

The Good Life

**Measuring inclusive growth
across countries**

June 2019

centre for
**progressive
policy**



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Delivering economic progress is a basic objective for every government, and the UK is no exception. But what do we mean when we talk about economic progress? And how can we deliver an economy that really improves the lives of all the people we serve?

For decades the debate has been rooted in the idea that the bigger the economy the better, regardless of all else. If we simply grow GDP then everything else will take care of itself.

To help achieve broad-based prosperity, we need to redefine how we think about and measure economic progress and how we develop an economy and public finance system which reflects real value, and values. For too long, a fixation on GDP statistics has reinforced the narrow idea that the quantity of economic growth is all that counts. As a result, this is what decision-makers have been held accountable for.

The CPP Inclusive Growth Country Index – presented in this report – tackles the issue head on by challenging all of us to rethink what economic progress is, how best to measure it and therefore what we can do to deliver it.

APPG on Inclusive Growth Co-Chairs



Rt Hon. Liam Byrne MP

A stylized, handwritten signature in black ink, appearing to read 'Liam Byrne'.



George Freeman MP

A handwritten signature in black ink that reads 'George Freeman'.

Executive summary



Delivering inclusive growth (IG) is one of the most urgent challenges facing economies across the world. Simply, the economy is not delivering prosperity for all. The pervasiveness of GDP as the principal barometer of economic performance is a key barrier to achieving inclusive growth, reinforcing an economic status quo that prioritises quantity over quality. Developing new, credible measures of inclusive growth and embedding these within economic decision-making is a critical step towards achieving broad-based economic prosperity.

The Centre for Progressive Policy (CPP) has partnered with the All-Party Parliamentary Group (APPG) on Inclusive Growth to launch an ambitious new project to develop new measures of inclusive growth at the country, community and company level. The three measures seek to help redefine what we consider to be economic progress.

This report is the first stage of the project, presenting the CPP Inclusive Growth Country Index. Building on previous work in this space, the index combines data on consumption, life expectancy, leisure, consumption inequality and unemployment to produce an economically robust metric for inclusive growth across over 150 countries.

As a measure of production and economic output, GDP is a useful statistic. Yet as a barometer of shared economic progress it falls short. The measure developed in this report adds to the growing body of evidence that inclusive growth metrics can bring the required depth of economic insight. This is required to successfully shift policymaking away from ‘grow now, redistribute later’, to a model that tackles inequality and poverty as part of achieving broad-based growth.

This report is intended to reignite debate about how best to measure economic progress, build on existing work and, consequently, help refocus our economy on what really matters. Ultimately, new measures such as these must be at the heart of economic decision-making in order to help drive economic progress for all.

Key findings

1

There are important differences between GDP per capita and the CPP Inclusive Growth Country Index across countries. Iceland and Luxembourg have similar IG scores despite Luxembourg’s GDP per capita being almost twice that of Iceland’s. There are countries with a ratio of IG score to GDP per capita as low as 0.29 and as high as 1.51. The differences are because the CPP’s index deliberately captures shared economic progress rather than total economic output.

2

The richer a country is, the less relevant GDP per capita is for inclusive growth. The relationship between GDP per capita and IG score is stronger for countries with a GDP per capita below 50% of the US level. For richer countries, GDP per capita provides less of an indication of IG score.

3

Inclusive growth is closely related to – but distinct from – other measures of welfare. There is a strong correlation between the UN Human Development Index (HDI) and the CPP Inclusive Growth Country Index. Yet there are important deviations.

4

Central and eastern European countries are catching up fast. Amongst OECD countries, those in eastern and central Europe experienced the fastest growth in their IG scores between 2000 and 2017. Five of the top six fastest growing countries joined the EU in 2004.

5

The UK has a relatively high IG score but suffers from sluggish improvement. The UK’s IG score places it 12th out of 36 OECD countries. Our index implies for the UK that a 1% increase in consumption is equivalent in terms of inclusive growth to a 0.5% decrease in the unemployment rate, each person working 1 hour fewer per week, a reduction in inequality of 3% or an increase in life expectancy of just over two months. The growth in its IG between 2000 and 2017 score is relatively slow, however, leaving it 22nd in the OECD rankings.

Introduction



The need to redefine economic progress is one of the most urgent challenges facing economies around the world. Inclusive growth (IG) offers a broad understanding of economic progress and wellbeing – seeking to tackle deprivation and inequality as an integral part of achieving more sustainable, quality growth. While inclusive growth has grown in prominence, the challenge of definition and measurement is often seen as a barrier for achieving parity of esteem with more traditional economic ideas and statistics. The ubiquity of GDP as a measure of progress serves to reinforce the prevailing economic model that values aggregate economic output above all. New measures of inclusive growth can act as a focal point to shift our economic priorities away from solely increasing output and towards delivering broad-based prosperity. This work seeks to help refocus the debate on what really matters for the good life.

At the Centre for Progressive Policy (CPP), we work across a range of policy areas – with international, national and local partners – to develop effective, pragmatic policy solutions designed to make inclusive growth a reality. CPP and the All-Party Parliamentary Group (APPG) on Inclusive Growth have joined forces to launch an ambitious project that responds to the need to rethink how we define and measure economic progress. The project develops new measures of inclusive growth at the country, community and company level. We have convened a group of leading experts in inclusive growth and measurement, drawing on a wealth of knowledge relevant to moving ‘beyond GDP’. Such an approach enables us to build on the momentum established by existing work in this space and move to deliver a workable measure of inclusive growth.

This report marks the first stage of the project, presenting the CPP Inclusive Growth Country Index. Building on existing work, we have produced an inclusive growth score for more than 150 countries for all years between 2000 and 2017. Using a rigorous economic framework, the measure combines data on consumption, life expectancy, leisure, inequality and unemployment. Through this measure, our aim is to focus policy attention and drive forward the debate about how we define, measure and achieve economic success across different countries.

Why measure inclusive growth

An abstract graphic featuring a large, bold white number '1' centered on the left side. The background consists of several thick, curved, overlapping bands in various colors: orange, purple, teal, pink, and light orange. These bands are set against a dark purple background, creating a dynamic, layered effect. The number '1' is positioned over the purple and teal bands.

1

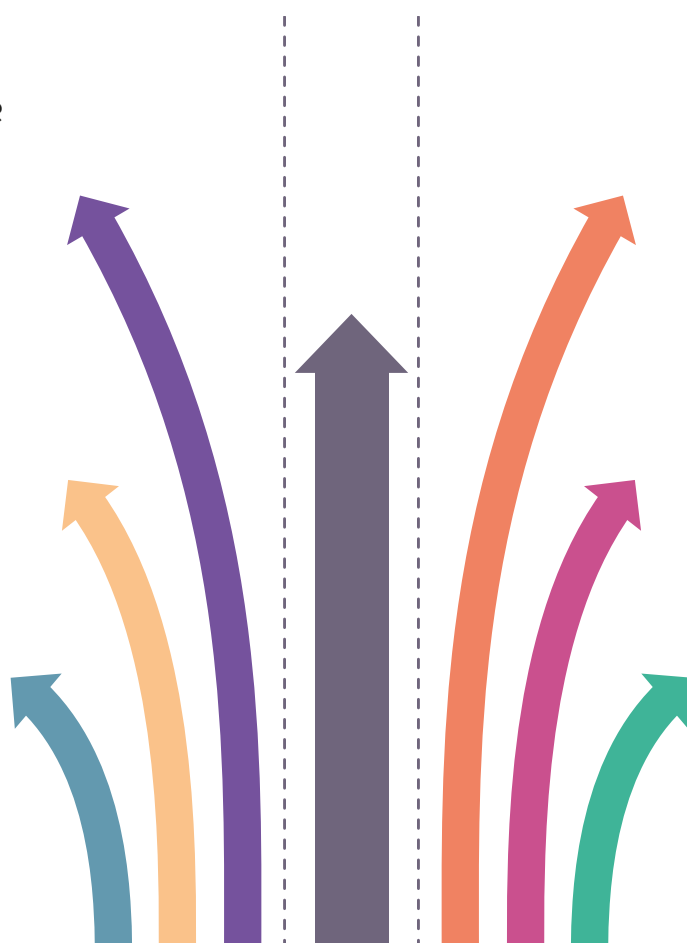
Conventional measures of economic performance do not adequately capture a country's progress, even in a purely economic sense. For decades, many within the economic policy community have railed against the pervasiveness of these measures (GDP in particular) in defining what constitutes economic progress. GDP's limitations are well known. It has no regard for the distribution of economic gains – either socially or spatially. It is a narrow, point in time measure of economic activity, unable to describe future capabilities or potential. It ignores all unmonetised activity, such as unpaid household work.

The overreliance on GDP as a barometer of economic success stems from the fact that it mistakes output for progress, operating under the false premise that bigger is always better. Though the amount the UK produces has been steadily increasing over the long term, stagnant wages, rising house prices and persistent inequality – not just of income and wealth, but of opportunity too – offer a more accurate assessment of our economic progress.

GDP only takes into account what is produced, with no regard for the distribution of economic gains – either socially or spatially. It is a narrow, point in time measure of economic activity, unable to describe future capabilities or potential. It ignores all unmonetised activity, such as unpaid household work.

The ubiquity of GDP is indicative of the prevailing economic model that makes the quantity of growth the overriding priority, with considerations of how that growth should be distributed coming only later. This can loosely be described as 'grow now, redistribute later', a model that treats "efforts to tackle inequality and deprivation as though they are disconnected from efforts to drive up productivity and grow the economy."¹ Ex-post redistribution of some of the gains from growth offers no real substitute for jobs that previously were the cornerstone of whole communities, not just in terms of employment, but also for self-agency, job satisfaction and a sense of belonging.

Growth has been delivered alongside mounting dissatisfaction following the failure to adequately distribute not only the gains from growth, but also the opportunity to contribute to growth. Particular groups within society and areas of the country have benefited enormously from economic growth, whilst others have been left out in the cold. For example, while aggregate GDP per capita puts the UK in the richest third of EU countries, disposable household income per resident is below the EU average in over half of UK sub-regions.²



¹ Inclusive Growth Commission (2017) *Inclusive Growth Commission: Making our Economy Work for Everyone*. London: The Royal Society of Arts. Available at: https://www.thersa.org/globalassets/pdfs/reports/rsa_inclusive-growth-commission-final-report-march-2017.pdf

² Ibid.

A new model for the good life

Inclusive growth is an economic model that seeks to tackle inequality and deprivation by design. Rather than focusing solely on quantity, it concerns itself with the quality of growth, striving to enable as many people as possible to contribute to and benefit from growth.³ What started out as an innovative policy framework for developing countries, inclusive growth has moved up the policy agenda across the developed world having resonated profoundly with those dissatisfied with conventional concepts of economic progress in industrialised nations.

The ubiquity of GDP as *the* barometer of economic progress inhibits our ability to hold political leaders and economic decision makers accountable for achieving inclusive growth. Persevering with conventional economic measures reinforces a conventional economic system that has failed to deliver broad-based opportunity and prosperity. A better metric is needed to shift our economic paradigm away from growth at all costs and towards delivering what really matters to people – the good life.

Inclusive growth is an economic model that seeks to tackle inequality and deprivation by design. Rather than focusing solely on quantity, it concerns itself with the quality of growth, striving to enable as many people as possible to contribute to and benefit from growth.

Work to date

There are a growing number of high-profile work programmes designed to move ‘beyond GDP’ that are akin to the spirit of inclusive growth. Notable examples include the 2008 Stiglitz-Sen-Fitoussi Commission⁴, the OECD’s Better Life Initiative and Inclusive Growth Framework⁵, the World Bank Poverty and Shared Prosperity Series, the UN Human Development Index and the Legatum Prosperity Index⁶. While these may point to different solutions, they are all born out of a dissatisfaction with GDP and agreement that we need more broad-based measures of economic and social progress.

Some have argued that what we ultimately should be measuring is happiness or life satisfaction. However, these concepts struggle to enhance our understanding of how people interact with the economy or how economic policy decisions can drive change.⁷ The latest Office for National Statistics (ONS) life satisfaction analysis reported that around half of the variation in personal wellbeing could be down to genetic and personality factors, well beyond the reach of government action.⁸

The use of GDP statistics has flourished because it is a response – albeit an imperfect one – to the need to evaluate our economic progress. Inclusive growth, as a measure of shared economic prosperity, offers a broader evaluation tool, while still being directly relevant to economic policy questions. By using a rigorous economic framework as the foundation, we are able to produce rankings which can guide economic policymaking. We need to be able to track inclusive growth, to make comparisons, identify differences and make projections. Only then can we expect the focus of economic policy to change.

³ Ibid.

⁴ Stiglitz, J. et al. (2009) *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Available at: <https://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report>

⁵ See for example OECD (2018) *The Framework for Policy Action on Inclusive Growth*. Available at: <https://www.oecd.org/mcm/documents/C-MIN-2018-5-EN.pdf>

⁶ Legatum Institute (2018) *The Legatum Prosperity Index 2018*. Available at: https://prosperitysite.s3-accelerate.amazonaws.com/2515/4321/8072/2018_Prosperty_Index.pdf

⁷ Alldritt, C. (2018) *Inclusive Growth: Why it can rekindle progressive politics*. London: Centre for Progressive Policy. Available at: <https://www.progressive-policy.net/downloads/files/IG-essay-final.pdf>

⁸ The ONS analysis covers both socio-demographic and economic factors. See Office for National Statistics (2019) *Personal and economic wellbeing: what matters most to our life satisfaction?* Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/personalandeconomicwellbeingintheuk/whatmattersmosttoourlifesatisfaction>



A framework for measuring inclusive growth

2

The background of the lower half of the image features a series of overlapping, curved bands in various colors: purple, teal, pink, and gold. These bands are set against a dark, almost black, background, creating a dynamic and modern abstract design.

The Stiglitz-Sen-Fitoussi Commission⁹ report identified the ‘marked distance’ between conventional measures of economic growth and widespread perceptions. This is as true now as it was then, with many experiencing the economic progress cited in official statistics has not trickled down, suggesting that we are not currently measuring what matters. The ultimate prize is, therefore, to shrink this gap by creating a measure that captures how people are really experiencing the economy. But it must go further still. It must provide a clear signal to government as to how it can improve the lives of its people.

Challenges and trade-offs

There exist many challenges to designing an accurate measure of inclusive growth, many of which necessitate difficult trade-offs. These challenges include:

- 1 On the ground application:** any measure must be easy to understand and have real world applicability if it is to lead to tangible change in policy.
- 2 Single indicator vs a basket of indicators:** a basket of indicators, perhaps presented as a dashboard, offers a fuller picture of economic progress than can a single figure. However, public debate tends to focus more easily around a single figure.
- 3 Selection of indicators:** choosing which indicators to include necessitates judgements as to what matters for inclusive growth. If not based on a sound intellectual and theoretical foundation, then the choice of indicators can seem ad hoc.¹⁰
- 4 Weighting different indicators:** combining a basket of indicators into a single metric requires judgements as to the relative importance of each to inclusive growth. For example, is a 10% increase in employment of equivalent value to a 10% reduction in inequality?
- 5 Data availability and timeliness:** finding comparable, statistically significant data at the local, national and international level remains a key challenge, despite recent improvements, such as the Penn World Tables, the World Income Inequality Database and the data development work by the OECD.

By navigating these trade-offs as comprehensively and transparently as possible, we can construct a measure of inclusive growth that adds broader insight into the nature and quality of growth and shifts our understanding of economic progress.

The ultimate prize is to create a measure that captures how people are really experiencing the economy. But it must go further still. It must provide a clear signal to government as to how it can improve the lives of its people

Our approach

In response to these challenges and in order to bring together and build on what has come before, we have developed an approach that combines data on consumption, life expectancy, leisure time, inequality and unemployment into a single measure of how all of society benefits from and contributes to economic growth. Higher consumption and life expectancy, more leisure and lower inequality and unemployment all improves an individual's wellbeing. The approach is rooted in economic theory and evidence and the final measure is a simple summary statistic bound by a recognised economic framework.¹¹

⁹ Stiglitz, J. et al. (2009) op cit.

¹⁰ Coyle, D. (2017) *Measuring Greater Manchester's economic performance through the lens of inclusive growth*. Available at: https://www.gmcmeetings.co.uk/download/meetings/id/1883/9b_annexe_a_gm_submission_to_the_rsa

¹¹ Please see the online technical appendix for a full explanation of the methodology and data used.

Box 1: Drivers of ‘the good life’

Based on the available data¹², we have defined the good life as being driven by:



Consumption

As an economic concept, material wellbeing is an important component of inclusive growth. And as the Stiglitz-Sen-Fitoussi Commission observes, material living standards are more closely related to measures of consumption than to GDP. While there may well be an upper limit to what extra consumption can achieve, consumption is key for a decent standard of living and for inclusive growth. Our per capita consumption data includes household and government consumption spending.



Life expectancy

Health is a fundamental economic asset that empowers people to take an active part in the economy. While life expectancy is a crude proxy for health, a life cut short due to preventable causes clearly curtails an individual's ability to live the good life – to learn, work and play.



Leisure

Differences in the wellbeing gained from various uses of time are important for understanding economic welfare, particularly as modern economies become increasingly service based.¹³ While it is true that being engaged in some sort of productive employment is important for a good life, there are of course limits, and a healthy

balance between work and leisure is essential. Early stages of industrialisation, for example, while driving strong GDP growth, have often come hand-in-hand with extremely long working hours for the majority of those in employment.¹⁴ Economic growth means little for individual wellbeing if people spend most of their waking hours at work. Our leisure calculation is based on data on average working hours and employment levels.



Inequality

At the heart of inclusive growth is a concern for how the benefits of growth are distributed. High levels of inequality are clearly antithetical to a society that values any degree of economic justice. More practically, average statistics on income, consumption or wealth can mask important changes within the distribution. For example, an increase in average consumption could hide a fall in consumption for the majority of people if the rise for those at the top is substantial. Our measure of inequality is the Gini coefficient for consumption.¹⁵



Unemployment

Employment has been shown to be central to someone's sense of self-worth and agency. As such, there is a strong negative effect of unemployment above and beyond a fall in income. In fact, Clark and Oswald (2002) find that a change from employment to unemployment causes such distress that an individual would have to be given a monthly payment of between £15,000 and £23,000 to be compensated for the loss in welfare.¹⁶ Our measure combines this finding with data on unemployment for each country.

¹² Please see the online technical appendix for a full explanation of data used.

¹³ Coyle, D. and Nakamura, L. (2019) *Towards a Framework for Time Use, Welfare and Household-centric Economic Measurement*. Available at: <https://www.escoe.ac.uk/wp-content/uploads/2019/01/ESCoE-DP-2019-01.pdf>

¹⁴ Chang, H. J. (2014) *Economics: The User's Guide*. London: Pelican Books.

¹⁵ Where a Gini coefficient for consumption is not available we infer the figure from the income Gini coefficient.

¹⁶ Clark, A. and Oswald, A. (2002) *A Simple Statistical Method for Measuring How Life Events Affect Happiness*. *International Journal of Epidemiology*, 31(6): 1139–44. Available at: http://wrap.warwick.ac.uk/343/1/WRAP_oswald_ijeclarkos.pdf

The methodology is based on research by Stanford University economists Charles Jones and Peter Klenow.¹⁷ While their methodology has been recognised as a key contribution to the field, the standard Jones and Klenow approach – which includes life expectancy, consumption, leisure and consumption inequality – falls short of the full definition of inclusive growth as previously stated: enabling as many people as possible to contribute to as well as benefit from growth. While the Jones and Klenow measure does consider the benefits of growth, the exclusion of a measure of employment limits its ability to reflect whether as many people as possible are contributing to growth.

We extend the methodology to include unemployment to create an inclusive growth metric. Our inclusion of unemployment moves the existing methodology forward in two ways. Firstly, it accounts for the negative effects that unemployment brings above and beyond a drop-in income.¹⁸ Secondly, we correct the implicit assumption in the Jones and Klenow methodology that all waking hours not spent working constitute leisure time and are therefore good for wellbeing. All other things being equal, higher unemployment leads to greater welfare in their approach. We would strongly argue that increased leisure time for those in work is good for inclusive growth, but the same is not true for those involuntarily unemployed.¹⁹ We include retirees in our leisure time calculation, a decision supported by ONS analysis that found “being retired has a positive impact (on life satisfaction), while being unemployed or economically inactive due to sickness or disability has a significant negative impact”.²⁰

We would strongly argue that increased leisure time for those in work is good for inclusive growth, but the same is not true for those involuntarily unemployed

Adjusting for unemployment in this way allows the methodology to produce an inclusive growth score for each country and each year. In our calculations, therefore, lower unemployment drives higher inclusive growth.²¹

There are a number of significant benefits to the approach put forward in this report that directly respond to the challenges outlined above:

- It offers a credible, usable measure with real world applicability by highlighting areas of concern from an economic standpoint for each country to improve upon. This is important, given the growing demand from governments at the national and local level for practical IG tools.
- It is a single figure that incorporates only a small number of indicators so that key findings are not lost through complexity, while still capturing the essence of inclusive growth.
- The selection of indicators is not ad hoc. The methodology is rooted in economics, is theoretically rigorous and has stood up to international scrutiny. This credibility will be important in terms of the measure’s ability to influence economic policymakers.
- It utilises internationally comparable data from a number of different reputable sources, including the UN, the Penn World Tables, the International Labour Organisation, the OECD, Eurostat and the World Bank.
- Importantly, we are drawing on the expertise of those already in this debate from academia, policy, government, business and the ONS to ensure we are building and bringing together a coherent measure of inclusive growth.

¹⁷ Jones, C. and Peter, J. (2016) *Beyond GDP? Welfare across Countries and Time*. American Economic Review, 106 (9): 2426–57. Available at: <https://www.aeaweb.org/articles?id=10.1257/aer.20110236>

¹⁸ This value of unemployment in our IG score is based on the work of Andrew Clark and Andrew Oswald. See Clark, A. and Oswald, A. (2002) op cit.

¹⁹ We also adjust the leisure score to reflect that some people choose to leave the labour market voluntarily (e.g. by retiring) and for them increased leisure time is a good thing.

²⁰ Office for National Statistics (2019) op cit.

²¹ See technical appendix for a full discussion of how unemployment is added to the methodology.

CPP Inclusive Growth Country Index results



Table 1: OECD countries ranked by inclusive growth score, 2017

	IG score	Log IG score	Consumption	Life expectancy	Leisure	Inequality	Unemployment
Luxembourg	1.47	0.38	0.10	0.26	-0.11	0.14	-0.01
Iceland	1.40	0.33	-0.10	0.23	0.00	0.20	0.01
Austria	1.14	0.13	-0.23	0.19	0.01	0.18	-0.01
Norway	1.13	0.12	-0.35	0.24	0.03	0.20	0.00
Belgium	1.12	0.12	-0.29	0.18	0.06	0.19	-0.02
Switzerland	1.11	0.10	-0.30	0.30	-0.04	0.16	-0.01
Sweden	1.08	0.08	-0.30	0.22	0.01	0.18	-0.03
Germany	1.07	0.07	-0.28	0.15	0.05	0.16	0.00
Denmark	1.05	0.04	-0.30	0.15	0.04	0.18	-0.02
Finland	1.03	0.03	-0.31	0.17	0.02	0.19	-0.04
Australia	1.03	0.03	-0.29	0.23	-0.02	0.12	-0.02
United Kingdom	1.02	0.02	-0.28	0.16	0.01	0.14	0.00
France	1.02	0.02	-0.39	0.23	0.06	0.16	-0.04
Netherlands	1.02	0.02	-0.36	0.18	0.03	0.18	-0.01
Canada	1.02	0.02	-0.32	0.23	-0.02	0.15	-0.03
Japan	1.00	0.00	-0.42	0.32	-0.03	0.12	0.02
United States	1	0	0	0	0	0	0
Italy	0.92	-0.08	-0.44	0.27	0.03	0.12	-0.05
New Zealand	0.85	-0.16	-0.39	0.18	-0.04	0.10	-0.01
Israel	0.83	-0.18	-0.43	0.23	-0.04	0.06	0.01
Slovenia	0.78	-0.25	-0.58	0.15	0.01	0.20	-0.02
Ireland	0.78	-0.25	-0.59	0.19	0.02	0.16	-0.02
Spain	0.75	-0.29	-0.54	0.26	0.01	0.11	-0.13
Czech Rep.	0.74	-0.30	-0.54	0.05	-0.02	0.20	0.02
South Korea	0.65	-0.43	-0.72	0.22	-0.10	0.16	0.00
Slovakia	0.63	-0.47	-0.57	-0.08	0.01	0.20	-0.04
Portugal	0.61	-0.50	-0.67	0.14	-0.03	0.11	-0.05
Poland	0.55	-0.59	-0.68	-0.04	-0.01	0.14	0.00
Estonia	0.54	-0.61	-0.63	-0.05	-0.04	0.13	-0.02
Greece	0.53	-0.64	-0.69	0.15	-0.04	0.11	-0.16
Lithuania	0.51	-0.68	-0.48	-0.22	-0.03	0.08	-0.03
Hungary	0.50	-0.70	-0.72	-0.13	-0.02	0.17	0.00
Chile	0.42	-0.87	-0.87	0.06	-0.03	-0.01	-0.03
Latvia	0.40	-0.91	-0.74	-0.20	-0.03	0.11	-0.05
Turkey	0.37	-1.01	-0.88	-0.13	0.06	-0.01	-0.04
Mexico	0.29	-1.24	-1.10	-0.06	-0.06	-0.04	0.01

We have developed an index that, as we see it, measures shared prosperity – or the good life. Here we present the findings of the CPP Inclusive Growth Country Index. The results presented bring to life what an inclusive growth ranking looks like, test core economic relationships and, most importantly, provoke debate as to what we consider to be the good life and what we can do to achieve it.

Table 1 shows all OECD countries ranked by their inclusive growth score in 2017. The second column shows a country's IG score in comparison to the US, which has a score of one. The third column shows the logarithm of the IG score which is then broken down into its constituent scores of life expectancy, consumption, leisure, inequality and unemployment in the remaining columns.

Headline results

Luxembourg has the highest IG score in 2017, driven mainly by high life expectancy and being the only country in the OECD with higher levels of consumption than the US. Iceland, however, achieves a similarly high IG score, despite far lower levels of consumption. It combines high life expectancy and low inequality to achieve an IG score that is 40% higher than that of the US.

Chart 1: CPP Inclusive Growth Country Index for 155 countries²²

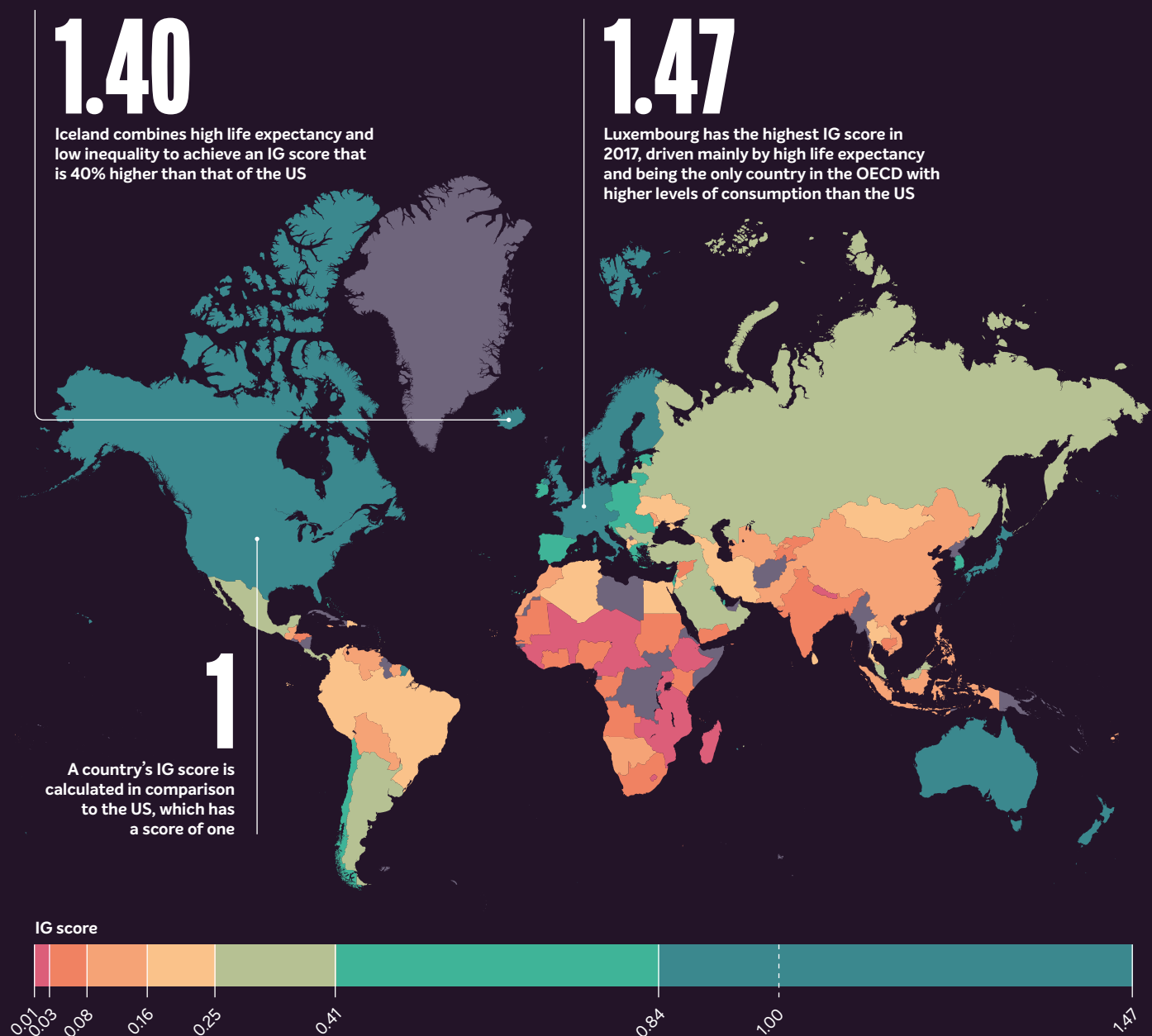


Table 2: Standard deviation and correlation of different IG score elements

	Consumption	Life expectancy	Leisure	Inequality	Unemployment
Standard Deviation					
OECD only	0.25	0.15	0.04	0.06	0.04
All	1.07	0.23	0.07	0.10	0.05
Correlation with other elements of log IG score					
OECD only	0.61	0.52	0.12	0.48	0.12
All	0.56	0.69	-0.37	0.42	-0.19

22 Boundary data from <https://www.naturalearthdata.com>

Table 3: Bottom 10 countries (all) ranked by inclusive growth score, 2017

	IG score	Log IG score	Consumption	Life expectancy	Leisure	Inequality	Unemployment
Central African Republic	0.01	-4.31	-4.10	-0.25	0.05	0.00	-0.01
Mozambique	0.01	-4.29	-3.94	-0.18	0.06	-0.25	0.02
Niger	0.02	-4.14	-4.10	-0.21	0.04	0.10	0.04
Liberia	0.02	-3.96	-3.98	-0.21	0.09	0.11	0.03
Chad	0.02	-3.91	-3.58	-0.44	0.08	0.00	0.03
Malawi	0.02	-3.90	-3.73	-0.22	0.05	0.00	0.00
Ethiopia	0.02	-3.88	-3.78	-0.18	0.02	0.03	0.03
Sierra Leone	0.02	-3.83	-3.42	-0.51	0.09	0.00	0.02
Togo	0.02	-3.76	-3.47	-0.32	0.03	-0.03	0.03
Uganda	0.02	-3.74	-3.49	-0.33	0.07	-0.03	0.03

Table 3 shows the 10 countries with the lowest IG scores across the entire sample of 155. It is plain to see this is driven largely by very low consumption scores. These countries still suffer from levels of extreme poverty and this is reflected in their IG score.

Central and eastern European countries are catching up fast.

The strongest growth in IG scores in the OECD has been recorded by countries in central and eastern Europe.²³ It is notable that five of the top six countries with the fastest growing IG score since 2000 joined the EU in 2004. Table 4 shows that these countries have benefited from rapid growth of consumption. Improving life expectancy and falling unemployment have also made significant contributions for growth in Estonia, Latvia, Poland and Slovakia. While this strong growth in IG score should be commended, it is important to note that this growth has come from a relatively low base and many of the countries in Table 4 still lag well behind the US. Estonia, the fastest growing country, still only has an IG score just over half that of the US in 2017.



The strongest growth in IG scores in the OECD has been recorded by countries in central and eastern Europe

Table 4: Top 10 OECD countries ranked by IG score growth, 2000–17

	IG score growth	Consumption	Life expectancy	Leisure	Inequality	Unemployment
Estonia	9.15	5.65	2.56	0.21	0.29	0.43
Lithuania	7.74	6.54	0.94	0.05	-0.29	0.50
Chile	7.56	5.16	0.87	0.00	1.42	0.11
Latvia	7.49	5.82	1.49	0.07	-0.15	0.26
Poland	7.34	4.76	1.39	0.42	0.14	0.63
Slovakia	7.31	4.83	1.46	0.31	0.08	0.63
Turkey	5.89	4.48	1.97	-0.26	-0.04	-0.26
Czech Rep.	5.63	3.48	1.58	0.30	-0.09	0.37
South Korea	5.47	2.96	2.17	0.28	0.05	0.02
Hungary	5.45	3.66	1.69	0.01	0.00	0.08

²³ Note that growth is calculated by using the same country in 2000 as the base, instead of the US value.

Drivers of the index

Consumption is clearly an important driver of the IG score. It has the largest standard deviation of the drivers, meaning that this element varies most between countries and so has more impact on their relative scores. It also has a strong correlation with the other elements of the score. However, a key finding of the index is that 16 countries manage to surpass the US in terms of IG despite having lower levels of consumption. Life expectancy also has a relatively large standard deviation and strong positive correlation with other elements of the score, suggesting it too is a key driver of IG score.

The addition of unemployment into the methodology has only made a slight difference for the majority of countries. For OECD countries, its standard deviation with other elements of the IG score places it relatively on par with leisure and inequality in terms of influence. However, while unemployment only makes a small difference to most countries' scores, it has had a relatively significant impact on the scores of both Greece and Spain. This is a reflection of the damage caused by high levels of unemployment in these countries following the financial crisis.

At the OECD level, increased leisure time is positively correlated with each of the other elements of the IG score, except unemployment, suggesting that leisure may not have to be traded off against consumption, inequality, and life expectancy. At the global level (155 countries), leisure is negatively correlated with each of consumption, life expectancy, inequality and unemployment, but due to the paucity of data on working hours it is not possible to draw any definitive conclusions and this may be down to variations in labour market participation rates and dependency ratios.

Box 2: Inclusive growth in the UK

The UK has a relatively high IG score but suffers from sluggish improvement. In 2017, the UK's IG score placed it 12th out of the 36 OECD countries. Relative to the US, the UK performed well on life expectancy and inequality, with very similar scores for leisure and unemployment. Our index implies for the UK that a 1% increase in consumption is equivalent in terms of inclusive growth to:

- A 0.5% decrease in the unemployment rate
- Each person working 1 hour fewer per week
- A reduction in inequality of 3%²⁴
- An increase in life expectancy of just over 2 months

Growth in the UK's IG score since 2000 has averaged 3.31%.²⁵ Since 2000, consumption has contributed most to growth of the five drivers. Improvements in life expectancy have also driven growth in the UK's IG score, although almost all of this progress was made prior to 2011. Since then, life expectancy has grown on average at only 0.05% per year, with declines in two years across the period.

While an average growth rate of more than 3% per year may seem impressive, growth in the IG score has been sluggish relative to other OECD countries, placing the UK only 22nd out of 36. This is down to a range of factors. Life expectancy and consumption – perhaps the two key drivers of growth in IG score – have both grown in the UK but growth has been faster in the majority of other OECD countries. A lack of improvement when it comes to leisure is also partly responsible. UK inequality is almost exactly the same in 2017 as it was in 2000, meaning this driver has little effect on growth in IG score. This puts the UK in the middle of OECD countries, though it is notably better than the United States where inequality has widened. It is also in sharp contrast to the seventeen years leading to 2000 during which UK inequality increased dramatically.

One area in which the UK has been performing well in recent years is unemployment. The unemployment rate in the UK has reached a 45-year low²⁶, which is a key achievement in terms of inclusive growth given strong evidence of the individual and wider societal benefits of employment. While in some countries boosting the level of employment remains the policy focus, attention in the UK has now turned to 'good work'. There is growing recognition of the importance of creating employment with fair pay, job security, scope for training and progression, and high job satisfaction. While reflecting this in a cross-national measure is not yet possible due to data constraints, it is nevertheless an important policy objective in this area.

²⁴ A 3% reduction in the coefficient for consumption inequality.

²⁵ Note that growth is calculated by using the same country in 2000 as the base, instead of the US value.

²⁶ Romei, V. (2019) *UK unemployment rate drops to lowest level since 1974*. London: Financial Times. Available at: <https://www.ft.com/content/4cce6f54-7624-11e9-bbad-7c18c0ea0201>

Chart 2: UK growth in inclusive growth score and GDP per capita vs. year before, 2001–17

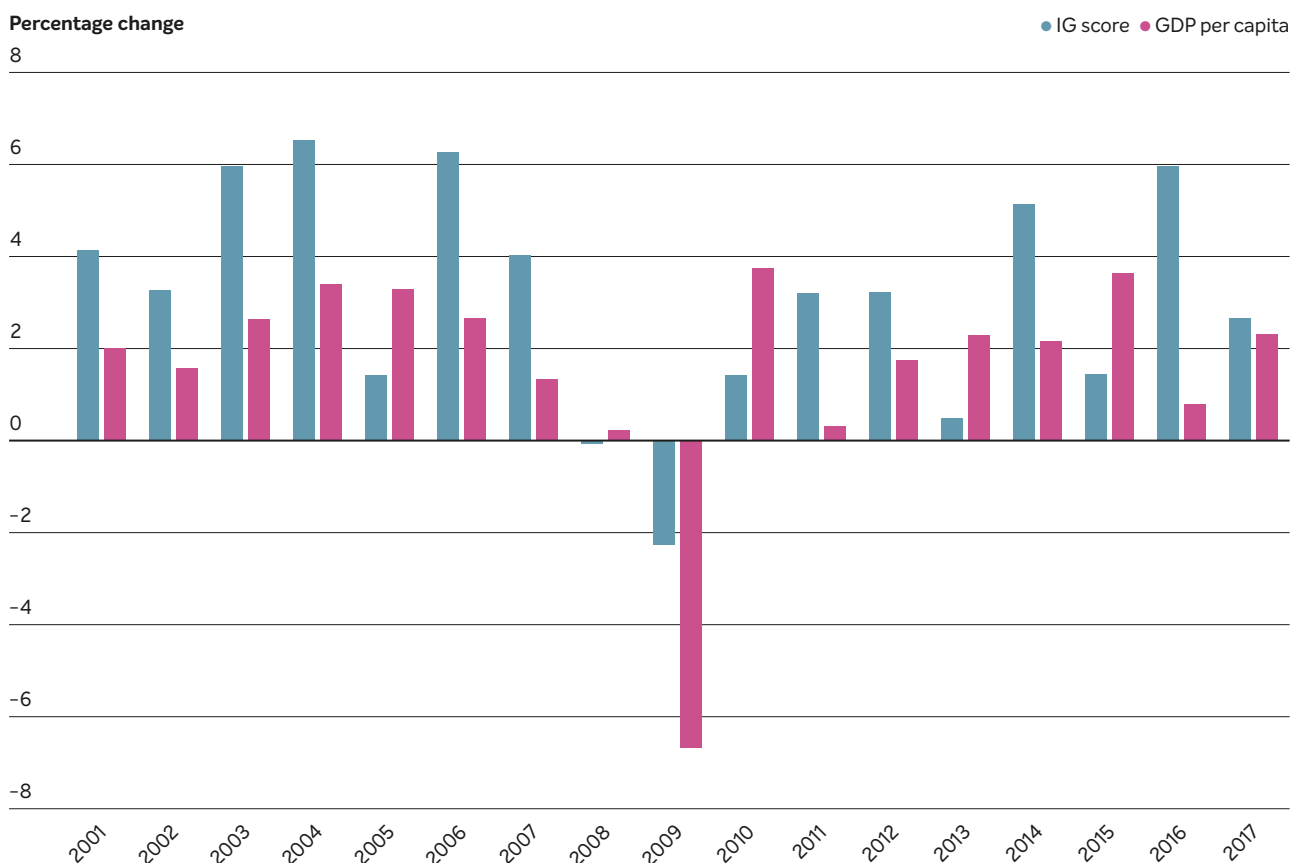


Table 5: Growth of GDP per capita, IG score and components of IG score in the UK, 2001–17²⁷

	GDP per capita	IG score	Consumption	Life expectancy	Leisure	Inequality	Unemployment
2001	2.02	4.13	4.64	1.50	0.37	-3.33	0.95
2002	1.57	3.26	2.73	0.90	0.03	0.00	-0.40
2003	2.65	5.97	3.11	1.82	0.14	0.68	0.22
2004	3.41	6.52	4.60	1.80	0.02	-0.11	0.21
2005	3.29	1.42	0.25	1.78	-0.30	-0.10	-0.21
2006	2.66	6.26	3.77	1.18	-0.33	2.33	-0.69
2007	1.33	4.04	2.85	1.18	0.01	-0.11	0.10
2008	0.22	-0.08	0.97	0.90	-0.10	-1.43	-0.42
2009	-6.67	-2.27	-4.47	2.69	-0.04	1.64	-2.09
2010	3.74	1.42	0.27	2.07	-0.13	-0.54	-0.26
2011	0.31	3.20	0.36	3.21	-0.01	-0.11	-0.25
2012	1.76	3.22	1.90	-0.27	-0.33	1.79	0.13
2013	2.30	0.49	-1.45	0.58	-0.11	1.10	0.37
2014	2.16	5.15	3.00	1.73	0.28	-1.41	1.54
2015	3.65	1.45	3.11	-2.00	0.29	-0.84	0.89
2016	0.79	5.97	3.22	1.16	0.12	0.94	0.53
2017	2.31	2.66	1.96	0.00	0.17	0.00	0.53
Average	1.62	3.11	1.81	1.19	0.01	0.03	0.07

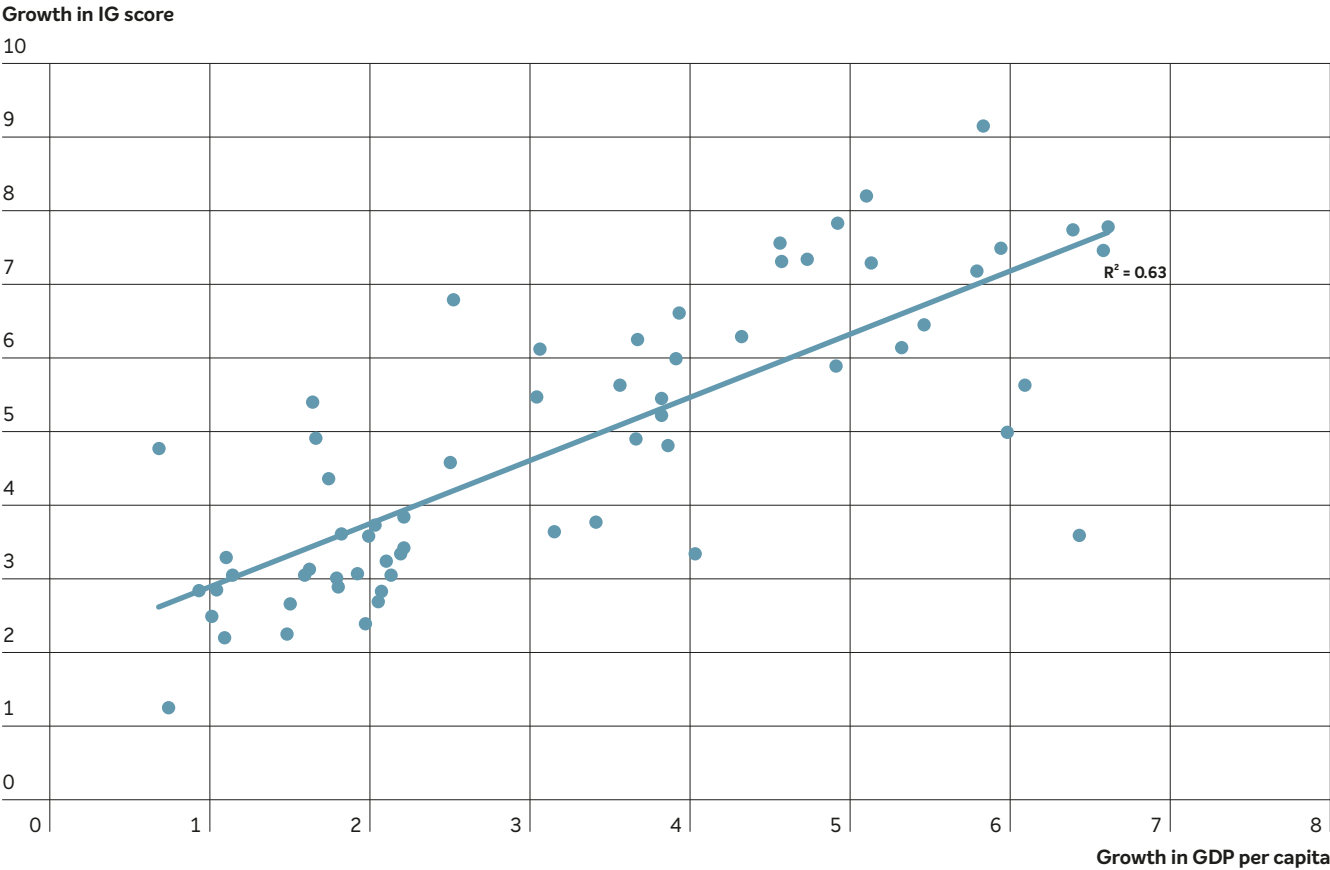
²⁷ The growth figures in the table are the year-on-year differences in log score (e.g. log GDP p.c). These can roughly be interpreted as percentage growth. Log differences are used so that the constituent growth figures sum to the overall IG score growth. Where data is unavailable for a driver in a particular year, growth has been set to zero.

Inclusive growth, GDP and other measures of welfare

4



Chart 3: The relationship between growth in inclusive growth score and GDP per capita across 63 countries, 2000–17²⁸



Inclusive growth is related to economic growth. But it is a concept that goes beyond GDP, while remaining firmly rooted in economics. As such, we would expect our measure of inclusive growth to be strongly, but not completely, correlated with GDP per capita.

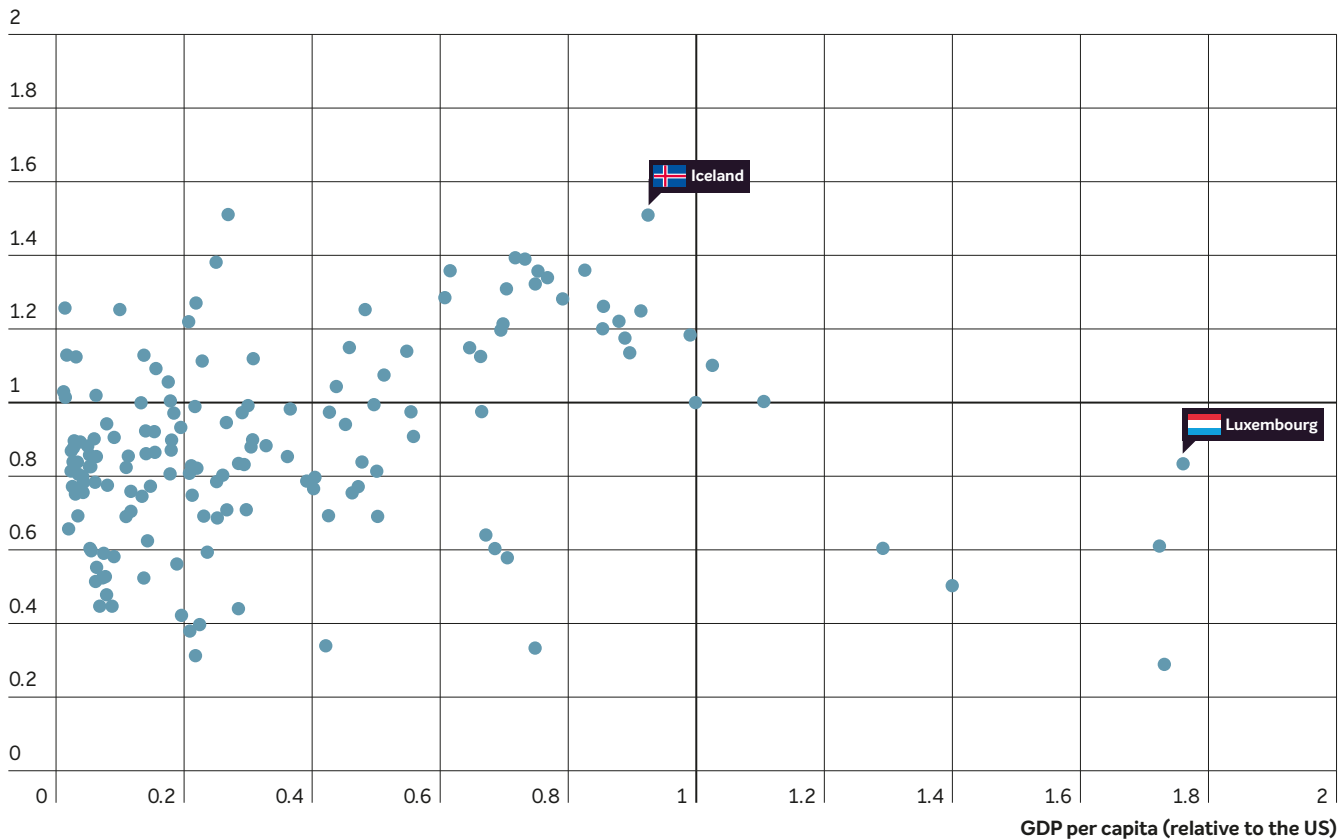
The analysis does indeed show a strong relationship between inclusive growth and GDP per capita.²⁹ There is also a strong relationship between growth in the IG score and growth in GDP per capita, as depicted in Chart 3. **However, GDP per capita masks important variations in the level and growth of shared prosperity across countries.**

GDP per capita masks important variations in the level and growth of shared prosperity across countries

²⁸ Data is presented for countries for which there was data available for each indicator in 2000 and 2017 (or within 5 years of either).
²⁹ We find a correlation in logs of 0.97, similar to that found by Jones and Klenow.

Chart 4: The relationship between the ratio of inclusive growth to income and GDP per capita across 155 countries, 2017

Ratio of IG score to GDP per capita



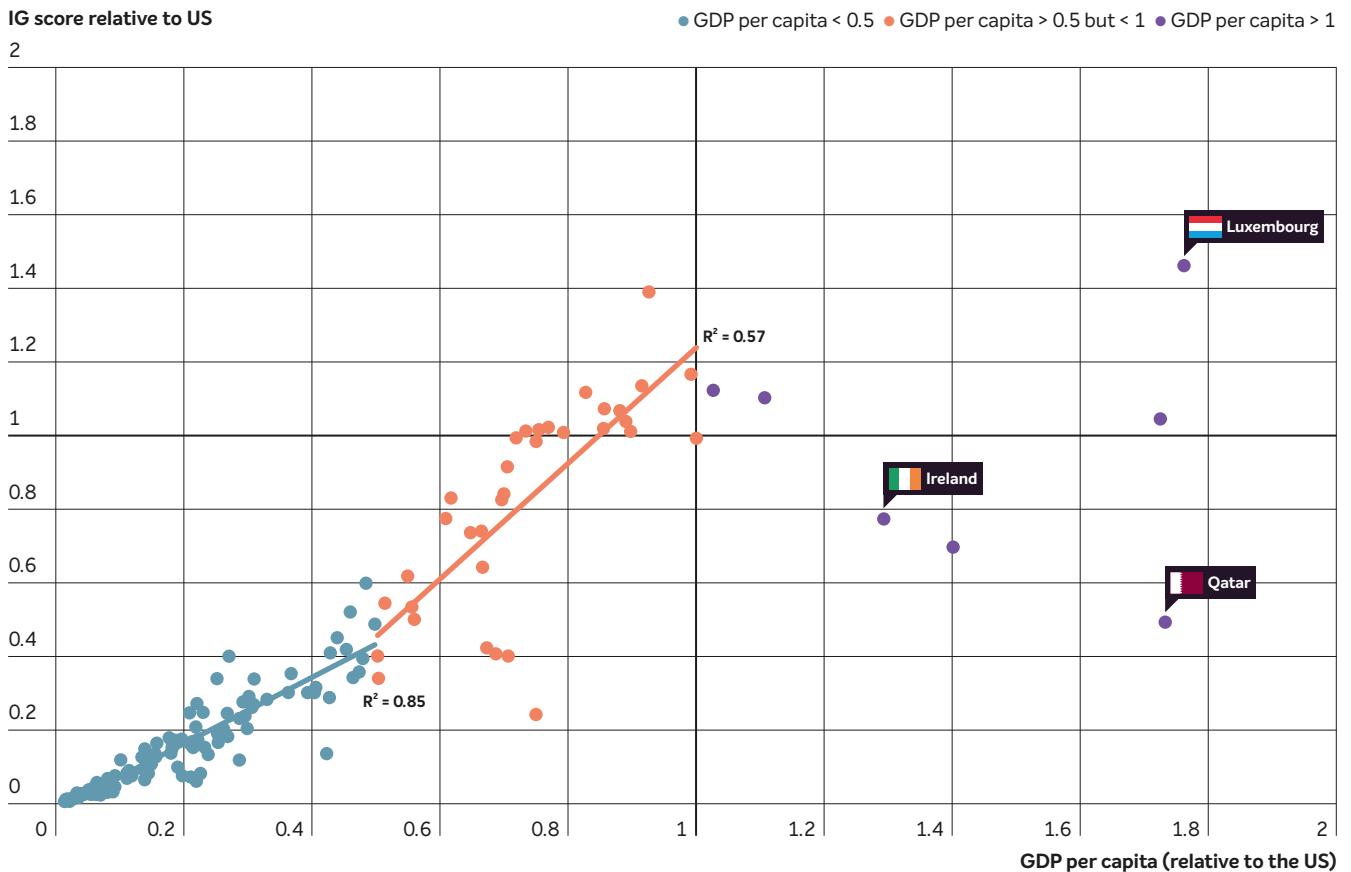
A generally close relationship does not mean that GDP per capita can be considered an acceptable proxy for inclusive growth. For example, Iceland and Luxembourg have similar IG scores, yet Luxembourg has a GDP per capita nearly double that of Iceland. This is because GDP fails to account for the significantly higher life expectancy in Iceland which our IG measure captures. Chart 4 depicts the ratio of a country's IG score to income on one axis and GDP per capita on the other. If GDP per capita were everything, we would expect every country's ratio to be equal to one. However, only 17 out of 155 countries in 2017 had a ratio between 0.95 and 1.05. With ratios ranging from 0.29 to 1.51, there is clearly far more to inclusive growth than can be captured by GDP per capita.

Iceland and Luxembourg have similar IG scores, yet Luxembourg has a GDP per capita nearly double that of Iceland. This is because GDP fails to account for the significantly higher life expectancy in Iceland which our IG measure captures.

11%

Only 17 out of 155 countries in 2017 had a ratio of IG score to GDP per capita between 0.95 and 1.05

Chart 5: The relationship between GDP per capita and inclusive growth score for countries above and below 50% of US GDP per capita



The richer a country is, the less relevant GDP per capita is for inclusive growth. In Chart 5, the blue dots represent countries with GDP per capita of less than half the US's level. For these, there is a very close correlation between GDP score and IG score, acting predominantly through consumption. The orange dots show how this relationship weakens amongst richer countries. For these countries, GDP per capita provides less of an indication of IG score.

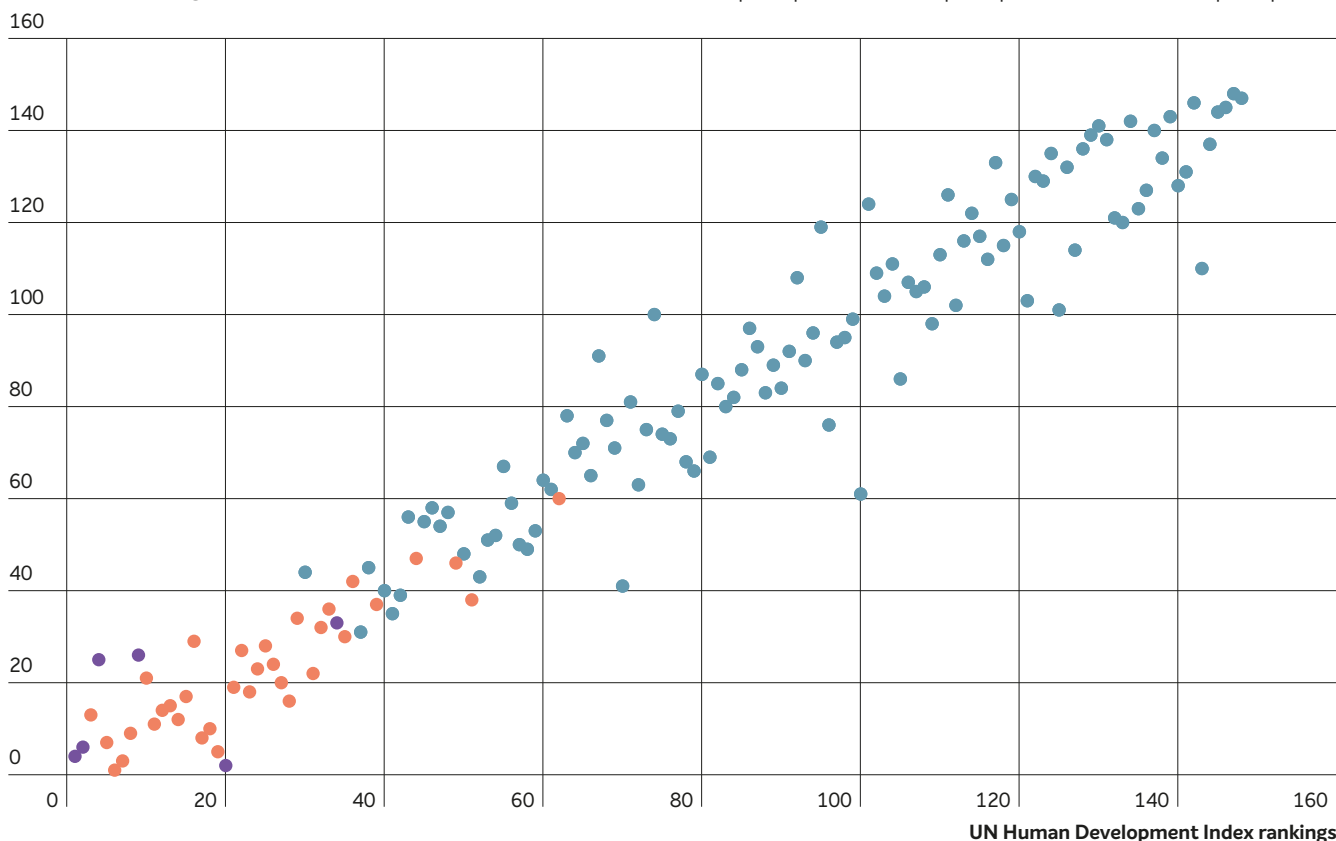
The purple dots represent GDP outliers such as Qatar, Luxembourg and Ireland. For this group, there seems to be little or no relationship between GDP per capita and inclusive growth. In fact, reported GDP per capita can be highly misleading. In Ireland's case, their own statistics authority recognises that the redomiciling of companies and the reporting of R&D and intellectual property output as based in Ireland has disproportionately impacted the measure of GDP. In response, the Central Statistics Office produced a 'Modified Gross National Income' statistic.³⁰ In this case, as in many others, GDP per capita shows itself to be a poor proxy for inclusive growth.

For GDP outliers such as Qatar, Luxembourg and Ireland there seems to be little or no relationship between GDP per capita and inclusive growth. In fact, reported GDP per capita can be highly misleading.

³⁰ For an explanation of the new measure please see the Central Statistics Office website. Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-nie/nie2017/mgni/>

Chart 6: CPP inclusive growth rankings vs the UN Human Development Index rankings, 2017 (151 countries)³¹

CPP IG Index rankings



Inclusive growth is closely related to – but distinct from – other measures of welfare. For example, Chart 6 shows the relationship between the IG rankings and the UN Human Development Index (HDI) rankings, suggesting a strong correlation (R-squared of 0.95).

However, again there are deviations. These reflect that while human development and inclusive growth are of course related, they are distinct concepts. Both include measures of life expectancy and income, but the HDI includes measures of education and ignores unemployment, leisure and distributional concerns. As such, these appear to drive the main differences in the relationship. The key point here is the implications of each index differ greatly. The policy recommendations that stem from the IG index concern the social and economic levers that affect labour markets, health policy and living standards.

The implications of each index differ greatly. The policy recommendations that stem from the IG index concern the social and economic levers that affect labour markets, health policy and living standards.

³¹ We use rankings here rather than absolute figures as the HDI is constructed with a different scale. Comparing rankings of the IG index with rankings of GDP per capita also produces an R-squared of 0.94.

Potential extensions to the index

No measure of inclusive growth will be perfect, and our approach is certainly not without limitations. We are hopeful that we, and others, will be able to continue to build on this approach as more regular data on a range of additional inclusive growth drivers becomes available.

Firstly, we would ideally adjust the unemployment term to reflect ‘good work’ in some way, to indicate that “all work should be fair and decent with realistic scope for development and fulfilment”³² and a cornerstone of inclusive growth. However, given an approach for measuring this is still being developed for the UK, we are years away from having comparable data across multiple countries. To an extent, our approach already deals with one aspect of good work by including data on working hours. While reasonable working hours is clearly important, this is just one element of good work. When we come to develop the community level inclusive growth index, it is our ambition to include a proxy measure for good work.

As previously noted, data on life expectancy is a crude proxy for health.³³ Other measures, including healthy life expectancy, could be considered as a way to extend the analysis in the future.

With the emergence of rising inequalities in wealth and between generations as prominent issues in many countries, the case for their inclusion in future iterations of IG metrics is growing. Again, however, this will be contingent on the availability of internationally comparable data through time. The OECD’s work developing data on both these topics is cause for optimism.

It is increasingly important that the wider environmental sustainability of consumption is considered

Another issue to address is the sustainability of the indicators covered. It is increasingly important that the wider environmental sustainability of consumption is considered. There have been previous attempts to include this important element. One notable example comes from a recent IMF working paper looking at the impact of environmental externalities.³⁴ It is important to note that the original methodology – and so the adapted methodology used in this report – is a point in time measure of welfare or inclusive growth now. Any future iteration of an inclusive growth index that is able to account for trade-offs through time across all variables without compromising the rigorous economic framework would represent a welcome development.

Finally, the OECD have also built on the Jones and Klenow methodology to create a distribution-adjusted welfare measure that provides consistent welfare evaluations even when individuals hold different preferences over aspects of wellbeing. They too find that their welfare measure differs significantly from economic growth.³⁵

This report is intended to spark debate about how best to measure economic progress and in so doing help to change the focus of our economy. It is part of a process of debate and discussion that we hope will lead to iterative improvements in the future. We therefore welcome any suggestions for additional factors to include in the index in future iterations, by us or the wider inclusive growth community.

32 Taylor, M. (2017) *Good work: The Taylor Review of Modern Working Practises*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627671/good-work-taylor-review-modern-working-practices-rg.pdf

33 Health spending is included in consumption data, however.

34 Bannister, G. and Mourmouras, A. (2017) *Welfare vs. Income Convergence and Environmental Externalities*. Washington D.C.: International Monetary Fund. Available at: <https://www.elibrary.imf.org/abstract/IMF001/24782-9781484331514/24782-9781484331514/24782-9781484331514.xml?redirect=true>

35 Boarini, R. et al. (2016) *Multi-dimensional Living Standards: A Welfare Measure Based on Preferences*. Paris: The OECD. Available at: <https://www.oecd-ilibrary.org/docserver/5jlpg7qvx6f-en.pdf?expires=1557394405&id=id&accname=guest&checksum=5A1035EA30AC54AA584E1CE09C01AC96>

**Conclusion: where
next for measuring
inclusive growth?**

5



Economic growth has failed to deliver broad-based prosperity. As a measure of economic output GDP is a useful statistic, yet it fails to adequately capture the quality and distribution of economic progress. Momentum is growing for a broader measure of national economic performance. Key global institutions, including the OECD, the IMF and the World Bank, through to local authorities have developed substantial work programmes in this area. The goal must be to shift the definition of progress towards the good life and ultimately provide a clear signal to government as to what to do about it.

The measure developed here adds to the growing body of evidence that measuring inclusive growth can bring the depth of economic insight required to achieve this. Using a rigorous economic framework, we provide a simple summary statistic for measuring economic performance that is consistent with the ethos of inclusive growth. While the measure is correlated with traditional economic measures, it captures much more than GDP.

Embedding inclusive growth in economic decision-making

Once a new metric has been developed, its objective must be to prompt policy change. To do so requires the metric to be embedded within regular economic monitoring and public policy. Alongside the headline metric we have developed, it will be important to understand the drivers behind the five inclusive growth indicators – consumption, life expectancy, leisure, inequality and unemployment. We will be testing the links between policy interventions and the headline measures of this framework in our next report, when we look at inclusive growth at community level.

Embedding inclusive growth metrics can be done at all levels of government. Here we have focused on the national level where this framework can be used to set the desired overarching direction of travel of the economy. In practice this means inclusive growth metrics should be part of strategic and evaluative frameworks of government green or white papers. Industrial strategies should also be guided by inclusive growth metrics first and foremost.

Secondly, embedding inclusive growth into policymaking requires regular reporting of inclusive growth metrics. This could be done by the Office for National Statistics for national (and local level) data and could serve as an extension of their very recent work linking personal and economic wellbeing.³⁶ Our upcoming CPP Inclusive Growth Community Index will investigate this at the local level. It is also important that the media reports inclusive growth metrics as the gauge for economic progress.

Both politicians and the media alike will have to play their part in recognising that GDP is no longer enough and metrics of the good life should be the true gauge for economic progress

Once the reporting is in place, it is vital that the public is aware of progress on inclusive growth if they are to hold decision-makers accountable for improving it. Both politicians and the media alike will have to play their part in recognising that GDP is no longer enough and metrics of the good life should be the true barometer for economic progress.

Next steps in the CPP-APPG research programme

This report sets out the first of three inclusive growth metrics that we will deliver as part of this project. The next will capture inclusive growth at a community level in the UK and will follow closely the methodology developed here, with the addition of the exploration of policy drivers. Later in the year, we will develop a company level inclusive growth metric. Together, these three coherent measures will illuminate what local and national decision-makers and company leaders can do to drive and deliver inclusive growth in the UK.

³⁶ Office for National Statistics (2019) op cit.



DECIMAL EQUIVALENTS

FRACTION	DECIMAL
1/16	0.0625
1/8	0.125
3/16	0.1875
1/4	0.25
5/16	0.3125
3/8	0.375
7/16	0.4375
1/2	0.5
9/16	0.5625
5/8	0.625
11/16	0.6875
3/4	0.75
13/16	0.8125
7/8	0.875
15/16	0.9375
1	1.0

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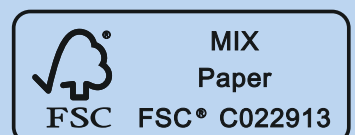
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About the Centre for Progressive Policy

The Centre for Progressive Policy is a think tank committed to making inclusive economic growth a reality. By working with national, local and international partners, our aim is to devise effective, pragmatic policy solutions to drive productivity and shared prosperity in the UK.

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