Measuring Progress: Economy, Society and Environment in Ireland

2023

This report is written by:

Prof. Charles M.A. Clark, *St. John's University, New York*

Dr. Catherine Kavanagh, *University College Cork*

Colette Bennett, *Social Justice Ireland*

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www.socialjustice.ie

Tel: 01-2903597

e-mail: secretary@socialjustice.ie

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Introduction

The main benefit of democratising public policy is placing well-being as a primary goal of government policy. With universal franchise and wide participation in all levels of policy formation, implementation and evaluation, government policy should increasingly reflect the hopes and dreams of the people. It is essential for citizens to be active in defining what promotes their well-being. While a basic needs approach can rely on experts, as was the case with the United Nations Millennium Development Goals, going beyond mere subsistence to human flourishing calls for widespread input, and a variety of voices. It also calls for a variety of measures to evaluate the success or failure of policy.

Having economic policy that promotes the well-being of the people is often contrary to the intent of the elites that establish civil government in the first place. Amidst all the lofty language of a country's founding documents, the clear goal is usually to protect the interests of the elites.[1] As Adam Smith (1976b, p. 715) noted "Civil government, so far as it is instituted for the security of property, is in reality instituted for the defense of the rich against the poor." Smith argued that government policy should be limited to three basic functions:

- national defense;
- justice (law and order); and
- public works and institutions which are beneficial but for which the private sector cannot provide (because they cannot be provided at the level needed that is also profitable for the private sector).

Today we call these public goods. Smith mentions infrastructure and education as examples, but the list is much longer today. It is now widely agreed that healthcare and environmental protection are necessarily public goods, meaning that the market cannot provide

1 See Charles Beard (1913). As a post-colonial country, the founding of Irish state is quite different from most advanced capitalist countries. Even though USA, Canada, Australia and New Zealand were former colonies, they were never experience the level of exploitation to fit post-colonialism.

the level and quality the public demands. The profit motive works adequately for the provision of face-lifts for celebrities, but is inadequate for nearly every other aspect of healthcare (Clark 2018). Furthermore, our understanding of justice goes well beyond law and order and the protection of property rights. Promoting well-being in the 21st century is not paternalism, it is the recognition of the limits of the market in providing all that is needed for human flourishing and the right each human has to participate in all aspects of the communities we live in.

Two of the earliest attempts at measuring the size of an economy were for the purpose of tallying up the spoils of conquest: the "Great Survey" ordered by William the Conqueror in the late 11th century (known as the "Domesday Book") and the "Down Survey" of Ireland carried out by William Petty in the mid-1650s. William the Conqueror's interest was in figuring out his potential tax revenue in the land he had conquered. William Petty's "Down Survey" was more commercial in its outlook, as Oliver Cromwell's invasion of Ireland had been funded by private investors, with the investors and soldiers being paid for their efforts in what could be taken from the Irish. William Petty's efforts to measure the wealth of a nation sometimes included the value of people, anticipating recent efforts of the World Bank.[2]

These early attempts at measuring wealth were not motivated by a desire to improve the well-being of the people in these countries, but instead to confiscate the better properties and extract a share of national output in the form of taxation or profits. With the rise of Mercantilism (1500-1800), governments and merchants pursued policies designed to increase the wealth of the country by mixing military and economic power to increase the amount of gold, silver, and land under the control of the State (usually the sovereign) and profits accruing to merchants. Keeping most of the citizens of the country poor was an essential part of mercantilist policy. As Bernard de Mandeville stated: "It is manifest, that in a free Nation where Slaves are not allow'd of, the surest Wealth consists in a Multitude of laborious Poor; … without them there could be no Enjoyment, and no Produce of any could be valuable" (quoted in Ravallian, 2016, p. 20). By keeping wages low, they would ensure people had to work more hours and lower costs of production for merchants would raise their profits. The well-being of anyone but the sovereign and the merchants was not a consideration. Progress in economic policy evolved from a "preferential option for merchants" to a "preferential option for capitalists" (see Clark 2021). After the Great Depression and World War Two, and the expansion of democratic institutions, the focus of economic policy enlarged to include social protection (welfare state) yet they were still primarily based on a pro-business, pro-economic growth outlook. While government policy still often prioritises business interests, the spread of democratic ideals, institutions, and popular participation in political affairs forces a rebranding of probusiness policies, which become pro-growth. A cynical version of this is "trickle-down" economic policies, which is based on the theory that the best way to help the poor is to give the rich more money.[3] These

2 See the World Bank's Changing Wealth of Nations (2021) and its estimates of Human Capital.

3 The reasoning is that cutting the tax rates for top earners will get them to work harder or invest more and that the benefits of this extra work or investments will trickle-down to the rest of society in the form of job creation and rising incomes.

policies are usually effective in redistributing money towards the already affluent, with little ever trickling down to the poor.

Economic growth becomes the rising tide that lifts all boats, with Gross Domestic Product (GDP) as the primary indicator of the size of the economy, and therefore the metric for measuring economic growth. With a growing GDP as the primary goal of economic policy, questions of how GDP increased or who received the benefits of the increase become secondary or ignored. Anything that produced economic growth must be good. Even the Cold War, with its threat of nuclear annihilation, and hot wars with their daily body counts on the nightly news, are viewed differently when you consider how military spending creates jobs and grows the economy.[4]

Writing during the Great Depression John Maynard Keynes was trying to convince governments that by spending money to put the unemployed back to work they would cause the economy to grow (through the multiplier effect). This was to counter the accepted economic orthodoxy of the time that government borrowing and spending "crowd-out" private sector spending. "Pyramid-building, earthquakes, even wars may serve to increase wealth, if the education of our statemen on the principles of the classical economics stands in the way of anything better" (Keynes 1964, p. 129). He added "It would, indeed, be more sensible to build houses and the like; but if there are political and practical difficulties in the way of" using the money to improve well-being, then the government burying bottles filled with money and letting private enterprise hire workers to dig the bottle up "would be better than nothing" (Ibid.).

The "political and practical difficulties" Keynes is referring to is the classical liberal idea that the government should not spend money on the well-being of its citizens (the market will produce what people want more efficiently) and the above-mentioned theory [now called Ricardian Equivalence] that increases in government spending are matched by reduction in private sector spending, thus having no net effect at increasing the size of the economy. The accepted view was that such government spending was wasteful because it would not yield a return high enough to justify the expense of borrowing the money needed to fund the government spending.[5] When Keynesian deficit spending goes to tax cuts or spending that benefits businesses and the rich, the "political and practical difficulties" seem to disappear.

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4 Not to mention the technical progress that came from spending on the Cold War, which produced the internet and GPS and dozens of other major innovations we use daily. In the 1970s this was called military Keynesian (Cypher, 2015).

5 Keynes' analysis of the multiplier was designed to show that when the economy is well below full employment government spending you cause GDP to go up by more than what the government spent, thus yielding a return. During the Financial Crisis and Great Recession that started in 2009 the IMF and European Central Bank justified their imposed austerity policy on Ireland and other countries based partly on estimates of "multipliers" well below 1, thus they advocated spending cuts rather than increased spending. They later admitted that their estimates of the expenditure multipliers were incorrect.

The most important development in measuring the wealth of nations was the development of national income accounting, first in the 1930s and accelerated considerably during World War Two. The political problem to be solved during the war was posed as the question of "How to Pay for the War" (Keynes 1940) but the economic question was not about finance[6] but about resources and production: "how best to reconcile the demands of War and the claims of private consumption" (Ibid. p. iii). This involved figuring out what was potential output and balancing private and public needs. During the war everyone counted because everyone was going to have to sacrifice and share in the burden. Keynes wrote that such a comprehensive perspective allowed for a "gain in social justice" (Ibid.) which had previously not been part of the political discourse. It will be a while before the "comprehensive perspective" would allow "social justice" to take center stage.

1.1 GDP and Its Discontents

Albert Einstein is reported to have said: "Many of the things you can count, don't count. Many of the things you can't count really count". Gross Domestic Product is hard to fit into Einstein's insightful quip. GDP measures all final goods and services produced in a given time period, whether they "don't count" or "really count." Generally, economists are leery of making such a distinction. For the macroeconomist what matters is not what is purchased, but that something has been purchased, which contributes to national income and employment. It is assumed that since the purchase was voluntary it must add to the well-being of the purchaser (the marginal utility of the good must be at least equal to its price, if not more, or they would not have made the purchase). Adam Smith established economic growth, which for him was an increase in the goods and services available for consumption, as the *raison d'être* of political economy and he argued that this is so obvious there was no need to argue why.[7]

Economists' early fixation on economic growth was understandable given the realities of living in the 18th and 19th centuries. From the mid-1700s to 1880 life expectancy in the UK fluctuated between 38 and 42 years, with nearly 15 per cent of children not reaching their first birthday.[8] Living conditions were harsh, food and shelter were often inadequate, and most illness had no real medical treatments. Increasing consumption is an obvious way to improve the lives of people who do not have enough. However, increasing output proved to be less effective on its own in improving living standards, as the benefits of the economic gains were increasingly concentrated in the upper classes (Clark 2007). Consumption only increases when the increase

6 Most previous wars in the past had been paid for by either borrowing and deflating the currency while paying back these loans, or by directly printing money to pay for the war, which also deflated the currency (caused inflation).

7 "Consumption is the sole end and purpose of all production. … [This] maxim is so perfectly self-evident, that it would be absurd to attempt to prove it" (Smith 1976b, p. 660).

8 Data from the United Kingdom Office of National Statistics, How has life expectancy changed over time? - Office for National Statistics (ons.gov.uk) retrieved January 28, 2023.

in output leads to higher real wages. Inequality, economists tell us, was necessary to ensure the savings that was needed to finance the capital investments that fueled the Industrial Revolution.[9] The benefits of economic growth began to be more widely distributed when worker protection legislation was passed and enforced and when social protection policies and the provision of public goods by the government started to move much of the population into the middle class.

One of the constant themes of our reports has been the limitations of using GDP as a measure of well-being.[10] GDP has been used in two basic ways:

1. To compare countries with other countries; and
2. To assess economic growth within a country.

To give an example of the first reason, consider how the World Bank divides countries into High-Income, Middle-Income, and Low-Income countries (Middle Income countries are also divided into Lower Middle and Upper Middle). This is to make country to country comparisons more meaningful. High-Income countries (high GDP per capita) are usually compared with other High-Income countries because they have similar resources with which to address economic and social problems. Often when you see High-Income countries compared with Middle-Income or Low-Income countries it is to embarrass the High-Income countries when they are not achieving a goal as well as poorer country.

The second reason for using GDP as a measure of well-being is because it measures the annual output of goods and services. By measuring the volume of output, you have a measure of incomes and goods and services available for purchase, thus you have an indicator of the resources that people in the country can use to meet their needs. One of the first uses of GDP was to measure potential output during World War Two, thus allowing the United States and England to estimate how much military production they could undertake for the war effort. Today GDP is used for understanding the state of the economy: is it going into a recession? Is demand too high? This allows governments to consider policy responses for unemployment and inflation. As economists tend to measure well-being based on utility obtained from market purchases, it was natural for them to see GDP, which measures the purchase of all final goods and services, as a measure of well-being. We should expect countries with higher levels of consumption to have higher levels of well-being because its people can consume more goods and services, and more easily meet their basic needs (and maybe even some luxury goods and services).

We have seen in each report that Ireland's GDP is grossly distorted and does not reflect the standard of living or consumption power of the average Irish citizen. This is because activity

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9 See Keynes explanation in *Economic Consequences of the Peace*, 1920, p. 18-19.

10 See Clark and Kavanagh, 1996; 2015; 2017; 2019 and 2021; Clark, Kavanagh and Lenihan, 2018; and Clark, Kavanagh and Bennett, 2022.

by foreign companies gets recorded as taking place in Ireland, yet none of this activity (money/income) is spent in Ireland or used by Irish nationals. Thus, separate from the overall critique of GDP as a measure of well-being, it is a poor measure of economic activity in Ireland. We have suggested using Final Consumption has a measure to compare Irish households' spending power with the comparable Eurozone countries (See Table 1). We have called this the "Adam Smith standard" based on his contention that "Consumption is the sole end and purpose of all production" (Smith, 1976b, p. 660). Smith was not, however, suggesting that consumption levels are an adequate indicator of happiness. Smith, like most philosophers, was skeptical of the link between wealth and happiness, referring to wealth and greatness as "mere trinkets of frivolous utility" (1976a, p. 301). But Smith recognised that humans need material goods and services from others in order to engage in any actions, and the depravation in our material needs will be a barrier to well-being.

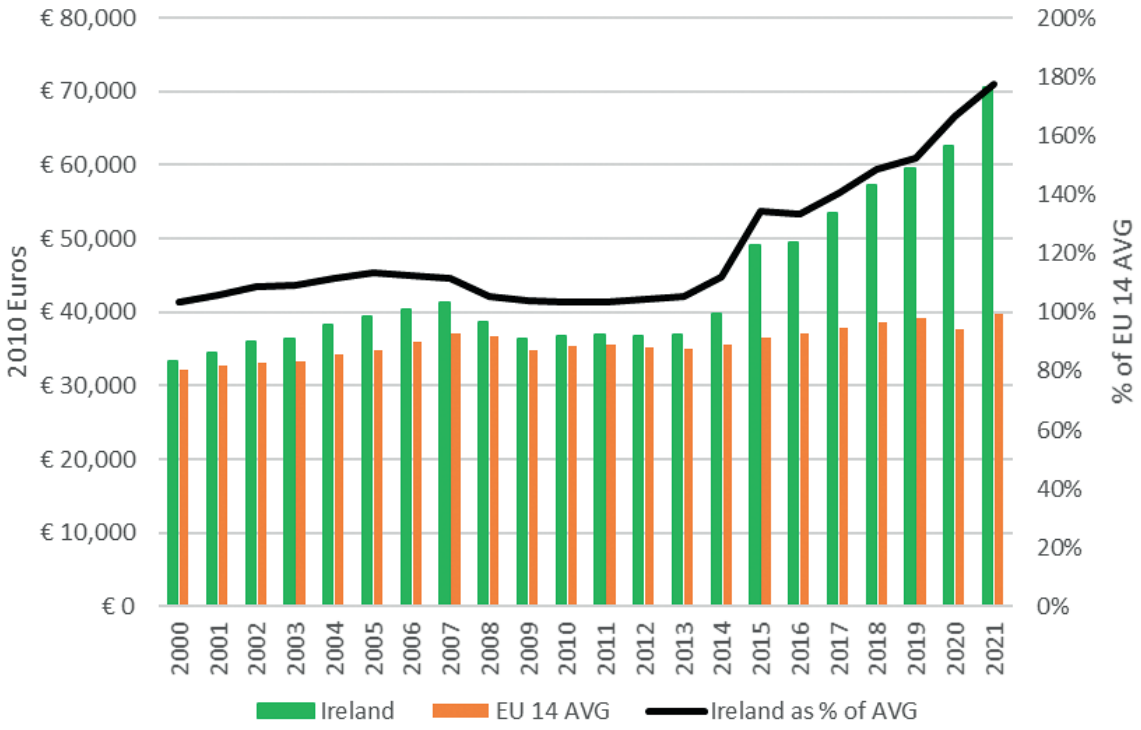
Table 1: EU14 GDP and Final Consumption, 2021

Country	GDP per Capita	Country	Final Consumption per capita
Luxembourg	€ 112,780	Luxembourg	€ 53,790
Ireland	€ 84,940	Denmark	€ 40,200
Denmark	€ 57,520	Sweden	€ 35,990
Sweden	€ 51,560	Finland	€ 34,240
Netherlands	€ 48,840	Netherlands	€ 33,350
Finland	€ 45,390	Austria	€ 32,470
Austria	€ 45,370	Belgium	€ 31,610
Belgium	€ 43,330	Germany	€ 30,910
Germany	€ 43,290	Ireland	€ 30,500
France	€ 36,660	France	€ 28,200
Italy	€ 30,140	Italy	€ 23,390
Spain	€ 25,500	Spain	€ 19,800
Portugal	€ 20,850	Portugal	€ 17,170
Greece	€ 17,010	Greece	€ 15,240
EU14 AVG	€ 47,370	EU14 AVG	€ 30,490
Ireland as % of AVG	179.3%	Ireland as % of AVG	100.0%

Source: Eurstat. Figures are in current prices.

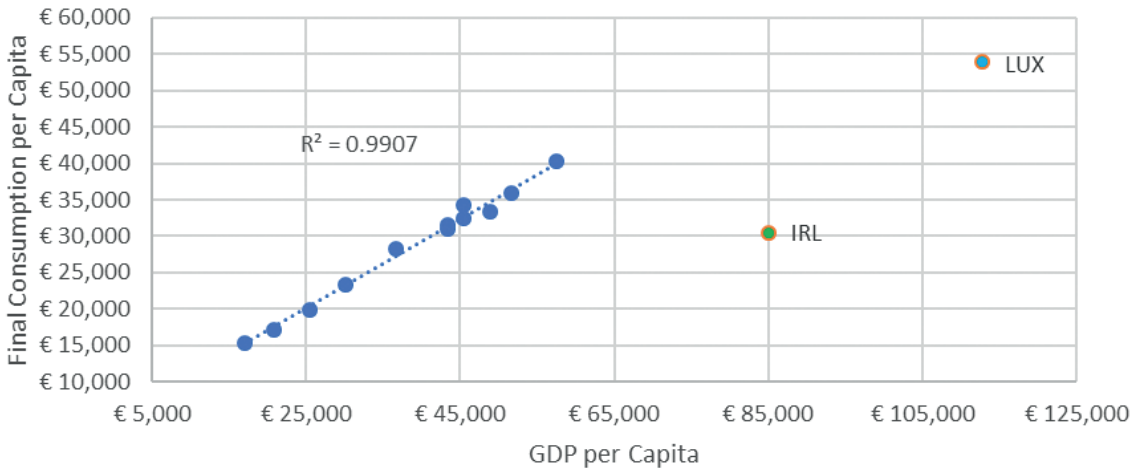
In Figure 1 we see that Ireland's GDP per capita begins to break from the EU14 average in 2014, with the dramatic jump in 2015 when GDP per capita was recorded to have increased by over 25 per cent. This break was facilitated, at least partly, by a few multinational corporations using Ireland's low corporate tax rate as an incentive to "book" profits in Ireland for activity that takes place in other countries. Some of these companies are so large relative to the size of the Irish economy that their efforts to avoid taxation greatly distorted Ireland's estimate of GDP. Yet the problem of accurately measuring GDP in Ireland goes back at least to the 1990s.

Figure 1: Ireland and EU14 GDP per capita, 2000-2021



Source: Eurostat

Figure 2: EU14 GDP and Final Consumption, 2021



Source: Eurostat

In Figure 2 above we see that for all the EU14 countries except for Ireland and Luxembourg there is a near perfect correlation between GDP per capita and Final Consumption per capita. Therefore, when we want to compare Ireland's purchasing power with other EU14 countries it is better to use Final Consumption than GDP.

2

Some Popular Well-Being Indicators

It is common for philosophers to observe that the pursuit of wealth (money-making) as an activity does not generate human happiness (well-being). According to Aristotle material sufficiency was needed to pursue human happiness, because humans need material goods to survive, but that happiness and well-being consists of more than just material goods. Happiness or human flourishing requires many factors, most of which relate to social participation. In the 20th century many countries have achieved levels of per capita output which provide the material sufficiency needed for a decent standard of living. These countries have a higher level of happiness than those countries where material hardship is the norm. Yet there is a good deal of overlap in the happiness scores (using the World Happiness Report) between countries classified as High, Middle and Low-Income by the World Bank. While the top 38 countries ranked by WHR are all High-Income Countries, the 39th country is Guatemala, an Upper Middle-Income country with a GDP per capita of $8,927, just over a third (34 per cent) as big as the GDP per capita of the 40th rank country Kazakhstan ($26,111). There are 34 other Upper Middle-Income countries that are interspersed with High-Income countries. Furthermore, 23 Low Middle-Income countries also have Happiness scores that equal to some of the High-Income countries. To give just one example of the intermingling of income groups: High Income Bulgaria ($24,398) has a WHR of 5.371, which is slightly under Lower Middle-Income country Nepal ($3,832).

There is a growing recognition that public policy needs to go beyond promoting GDP growth and target policies that will directly promote well-being. An early example of this message was John Kenneth Galbraith's bestselling book *The Affluent Society*, published in 1958. Galbraith argues that more private production is not addressing the problems faced by an "affluent society," that a better balance between public and private production is needed. Private solutions require profitability, so that the only problems that get addressed are those which enrich large corporations. Public spending on education and healthcare has a profound impact on well-being, even though it is often promoted because they are also major contributors to economic growth.

By the late 1990s there were increasing challenges to GDP as the primary metric for measuring economic and social progress. These challenges were on two broad fronts: environmental and social.[11] The environmental challenge noted that GDP did not adequately measure the costs and benefits of natural resources and ecological systems. Thus, environmentally damaging activities like burning coal are counted only as a plus to the national income accounts, with no adjustment for the negative effects. In fact, many of the negative effects (like spending on increased diseases caused by burning coal) are also counted as additions to GDP. The promotion of economic growth for the sake of economic growth is the main driver of the waste and pollution that is at the core of our current environmental crises.

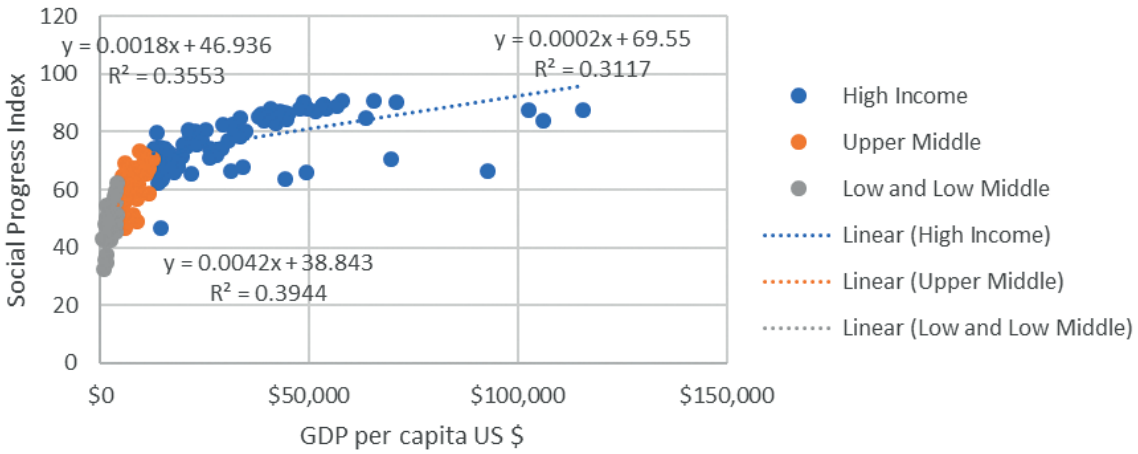
The social challenge to GDP is based on the decoupling of well-being with GDP. After a certain level of GDP per capita is achieved, the link between higher levels of GDP and well-being and happiness becomes weaker and is often very small (and in some cases becomes negative). We see this in the relationship between GDP per capita and the Social Progress Index (SPI) (one of the leading measures of well-being). We have produced versions of this relationship in previous reports.[12] In these past reports we divided all countries based on GDP per capita above or below $30,000 to highlight the fall in the correlation coefficient between GDP per capita and the SPI. In this year's report we have divided countries into three groups following the World Bank income group classification (which we mentioned above).[13] This is shown in Figure 3.

11 See Scott, Nolan and Fahey, 1996, chapter 5 for an early review of these developments.

12 We have used the World Happiness Index instead of SPI and achieved the same results (Clark and Kavanagh, 2019, p. 19).

13 We have combined the Low and Lower Middle Countries into one group because there are so few countries in the Low-Income group.

Figure 3: SPI and GDP per capita, 2021



Source: Social Progress Imperative, World Bank

When we follow the World Bank groupings, we see the effect of rising GDP on the Social Progress Index changes dramatically when we move from Low and Low Middle-Income countries to High-Income countries. We highlight this data in Table 2, where a $1000 increase in the GDP per capita in the lowest income groups produces, on average, a 4.2 point increase in their SPI, while the same $1,000 increase raises the Upper Middle-Income group by only 1.8 points and High-Income countries by 0.2 of a point (90 times smaller than the Upper Middle countries and 210 times smaller than the lowest income countries. All this confirms what is now a common finding, as countries grow richer, increasing income and increasing well-being are not the same thing.

Table 2: GDP Increase Impact on Social Progress Index by Country Income Group

Income Groups	Average increase in SPI from an addition of $1,000 to GDP per cap.
High Income	0.2
Upper Middle Income	1.8
Low and Lower Middle Income	4.2

Source: SPI and Author's calculations

2.1 Growing Interest in Alternatives to GDP

In 1996 we (Clark and Kavanagh, 1996) were asked to construct an alternative to GDP for measuring progress in Ireland. We constructed the *Index of Social Health for Ireland*, based on the *Index of Social Health* (Miringoff, Miringoff, and Opdycke, *1999)* developed for the United States. Our goal was not to replace GDP, nor to develop a singular metric upon which all social and economic policy can be evaluated. Our purpose was to show that many important

social and economic variables do not necessarily improve when GDP or the Stock Market grows. We wanted to graphically and empirically demonstrate the general feeling best expressed in the title of the well-known articles on the limitations of GDP: "If the GDP is Up, Why is America Down?" (Cobb, Halstead and Rowe, 1995). The Sustainable Progress Index we present here has the same goal. Our current index uses the Sustainable Development Goal Indictors developed by the United Nations and approved by most member countries as representing the goals that, collectively, the world has agreed to promote.

The Sustainable Progress Index is used to evaluate progress in Ireland by benchmarking Ireland against 13 other eurozone countries. In this way it is different from our 1996 Index of Social Health which benchmarked Ireland against Ireland's past performance. By benchmarking against other similar countries, we provide a natural way to analyse possible pathways to improvement. If Ireland is ranked 10th in a category, that means there are 9 countries that have figured out more effective ways to address the issue this indicator tracks. The overall ranking and the Economy, Society and Environment rankings are designed to start the conversation and lead the dialogue to the specific indicators that represent the 17 Sustainable Development Goals.

In the most recent *World Happiness Report* (2022, chapter 3), Christopher P. Barrington-Leigh looks at how interest in happiness and well-being has been growing in popular and academic discussions. He uses the ability to search Google Books to quantify how much different words or phrases are used in books in different years. Barrington-Leigh's analysis shows that "since 2013 [the word] "happiness" … has occurred more frequently than the phrase "gross domestic product" (GDP), an older marker of progress, which has been declining in frequency of usage since 2010. Since 1995, the frequency of use of 'happiness' … has doubled, while that of 'subjective well-being' has increased by a factor of eight" (p.56). Using Ngram viewer we can see that in 1988 the usage of "GDP" surpassed "happiness", with GDP peaking in 2003 and with "happiness" overcoming "GDP" in 2010.[14] Barrington-Leigh also examined the usage of the terms "happiness" and "subjective well-being" and is able to demonstrate that they have grown significantly in the academic literature, especially in economics. Also growing has been the number of "indicator systems" that measure progress and well-being, with over 160 examples of well-being indexes or dashboards at the local and national levels, by governments, NGOs, and academic institutions.

2.2 Measuring Well-Being and Policy

In our 2022 report we mentioned the important report by Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi that brought together all the current research and perspectives on alternatives to GDP. In Table 3 we see there is considerable overlap between their report and the World Happiness Report and the Wellbeing in Policy Analysis on what should be included

14 Google Ngram Viewer.

in measuring well-being. The Social Progress Index and the Sustainable Development Report (two other well-being reports) also cover the same ground, only much more extensively (the SPI has 60 indicators and SDR has over 100). The only major difference is that the World Happiness Report does not include environmental factors.

Table 3: Consensus on What Improves Well-Being

Stiglitz-Sen-Fitoussi Report	World Happiness Report	Wellbeing in Policy Analysis
Material living standards (income, consumption, and wealth).	GDP per Capita	Health - mental - physical
Health.	Social Support	Personal Finance - income - debt - financial security
Education.	Healthy Life Expectancy	Education and Skills
Personal activities including work.	Freedom to make life choices	Relationships
Political voice and governance.	Generosity	What we do and Purpose - good jobs - participation in activities
Social connections and relationships.	Perceptions of Corruption	Broad Environment - fear of crime/safety - access to services and housing Natural environment
Environment (present and future conditions).		Autonomy - participation - self-esteem, dignity - fairness
Insecurity, of an economic as well as physical nature.		

Source: Sen, Stiglitz, and Fitoussi, 2010; World Happiness Report 2022; What Works Wellbeing, 2018.

2.2.1 World Happiness Report

The World Happiness Report is an interesting combination of subjective and objective indicators. The Happiness Score is the result of life evaluations scores derived from The Gallup World Poll (based typically on 1,000 responses per country.) Life evaluations are based on a 0-10 scale, with 10 being the best life possible. The results for the EU14 countries are presented in Table 4.

Table 4: EU14 Happiness Scores with Explanation Factors Percentages, 2022

Country	Happiness score	Explained By						
		Dystopia (1.83) + residual	GDP per capita	Social support	Healthy life expectancy	Freedom to make life choices	Generosity	Perceptions of corruption
FIN	7.821	32.2%	24.2%	16.1%	9.9%	9.4%	1.4%	6.8%
DNK	7.636	29.1%	25.6%	16.3%	10.2%	9.4%	2.5%	7.0%
NLD	7.415	28.8%	26.2%	16.3%	10.6%	8.8%	3.7%	5.7%
LUX*	7.404	26.1%	28.2%	14.8%	10.1%	8.9%	1.5%	5.0%
SWE	7.384	27.1%	26.0%	16.3%	10.9%	9.8%	3.0%	6.9%
AUT	7.163	30.0%	27.0%	16.3%	10.8%	8.7%	2.7%	4.6%
IRE	7.041	24.8%	30.2%	16.6%	11.1%	8.9%	2.7%	5.8%
DEU	7.034	30.4%	27.3%	15.5%	11.0%	8.3%	2.3%	5.1%
BEL	6.805	33.6%	28.0%	16.3%	11.2%	7.2%	0.7%	3.0%
FRA	6.687	28.3%	27.9%	18.2%	12.1%	8.5%	1.0%	4.0%
ESP	6.476	29.2%	27.9%	18.7%	12.5%	7.8%	1.6%	2.3%
ITA	6.467	34.4%	28.4%	16.3%	12.4%	6.4%	1.3%	0.9%
PRT	6.016	28.1%	29.3%	17.9%	12.9%	10.9%	0.3%	0.7%
GRC	5.948	35.6%	28.6%	16.5%	13.0%	4.2%	0.3%	1.8%
EU14 AVG	6.950	29.8%	27.5%	16.6%	11.3%	8.4%	1.8%	4.2%

*Source: 2022 World Happiness Report; * 2021*

Ireland is 7th out of 14 and a little higher than the EU14 average.

The explanations of the happiness score are not based on the happiness score survey, but instead are based on regression estimates of how the six variables contribute to the happiness scores. GDP per capita and healthy life expectancy are objective measures, while the remaining four variables are derived from The Gallop World Poll. Ireland's high GDP explanatory variable is no doubt an overestimate due to the over-valuation of Ireland's GDP. The Happiness Score is helpful in highlighting many of the important issues in promoting happiness, but not as useful as a policy guide. Outside of GDP and Healthy Life Expectancy, it would be hard for governments to target actual policies to improve survey answers.

Table 5: Source of the Contributory Variables for Happiness Score

Contributory Variables	Source
GDP per capita (PPP)	World Bank
Social support	Gallup World Poll (GWP) question: Yes (1) or No (0) answer to "If you were in trouble, do you have relatives or friends you can count on for help?"
Healthy life expectancy	World Health Organization
Freedom to make life choices	GWP question: Yes (1) or No (0) answer to "Are you satisfied or dissatisfied with your freedom to choose what you do with your life?"
Generosity	Residual of regressing the national average of GWP response to the donation question: "Have you donated money to a charity in the past month?" on log GDP per capita.
Perceptions of corruption	Based on 2 GWP questions on government corruption.

Source: World Happiness Report 2022

2.2.2 Social Progress Index

The Social Progress Imperative was created in 2012 with famous management professor Michael Porter as one of its founders. It produces the Social Progress Index, which in 2022 ranked Ireland 13th overall (out of 169 countries). SPI is broken down into three groupings: Basic Needs; Foundations of Wellbeing; and Opportunity, with these having four subcategories, and each subcategory having 4-6 indicators. These results are very helpful to policy makers because you can compare Ireland's results at the individual indicator level, thus learning which countries are successful in addressing specific social, economic, and environmental problems.

Table 6: Social Progress Index Scorecard for Ireland, 2022

Category	World Rank	Significant Strengths+/Weaknesses-
Total Score	**13**	
Basic Needs	**24**	
Nutrition and Basic Medical Care	18	Child Nutrition +
Water and Sanitation	37	Access to improved sanitation - Satisfaction with Water Quality -
Shelter	63	Housing affordability -
Personal Safety	9	Money Stolen -
Foundations of Wellbeing	**19**	
Access to Basic Knowledge	21	Gender Parity in Secondary attainment + Secondary school attainment -
Access to Information	15	Mobile Telephones + Access to online governance -
Health and Wellness	27	Equal access to quality healthcare – Satisfaction with quality healthcare -
Environmental Quality	13	
Opportunity	**8**	
Personal Rights	5	
Personal Freedom and Choice	14	
Inclusiveness	2	Discrimination/Violence against minorities +
Access to Advanced Education	23	Women with advanced education -

Source: https://www.socialprogress.org

In Table 7 below we see a comparison of rankings for GDP per capita, and these three popular measures of well-being: Social Progress Index, Sustainable Development Report and World Happiness Report index. This is an update of tables we have used in the past to show both how unreliable GDP is as a measure of well-being and progress, and to also show how Ireland compares with the other thirteen Eurozone countries. In general Ireland falls in the middle of the EU14 countries, very near the EU14 average.

Table 7: EU14 Countries GDP and Alternative Measures of Progress, 2021-22

Country	GDP per cap 2021	Country	SPI 2022	Country	SDR Score 2021	Country	WHR 2022
LUX	€ 84,490	DNK	90.54	FIN	86.5	FIN	7.821
IRL	€ 70,530	FIN	90.46	DNK	85.6	DNK	7.636
DNK	€ 50,010	SWE	89.42	SWE	85.2	NLD	7.415
SWE	€ 44,820	NLD	88.97	AUT	82.3	LUX*	7.404
NLD	€ 41,860	DEU	88.72	DEU	82.2	SWE	7.384
AVG	€ 39,691	AUT	88.05	FRA	81.2	AUT	7.163
FIN	€ 37,240	IRL	87.69	AVG	80.9	IRL	7.041
AUT	€ 36,950	LUX	87.48	IRL	80.7	DEU	7.034
BEL	€ 35,950	AVG	87.31	ESP	79.9	AVG	6.950
DEU	€ 35,480	BEL	87.22	NLD	79.9	BEL	6.805
FRA	€ 32,530	FRA	86.04	BEL	79.7	FRA	6.687
Italy	€ 26,700	ESP	85.35	PRT	79.2	ESP	6.476
ESP	€ 23,450	ITA	85.23	ITA	78.3	ITA	6.467
PRT	€ 18,050	PRT	84.75	GRC	76.8	PRT	6.016
GRC	€ 17,610	GRC	82.44	LUX	75.7	GRC	5.948

Source: Eurostat; Social Progress Imperative; Sustainable Development Report; World Happiness Report, 2022

2.3 Well-Being Indicators and Covid-19

In the previous section we examined some of the popular aggregate well-being indicators. In this section we use each of these metrics to examine how they assess the performance of the EU14 countries during the recent Covid-19 pandemic. There are two important limitations for such an exercise which we should note at the outset. First, while it is common that many economic indicators are produced quarterly or monthly, with a short lag so that policy analysts receive timely information, many well-being indicators, especially subjective well-being indicators, are released annually, and sometimes with a year or two lag before the data is released. And some data is only collected every two or three years, so the lag time is even longer. Thus, the data in these 2022 reports was collected from 2019 to 2021. The situation is even more problematic for developing countries, where data is collected in a less timely fashion. While this is not too important for our purposes (comparing EU14 countries), it is an issue if one is conducting an event analysis, such as how Covid-19 affected well-being. The second limitation is the fact that the Covid-19 pandemic is not fully over, and it will take years if not decades to fully assess the implications of Covid-19 for any country. But we think it is a helpful exercise to see how these popular well-being aggregate indicators work as policy tools for analysts looking at the well-being implications of an event like Covid-19.

2.3.1 *Aggregate Spending (replacement for GDP)*

Our first comparison is the impact of Covid-19 on the aggregate economy. Normally we would use GDP per capita as our indicator, but as we have seen in previous reports (and again in Section 1 of this report), GDP per capita is not a useful indicator for two of the EU14 countries: Ireland and Luxembourg. Instead, we use Final Consumption of our indicator for how Covid-19 affected the economic well-being of households in EU14 countries.

Table 8 demonstrates that 13 out of the EU14 countries experienced a fall in final consumption per capita in the first year of Covid-19 (Denmark had a slight increase). Ireland's decline of -5.39 per cent was 56 per cent above that of the EU14 average in the first year, but its rebound in the second year was 21 per cent above the EU14 average, leaving Ireland overall (2019-21) ranked 9th in how the economy reacted to the Covid-19 disruption, well below the average of all EU14 countries. Economic data is timelier than most well-being indicators, but unfortunately at the time this report was written, the 2022 data has not been released for most of the EU14 countries, so we do not capture Covid-19's full effect.

Table 8: Changes in Final Consumption in EU14 Countries During Covid-19

	Final Consumption Euros per capita			Change in Final Consumption		
	2019	2020	2021	2019-20	2020-21	2019-21
SWE	32,800	32,690	35,990	-0.34%	10.09%	9.73%
DNK	37,820	37,960	40,200	0.37%	5.90%	6.29%
LUX	51,100	50,100	53,790	-1.96%	7.37%	5.26%
NLD	31,920	31,130	33,350	-2.47%	7.13%	4.48%
FIN	32,910	32,450	34,240	-1.40%	5.52%	4.04%
DEU	30,190	29,600	30,910	-1.95%	4.43%	2.38%
FRA	27,550	26,580	28,200	-3.52%	6.09%	2.36%
AUT	31,770	30,440	32,470	-4.19%	6.67%	2.20%
IRL	29,880	28,270	30,500	-5.39%	7.89%	2.07%
BEL	30,980	29,460	31,610	-4.91%	7.30%	2.03%
PRT	16,890	16,170	17,170	-4.26%	6.18%	1.66%
GRC	15,260	14,340	15,240	-6.03%	6.28%	-0.13%
ITA	23,590	21,990	23,390	-6.78%	6.37%	-0.85%
ESP	20,160	18,450	19,800	-8.48%	7.32%	-1.79%
EU14 AVG	29,232	28,226	30,067	-3.44%	6.52%	2.86%
IRL as % AVG	102.2%	100.2%	101.4%	156.5%	121.0%	72.7%

Source: Eurostat

Aggregate economic activity data, especially for consumption, is very important for policy makers. Maintaining spending levels during the shut-downs was critical for preventing

a massive and prolonged economic downturn, such as happened after the Global Financial Meltdown of 2009. Many countries learned the lesson of the Great Recession and did not adopt austerity as a response to the pandemic. But Final Consumption (or GDP) data is an average and does not account for income inequality. In countries with high inequality the poor can be dramatically hurt by an event like Covid-19, yet the data can show only mild average impacts overall (and the rich might not be affected at all). Furthermore, regional effects might also be significant and not noticed in national averages.

2.3.2 Social Progress Index

The effects of Covid-19 show up in the Social Progress Index, with 11 of the 14 EU countries experiencing a decline in the first year of the pandemic.[15] Six countries experienced a fall in the second year as well. Given the time lag in many of the data used by the SPI, it is hard to separate what is a 2020 and 2021 effect. We see in Table 9 that Ireland's decline in the first year matched the EU14 average and its rebound was twice the average.

Table 9: Social Progress Index for EU14 countries during Covid-19

Country	SPI			Yearly Change	
	2020	2021	2022	2020-21	2021-22
AUT	88.01	88.37	88.05	0.36	-0.32
BEL	87.09	86.96	87.22	-0.13	0.26
DEU	89.00	88.44	88.72	-0.56	0.28
DNK	90.58	90.35	90.54	-0.23	0.19
ESP	85.77	85.65	85.35	-0.12	-0.30
FIN	90.49	90.52	90.46	0.03	-0.06
FRA	86.39	86.27	86.04	-0.12	-0.23
GRC	82.26	82.19	82.44	-0.07	0.25
IRL	87.76	87.61	87.69	-0.15	0.08
ITA	85.05	85.10	85.23	0.05	0.13
LUX	87.78	87.13	87.48	-0.65	0.35
NLD	89.27	89.09	88.97	-0.18	-0.12
PRT	85.10	84.79	84.75	-0.31	-0.04
SWE	89.37	89.34	89.42	-0.03	0.08
EU14 AVG	87.42	87.27	87.31	-0.15	0.04

Source: Social Progress Initiative, 2022

15 The data for Social Progress Index has at least a year lag, so that the SPI 2020 is based on 2019 data, which is why we use 2020 as our preCovid-19 year.

The SPI data for each of the 60 indicators can be obtained and it is possible to see what is contributing to declines and what variables are not affected much by the pandemic.

2.3.3 Sustainable Development Report

The Sustainable Development Report (SDR) for 2022 highlighted the many challenges of data collection during Covid-19. Shutdowns in response to the pandemic caused the offices responsible for collecting data to also shut down. Those collecting health statistics were particularly affected due to the higher volume of incidents to report. Just keeping up with counting the deaths caused by Covid-19 became an overwhelming issue, even for many advanced countries. The main benefit of the Sustainable Development Goals for policy makers who want to rely on evidence-based decision making is the mainstreaming of data collection for over 200 SDG indicators. The timely value of individual indicators to track the pandemic is more important than the aggregate score. When a country's SDR score goes down, there is not an obvious set of policy responses (as there is when GDP declines and the economy enters a recession). As an example, if malnutrition as measured by prevalence of stunting in children under five years old remains stubbornly high, targeted policies can be implemented to address this challenge.

Overall, we see in Table 10 that the SDR score does not respond to the Covid-19 crisis as quickly as the SPI and Final Consumption. Only Austria declines in the first year, with six countries (including Ireland) declining in the second year. The EU14 average is positive in both years, although the second-year increase is trivial. Since much of the data in the 2021 report comes from 2019 or earlier, we can see that it is not an effective metric for quickly addressing problems.

Table 10: Sustainable Development Report Score for EU14 Countries During Covid-19

Country	2019	2020	2021	2019-2020	2020-2021
Finland	86.18	86.42	86.48	0.24	0.06
Denmark	85.39	85.40	85.61	0.01	0.21
Sweden	85.12	85.29	85.15	0.17	-0.14
Austria	82.27	82.21	82.18	-0.06	-0.03
Germany	81.94	82.28	82.16	0.34	-0.12
France	81.12	81.15	81.22	0.03	0.07
Ireland	80.65	80.65	80.64	0.00	-0.01
Spain	79.43	79.68	79.84	0.25	0.16
Netherlands	79.68	79.97	79.83	0.29	-0.14
Belgium	79.47	79.68	79.68	0.21	0.00
Portugal	78.69	78.97	79.20	0.28	0.23
Italy	77.94	78.47	78.31	0.53	-0.16
Greece	76.50	76.55	76.72	0.05	0.17
Luxembourg	75.11	75.62	75.65	0.51	0.03
EU14 AVG	80.68	80.88	80.91	0.20	0.02

Source: Sustainable Development Report, 2022

2.3.4 World Happiness Report

The World Happiness Report scores for 2022 are a three-year average for 2019-2021. The data for 2022 includes the year before Covid-19 and the first two years of the pandemic. In Table 11 we compare the WHR score for the three-year average before Covid-19 and the most recent score (2019-2021). We see that in six countries the Happiness Score goes down, meaning that people in these countries have reported that the average life satisfaction has declined. Next year's report will have a three-year average which will include all pandemic years.

Table 11: EU14 Changes in Happiness Index during Covid-19

Country	2017-19	2019-2021	% change
Finland	7.809	7.821	0.15%
Denmark	7.646	7.636	-0.13%
Netherlands	7.449	7.415	-0.46%
Luxembourg*	7.238	7.404	2.29%
Sweden	7.353	7.384	0.43%
Austria	7.294	7.163	-1.80%
Ireland	7.094	7.041	-0.75%
Germany	7.076	7.034	-0.59%
Belgium	6.864	6.805	-0.86%
France	6.664	6.687	0.34%
Spain	6.401	6.476	1.18%
Italy	6.387	6.467	1.25%
Portugal	5.911	6.016	1.78%
Greece	5.515	5.948	7.85%
EU14 AVG	6.907	6.950	0.008

Source: World Happiness Report 2019, 2022.

These popular aggregate well-being indicators are best used to show overall trends and for comparing countries. But they are less effective for guiding policy in the short term. However, with the SPI and the SDR, the aggregate scores are only introductions designed to capture the interest of the reader and hopefully lead them to the specific indicators that address specific issues so that policies can be more effective.

2.3.5 Using More Focused Indicators

Health and healthcare are very important contributors to well-being and are used in many aggregate measures of well-being. While it is beyond the scope of our analysis in this report, health (and education) are important contributors to "human capital" which economists use to explain income differences between and within countries. According to the World Happiness Report, health accounts for 11 per cent of EU14 countries' explanation of their Happiness score (16 per cent for all countries). Furthermore, the Social Progress Index includes 11 health indicators among its 60 (18.3 per cent) indicators. Healthcare also plays a big role in the Sustainable Development Goals (the 3rd goal is "Ensure Healthy Lives"). As these well-being metrics must apply to all countries, their indicators are very general. In many cases their indicators are focused on developing countries (helping countries achieve developed status is a goal of the SDGs). Thus, it is more helpful to directly use health statistics rather than broad indicators to compare Ireland's health system with the other EU14 countries.

In Table 12 we see the four indicators the OECD uses to measure assess to health care:

- coverage;
- satisfaction;
- financial protection; and
- unmet needs.

All EU14 countries have universal or nearly universal coverage, producing a very narrow range for the first statistic. The range for satisfaction is much greater, with Netherlands at 92 per cent and Greece at 38 per cent. Ireland has the third lowest score, 10 percentage points below the average. Ireland also scores poorly for Financial Protection (how much is covered by government) and percentage of population reporting unmet needs.

Table 12: EU14 Access to Health Care, 2021

Country	Coverage	Country	Satisfaction	Country	Financial protection	Country	Unmet needs
DEU	100	NLD	92	LUX	85.0	NLD	0.2
SWE	100	BEL	92	SWE	84.9	LUX	0.2
DNK	100	DNK	89	DEU	84.8	ESP	0.2
LUX	100	AUT	86	FRA	83.7	DEU	0.3
IRL	100	DEU	85	DNK	83.3	AUT	0.3
FIN	100	LUX	85	NLD	82.9	FRA	1.2
ITA	100	FIN	85	FIN	77.8	SWE	1.4
ESP	100	SWE	82	BEL	76.8	PRT	1.7
PRT	100	AVG	76	AVG	76.7	DNK	1.8
GRC	100	FRA	71	AUT	75.2	BEL	1.8
NLD	99.9	ESP	70	IRL	74.6	AVG	1.8
AUT	99.9	PRT	67	ITA	73.8	ITA	1.8
FRA	99.9	IRL	66	ESP	70.6	IRL	2.0
AVG	99.9	ITA	61	PRT	61.0	FIN	4.7
BEL	98.6	GRC	38	GRC	59.8	GRC	8.1

Source: OECD Health at a Glance, 2021.

In Table 13 we see data on Health System Capacity and Resources. Ireland is 9th in per capita health spending (yet above the EU14 average), but is 11th in Hospital Beds, 9th in doctors per 1,000 and 3rd in Nurses per 1,000 (25.6 per cent above the average for the EU14 countries).

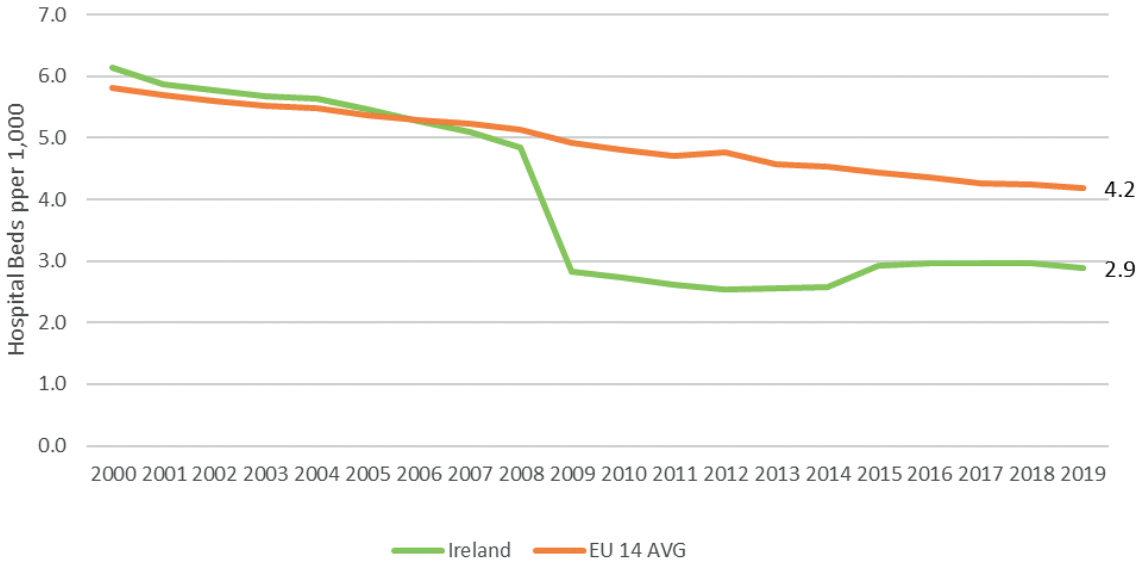
Table 13: EU14 Health System Capacity and Resources, 2021

Country	Health Spending per Capita (USD based on PPPs)	Hospital Beds per 1000 population	Doctors per 1000 population	Nurses per 1000 population
DEU	$6,518	7.9	4.4	13.9
NLD	$5,739	3.1	3.7	10.7
AUT	$5,705	7.2	5.3	10.4
SWE	$5,552	2.1	4.3	10.9
DNK	$5,478	2.6	4.2	10.1
BEL	$5,458	5.6	3.2	11.1
LUX	$5,414	4.3	3.0	11.7
FRA	$5,274	5.8	3.2	11.1
IRL	$5,083	2.9	3.3	12.5
FIN	$4,561	3.4	3.2	14.3
ITA	$3,653	3.2	4.1	6.2
ESP	$3,600	3.0	4.4	5.9
PRT	$3,347	3.5	5.0	7.1
GRC	$2,319	4.2	6.2	3.4
EU14 AVG	$4,836	4.2	4.1	10.0
Ireland as % of AVG	105.1%	69.0%	80.3%	125.6%

Source: OECD Health at a Glance, 2021.

These figures fit with the recent headlines on Ireland's hospitals being overwhelmed. The lack of hospital beds has been a problem in Ireland. We see in Figure 4 that Ireland has been slowly reducing the number of beds per 1,000, keeping pace with an overall decline in the EU14 average, and falling from 5.6 in 2001 to 4.9 in 2008. In 2009 Ireland's number of hospital beds per 1,000 fell over 40 per cent and has stayed under 3 per 1000 ever since.

Figure 4: Ireland and EU14 AVG Hospital Beds per 1,000 population, 2001-2019



Source: World Development Indicators, Eurostat

Overall, Ireland's healthcare system performs well (Table 14) when compared to the EU14. Life Expectancy is a little above the average and the percentage of people who have Chronic Diseases and who report that they are in poor health are significantly below the average of the countries in our report.

Table 14: EU14 Health Status, 2021

Country	Life Expectancy	Avoidable Deaths	Chronic diseases	Self-Rated Poor Health
ESP	83.9	141	6.9	7.2
ITA	83.6	136	5	7
SWE	83.2	140	4.8	5.1
FRA	82.9	153	4.8	8.9
IRL	82.8	172	3.2	3.2
LUX	82.7	97	5	9
NLD	82.2	145	5.4	5.5
BEL	82.1	173	Na	9.1
FIN	82.1	176	5.6	5.6
AUT	82	170	6.6	7.8
PRT	81.8	173	9.8	15.2
GRC	81.7	179	4.7	6.6
DNK	81.5	167	Na	8.3
DEU	81.4	175	10.4	8.5
EU14 AVG	82.4	156.9	6.0	7.6
Ireland as % of AVG	100.5%	109.6%	53.2%	41.9%

Source: OECD Health at a Glance, 2021. Na=not available.

Figure 5: Healthcare Spending and Satisfaction for EU14, 2019

Source: OECD

One of the not surprising results of the OECD Health at a Glance 2021 report is that there is a strong connection between the populations satisfaction with the availability of healthcare and how much a country spends on providing healthcare (shown in Figure 5). We should not be surprised that the Greek population is not satisfied with the quality of their healthcare as they spend less than half of the EU14 average. Yet we can see from Figure 5 that Ireland is well below the trend line showing the relationship between spending and satisfaction, suggesting that Ireland is under performing.

The purpose of this section is not to give a detailed analysis of the provision of healthcare in Ireland, but to show the insights and suggestions that can be gathered by comparing its access, how much it spends and the health status and outcomes with other similar countries. Yet by comparing Ireland's outcomes with other similar countries, citizens are better informed to evaluate government policy and to advocate to bring policy and outcomes more in line with their needs and desires.

3

The Sustainable Progress Index 2023

The focus on sustainable development has gained momentum over the recent past and includes the introduction of the Sustainable Development Goals (SDGs) by the United Nations (UN). In 2015, as part of the UN's 2030 Agenda for Sustainable Development, 17 SDGs were identified, based on 169 targets and over 230 indicators. In January 2016, the SDGs were implemented.

Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet (UN, 2022). The SDGs are designed to identify policies that directly help people's wellbeing in harmony with our natural environment. They aim to provide both a pathway out of poverty, and a map towards a sustainable future for all countries and people. Countries can monitor the SDGs to track the progress they have made in achieving the 2030 Agenda vision. Many institutions, including the World Bank, WHO, IMF, OECD and Eurostat, have all committed to data collection efforts to support the monitoring of the SDGs.

Figure 6: The 17 Sustainable Development Goals

Source: United Nations (UN)

It is worth emphasising that there is general agreement that events over the recent past have threatened the progress of the SDGs. For example, the UN point to the confluence of crises, dominated by COVID-19, climate change and conflicts, which are creating spin-off impacts on food and nutrition, health, education and the environment, and peace and security, affecting all the SDGs, and putting their achievement in danger (UN, 2022). Sachs et al (2022) agree that the Covid-19 pandemic has had a significantly negative impact on the path towards sustainable development and the achievement of the SDGs. However, they also noted that pre-Covid, even rich countries faced many challenges in achieving the SDGs. Further, all three spheres are affected – economic, social and environmental.

Antonio Guterres, Secretary General, UN has emphasized the need to prioritise the SDGs:

> "We must rise higher to rescue the Sustainable Development Goals – and stay true to our promise of a world of peace, dignity and prosperity on a healthy planet". (UN, 2022)

Paolo Gentiloni, Commissioner, European Commission Responsible for Economy and for Eurostat shares this view. He recently reiterated the EU's commitment to delivering on the 2030 Agenda and encourages action at all levels in society:

> "Despite the challenges brought about by the COVID-19 pandemic and more recently Russia's invasion of Ukraine, the European Commission has

> been focusing on concrete actions to bring tangible progress in the areas of the Sustainable Development Goals (SDGs)... Sustainable development continues to be further mainstreamed into the EU's policymaking and economic coordination processes... Actions at all levels, from local, regional and national to European, are necessary to achieve a better and more sustainable future". (Eurostat, 2022, p.4)

There have been several attempts to track countries' progress on achievement of the SDGs since the adoption of the goals[16]. The 17 SDGs have been at the forefront in many European policies, strategies, and initiatives. Eurostat's most recent (2022) SDG monitoring[17] report is based on a set of approx. 100 indicators[18], including 37 multipurpose indicators. The analysis suggests that over a five-year period, the EU has made progress towards almost all goals (see Figure 7). However, significant challenges remain and progress towards the SDGs in the EU is uneven. Figure 7 shows that the EU continued to make the strongest progress towards SDG16 (fostering peace and personal security within its territory, and improving access to justice and trust in institutions). Good progress is also seen in SDG1, SDG8 and SDG9. However, the favourable assessment of SDG7 is strongly influenced by a remarkable reduction in energy consumption in 2020 as a result of COVID-19-related restrictions on public life and lower economic activity (Eurostat, 2022, p.11). Improvements are also seen with SDG3, SDG14 and SDG15. However, progress towards the remaining nine goals was much slower.

16 See Sachs et al, (2016, 2017, 2018, 2019, 2020, 2021); Eurostat, (2017, 2019, 2020, 2021; OECD, (2017).

17 The European Union (EU) adopted the first statistical overview of trends relating to the SDGs in the EU in 2017. The 2022 edition provides a detailed monitoring of the SDGs in an EU context and an indicator framework for reference..

18 The EU SDG dataset is structured along the lines of the SDGs. However, some indicators are not official UN indicators, but are more specific to EU policies and strategies. Further, the report does not produce an index. Rather, it examines the SDGs at indicator level and by key themes to arrive at an overall assessment of progress.

Figure 7: Eurostat's Assessment of EU Progress on the SDGs

Source: Eurostat (2022, p.10)

Work by Jeffrey Sachs and his colleagues in the Sustainable Development Solutions Network (SDSN) has also provided important insights over the years into countries' progress towards achievement of the SDGs. The 2022 report provides a detailed country profile on all 193 UN member countries. Their computation of an SDG index ranks each country on the basis of how far away it is from achieving each SDG.

In the Sachs et al (2022) analysis, a scale presents the score for each country's performance on a particular indicator from 0 to 100, with 100 denoting the best possible score. Figure 8 illustrates their assessment of Ireland's progress towards the SDGs. The overall score ranks Ireland 9th out of 163 countries (for which comparable data is available). The dashboard colour codes identify the progress being made under each SDG. A green indicator rating implies achievement but all indicators under the goal need to be also green for the SDG to get a green colour. Yellow, orange and red indicate increasing distance from the SDG achievement (Sachs et al, 2022). The authors conclude that Ireland faces challenges in 9 SDGs, significant challenges in 3 SDGs, and 4 major challenges.

Figure 8: Ireland's Current SDG Dashboard

Source: Sachs et al (2022, p. 244)

Our reports over the years[19] have focused on how Ireland performs on the SDGs in an EU context. This report is our latest contribution to the debate on the shape of Ireland among the EU14 countries, and sheds some light on the actions that we must take to achieve the 2030 Agenda. We believe this is valuable: knowing where we stand, identifying the most pressing sustainability challenges, and critically examining our performance is essential if we are to ensure a sustainable Ireland in a sustainable world.

19 See Clark and Kavanagh (2017), Clark, Kavanagh and Lenihan, (2018a, 2018b), Clark and Kavanagh (2019) and Clark, Kavanagh and Lenihan (2020); Clark and Kavanagh; (2021); Clark, Kavanagh and Bennett (2022)..

3.1 Data Selection

The computation of an SDG index requires an extensive dataset. Our starting point (as in previous reports), is the official UN Global Indicator Set which was adopted in 2017. We also utilize the EU SDG Indicator Set (2022), which includes indicators most relevant to the EU. This data set is open to annual reviews to incorporate indicators from new data sources and to take into account new EU policy priorities. Eurostat argues that their choice of indicators better reflects EU policy and initiatives, while still reflecting the principles of the official UN indicators incorporated in the SDGs. Our final dataset therefore is aligned as closely as possible to the official global indicators while also taking account of the experiences of countries in the EU context.

A number of additional rules are used to guide our approach to data collection.

- ***Relevance and applicability:*** the data must be directly related (e.g. an exact match), similar, or relevant to monitoring of the SDG. For example, some official indicators (e.g. prevalence of stunting and wasting, extreme poverty measures, prevalence of undernourishment, etc.) are less relevant to high income countries in the EU. We exclude these indicators. Other indicators, although not official UN indicators, are included to capture the theme of a particular SDG.
- ***Quality:*** The presentation of the most up to date and reliable data remains the backbone of this report. As mentioned above, we draw closely on the EU and UN datasets, and include data from official sources (OECD, World Bank, WHO, ILO, others) and non-official data sources (research centers and non-governmental organizations such as Gallup and Transparency International). Our goal is to ensure, in so far as possible, that the best, most reliable data is used to capture each SDG.
- ***Most recent available:*** all data must refer to the most recent year available, as far as possible. However, due to time lags in data generation, earlier data must be used for some indicators. We exclude data that is judged to be out-dated (for example, some official indicators have not been updated in several years and hence their use in the assessment of SDG achievement is questionable).
- ***Coverage:*** we only include indicators where data is available for all our 14 EU countries. Indicators that have missing data for countries are not used in our index. The United Kingdom is not included in our analysis.

Based on the above criteria, this current report utilises 82 indicators across the 17 goals to arrive at our final index scores. We believe our final dataset allows for a richer and more accurate assessment of Ireland's SDG performance compared to the EU14.

The following points are worth noting.

- The number of indicators evolves as new information becomes available. Additionally, some SDG indicators are revised based on new methodologies for producing better quality indicators in an attempt to better reflect the SDGs. As a result, our SDG scores and rankings are not comparable to results from previous reports.
- We attempt to use the most recently available data, and this relates to 2021 for many indicators. However, for some SDGs, the full impact of COVID-19 on some of the SDGs cannot be captured. This issue will be resolved in time and the full scale of recent events will be revealed in later editions.
- Our dataset is structured along the 17 SDGs and covers the social, economic, environmental aspects of sustainability as represented by the Agenda 2030. Where possible, each SDG is covered by a minimum of 4 indicators. There are some exceptions. For example, data limitations and coverage imply we use just 2 indicators for SDG13, and SDG14, while 3 indicators are used to compute SDG1. This is far from ideal but is driven by data availability at country level.[20].

3.2 Our Method

As in previous reports, the focus of our analysis is the EU14 countries. Comparing relative performance among countries from a similar regional or income group is valuable. Sachs et al (2016) have emphasised the substantial variations observed in small groups of similar regions should encourage policymakers to better understand reasons for divergence and design strategies for achieving the SDGs by 2030.

The first step in constructing the index is to make the data comparable; this is critical, given the heterogeneous nature of the data and the myriad of sources used in data collection. As in previous reports, we use a similar method to Sachs et al (2016). The approach allows us to benchmark Ireland against the other EU countries, at individual indicator level, SDG level and aggregate index level.

20 The complete list of indicators used in the construction of the SDG measures is provided in Table A1 in the Appendix.

Briefly, the method can be summarized as follows. A percentile rank is first assigned to each indicator. A percentile rank of 100 is assigned to the country with the best performance, 0 to the country with the worst performance. All indicators are expressed in ascending order, so that a higher score on the indicator corresponds to a higher overall SDG score. This allows for clarity and ease of interpretation. The second steps involved aggregating the percentile rank of each indicator to compute the SDG score for each country. Given that we have data on every SDG, this implies that every country has an SDG score for each of the 17 goals. Finally, to arrive at the composite Sustainable Progress Index, we aggregate across all goals to arrive at a score for each country. Equal weight is assigned to each SDG (and each indicator under each goal). This is in accordance with the view of the UN (2015, paragraph 5) that all SDGs are equally important and should be treated equally[21]. The individual SDG scores allow us to rank the countries at goal level while the aggregate measure[22] provides a snapshot of how Ireland is faring overall on the SDGs relative to the EU14.

Agenda 2030 sets ambitious targets across the three dimensions of sustainable development: economic development, social inclusion and environmental sustainability. These elements are interconnected and all are crucial for the well-being of individuals and societies (UN, 2022). We think however there is value in attempting to understand how countries are doing on the three aspects of progress. Hence, using our judgement, we cluster the goals by the three dimensions: economic, social and environment. The following section then presents the latest Sustainable Progress Index[23]. However, we encourage interested readers to go beyond the aggregate SDG Index and look at comparative performances at the goal and indicator level.

3.3 The Economy Index

First, we examine the economy aspect of the SDGs by combining SDG8 and SDG9. Country ranking and scores of the Economy Index[24] are presented in Table 15. Despite significant improvement in many aspects of the economy, (in particular, GDP and GDP per capita), our

21 "These are universal goals and targets which involve the entire world, developed and developing countries alike. They are integrated and indivisible and balance the three dimensions of sustainable development" UN's (2015, paragraph 5). It is worth pointing out that there is no agreement about assigning higher weights to some SDGs over others. Our approach has the benefit of allowing for the addition of new indicators for a particular SDG without affecting the relative weight of each SDG in the composite measure.

22 Both the arithmetic mean and the geomean averages were explored as approaches to aggregating the data. The two indexes show a high degree of correlation (Pearson's correlation coefficient of 0.98). For ease of interpretation, we settle on the arithmetic mean.

23 Statistical tests were conducted as part of the analysis. We assessed both collinearity between the goals and between the indicators under each goal. Based on the Pearson's pairwise correlation exercise for the goals, there is no sign of collinearity (defined as > 0.9). We found little evidence of collinearity at indicator level and retain the choice of indicators as they are directly related or relevant to the official UN list.

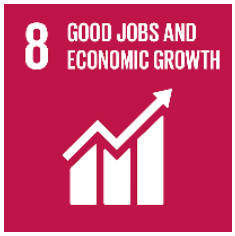
24 The score compares *average performance* across SDGs 8 and 9.

broader measure of the economy shows that there is significant room for improvement. Ireland ranks 9th relative to its EU peers on the Economy Index[25]. We explore elements of each SDG further below.

Table 15: The Economy SDG Index – Ranking by Country

Country	Index Score	Country Rank
Sweden	0.8064	1
Denmark	0.7936	2
Finland	0.6923	3
Netherlands	0.6806	4
Germany	0.6408	5
Luxembourg	0.6256	6
Austria	0.6242	7
Belgium	0.5652	8
Ireland	0.4369	9
France	0.3483	10
Spain	0.2586	11
Portugal	0.1983	12
Italy	0.1880	13
Greece	0.1382	14

Source: Authors' analysis



SDG8 'Decent work and economic growth'

SDG8 recognises the importance of inclusive and sustained economic growth, as it is essential for the development of an economy, productivity, employment, living standards, and global prosperity. It focuses on providing opportunities to eradicate forced labour, human trafficking, and child labour globally by promoting labour rights and safe and secure working conditions.

6 indicators are used to compute SDG8. Although the data doesn't take full account of recent events, the evidence does point to steady improvement in economic growth in Ireland, despite the pandemic. GDP per capita is high, second only to Luxembourg.

25 The arithmetic mean and the geomean averages were explored as two approaches to aggregating the data. Both indexes show a high degree of correlation (Pearson's correlation coefficient of 0.98). For ease of interpretation, we settle on the arithmetic mean.

In order to capture the other components of SDG8, (including the theme of 'decent work'), additional indicators included are: the employment rate, the NEET rate (youths not in employment, education or training), accidents at work, and average wages. At 74.9 per cent in 2021, Ireland's employment rate has improved, as it has for many EU countries. Ireland's NEET rate has also improved, and is now just under 10%. Although it would be preferable to have a good measure of 'decent work', there is yet no agreed measure developed for use in the SDGs The indicators 'accidents at work' and 'average wages' are used here to mirror decent work. Ireland is ranked 9th and 7th respectively on these indicators. Combining all other indicators gives an overall rank for Ireland of 8 on SDG8.

SDG8: Rank =8

SDG9 'Industry, innovation and infrastructure'

SDG9 calls for building resilient and sustainable infrastructure and promotes inclusive and sustainable industrialization, with the aim of improving living standards. It also recognises the importance of research and innovation for finding lasting solutions to social, economic and environmental challenges.

We draw on 5 indicators to compute SDG9. Expenditure on R&D (as a percentage of GDP) in Ireland is the second lowest of the EU14 at 1.06%. Sweden, Austria, Germany and Belgium are the exceptions: they score highest on this indicator and all have expenditure greater than 3% of GDP.

Other indicators under this SDG - internet use, and number of researchers as % of population, show Ireland performing somewhat better, but there is still significant room for improvement. Ireland's share of R&D researchers, as % of population has increased over the years but is below the best performing countries. An indicator that attempts to measure the quality of trade and transport-related infrastructure from the World Bank – the Logistics Performance Index, scores Ireland in 12th place for logistics capacity.

Ireland's scores on SDG9 puts in in 11th place overall."

SDG9: Rank = 11

3.4 The Society Index

We compute the Society Index by combining 8 SDGs[26]. The overall score and country ranking are presented in Table 16. Ireland is in 6th place overall. Our relatively favourable position is driven by strong performance particularly on the education theme, (SDG4), and relatively good performance on peace and justice goals (SDG16) and good health and wellbeing (SDG3).

Table 16: The Society SDG Index – Ranking by Country

Country	Index Score	Country Rank
Denmark	0.6702	1
Sweden	0.6632	2
Finland	0.6493	3
Netherlands	0.6160	4
Austria	0.5197	5
Ireland	0.5152	6
Belgium	0.5056	7
Germany	0.4794	8
France	0.4762	9
Luxembourg	0.4306	10
Portugal	0.4198	11
Italy	0.3973	12
Spain	0.3901	13
Greece	0.2759	14

Source: Authors' analysis

SDG1 'No poverty'

SDG1 calls for an end to poverty in all its manifestations. It aims to ensure peoples' basic needs are met, by focusing on equal rights and access to economic and natural resources, including technology, property and basic and financial services.

In the EU context, monitoring SDG1 involves tracking aspects related to multidimensional poverty and basic needs. In recent years, the EU's situation regarding SDG1 is characterised by considerable improvement in all poverty dimensions monitored (Eurostat, 2022, p.11).

As the focus of our analysis is the EU14 countries (with broadly similar levels of development), we exclude some of the less relevant UN indicator

26 The 8 SDGs that are included in the society index are: 1, 2, 3, 4, 5, 10, 16 and 17.

variables that capture extreme poverty (such as the poverty headcount ratio at $1.90/day, percentage of the population). We use the average of 3 indicators from Eurostat and the OECD to reflect SDG1: the poverty rate (the share of the population whose incomes fall below half the median disposable income for the entire population after taxes and social transfers – this is closely aligned with the UN indicator): severely materially deprived people (percentage of the population); and low-work intensity households.

Although Ireland scores well on the poverty rate measure (3rd place), less favourable scores on the other indicators (which are meant to capture poverty in developed countries) gives an overall score on SDG1 that puts Ireland in 10th place. Finland, Netherlands, Sweden and Austria rank at the top end for this SDG.

SDG1: Rank = 10

SDG2 'No hunger'

Food security and the eradication of hunger are the main concerns of SDG2. Many of the official indicators under this goal are more applicable to developing countries. In terms of sufficiency and supply, there are no major issues about food security within the EU region. Hence, the monitoring of SDG2 focuses on malnutrition (in particular, achieving healthy diets) as well as on the sustainability of agricultural production and its environmental impacts.

Consumption patterns and lifestyles have changed in the EU, including in Ireland, and obesity is on the rise with implications for people's quality of life and resourcing the health care system. Obesity in Ireland is the highest among the EU14, according to Eurostat data. Over 25% of the population are categorized as obese.

SDG2 is also concerned with ensuring long-term productivity and the sustainability of agriculture. We use 4 indicators to capture this aspect of SDG2: cereal yield efficiency, ammonia emission from agricultural land, the extent of organic farming, and a pesticide indicator.

Ireland performs well compared to other countries on the cereal yield indicator, although less well on ammonia emissions and pesticide indicator. Ireland's organic farming share of the total utilised agricultural area (UAA) is well below the EU average at 1.66%; it scores lowest of the

EU14 on this indicator. Combining the 5 selected indicators for this goal gives a ranking of 13 for Ireland.

SDG2: Rank = 13

SDG3 'Good health and wellbeing'

To ensure the health and wellbeing for all at all ages, by improving reproductive, maternal and child health, is the aim for SDG3. It also focuses on behavioural or environmental health risks. Hence, in addition to indicators like life expectancy, maternal and neo-natal mortality rates, subjective wellbeing measure, etc. indicators such as death due to chronic diseases, incidence of alcohol and smoking are included under this SDG.

Within the EU, this SDG continues to be characterised by rather strong progress over the past five years. Significant progress in almost all health-related indicators is seen. The trend is similar for Ireland.

A more expansive range of data is available to reflect this SDG compared to others. We settle on 10 relevant indicators, utilising many of the Eurostat data and excluding indicators that are more relevant to the developing countries. Ireland scores well overall. Again, Sweden, the Netherlands and Finland score highest, respectively.

SDG3: Rank = 5

SDG4 'Quality education'

Access to equitable and quality education through all stages of life is the aim of SDG4. It focuses on increasing the number of youth and adults with employment and entrepreneurship opportunities and advocates life-long learning. It also aims to decrease inequalities among gender or income in accessing education. Education is significant in meeting other SDGs; it can help reduce poverty, inequality, and gender inequality, and contributes to growth, employment, productivity, innovation, competitiveness, and healthier lifestyles.

We utilise 6 indicators in our computation of SDG4, reflecting education at all levels of life. Ireland scores high on several indicators: childhood education, second level outcomes, third level education outcomes and on

the PISA[27] score. We also do well on a new Eurostat indicator capturing the extent of basic digital skills in the population. One area where improvement is required is in the adult learning sphere: the indicator score that reflects life-long learning (adult participation in learning as a percentage of the population) puts Ireland in 8th place on this measure. Overall however, the positive performance of several measures mean that Ireland scores very well on this SDG and is ranked first overall.

SDG4: Rank = 1

SDG5 'Gender equality'

SDG5 aims at achieving gender equality by ending all forms of discrimination, violence, and any harmful practices against women. It recognises the need for equal rights and opportunities for female leadership at all political and economic decision-making levels.

Our SDG5 is computed using 5 indicators. Based on the selected indicators, we see a somewhat mixed performance for Ireland. Indicators for both the share of women in national parliament and in senior management roles have improved, but are still below the EU average with scores that place Ireland in 13th and 11th place, respectively. The employment gap indicator also puts Ireland at the lower end of the ranking, as many more women than men still remain economically inactive due to caring responsibilities.

On a more positive note, the gender pay gap has narrowed slightly over the years in the EU but remains about 14.1%. In Ireland, the latest data puts the gap at 11.3%, below the EU average. Also, the gender gap is reversed in the area of education, meaning that women are ahead of men and Ireland is ranked first on this indicator (female education as a percentage of male education).

Overall, Ireland is ranked in 10th place on this SDG indicating there is scope for improvement. Sweden, Denmark and Finland are the highest ranked countries.

SDG5 Rank = 10

27 The Programme for International Student Assessment (*PISA*) is an international assessment of the skills and knowledge of 15-year-olds. *PISA* assesses students› performance on reading, maths and science.

SDG10 'Reduced inequalities'

SDG10 calls for reducing inequality relating to income, sex, ages, disability, race, class, ethnicity, and religion within and among countries. It also focuses on inequalities between countries, and migration and social inclusion. Increasing the income of the bottom 40 per cent of the population by adopting policies and legislation is another aim of SDG10.

In the EU, developments in the area of SDG10 reveal a mixed, but on average moderately favourable picture. Our SDG10 draws on four indicators to capture the theme of this goal. The data for the Palma Index, (the ratio of the richest 10 per cent of the population's share of gross national income divided by the poorest 40 per cent's share) shows Ireland is ranked 7th. Data for the Gini coefficient shows Ireland is ranked 7th .

The Netherlands and Denmark are the worst performing countries for household debt while Ireland's score puts it in 6th place on this indicator. Ireland's performance on the social justice indicator puts it in 6th place, while the Scandanavian countries have the highest scores. Overall, our selected indicators give a goal score that puts Ireland in the middle of the rankings for this SDG with a place of 7.

SDG10: Rank = 7

SDG16 'Peace, justice and strong institutions'

SDG16 intends on promoting a peaceful and inclusive society for sustainability, supported by human rights, access to justice, and secure governance. This SDG is at the top of the ranking in the EU as favourable trends on all the indicators have been observed, indicating that "life in the EU has become safer over the past few years" (Eurostat, 2022, p.11).

To reflect and assess the theme of SDG16, we employ 8 different indicators. The theme of peace and personal security is captured by indicators of homicides, occurrence of crime/violence/vandalism, and feeling safe walking home. The theme of access to justice and strong institutions is measured by: an indicator of confidence in the judicial system (Eurostat); the perception of corruption (Transparency International); and the number of unsentenced detainees (as per cent of the population – an official UN indicator).

Our analysis of SDG16 shows that Ireland is a relatively safe society with a low number of deaths associated with homicide or assault, and a lower

perceived occurrence of crime, violence and vandalism. Relative to the EU14 countries, Ireland's overall score puts it in 7th place.

SDG16: Rank = 7

SDG17 'Partnership for the goals'

The SDGs can only be realised with a strong commitment to global partnership and cooperation. This is the basis for SDG17 which focuses on the global macro economy. The goal seeks to ensure an open universal multilateral trading system for sustainable development under the WTO. Coordinating policies to help developing countries, particularly the least developed countries, is vital to achieving sustainable growth and development.

In an EU context, monitoring of SDG17 has focused on global partnership and financial governance within the EU. Progress in achieving SDG17 is mixed and has been strongly impacted by the Covid-19 pandemic. Official development assistance (ODA) has grown slowly but steadily. According to Eurostat, "[i]n 2020, the EU maintained its position as the biggest ODA donor globally, providing €66.8 billion" (Eurostat, 2022, p.305). The EU remains committed to dedicating a share of 0.7 per cent of its GNI to ODA by 2030 (Eurostat, 2022, p.304).

Our SDG17 is computed using 4 indicators. Regarding ODA, Ireland's contribution of 0.3 per cent of GNI in 2021 is well below the EU average, placing it in 10th place on this indicator. As a member state of the EU, Ireland is clearly a long way off meeting its commitment. The target of 0.7 per cent of GNI to ODA was only met by 4 EU countries in 2021: Denmark, Sweden, Germany and Luxembourg.

We include an indicator of General Government Gross Debt to reflect the theme of financial governance. This indicator is important as the EU stipulates that EU countries' debt level should not exceed 60 per cent of GDP. Ireland's debt has fallen over the years and at 55.4% of GDP in 2021, was well below the EU27 average of 87.9%.

Ireland's share of environmental taxes as a proportion of revenue puts it on a par with the European average on this indicator, and is ranked 8th out of the 14 countries. However, Ireland's performance on the indicator which measures expenditure on health and education as a % of GDP paints a less positive picture (12th place on this indicator).

Based on the selected indicators here, Ireland's overall rank on SDG17 is 10. We emphasise that the ranking of this goal needs to be interpreted with some caution. Insufficient data means the indicators do not necessarily capture the key aims of the SDG. It is hoped that better and more reliable quality data will emerge to mirror this goal in time.

SDG17: Rank =10

3.5 The Environment Index

Country scores and rankings for the Environment Index[28] are shown in Table 17. Our analysis sees Ireland in 9th place among the EU14, implying the country faces significant challenges in meeting our commitment to the environment goals set out in Agenda 2030.

Table 17: The Environment SDG Index – Ranking by Country

Country	Index Score	Country Rank
Denmark	0.5788	1
Netherlands	0.5646	2
Germany	0.5525	3
Sweden	0.5355	4
Austria	0.5237	5
Italy	0.5137	6
Finland	0.5093	7
Luxembourg	0.4981	8
Ireland	0.4840	9
Belgium	0.4691	10
France	0.4658	11
Greece	0.4548	12
Portugal	0.4270	13
Spain	0.4140	14

Source: Authors' analysis

SDG6 'Clean Water and Sanitation'

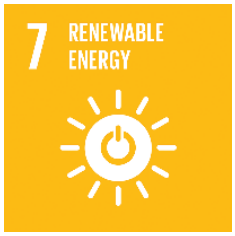
Ensuring the availability, cleanliness and hygiene and management of sustainable water is the main aim of SDG6. Water is a basic need so this goal calls for universal access to safe and affordable drinking water.

28 The 7 SDGS used to compute our Environment Index are: 6, 7, 11, 12, 13, 14 and 15.

The EU focuses on sanitation, water quality and water use efficiency to reflect the theme of this SDG. Available data paint a rather favourable picture for the EU and improvements across the key indicators have been seen. The majority of EU member states already have universal access to sanitation. Improved bathing water quality in inland waters is also enjoyed by Europeans.

We draw on 4 indicators to reflect this SDG and the results for Ireland are mixed. We score well on Eurostat's water exploitation index, which is a measure of total fresh water use as a percentage of the renewable fresh water resources (groundwater and surface water) – Ireland is ranked in 4th place. The proportion of wastewater that is treated is lower in Ireland relative to the best performing countries – Ireland is in 9th place. Also, indicators for access to improved drinking water and sanitation show further development is required. The overall score for Ireland ranks it in 11th place on this goal.

SDG6: Rank = 11



SDG7 'Affordable and Clean Energy'

SDG7 advocates access to reliable, affordable, and sustainable energy services. In order to fulfill demands, the goal calls on countries to facilitate access to clean energy research and technology and to promote investment in resource- and energy-efficient solutions and low-carbon energy infrastructure.

Eurostat argue that this goal has been heavily influenced by the measures taken in response to the Covid-19 pandemic and the related restrictions on public life and lower economic activity. They conclude that the EU now appears to be on track towards the 2030 target (Eurostat, 2022, p.12).

We use 4 indicators to reflect SDG7. Ireland's CO2 emissions from energy fuels combustion/electricity output (MtCO2/TW) are one of the highest in the sample. The share of renewable energy is one of the lowest relative to our EU peers and is well below the EU average. On the other hand, final energy consumption in household per capita puts Ireland in 6th place on this indicator, while the score for the proportion of people who are unable to keep their home adequately warm places Ireland in the middle of the rankings. Combining the indicators gives a score that ranks Ireland in 10th place.

SDG7: Rank = 10

SDG11 'Sustainable cities and communities'

Designing cities, towns, and communities in a safe, resilient and sustainable manner is the aim of SDG11. It advocates access to basic services for all, including safe and affordable housing, investing in infrastructure, including transportation and green public spaces, and improving planning and management in a way that is both participatory and inclusive.

The EU indicators focus on indicators of overcrowding and poor dwelling conditions, as well as people's exposure to noise and air pollution, and the occurrence of crime, violence and vandalism in the neighbourhood. There have been largely favourable developments concerning the quality of life in cities and communities, whereas the picture is more mixed for sustainable mobility and environmental impacts (Eurostat, 2022, p.13).

Our SDG11 is based on 4 indicators. In Ireland, air pollution is less of a problem in urban areas compared to many other EU countries. Ireland is ranked 4rd on this indicator, only out-ranked by Sweden, Finland and Portugal. Our second indicator attempts to capture 'satisfaction with public transport' and this indicator ranks Ireland ranks 10$^{th.}$ Our third indicator is a measure of rent over-burden from the OECD; it is an attempt to reflect the 'safe and affordable housing' theme of the goal. Households that spend more than 40 per cent of disposable income on housing are considered "overburdened" (OECD, 2019).

Ireland does well on this SDG: the overall score for quality of life in our cities and communities shows Ireland in 3rd place.

SDG11: Rank = 3

SDG12 'Responsible consumption and production'

Consumption and production – key driving forces in the global economy – are the focus of SDG12. The main aim of SDG12 is about doing more and better with less. It calls for adopting sustainable practices and procedures for business and an increase in environmentally friendly activity by consumers to enhance sustainable consumption and production. Activity would be supported through the development of new technologies, production and consumption methods.

In the EU, the focus is on developments in the area of decoupling environmental impacts from economic growth, energy consumption, and waste generation and management. However, at the EU level, progress

has been mixed. Specifically, while there have been improvements in decoupling environmental impacts from economic growth, increasing the value added from green products and services, and managing waste, waste generation as well as the consumption of toxic chemicals have increased over the past few years.

Our SDG12 draws on 5 indicators. The production of municipal waste is one of the highest among the countries here (Ireland is ranked 11) The recycling rate of municipal waste is very low (11th place) and the indicators of circular material use (%) is one of the lowest in our sample. A more favourable picture is provided for the indicator measuring energy productivity. The overall score puts Ireland in 10th place on this SDG.

SDG12: Rank = 10

SDG13 'Climate Action'

SDG13 seeks to implement the commitment to the United Nations Framework Convention on Climate Change and operationalise the Green Climate Fund. SDG13 integrates climate change mitigation and measures into strategies and policies to reduce the severity from the effects of climate related hazards and natural disasters.

In the EU context, SDG13 focuses on three themes: climate mitigation, climate impacts, and climate initiatives that support climate action. Eurostat's most recent overall assessment of progress on this goal is moderately positive, "even though the trends in the monitored areas – climate mitigation, adaption, and finance – show a somewhat mixed picture" (Eurostat, 2022, p.14).

International agencies still find measuring this goal problematic when attempting to determine important trends. This is due to data limitations (for example, reliable and comprehensive measures of mitigation, impacts and initiatives). Our SDG consists of 2 indicators. Eurostat utilise GHG emissions as a key indicator under this SDG and we use it here. Eurostat note that "further progress will be required to meet the new 55% reduction for 2030, especially since GHG emissions are expected to increase again in 2021with the economic recovery" (Eurostat, 2022, p.14).

Ireland's emissions have for the most part declined over the years, but they continue to be well above the EU average. Ireland is ranked second last on this indicator, based on most recent data, second only to Luxembourg.

We fair better on the indicator that reflects the carbon pricing score[29] and the overall score ranks Ireland 10th on this SDG.

SDG13 Rank = 10

SDG14 'Life below Water'

The aim of SDG14 is to conserve and sustain the use of oceans, seas and marine resources. Careful management of this essential global resource is a key priority for a sustainable future. Hence, SDG14 aims to reduce marine pollution, ocean acidification and overfishing as addressed through policy.

Available data measuring the themes of this SDG are still limited in scope. Eurostat present some results for this SDG for the first time, but in general, indicators are not available at the country level. For example, it continues to be difficult to estimate how each country is contributing to ocean health and fishing pressure. Eurostat argue that ocean acidification poses a risk to the marine environment and global climate regulation. Unfavourable trends are visible and "due to the absorption of CO2 into the world's oceans, the mean ocean acidity continues to increase, and in 2020 reached a new unprecedented high over pre-industrial levels (Eurostat, 2022, p.13). Available data for protected marine sites do not provide an indication of the sites' conservation status nor the effectiveness of the protection they offer to species and habitats (Eurostat, 2022, p.13). Hence caution is advised in interpreting the findings here.

Given the data limitations at country level, our SDG14 is computed using 2 indicators for 12 countries[30], based on data on protected marine sites and quality of bathing sites by locality. The overall score gives it a ranking of 6 on this SDG. Given time, it is hoped better quality data will allow for more reliable estimates of SDG14.

SDG14 Rank = 6 (out of 12)

29 The Carbon Pricing Score (CPS) (also called the effective carbon tax rate) measures the extent to which countries have attained the goal of pricing all energy related carbon emissions at certain benchmark values for carbon costs. The more progress that a country has made towards a specified benchmark value, the higher the CPS. The measure here comes from the OECD and excludes CO2 from biomass.

30 Both Austria and Luxembourg are landlocked – hence there is no data for this goal.

SDG15 'Life on land'

SDG15 is one of the key goals, along with SDG14 that incorporates environmental considerations for all UN member countries. It seeks to protect, restore and promote the conservation and sustainability of ecosystems. SDG15 is concerned with the use of terrestrial, inland-water and mountain ecosystems, which are enhanced by halting deforestation, restoring degraded land and protecting species. This is especially important given global trends such as population growth, accelerating urbanisation and the increasing need for natural resources.

Similar to SDG14, monitoring of SDG15 remains somewhat limited because of data availability issues. In the EU, policy focuses in the EU on attempting to ensure ecosystems are healthy and sustainably used and managed. Commenting on SDG15 in its latest report, Eurostat note "the conservation status of ecosystems and biodiversity in the EU is unfavourable and the negative impacts of EU consumption patterns on global biodiversity are considerable" (Eurostat, 2022, p.16).

We settle on five indicators to reflect SDG15. Ireland scores in the top three for indicators of the share of protected terrestrial areas and freshwater areas. Less favourable is the score on the Red List index which estimates biodiversity loss. Ireland is ranked last on this indicator. Finally, the share of land dedicated for forestry and woodland use is well below the EU average, with Ireland performing poorly on this indicator. Combining the indicators gives Ireland an overall rank on this SDG of 7.

SDG15 Rank = 7

Summary

The SDGs call on all nations to combine economic prosperity, social inclusion, and environmental sustainability. The analysis above shows that enormous challenges remain for Ireland under these three headings. Table 18 summarises how Ireland has scored on each SDG under the three dimensions.

Table 18: Ireland's Rank by Dimension and by SDG

Economy		9
SDG 8	Good Jobs and Economic Growth	8
SDG 9	Industry, Innovation and Infrastructure	11
Society		6
SDG 1	No Poverty	10
SDG 2	Zero Hunger	13
SDG 3	Good Health and Wellbeing	5
SDG 4	Quality Education	1
SDG 5	Gender Equality	10
SDG 10	Reduced Inequality	7
SDG 16	Peace and Justice	7
SDG 17	Partnerships for the Goals	10
Environment		9
SDG 6	Clean Water and Sanitation	11
SDG 7	Affordable and Clean Energy	10
SDG 11	Sustainable Cities and Communities	3
SDG 12	Responsible Consumption and Production	10
SDG 13	Climate Action	10
SDG 14	Life Below Water	6
SDG 15	Life on Land	7

Source: Authors' analysis

Strengths

Ireland is in the top 5 for just 3 SDGs; 'Quality education' (SDG4), 'Good health and wellbeing' (SDG3) and 'Sustainable cities and communities' (SDG11). The good score on SDG16 'Peace and justice' indicates that Ireland is a relatively safe place to live with reasonably good transparent, effective and accountable institutions. Ireland's relatively good performance on 'Good health and wellbeing' does not of course take account of the Covid-19 pandemic; the crisis has underlined shown the importance of every country having an effective social protection system, and universal health coverage. We continue to perform very well on the SDG for 'Quality Education' (SDG4), much as expected. From basic education to tertiary education, Ireland's reputation for 'quality education' is evident, although some consideration should be given to the low rate of adult participation in learning.

Weaknesses

Challenges lie ahead for progress on achievement of some goals. For example, several of the SDGs reflecting the environment present a less favourable picture of Ireland. Clearly, there are pressing sustainability issues that must be addressed, as reflected by the ranking of SDG7 'Affordable and clean energy', SDG12, 'Responsible consumption and production', and SDG13, 'Climate action'. The low score on SDG2 'No hunger' emphasizes the need to embrace fully the idea of sustainable agriculture while Ireland's rank on SDG9, 'Industry, Innovation and Infrastructure, points to the need for further policy action with regard to logistics and broadband capacities.

Somewhere in the Middle

Several of the SDGs are in the middle of the rankings, implying there is much scope for improvement. We should not be complacent. The objective of the 17 SDGs as part of the 2030 Agenda was to set universal goals that meet the urgent environment, political and economic challenges evident in our world. Continuous monitoring of all the indicators that make up the goals is required in order to fully meet the aims of Agenda 2030.

3.6 How Are We Doing Overall? - The Sustainable Progress Index

The SDGs provide an ambitious, comprehensive plan of action for people, planet and prosperity. The goal of the SDGs is to change the perspective of public policy and we have shown the scale of the challenge facing Ireland under the headings of economy, society and environment.

We present the composite Sustainable Progress Index (SPI) in Table 19. We have argued previously there is merit to presenting one statistic to capture progress – it can quickly draw our attention to potential problems or issues that need to be addressed. The benefit of the aggregate measure here is that it provides a simple report card to track Ireland's overall performance on the SDGs compared to its EU peers: countries that have experienced similar levels of development.

It is important to emphasise that our analysis is based only on what can be measured. In spite of best efforts to identify data for the SDGs, several indicator and data gaps persist, particularly for the environment SDGs. Good data and analysis remain critical to ensuring the SDGs become useful tools to support policy-making

Table 19 highlights that once again, we see the Nordic countries, along with the Netherlands, top the index rankings. **Ireland is in 8th place in the SPI 2023**.

Table 19: The Sustainable Progress Index, Ranking by Country

Country	Index Score	Country Rank
Denmark	0.6875	1
Sweden	0.6667	2
Netherlands	0.6401	3
Finland	0.6340	4
Germany	0.5615	5
Austria	0.5343	6
Belgium	0.5287	7
Ireland	0.5240	8
France	0.4854	9
Luxembourg	0.4803	10
Italy	0.4469	11
Portugal	0.4215	12
Spain	0.4085	13
Greece	0.3542	14

Source: Authors' analysis

4

Conclusion and Future Policy Considerations

The SDGs are a blueprint to achieve a better and more sustainable future. This report is the latest in our contribution to the debate on the shape of Ireland, Europe and our world in 2030 and beyond. The aim is to inform interested parties, including Irish and European citizens, policy makers, and business people, to adopt sustainable development actions. Our central goal is to show how Ireland compares relative to our EU peers. We believe that knowing where we stand, identifying the most pressing sustainability challenges, and critically examining our performance is essential if we are to ensure a sustainable future for our country.

In our report last year, we welcomed the Government's publication of the Wellbeing Framework, with its 11 dimensions of Subjective Well-being; Mental and Physical Health; Knowledge and Skills; Income and Wealth; Housing and Local Area; Environment, Climate and Biodiversity; Safety and Security; Work and Job Quality; Time Use; Community, Social Connections and Cultural Participation; and Civic Engagement and Cultural Expression, and its First Report on a Wellbeing Framework for Ireland (Clark, Kavanagh, & Bennett, 2022).

Since then, Government published the Second Report on the Wellbeing Framework in Ireland (Government of Ireland, 2022) which refined the overarching vision and goals of the Framework "to emphasise mental health, broader skills across the life cycle (rather than formal education), protection of Ireland's environment, climate and biodiversity and a focus on open government with which citizens can meaningfully engage." (p.14).

The Overarching Vision and Goals are now stated as follows:

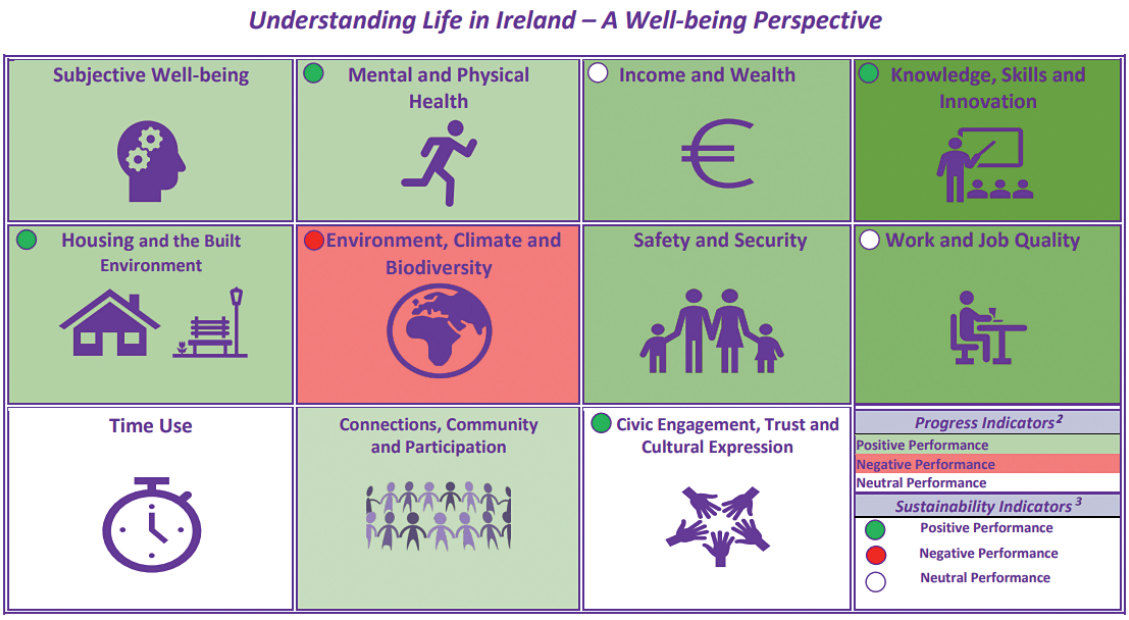
- Enable people to have purposeful lives that support good physical and mental health, enabling the development of skills across the life cycle and providing a good standard of living;
- Ensure a sustainable sense of place, including an appropriate and safe place to live and protection of Ireland's environment, climate and biodiversity;
- Preserve balance, inclusivity and equality of opportunities across society with open and effective government, empowering families, friends and communities to grow, connect and meaningfully engage.

(Government of Ireland, 2022, p. 14)

The Interdepartmental Working Group established within the Department of the Taoiseach also developed a 'Wellbeing Dashboard', consisting of 35 indicators, as a way of providing a snapshot of progress across the 11 dimensions. There are two types of indicators of progress, the Progress Indicators, denoted as colours in each box, refer to how the indicators perform over a 5 year period and compared to the EU average, depending on data availability; while the Sustainability Indicators, denoted as coloured circles in the top-left of each of seven boxes, refer to a subset of the 35 indicators (consisting of 14 indicators) which have been identified as particularly important for sustainability. The indicators are then colour-coded: green as positive, red as negative, and white as neutral.

In June 2022, when the first Wellbeing Dashboard was published, it would appear that Ireland was doing extremely well, with Positive Performance recorded for eight of the 11 Performance Indicators, Neutral Performance for two, and Negative Performance for just one. Of the seven Sustainability Indicators, Positive Performance is recorded for four, Neutral Performance for two, and Negative Performance for just one (Figure 1).

Figure 1: Well-being Dashboard



[2] The colour indicates how overall the 35 indicators perform over time (generally 5 years) and compared to the EU average, depending on data availability.
[3] A subset of the indicators (14) have been identified as particularly important for sustainability (Economic, Environmental, Social). The circle shows performance of these indicators.

Source: Understanding Life in Ireland: The Well-being Dashboard 2022, p.5

Of course, progress depends on the measures used. Analysis by Social Justice Ireland based on a survey of what indicators should be included showed "considerable room for improvement" (p.188). Just two dimensions showed positive progress – Knowledge, Skills and Innovation; and Work and Job Quality, while four showed neutral progress – Subjective Wellbeing; Income and Wealth; Connections, Community and Participation; and Civic Engagement, Trust, and Cultural Expression; and the remaining five showed negative progress (Bennett, 2022) (Figure 2).

Figure 2: Alternative Dashboard

Source: What Counts When It Comes to Wellbeing?, contained in Towards Wellbeing for All, 2022, p.189

Wellbeing and a New Social Contract

Social Justice Ireland has consistently proposed a policy framework for a new Social Contract that identifies five key policy outcomes: a Vibrant Economy; Decent Services and Infrastructure; Just Taxation; Good Governance; and Sustainability (Bennett, Healy, Murphy, & Murphy, 2020). Each of these five key policy outcomes must be achieved if a new Social Contract is to be achieved. It is not enough to have three or even four of the five, while neglecting other areas. All five must be worked on simultaneously. It is not a question of getting the economy right and everything else will follow. That approach has led us from boom to bust to boom to bust. When we placed our analysis of real progress in each of the 11 dimensions in the context of the Social Contract Framework, it is clear that Government has again prioritised the economy above all else (Bennett, 2022) (Figure 3).

Figure 3: Wellbeing Framework and the Social Contract

Vibrant Economy	Decent Services and Infrastructure	Just Taxation	Good Governance	Sustainability
 Work and Job Quality	 Subjective Wellbeing	 Income and Wealth	 Safety and Security	 Environment, Climate and Biodiversity
 Knowledge, Skills and Innovation	 Mental and Physical Health		 Civic Engagement, Trust, and Cultural Expression	 Time Use
	 Housing and the Built Environment			
	 Connections, Community and Participation			

Source: What Counts When It Comes to Wellbeing?, contained in Towards Wellbeing for All, 2022, p.189

5.1 Policy Proposals

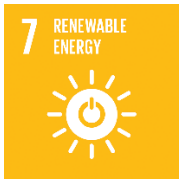
A properly functioning Wellbeing Framework would support Ireland to achieve the targets set as part of the 2030 Agenda for Sustainable Development. However, implementing the Framework will require transformational change across all levels of Government and State Agencies and be supported by real Social Dialogue and participation. To begin this change, make the following proposals set out both within the framework of the 11 Well-being Dimensions and the 17 Sustainable Development Goals.

Wellbeing Indicator 1: Subjective Well-being SDG Number	
SDG Number	
	
National Level	
• Introduce a new Social Contract to underpin the Wellbeing of all in Ireland	
Local Level	
• Introduce local social dialogue mechanisms to ensure that all communities have a say in their own Wellbeing	
SDG Number	National Level
	• Support policies that enhance the standard of living of people who are most marginalised, including people with disabilities. • Specifically, address poverty among people with disabilities, starting with the introduction of a cost of disability payment.
SDG Number	National Level
	• Increase educational campaigns promoting health, targeting particularly people who are poor, acknowledging that a preventative approach saves money in the long run. • Properly resource and develop mental health services and facilitate campaigns giving greater attention to the issue of suicide.
SDG Number	National Level
	• Work to eliminate the barriers faced by people with disabilities in accessing basic services such as housing, healthcare, and education.

Wellbeing Indicator 2: Mental and Physical Health	
SDG Number	National Level
	• Fund research on food poverty through stakeholder groups such as the Vincentian Partnership for Social Justice, St. Vincent de Paul and MABS. • Expand the 'hot school meals' programme, particularly for schools and pre-schools in disadvantaged areas and those with a high concentration of homeless children / children living in Direct Provision who do not have their own cooking facilities.
	Local Level
	• Provide funding for research on local initiatives on sustainable food production. • Support 'farm to fork' and short supply chains in food production.
SDG Number	National Level
	• Ensure that announced budgetary allocations are valid, realistic and transparent and that they take existing commitments into account. • Complete the roll-out of the Community Health Networks and increase the availability and quality of Primary Care and Social Care services. • Ensure medical card-coverage for all people who are vulnerable. • Act effectively to end the current hospital waiting list crisis. • Create a statutory entitlement to Home Care Services. This will require increased funding, but will save the State money long-term, as home support allows people to remain living in their own homes, rather than entering residential nursing care. • Implement all aspects of the dementia strategy. • Adopt a target to reduce the body mass index (BMI) of the population by 5 per cent by 2025. • Work towards full universal healthcare for all. Ensure new system structures are fit for purpose and publish detailed evidence of how new decisions taken will meet healthcare goals. • Enhance the process of planning and investment so that the healthcare system can cope with the increase and diversity in population and the ageing of the population projected for the next few decades.
	Local Level
	• Support the integration of primary care networks and GP led community healthcare services. • Support the roll-out of 'Smile agus Sláinte' as part of primary care provision.

Wellbeing Indicator 3: Income and Wealth	
SDG Number	National Level
	• Immediately provide for an additional €8 per week (€20 in total) in core social welfare rates in the Social Welfare Bill 2022. • Adopt targets aimed at reducing poverty among particular vulnerable groups such as children, lone parents, jobless households, and those in social rented housing. • Acknowledge that Ireland has an ongoing poverty problem. • Commit sufficient resources to achieve policy targets on poverty reduction.
	Local Level
	• Support the development of social and affordable housing on State lands. • Seek to replace the Local Property Tax with a Site Value Tax and increase the tax-take, while including hardship measures for those who cannot afford to pay it in full.
SDG Number	National Level
	• Adopt and implement a national financial literacy strategy.
SDG Number	National Level
	• Introduce a Universal State Social Welfare Pension.
	Local Level
	• Support high-quality community childcare, particularly in disadvantaged areas.

Wellbeing Indicator 4: Knowledge and Skills	
SDG Number	National Level
	• Make the improvement of educational outcomes for pupils from disadvantaged backgrounds and disadvantaged communities a policy priority, with additional resources focused on addressing the persistence of educational disadvantage. • Commit to increasing investment in Early Childhood Care and Education by 0.1 per cent of GDP annually to reach 1 per cent of GDP by 2027. • Commit to reducing class sizes and pupil teacher ratios at primary and post primary level by 1 point per annum to 2030. • Revise our lifelong learning target to reach 20 per cent by 2026, ensuring sufficient resources are made available. • To meet the digital and green transition challenges develop an integrated skills development, digital transition, vocational training, apprenticeship and reskilling strategy. • Fully resource 'Adult Literacy for Life' by increasing the adult literacy budget to €100 million by 2030, including €25 million to improve ancillary and support services.
	Local Level
	• Enhance community education programmes and life-long learning through the library network. • Ensure full implementation of the 'Our Public Libraries 2022' strategy and ensure that its implementation is inclusive and supportive of smaller branch libraries as a hub for local communities.
Wellbeing Indicator 5: Housing and Local Area	
SDG Number	National Level
	• Introduce an Equity Scheme for Borrowers in Long Term Mortgage Arrears. • Increase the provision of 'Housing First' accommodation for families in emergency accommodation, with wraparound supports. • Introduce legislation to limit the length of time families can spend in Family Hubs and other emergency accommodation.

SDG Number	National Level
	• Set a target of 20 per cent of all housing stock to be social housing and achieve this through building more social housing. • Ensure that no State land suitable for housing is sold by a Local Authority or State agency. • Address affordability through supply-side initiatives such as new methodologies and procurement processes, rather than demand-side subsidies. • Develop a spectrum of housing supports for people with disabilities. • Resource the enforcement of legislation targeting short-term lettings. • Begin the process of reducing the reliance of the rental sector on Housing Subsidies. • Allow local authorities and Approved Housing Bodies to pool resources to finance this increased supply in a sustainable way.
	Local Level
	• Expedite the roll-out of the National Broadband Plan, commencing with those with the largest proportion of premises dependent on it. • Improve the primary road network across the country to support the increased provision of public transport. • Invest in a deep retrofitting programme for community spaces. • Ringfence continued funding to encourage sports participation and active lifestyle programmes. • Invest in the provision and maintenance of community spaces, playgrounds, and youth centres.
Wellbeing Indicator 6: Environment, Climate and Biodiversity	
SDG Number	**National Level**
	• Continue to provide support and advice to farmers to improve water quality under the Agricultural Sustainability Support and Advice Programme. • Invest in Ireland's wastewater system.
	Local Level
	• Develop a Drinking Water Safety Plan, following EPA Guidelines, for each public water supply, identifying all potential risks and detailing mitigation and control measures.
SDG Number	**National Level**
	• Upgrade the national grid and invest in infrastructure necessary to support a transition to renewable energy. • Invest in research and development for the use of renewable energy in our public transport systems.
	Local Level
	• Invest in renewable energy transition programmes for Local Authority offices and community spaces.

SDG Number	National Level
	• Introduce a circular economy package for Ireland across all areas of economic activity. • Research cradle-to-cradle development. • Place a levy on single-use plastics. • Invest in the development of short supply chains. • Clarify and enforce the Vacant Site Levy legislation to ensure it achieves its original purpose. • Introduce an aviation fuel tax. • Reintroduce the Windfall Gains Tax at 80 per cent. • Explore new initiatives to promote behavioural change through the tax system.
	Local Level
	• Eliminate all single-use plastics from Local Authority buildings and public spaces. • Develop open consultation on ambitious waste management plans beyond 2021. • Adopt the principles of a circular economy, particularly for construction and demolition waste.

SDG Number	National Level
	• Establish a Just Transition and Adaptation Dialogue to ensure rural areas are not disproportionately impacted by low carbon policies and are supported to meet the challenges posed by the future of work. • Develop a comprehensive mitigation and transition programme to transition to a low carbon economy. • Increase carbon taxes in line with IPCC recommendations. • Ensure that all people are treated fairly in the creation of policies and projects that address climate change as well as in the systems that create climate change. • Develop a comprehensive mitigation and transition programme to support communities and people in the transition to a low carbon society. • Set ambitious emissions reduction targets for 2030 and ensure sufficient resources to support implementation of these targets.
	Local Level
	• Develop Climate Change Adaptation Strategies in each Local Authority area, with the collaborative input of local communities and Public Participation Networks, supported by dedicated sustainable funding in the medium to long-term.

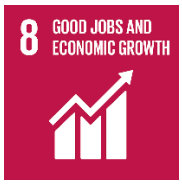
SDG Number	National Level
	• Fully implement the National Integrated Maritime Plan. • Regulate harvesting and end over-fishing. • Implement policies to restore fishing stocks to sustainable levels.
	Local Level
	• Put a plan in place to tackle pesticides in drinking water. • Implement the 'Nature' programmes set out in the Climate Action Plan published by the Department of Communications, Climate Action and the Environment.

SDG Number	National Level
	• Increase afforestation of native trees and reduce planting of Sitka spruce. • Ensure that sustainable agriculture policy, sustainable land management, and short supply chains for farmers and consumers form the basis of future agricultural policy.
	Local Level
	• Invest in programmes to rewet the boglands. • Implement the 'Nature' programmes set out in the Climate Action Plan published by the Department of Communications, Climate Action and the Environment.

Wellbeing Indicator 7: Safety and Security

SDG Number	National Level
	• Following our ratification of the Istanbul Convention, Ireland is obligated to have 472 places for victims of DSGBV, however we are falling far short of this target. • The Programme for Government referred to an "epidemic" of domestic abuse. But as like any epidemic, adequate resources are needed to combat it. Government must meet their commitments under the Istanbul Convention and provide further refuge spaces for victims of Domestic Sexual and Gender-Based Violence.

SDG Number	National Level
	• Fully implement the recommendations of the Commission for the Elimination of Racial Discrimination within a reasonable timeframe. • Fully implement the recommendations of the 2019 Trafficking in Persons Report. • As more and more make the move to online and digital money services, especially those who may be unused to using these services, effective education and fraud prevention measure must be enhanced.
	Local Level
	• Utilise the full allocation for Traveller specific accommodation and support the development of sites for this purpose. • Fully implement the National Traveller and Roma Inclusion Strategy.

Wellbeing Indicator 8: Work and Job Quality	
SDG Number	National Level
	• Implement a Refundable Tax Credit System to support the working poor. • Recognise the challenges of long-term unemployment and of precarious employment and adopt targeted policies to address these.
SDG Number	National Level
	• Launch a major investment programme focused on prioritising initiatives that strengthen social infrastructure, including a comprehensive school building programme and a much larger social housing programme. • Support the widespread adoption of a Living Wage so that low paid workers receive an adequate income and can afford a minimum, but decent, standard of living.
	Local Level
	• Review the sustainability of jobs created through LEOs and develop plans to ensure the security of decent work.
Wellbeing Indicator 9: Time Use	
SDG Number	National Level
	• Recognise that the term "work" is not synonymous with the concept of "paid employment". Everybody has a right to work, i.e. to contribute to his or her own development and that of the community and the wider society. This, however, should not be confined to job creation. Work and a job are not the same thing. • Give greater recognition to the work carried out by carers in Ireland and introduce policy reforms to reduce the financial and emotional pressures on carers. These should focus on addressing the poverty experienced by many carers and their families and on increasing the provision of respite opportunities to carers and to those for whom they care. • Request the CSO to conduct an annual survey to discover the value of all unpaid work in the country.

Wellbeing Indicator 10: Community, Social Connections and Cultural Participation	
SDG Number	National Level
	• National Economic and Social Dialogue / Partnership to include all five pillars. • Ensure that all voices are heard and include all stakeholders. • Restore funding to the Community and Voluntary Pillar. • Broaden discussion beyond pay and taxation. • Review planning legislation to ensure that its terms are consistent with the objectives of the Goals and democratic engagement. • Introduce impact assessment and poverty proofing on all Government initiatives. • Ensure that Budgetary allocations are valid, realistic and transparent, and take account of existing levels of service. • Legislate for enforcement mechanisms where Local Authorities do not use their full allocation for Traveller Specific Accommodation. • Ensure adequate funding for civil legal aid. • Greater transparency of lobbying activities. • Establish a Dialogue Forum in every Local Authority involving Local Authorities and the Public Participation Networks (PPNs). Fully implement recommendations of the Commission for the Elimination of Racial Discrimination within a reasonable timeframe. • Introduce an ex-ante social impact assessment of all policy proposals to be discussed at Oireachtas Committees. • Review building regulations to ensure good ventilation, heating, and fire safety standards across all buildings.
	Local Level
	• Develop a sustainable strategy for public participation, to include medium and long-term objectives and associated budget commitments. • Move from an annual funding model for PPNs to a 3 to 5-year renewable commitment.

Wellbeing Indicator 11: Civic Engagement and Cultural Expression	
SDG Number	National Level
	• Increase ODA as percentage of GNI, with a move towards the UN Target of 0.7 per cent of GNI by 2025. • Adopt targets and a reporting system for the Sustainable Development Goals. • Tag all Government policies and policy proposals with the relevant Goal(s). • Adopt targets and a reporting system for each of the Sustainable Development Goals. • Develop a new National Index of Progress, ensuring social and environmental issues are incorporated into our national accounts. • Include, in the Commission for Regulating Lobbying's Annual Reports, policy areas with the greatest lobbying activity, the lobbying organisations and the designated public officials engaged to highlight to the general public those influencing the political decision-making process.
	Local Level
	• Develop strategic partnerships with Local Authorities and local government organisations, in Europe and Internationally, to support the implementation of the Goals. • Ensure coherence between national and local government policies.

5

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Appendices

Appendix A: List of Indicators Used in the Construction of the Sustainable Progress Index 2023

Table A.1 List of Indicators Used in the SDGs

SDG	Indicator	Source
1	Poverty rate after taxes and transfers; poverty line 50% (% of population)	OECD
1	People living in households with low work intensity	Eurostat
1	Share of severely deprived people	Eurostat
2	Prevalence of obesity, BMI>30 (% of adult population)	Eurostat
2	Cereal yield (kg/ha)	World Bank
2	Ammonia emissions from agriculture	Eurostat (from EEA)
2	Pesticide exports hazardous to human health	FAO, Sachs et al (2022)
2	Area under organic farming (% of UAA)	Eurostat
3	Life expectancy at birth, total, years	Eurostat
3	Adolescent fertility rate (births per 1000, age15-19)	UNDP, Sachs et al (2022)
3	Subjective wellbeing (average ladder score)	Gallup (2022)
3	Smoking prevalence (%, aged 15+)	Eurostat
3	Self-reported unmet health needs (% of population)	Eurostat
3	Deaths from NCDs (per 100,000)	UNDP
3	Suicide Rate	OECD
3	Fatal Road Accidents	Eurostat
3	Alcohol Consumption (litres per capita, age 15+)	Eurostat
3	Universal Health Coverage Index	WHO
4	Tertiary education (% of population, age 30-34)	Eurostat
4	PISA Score	OECD
4	Share of population with basic digital skills	Eurostat
4	Adult participation in learning (%)	Eurostat
4	Early leavers from education and training	Eurostat
4	Early childhood education coverage	Eurostat

SDG	Indicator	Source
5	Proportion of seats held by women in national parliaments (%)	Eurostat
5	Proportion of women in senior management positions (%)	Eurostat
5	Gender pay gap in unadjusted form (% of male hourly wages)	Eurostat
5	Gender employment gap	Eurostat
5	Ratio of female years of education to male mean years (% of males), population aged 25 and above	UNESCO
6	Population using safely managed water services	JMP (2020)
6	Population using safety managed sanitation services	JMP (2020)
6	Water exploitation index	Eurostat
6	Anthropogenic wastewater that receives treatment (%)	EPI (2018); Sachs et al (2022)
7	Share of renewable energy in consumption (%)	Eurostat
7	CO2 from fuels and electricity	IEA (2022)
7	Population unable to keep adequately warm (%)	Eurostat
7	Final energy consumption per capita in households	Eurostat
8	Unemployment Rate (%)	Eurostat
8	Real GDP per capita	Eurostat
8	Average gross annual wages (in PPP)	OECD
8	NEET rate (youths not in employment education or training (%)	Eurostat
8	Employment rate	Eurostat
8	Fatal accidents at work (per 100,00 workers)	Eurostat
9	R&D expenditure, % of GDP	Eurostat
9	Population using the internet (%)	ITU, Sachs et al (2022)
9	Mobile broadband subscriptions	ITU, Sachs et al (2022)
9	Number of R&D researchers (% of active population)	Eurostat
9	Logistics Performance Index: Quality of trade and transport-related infrastructure (worst 1-5 best)	World Bank
10	GINI index	OECD
10	Household debt, % NDI	OECD
10	Palma Index	OECD
10	EU Social Justice Index	Hellman et al (2019)
11	Exposure to air pollution of PM2.5 in urban areas	Eurostat
11	Satisfaction with public transport (% of population)	Gallup (2020)
11	CO2 from new passenger cars	Eurostat
11	Rent over-burden rate in the population (%)	OECD
12	Municipal waste generated per capita	OECD
12	Resource productivity	Eurostat
12	Recycling rate of waste, excluding major mineral waste (% of total waste recycled)	Eurostat

SDG	Indicator	Source
12	Circular material use rate (%)	Eurostat
12	E-waste (kg per capita)	ITU (2021); Sachs et al (2021)
13	GHG emissions per capita	Eurostat
13	Carbon Pricing Score from non-road energy, excluding emissions from biomass	OECD
14	Mean area that is protected in marine sites important to biodiversity (%)	Birdlife International et al. (2021)
14	Bathing sites of excellent quality (coastal and inland)	Eurostat
15	Surface of terrestrial sites designated under Natura 2000	Eurostat
15	Percentage of land covered by forestry	Eurostat
15	Soil Sealing Index	Eurostat
15	Red List Index	Bird Life International (2021)
15	Mean area that is protected in freshwater sites important to diversity (%)	Bird Life International (2021)
16	Corruption Perception Index	Transparency International (2021)
16	Homicides per 100,000 population	Eurostat
16	Population reporting occurrence of crime, violence or vandalism in their area (%)	Eurostat
16	Perceived independence of the justice system (%)	Eurostat
16	Prisoners (% of population)	UNOCD, Sachs et al (2021)
16	Property Rights Index	World Economic Forum: World Competitiveness Report (2021)
16	Feel safe walking at night (%)	Gallup (2022)
16	Unsentenced detainees (% of prison population)	UNODC, Sachs et al (2021)
17	Overseas Development Assistance (% of GNI)	Eurostat
17	Environmental taxes as % of tax revenue	Eurostat
17	Government spending on health and education (% of GDP)	UNESCO (2021); Sachs et al (2021)
17	General government gross debt	Eurostat

SOCIAL JUSTICE IRELAND

working to build a just society

Social Justice Ireland
1-3 Burton Hall Road
Sandyford
Dublin D18 A094

www.socialjustice.ie

Tel: 01- 2903597

email: secretary@socialjustice.ie

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