Measuring Progress: The Sustainable Progress Index 2024

Sustainable
Progress Index

SOCIAL
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IRELAND

working to build a just society

2024

This report is written by:

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1 Introduction

The Beyond GDP movement, as well as efforts on Wellbeing and Happiness, are attempts to provide evidence-based policy. Addressing problems begins with fully understanding them, and that requires data. And data needs theories to be created (as a guide on what to measure) and also to explain what the data means. The goal of evidence-based policy is that it will supplement the usual policy guides: self-interest and ideology. While self-interest certainly causes most of the mischief in public policy as powerful economic agents get the government to subsidize their activities or prevent others from competing with them (modern versions of the Mercantilism Adam Smith argued against), it is necessary that, in a democracy, citizens can vote for representatives who will promote their interests in public policy discussions, so that the government's budget reflects the will of the people. Furthermore, as we noted above, all data collection and analysis, as well as policy formation, is based on ideas and theories, thus you cannot eliminate ideology from politics. But you can try to ground ideologies in the lived realities of the people, and that is why we need a wide variety of indicators.

When the nations of the world agreed on the United Nations Sustainable Development Goals (SDGs), they were laying out 17 goals that all agreed were necessary for a sustainable future. The SDGs, like the MDGs (Millennial Development Goals) before them, are a rejection of the standard approach economists take towards most, if not all, problems: grow the economy (GDP) and we can afford (either as individuals or acting together through governments) to address and hopefully remedy the problem. The new approach of the MDGs and SDGs is to instead focus on specific problems, recognizing that they often do not need further economic growth. If the problem is hunger or illness or lack of sanitation, then our efforts should directly address these problems. Ironically, at least for Sub-Saharan African countries, many of the economies as measured by GDP performed much better under the UN's MDG regime than under the four previous United Nations Decades of Development framework (Clark 2021b), which makes sense because people who are better fed, healthy and live in a clean environment, are also more productive.

Our report contributes to this debate. First, we put the overall issues of measuring progress in context. Then we focus on consumption as a measure of progress, proposed initially by Adam Smith, which eventually leads to the prominent role of GDP. We also examine (again) why GDP is a poor indicator of economic progress for Ireland. The World Bank's Wealth Accounting, as a way of measuring sustainable consumption, is also explored – we use its indicators to compare Ireland with the 13 other countries that make up our focus group (EU 14). We then examine the issue of wellbeing - specifically the Social Progress Index as a wellbeing indicator – and draw on that data to see how Ireland compares with the other EU 14 countries. These two sections are designed to expose policy advocates to significant efforts at measuring the economy and society. The following section updates our Sustainable Progress Index (based on the SDGs) to compare Ireland with the EU 14. Our final section concludes with key policy recommendations.

1.1 A Quick note on the EU 14

All data is only meaningful in context. Telling a patient that their temperature is 38 degrees is meaningless unless they can compare that with what is considered a healthy temperature. Thus, reporting any economic or social statistic requires some context. There are two ways of doing this for a country like Ireland: compare the statistic with how Ireland has done in the past or compare Ireland with similar countries. In this report we do both. When possible, we examine Ireland's performance over time. We also compare Ireland with the EU 14 (often with the EU 14 average). The EU 14 countries are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden. We pick these countries because they are the in the Euro zone and because they have adjusted to the European Union standards for the most part. Comparing Ireland with just individual countries would often be problematic, as individual factors could make the comparison unhelpful, but as a group we think it gives a benchmark that shows what similar countries have achieved.

2

Measuring Progress

Measuring any economic or social variable is always political. Whether it is counting people, places or things, you need both the authority (to force compliance) and the resources to conduct the count. In ancient times, the purpose of a census was to assess taxation and to get a count of the number of males suitable for the military, necessary for determining the potential size of the army. Some early examples of this are 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.[1] Both were designed to tally up the spoils of conquest. Petty called his work "political arithmetic, which his contemporary Charles Davenant defined as 'the art of reasoning by figures upon things relating to government'" (quoted in Stone, 1986).

National income accounting (Gross Domestic Product being the most well-known example) was developed at the outset of World War II to allow the United States and the United Kingdom to calculate potential output (which would allow them to plan military spending). Sir Richard Stone is considered the founder of national income accounting, having first developed a system for measuring national income to support John Maynard Keynes's work on war time finance and then for leading the efforts in the development of the United Nations System of National Accounts (SNA, 1953). The fact that National Income Accounting fits neatly into Keynesian macroeconomic theory was no accident.

Keynes revolutionized economic theory with his theory of employment, which states that the level of employment is determined by the level of aggregate demand (total spending). Changes in the level of employment are caused by changes in the level of aggregate demand.

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1   Census taking is thousands of years old and is found in most ancient empires, the most famous being the one ordered by Caesar Augustus that prompted Joseph and Mary's famous trip to Bethlehem.

Keynes's theory replaced the reigning orthodoxy (Say's Law of Markets) that stated that supply (the production of goods and services) creates its own demand (production process pays out sufficient incomes to buy what was produced), thus everyone who wants to work at the market wage will be able to get a job – full employment. Keynes demonstrated that involuntary unemployment[2] is possible, which then calls for a government policy response. However, effective policy would require an accurate measure of aggregate demand (spending), thus the use of Keynesian economics required national income statistics.

While Keynes had first-hand applied expertise on the workings of financial markets and the economy, his theory was developed in a similar manner as all previous theories in the history of economics. Keynes faced new realities (the changed economy of the early 20th century) with new insights acquired from the overall intellectual milieu, such as a new understanding of time and uncertainty derived from developments in physics (such as Heisenberg's uncertainty principle) and a rejection of the ideology of laissez-faire as foundational for economics (Keynes, 1926). The US spending on World War II, which quickly lowered unemployment from 14.6% in 1940 to 1.9% in 1943, showed that Keynes's policy recommendation in the *General Theory* worked. All countries had to develop national income systems in order to prudently apply Keynesian fiscal policy. Increasing government responsibility for other social and economic problems required a massive expansion of the "measuring state" beyond the initial role of counting people (population census), property and foreign trade (necessary for collecting taxes) to support government functions.

2.1 The Second Crisis of Economic Theory

Keynesian economics was a response to the mass unemployment of the Great Depression, what Joan Robinson called the "first crisis of economic theory". Keynes explained what determined the level of employment (level of aggregate demand). The US Government spending increased during World War II, and more recently its spending as a response to the recession caused by Covid-19, showed that Keynes's theory worked - governments can, as a matter of policy, stimulate the economy to reach its potential output and thus generate full employment. It should be noted that often governments will not want to keep the economy permanently in full employment as that would increase the relative power of workers, thus reducing the relative power of business (See Michael Kalecki famous 1943 essay "the Political Aspects of Full Employment").

In her address to the American Economics Association in 1972, Robinson declared that the economics profession was in the "second crisis of economic theory": "The first crisis

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2   Involuntary unemployment is when a worker is willing to work at the existing wage but cannot find a job. Say's Law suggests that anyone who is unemployed is voluntarily unemployed, meaning that they are not willing to work at the existing wage. Most economists at the time blamed the mass unemployment of the 1930s on rigid wages, blaming unions (which were not common at the time) for preventing wages from falling.

arises from the breakdown of a theory which could not account for the level of employment. The second crisis arises from a theory that cannot account for the content of employment" (Robinson 1972, p. 6). Robinson's speech came at the apex of what was commonly called "Keynesian Economics". The consensus at the time, from Milton Freidman to Richard Nixon, was that "we are all Keynesians now".

Robinson felt that economists needed to move beyond the question of what is the level of GDP (growth rate) and start addressing the question of what is the composition of GDP. Much of the spending required to keep GDP high was on the military (called military Keynesianism at the time) and excessive consumption (consumerism) that was burying the planet in waste and pollution. Furthermore, she argued that economic growth often leads to higher poverty: "Growth requires technical progress and technical progress alters the composition of the labour force, making more places for educated workers and fewer for uneducated, but opportunities to acquire qualifications are kept (with a few exceptions for exceptional talents) for those families who have them already. As growth goes on at the top, more and more families are thrown out at the bottom. Absolute misery grows while wealth increases. The old slogan, "poverty in the midst of plenty," takes on a new meaning" (1972, p.7). The problems of rising inequality, technological unemployment and environmental damage are going to be made worse by policies that pursue growing GDP with the hope it will be used to solve society's social and environmental problems. Joan Robinson was clearly ahead of her times. Fetishizing economic growth makes all of a country's problems and challenges secondary, and thus ignored.

3

Progress as Production and Consumption

In honor of Adam Smith's recent 300th birthday (June 5, 2023), it is worth noting that Adam Smith's rejection of the Mercantilist policy goal of maximizing Gold and Silver reserves held by the King and Merchant class, along with his focusing on increasing the production and consumption of goods and services by average citizens, were great improvements in economic theory and policy. Adam Smith dramatically changed economics when he redefined the "wealth of a nation" as the annual output of "necessaries and conveniences of life" which the country consumes, with this output being the result of the "annual labour" of the country (Smith, 1976b, p. 10). Smith redirects the focus of economics away from the stock of wealth (gold and silver) to the flow of goods and services that meets people's needs and wants. In doing so, he also changed the focus from the land owners and merchants (elites) to the workers and consumers (general public), with how much the average person consumes being the metric for progress rather than the accumulated property of elites: "Consumption is the sole end and purpose of all production" (1976b, p. 660). Writing when most of the population lived near the subsistence level, we can see why Smith added that this "maxim is so perfectly self-evident, that it would be absurd to attempt to prove it" (Ibid).

Eighteenth century economies were "scarcity-constrained" meaning that their central economic problem was meeting the society's basic needs, thus increasing output was necessary for improving wellbeing. Progress depended on increasing production. This was achieved by increasing the inputs in production (land, labour and capital) as well as improving the way these inputs were used. Smith recommends moving inputs (Land, Labour and Capital) from

unproductive activities to productive ones[3] and by improving the efficiency and quality of the inputs by improvements in technology, organization of production and the skill and dexterity of workers.

3.1 Adam Smith and the Case for Growth

One of the ways that Adam Smith differed from the Mercantilists was his belief that economic progress was natural and that should benefit all social classes. Smith first stated this belief in the one of his earliest writings: "Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things." (Smith, 1980, p. 322). Smith's *magnum opus An Inquiry into the Nature and Causes of the Wealth of Nations* (Smith, 1976b) is an explanation of the "natural course of things".

One way Smith differed from modern economists was his contention that equity and efficiency were part of the "natural course of things" and, thus, were not conflicting goals but instead were compatible goals. He would have rejected the argument of a necessary trade-off between equality and efficiency[4]. Smith (1976b, p. 96) states: "[n]o society can surely be flourishing and happy, of which the greater part of the members are poor and miserable. It is but equity, besides, that they who feed, cloth and lodge the whole body of the people, should have such a share of the produce of their own labour as to be themselves tolerably well fed, clothed, and lodged." While the Mercantilist argued that low wages were necessary for wealth creation, and that high wages harm economic efficiency (as they lead to lazy workers), Smith argues the opposite, that high wages lead to more productive workers[5].

For Smith the "natural course of things" worked by having market competition direct individual self-interested economic actions towards the common good, with equity and efficiency both being aspects of Smith's idea of the common good. Smith famously used the phrase "invisible hand" to illustrate how individual self-interest (which for Smith was more prudence than greed) ended up promoting both equity and efficiency. While Smith only uses the phrase three times in all his writings, and only twice regarding economic issues, it is a key aspect of his vision of the economy and society and his support for market competition. The first time Smith uses the phrase is in *The Theory of Moral Sentiments* (Smith, 1976a, p. 184) where he argues that while it looks like the rich are getting all the benefits of economic output, the "invisible hand" works to provide a more equitable distribution:

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3   Productive activities increase production of goods and services whereas unproductive activities do not. Moving workers from being servants to production workers in a factor would be an example of what Smith is recommending.

4   The classic case for the equality/efficiency trade-off is Arthur Okun's *The Big Trade-Off* (1975).

5   See Clark (2021) for an extended discussion on Mercantilist and Smithian views on wages.

> "The rich only select from the heap what is most precious and agreeable. They consume little more than the poor, … they divide with the poor the produce of all their improvements. They are **led by an invisible hand** to make nearly the same distributions of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without intending it, without knowing it, advance the interests of society" (emphasis added).

The more often quoted example of Smith's use of the "invisible hand" is in *The Wealth of Nations* (1976b, p. 456) where Smith makes the well-known case of how individual self-interest is guided towards economic efficiency:

> "[E]very individual necessarily labours to render the annual revenue of the society as great as he can. By directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, **led by an invisible hand** to promote an end which was no part of his intention. … By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it" (emphasis added).

Maximizing output (production) is an important social goal for Smith not because it leads to high profits of merchants or businesses (according to Smith competition will drive profits down to their natural level in the long run) or because it adds to government revenues to support the Monarch and a large standing army, but instead because the increases in output lower prices and thus increases the standard of living (level of consumption) for the population as a whole. The purpose of production is to provide goods and services for consumers. The "natural course of things" produces economic growth by directing economic initiative towards its most profitable use (what consumers want), which will naturally lead to greater "division of labour" and the development of machines (technological change), all of which will improve the standard of living for the average citizens.

3.2 The Rise of GDP

Smith and the classical economists focused on economic growth, specifically on the creation of a surplus to promote the accumulation of capital. David Ricardo saw a growing economy as the way to keep wages and the standards of living for workers above the subsistence level. Without a growing economy (which produced a growing demand for labour) the wages of workers would be reduced by the pressures of population growth to a subsistence level (just enough to keep families of workers alive and working). This "iron law of wages" theory was widely accepted by economists up until the post WWII increase in standards of living.

A key part of the classical theory is the role of savings and market forces turning savings into profitable (productive) investment. This special role of savings to finance investment became the argument for accepting the rising inequality brought about by the Industrial Revolution. John Stuart Mill argued that social reforms (education, decent housing) could break the cycle of poverty. He believed that while the forces of production were ruled by natural laws, the factors that determined the distribution of income were political. While Karl Marx emphasized the inherent instability of capitalism, he also saw improvements in output as necessary to free workers from endless drudgery in factories.

The Marginal Utility revolution in the 1870s changed the emphasis in economics from economic growth to the determination of relative prices. The Classical Economists (from Adam Smith to Mill and Marx) used the labour theory of value to explain relative prices, but also to show economic growth, as an objective yardstick that can be used to measure economic activity in the past or future, as well as between goods made today. The subjective marginal utility theory of value did not allow for past or future comparisons (or for interpersonal comparisons) and was detached from outside observation. Measuring national output, much less wellbeing, was not an issue for proponents of marginal utility theory. However, their focus on consumption of utility as the driver of the economy placed more emphasis on consumption, and less on production. In the Walrasian General Equilibrium economy, there is no production, just endowments, and the model looks at how individual trading can redistribute goods to improve the utility of the traders (Clark, 1987-88; 1992).

A handful of economists kept up the focus on economic surplus, but they were no longer in the mainstream of economic theory, but instead were off on the side lines. The Great Depression, and especially Keynes's explanation, placed the macroeconomy in the economic discourse, although Keynes's focus was on the short-run (why the economy was not in full employment, or why there was inflation). Keynes's (1923) famous statement that "in the long-run we are all dead" showed his disdain for the "laissez-faire" view that markets were self-correcting. As we mentioned above, Keynes's work on how to pay for World War II lead to the development of what we now call Gross Domestic Product.

3.3 The Case for GDP

We are not arguing against GDP as an important economic statistic, even though it is not very meaningful for Ireland. Knowing what potential output is however, is necessary in designing government economic policy. And a growing GDP is generally better than a shrinking one (prosperity is better than recession). However, the argument that a rising tide will lift all boats and that economic growth will reduce poverty, inequality and improve the environment has not held up to the lived experience in most countries. The rise of right-wing politics in America and Europe is not a reaction to a lack of GDP growth, even if GDP growth in the last 30 years has been slower, on average, than in the three decades after World War II. It has been

mostly a reaction to rising inequality and global migration, both of which are a by-product of the globalization model adopted in the name of economic growth.

Furthermore, the consumerism that is necessary to stimulate GDP has produced significant alienation, as countries became wealthier but not happier. The attitude towards consumers in the post-World War II era was best summarized by Victor Lebow:

> "Our enormously productive economy demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfactions, our ego satisfactions, in consumption. The measure of social status, of social acceptance, of prestige, is now to be found in our consumption patterns. The very meaning and significance of our lives today is expressed in consumption terms… We need things consumed, burned up, worn out, replaced and discarded at an ever-increasing pace" (Lebow, 1955).

It is no wonder that we see the separation between economic growth and measures of happiness and wellbeing (see Figure 13 below).

Criticisms of GDP have become commonplace and the Beyond GDP movement is now in some Macroeconomic textbooks. Even the Manual for measuring GDP, the United Nations Systems of National Accounts (SNA 2008, p. 12-13) gives reasons why GDP should not be used as a measure of wellbeing:

1. GDP measures spending and not all spending adds to welfare;

2. Much economic activity takes place out of market relations, and thus is not included in GDP (household production);

3. Many non-economic events (like natural disasters) have a negative impact on welfare but often can have a positive effect on GDP;

4. Many consumption or production expenditures have a positive effect on the welfare of the individuals undertaking them, but a negative effect on non-market participants (economists call these externalities); and

5. An individual's wellbeing is greatly affected by many non-economic factors, such as their health, family relations, friendships, factors that GDP does not measure.

After the Financial Meltdown and Great Recession (2008-9), President Macron commissioned a report by some of the world's leading economists, led by Noble Prize Laureates Amartya Sen and Joseph Stiglitz. The report recommended to "shift emphasis from measuring economic production to measuring people's wellbeing. And measures of wellbeing should

be put in a context of sustainability" (Stiglitz, Sen and Fitoussi, 2009, p. 12). They noted that although wellbeing is greatly influenced by material living standards, it is also affected by: health; education; personal activities including work; political voice and governance; social connections and relationships; environment (present and future conditions); and insecurity, of an economic as well as physical nature. The Social Progress Index we explore below was greatly influenced by this report.

3.4 GDP as a Measure of Progress in Ireland

In the 1970s, Ireland had one of the lowest GDP per capita among the OECD economies, with only Portugal and Mexico below it. By 2022, Ireland had the 2nd highest GDP per capita, 75.8% greater than the United States. We have covered in previous reports how GDP per capita data for Ireland became disconnected from the performance of Ireland's economy. An example of this is the 25.2% growth rate in 2015, which is impossible under normal circumstances[6]. The presence of a few foreign corporations using Ireland as a tax haven has led to a considerable amount of transactions being booked as if it were produced in Ireland, when in fact it is merely transfer pricing gone wild. In Table 1, we see the data for GDP per capita for 13 of the EU 14 (data for Luxembourg was not available) from the Maddison Project, which provides GDP data going back centuries. We see that Ireland was 65.5% of the average in 1970, slight improvement to 77.2% of the average in 1990, then jumping to 110% in 2000. This is the Celtic Tiger economy that was much discussed at the time. After the Financial Meltdown and Great Recession, Ireland slipped back down to 105% of the average.

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6   The US economy had a quarterly growth rate of 34% in 3rd Quarter of 2020, but that is when the economy opened up after the onset of Covid-19, and the economy shrank 32% in the previous 2 quarters.

Table 1 EU 13 Historical Growth in GDP per capita ($1990), 1970-2010

| Ctry	1970	Ctry	1980	Ctry	1990	Ctry	2000	Ctry	2010
SWE	12,716	DNK	15,227	DNK	18,452	DNK	22,966	SWE	25,306
DNK	12,686	SWE	14,937	FRA	17,647	NLD	22,148	NLD	24,303
NLD	11,967	FRA	14,766	SWE	17,609	IRL	21,027	AUS	24,096
FRA	11,410	NLD	14,705	NLD	17,262	AUS	20,962	BEL	23,557
DEU	10,839	BEL	14,467	BEL	17,197	SWE	20,871	DNK	23,513
BEL	10,611	DEU	14,114	AUS	16,895	BEL	20,809	FIN	23,290
AUS	9,747	AUS	13,759	FIN	16,866	FRA	20,392	IRL	22,013
FIN	9,577	FIN	12,949	ITA	16,313	FIN	19,951	FRA	21,477
ITA	9,367	ITA	12,927	DEU	15,929	DEU	18,944	DEU	20,661
ESP	6,319	ESP	9,203	ESP	12,055	ITA	18,761	ITA	18,520
GRE	6,211	GRE	8,971	IRL	11,818	ESP	15,724	ESP	16,797
IRL	6,199	IRL	8,541	PRT	10,826	PRT	13,922	GRE	14,691
PRT	5,473	PRT	8,044	GRE	10,015	GRE	12,111	PRT	14,279
AVG	9,471	AVG	12,508	AVG	15,299	AVG	19,122	AVG	20,962
IRL as % AVG	65.5%	IRL as % AVG	68.3%	IRL as % AVG	77.2%	IRL as % AVG	110.0%	IRL as % AVG	105.0%

Source: Maddison Project Database

In Table 2, we see two measures of how people are doing in an economy. As measured in GDP per capita, Ireland is the second richest country in 2022, 87.4% above the EU 14 average. However, when we look at household consumption, we see Ireland in the middle of the table, just 8% above the EU 14 average. There is no doubt that Ireland has experienced considerable economic progress in the past 30 years, and no longer can be considered one of the poor countries in Europe (often called by the derogatory name the PIIGS, Portugal, Ireland, Italy Greece and Spain). There are many factors that contributed to Ireland's success, from large EU investments in infrastructure in the 1990s, to an excellent higher education system and a knowledge-based global economy better suited to Ireland's comparative advantages. Following Adam Smith's standard, we can safely say that Household Consumption is a better indicator of material wellbeing, or at least consumption levels, which is what most economists mean by material wellbeing.

Table 2 EU 14 GDP per capita and Household Consumption, 2022

GDP per Capita		Household Consumption	
Country	2022	Country	2022
Luxembourg	€86,130	Luxembourg	€49,040
Ireland	€77,430	Denmark	€37,740
Denmark	€51,660	Sweden	€32,980
Sweden	€46,250	Finland	€32,540
Netherlands	€43,800	Netherlands	€32,450
EU 14 average	€41,322	Austria	€31,970
Austria	€38,080	Ireland	€31,820
Finland	€37,780	Belgium	€31,420
Belgium	€37,040	Germany	€30,080
Germany	€36,010	EU 14 AVG	€29,461
France	€33,180	France	€26,660
Italy	€28,220	Italy	€23,410
Spain	€24,910	Spain	€19,560
Portugal	€19,310	Portugal	€17,480
Greece	€18,710	Greece	€15,310
Irl % of AVG	187.4%	Irl % of AVG	108.0%

Source: Eurostat

Figure 1 EU 14 Relationship Between GDP and Household Consumption, 2022
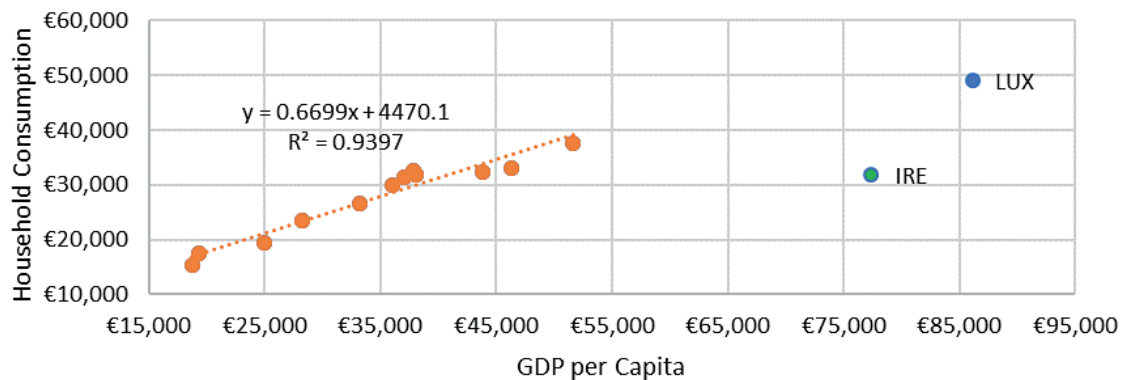
Source: Eurostat

In Figure 1, we see that for all of the EU14 countries except for Ireland and Luxembourg, there is a very strong connection between GDP per capita and Household Consumption per capita, with all of the countries on or very close to the trend line (which has an R^2 of 0.9397,

indicating a very tight correlation). Clearly, the factors that determine Ireland and Luxembourg's GDP vary considerably with those of comparable nations. If you removed these factors, based on the relationship shown above, Ireland's GDP per capita would have been approx. €40,000 in 2022 and not over €77,000.

3.5 Wealth as Sustainable Consumption: World Bank Wealth Accounts

The World Bank has developed a new approach to measuring sustainable wellbeing, that is wellbeing into the future, with its Global Wealth Accounting Database (Onder, Marks and Wang, 2022). This database is based on research the World Bank began in the 1990s and is an attempt at measuring the wealth of nations. As Onder, Marks and Wang (2022) explain, "[w]ealth accounting quantifies the life-time earnings of a country's assets in monetary terms. The wealth methodology provides a robust, quantitative framework for thinking about sustainability in terms of natural, produced, and human capital." Economists define human capital as the education, skills and experience that make individuals more productive workers. The World Bank estimates the value of a country's total human capital as "the discounted expected life-time earnings of a population" (World Bank 2021, p. 348). Natural capital, which includes the natural resources of a country, is "calculated as the discounted value of future resource rents" which for nonrenewable resources ends when the resource is fully used up, and for renewable resources is calculated based of the "rate of extraction versus replacement" (Ibid.). Productive capital consists of tangible wealth like machines, buildings, infrastructure, and intangible wealth (intellectual property) and residential and nonresidential urban land. And the last category of wealth is Net Foreign Assets, "the sum of a country's external assets and liabilities" (Ibid. 28).

3.6 An Overview of Capital

Traditional measures of wealth kept capital separate from labour. The Classical Economists understood that capital represented power, that the ownership of capital assets is where power resided in a capitalist economy (that is why it is called capitalism). Industrial capital was the most important productive property in an industrial economy and ownership of that property gave control of the economy and society[7]. In an agriculture economy and society, the owners of land have the most power. In today's knowledge economy. it is the ownership and control of ideas and other intangible assets that is the primary source of power. As of 2015, over 85% of the value of companies in the Standard and Poor's 500 was intangible assets

The division of the factors of production into Land, Labour and Capital, which economists still use, was used by Adam Smith because these three factors represented the three

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7   For an excellent analysis of the role of power in a capitalist society, see Robert Heilbroner's *The Nature and Logic of Capitalism* (1986).

social classes "the three great, original and constituent orders of every civilized society" (Smith 1976b, p. 265): "those that live by rents" (landowners); "those who live by wages" (workers); and "those who live by profit" (capitalists, though Smith did not use that term, calling them Owners of Stock or Masters). Smith notes that in the "early and rude" state of social development where there is no ownership of land and no separate ownership of tools (capital), the benefits of production accrue solely to the worker and prices were determined by relative labour content (labour theory of value). Yet, once land and capital are privately owned[8], landlords and capitalists demand a share of output, and thus in explaining the components of production, Smith is also explaining the distribution of income. Adam Smith and Classical Political Economy attempted to understand the economy in a specific social and historical context. Modern neoclassical economics excludes the social and historical context and thus reduces everything to individual actions; hence, no need for context. The World Bank's efforts here are a move in the direction of historical and social context (especially the attention it has been giving to social capital, although not included here). However, this creates one overriding challenge: in attempting to reduce everything to market prices, World Bank economists run into the problem of a lack of markets for many of the factors they seek to include in their analysis.

There are two basic ways that capital adds to material wellbeing (consumption):

1. Capital can be exchanged for money and used to purchase goods and services; or

2. Capital can be used to acquire productive assets that then yield an income to the owner.

Think of gold in an economy that is on the gold standard; it can be spent, or it can be leant out and the lender gets interest income. But if the gold always remains as gold (never used to acquire productive assets), the economy's productive abilities will not improve. It is only when capital is invested in productive assets that capital accumulation increases production and we have the possibility of real economic growth. Therefore, the classical economists equated the accumulation of capital with economic growth. The World Bank equates wealth with wellbeing through this link with consumption. Here, the accumulation of wealth allows for future consumption.

Both GDP and the World Bank's Wealth Accounting seek to measure material wellbeing, with material wellbeing being equated with consumption. There is widespread recognition of the limitations of material wellbeing as an overall measure of wellbeing, just as there is the recognition that material wellbeing plays an important role in overall wellbeing, especially for low income persons and countries. We have seen in past reports how income

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8   "As soon as the land of any country has all become private property, the landlords, like all other men, love to reap where they never sowed, and demand a rent even for its natural produce" (Smith, 1976b, p. 67).

accounts for 25-30% of the World Happiness Survey factors promoting happiness (26% in the 2018 report). The distinction between GDP and Wealth Accounts is that GDP "indicates how much monetary income or output a country creates in a year; wealth indicates the value of the underlying national assets and therefore the prospects for maintaining and increasing income over the long term" (World Bank, 2021, p. xxix). GDP is a flow and Wealth is a stock. Think of your bank account. The money you have in it at any given time is a stock variable, and the money you withdraw, or deposit, over time, is a flow variable. As you deposit money the stock increases, and when you withdraw funds it decreases. The growth in your bank account, and wealth in general, requires that deposits exceed withdrawals. When deposits are greater than withdrawals, over time, we call this savings, and in a classical or neoclassical world, savings is needed to fund investment[9]. Investment is a productive use of savings in that it increases capital stock and, if done wisely, deepens it through improved technology (that provides for greater output per input).

Using the same logic of stocks and flows, the World Bank developed their global Wealth Accounts so that, along with Gross Domestic Product, policy makers can better assess the sustainability of a country's material wellbeing. While short-run material wellbeing is based mostly on GDP, the long-run material wellbeing is a function of wealth. Countries save or invest (including education) so that they will be able to maintain or expand their consumption levels in the future. If they spend more now and deplete their wealth, they will have to reduce their spending in the future. This is basically the classical analysis of economic growth being based on saving out of income (accumulation of capital) so that there is money to invest (capital formation) in future production. The main difference is the addition of natural and human capital into the analysis.

The World Bank's *Changing Wealth of Nations* (CWON) argues that the "world's material wellbeing is under threat: from unsustainable exploitation of nature, from mismanagement and mispricing of the assets that make up national wealth, and from a lack of collective action at local, national and regional levels" (World Bank, 2021, p. xxix). The importance of sustainability in a country's planning and decision making requires an accurate understanding of both GDP and Wealth. Most countries do not measure their traditional capital accounts (produced and natural) much less Human capital. Only the net foreign assets are part of the normal national accounting. The challenges of climate change and migration add considerable complexity to economic decision making. Countries need to consider not only the problem of saving/investing enough for the future, but also must consider the portfolio of assets as well. (Similar to Joan Robinson's call to change the questions discussed above). Policy makers in resource rich countries might feel they have sufficient reserves of natural resources to maintain their consumption levels, so they will not invest in education and infrastructure. In

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9   In Keynes's world, as well as the one we live in, it is only when one's economy is at full capacity that one has to save out of income to fund investment.

the long-run, their wealth will decline (be used up) and they will not be sufficiently competitive economy in the future.

In this report we discuss new data, although space prevents us from critically evaluating each of its components. We start by pointing out that the World Bank Wealth Accounts are fundamentally different from most measures of wealth which typically focus on household wealth - with mostly measures of financial assets. A comparison of the World Bank Wealth Account's Total Wealth per capita and Credit Suisse Wealth per Adult is shown in Figure 2. The Credit Suisse Wealth estimate is made up of financial wealth plus non-financial wealth minus debts.

Figure 2 World Bank and Credit Suisse Wealth Estimates, 2017/2018
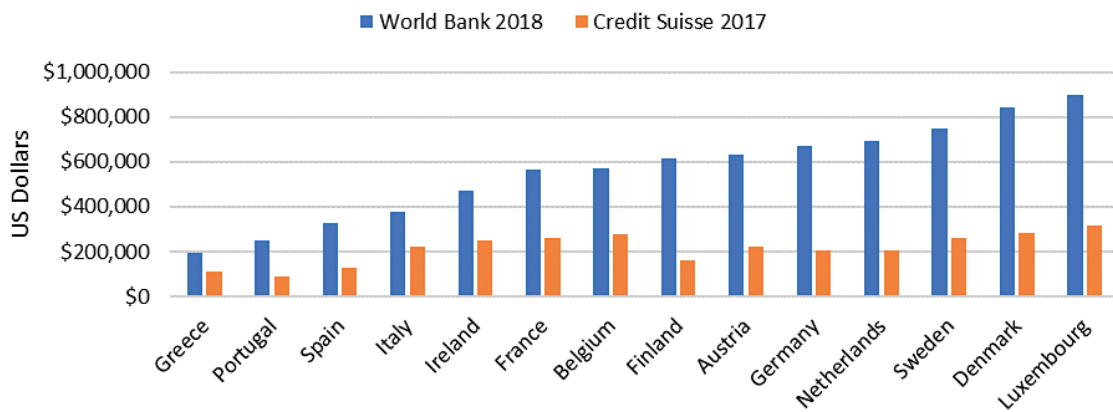
Source: World Bank and Credit Suisse

The World Bank measure is much broader focusing on a country's assets, whereas the typical way of measuring wealth focuses on the assets privately held by households (and mostly considers only those held by wealthy households).

Total Wealth per capita for the EU 14 countries for 1995 and 2018 is presented in Table 3, as well as the growth rate over this time period. Ireland is below the average in both years: 16.1% below in 1995; and 18.7% below in 2018. The EU 14 AVG grew 29.6% from 1995 to 2018, while Ireland only increased 26.8%. In terms of ranking, there is little real change in the list, just some minor changes in the middle.

In Figure 3, the Total Wealth per capita for the EU 14 countries is broken down by the four main categories for 2018. As is common for advanced capitalist economies, most of the total wealth for the EU 14 countries is human capital and produced capital, with natural capital not having much importance. Ireland's large negative Net Foreign Assets is also prominent in this figure.

Table 3 EU 14 Countries Total Wealth Per Capita, 1995 and 2018

Country	1995 ($2018)	Country	2018 ($2018)	% Growth 1995-2018
Luxembourg	$785,458	Luxembourg	$898,547	14.4%
Denmark	$605,986	Denmark	$842,148	39.0%
Sweden	$519,660	Sweden	$748,540	44.0%
Netherlands	$490,908	Netherlands	$690,432	40.6%
Austria	$487,853	Germany	$672,408	41.1%
Germany	$476,436	Austria	$633,748	29.9%
France	$449,640	Finland	$614,630	50.1%
EU 14	$433,175	Belgium	$571,179	32.6%
Belgium	$430,838	France	$565,959	25.9%
Finland	$409,557	EU 14	$561,394	29.6%
Ireland	$372,948	Ireland	$472,814	26.8%
Italy	$334,049	Italy	$375,541	12.4%
Spain	$277,976	Spain	$328,253	18.1%
Portugal	$237,464	Portugal	$251,045	5.7%
Greece	$185,679	Greece	$194,266	4.6%

Source: World Bank

**Figure 3** Elements of Per Capita Wealth for EU 14, 2018
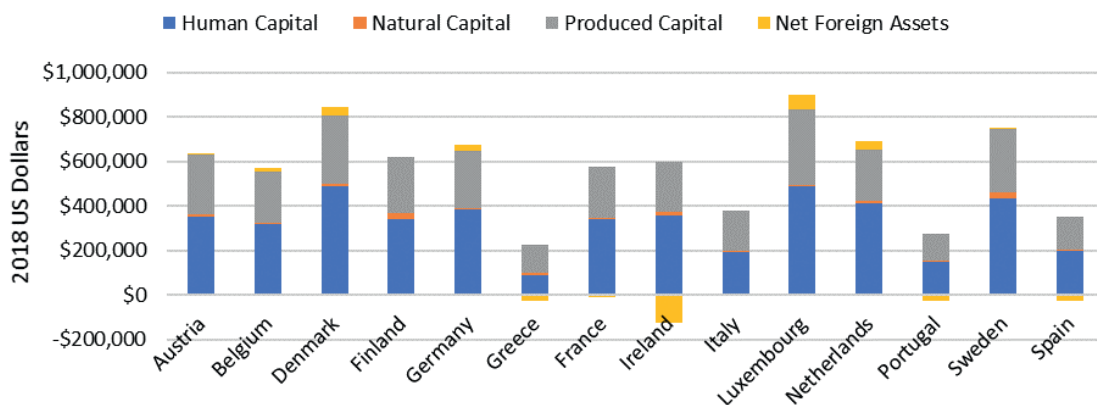
Source: World Bank

In the next set of figures, we look at how Ireland's Total Wealth per capita and the four components of wealth (Human Capital, Natural Capital, Produced Capital and Net Foreign Assets) have changed from 1995 to 2018, compared with the EU 14 Average. In Figure 4, we

see that Ireland's Total Wealth per capita began below the average (as expected, since this is at the very start of the Celtic Tiger) and from 1998 to 2003, Ireland had caught up with the EU 14 average. By 2007 (around the peak of the financial bubble), Ireland's total wealth per capita was over 15% the EU 14 average, yet steadily fell thereafter to 74% in 2015, rising back to nearly the same relative position in 2018 as it was in 2011. The volatility of Ireland's total wealth per capita over this time period suggests some problems in its value as a measure of future sustainable consumption.

Figure 4 Ireland and EU 14 AVG Total Wealth Per Capita, 1995-2018
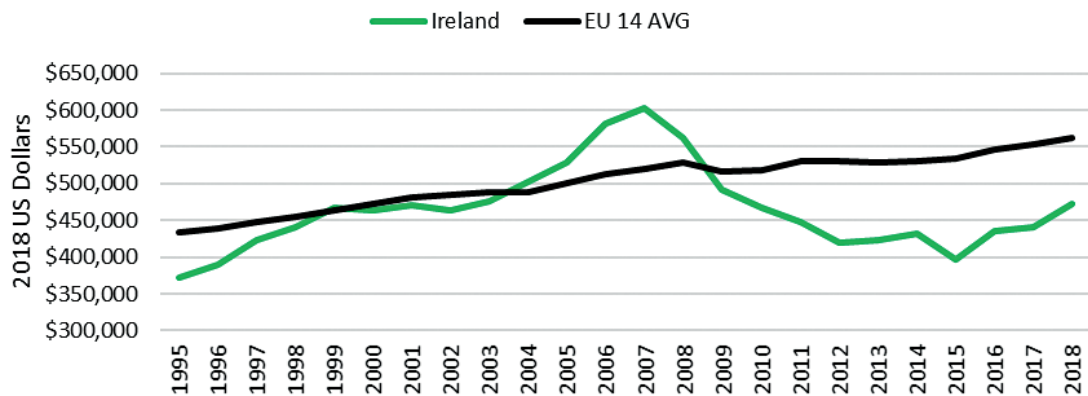
Source: World Bank

Figure 5 shows that the volatility of Ireland's total wealth per capita is largely driven by the variation in its Human Capital per capita measure. It is not likely that Irish workers became suddenly more productive from 2003 to 2007 and then, just as suddenly, became less productive, falling to the average level of the EU 14.

Figure 5 Ireland and EU 14 AVG Human Capital Per Capita, 1995-2018
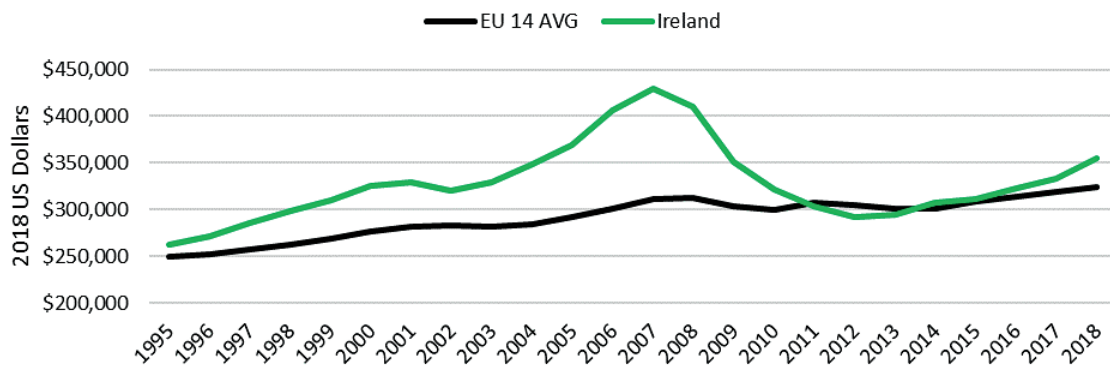
Source: World Bank

The World Bank Wealth Accounts present human capital by gender and by employed and the self-employed. Figure 6 shows Ireland's human capital per capita by gender. The Male/Female ratio was surprisingly flat (meaning not much progress in the wage gap) from 1995 to the time of the financial crisis, and then rose sharply over the 2010-2013 period, only to start falling after. This is mostly likely not due to a change in women's pay, but instead reflects the decline in construction (a male dominated industry) after the financial crisis and with the small revival in construction, there is a slight return to the old norm.

Figure 6 Human Capital per capita by Gender in Ireland, 1995-2018
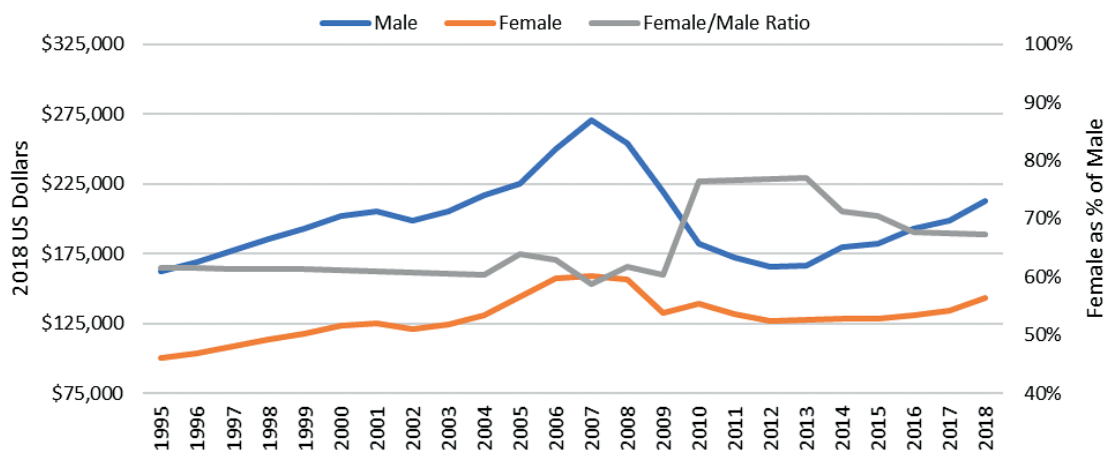
Source: World Bank

Figures 7 and 8 focus on Ireland's Natural Capital, first in comparison to the EU 14 average and then broken down by renewable and nonrenewable capital. The large share of Agriculture in the Irish economy accounts for why its natural capital value is significantly higher than the EU 14 average. The rise since 2010 is no doubt partially connected to the growth in cattle and beef exports.

Figure 7 Ireland and EU 14 AVG Natural Capital Per Capita, 1995-2018
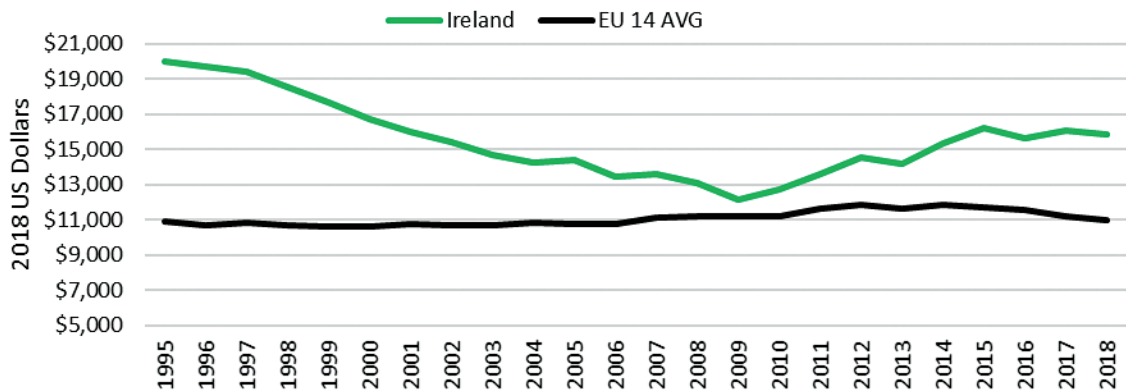
Source: World Bank

Figure 8 Ireland and EU 14 AVG Renewable and Nonrenewable Natural Capital, 1995-2018
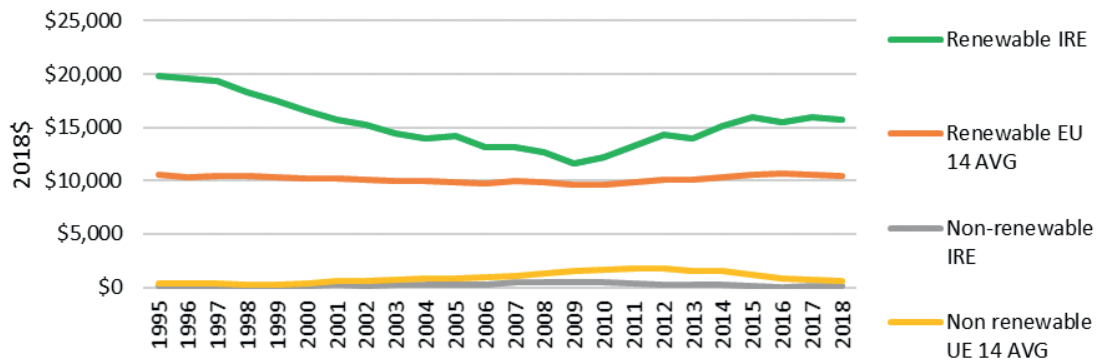
Source: World Bank

3.6.1 Productive Capital

Productive Capital fits with what economists have historically meant by capital accumulation, as this involved assets that are usually privately owned a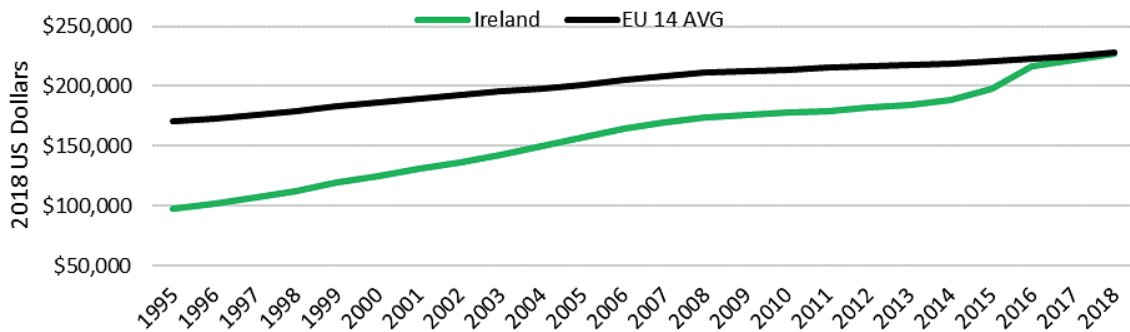nd yield an income. According to the World Bank, since 1995 Ireland has steadily moved towards the EU 14 Average, reaching it by 2018.

Figure 9 Ireland and EU 14 AVG Produced Capital Per Capita, 1995-2018

Source: World Bank

The produced capital we typically imagine of when we think of advanced capital economies is tangible assets such as housing, factories, equipment and infrastructure. Yet in our knowledge-based economies, intangible assets are a larger share of the capital formation of companies and countries. In Table 4, we present the Gross Capital Formation for the EU 14 countries from 2010 to 2019. We see that Ireland had the highest level of Gross Capital Formation at 26.01% of GDP. Given that Ireland's GDP estimates are a considerable over-estimation of actual output in Ireland, the percent of capital formation to actual GDP would be much higher. Ireland's high amount of Gross Capital Formation is due almost completely to the investment in intellectual property products (intangible assets). The high intellectual property investment, nearly three times the EU 14 average, is partly, if not largely, due to foreign companies locating patent holdings in Ireland so they can book high profits in a country with low corporate tax rates. For each other category, except Transportation equipment, Ireland is below the EU 14 average. Ireland's investment in Dwellings (housing) is the lowest among the EU 14 and is less than half the EU 14 average. Under investment in housing is no doubt a cause of the current housing crisis.

**Table 4** EU 14 Countries Gross Capital Formation as a % of GDP, 2010-2019

Category	Intellectual property products	Other machinery and equipment and weapons systems	IT equipment	Transport equipment	Other buildings and structures	Dwellings	Total GFCF, 2010-2019
Ireland	12.53	1.37	0.83	4.89	4.40	1.97	26.01
Sweden	6.45	4.57	1.12	1.57	5.39	4.45	23.60
Austria	4.72	4.34	1.19	2.05	6.33	4.38	23.05
Belgium	4.25	4.26	1.28	2.10	5.27	5.86	23.05
Finland	4.55	3.35	0.55	1.03	6.61	6.56	22.67
France	5.19	2.93	0.45	1.53	5.97	6.20	22.32
Germany	3.54	4.23	0.68	1.99	4.01	5.92	20.37
Denmark	5.10	2.67	0.97	2.17	4.80	4.22	19.93
Netherlands	4.76	3.35	0.79	1.42	5.42	4.05	19.82
Spain	3.21	3.23	0.67	1.82	4.92	4.90	18.95
Luxembourg	1.47	2.00	0.86	4.08	6.59	3.51	18.52
Italy	2.85	4.56	0.70	1.11	4.18	4.50	17.94
Portugal	2.64	2.91	0.89	1.19	5.90	2.87	16.81
Greece	1.79	2.42	0.91	0.87	3.75	2.03	11.83
AVG	4.50	3.30	0.85	1.99	5.25	4.39	20.35

Source: OECD

* Includes Cultivated Biological Resources which we did not include as a separate column

Ireland's Net Foreign Assets is a significant outlier for the EU 14 countries, generally $100,000 (per capita) over its nearest comparable country (see Figure 10). This certainly reflects the growth in foreign owned businesses and the repatriation of profits.

Figure 10 Ireland and EU 14 AVG Net Foreign Assets, 1995-2018
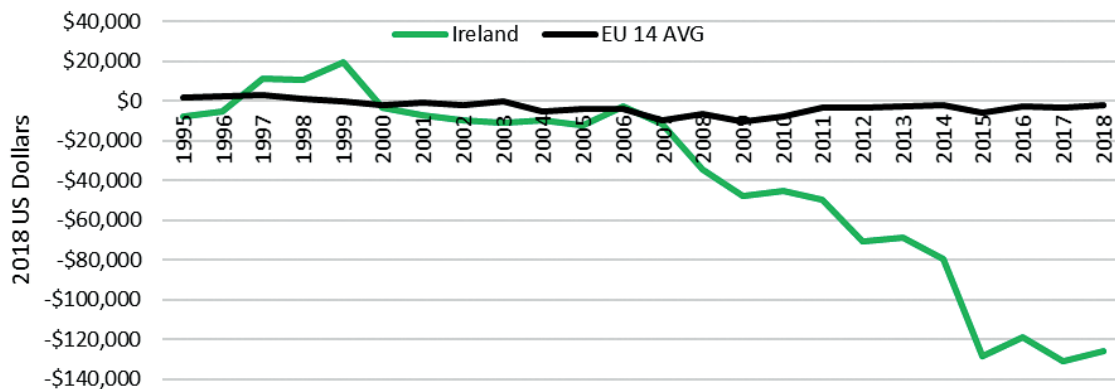
Source: World Bank

3.6.2 *A Short Note on Human Capital*

The original "human capital" was slavery, the slave being an asset owned by someone which yielded that owner an income stream based on their property rights[10]. In the 20th century, economists developed the concept to refer to the education and skills acquisition that made workers more productive and which yielded the worker a return for having these attributes. Like most concepts in economics, the idea of human capital can be traced back to Adam Smith who referred to:

> "the acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents, and the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. ... The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labour, and which, though it costs a certain expense, repays that expense with a profit" (Smith, 1976b, p. 282).

Much of the differences in individual wages is explained with human capital theory.

There are three basic ways to measure human capital: indicators of elements of human capital, such as years of education; cost of human capital formation; and earnings from human capital. As the CWON approach views wellbeing as consumption, their measure of

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10   See Goldin (2014) for a discussion of slavery as human capital.

wealth is based on future consumption. Specifically, it is the present value of the expected life-time earnings of the current working population. However, the World Bank also produces the Human Capital Index, which is a version of the indicators approach. The World Bank Human Capital Index is an estimate of the percent of potential human capital a child born today will obtain, based on the potential barriers to full human capital development, such as inadequate health and education. A score of 0.50 indicates that the average child will only reach half of their potential productivity when they reach adulthood (18 years of age). Ireland has the second highest World Bank Human Capital Index score among the EU 14 countries, evidence of access to and quality of both its education and healthcare systems.

Table 5 Two Measures of Human Capital, 2018

| Country	World Bank Human Capital Index 2018	Country	CWON Human Capital 2018
FIN	0.8145	LUX	$488,126
IRL	0.8137	DNK	$487,962
NLD	0.803	SWE	$435,856
SWE	0.8025	NLD	$412,939
PRT	0.7834	DEU	$381,761
DNK	0.7708	IRL	$355,503
AUT	0.7687	AUT	$351,301
DEU	0.7638	FIN	$342,068
BEL	0.7628	FRA	$340,323
FRA	0.756	BEL	$318,355
ITA	0.7529	ESP	$198,351
ESP	0.7362	ITA	$192,539
GRC	0.6948	PRT	$146,922
LUX	0.6924	GRC	$89,600

Source: World Bank

In Figure 11, we see a weak correlation between the two World Bank measures of Human Capital. Human capital theory suggests that market forces (supply and demand) will bring individual workers' incomes into an equilibrium in which the rate of return on their investment in human capital will be equal. Economists use human capital theory to explain differences in individuals' incomes and they use the observed differences in incomes as a measure of human capital. Yet, labour markets deviate considerably from the competitive equilibrium theory that underlies human capital theory. Structural and institutional factors play significant roles in determining observed incomes. To assume that observed incomes are actual returns for investments in human capital is problematic.

Figure 11 Relationship Between Two World Bank Measures of Human Capital
for EU 14 Countries, 2018
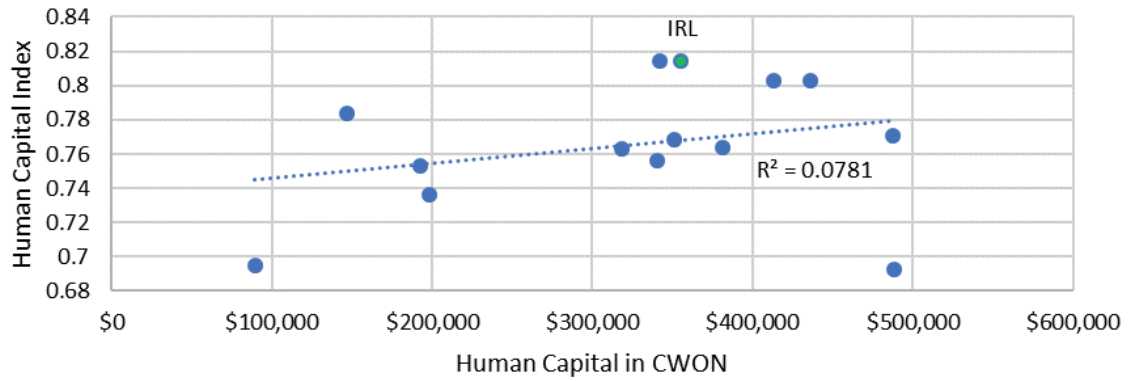
Source: World Bank

Figure 12 EU 14 Countries Annual Wages, 2022
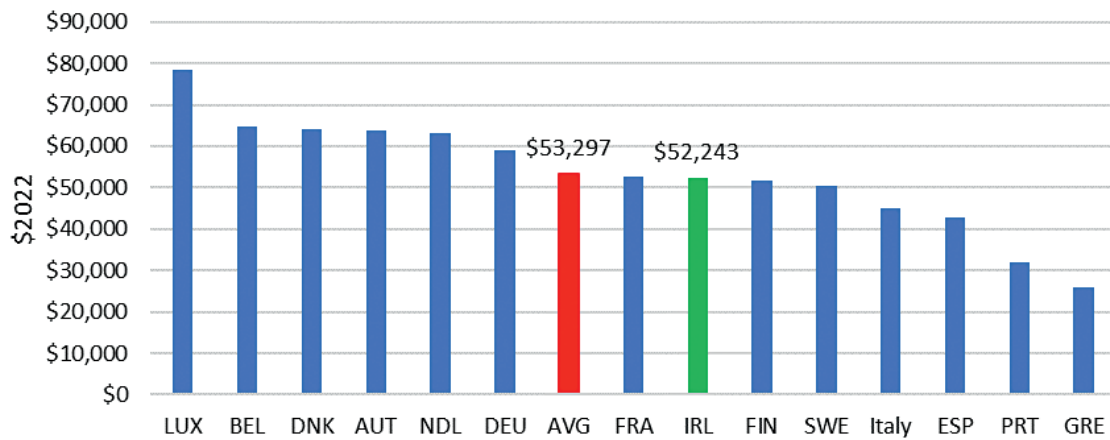
Source: Eurostat

As countries must adjust continually to the challenges of climate change, as well as other aspects of sustainability, the portfolio approach used by the World Bank can be a very beneficial tool for policy makers. Many of its elements are part of the discussions around the United Nations' planned update of the System of National Income 2025 and it will be interesting to see what gets included in this going forward.

4

Measuring Wellbeing

I n our 2022 (Clark, Kavanagh and Bennett, 2022) report, we did a deep
dive into wellbeing, and the different ways various groups measure it, and
the evidence on what best promotes wellbeing. It is worth repeating: the goal
is not to replace GDP, but instead to supplement traditional National Income
data to provide policy makers with a broader perspective. Yet, following the
success of GDP, these alternative measures often produce an overall index
and produce rankings as their high-profile output. We are also guilty of doing
this. One reason is that a single number is what is expected. In this regards,
social statistics become a little like sports scores. After a sporting event,
there is most often a single number (score) which is used to indicate who
has come out on top. And while there will also be many other statistics that
hard-core fans will endlessly discuss and debate, the general public is most
interested in the final score that determines who won or lost. GDP became
that indicator of success or failure of national governments (if the economy
is in a recession, the government in power is held responsible). Thus, in the
many alternatives to GDP, we see a single measure that can be used to rank
countries performance, with a time series providing progress or the lack
thereof. In Table 6, we see a small sample of the more widely known measures
of progress: GDP, the Social Progress Index, the Sustainable Development
Goals Index and the World Happiness Index. We have provided a version of
this table in all our reports, partly as a critique of GDP, but also to publicize
alternative indicators.

As we have seen in our previous reports, GDP for Ireland and Luxembourg are
considerable outliers, placing them at nearly double the average of the EU 14 countries. However,
the lack of conformity of these GDP estimates with all other measures of progress (even strictly
economic ones as we saw above in this report) is not a major reason why international agencies
are promoting and developing alternative measures. As we discussed above, the problem isn't

that GDP estimates can inaccurately measure aggregate economic activity (which is the case for Ireland) - it is that wellbeing, and even material wellbeing, depends on more than the just income levels.

Table 6 Various Measures of Progress EU 14, 2023

Gross Domestic Product*		Social Progress Index*		Sustainable Development Goals Index**		World Happiness Index***	
Country	GDP 2023 ($2017)	Country	SPI 2023	Country	SDG Index 2023	Country	WHI 2023
LUX	$115,542	DNK	90.38	FIN	86.8	FIN	7.804
IRL	$113,871	FIN	89.96	SWE	86.0	DNK	7.586
DNK	$59,704	SWE	89.09	DNK	85.7	NLD	7.403
NLD	$58,585	LUX	87.86	DEU	83.4	SWE	7.395
AVG	$58,001	NLD	87.73	AUT	82.3	LUX	7.228
AUT	$56,281	DEU	87.64	FRA	82.0	AUT	7.097
SWE	$54,818	AUT	86.73	AVG	81.5	IRL	6.911
DEU	$53,560	IRL	86.57	ESP	80.4	AVG	6.898
BEL	$53,156	AVG	86.26	IRL	80.1	DEU	6.892
FIN	$49,586	BEL	86.13	PRT	80.0	BEL	6.859
FRA	$46,020	PRT	84.10	BEL	79.5	FRA	6.661
ITA	$43,788	FRA	83.88	NLD	79.4	ESP	6.436
ESP	$39,834	ESP	83.87	ITA	78.8	ITA	6.405
PRT	$35,746	ITA	83.61	GRC	78.4	PRT	5.968
GRC	$31,517	GRC	80.09	LUX	77.6	GRC	5.931
IRL as % of AVG	196.3%	IRL as % of AVG	100.4%	IRL as % of AVG	98.3%	IRL as % of AVG	100.2%

Source: *Social Progress Report 2024;
**Sustainable Development Report 2023,
***World Happiness Report 2023.

In terms of ranking, the other three indicators in Table 6 show that Ireland is in the middle of the EU 14 countries in terms of wellbeing widely considered. Outside of bragging rights, this information is not very useful on its own. If the metric is GDP, then we have a wide and deep body of research, filled with theories and evidence and occasionally theories supported by evidence, on how a country can improve its GDP. The rate of economic growth, as we saw above, has been a primary focus for economics as a discipline since at least Adam Smith's time. But if we want to improve our World Happiness score, we do not have the volume of analysis to inform our policy options. And while happiness has been promoted as an end (or goal) by philosophers at least since the Ancient Greeks, we have yet to see politicians running on promises to increase the nations World Happiness Ranking. Public policy is more interested

in the specifics when it comes to wellbeing, and not aggregates. In fact, the SDG index is developed to give more attention to the individual SDGs, each of which has been approved by the international community as important goals which countries should promote.

In this report, we take a deep dive into the Social Progress Index to see how it can inform Ireland's public policy discussions. Our goal is not to participate in specific policy debates, but instead to highlight what the Social Progress Index says about how Ireland compares to other countries in the EU 14 group.

4.1 The Social Progress Index

The Social Progress Index is produced by the Social Progress Imperative, which was founded by a group of academics and business leaders who wanted better indicators of a country's economic and social development. Famous management professor Michael Porter was the most well-known academic associated with this nonprofit organisation. The Social Progress Imperative produces yearly updates of the Social Progress Index. Table 7 presents the three main categories of indicators that make up the Social Progress Index: Basic Needs; Foundations of Wellbeing; and Opportunity. Each of these three categories has four components and a total of 19 individual variables (each component has 4-5 individual indicators).

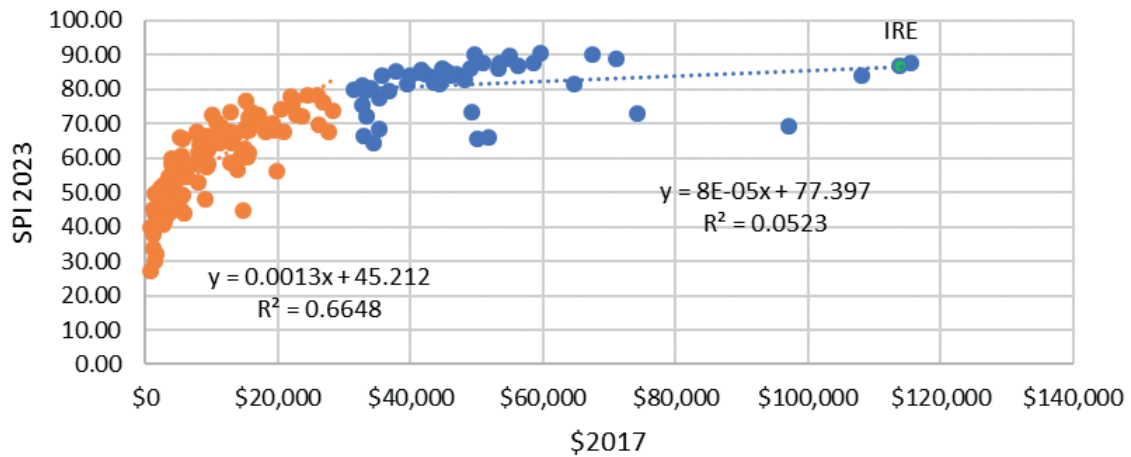Table 7 Three Categories of Social Progress Index

Basic Needs	Foundations of Wellbeing	Opportunity
Nutrition and Medical Care	Basic Education	Rights and Voice
Water and Sanitation	Information and Communications	Freedom and Choice
Housing	Health	Inclusive Society
Safety	Environmental Quality	Advanced Education
19 variables	19 variables	19 Variables

4.2 Social Progress Index and GDP

One of the consistent features of our reports has been an analysis of the relationship between GDP and the Social Progress Index, demonstrating that for low income countries, the correlation is stronger than it is for wealthy countries. In this example (Figure 13), the correlation coefficient (R^2) for SPI and GDP for countries with a GDP below $30,000 is 0.6648, while for countries with a GDP higher than $30,000 it is 0.0523. The rising trend line in the lower income group shows that rising income significantly improves their SPI and the nearly flat trend line in the high-income group indicates a much smaller effect. Since all of the EU 14 countries are above $30,000, this suggests that for this group of countries, pursuing economic growth might not be the most effective way of promoting wellbeing. The analysis here is merely suggestive, and we wouldn't argue that it is definitive, as there are many other ways to examine the issue.

But the value of the SPI lies not in its aggregate number, but in its ability to show trends and comparisons in more detailed aspects of wellbeing, which we do below.

Figure 13 Social Progress Index and GDP, 2023

Source: Social Progress Index 2024

4.3 Social Progress Index and the EU 14 Countries

Here, we focus on how the Social Progress Index evaluates the EU 14 countries, both at aggregate level, and for each of the major categories of the SPI. Table 8 presents the SPI and GDP for the EU 14 countries for 2011 and 2023. The table again demonstrates how much of an outlier Ireland's and Luxembourg's GDP estimate is, and how much wellbeing (broadly measured) is not correlated with GDP for already high-income countries. When the outliers are removed, we see a group of countries who have very similar levels of output and wellbeing. In terms of Ireland's progress, the SPI rises from just below the EU14 average in 2011 to just above the EU 14 average (we get a better perspective on Ireland's relative position below).

Table 8 GDP and Social Progress Index for EU14 Countries, 2011 and 2023

Gross Domestic Product				Social Progress Index			
Country	GDP 2011 ($2017)	Country	GDP 2023 ($2017)	Country	SPI 2011	Country	SPI 2023
LUX	$114,344	LUX	$115,542	DNK	88.11	DNK	90.38
CHE	$65,262	IRL	$113,871	SWE	87.51	FIN	89.96
IRL	$53,652	CHE	$71,000	DEU	86.90	SWE	89.09
NLD	$52,033	DNK	$59,704	FIN	86.59	CHE	88.88
AUT	$51,843	AVG*	$58,867	NLD	86.45	LUX	87.86
AVG*	$50,948	NLD	$58,585	CHE	86.20	NLD	87.73
DNK	$50,825	AUT	$56,281	AUT	84.94	DEU	87.64
BEL	$47,973	SWE	$54,818	BEL	84.56	AUT	86.73
SWE	$47,791	DEU	$53,560	LUX	84.41	IRL	86.57
DEU	$46,999	BEL	$53,156	AVG*	83.98	AVG*	86.43
FIN	$45,875	FIN	$49,586	IRL	83.59	BEL	86.13
ITA	$42,664	FRA	$46,020	FRA	82.94	PRT	84.10
FRA	$42,146	ITA	$43,788	ESP	82.02	FRA	83.88
ESP	$37,319	ESP	$39,834	PRT	79.71	ESP	83.87
GRC	$33,693	PRT	$35,746	ITA	78.93	ITA	83.61
PRT	$31,798	GRC	$31,517	GRC	76.79	GRC	80.09

* EU 14 Average
Source: Social Progress Index 2024

Table 9 disaggregates the SPI into its three major categories: Basic Needs; Foundations for Wellbeing; and Opportunity. We can see that most of the same countries are near to the top (Denmark, Finland, Luxembourg and Sweden) with Greece, Portugal, Spain and Italy generally being at the bottom. However, for Basic Needs, Portugal and Spain are above the EU 14 average. For two of the categories, Ireland is in the middle group (Foundations and Opportunity); however, for the Basic Needs category, it is second to last. The Basic Needs category includes nutrition, medical care, housing, water and sanitation. Many of these topics have regularly been in the headlines in the Irish press because of unsatisfactory outcomes, so this is not a huge surprise.

Table 9 Three Major Categories of SPI for EU 14, 2023

Country	Basic Needs	Country	Foundations of Wellbeing	Country	Opportunity
DNK	93.19	DNK	87.93	FIN	90.56
FIN	92.60	LUX	87.93	DNK	90.02
AUT	91.81	FIN	86.71	SWE	89.23
LUX	91.68	DEU	86.68	NLD	87.18
SWE	91.58	SWE	86.45	IRL	85.89
DEU	91.06	NLD	85.89	BEL	85.40
ESP	91.01	AUT	85.64	DEU	85.18
PRT	90.93	IRL	84.80	LUX	83.96
EU 14 AVG	90.80	EU 14 AVG	84.30	EU 14 AVG	83.68
ITA	90.34	BEL	83.27	AUT	82.73
NLD	90.13	FRA	83.07	PRT	80.37
BEL	89.72	ITA	82.21	FRA	79.42
FRA	89.16	ESP	82.07	ESP	78.52
IRL	89.02	PRT	81.00	ITA	78.27
GRC	88.94	GRC	76.61	GRC	74.73

Source: Social Progress Index 2024

In Figure 14, we see the SPI value and the value for the three categories for Ireland over the recent past (from 2011 to 2023). The graph shows that the overall trend for the SPI has been rising, as have the Foundations of Wellbeing and Opportunity categories. However, the SPI and Foundations both fell in 2023. The trend for Basic Needs has not been improving, but instead shows a general trend downward.

Figure 14 SPI and Its Components for Ireland, 2011-2023
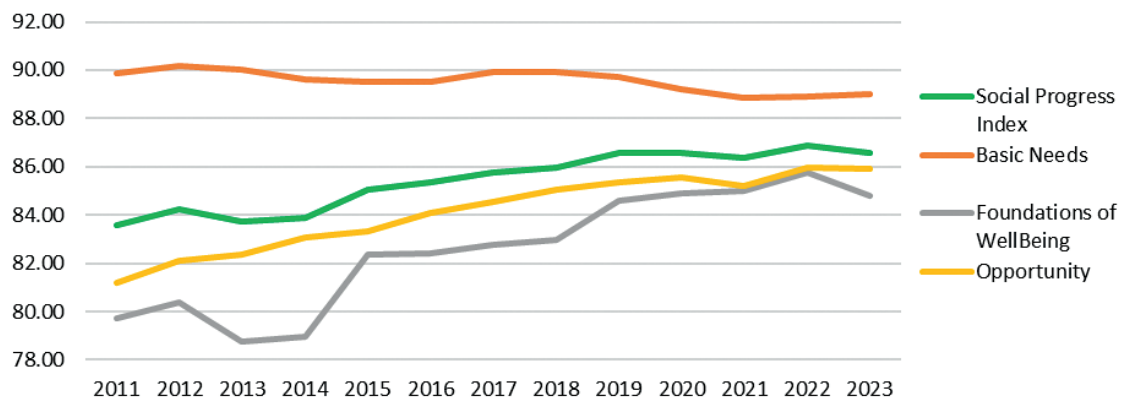
Source: Social Progress Index 2024

In Figure 15, we breakdown the four components of Basic Needs and this shows where Ireland has been facing many challenges. The decline in housing has been most dramatic. The data begins in 2011, just after the Financial Meltdown and Great Recession, both of which were partially caused by the housing bubble and crash. Dissatisfaction with housing affordability rose from 30% in 2011 to 52.5% in in 2023 (down from the high of 54.7% in 2022). Water and Sanitation have also been declining. Satisfaction with water quality fell from 88.7% to 81.0%, and percent of population with basic sanitation and basic water services both falling steadily. Safety, which had improved from 2011 to 2019, has been declining since.

Figure 15 Ireland's Basic Needs Components, 2011-2023
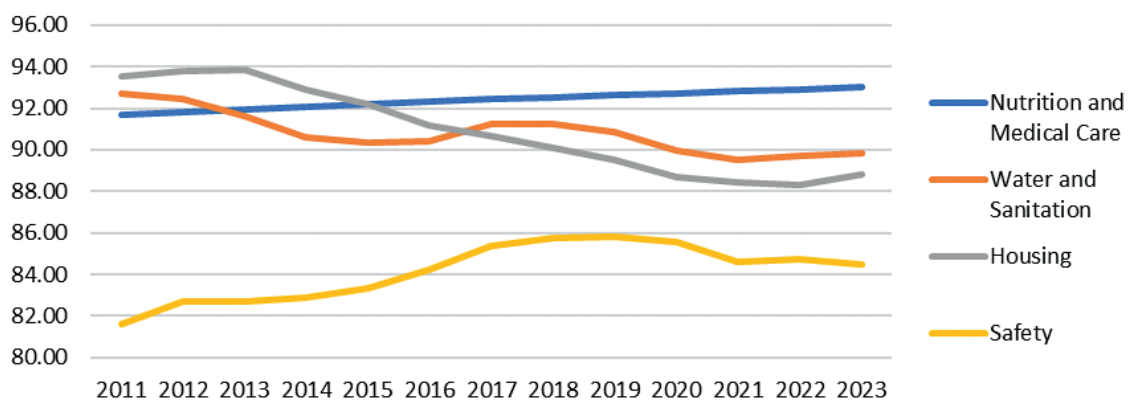
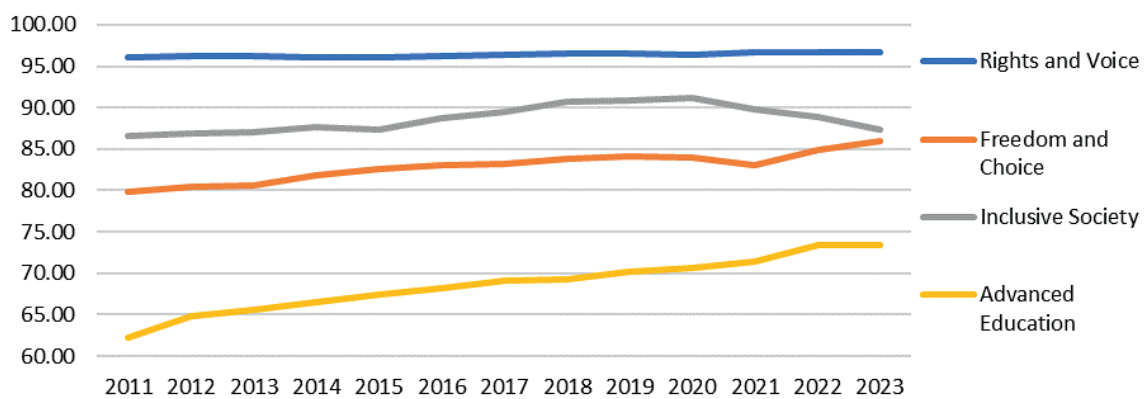
Source: Social Progress Index 2024

In Figures 16 and 17, we see the components of the Foundations of Wellbeing and Opportunity categories. Three out of the four components for Opportunity have been steadily rising, with notably high scores for Rights and Voice. Yet the Inclusive Society index, which was rising from 2011 to 2020, has been falling in the past three years, due to a drop in Acceptance of Gays and Lesbians index and proportion of the population that said they could "count on help", which had fallen slowly from 2011 to 2020 (from 96.7% to 94.67%) and then more quickly to 88% by 2023.

Figure 16 Ireland's Foundations of Wellbeing Components, 2011-2023
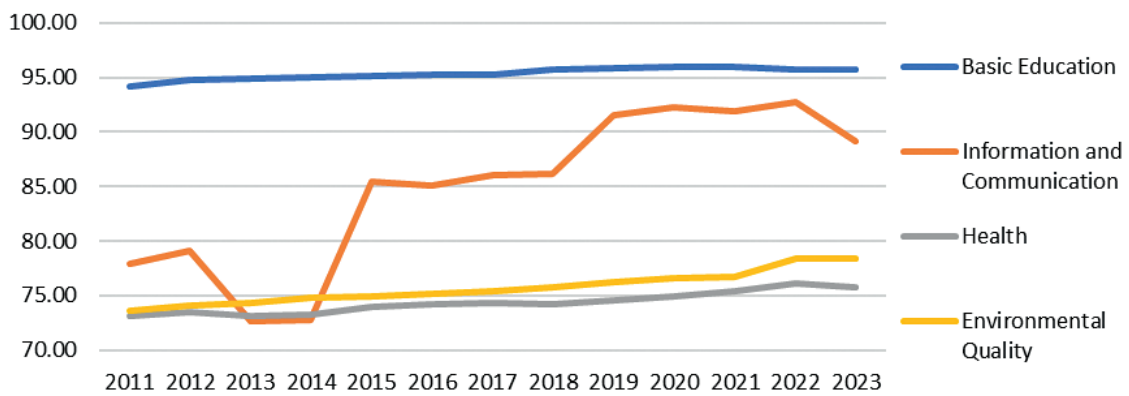
Source: Social Progress Index 2024

Figure 17 Ireland's Opportunity Components, 2011-2023

Source: Social Progress Index 2024

Looking at how Ireland has done over time is a good measure of progress, but it also helps to compare Ireland's progress with each category with the EU 14. Table 10 shows that Ireland is not the only country that experienced a decline in Basic Needs from 2011 to 2023; Austria, Belgium, Germany and the Netherland also experienced a decline. All EU 14 countries experienced increases in the Foundations for Wellbeing and Opportunity in this time period, and it is worth noting that Ireland's increase was significantly above the average increase, and for the Opportunity category, was the highest increase. Also, overall the EU 14 countries scored higher for Basic Needs (average was 90.91 in 2023) than they did for the other two categories (84.49 for Foundations and 82.73 for Opportunity). European Welfare States have been addressing Basic Needs much longer than they have been promoting Opportunity, which has elements which can be more contentious.

Table 10 Change in EU 14 SPI Categories from 2011 to 2023

	Basic Needs			Foundations			Opportunity		
	2011	2023	Change	2011	2023	Change	2011	2023	Change
AUT	92.70	91.81	-0.89	82.00	85.64	3.64	80.11	82.73	2.62
BEL	89.98	89.72	-0.26	81.20	83.27	2.07	82.50	85.40	2.90
DNK	92.91	93.19	0.28	84.54	87.93	3.39	86.87	90.02	3.15
FIN	91.39	92.60	1.21	81.33	86.71	5.38	87.04	90.56	3.52
FRA	89.15	89.16	0.01	81.21	83.07	1.86	78.46	79.42	0.96
DEU	92.66	91.06	-1.60	85.21	86.68	1.47	82.82	85.18	2.36
GRC	87.94	88.94	1.00	71.62	76.61	4.99	70.83	74.73	3.90
IRL	89.88	89.02	-0.86	79.72	84.80	5.08	81.17	85.89	4.72
ITA	89.10	90.34	1.24	74.79	82.21	7.42	72.92	78.27	5.35
LUX	91.38	91.68	0.30	83.04	87.93	4.89	78.80	83.96	5.16
NLD	91.11	90.13	-0.98	83.35	85.89	2.54	84.89	87.18	2.29
PRT	89.49	90.93	1.44	74.41	81.00	6.59	75.25	80.37	5.12
ESP	89.05	91.01	1.96	79.62	82.07	2.45	77.39	78.52	1.13
SWE	90.77	91.58	0.81	84.35	86.45	2.10	87.39	89.23	1.84
CHE	91.47	92.48	1.01	82.40	87.03	4.63	84.73	82.73	2.39
EU 14 AVG	90.60	90.91	0.31	80.59	84.49	3.90	80.11	85.40	2.62

Source: Social Progress Index 2024

4.4 Summary

In this report, we have presented two detailed and extensive measures of wellbeing, the World Bank's Wealth of Nations, and the Social Progress Index. For both, we examined the headline estimate and their individual components as they apply to Ireland, in comparison with the EU 14. The United Nations Sustainable Development Goals is a list of 17 goals and over 230

indicators that are designed to assist and promote evidence-based public policy. It has been approved by the General Assembly of the United Nations, with each country committing to adding these variables to their statistics gathering efforts. This is done for Europe by Eurostat and for Ireland by Central Statistics Office. Our next section presents our Sustainable Progress Index for Ireland based on the SDGs.

5

The Sustainable Progress Index 2024

*S*ustainable development is more important now than ever. Though the idea of sustainable development is widely recognised to have its origins in the 1972 UN Conference on the Human Environment, as a concept, it began to gather momentum following the 1987 Brundtland Report, *Our Common Future*, and the 1992 UN Conference on Environment and Development (UNCED), also known as the Earth Summit. But what is sustainable development? Sustainable development can be defined as "[d]evelopment which meets the needs of the current generations without compromising the ability of future generations to meet their own needs". This is the definition of sustainable development that was first introduced in the Brundtland report, and it is still the most widely used definition.

The introduction of the Sustainable Development Goals (SDGs) by the United Nations (UN) in 2015 was in part aimed at putting sustainable development at the heart of policy-making. 17 SDGs were identified as part of the UN's 2030 Agenda for Sustainable Development, based on 169 targets and over 230 indicators. In January 2016, the SDGs were implemented. The SDGS are designed to refocus efforts towards policies that directly help people and communities in the long run. They aim to provide a pathway out of poverty for the world's population towards a sustainable future for all countries and peoples. The SDGs also allow countries 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 18 The 17 Sustainable Development Goals

The year 2023 is the half-way mark of the 2030 Agenda. Hence, assessment of our performance on the SDGs is more critical than ever. Events over the past few years, and in particular since Russia's full-scale invasion of Ukraine, have emphasized the importance of monitoring progress towards the SDGs. As noted by Paolo Gentiloni, Commissioner, European Commission Responsible for Economy:

> "[P]eace and security are a prerequisite for sustainable development: no sustainable development is possible without peace and no peace without sustainable development" (Eurostat, 2023, p.4).

António Guterres, Secretary-General of the UN, reiterates the need to prioritise the SDGs. According to the most recent UN report, the impacts of the climate crisis, the war in Ukraine, a weak global economy and the lingering effects of the COVID 19 pandemic have all had a negative impact. Hence, he calls for immediate action:

> "The SDGs are the universally-agreed road map to bridge economic and geopolitical divides, restore trust and rebuild solidarity. Failure to make progress means inequalities will continue to deepen, increasing the risk of a fragmented, two-speed world. No country can afford to see the 2030 Agenda fail" (UN, 2023, p.2).

Since the adoption of the SDGS, there have been several attempts to track countries' progress on achievement of the goals[11]. The SDGs are firmly anchored in the European Treaties and have been at the heart of European policy for a long time. The most recent Eurostat (2023)[12] monitoring report is based on a set of a 100 indicators[13] including 37 multipurpose indicators, and covers a five year time span. Figure 19 provides a snapshot of Eurostat's assessment of the EU's achievement of the goals over the past five years.

The improvement of goals has occurred at different paces for each SDG, ranging from moderate to significant progress. Over the past five years being assessed, the report notes that the EU has made significant progress towards certain goals (SDG 8, SDG 1 and SDG5). Good progress has also been achieved towards reducing inequalities (SDG 10), ensuring quality education (SDG 4) and fostering peace and personal security within the EU's territory and improving access to justice and trust in institutions (SDG 16). Some progress is also seen on SDG3 and SDG9. For the remaining goals, progress is less significant. Eurostat concludes that while strong progress has been made on many socioeconomic goals, trends in the environmental domain have been less favourable (Eurostat, 2023, p.10).

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11   See Sachs et al, (2020, 2021, 2022, 2023 and earlier editions); Eurostat, (2023 and earlier editions); OECD, (2017).

12   The European Union (EU) adopted the first statistical overview of trends relating to the SDGs in the EU in 2017. The 2023 edition provides a detailed monitoring of the SDGs in an EU context and an indicator framework for reference.

13   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 19 Eurostat's Assessment of EU Progress on the SDGs

Overview of EU progress towards the SDGs over the past 5 years, 2023
(Data mainly refer to 2016–2021 or 2017–2022)

Source: Eurostat (2023, p.11)

A series of reports by Jeffrey Sachs and his colleagues in the Sustainable Development Solutions Network (SDSN) complements the work by others in assessing performance towards achievement of the SDGs. The most recent report provides a detailed country profile on all 193 UN member countries. It concludes that Ireland performs relatively well on SDG1 and SDG3 but faces major challenges with other SDGs (see Figure 20). 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, 2023). Their analysis suggests Ireland scores particularly poor on SDGs 2, 12, 13,and 17.

Figure 20 Ireland's Current SDG Dashboard

Source: Sachs et al (2023, p. 2824)

The key aim of our work over the years[14] is to complement this body of work. The current report is our latest contribution. As previously, we specifically focus on how Ireland performs relative to the EU countries that share a similar level of economic development. Specifically, we look at the EU 14, and shed some light on the actions that we must take to achieve the 2030 Agenda.

5.1 Data Selection

An extensive dataset is required for the computation of our Sustainable Progress Index. Similar to previous reports, our starting point is the official UN Global Indicator Set which was adopted in 2017. We also draw heavily on the EU SDG Indicator Set (2023), which

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14   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) Clark, Kavanagh and Bennett (2023).

is aligned with the UN indicator set as closely as possible, but also includes indicators most relevant to the EU[15]. 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.

We employ a number of additional rules 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 (mainly those used by the EU), 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. In addition to the EU and UN datasets, we use 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 aim is to ensure the best, most reliable data is used to capture each SDG.

- ***Most recent available:*** as far as possible, all data must refer to the most recent year available. For most indicators, this is 2022 data. However, due to time lags in data generation, earlier data must be used for some indicators. We exclude data that is judged to be outdated (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.

Employing the above criteria to the data means our final index scores are based on 83 indicators of the 17 goals.

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15 This data set is open to annual reviews to incorporate indicators from new data sources and takes into account new EU policy priorities.

Two further points are worth emphasizing.

- Our dataset is structured along the 17 SDGs and covers the social, economic, environmental aspects of sustainability reflected in 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, while 3 indicators are used to compute SDG1 and SDG14. This is far from ideal but is driven by data availability at country level[16].

- 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, we emphasise our SDG scores and rankings are not comparable to results from previous reports.

5.2 Our Method

In our analysis, Ireland is compared to its peers, the EU14 countries. The comparison is useful due to similarities among countries in the EU region, and also at income group level.

In order to construct the index, all the data must be re-scaled. This is because of the heterogeneous nature of the data which is from various sources – but it must be made comparable across all indicators. A method similar to that used by Sachs et al (2016) is employed. The benefit of this approach is that it allows us to benchmark Ireland against the other countries, at indicator level, at SDG level, and also at an aggregate index level.

A summary of the method is as follows. First, a percentile rank is assigned to each indicator. A percentile rank of 100 is assigned to the best performance, 0 to the worst performance. All indicators must be 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 next step involves aggregating the percentile rank of each indicator to compute the SDG score for each country. Hence, every country has an SDG score for each goal, given that we have data on each SDG. The last step is the calculation of the composite Sustainable Progress Index. The computed SDG values are aggregated across all goals to arrive at an overall score for each country. As in previous reports, equal weight is assigned to each SDG (and each

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

indicator under each goal), as all goals are equally important. This complies with the UN's (2015, paragraph 5) view that all SDGs are equally important and should therefore be treated equally[17].

In the following subsections, we provide a snapshot of Ireland's record across three dimensions: economic development, social inclusion and environmental sustainability. We believe there is value in attempting to understand how countries are doing on these three aspects of progress - all are interconnected and are crucial for the wellbeing of individuals and societies. We conclude the section by presenting the aggregate Sustainable Progress Index[18] which ranks countries based on their average performance across all the SDGs.

5.3 The Economy Index

In order to reflect the economy aspects of the SDGs, we combine SDG8 and SDG9. Table 11 provides the ranking and scores of the Economy Index. Despite significant improvement in many aspects of the economy, (Ireland's GDP per capita continues to be at the top end of the scale relative to other countries), this broader measure of the economy shows there is significant room for progress. Ireland ranks 9th relative to its EU peers on the Economy Index[19]. Below, we explore elements of each SDG separately.

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17   There is no agreement about assigning higher weights to some SDGs over others. The approach here 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.

18   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.

19   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.

Table 11 The Economy SDG Index – Ranking by Country

Country	Index Score	Country Rank
Sweden	0.7693	1
Denmark	0.7693	2
Netherlands	0.7435	3
Finland	0.6538	4
Luxembourg	0.6346	5
Germany	0.5576	6
Austria	0.5191	7
Belgium	0.5063	8
Ireland	0.4871	9
France	0.3523	10
Portugal	0.3396	11
Spain	0.3203	12
Italy	0.1920	13
Greece	0.1728	14

Source: Authors' analysis
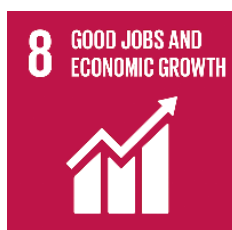
SDG 8 'Decent work and economic growth'

SDG8 identifies the importance of sustained and inclusive economic growth, economic productivity and global prosperity. The goal recognises that growth is essential for employment (particularly well-paid quality jobs), living standards, and 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.

We use 6 indicators to reflect SDG8. As well as GDP per capita and a measure of unemployment, we include additional measures to capture the theme of the goal: the employment rate, the NEET rate (youths not in employment, education or training), accidents at work, and a measure of low pay. At EU level, SDG8 shows continued signs of recovery after the pandemic's impact on the economy and the labour market. This is also the case in Ireland. Ireland's NEET rate has improved steadily and at 8.7%, it is half-way in the ranking on this indicator. The employment rate continues to improve also, and in 2022 it stood at 78.2%, above the EU average.

The indicators 'accidents at work' and 'low pay' are used here to mirror decent work 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). While ranked 7th on accidents at work, Ireland's performance on low-pay is less impressive (ranked 13th on latest data). The combined total of measures of SDGs give Ireland a relative ranking of 7 overall.

SDG 8: Rank =7

SDG 9 'Industry, innovation and infrastructure'

SDG9 focuses on supporting inclusive and sustainable development, technological progress, and human wellbeing, with the aim of improving living standards. In doing so, the goal is to promote increased access to financial services, and information and communication technologies, and it recognises the importance of research and innovation for achieving the goals.

6 indicators are used to compute SDG9. At 0.96%, expenditure on R&D (as a percentage of GDP) in Ireland is the lowest of the EU14. Belgium, Sweden, Austria and Germany top the rankings. They all have expenditure greater than 3% of GDP.

Other indicators under this SDG - internet use, and number of researchers as a percentage of population - show Ireland performing better over the recent past, but there is still significant room for improvement. Ireland's share of R&D researchers, as a percentage of population has increased. We score relatively well on the extent of high-speed internet coverage. The Logistics Performance Index - an indicator that attempts to measure the quality of trade and transport-related infrastructure from the World Bank, scores Ireland in 12th place for logistics capacity.

Ireland' overall score on SDG9 puts it in 10th place.

SDG 9: Rank = 10

5.4 The Society Index

The Society Index score and country ranking are presented in Table 12. The index is computed by combining 8 SDGs[20] that together, we believe capture the theme of social inclusion. Ireland is halfway in the ranking, in 7th place.

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

Strong performance on several SDGs impact the overall score, in particular, the education theme, (SDG4), peace and justice goals (SDG16) and good health and wellbeing (SDG3).

Table 12 The Society SDG Index – Ranking by Country

Country	Index Score	Country Rank
Denmark	0.6614	1
Sweden	0.6486	2
Finland	0.6304	3
Netherlands	0.5654	4
Belgium	0.5394	5
Austria	0.5274	6
Ireland	0.5120	7
Luxembourg	0.4745	8
Portugal	0.4651	9
France	0.4589	10
Germany	0.4478	11
Italy	0.4371	12
Spain	0.4126	13
Greece	0.3275	14

Source: Authors' analysis

SDG 1 'No poverty'

SDG1 pleads 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 financial services.

Monitoring SDG1 in the EU context involves tracking aspects related to multidimensional poverty and basic needs. The EU is characterised by considerable improvements in all poverty dimensions of SDG1 monitored in Eurostat's recent report, including an increasing share of people being able to meet their basic needs. However, "most of these improvements took place in the period up to 2019, while poverty rates have remained rather stable in 2020 and 2021" (Eurostat, 2023, p. 10).

Our SDG1 is constructed using 3 indicators; one from the OECD, and two taken from Eurostat. They are chosen to reflect the broad objectives and ambitions of the goal. The indicators are: 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. Ireland scores well on the poverty rate measure (3rd place). However, less favourable scores on the other indicators from Eurostat (which they argue are meant to capture poverty among more developed countries) gives an overall score on SDG1 that puts Ireland in 8th place.

SDG 1: Rank = 8

SDG 2 'No hunger'

SDG2 is concerned with food security, the eradication of hunger, improved nutrition and sustainable agriculture. Many of the official indicators under this goal are more applicable to developing countries. Food security, in terms of sufficiency and supply, is generally not considered a major concern for the EU countries, but malnutrition problems are evident. Achieving healthy diets and ensuring agricultural systems remain productive and sustainable are the key challenges associated with this goal in the EU.

At EU level, including Ireland, trends in the area of malnutrition remain unfavourable, with a clear increase in the share of obese people in the EU since 2014 (Eurostat, 2023, p.14). Obesity in Ireland is the highest among the EU14, according to the latest available data. Over 25% of the population are categorized as obese.

The sustainability of agriculture and ensuring long-term productivity are also key elements of SDG2. 4 indicators are used to reflect this part of SDG 2: cereal yield efficiency; the extent of organic farming; ammonia emissions from agriculture, and a measure of pesticide use.

At just 2%, Ireland's organic farming share of the total utilised agricultural area (UAA) is well below the EU average: it scores lowest of the EU14 on this indicator. On the plus side, Ireland scores highest (1st place) on the cereal yield indicator, although the ranking on the ammonia emissions and pesticide is much less favourable. Combining all the 5 selected indicators for this goal gives a rank of 13 for Ireland.

SDG 2: Rank = 13

SDG 3 'Good health and wellbeing'

SDG3 focuses on improving healthy lives and promoting wellbeing of all ages by improving reproductive, maternal and child health. It aims to end epidemics of major communicable diseases; and reduce non-communicable and mental diseases. It also focuses on reducing behavioural and environmental health-risk factors. 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.

While strong progress was observed at EU level on this SDG prior to 2019, assessment of the goal is now impacted by the effects of the COVID-19 pandemic. This is likely to be true in Ireland also. A more expansive range of data is available to reflect this SDG compared to others. We compute SDG 3 using 9 indicators, many from the Eurostat database. We exclude indicators that are more relevant to the developing countries. Ireland scores relatively well overall. Sweden and the Netherlands top the ranking, in first and second place, respectively.

SDG 3: Rank = 6

SDG 4 'Quality education'

The aim of SDG 4 is to ensure access to equitable and quality education through all stages of life. It focuses on increasing the number of youth and adults with employment and entrepreneurship opportunities and advocates life-long learning. It also aims to eliminate gender and income disparities in access to education.

Education is seen as key in meeting other SDGs; it aims at reducing poverty, inequality, gender inequality and contributes to growth, employment, productivity, innovation, competitiveness and healthier lifestyles (Eurostat, 2017:89).

Our 6 indicators that are used to compute SDG4 reflect education at all levels of life. Ireland scores high on several indicators: Ireland is ranked first on the share of the population aged 30 to 34 that have completed tertiary or equivalent education (a measure of 3rd level outcomes) and first on the PISA[21] score (a measure of 2nd level outcomes). Ireland also does

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21   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.

well on the early-leavers indicator and an indicator capturing childhood education. We also do well on a new Eurostat indicator capturing the extent of basic digital skills in the population. We do less well in one area in particular: adult learning – which is used to reflect life-long learning. Overall however, the strong performance of several measures mean that Ireland scores very well on this SDG and is ranked first overall.

SDG 4: Rank = 1

SDG 5 'Gender equality'

SDG 5 aims at ending all forms of discrimination, violence and any harmful practices against women and girls. It calls for equal rights, recognition and equal opportunities of leadership at all levels of political and economic decision making.

Our SDG5 is computed using 5 indicators, mainly drawn from the Eurostat database. At EU level, SDG5 shows a quite favourable picture in most of the areas monitored. Regarding employment, women's hourly earnings are catching up with those of men, and the gap between men and women who are outside the labour force due to caring responsibilities has narrowed since 2017 (Eurostat, 2023, p. 12).

However, we see a somewhat mixed performance for Ireland based on the selected indicators. The data shows that we are still below the EU average on indicators for both the share of women in national parliament (13th place) and in senior management roles (12th places); this, despite observed improvements. 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.

In the EU, the gender pay gap has narrowed slightly over the years but remains about 13.9%. The latest data for Ireland puts the gap at 9.9%, which is below the EU average. Also on a positive note, Ireland is ranked first on the female education indicator (female education as a percentage of male education).

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

SDG 5 Rank = 10

SDG 10 'Reduced inequalities'

SDG 10 aims at reducing disparities in terms of income, sex, age, disability, race, class, ethnicity, and religion, within and among countries.

Trends regarding inequalities in the EU reveal a relatively favourable picture over the most recent five-year period of available data (Eurostat, 2023, p. 120). Our SDG10 draws on four indicators to capture the theme of this goal. The data for the Palma Index[22] shows Ireland is ranked 6th. Data for the Gini coefficient shows Ireland is ranked 7th. Ireland's performance on the social justice indicator puts it in 6th place and a measure of household debt also ranks Ireland 6th.

Finland, Belgium and Denmark are the best performing countries overall on this goal. Ireland's overall score puts it in 6th place.

SDG 10: Rank = 6

SDG 16 'Peace, justice and strong institutions'

SDG16 seeks to promote a peaceful and inclusive society for sustainability, supported by human rights, protection of the most vulnerable, access to justice, and secure governance.

We use 7 different indicators to reflect and assess the theme of SDG16. The theme of peace and personal security is captured by indicators of homicides, occurrence of crime/violence/vandalism, proportion of prisoners in the population, 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).

The data paint a favourable picture: 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. We conclude

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22   The Palma Index is a measure that attempts to capture inequality. It is the 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. Increasing the income of the bottom 40 per cent of the population by adopting policies and legislation is another aim of SDG10.

Ireland is doing well on this SDG based on the selected indicators, with an overall rank of 5.

SDG 16: Rank = 5

SDG 17 'Partnership for the goals'

A strong commitment to global partnership and cooperation is critical for the achievement of Agenda 2030. This is the aim SDG17, which focuses on the global macro economy to ensure an open universal multilateral trading system for sustainable development under the WTO. Global partnership and cooperation with developing countries can promote and develop sustained economic activity, which aids on achieving the targets of the 2030 Agenda.

However, the most recent overall assessment of EU developments regarding SDG17 is moderately negative (Eurostat, 2023, p.16) The EU has focused on global partnership and financial governance within the EU to reflect SDG17. They note that "[o]verall EU financing to developing countries has fallen strongly since 2016, and the EU's ratio of official development assistance (ODA) to gross national income (GNI) has not progressed towards the 0.7% target set for 2030" (Eurostat, 2023, p. 16).

We compute SDG17 using 4 indicators. The most recent data indicates that 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. Only four countries met the target of 0.7 per cent of GNI: Denmark, Sweden, Germany and Luxembourg.

Data for our second indicator comes from Eurostat; the share of environmental taxes as a proportion of revenue. They note that "the already low share of environmental taxes in total tax revenues declined even further and reached a new low in 2021" (Eurostat, 2023, p.16). Ireland is on a par with the European average on this indicator, and is ranked 8th out of the 14 countries.

To capture the theme of financial governance, we include an indicator of General Government Gross Debt. 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 44.4% of GDP in 2022, was well below the EU27 average of 83.5.9%. However, Ireland's performance on the final indicator, which measures expenditure on

health and education as a % of GDP, shows Ireland in 14th place on this indicator.

Combining our indicators puts Ireland last on SDG17. We emphasise that the indicators here do not necessarily capture fully the theme of the goal, given data limitations. Better quality data is required to fully capture the theme of this goal.

SDG 17: Rank =14

5.5 The Environment Index

Table 13 shows the country scores and rankings for the Environment Index[23]. The analysis sees Ireland in last place among our peers. Significant challenges exist if Ireland is to meet our commitment to the environment goals set out in Agenda 2030.

Table 13 The Environment SDG Index – Ranking by Country

Country	Index Score	Country Rank
Sweden	0.5899	1
Netherlands	0.5781	2
Denmark	0.5527	3
Germany	0.5525	4
Austria	0.5423	5
Greece	0.4929	6
Italy	0.4918	7
Luxembourg	0.4898	8
Finland	0.4750	9
France	0.4681	10
Ireland	0.4627	11
Spain	0.4584	12
Portugal	0.4500	13
Belgium	0.4227	14

Source: Authors' analysis

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

SDG 6 'Clean Water and Sanitation'

SDG 6 calls for universal access to safe and affordable drinking water, sanitation and hygiene. It aims at improving water quality, water use efficiency and sustainable supply.

Available data paint a rather mixed picture for the EU. Trends in water scarcity are somewhat unfavourable, with the EU's water exploitation index showing a slightly increasing trend in recent years. However, on a positive note, "the share of people without appropriate sanitation facilities in their households has been steadily decreasing in the EU, and connectivity to at least secondary waste water treatment has been improving slowly" (Eurostat, 2023, p. 15).

The results for Ireland are also mixed. Relative to other countries, we score well on Eurostat's water exploitation index - Ireland is ranked in 4th place. Less favourable is our performance on the proportion of waste-water that is treated - Ireland is in 9th place. Also, indicators for access to improved drinking water and sanitation show further development is required. Ireland's overall rank on this SDG is 11.

SDG 6: Rank = 11

SDG 7 'Affordable and Clean Energy'

Access to reliable, affordable, and sustainable energy services to fulfil demands is a key aim of SDG7. Specifically, it focuses on improving energy efficiency, access to modern energy services and increasing the share of renewable energy.

Our assessment of SDG7 indicates Ireland is performing poorly relative on this goal. We use 4 indicators to compute our measure. The share of renewable energy is one of the lowest relative to our EU peers and is well below the EU average. We also do poorly on the measure of CO2 emissions from energy fuels combustion/electricity output (MtCO2/TW). We do better on the indicator of final energy consumption in household per capita (Ireland is in 6th place). Our final indicator - the proportion of people who are unable to keep their home adequately warm – shows Ireland ranked 10th. Overall, our combined indicators give Ireland a score with a rank of 14 – last among the countries examined here.

SDG 7: Rank = 14

SDG 11 'Sustainable cities and communities'

The focus of SDG11 is on designing cities, towns, and communities in a safe, resilient and sustainable manner. It aims to make cities safe and sustainable by ensuring access to safe and affordable housing, investing in infrastructure, and improving planning and management in a way that is both participatory and inclusive.

Some of the official indicators for this goal are more relevant to developing countries. We use 5 indicators, drawing mainly on Eurostat's data, to reflect this goal. Air pollution is less of a problem in Ireland's urban areas compared to other countries, outranked by just the Scandinavian countries. Our second indicator attempts to capture 'satisfaction with public transport' and we are in the middle rankings for this measure. A third indicator captures the extent of rent over-burden – we use OECD data to reflect the theme of 'safe and affordable housing'. OECD proposes that households that spend more than 40 per cent of disposable income on housing are considered "overburdened" (OECD, 2019). Compared to other countries, Ireland does relatively well on this indicator, although the data does not reflect the current crisis. Our final two measures are CO_2 emissions from passenger cars (Ireland is ranked 7) and the proportion of fatal car accidents (Ireland is in 3rd place).

Ireland does well on this SDG: the overall score for quality of life in our cities and communities shows Ireland in 2nd place.

SDG 11: Rank = 2

SDG 12 'Responsible consumption and production'

Economic growth has long been linked to an increase in resource and energy consumption. SDG 12 calls for adopting sustainable practices and procedures for business and an increase in environmentally friendly activity by consumers to enhance sustainable consumption and production. 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.

Trends concerning SDG 12 have been mixed in the EU. Indicators for this SDG focus on waste generation, circular material use, electronic waste, raw material consumption and the recycling of waste.

Our analysis shows that Ireland continues to generate a significant amount of municipal waste per capita, (11th place), while the recycling

rate of municipal waste and circular material use is low (11 and 14 rank respectively). Combining all our indicators show Ireland continues to struggle on the achievement of this goal. The overall score puts Ireland in 10th place on this SDG.

SDG 12: Rank = 10

SDG 13 'Climate Action'

On fulfilling the promise to the United Nations Framework Convention on Climate Change and operationalising the Green Climate Fund, SDG 13 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. There have been improvements in this SDG in the EU. According to provisional estimates for 2021, "the EU has already reduced its net greenhouse gas emissions by about 30% since 1990". However, "stronger progress will be required to meet the ambitious 55% reduction target for 2030" (Eurostat, 2023, p. 15).

Problems with data availability however (for example, reliable and comprehensive measures of mitigation, impacts and initiatives) make this one of the SDGs that international agencies still find problematic when attempting to determine important trends. A key indicator used by Eurostat is GHG emissions. In recent years, Ireland has witnessed a fluctuation in its GHG emissions but it continues 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 do better on the indicator that reflects the carbon pricing score[24] and the overall score ranks Ireland in (joint) 9th place on this SDG.

SDG 13 Rank = 9

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24   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.

SDG 14 'Life below Water'

The conservation of the oceans by safeguarding and ensuring their sustainable use is the aim of SDG14. It aims to reduce marine pollution, ocean acidification and overfishing as addressed through policy. The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. Hence, a key priority for a sustainable future is the careful management of this goal.

Available data measuring the themes of this SDG are still limited in scope. Hence caution is advised in interpreting the findings here. For example, it has been, and continues to be, difficult to estimate how each country is contributing to ocean health. Ocean acidification poses a risk to the marine environment and global climate regulation. The EU has "made only moderate progress towards SDG14, based on the most recent data" (Eurostat, 2023, p. 14). Similarly, 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).

Given the data limitations at country level, our SDG14 is computed using 3 indicators for 12 countries[25], based on data on protected marine sites and quality of bathing sites by locality from Eurostat. Estimates of ocean health, including ocean acidity are available from the Ocean Health Index[26] which measures ocean health by country. The overall score gives it a ranking of 8 on this SDG. Given time, it is hoped better quality data will allow for more reliable estimates of SDG14.

SDG 14 Rank = 8 (out of 12)

SDG 15 'Life on land'

SDG15 seeks to protect, restore and promote the conservation and sustainable use of terrestrial, inland water and mountain ecosystems. It is one of the key goals, along with SDG14 that incorporates environmental considerations for all UN member countries.

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

26   http://www.oceanhealthindex.org/region-scores/annual-scores-and-rankings. We use the clean waters score from the Index.

Data availability means monitoring of SDG 15 also remains somewhat limited. At EU level, recent trends in the indicators selected show "some slight improvements combined with a few clearly negative developments that result in an overall slightly negative goal-level assessment" (Eurostat, 2023, p. 16).

Five indicators are selected here to mirror SDG15. Ireland scores high on indicators of the share of protected terrestrial areas and share of freshwater areas. The score on the Red List index which estimates biodiversity loss is less favourable, Finally, Ireland has a low share of land dedicated for forestry and woodland (19%) which is well below the EU average – Ireland is ranked 12 on this measure. The final indicator from Eurostat, the Soil Seal Index, gives a score that puts Ireland in 13th place. Combining the indicators gives Ireland an overall rank on this SDG15 of 7.

SDG 15 Rank = 7

5.6 Summary

The SDGs are an essential tool for translating aspirations into positive and long-lasting consequences for humanity. Our analysis shows that significant challenges remain for Ireland under the three headings of economic prosperity, social inclusion, and environmental sustainability. Table 14 provides a useful summary of how Ireland fares on each SDG under these three areas.

Table 14 Ireland's Rank by Dimension and by SDG

	Economy	9
SDG 8	Good Jobs and Economic Growth	7
SDG 9	Industry, Innovation and Infrastructure	10

	Society	6
SDG 1	No Poverty	8
SDG 2	Zero Hunger	13
SDG 3	Good Health and Wellbeing	6
SDG 4	Quality Education	1
SDG 5	Gender Equality	10
SDG 10	Reduced Inequality	6
SDG 16	Peace and Justice	5
SDG 17	Partnerships for the Goals	14

	Environment	9
SDG 6	Clean Water and Sanitation	11
SDG 7	Affordable and Clean Energy	14
SDG 11	Sustainable Cities and Communities	2
SDG 12	Responsible Consumption and Production	10
SDG 13	Climate Action	9
SDG 14	Life Below Water	8
SDG 15	Life on Land	7

Source: Authors' analysis

Strengths

Ireland does well on some SDGs, in particular 'Quality education' (SDG 4), Peace and justice' (SDG16) and 'Sustainable cities and communities' (SDG11). The high score and rank on SDG4 reflects Ireland's commitment to deliver on 'quality education' - from basic education to tertiary education. Ireland enjoys a relatively safe quality of life in our cities and communities (SDG 11) with reasonably good transparent, effective and accountable institutions (SDG16). Improvements on SDG 3 'Good health and wellbeing' are also reflected in the ranking of this goal, relative to our peers. The Covid-19 crisis has underlined the importance of every country having an effective social protection system and universal health coverage.

Weaknesses

At the midpoint of the implementation of the 2030 Agenda, a reality check reveals significant challenges are still evident in meeting some of the environment goals. There are obvious pressing sustainability issues in the areas reflected by SDG 7, 'Affordable and clean energy', and SDG12, 'Responsible consumption'. The low proportion of renewables in our energy mix points to the need for significant policy action to ensure that current energy needs continue to be met without jeopardizing future generations. While there have been improvements in SDG 13 'Climate action', more work needs to be done. The low score on 'SDG 2' also points to the need for further action, Obesity is a significant health issue and is a contributing factor to non-communicable diseases, such as cancer, cardiovascular diseases and diabetes (Eurostat 2021, p. 77) with important implications for the healthcare system in the future. Further, the low score on SDG2 emphasizes the need to embrace fully the idea of sustainable agriculture. Challenges also remain the areas of infrastructure and logistics capacity, as indicated by the score on SDG 9 'Industry, Innovation and Infrastructure'. Finally, the SDGs can only be realized with a strong commitment to global partnership and cooperation. Our SDG17 score shows that Ireland is a long-way off in meeting its commitments in this area.

Somewhere in the Middle

Many of the score for the remaining goals puts Ireland in the middle of the rankings. While certain areas have witnessed progress, it is important that we do not become complacent; there remains a proportion of indicators that are stagnating or progressing too slowly. Continuous monitoring of all the indicators that make up the goals is required in order to fully meet the aims of Agenda 2030.

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

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. These 17 global goals are a blueprint to achieve a better and more sustainable future. They focus on identifying global challenges relating to issues on poverty, inequality, climate, environmental degradation, prosperity, peace, and justice.

Events over the past few years have highlighted the interdependence of our economic, social and natural spheres. It has also made the achievement of the 2030 Agenda and the SDGs even more challenging, both for the EU and globally. However, they must remain at the top of the policy agenda if we are to ensure a more sustainable future for all.

In Table 15, we present our composite Sustainable Progress Index (SPI) for 2024. 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. Our index is based on the most up-to-date data available and our

indicators are selected to reflect the broad aims and objectives of the SDGs. Once again, we see the Nordic countries, along with the Netherlands, top the index rankings. **Ireland is in 8ᵗʰ place in the SPI 2024** .

Table 15 The Sustainable Progress Index Ranking by Country

Country	Index Score	Country Rank
Sweden	0.6329	1
Denmark	0.6270	2
Netherlands	0.6006	3
Finland	0.5692	4
Austria	0.5288	5
Germany	0.5049	6
Luxembourg	0.5026	7
Ireland	0.4922	8
Belgium	0.4875	9
France	0.4467	10
Portugal	0.4441	11
Italy	0.4319	12
Spain	0.4183	13
Greece	0.3740	14

Source: Authors' analysis

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Conclusion and Future Policy Considerations

It has been over eight years since the 2030 Agenda for Sustainable Development was agreed: we are now past the midway point in the timetable to achieve the 17 Sustainable Development Goals. At the SDG Summit in 2023, UN Secretary-General António Guterres stated bluntly that "the SDGs need a global rescue plan". In response, world leaders adopted a Political Declaration reaffirming their commitment to the 2030 Agenda and committing to accelerate progress.[27] As with all declarations, the proof will be in the implementation. This report not only measures progress, but also sets forth a suite of policy recommendations towards implementation.

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.

The SDGs are designed to refocus efforts towards policies that directly help people and communities in the long run. In this regard, the SDGs are complementary to Ireland's Well-being Framework, as was noted in the Government's own second report on the Well-being Framework (Government of Ireland, 2022, pp. 30-32). In 2022, the Irish Government published

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27   https://www.un.org/en/conferences/SDGSummit2023

its first report on the country's wellbeing, *Understanding Life in Ireland: The Well-being Dashboard 2022*. This was followed last year with a 2023 report. The report assessed progress using Ireland's Well-being Dashboard which consists of a total of 35 indicators across economic, environmental and social issues. These 35 indicators provide a snapshot of progress on 11 dimensions outlined in the Well-being Framework:

- Subjective wellbeing

- Mental and physical health

- income and wealth

- knowledge, skills and innovation

- housing and the built environment

- environment, climate and biodiversity

- safety and security

- work and job quality

- Time use

- Connections, community and participation

- Civic engagement, trust, and cultural expression

There are two types of indicators: Progress Indicators which refer to performance over a 5 year period as compared to the EU average (depending on data availability); while the Sustainability Indicators refer to a subset of 14 indicators which have been identified as particularly important for sustainability. The full breakdown of indicators can be found at the CSO's Well-being Information Hub.[28] The 2023 report also introduced an assessment of equality within each dimensions (Government of Ireland, 2023). We warmly welcome this development. Indeed, *Social Justice Ireland* was party to the consultation report published by the National Economic and Social Council (NESC) on the development of the Well-being Framework which highlighted equality as one of three overarching and inter-linked priorities, along with agency and sustainability (NESC, 2021).

According to Government, the purpose of the Well-being Framework is "to better measure Ireland's progress as a country and better align policy decisions with people's experiences."[29] In line with this objective, the 2023 report states that, "The Well-being initiative is now being integrated across policy-making in Government. For example, the dashboard

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28   https://www.cso.ie/en/releasesandpublications/hubs/p-wbhub/well-beinginformationhub/howwearedoing/

29   gov.ie - A Well-being Framework for Ireland - Join the Conversation (www.gov.ie)

analysis fed into the Budgetary cycle last year, including at the National Economic Dialogue, in the Summer Economic Statement and in Budget Day documentation." (Government of Ireland, 2023) This is a welcome step and will need to be monitored to ensure that such integration continues to be implemented.

Figure 21 Ireland's Well-being Dashboard
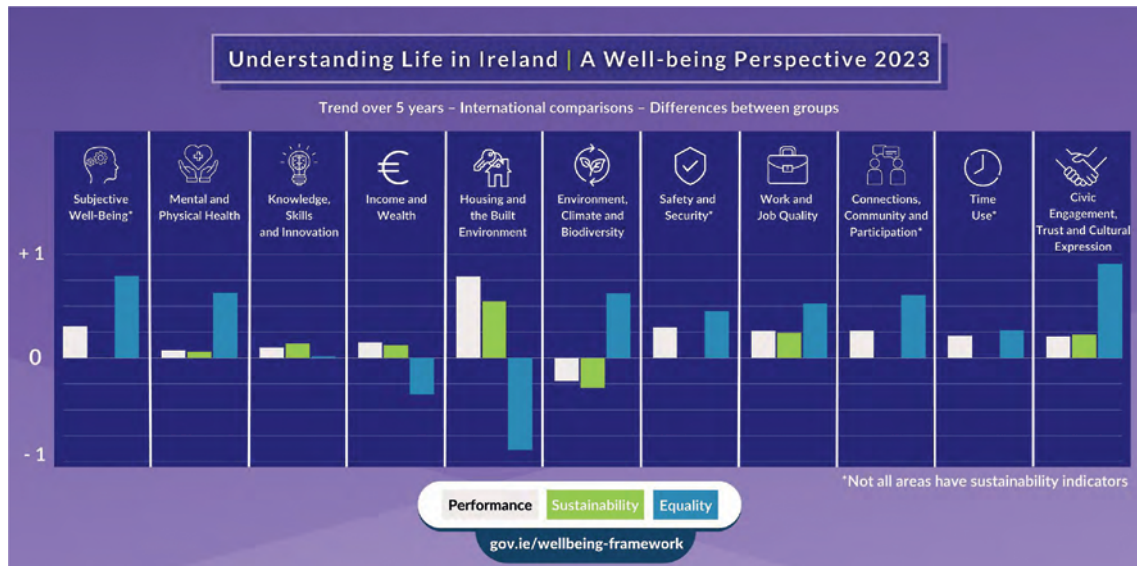
Source: Understanding Life in Ireland: The Well-being Framework 2023, p.7

The development of a multi-dimensional framework to measure progress in societal wellbeing and to underpin a more integrated approach to policy making, was welcomed by *Social Justice Ireland* in our 2022 edition of this report (Clark, Kavanagh, & Bennett, 2022). By the same token, room for improvement remains. In 2022, *Social Justice Ireland* recommended an alternative set of indicators that would provide a more accurate picture of wellbeing in Irish society (Bennett C. , 2022). The choice of alternative indicators, drawn from readily available datasets produced by the CSO and other reputable sources, was deemed to "provide proximation of real Well-being, that is, how policies are being experienced. (Bennett C. , 2022, p. 176) Using this alternative set of indicators, *Social Justice Ireland* showed "considerable room for improvement" (Bennett C. , 2022, p. 188): only two dimensions showed positive progress, while four showed neutral progress and the remaining five showed negative progress (Bennett C. , 2022).

Figure 22 Alternative Dashboard
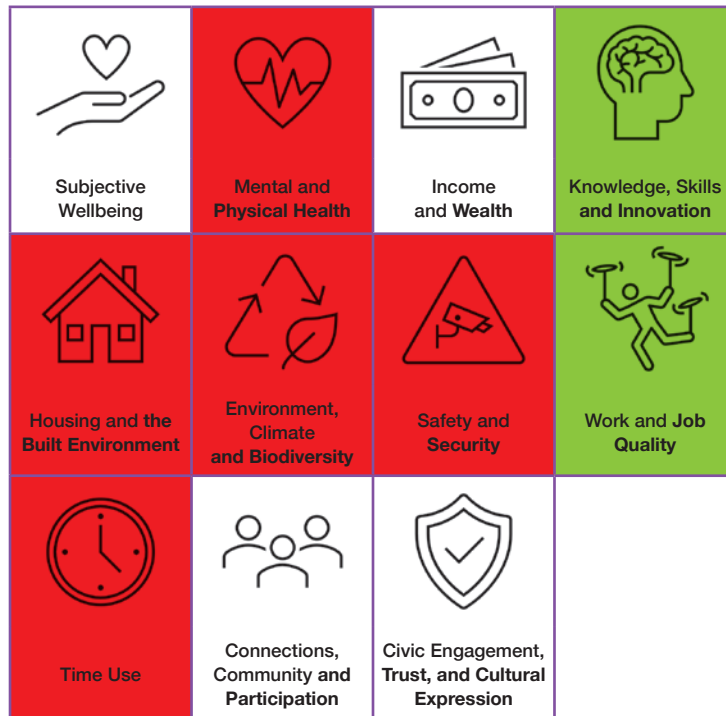
Source: 'What Counts When It Comes to Wellbeing?', contained in Towards Wellbeing for All, 2022, p.189

As noted above, there is significant cross-over between the SDGs and the Well-being Framework, as illustrated in Figure 23. Explicitly linking the SDGs to the 11 dimensions of the Well-being Framework would help mutually reinforce each another and ensure policy coherence between our national targets and our international commitments.

Figure 23 Well-being Framework and SDG Alignment

Well-Being Dimensions	Sustainable Development Goals
1. Subjective Well-being	1. No Poverty
2. Mental and Physical Health	2. Zero Hunger
3. Income and Wealth	3. Good Health and Wellbeing
4. Knowledge and Skills	4. Quality Education
5. Housing and Local Area	5. Gender Equality
6. Environment, Climate and Biodiversity	6. Clean Water and Sanitation
7. Safety and Security	7. Affordable and Clean Energy
8. Work and Job Quality	8. Decent Work and Economic Growth
9. Time Use	9. Industry, Innovation and Infrastructure
10. Community, Social Connections, and Cultural Participation	10. Reduced Inequalities
11. Civic Engagement and Cultural Expression	11. Sustainable Cities and Communities
	12. Responsible Consumption and Production
	13. Climate Action
	14. Life Below Water
	15. Life on Land
	16. Peace, Justice and Strong Institutions
	17. Partnerships for the Goals

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 realised. It is not enough to have three or even four of the five, while neglecting

other areas. All five must be worked on simultaneously. The 11 dimensions of the Well-being Framework can be mapped onto the five policy outcomes of a renewed Social Contract, as illustrated in Figure 24 (Bennett C. , 2022).

Figure 24 Well-being 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

6.1 Policy Proposals

A properly functioning Well-being Framework would support Ireland to achieve the Sustainable Development Goals and also realise the five key policy outcomes needed to renew the Social Contract as proposed by *Social Justice Ireland*. However, putting this interconnectedness into practice will require transformational change across all levels of Government, and be supported by real Social Dialogue and participation. This will need to be facilitated by the

introduction of local social dialogue mechanisms to ensure that all communities have a say in their own wellbeing.

We make the following policy recommendations for the achievement of each of the 17 Sustainable Development Goals, linking them to the five policy outcomes for a renewed Social Contract and the 11 dimensions of the national Well-being Framework.

A Vibrant Economy	
Wellbeing Indicator 8: Work and Job Quality	
SDG Number	**National Level**
1 NO POVERTY	• 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**
8 GOOD JOBS AND ECONOMIC GROWTH	• 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 4: Knowledge and Skills	
SDG Number	**National Level**
4 QUALITY EDUCATION	• 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. • 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.

Decent Services and Infrastructure

Wellbeing Indicator 1: Subjective Wellbeing	
SDG Number	**National Level**
1 NO POVERTY	• 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**
3 GOOD HEALTH AND WELL-BEING	• 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**
10 REDUCED INEQUALITIES	• 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**
2 ZERO HUNGER	• 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 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**
3 GOOD HEALTH AND WELL-BEING	• 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. • 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 5: Housing and the Built Environment	
SDG Number	**National Level**
1 NO POVERTY	• 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**
11 SUSTAINABLE CITIES AND COMMUNITIES	• 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 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 10: Connections, Community and Participation	
SDG Number	**National Level**
16 PEACE AND JUSTICE	• 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 building.
	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.

Just Taxation	

Wellbeing Indicator 3: Income and Wealth

SDG Number	National Level
1 NO POVERTY	• Immediately increase core social welfare rates by €13, and move towards benchmarking welfare rates to average weekly earnings.
	• 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
4 QUALITY EDUCATION	• Adopt and implement a national financial literacy strategy.

SDG Number	National Level
5 GENDER EQUALITY	• Introduce a Universal State Social Welfare Pension.
	Local Level
	• Support high-quality community childcare, particularly in disadvantaged areas.

Good Governance	

Wellbeing Indicator 7: Safety and Security

SDG Number	National Level
5 GENDER EQUALITY	• 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
10 REDUCED INEQUALITIES	• 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 11: Civic Engagement and Cultural Expression	
SDG Number	**National Level**
17 PARTNERSHIPS FOR THE GOALS	• Increase ODA as percentage of GNI, with a move towards the UN Target of 0.7 per cent of GNI by 2028.
	• 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.

Sustainability

Wellbeing Indicator 6: Environment, Climate and Biodiversity	
SDG Number	**National Level**
6 CLEAN WATER AND SANITATION	• 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
7 AFFORDABLE AND CLEAN ENERGY	• 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
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	• 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 80per 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. • Adopt the principles of a circular economy, particularly for construction and demolition waste.

SDG Number	National Level
13 CLIMATE ACTION	• 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
14 LIFE BELOW WATER	• 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
15 LIFE ON LAND	• 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 9: Time Use	
SDG Number	**National Level**
10 REDUCED INEQUALITIES	• 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.

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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 (2023)
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 (2023)
3	Subjective wellbeing (average ladder score)	Gallup (2023)
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	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	UNDP
6	Population using safely managed water services	World Bank
6	Population using safety managed sanitation services	World Bank
6	Water exploitation index	Eurostat
6	Anthropogenic wastewater that receives treatment (%)	EPI, Sachs et al (2023)
7	Share of renewable energy in consumption (%)	Eurostat
7	CO2 from fuels and electricity	IEA, Sachs et al (2023)
7	Population unable to keep adequately warm (%)	Eurostat
7	Final energy consumption per capita in households	Eurostat
8	Real GDP per capita	Eurostat
8	Long-term unemployment rate (%)	Eurostat
8	Low Pay (%)	Eurostat
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	High speed internet coverage	Eurostat
9	Mobile broadband subscriptions	ITU, Sachs et al (2023)
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 (2023)
11	CO2 from new passenger cars	Eurostat
11	Road fatalities	Eurostat
11	Rent over-burden rate in the population (%)	OECD
12	Municipal waste generated per capita	OECD
12	Raw material consumption per capita	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, Sachs et al (2023)
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. (2023); UN
14	Ocean Health Index	Ocean Health; Sachs (2023)
14	Bathing sites of excellent quality (coastal and inland)	Eurostat
15	Mean area that is protected in terrestrial sites important to biodiversity (%)	
15	Percentage of land covered by forestry	Eurostat
15	Soil Sealing Index	Eurostat
15	Red List Index	Bird Life International (2023); UN
15	Mean area that is protected in freshwater sites important to diversity (%)	Bird Life International (2023); UN
16	Corruption Perception Index	Transparency International (2023)
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 (2023), Sachs et al (2023)
16	Feel safe walking at night (%)	Gallup (2023)
16	Unsentenced detainees (% of prison population)	UNODC (2023), Sachs et al (2023)
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 (2023); Sachs et al (2023)
17	General government gross debt	Eurostat

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