projected carbon emissions at a five-year horizon, and the latest estimate of where they need to be for the UK to be on the cost-effective path to decarbonisation. As of the most recent forecast, emissions in 2021 were projected to be 20 per cent higher than the cost-effective path (ibid).

**The UK's emissions are not on the cost-effective path to decarbonisation** *Progress towards meeting legislated carbon budgets* 



Source: Committee on Climate Change, 2017 Report to Parliament (CCC 2017) and author's calculations using Committee on Climate Change, Progress report 2016 (CCC 2016)

These five indicators are clearly not the only ones available that would measure the goals of broadly shared prosperity, justice and sustainability. But between them we believe they would capture well the current performance of the economy in achieving the outcomes that matter most.

To ensure that these new measures stick in the public consciousness, and that the government is committed to their improvement, we recommend that the Treasury publish a report alongside each annual update, assessing performance by each measure.

## Conclusion

Measuring the economy has always been difficult, but disruptive technologies are shifting the nature of the challenge from one year to the next. We will need to keep investing in our public data if it is to remain relevant. Public policy to steer the economy will only succeed in its aims if it is informed by both accurate economic indicators to provide the macroeconomic context, and credible evidence of its impact via robust evaluation.

To understand whether the economy is delivering for its citizens, we need a new suite of outcome indicators. Simply tracking GDP and a small number of production statistics is not sufficient; it may even undermine progress towards a more just economy, as it distracts attention from the issues that really matter.

We propose a dashboard of five outcome indicators, to be updated annually by the ONS. Together, they reveal how broadly the economy distributes its rewards, whether it is succeeding at reducing poverty, whether people feel satisfied with their lives, and our progress at moving to an environmentally sustainable model of growth. We would argue that if the economy doesn't show improvement by the five metrics we have chosen, it isn't working.

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# Measuring What Matters Improving the indicators of economic performance

### **Discussion Paper**

The IPPR Commission on Economic Justice is a landmark initiative to rethink economic policy for post-Brexit Britain. The Commission brings together leading figures from across society to examine the challenges facing the UK economy and make practical recommendations for reform.

This discussion paper explores the ways in which our measurement and appraisal of the economy needs to change. It argues that new technologies, business models and economic goals require significant improvements in the measurement of key economic statistics, including those relating to the digital economy, intangible investment, wealth and regional economic performance. It discusses the limitations of GDP and how alternative approaches can better define and measure economic performance. It proposes a dashboard of five outcome indicators that should be used to track the economy's progress towards the goals of broadly shared prosperity, justice and sustainability.

