

- Competitiveness is a complex concept and composite indicators can be a useful tool to assess Ireland's relative strengths and weaknesses compared to international peers.
- Since 2020, changes in data availability and concerns with methodologies have impacted on some of the high-profile competitiveness indicators typically used by the NCPC.
- Global transformations such as the twin digital and green transitions and the shift towards sustainability and equality indicated the possible benefit of having the NCPC Secretariat to explore alternative indicators.
- In the context of global changes, it is timely to consider newly available indicators, including those on sustainability, skills, innovation and well-being, and to refresh the selection of comparator countries, in measuring Ireland's performance against key competitors and the world's best performers.

OVERVIEW

The National Competitiveness and Productivity Council (NCPC) recognises that competitiveness is a complex concept, reflecting a multitude of different factors (including policy decisions). This complexity is also globally recognised and reflected in the different composite indicators produced by international organisations. These indicators comprise a large series of sub-indices that cover a range of distinct structural factors that impact competitiveness. Each country is then assigned an overall ranking based on its performance.

As all these rankings are subject to methodological challenges, they are best considered as being informative in a broad sense rather than as the final word in an assessment of a country's competitiveness (or ranking). Furthermore, where GDP or GNP are used in the construction of the indicators, they are less appropriate to Ireland where GNI* gives a better measure of economic performance.

Since its inception, the NCPC has tended to focus on a common and limited set of international competitiveness benchmarking indicators. Over time, however, additional indicator series have become available. Some of these address themes – such as digitalisation, sustainability and connectivity – which have become particularly important in a rapidly changing economic environment. This Bulletin sets out the findings of a review by the Secretariat of these additional data sources to provide options for the Council in identifying a broader array of indicators for future use¹. These additional indicators will complement those which have been used in previous *Competitiveness Scorecards*.

IRELAND'S COMPETITIVENESS SCORECARD 2023

Until 2020, the Council published *Ireland's Competitiveness Scorecard* on an annual basis, benchmarking the competitiveness of Ireland's business sector against international peer countries. In light of the slow rate of year-to-year changes, the NCPC decided to move the Scorecard to a three-yearly cycle with the next publication due in 2023.

International competitiveness indicators are a useful tool to benchmark Ireland's performance against global peers. However, the individual metrics in these types of indicators have different strengths and weaknesses (i.e. in terms of definitions used, how the data is collected, etc.). A key step in analysing the individual metrics is to consider how they combine to tell a coherent story about Ireland's competitiveness performance.

In international benchmarking exercises, the careful selection of comparator countries is vital to ascertain Ireland's performance against our competitors and the world's best performers. The NCPC's approach is to benchmark Ireland against countries that (a) represent global best performance in a particular domain, (b) have broad comparability in terms of economic models/size, and (c) are among Ireland's closest trading partners. These include a mix of euro area countries, non-euro area European countries, and various OECD high income countries.

In previous *Competitiveness Scorecard* reports over many years, the NCPC has depended heavily on the three most influential international competitiveness indicators that have been published annually, namely, those of the

¹ This also reflects the 2018 designation of the National Competitiveness and Productivity Council as Ireland's National

Productivity Board which made the NCPC responsible for analysing developments and policies in the field of productivity and competitiveness in Ireland.

Institute for Management Development (IMD), the World Economic Forum (WEF), and the World Bank (WB). It is informative to look at the current standing of these three sets of indicators in the context of developing the NCPC Scorecard in 2023.

IMD Competitiveness Yearbook

The IMD Competitiveness Yearbook assesses and ranks 63²³ economies around the world, based on their ability to create and maintain a competitive business environment. The rankings are based on more than 330 indicators grouped under four pillars: Economic Performance, Government Efficiency, Business Efficiency, and Infrastructure. Two-thirds of the indicators are based on 'hard' quantitative data, and one-third on 'soft' data; the latter are subjective, qualitative data from IMD surveys of business executives in different countries. The highest possible score is 100 points, a frontier of economic competitiveness. In June 2022, the IMD Competitiveness Yearbook ranked Ireland as the 11th most competitive economy out of these 63 economies.

WEF Global Competitiveness Index

The WEF Global Competitiveness Index⁴ provided a detailed map of the factors and attributes that drive productivity, growth, and human development in 141 economies. Its 103 individual indicators were organized into 12 'pillars': Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labour market; Financial system; Market size; Business dynamism; and Innovation capability. The indicators were derived from a combination of data from international organisations as well as from the WEF's Executive Opinion Survey. A country's performance was reported as a 'progress score' on a 0-to-100 scale, where 100 represents the 'frontier', an ideal state where an issue ceases to be a constraint to productivity growth. In October 2019, the WEF Global Competitiveness Index ranked Ireland as 24th out of 141 economies.

WB Doing Business Report

The World Bank's *Doing Business* report benchmarked the regulations that enhanced business activity and those that constrained it, across 191 countries, using hard and soft data. Regulations affecting 10 areas relevant to local small or medium sized businesses were covered, including: starting a business, dealing with construction permits, getting electricity, registering property, getting credit,

protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. An ease of doing business score and ranking was then calculated for each country. In October 2019, the World Bank's *Doing Business* report ranked Ireland as 24th out of 190 economies.

RECENT CHANGES TO DATA AVAILABILITY

The IMD Competitiveness Yearbook for 2022 was published this year⁵ and informed the NCPC's *Competitiveness Challenge* for 2022. However, since 2020, neither of the other two major international indices traditionally used by the NCPC to track Ireland's international competitiveness have been published.

Publication of the World Bank's *Doing Business* report was paused when data irregularities in the 2018 and 2020 reports were reported internally to World Bank management in June 2020. Following a series of reviews and audits of the report and its methodology, the World Bank has now suspended the publication indefinitely, while it formulates a new approach to assessing the business and investment climate in economies worldwide. Its new set of indicators, published as the *Business Enabling Environment* (BEE)⁶, are not expected to be available in the near term.

When the World Economic Forum issued a special edition of its Global Competitiveness Report in 2020, it contained no country competitiveness rankings, due to the absence of key data from various international organisations, as well as an identified need for new thinking regarding the economic recovery after the COVID-19 shock. The WEF has not issued an updated report since December 2020 and is currently reviewing its own methodology.

BROADENING THE SCOPE OF INDICATORS

In the context of a decision to move to a three-year publishing cycle and the unavailability of these two high-profile international indicator sets, the NCPC has looked anew at possible indicators. This exercise brought in consideration of a broader range of competitiveness and productivity indicators, including measures of sustainability and well-being. This widening of the range of indicators is consistent with the NCPC's mandate which does not advocate pursuing greater competitiveness and

² [World Competitiveness Rankings - IMD](#)

³ The 2022 Yearbook included 63 economies. There were previously 64 economies surveyed. However, this year includes Bahrain as a new economy, and does not include either Russia or Ukraine due to the limitation of the data collected.

⁴ [Global Competitiveness Report 2019 | World Economic Forum \(weforum.org\)](#)

⁵ [2022 - Competitiveness](#) (Competitiveness Bulletin 22-3 (June 2022))

⁶ [Business Enabling Environment \(worldbank.org\)](#)

productivity for their own sakes, but rather because of how they help to support sustainable economic growth and quality employment which are key to improving living standards and quality of life for all of society.

This broader approach is also consistent with the *Programme for Government*⁷, published in June 2020, which stated that “the well-being of our nation...goes beyond the narrow confines of economic growth. Over the next five years, the Government will use well-being indicators as well as economic indicators to point out inequalities and help ensure that policies are driven by a desire to do better by people”. Gross Domestic Product and economic output are not very sophisticated measures of prosperity, and in the aftermath of the COVID-19 pandemic, there has been a greater emphasis on putting issues pertaining to well-being and sustainability at the core of public policy. This has also been an area of increased focus at European level over the last decade, including since the publication of the report of the Commission on the *Measurement of Economic Performance and Social Progress*⁸.

The National Economic and Social Council (NESc), which was tasked with producing a National Well-Being Framework⁹, is now looking at how such frameworks have been embedded into budgeting and policy-making processes in other countries, including New Zealand¹⁰. Building on NESc’s work, documents published as part of Budget 2023¹¹ also included analysis entitled “Beyond GDP - Quality of Life Assessment”. This analysis documents how the traditional budgetary analysis is being expanded to assess how the Budget contributes to wider societal goals, such as improvements in quality of life. The Central Statistics Office (CSO) has also launched a Well-being Information Hub¹² which details a broad range of well-being indicators over time.

In looking at broadening the scope of current indicators, the Council must also ensure that these provide a more holistic perspective on issues related to competitiveness and productivity.

ADDITIONAL INDICATORS

In addition to well-being considerations, there has been a shift in recent years to incorporate sustainability elements

further into international indicators. The climate transition to net zero greenhouse emissions by 2050 has also brought environmental considerations to the fore. The digital transformation of the economy and society will also shape competitiveness and productivity developments in the years to come, as will investment in research, development, and innovation.

In order to capture some of these new elements that are relevant to competitiveness and productivity, the following sections provide a high-level description of a sample of new sources for metrics the NCPC will consider incorporating into future *Competitiveness Scorecard* publications.

Global Innovation Index

The Global Innovation Index (GII)¹³ was launched in 2007 with the aim of identifying and determining metrics and methods that could capture a picture of innovation in society that is as complete as possible. The index is currently published by the World Intellectual Property Organisation (WIPO). An overall GI score is calculated based on two sub-indices: innovation inputs and innovation outputs. Both sub-indices are considered equally important in generating a complete picture of innovation and are, in turn, derived from a series of underlying metrics such as infrastructure¹⁴, institutions and human capital (inputs) and knowledge and creativity (outputs). In 2022, the GI model included 81 indicators, including quantitative data, composite indicators, and survey data for 132 economies. Ireland was ranked 23rd in the 2022 GI. As highlighted in this year’s *Competitiveness Challenge*¹⁵ report, innovation plays an important role in boosting productivity growth, particularly in the context of the twin digital and green transitions. It is, therefore, important that it is adequately reflected in the Council’s benchmarking of Ireland’s performance.

European Regional Competitiveness Index

The European Regional Competitiveness Index (RCI)¹⁶ is produced by the European Commission’s Directorate General for Regional and Urban Policy. Since 2010, the RCI has been published on a three-yearly cycle with the most recent report published in 2019. The index measures the major factors of competitiveness in all regions across the EU and, using a broad array of sub-components, it captures concepts that are relevant to sustainable

⁷ [gov.ie](http://www.gov.ie) - Programme for Government: Our Shared Future (www.gov.ie)

⁸ [Report of the commission on the measurement of economic performance et social progress \(europa.eu\)](http://europa.eu)

⁹ [Well-Being Framework | The National Economic and Social Council - Ireland \(nesc.ie\)](http://nesc.ie)

¹⁰ [Our Living Standards Framework \(treasury.govt.nz\)](http://treasury.govt.nz)

¹¹ [gov.ie](http://www.gov.ie) - Budget 2023: Budget Publications (www.gov.ie)

¹² [Well-being Information Hub - CSO - Central Statistics Office](http://csostatistics.ie)

¹³ [Global Innovation Index | What is the future of innovation-driven growth?](http://www.gii.org)

¹⁴ This category spans ICT usage, capital formation and ecological sustainability.

¹⁵ [irelands competitiveness challenge 2022.pdf](http://irelandscompetitivenesschallenge2022.pdf)

¹⁶ [Inforegio - European Regional Competitiveness Index \(europa.eu\)](http://europa.eu)

development, productivity, and well-being. This index provides within-country insights which national indices of competitiveness cannot capture. The latest edition of the index illustrates clearly the north-west / south-east divide across the EU.

For most EU countries (including Ireland), the index demonstrates a clear gap between the capital/metropolitan regions and the rest of the country. A suite of index scores is presented for three regions in Ireland: Eastern and Midland; Southern; and Northern and Western. The Eastern and Midland region outperformed the other two regions in 2019 when measured by its overall RCI score and under the various sub-indices for efficiency and innovation. Using these same metrics, it fared less well than metropolitan regions in other smaller EU countries such as Denmark and Finland. The next version of the index is due to be published in March 2023.

The Council is already aware of the importance of regional variations in competitiveness and productivity. For example, in 2009, the Council published a report on the drivers of competitiveness across cities in Ireland¹⁷. The Council will explore the possible incorporation of regional data in the forthcoming *Scorecard* and other future work.

OECD Better Life Index

The OECD Better Life Index¹⁸ is based on a multi-dimensional framework covering 11 dimensions of current well-being (income and wealth, jobs and earnings, housing, health, education, work-life balance, environment, social connections, civic engagement, safety and subjective well-being) and four different resources for future well-being (natural, human, economic and social capital). The index is an interactive tool that allows users to see how countries perform according to how the user attributes importance to each of the 11 dimensions that make for a better life. *How's Life?*¹⁹ is the related OECD statistical report, released every two years, that captures essential aspects of life that shape people's well-being in OECD and partner countries; it includes subjective well-being, job quality, knowledge/skills, environmental quality, and housing outcomes. The most recent report (2020) indicates that, since 2010, progress has been uneven with people's well-being improving in many respects but slowing or deteriorating in others.

¹⁷ [Our Cities: Drivers of National Competitiveness](#)

¹⁸ [OECD Better Life Index](#)

¹⁹ [How's Life? 2020 : Measuring Well-being | How's Life? : Measuring Well-being | OECD iLibrary \(oecd-ilibrary.org\)](#)

²⁰ [World Management Survey](#)

Other Indicators

In addition to the three indicator sets summarised above, there are several other recent composite indicators that will be considered more fully. These include the World Management Survey²⁰, a cross-country, cross-industry dataset built to capture the quality of management practice and the Digital Economy and Society Index (DESI)²¹ which measures digital progress. There are also several useful OECD datasets²² which the Council has previously used and will continue to explore. The NCPC plans to remain responsive and adaptive to ensure that future publications incorporate more systematically the most relevant international benchmarks available.

This review of the *Scorecard* reflects the scale and pace of change across the global economy and the growing impact of mega-trends such as the twin digital and green transitions, as well as greater policy emphasis on investment in research, development and innovation, and on sustainability and equality. The Council is determined to ensure that such elements are taken into account in the *Scorecard* report in order to present a full picture of competitiveness and productivity in Ireland.

CONCLUSION

The recently published White Paper on Enterprise²³ sets out a vision for Irish-based enterprise to succeed through competitive advantage founded on sustainability, innovation and productivity. It clearly identifies the role the digital and green transitions will play in contributing to sustainable growth for Ireland. As Ireland's enterprise policy evolves, we must use the set of relevant and broad-based indicators to benchmark our performance; these will allow us to identify areas for improved performance as a small, advanced economy.

It is well recognised that aggregate indices are not perfect measures of competitiveness, and some indicators are based on subjective metrics. While Irish performance may improve, our relative ranking depends on whether other countries improve/dimprove by more than we do. Particularly in a time of global change, these indicators help governments to communicate with potential investors and can drive policy reforms. This review of available composite international indicators will inform the NCPC as it prepares *Ireland's Competitiveness Scorecard 2023*. The basis for adopting any additional

²¹ [The Digital Economy and Society Index \(DESI\) | Shaping Europe's digital future \(europa.eu\)](#)

²² For example: [Business innovation statistics and indicators - OECD](#), [OECD Science, Technology and Innovation Scoreboard - OECD](#), [OECD Compendium of Productivity Indicators | en | OECD](#).

²³ [white-paper-on-enterprise-2022-2030.pdf](#)

indicators from sources listed in this Bulletin will be further explored in the *Scorecard* report.

Further Reading: [Ireland's Competitiveness Scorecard 2020 - Competitiveness](#)

The NCPC reports to the Taoiseach and the Government, through the Minister for Enterprise, Trade and Employment, on the key competitiveness and productivity issues facing the Irish economy and makes recommendations to Government on how best to address these issues. The latest NCPC publications can be found at: www.competitiveness.ie.

This Bulletin has been issued by the Chair, Dr. Frances Ruane, and was prepared by Dermot Coates, Karen Hogan, Linda Kane and Rory Mulholland in the NCPC Secretariat.