

- The National Competitiveness and Productivity Council (NCPC) uses an analytical Framework to analyse competitiveness and productivity issues in Ireland.
- This Bulletin outlines the NCPC's recent decision to review the longstanding pyramidal framework (first adopted over 20 years ago and revised most recently in 2016). Following this review, the NCPC has now decided on a new Framework which centres on the two related concepts of competitiveness and productivity.
- As concepts, competitiveness and productivity overlap and interlink in a variety of ways, and this revised Framework speaks more effectively to the strong intersection of both. This change was motivated by the increased EU policy focus on both competitiveness and productivity and by the Government's decision in 2019 to expand the remit of the Council to focus on both Competitiveness and Productivity.
- In seeking to achieve the NCPC's overarching goal – Sustainable Growth and Well-being – the NCPC will utilise this refreshed '*Competitiveness and Productivity Framework*' to guide and shape future analyses, and to report on Ireland's performance in relation to both.

INTRODUCTION

Following detailed consideration over the past year, the NCPC has chosen to adopt a new *Competitiveness and Productivity Framework*. This will be used as the theoretical framework for analysis of competitiveness and productivity going forward. These two concepts overlap and interlink with each other through the drivers that determine them in achieving the overarching goal of sustainable growth and wellbeing.

The revised Framework replaces the previous Pyramidal Frameworks, the first introduced in 2003 and the second in 2016. This Bulletin provides background to the revision, and the changing environment which made the development of a new Framework essential.

The next section of the Bulletin sets out the visual representation of the new Framework and what we see as the six key drivers of competitiveness and productivity in Ireland. The following section summarises the previous Frameworks and explains the need to develop a new framework. This is followed by a more detailed presentation on the determinants of the drivers of competitiveness and productivity and examples of the metrics that will be used to measure Ireland's progress on each of these drivers.

REVISED COMETITIVENESS AND PRODUCTIVITY FRAMEWORK

The new *Framework* (Figure 1) differs fundamentally from its predecessors in presenting productivity and competitiveness as two mutually-reinforcing concepts (rather than simply conceptualising productivity as one of many sub-sets of competitiveness). The arrows in the inner circle visually capture this interconnected relationship.

Figure 1. Competitiveness and Productivity Framework



It also contrasts with the 2016 Pyramid, by putting sustainable growth and wellbeing as the ultimate outcome for policies designed to improve competitiveness and productivity. In this approach, *both* competitiveness and productivity are presented as being determined primarily by a series of six key Drivers (shown in the 'outer' circle). These Drivers are detailed further below, together with examples of the key Determinants. Indicators will be chosen to monitor latter.

Before turning to look in more detail at the new Framework, we now look at the two previous Frameworks which have guided competitiveness policy analysis in Ireland since 2003.

PREVIOUS FRAMEWORKS

In 2003, the National Competitiveness Council (NCC) adopted a *Competitiveness Pyramid* (Figure 2) which remained in use until 2016. In 2016, the NCC commissioned external experts to review the foregoing with a view to determining whether this approach remained relevant and appropriate. The findings of this review were accepted and an updated *Competitiveness Pyramid* (Figure 3) was adopted in early-2016.

First Competitiveness Pyramid

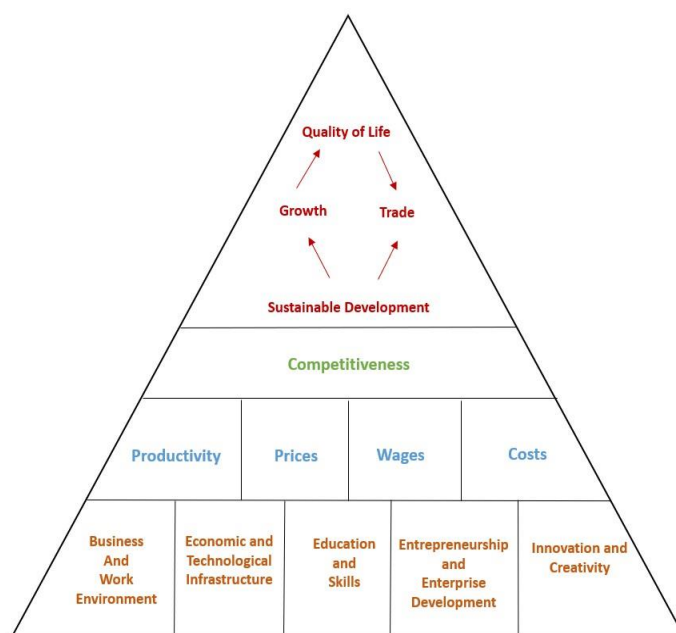
This original iteration was developed in-house following a period of consultation with members of the Council. This bespoke framework was intended to provide a visual summary of the various dimensions of national competitiveness. It was first used in the Annual Competitiveness Report 2003¹.

The then NCC defined competitiveness by stating that '*we target improving competitiveness to achieve success in markets which maximises the opportunities to improve the standards of living for all*'. The Pyramid was structured over three tiers with Sustainable Development presented as the intended outcome of competitiveness. The first (or lowest) tier consisted of 'inputs' which were described as the foundation stones of the economy and those factors that lie within the control of policymakers.

The second tier is presented as an intermediate stage which sits between 'inputs' and 'outputs'. By building competitiveness at this stage, economic stability can be attained in parallel to the maximising productivity. The third (or upper) tier consists of a series of indicators which are used to inform an overall assessment of Irish competitiveness. Competitiveness gains at the lower tiers

allow growth potential to be optimised whilst underpinning sustainable development.

Figure 2. Competitiveness Pyramid 2003-2016



Second Competitiveness Pyramid

Given the emergence of a large literature on competitiveness following the adoption of the original Competitiveness Pyramid, the NCC commissioned research to consider whether this approach was still relevant and appropriate. The commission to evaluate the original Pyramid was awarded to Harvard Business School². This study found that whilst the approach was generally robust, there were a number of weaknesses to be addressed. Amongst the recommendations made were that a value chain approach would be useful in emphasising the importance of the role played by the combination of endowment conditions and competitiveness fundamentals (including macroeconomic policies and institutions).

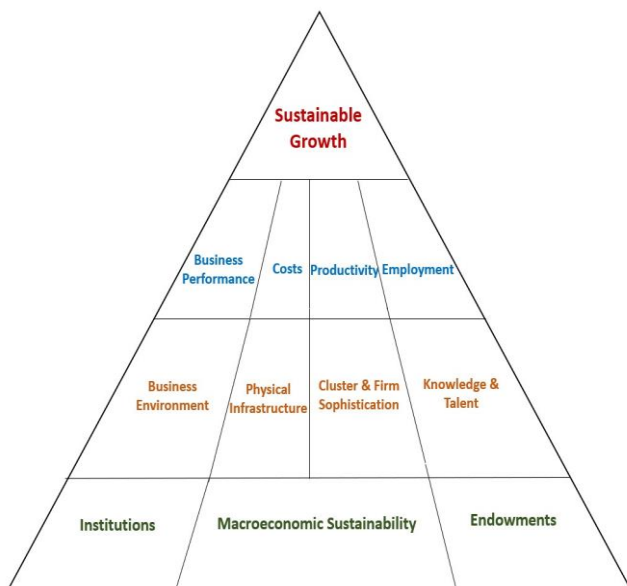
The report also found that the absence of any recognition of issues pertaining to macroeconomic stability was a weakness which limited the relevance of the NCC's approach. In addition, the report recommended the use of an 'outcome' indicator to reflect the final objective of policy and the need to include an indicator referencing clusters and firm sophistication. The second iteration of the Pyramid was structured over four tiers with Sustainable Growth presented as the ultimate objective. The first (or lowest) tier now consisted of 'essential

¹ [Annual Competitiveness Report 2003](#)

² [Review of Competitiveness Frameworks_3905ca5f-c5e6-419b-8915-5770a2494381.pdf \(hbs.edu\)](#)

conditions' with other indicators grouped as 'inputs' and 'outputs' as we proceed up the Pyramid.

Figure 3. Competitiveness Pyramid 2016-2023



RESPONDING TO A CHANGED CONTEXT

The general economic landscape in Ireland – and abroad – has been significantly disrupted by the impact of successive international shocks, including Brexit, the COVID-19 pandemic, and the ongoing war in Ukraine. There have also been substantial changes in the ecosystem in which firms trade and compete, including the re-emergence of inflation and interest rates as issues of concern for both households and enterprises.

Against the backdrop of the European Union's twin green and digital transitions and rising geo-political tensions, there has also emerged a sharper focus on competitiveness issues at the EU-level. This has included the adoption by the EU of a long-term focus on competitiveness in 2023³ as well as debates around changes in the approach to EU State Aid. The European Commission President has tasked Mario Draghi with the preparation of a report on the future of European competitiveness. This report is due by mid-2024.

³ This arose from a decision by the European Council in 2022 to ask the European Commission to present a strategy at EU level to boost competitiveness and productivity: [Questions and Answers: Long-term view on competitiveness \(europa.eu\)](#)

⁴ [ESRG CSO response 3 Feb 2017.pdf](#)

⁵ According to Council Recommendation (349/01 (2026)), the objective is that NPBs analyse developments and policies in the field of productivity and competitiveness, thereby contributing to foster ownership and

In addition, over the past decade the macroeconomic statistics for Ireland have been heavily impacted by trends in globalisation – including intellectual property transfers, contract manufacturing and the re-domiciling of entities to Ireland – and these changes have served to distort the interpretation of Irish data on measures such as labour productivity. In response to recommendations made by the Economic Statistics Review Group (ESRG) in 2017⁴, the CSO developed the GNI* indicator to better capture the specific nature of the Irish economy. Since that time, the CSO has also made significant strides in the development of its *Productivity in Ireland* series.

Beyond the foregoing factors, the designation of the NCPC as Ireland's National Productivity Board (NPB)⁵ – alongside the renewed focus on costs and disruption to global supply chains – led the NCPC to revisit this Framework. Although the Framework emphasises the importance of both competitiveness and productivity, the NCPC posits sustainable growth and well-being as being the ultimate outcome that policy is seeking to achieve. Delivery on both elements is key to achieving the overarching goal and it is for this reason that sustainable growth and well-being are placed at the centre of the new Framework.

Showing how competitiveness and productivity impact sustainable growth and wellbeing is in line with important developments elsewhere, such as the EU and Irish adoption of the UN Sustainable Development Goals (SDGs), the launch of Ireland's well-being framework⁶ and stated objectives under the current Programme for Government. While many other factors and policies clearly impact on sustainable growth and wellbeing, the NCPC's focus here is on the role competitiveness and productivity play in achieving this joint goal.

Constituent Elements

Figure 1 above shows that the revised Framework is based on six Drivers: Business Environment, Macroeconomic Sustainability; International Environment; Technology and Innovation; Education and Skills; and Infrastructure. The rationale underpinning each Driver is as follows:

- **Business Environment:** The competitiveness and productivity of any economy is shaped by the

implementation of the necessary reforms at the national level, and hence foster sustained economic growth and convergence.

⁶ [gov - A Well-being Framework for Ireland \(www.gov.ie\)](#)

overarching business environment in which its enterprises operate, and how that environment differs from those in competing economies. The different costs of doing business are crucial, as is the effective regulatory environment and the set of supports available to businesses.

- **Macroeconomic Sustainability:** An economy's prospects are underpinned by a set of transparent and responsive public institutions which can deliver certainty and stability. This includes a robust fiscal and monetary environment with an efficient and sustainable taxation model that can underpin economic growth and entrepreneurship plus labour market policies that strike the optimal balance between protection for workers and enabling the responsiveness necessary for the enterprise sector.
- **International Environment:** For any small, open economy, the international trading environment (including multilateral agreements, reliable supply chains and access to global markets), and geo-political developments, are crucial. For Ireland, as a member of the EU and Euro Area, EU policy and the effective functioning of the EU Single Market (SEM) have a major impact on competitiveness and productivity.
- **Technology and Innovation:** In order to compete globally, an economy needs to adopt and integrate modern technologies which can be important in driving innovation and productivity.

It is also essential to use all available policy tools to support research, development and innovation (R, D & I) across all sectors of the economy and to support technological spillovers.

- **Education and Skills:** Access to a highly skilled workforce is a key foundation for the competitiveness and productivity of an economy. This includes providing appropriate Exchequer supports to the further and higher education sectors, the promotion of lifelong learning, a responsive approach to sectoral labour/skills needs (including via work permits) and the promotion of activation and skills matching. These play a vital role in ensuring that the economy can attract and retain FDI as we continue to move up the value chain.
- **Infrastructure:** In order to compete globally, an economy needs to have in place a full suite of infrastructural resources which are effective and reliable. These are essential in order to facilitate producers, consumers and employees in terms of getting goods and services to market; providing access to sustainable energy and water; and delivering modern connectivity (including broadband) to businesses and households. This also includes the provision of well-managed and timely public capital projects (including housing).

Finally, Table 1 below presents a summary of the key Determinants underpinning the six Drivers.

Table 1. Mapping Drivers and Determinants

| Drivers | Determinants (examples) | |
|-------------------------------------|--|--|
| Business Environment | Regulation & competition Domestic taxation Non-payroll costs Policy stability | Entrepreneurship Trade & supply/value chains Wage pressures Access to finance |
| Macroeconomic Sustainability | Economic performance Fiscal policy Domestic Inflation Public institutions | National debt & funding Employment rate Labour market developments |
| International Environment | Geo-political factors International interest & inflation rates EU/EA Policy & the SEM | Global taxation and trade agreements Global patterns of FDI |
| Technology & Innovation | R&D Innovation & creativity Emergent technologies (including AI, robotics & quantum computing) | Speed of adaption to change Technology spillovers Twin transition: green energy & digitisation |
| Education and Skills | Higher and further education Apprenticeships Lifelong learning Reskilling & upskilling | Migration & work permits Attainment, progression & workplace readiness Skills matching |
| Infrastructure | Public capital investment Housing Water/Wastewater | Energy supply, mix & security Transport & logistics Broadband & telecommunications |

CONCLUDING COMMENTS

This revised *Competitiveness and Productivity Framework* will be used to structure future NCPC reports going forward. It has already been deployed to provide a structure for the next iteration of *Ireland's Competitiveness Challenge* report which is expected to be published by May 2024.

The NCPC reports to An 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: Dr. Dermot Coates, Dr. Keith Fitzgerald, Karen Hogan, Linda Kane, Rory Mulholland and Erika Valiukaite in the NCPC Secretariat.