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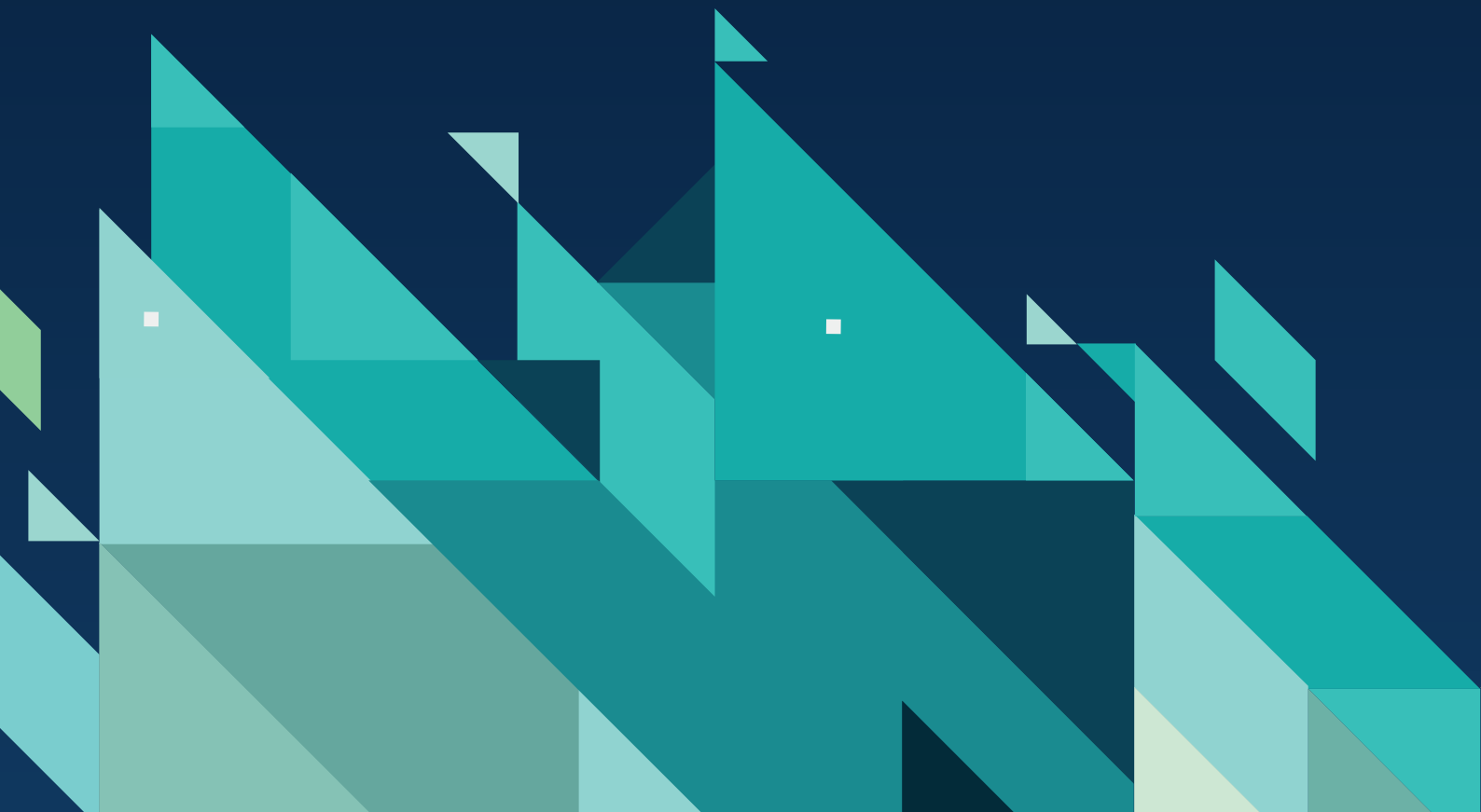
Economic Overview of Ireland and Northern Ireland

ADELE BERGIN, SEAMUS MCGUINNESS AND CONOR BANAHAN



ECONOMIC OVERVIEW OF IRELAND AND NORTHERN IRELAND

Adele Bergin

Seamus McGuinness

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April 2025

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ACRONYMS

ARINS	Analysing and Researching Ireland North and South
CSO	Central Statistics Office
ESRI	Economic and Social Research Institute
EU	European Union
EU27	27 Member States of the EU
FDI	Foreign direct investment
GB	Great Britain
GNI*	Modified gross national income
GDP	Gross domestic product
GVA	Gross value added
NEET	Not in employment, education or training
NI	Northern Ireland
PPP	Purchasing power parity
NTPF	National Treatment Purchase Fund
NHS	National Health Service
NISRA	Northern Ireland Statistics and Research Agency
OECD	Organisation for Economic Co-operation and Development
ONS	Office of National Statistics
PEH	Per equivalised household
UK	United Kingdom
VAT	Value added tax

EXECUTIVE SUMMARY

This report provides a high-level comparison of the economies of Ireland and Northern Ireland (NI) for recent years. A range of economic, socio-economic and demographic measures are used to explore similarities and differences in economic growth, living standards, general well-being and economic structures. While the primary focus is to provide a comparison of the economies of Ireland and NI over recent years, we also examine changes over time to assess how relativities have evolved in recent years.

It is important to recognise that the economies North and South on the island are distinct in important structural respects. NI forms a regional part of the overall United Kingdom (UK) economy with important implications, for instance, for NI's trade and labour market flows, as well as the organisation of public services and public policy configuration. Comparisons with Ireland, as a national level economy, and a European Union (EU) Member State, will therefore not always be on a like-for-like basis. In making comparisons, it is also important to note the relatively strong economic growth in Ireland and the impact of Brexit on the whole of the UK in recent years, which additionally saw an absence of a functioning Northern Ireland Executive for a prolonged period. These wider contexts are reflected in metrics over recent years, but may not continue to impact in the same way in the time ahead.

DEMOGRAPHICS AND LABOUR MARKET STRUCTURE FINDINGS

- In 2022, the population in Ireland was 5.1 million and that of Northen Ireland was 1.9 million. Over the 2010 to 2022 period, Ireland experienced more rapid population growth; in more recent years, this was in large part driven by strong net migration flows. Ireland has a younger age structure than that of NI, with an old-age dependency rate (population aged 65 and over relative to the population aged 15–64) of 23.1 in 2022, compared to 27.7 in NI.

- Labour market participation rates for those aged 16–64 are higher in Ireland than in NI, and a widening gap in participation rates has emerged over time. In 2010, the participation rate for those aged 16–64 was 71.6 in Ireland, 0.5 percentage points above that in NI, while in 2022 the participation rate in Ireland stood at 76.8 per cent, which was 4.4 percentage points higher than in NI.

- Employment rates were higher in NI in 2010, but the subsequent strong recovery from the financial crisis in Ireland led to a large increase in employment rates there, so that in 2022 the employment rate for those aged 16–64 was 73.3 in Ireland – 3 percentage points above that in NI.

- The business cycle is more evident in Ireland than in NI, with labour market indicators such as the unemployment rate, migration flows and NEET (not in employment, education or training) rates all displaying more volatility in Ireland than in NI.

- In recent years, the unemployment rate has been lower in NI while the NEET rate has been lower in Ireland.

LIVING STANDARDS FINDINGS

- Household disposable income (per equivalised household), a reliable measure of living standards that is not distorted by globalisation effects, was 18.3 per cent higher in Ireland than in NI in 2018, a gap that has widened over time. The data also show that modified gross national income (GNI*) per capita – a reliable measure of Irish domestic output – was 57 per cent higher in Ireland than gross domestic product (GDP) per capita in NI in 2022. It also grew at a faster pace between 2015 and 2022, indicating divergence between Ireland and NI. In terms of wages, the data show a positive gap favouring Ireland, with hourly earnings 36 per cent higher than in NI in 2022 (on a purchasing power parity (PPP) adjusted basis).

ECONOMIC STRUCTURE FINDINGS

- While Great Britain (GB) remains NI's largest trading partner, there was a decline in trade between NI and GB over the 2015 to 2022 period; this has been particularly marked in the share of services imports from GB to NI.

- Recent years have seen an increase in trade activity between NI and Ireland, with the rise in trade flows between NI and Ireland being particularly pronounced in NI's goods exports and services imports. It is likely that Brexit is an important driver in the observed pattern of NI trade flows declining relative to GB and increasing relative to Ireland in recent years.

- Individuals in NI, on average, pay less than half the amount of personal income tax (€2,980) compared to their counterparts in Ireland (€6,725) on a per capita basis. This disparity suggests that higher average incomes in Ireland, coupled with a more progressive tax system, results in a larger income tax share per capita.

- In Ireland, corporation tax receipts per capita (€5,760) were more than five times the amount collected in NI (€1,018) based on the most recent year of data (2022). Corporation tax accounts for approximately 21 per cent of per capita total tax receipts in Ireland, compared to 6 per cent in NI, reflecting the increased proportion of corporate taxation within the overall tax take in Ireland over recent years.

- Health spending accounts for 26.3 per cent of expenditures in Ireland compared to 17.3 per cent in NI. Education accounts for 10.7 and 9.5 per cent of total expenditures in Ireland and NI respectively.

SECTORAL LEVEL FINDINGS

- Public sector employment remains higher in NI, accounting for 29.2 per cent of total employment compared to 25.3 per cent in Ireland. Employment in Ireland is more heavily concentrated in the 'information and communication' and 'financial insurance' sectors, which account jointly for 9.8 per cent of jobs in Ireland relative to 5.4 per cent in NI.

- In Ireland, the manufacturing sector accounts for more than 44 per cent of total gross value added, which is almost four times the sector's employment share, in part reflecting the distortionary impact of the multinational sector, and over 2.5 times the same sector's gross value added contribution in NI. This reflects, in particular, the strong prominence of foreign-owned pharmaceuticals manufacturing in Ireland's manufacturing gross value added (GVA).

- The GVA contribution of the information and communication sector in Ireland is approximately three times the NI GVA share, while the employment contribution of the sector is 1.75 time higher in Ireland than in NI.

- Labour productivity in NI lagged that of Ireland in eight of ten sectors in 2021. NI is more productive in 'construction' and 'agriculture, forestry and fishing'. Across all sectors, average labour productivity in Ireland was over 2.5 times that of NI in both 2015 and 2021. In Ireland, this is largely driven by foreign-owned enterprises in 2021.

- Between 2015 and 2021 the numbers employed in foreign-owned firms in Ireland increased from 304,000 to 572,000, which compares to an increase from 82,000 to 89,000 in NI over the same period. Notwithstanding the usual caveats around data related to the FDI sector in Ireland, the finding that productivity levels in foreign-owned firms in Ireland were almost four times those in NI in the same year points to a sharp divergence in the productive capacity of foreign-owned firms locating in these two jurisdictions.

MEASURES OF WELL-BEING AND OPPORTUNITIES FINDINGS

- The academic literature on the importance of early years education is well established, particularly for reducing social inequalities. However, NI is a poor performer in early years enrolment rates relative to the average for the UK, Ireland and the EU27.

- Enrolment rates among 15–19 year olds were at 71 per cent in 2022 in NI – 10 percentage points behind the UK average and 21 percentage points behind the figure for Ireland. The percentage of 15–19 year olds enrolled in education in NI fell by three percentage points between 2018 and 2022.

- Enrolment rates among 20–29 year olds in Ireland were almost twice that of NI in 2018 and 2022, while the educational enrolment rates of older cohorts in NI, which typically reflects lifelong learning, also lie well below the rates observed for Ireland in both periods.

- Between 2018 and 2022, early school leaving in Ireland fell from 5 to 2.7 per cent, while it increased in NI from 9.4 to 10 per cent over the same period. Furthermore, while this period saw the proportion of young people who were NEET fall, in 2022 the NEET rate in NI was 2.6 percentage points higher than in Ireland.

- Inpatient and outpatient waiting lists were similar for those waiting between zero and six months for treatment in 2024; however, the rates for longer durations are much higher in NI. There were 86 persons per 1,000 population on waiting lists (inpatient plus outpatient) for more than 18 months in NI in 2024 compared to an equivalent figure of 12 in Ireland.

- In 2009, the rate of hospital bed provision was substantially higher in NI compared to Ireland – 4.05 beds per 1,000 compared to 2.83 in Ireland. However, this advantage gradually diminished over the period to 2022 by virtue of declines in provision in NI (rather than increases in provision in Ireland).

- Infant mortality rates are an important indicator of the effect of overall economic and social conditions on the health of mothers and infants, and are particularly influenced by the effectiveness of health systems, by income and by maternal level of education. In 2009, infant mortality rates in NI and Ireland were broadly equivalent and below the UK average. However, the intervening period up to 2021 saw infant mortality falling in both Ireland and the UK as a whole, but rising in NI. In 2021, infant mortality rates per 1,000 live births were 2.8 in Ireland, 3.6 for the UK average and 4.8 in NI.

- Life expectancy is also an important indicator that tends to encapsulate the impacts of multiple well-being determinants across a range of areas including income levels, educational attainment and access to health services. In 2021, life expectancy for children aged below one in Ireland was 82.4 years compared to 80.4 years in NI and a UK average of 80.7 years.

- While the life expectancy rate in NI in 2021 was approximately equal to the EU27 average, the divergence over recent years from the UK and Ireland levels will largely reflect a growing divergence over time in key well-being determinants, including living standards, education and certain aspects of health care access.

CHAPTER 1
Introduction

1.1 INTRODUCTION

Prior to the Brexit referendum in 2016, very little research was undertaken on the relative performance of the economies of Ireland and Northern Ireland (NI). Traditionally, the performance of the NI economy has been benchmarked against regions in Great Britain (GB), while the performance of the Irish economy has tended to be compared with the United Kingdom (UK) as a whole, and with other European Union (EU) countries. However, recent years have seen a growing interest in comparative analysis of the distinct economies of NI and Ireland, and this has been a strong focus of the joint research programme between the Economic and Social Research Institute (ESRI) and the Department of the Taoiseach's Shared Island Unit over the last four years. The establishment of the Analysing Ireland North and South (ARINS) project by the Royal Irish Academy and the Keough–Naughton Institute for Irish Studies in the University of Notre Dame has also led to an expansion of the comparative evidence base.

It is important to recognise that the economies North and South on the island are distinct in important structural respects. NI forms a regional part of the overall UK economy with important implications, for instance, for NI's trade and labour market flows, as well as the organisation of public services and public policy configuration. Comparisons with Ireland as a national level economy, and an EU Member State, will therefore not always be on a like-for-like basis. Also, Northern Ireland suffered more than anywhere else from the violence of the Troubles, and the legacy of conflict affects the economy in significant ways to this day.

At the same time, the respective economies of each jurisdiction on the island of Ireland are integrated and comparable in many important respects. Analysis of relative economic structure, performance and trends, North and South, can provide significant and unique insights for public policy in each jurisdiction, on the scope for cooperation and exchange on key economic policy issues, and for understanding of the island as a whole in economic and social terms.

In making comparisons, it is also important to note the relatively strong economic growth in Ireland in recent years, and the impact of Brexit on the whole of the UK in more recent years, which additionally saw an absence of a functioning Northern Ireland Executive for a prolonged period. These wider contexts are reflected in metrics over recent years but may not continue to impact in the same way in the time ahead.

In this overall context, this research focuses on providing a high-level comparison of the economies of Ireland and NI for recent years; in doing so, it builds and

expands on earlier research (e.g. McGuinness and Bergin, 2020; Bergin and McGuinness, 2021). A range of economic, socio-economic and demographic measures are used to explore similarities and differences in economic growth, living standards, general well-being and economic structures. Having an economic overview of the economies of Ireland and NI will provide a contemporary overview of relative economic performance and allow for any differences between Ireland and NI to be better understood. Importantly, where possible, the research attempts to measure how indicators are changing over time and to assess any associated convergence, or divergence, in key metrics. While the primary focus is to provide a comparison of the economies of these two jurisdictions over recent years, we also examine changes over time to assess how relativities have evolved over time.

1.2 RELEVANT LITERATURE

This report builds on an emerging body of comparative research on the economies of NI and Ireland. It draws on findings from these studies and provides an updated picture on key metrics and indicators. There is a relatively new research base examining differences in economic output and living standards between Ireland and NI. Most studies (e.g. Bergin and McGuinness, 2021; McGuinness and Bergin, 2020; Department of Finance, 2024) find substantial gaps in economic output and living standards between Ireland and NI that generally favour Ireland. Other studies, by contrast, using different metrics and indicators, point to a gap in living standards in favour of NI (FitzGerald and Morgenroth, 2019), although this gap has fallen considerably in recent years (FitzGerald and Morgenroth, 2020). Using the most recent data, we examine all the relevant indicators to see how the relativities currently stand.

Differences in living standards between any two regions or countries will mainly be driven by differences in productivity levels. McGuinness and Bergin (2020) hypothesised that the gaps in income per capita between NI and Ireland are likely to be driven by lower levels of productivity in NI, which in turn are potentially explained by a number of factors, including NI's poorer relative performance in the areas of educational attainment, foreign direct investment (FDI) and export intensity. While there is some ongoing debate on the magnitude of gaps in living standards between Ireland and NI, there is a growing consensus that productivity in NI significantly lags that of Ireland (see for example Bergin and McGuinness, 2022; and FitzGerald and Morgenroth, 2019).

Bergin and McGuinness (2022) find that while productivity levels were broadly similar across the two jurisdictions in 2000, over the period 2001 to 2020 productivity in Ireland increased by 0.2 per cent per annum and fell by 1.1 per cent per annum in NI. By 2020, productivity levels were approximately 40 per cent

higher in Ireland compared to NI. The research also found that sectoral productivity in Ireland increases with the share of educated workers employed, and with levels of investment and export intensity. A simulation exercise concluded that if Ireland had a similar education and investment profile to NI, productivity levels in Ireland would fall by approximately 50 per cent. However, despite using comparable data sources and the same methodology, the authors do not find evidence of causal relationships between the usual factors that drive productivity (education, investment, exports etc.) and NI productivity. This apparent lack of evidence on the relationships between productivity and its usual drivers for NI suggests that productivity in the region has historically been relatively unresponsive to single policy levers, such as changes in education and skills provision.[1] Their analysis suggests that a comprehensive strategy is needed, aimed at improving underlying competitiveness among NI firms, reforming education and skills provision, and increasing investment in an integrated way.

With respect to educational attainment, a number of studies have confirmed that levels of educational attainment in NI substantially lag behind those of Ireland (McGuinness and Bergin, 2020; Begin and McGuinness, 2021; Smyth et al., 2022). Smyth et al. (2022) provided the most comprehensive comparative overview of both educational systems and reported that marked differences existed, both at the lower and upper ends of the educational spectrum. Specifically, they reported that, depending on the measurement approach adopted, rates of early school leaving in NI were two to three times those found in Ireland.[2] Smyth et al.'s study also finds the proportion of young people qualifying to post-secondary level stood at 30 per cent in Ireland, compared to 10 per cent in NI. Incidentally, they also found that wage levels were generally 30 to 40 per cent higher in Ireland for most levels of educational attainment, after controlling for price differences.

In terms of other key drivers of productivity, McGuinness and Bergin (2020), using data for 2015, find that exports accounted for a much higher share of business turnover in Ireland than NI, and that foreign-owned businesses accounted for a higher employment share in Ireland than NI.

McGuiness and Bergin (2020) also examined metrics related to access to healthcare in both jurisdictions, as health impacts will also feed into productivity and economic relativities, primarily through labour market effects. The existing

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1 The fact that productivity in Northern Ireland is not well explained using conventional economic models and policy instruments suggests that other factors may need to be considered to explain why market forces are not operating in a typical way in the Northern Ireland economy. These include the fact that it is a peripheral economy, which is relatively less involved in international trade, and its historical reliance on public sector employment and high financial dependence on the UK, as well as the broader impact of the Troubles on the economy.

2 Smyth et al. (2022) highlight two key contributory factors in this difference. Firstly, they point to the success of the Delivering Equality of Opportunity in Schools (DEIS) programme in supporting and retaining students in disadvantaged areas in Ireland. Secondly, they emphasise the impact of academic selection in Northern Ireland, which leaves students in non-grammar schools more likely to leave school early and have lower expectations of educational success as strong contributory factors in this difference.

comparative research in this area is relatively limited, primarily as a consequence of a lack of comparable data sources; however, a recent comparative study of primary health care concluded that neither system substantially outperformed the other (Connolly et. al., 2022).

1.3 REPORT OUTLINE

Chapter 2 discusses the data used in the report. Chapter 3 provides an overview of the demographic structure and key labour market indicators for Ireland and NI. Chapter 4 explores commonly used economic measures of living standards, to provide a comparative assessment of living standards in Ireland and NI, and how they have changed over time. Chapter 5 compares broad economic structures in terms of the component of gross domestic product (GDP), trade and government spending and revenue. Chapter 6 compares indicators at a sectoral level for output, employment and productivity and share, and distribution of foreign-owned businesses. Chapter 7 focuses on broader socio-economic measures of well-being and living standards, including education enrolment, aspects of healthcare and life expectancy. Chapter 8 concludes.

CHAPTER 2

Data

This report draws primarily on regional data (at the NUTS2 level) collected by the Organisation for Economic Co-operation and Development (OECD) to provide a comprehensive overview of key demographic, economic and socio-economic indicators for Ireland and Northern Ireland (NI).[3] Using standardised OECD data ensures equivalent metrics are used for both jurisdictions. We also use data from national statistical agencies, including the Central Statistics Office (CSO), the Office of National Statistics (ONS) and the Northern Ireland Statistics and Research Agency (NISRA), for the comparative analysis of migration, wages, trade, government accounts and foreign multinational activities. In some cases, particularly for healthcare, this is supplemented with data from government departments and agencies.

While the primary focus is to provide a recent comparison of the economies of Ireland and NI, we also examine some changes over time to assess how relativities have evolved in recent years. Furthermore, in some cases we provide data for the wider United Kingdom (UK) or European Union (EU) as a benchmark to help assess whether Ireland and/or NI are outliers in a wider context. Generally, data are presented in per capita terms, to account for differences in the scale of most measures for Ireland and NI, thus facilitating a more meaningful comparison. Finally, most data are presented in purchasing power parity (PPP) adjusted constant price terms.[4] As such, they account for exchange rate differentials, but also adjust for differences in prices levels (i.e. purchasing power) between jurisdictions. This is to help ensure accurate and reliable comparisons between Ireland and NI. Irish gross domestic product (GDP) data are heavily distorted by globalisation effects, causing GDP – and some of its components – to become increasingly disconnected from underlying economic activity (see FitzGerald, 2015, 2018, for more details). As a result, we place a stronger emphasis on measures such as modified gross national income (GNI*), which removes the distortions caused by the activities of some foreign-owned multinational companies from Irish data.

The report focuses on the most recent available data. It is important to note that high quality macroeconomic data are available with a lag, and comparable regional data are available with a further lag. Generally, we have comparable data to 2022 but the most recent data for some indicators pertains to earlier years.

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3 See https://www.oecd-ilibrary.org/urban-rural-and-regional-development/data/oecd-regional-statistics_region-data-en for more details.

4 The OECD uses 2015 as their benchmark year for constant prices. We adopt this as our base year for subsequent estimates from other data sources.

Unfortunately, some healthcare data sources, such as *OECD Health at a Glance* – which contains comparable data for the number of physicians/GPs per 1,000 population and discharges – are only available to 2016. These data were analysed in McGuinness and Bergin (2020). Furthermore, the OECD has not updated their measures on poverty and inequality beyond what was discussed in Bergin and McGuinness (2021); these are thus omitted from the analysis.

CHAPTER 3
Demographic and labour market structure

3.1 INTRODUCTION

This chapter provides an overview of the demographic structure and key labour market indicators for Ireland and Northern Ireland (NI). The demographic structure of a population has significant ramifications for its economy and society, both now and in the future. Demographics will shape the numbers available to participate in the labour force and dependency rates. As Ireland is a highly open economy and is more integrated with the global economy through trade, investment and labour mobility, the business cycle can be particularly pronounced relative to NI. As such, Ireland can experience more fluctuations in key economic data, including for the labour market.

3.2 POPULATION AND LABOUR STRUCTURE

Table 3.1 describes the population structure and key labour market indicators for Ireland and NI for 2010 and 2022.[5] In 2022, the Irish population was over 5 million people, and more than 2.5 times the population of NI. Over the period 2010 to 2022, the population in NI grew by 5.9 per cent whereas population growth was much stronger in Ireland, at 11.2 per cent, in large part driven by stronger net immigration in Ireland. The table also reveals differing structures for the two populations, with Ireland having a younger population than NI. For example, while both jurisdictions show an ageing population over time, with a rising population share of those aged 65 and over, in 2022 the share of the population aged 65 and over in Ireland was 15 per cent compared to 17.6 per cent in NI. Furthermore, the share of the population aged 15–64, a broad indicator of the population of working age, was 2 percentage points higher in 2022 in Ireland than in NI. As a result, the old-age dependency rate (population aged 65 and over relative to the population aged 15–64) is higher in NI than in Ireland.

The labour market participation rate for those aged 16–64 was higher in Ireland than in NI over the period. In 2010, the participation rate was 0.7 percentage points higher in Ireland, and over time a widening gap in participation rates has emerged. In 2022 the participation rate in Ireland, at 76.5 per cent, was 4.6 percentage higher than that in NI. Participation rates for young age cohorts are also higher in Ireland than in NI. Both jurisdictions have experienced a slight fall in participation rates for those aged 16 to 24, although this is not necessarily concerning if the fall relates to younger people staying in education for longer over time. A different picture emerges in relation to the participation rates of those aged 25 to 34. In NI, the

[5] Ireland was particularly exposed to the global financial crisis and economic activity was relatively stagnant in 2010.

participation rate for this age group fell by over three percentage points over the period, while in Ireland it rose by over three percentage points.

A different picture also emerges for employment rates over time. In 2010, employment rates were higher in NI than in Ireland for all age groups. The gap in employment rates in 2010 was likely driven by Ireland being harder hit by the global financial crisis. The subsequent recovery in the Irish economy led to a large increase in employment rates, and in 2022 employment rates in Ireland were higher than in NI for all age groups, except for those aged 16 to 24.

TABLE 3.1 DEMOGRAPHIC AND LABOUR MARKET INDICATORS

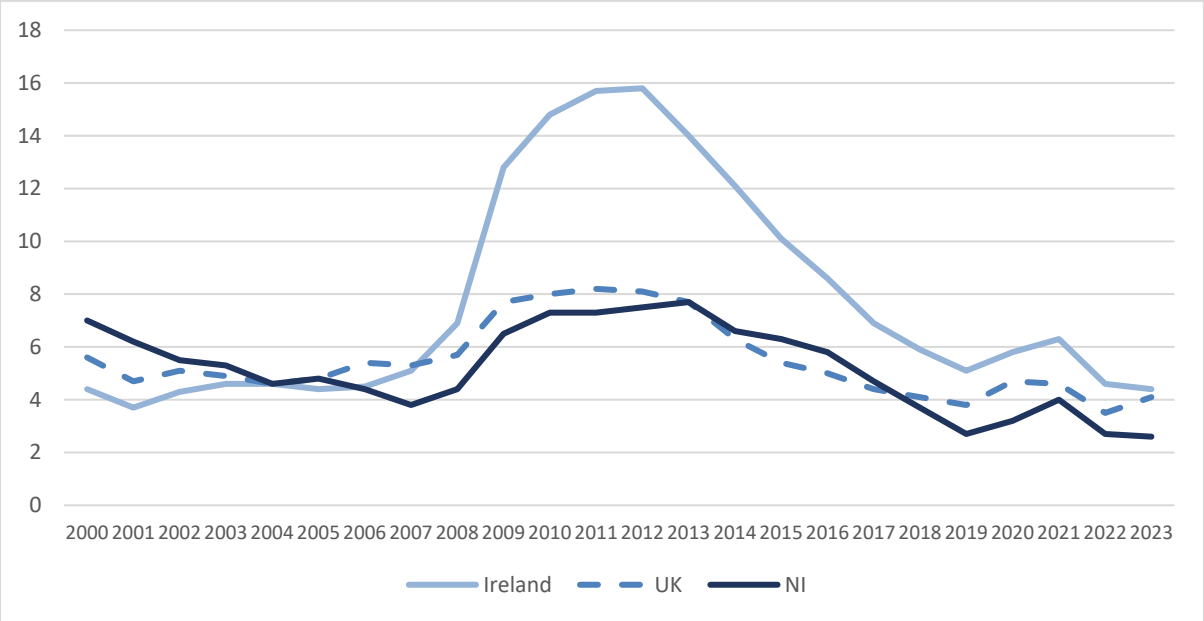
	2010	2022	2010	2022
Population (in thousands)	NI		Ireland	
< 15	355	365	953	997
15–64	1,190	1,210	3,086	3,302
> 65	260	335	510	761
Total	1,805	1,911	4,549	5,060
Population (% of total):				
< 15	19.7	19.1	21.0	19.7
15–64	65.9	63.3	67.8	65.3
> 65	14.4	17.6	11.2	15.0
Dependency rates:				
< 15	29.8	30.2	30.9	30.2
> 65	21.8	27.7	16.5	23.1
Total	51.7	57.9	47.4	53.2
Employment rates:				
16–64	66.0	70.3	61.0	73.3
16–24	43.6	47.8	38.7	47.4
25–34	79.4	80.0	70.9	82.9
Participation rates:				
16–64	71.1	72.4	71.6	76.8
16–24	53.4	51.3	53.9	52.7
25–34	85.6	82.8	83.5	86.9

Sources: NISRA – Labour Force Survey data; CSO – Labour market data; OECD – Population data.
Notes: Dependency rates are defined as those individuals between the ages of 0 and 14, and above the age of 65, relative to the total working age population aged 15–64. Labour force participation rate is the ratio between the total labour force (either in or seeking employment) relative to the total working age population. The working age population refers to people aged 15–64.

Figure 3.1 shows the unemployment rate in Ireland, NI and the United Kingdom (UK) over time. The evolution of the unemployment rate in Ireland shows how Ireland has had a more severe boom-to-bust economic cycle than other countries. In the early 2000s, the unemployment rate in Ireland was below that of NI and the UK, although the rate was falling in NI. In the middle of the decade the rates were

broadly similar; then, when the financial crisis hit in 2008, Ireland was particularly exposed and the unemployment rate rose dramatically over a relatively short space of time, peaking at just under 16 per cent in 2012. For the remainder of the decade, it was on a downwards trajectory and since then has been relatively stable at a low rate.[6] While unemployment rates also rose in NI and the UK in the aftermath of the financial crisis, the scale of the increase was more muted relative to Ireland. By 2023, the unemployment rate in NI was around 1.8 percentage points below that of Ireland.

FIGURE 3.1 UNEMPLOYMENT RATES



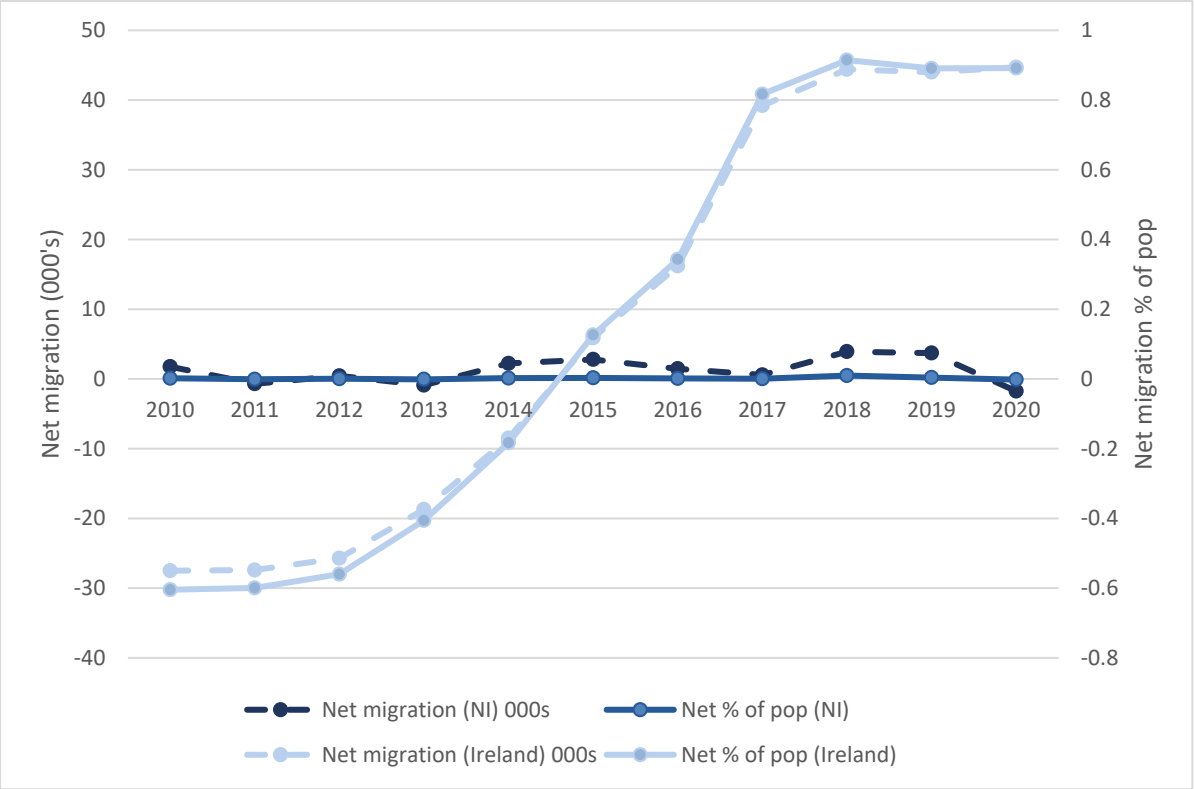
Source: OECD regional database on labour markets.
Notes: Unemployment rate refers to those aged 15–64 years. Unit of measure: Percentage of labour force in the same subgroup.

Migration flows can also impact the demographic structure and labour market in a country. Figure 3.2 shows net migration flows and net migration as a share of the population for Ireland and NI over time. The graph shows that net migration is more significant, in terms of its share in the population, for Ireland than for NI. Net migration is a key driver of population change in Ireland and strong net migration flows in recent years have been the key contributor to the strong population growth discussed earlier in this chapter. The graph also indicates that net migration is closely related to economic conditions, with Ireland experiencing net emigration in the aftermath of the financial crisis when the unemployment rate escalated, a trend that reversed to net immigration as the economy recovered, with the flows

6 Note the graph considers the headline unemployment rates and not the COVID-19 adjusted rates.

increasing in line with improved economic conditions in Ireland. Net migration in NI comprises a much smaller share of the population than in Ireland.

FIGURE 3.2 INTERNATIONAL MIGRATION FLOWS

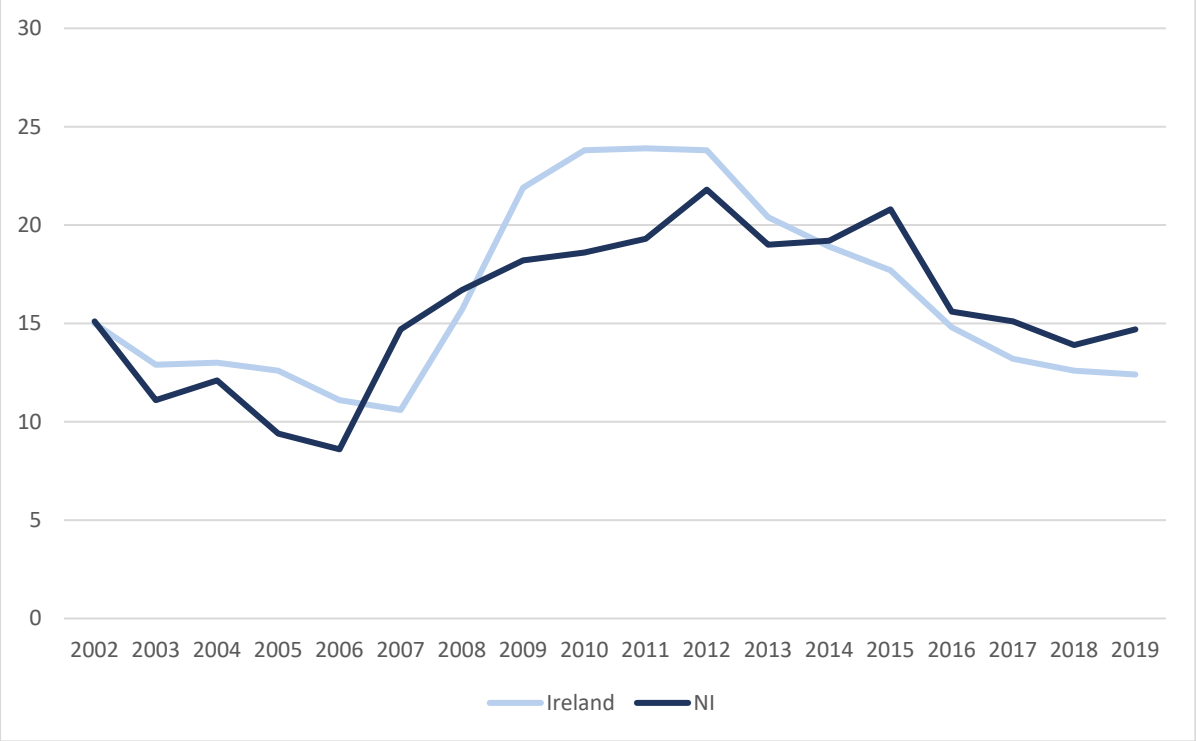


Source: CSO – Population and Migration Estimates; NISRA – Long Term International Migration Statistics.

NEET – not in employment, education or training – is another important labour market indicator. It provides insight into youth engagement and integration in the labour market.[7] A high NEET rate suggests barriers to education and/or employment, or limited job opportunities, which can be symptomatic of broader issues in the economy. People in the NEET category often face long-term challenges, including financial instability and social exclusion. Figure 3.2 shows the NEET rates from 2002 to 2019 for Ireland and NI, with an additional breakdown by gender in Figures 3.3 and 3.4. Overall, NEET rates peaked for both jurisdictions in the years following the financial crisis, with NI recording higher rates than Ireland in more recent years. Over time, NEET rates have declined steadily, with convergence becoming more evident by 2019, particularly among males, and in recent years NEET rates in Ireland are below those in NI.

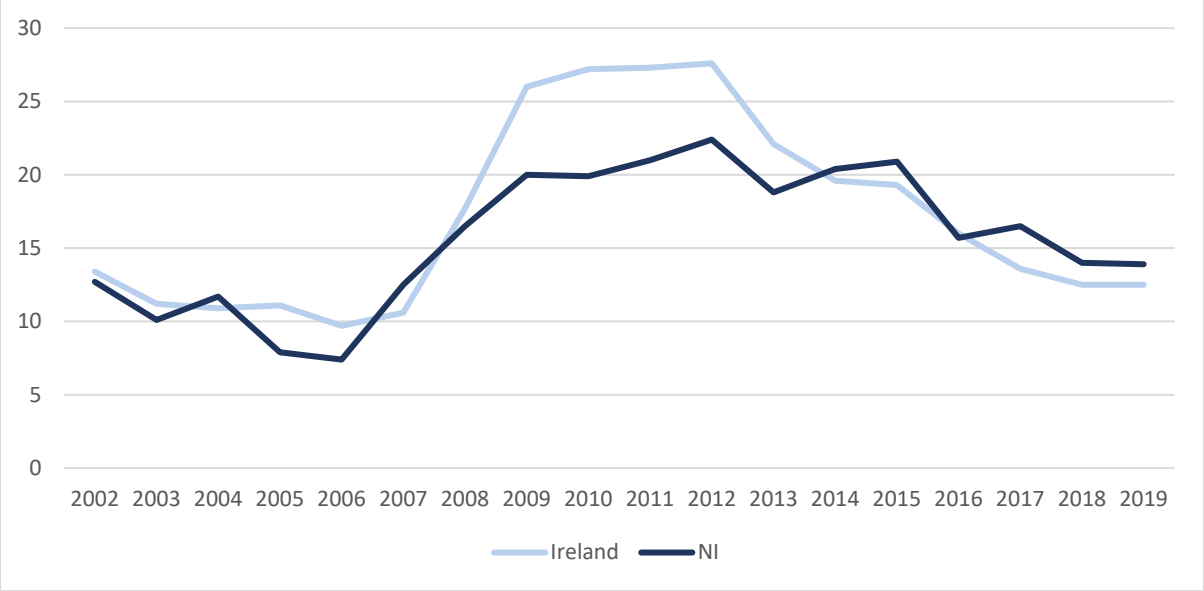
[7] The NEET indicator captures the share of young people who are not in employment, education or training (NEET) as a percentage of the total number of young people in the corresponding age group. The age category here is 18–24 year olds.

FIGURE 3.3 NEET RATES



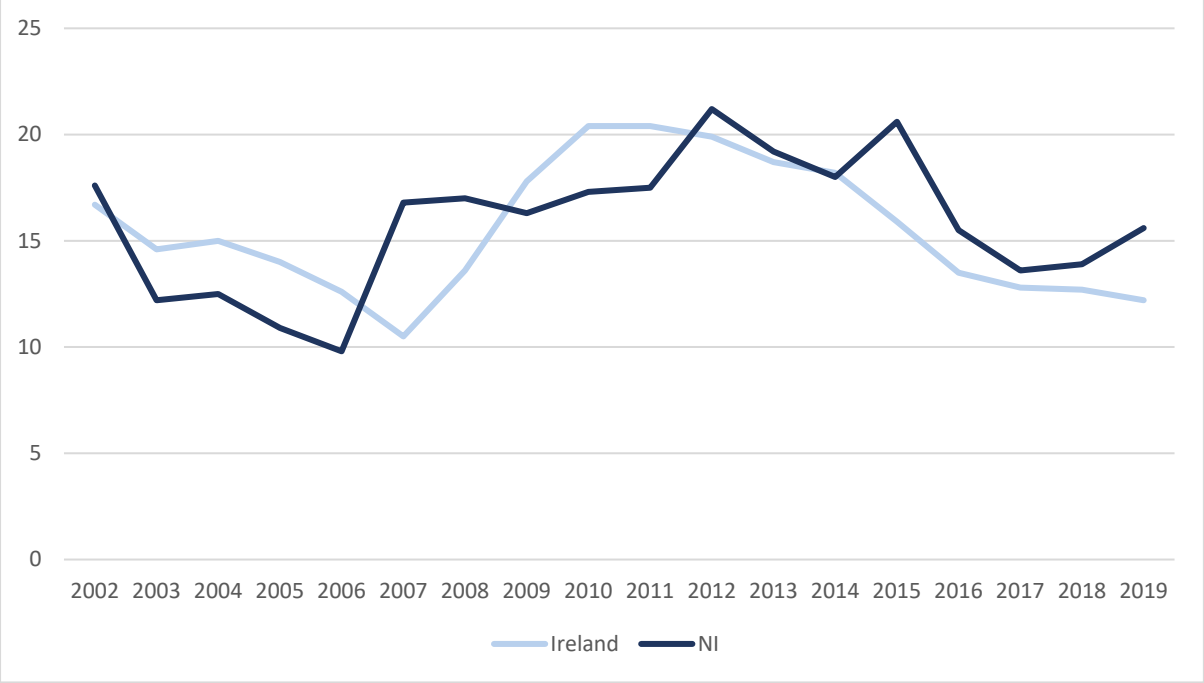
Source: OECD regional education database.
Note: This indicator presents the share of young people who are NEET as a percentage of the total number of young people in the corresponding age group.

FIGURE 3.4 NEET RATES: MALES



Source: OECD regional education database.
Note: This indicator presents the share of young people who are NEET as a percentage of the total number of young people in the corresponding age group.

FIGURE 3.5 NEET RATES: FEMALES



Source: OECD regional education database.
Note: This indicator presents the share of young people who are NEET as a percentage of the total number of young people in the corresponding age group.

3.3 CONCLUSIONS

This chapter provides an overview of the population structure and key labour market indicators for Ireland and NI, and how they evolved between 2010 and 2022. In 2022, the population in Ireland was 5.1 million and that of Northen Ireland was 1.9 million. Over the period concerned, Ireland experienced more rapid population growth, in large part driven by strong net migration flows in more recent years. As a result, Ireland has a younger age structure than that of NI, with an old-age dependency rate (population aged 65 and over relative to the population aged 15–64) of 23.1 in 2022, compared to 27.7 in NI.

The descriptive statistics also show that labour market participation rates for those of prime working age (16–64) are higher in Ireland than in NI, and that a widening gap in participation rate has emerged over time. In 2010, the participation rate for those aged 16–64 was 71.6 in Ireland, 0.5 percentage points above that in NI, while in 2022 the participation rate in Ireland stood at 76.8 per cent – 4.4 percentage points higher than in NI.

Employment rates have evolved differently in Ireland and NI over time. In 2010, employment rates were higher in NI, but Ireland's subsequent strong recovery from the financial crisis led to a large increase in employment rates there, so that in 2022 the employment rate for those aged 16–64 was 73.3 in Ireland, which was 3 percentage points above that in NI. The business cycle is more evident in Ireland

than in NI, with labour market indicators such as the unemployment rate, migration flows and NEET rates all displaying more volatility in Ireland than in NI. In recent years, the unemployment rate has been lower in NI while the NEET rate has been lower in Ireland.

CHAPTER 4
Living standards

4.1 INTRODUCTION

This chapter explores commonly used measures of living standards, to provide a comparative assessment of living standards in Ireland and Northern Ireland (NI), and how these have changed over time. The focus in this chapter is on more traditional economic measures, while Chapter 7 focuses on broader socio-economic measures of well-being and living standards, such as educational attainment and life expectancy.

4.2 ECONOMIC WELL-BEING

Internationally, gross domestic product (GDP) per capita is the most commonly used measure for comparing living standards across countries. As discussed in Chapter 2, GDP-based measures can be misleading for Ireland so here we focus on measures using modified gross national income (GNI*), as it is a more reliable measure of output in Ireland. Consequently, we compare GNI* per capita in Ireland to GDP per capita in NI. Table 4.1 presents data for the most recent year, the percentage gap between Ireland and NI and growth rates over the period 2015 to 2022. Comparing GNI* per capita in Ireland to GDP per capita in NI shows there was a gap of 57 per cent in favour of Ireland in 2022. Furthermore, the table reveals that the growth in this metric has been far greater in Ireland over the 2015–2022 period (26.7 per cent growth in GNI* per capita in Ireland compared to 14.8 per cent growth in GDP per capita in NI), indicating increased divergence in living standards over time. The table also presents the same metrics using GDP per capita for both jurisdictions; however, as stressed above this is not based on a reliable measure of output for Ireland and tends to overstate the gap in living standards between Ireland and NI.

TABLE 4.1 STANDARD OF LIVING – ECONOMIC INDICATORS

	Units	Year	Ireland (000s)	NI (000s)	% difference (Ireland–NI)	% change 2015–2022 (Ireland)	% change 2015–2022 (NI)
GNI* per capita	Constant prices, €, thousands	2022	53.4	34.1	56.5	26.7	14.8
GDP per capita	Constant prices, €, thousands	2022	104.2	34.1	205.3	66.2	14.8

Sources: OECD regional economy database; the CSO's national income and expenditure accounts; population data from the CSO's Annual Population and Migration Estimates; PPP adjustment from OECD regional economy database.
Note: All estimates are converted into euro.

Table 4.2 considers another indicator of living standards, namely household disposable income. This indicator, crucially, is not subject to the types of distortions of GDP-based measures. Furthermore, as it relates to disposable income it includes the impacts of the respective tax and welfare systems and, ultimately, reflects the average income available to households. To ensure comparability, total household disposable income is adjusted for household composition, by dividing it by the number of household members converted into equivalised adults. As before, the data have been adjusted for purchasing power parity (PPP) to account for differences in price levels across jurisdictions. As such, it is a more reliable measure of living standards. Unfortunately, the data are only available to 2018. Based on 2018 data, disposable income per equivalised household was €5,400 higher in Ireland compared to NI, equating to a gap of 18.3 per cent in favour of Ireland. The rate of growth in household disposable incomes in Ireland between 2011 and 2018 was 33.5 per cent compared to 31.2 per cent in NI, indicating that the gap in living standards has widened over the period. The gap in disposable income is smaller than for GNI* per capita. As explained below, this likely reflects differences in the tax and welfare systems, as well as differences in household size.

The data for household disposable income are also available at regional level for Ireland. While the positive gap in household disposable income compared to NI remains across all regions in Ireland, it is highest in the Eastern and Midland Region, and lowest in the Northern and Western Region.[8]

[8] This regional classification is based on the Nomenclature of Territorial Units for Statistics (NUTS), specifically the NUTS 2 classification of regions.

TABLE 4.2 STANDARD OF LIVING – ECONOMIC INDICATORS 2018

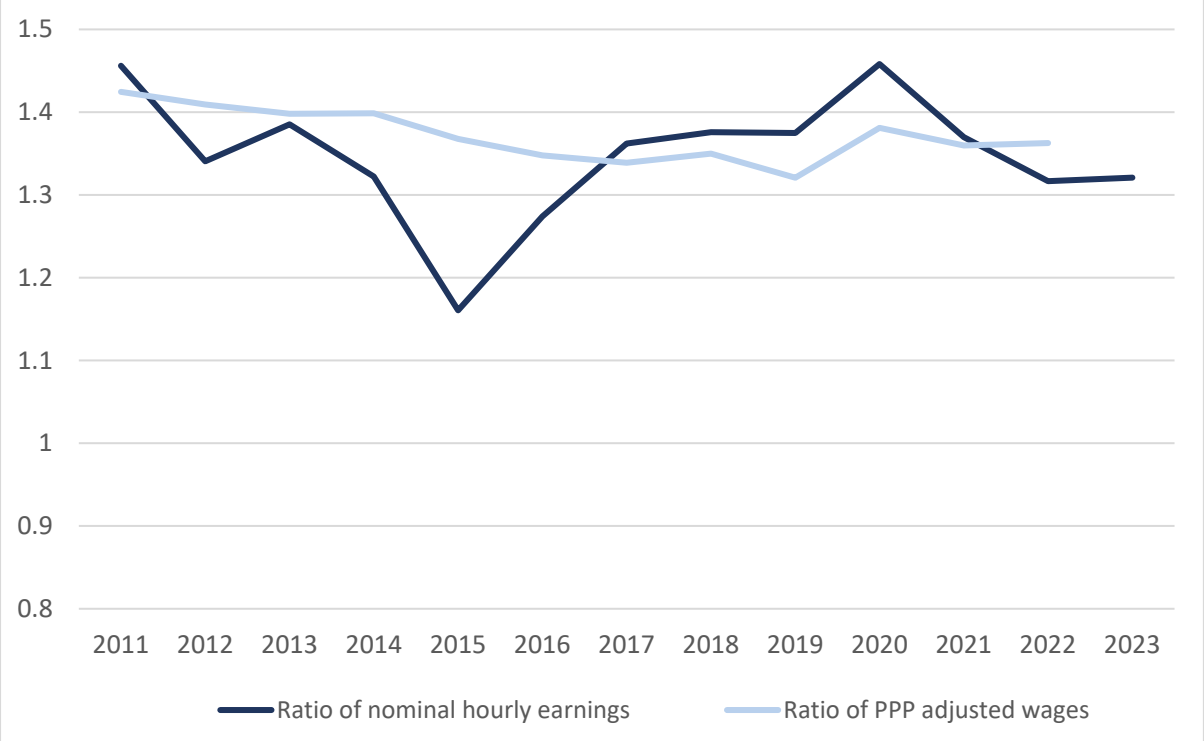
	Units	Ireland 000s	NI 000s	% difference (Ireland–NI)	% change 2011–2018 (Ireland)	% change 2011–2018 (NI)
Household disposable income	Constant prices, €, thousands (PEH)	35.3	29.9	18.3	33.5	31.2
Ireland: Northern and Western Region	Constant prices, €, thousands (PEH)	31.9	29.9	6.9	31.5	31.2
Ireland: Southern Region	Constant prices, €, thousands (PEH)	34.6	29.9	15.8	32.2	31.2
Ireland: Eastern and Midland Region	Constant prices, €, thousands (PEH)	37.0	29.9	24.1	34.8	31.2

Source: OECD regional economy database.
Notes: The growth rate for household disposable income is measured from 2011 to 2018. PEH = per equivalised household. OECD adjustment defines PEH as household income adjusted for differences regarding the needs of households of different sizes, with an equivalence scale placing household income relative to the square root of the household size.

The Department of Finance (2024) examined gross disposable income per capita at a county level in Ireland and NI. They find that while overall gross disposable income per capita in NI is towards the lower end of the distribution of disposable incomes, it is higher than in a few counties in Ireland. However, the data are on a gross basis (before adjusting for the effects of the tax and welfare systems). Bergin and McGuinness (2020) point to the tax and welfare system being more progressive in Ireland than in NI. Furthermore, the data in Table 4.2 also adjust for household size. The two factors likely explain the difference with the figures above.

Figure 4.1 plots the ratios of hourly earnings in Ireland and NI (excluding overtime) for employees in nominal (although in a common currency) terms and also in real PPP adjusted terms over the period 2011 to 2023. The PPP adjusted ratio declined from 1.42 to 1.36 between 2011 and 2022, indicating some convergence in hourly earnings over the period, although hourly earnings were 36 per cent higher in Ireland than in NI in 2022. The nominal ratio declined by slightly more, from 1.46 to 1.32 over the period 2011 to 2023. The ratio declined in 2015 to 1.16 owing to the fall in the sterling exchange rate. Unlike the household disposable income measure used in Table 4.2, these data are in gross terms and so do not reflect differences in the tax systems.

FIGURE 4.1 RATIO OF HOURLY EARNINGS BETWEEN IRELAND AND NI



Sources: CSO – Earnings and Labour Costs; NISRA – Annual Survey of Hours and Earnings.
Notes: The NI data are converted to euro. The PPP adjusted series is in real terms. Data cover all NACE economic sectors. Consumer Price Index (CPI) rates base year set at 2015=100. The CPI rates used for NI are UK estimates.

In addition to how average income levels compare, another key determinant of general welfare levels within an economy is the way in which wages and incomes are distributed across households. More equitably distributed national incomes should, in theory at least, lead to generally higher welfare levels across the population, the more the income levels of poorer households are raised. A key measure of inequality is the Gini coefficient, which measures the proportion of income that is held by a given proportion of the population; if each member of the population holds an equal share of the nation's income, the Gini coefficient will equal zero, while the greater the share of the distribution held by a smaller number of the population, the closer the Gini coefficient will be to one. Bergin and McGuinness (2021) found that, based on 2013 data for Ireland and 2011 data for NI, the Gini coefficient after taxes and transfers for Ireland, at 0.309, was somewhat higher than that for NI, which stood at 0.288, pointing to higher levels of inequality in Ireland.[9] As mentioned in Chapter 2, these data have not been updated yet by the Organisation for Economic Co-operation and Development

9 Analysis by Doorley et. al (2024), using harmonised microsimulation models for Ireland (SWITCH) and NI (EUROMOD), finds that the tax and benefit system in Ireland is more progressive than in NI as a result of a higher tax burden for households in the top half of the distribution. However, more than half of all households in NI were found to be in receipt of means-tested benefits compared to one-quarter in Ireland. These two factors tend to have competing impacts in terms of relative inequality; the relatively more progressive nature of the Irish tax system tends to lower inequality levels in Ireland relative to NI, while higher levels of welfare coverage in Northern Ireland tend to lower levels of inequality in NI relative to Ireland (Doorley et al, 2024).

(OECD) for more recent years (see Doorley et. al, 2024, for an in-depth comparative study of inequality).

4.3 CONCLUSIONS

This chapter provides an overview of differences in living standards between Ireland and NI across commonly used economic measures of living standards/well-being. It finds that household disposable income, a reliable measure of living standards that is not distorted by globalisation effects, was 18.3 per cent higher in Ireland than in NI in 2018, and that this gap has widened over time. The data also show that in 2022 GNI* per capita – a reliable measure of Irish domestic output – was 57 per cent higher in Ireland than GDP per capita in NI. It also grew at a faster pace in Ireland between 2015 and 2022, indicating growing divergence between Ireland and NI. In terms of wages, the data show a positive gap favouring Ireland, with hourly earnings 36 per cent higher than in NI in 2022 on a PPP basis.

CHAPTER 5
Broad economic structure

5.1 INTRODUCTION

In this chapter, we provide an overview of the structures of both economies using a range of different indicators such as final consumption, trade, government revenue and expenditure. It should be noted that in the following chapter we include some measures and breakdowns of the data that will be impacted by the well-documented distortionary impact of the multinational sector in Ireland. In our discussion of the data, we do not put substantial weight on measures or aggregates that have been potentially artificially inflated; nevertheless, in our view it is not justifiable to completely exclude such values as they still contain important information. Furthermore, differences in relativities are still likely to occur if it were possible to remove distortionary factors. The same caveats also apply to some of the data presented in Chapter 6.

5.2 NATIONAL ACCOUNTS

Table 5.1 gives a breakdown of the components of gross domestic product (GDP) in Ireland and Northern Ireland (NI). Given the issues already highlighted with Irish GDP, we cannot reliably compare some components, in particular the data on exports, imports and investment. The data in Table 5.1 are measured in current purchasing power parity (PPP) adjusted prices, in euro, and in per capita terms. There is a marked difference in household final consumption per capita, which favours Ireland in 2020 by approximately €2,000, or 10 per cent. The gap in government expenditure per capita is smaller, at €484, or 4.7 per cent, again favouring Ireland. Finally, modified gross national income (GNI*) per capita in 2020 was €9,619, or 27 per cent, higher in Ireland compared to GDP per capita in NI. Therefore, per capita measures of household and government expenditures and GNI* were all higher in Ireland relative to NI, with the gaps ranging from 4.7 per cent to 27 per cent.

TABLE 5.1 GDP EXPENDITURE APPROACH 2020 – PER CAPITA PPP ADJUSTED, €

	NI	Ireland
Household final consumption expenditure	19,299	21,246
Net government expenditure	10,240	10,724
Gross capital formation	4,639	34,668
Exports	16,580	111,183
Total imports	17,258	92,295
GDP at current market prices	33,500	84,800
Modified GNI*	33,500	45,119

Sources: NISRA – Economic Accounts, supply–use tables (SUTS); CSO – National Accounts.
Notes: All units are adjusted for PPP rates in US dollars and then converted into euro. Net government expenditure is the total cost of government services minus any income received from service fees. This measure excludes elements including cash payments to households, debt interest etc.

5.3 TRADE

Trade flows are a crucial measure of economic performance and regional prosperity as they generate employment and drive industrial development. NI now occupies a somewhat unique position as the only United Kingdom (UK) region maintaining access to both the European Union (EU) single market for goods and the broader UK internal market; however, as a result of Brexit, NI remains outside of the Single Market for services. At present, some trade frictions also exist between NI and Great Britain (GB). In terms of the NI data, we can see while GB remains by far the largest market for goods and services exports and imports, these have declined somewhat in importance over recent years. In 2015, GB accounted for 59 per cent of all NI imports and 69 per cent of all NI exports; however, these shares fell to 54 and 59 per cent respectively by 2022. The decline in trade between NI and GB over the 2015 to 2022 period has been particularly marked in the GB share of NI services imports, which fell from 80 to 65 per cent over the period. Recent years have seen an increase in trade activity between NI and Ireland, with Ireland's share of NI exports and imports rising from 14.4 and 9.9 per cent in 2015 to 21.9 and 15.4 per cent, respectively, in 2022. The rise in trade flows between NI and Ireland have been particularly pronounced in goods exports from NI and services imports into NI. It is likely that Brexit has been an important driver in the observed pattern of east–west to north–south trade realignment.

TABLE 5.2 NI TRADE STATISTICS, £ BILLIONS

	2015				2022			
	GB	Ire	RoW	Total	GB	Ire	RoW	Total
Exports (goods and services)	13.7	3.3	6.1	23.2	15.7	6.4	7.0	29.0
Imports (goods and services)	13.6	2.0	4.2	19.7	13.1	3.5	6.2	22.9
Exports (goods)	10.4	2.7	5.2	18.3	9.6	4.6	5.3	19.6
Imports (goods)	11.1	1.7	3.8	16.6	11.0	3.0	5.7	19.6
Exports (services)	3.3	0.6	0.9	4.9	6.1	1.7	1.7	9.5
Imports (services)	2.6	0.3	0.3	3.2	2.1	0.6	0.6	3.2
Exports (goods and services) %	59.3	14.4	26.4	100	54.2	21.9	24.0	100
Imports (goods and services) %	69.0	9.9	21.1	100	57.3	15.4	27.2	100
Exports (goods) %	57.1	14.6	28.3	100	49.3	23.6	27.1	100
Imports (goods) %	66.8	10.1	23.1	100	56.0	15.1	28.9	100
Exports (services) %	67.4	13.3	19.3	100	64.2	18.2	17.5	100
Imports (services) %	80.5	8.9	10.5	100	65.2	17.4	17.4	100

Source: Trade data come from NISRA – Broad Economy Sales and Exports Statistics.
Notes: Units are expressed in pounds sterling (£), millions. RoW=Rest of world.

Table 5.3 provides details of trade flows for Ireland over the same 2015 to 2022 period. Although we have no separate data for NI flows, and while some of the figures may be affected by distortions related to foreign direct investment (FDI) impacts, some interesting insights still emerge. In particular, despite the share of total imports coming from the UK increasing somewhat over the period, from 8.6 to 11.9 per cent, the UK market's share of total Irish exports has fallen by more than half – from 25.4 per cent to 12 per cent. It is very likely that the continued fallout from Brexit will, at least in part, explain the rapid decline of GB as an export market for Ireland.

TABLE 5.3 IRELAND TRADE STATISTICS, € BILLIONS

	2015			2022		
Billions	UK	RoW	Total	UK	RoW	Total
Total imports	31.9	196.2	228.1	57.1	423.8	480.9
Total exports	37.3	195.4	232.6	65.7	482.6	548.4
Total imports (goods)	18.0	52.1	70.1	29.4	111.6	141.0
Total exports (goods)	15.6	96.9	112.4	22.2	186.6	208.8
Total imports (services)	13.9	144.1	158.0	27.7	312.2	339.9
Total exports (services)	21.7	98.5	120.2	43.6	296.1	339.6
%						
Total imports	14.0	86.0	100	11.9	88.1	100
Total exports	16.0	84.0	100	12.0	88.0	100
Total imports (goods)	25.7	74.3	100	20.8	79.2	100
Total exports (goods)	13.8	86.2	100	10.6	89.4	100
Total imports (services)	8.8	91.2	100	8.1	91.9	100
Total exports (services)	18.1	81.9	100	12.8	87.2	100

Source: CSO.
Note: RoW=Rest of world.

5.4 GOVERNMENT REVENUE AND EXPENDITURE

Table 5.4 provides a breakdown of the main sources of government revenue through tax receipts for the financial year 2022–2023, presented as per capita figures and adjusted for PPP in euro. Overall, Ireland collected nearly €7,000 more per person than NI in total tax receipts. The data further reveal that individuals in NI, on average, pay less than half the amount of personal income tax (€2,980) compared to their counterparts in Ireland (€6,725). This disparity suggests that higher average incomes in Ireland, coupled with a more progressive tax system, result in a larger income tax share per capita. Related to this point, social contributions per capita in Ireland are €710 higher than those collected in NI. The largest difference observed, as one would expect, emerges through corporation tax receipts. Corporation tax receipt per capita in Ireland (€5,760) was more than five times the amount collected in NI (€1,018) based on the most recent year of data. Corporation tax accounts for approximately 21 per cent of Ireland's total tax receipts, compared to 6 per cent in NI. Finally, value added tax (VAT) tax revenues per capita were €933 higher in Ireland in the most recent tax year; nevertheless, VAT accounted for a higher share of tax revenues in NI (24.2 per cent) compared to Ireland (17.5 per cent). Finally, it is worth pointing out that taxes levied on individuals, VAT and income tax account for just over 40 per cent of total revenues in both jurisdictions.

TABLE 5.4 GOVERNMENT REVENUE – TAX RECEIPTS 2022 TO 2023 – PER CAPITA PPP ADJUSTED, €

	NI	Ireland	NI % of total	Ireland % of total
Income tax	2,980	6,725	18.2	24.0
Capital gains tax	155	444	0.9	1.6
Corporation tax	1,018	5,760	6.2	20.6
Value added tax	3,966	4,899	24.2	17.5
Social contributions	2,770	3,480	16.9	12.4
Other	5,513	6,662	33.6	23.8
Total	16,404	27,970	100	100
Total minus corporation tax	15,386	22,210	93.8	79.4

Sources: ONS – Taxes and Revenue Database; CSO – Government Income and Expenditure Accounts.
Notes: The data for Ireland are compiled on a general government accrual basis, including taxes such as local property tax and local authority rates, adjusted to reflect the timing of economic activity. Figures are per capita and PPP-adjusted in euro.

Table 5.5 illustrates the per capita gross government expenditure for 2022–2023, adjusted for PPP in US dollars and converted into euro. The table is measured on a financial year basis for 2022–2023, which runs from April 2022 to March 2023 in NI, and January 2022 to December 2022 in Ireland. These figures give us an overview of relative priorities in government spending across major spending areas in both jurisdictions. NI's total gross per capita expenditure stands at €27,470, which is substantively higher than in Ireland, which stood at €22,279 for the latest financial year. The total per capita gap in expenditures in 2022–2023 was €5,191, favouring NI. The share of total per capita expenditure allocated to capital projects is somewhat higher in Ireland (13.4 per cent) compared to NI (8.7 per cent). Given the role of capital investment in determining economic growth, differences of this magnitude are likely to have long-run consequences. When broken down by individual expenditure area, these were significantly higher for 'defence' and 'other' spending in NI, and these two areas alone had a total per capita expenditure gap of €4,926 favouring NI. Nevertheless, it is probably more useful to focus on the per capita expenditure shares per priority area rather than expenditure levels, as this gives us a clearer indication of the difference in policy focus across the two jurisdictions. Apart from the difference in 'defence' and 'other' spending, which account for higher shares in NI, health spending accounts for 26.3 per cent of per capita expenditures in Ireland compared to 17.3 per cent in NI. Education accounts for 10.7 per cent and 9.5 per cent of total per capita expenditures in Ireland and NI respectively. Finally, social protection accounts for 30.1 per cent of total expenditures in NI compared to 27.9 per cent in Ireland.

TABLE 5.5 NATIONAL EXPENDITURES 2022–2023 – PER CAPITA PPP ADJUSTED, €

	NI	Ireland	NI %	Ireland %
Current expenditure	25,078	19,297	91.3	86.6
Capital expenditure	2,392	2,981	8.7	13.4
Main areas of expenditure				
Defence	1,196	282	4.4	1.3
Education	2,616	2,374	9.5	10.7
Environment protection	248	237	0.9	1.1
Health	4,739	5,853	17.3	26.3
Housing	903	1,525	3.3	6.8
Social protection	8,266	6,211	30.1	27.9
Transport	624	931	2.3	4.2
Other	8,878	4,866	32.3	21.8
Other, excluding public order and safety	7,691	-	28.0	-
Total expenditure	27,470	22,279	100	100

Source: ONS National Accounts and the 2023 Budget expenditure report for Ireland.

Notes: The breakdown of expenditure by main areas is the sum of both current and capital expenditure. Gross voted core current expenditure reflects the Government's commitment to grow core expenditure in line with the trend growth rate of the economy (Budget Expenditure Report, 2022). For Ireland, the 'other' category includes expenditure on areas such as: agriculture, food and the marine; children, equality, disability, inclusion and youth; enterprise, trade and employment; finance; foreign affairs; further and higher education, research, innovation and science; justice; public expenditure and reform; rural and community development; the Taoiseach's Office; and tourism, culture, arts, Gaeltacht, sport and media. For NI, the 'other' category includes expenditure on areas such as: international services; public sector debt interest; science and technology; employment policies; agriculture, fisheries and forestry; recreation, culture and religion; public order and safety; enterprise and economic development. Public sector debt interest in NI accounts for €2,696 (9.8% of total expenditure) per capita of expenditure in the 'other' category.

5.5 CONCLUSIONS

This study uncovers important differences in the composition of tax revenues and spending priorities between the two regions of Ireland and NI. At a per capita level, individuals in NI, on average, pay less than half the amount of personal income tax compared to their counterparts in Ireland. There are important differences in the relative importance of revenue sources and spending priorities across both economies. Brexit has had a clear influence on trade flows over recent years. With regards to differences in relative spending composition, Ireland's greater focus on capital and health spending points to a greater ability to focus on investments that are likely to stimulate future economic growth. NI's greater emphasis on social protection and defence are much less likely to generate future growth returns. Such variations in the composition of spending across both jurisdictions could, potentially, contribute to future divergence in both living standards and economic performance.

CHAPTER 6
Economic sectors

6.1 INTRODUCTION

This chapter examines the sectoral composition of both economies in terms of both employment and productivity. It also assesses the relative role of foreign-owned businesses in both jurisdictions.

6.2 OUTPUT, EMPLOYMENT AND PRODUCTIVITY AT A SECTORAL LEVEL

Tabel 6.1 shows the sectoral distribution of employment and gross value added (GVA) in Ireland and Northern Ireland (NI) in 2019. It should be noted that GVA levels in some sectors are heavily influenced by the activities of the foreign multinational sector in Ireland, such as manufacturing. As such, the level and contribution to output may be overstated; nevertheless, the analysis does give us insights into the extent GVA and employment shares vary, both within and between both economies.

Comparing employment distributions across sectors in NI versus Ireland, we see that while there are many similarities in 2019, some notable differences do exist. Public sector employment remains higher in NI, accounting for 29.2 per cent of total employment compared to 25.3 per cent in Ireland. Employment in Ireland is more heavily concentrated in the 'information and communication' and 'financial insurance' sectors, which account jointly for 9.8 per cent of jobs in Ireland relative to 5.4 per cent in NI. This is typically a high-wage, high productivity sector. Agriculture and manufacturing are somewhat more dominant in Ireland, while real estate activities have slightly higher employment shares in NI. However, despite having broadly comparable sectoral employment distributions, there are large differences in the sectoral contributions of GVA, which points to much higher levels of value added per worker in some sectors in particular economies. In Ireland, the manufacturing sector accounts for more than 44 per cent of total GVA, which is almost four times the sector's employment share, and over 2.5 times the same sector's GVA contribution in NI. This points to a major gap in value added levels, with productivity substantially higher in Irish manufacturing. Similarly, the GVA contribution of the information and communication sector in Ireland is approximately three times the Irish employment share and the NI GVA share, which again indicates a much higher concentration of high value added activity in Ireland relative to NI. There are some sectors where value added shares disproportionately outweigh employment shares in NI to a greater extent than in Ireland. In particular, Table 6.1 suggests that value added levels are higher in the construction sector in NI relative to Ireland.

TABLE 6.1 SECTORAL DISTRIBUTION OF OUTPUT (GVA) AND EMPLOYMENT, 2019

	Ireland		NI	
	Share of GVA	Share of emp.	Share of GVA	Share of emp.
Agriculture, forestry and fishing	0.8	4.4	1.4	3.5
Manufacturing	44.2	12.4	16.9	11.8
Construction	1.6	6.4	7.4	6.6
Wholesale and retail trade	7.5	25.4	19.4	26.2
Information and communication	18.3	5.3	4.6	3.0
Financial and insurance activities	3.9	4.5	5.1	2.4
Real estate activities	4.1	0.4	12.3	1.2
Professional, scientific and technical activities; administrative and support service activities	9.9	10.7	7.5	11.4
Public administration, defence, education, human health and social work activities	8.8	25.3	23.0	29.2
Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organisations and bodies	0.9	5.1	2.4	4.9
Total	100.0	100.0	100.0	100.0

Source: OECD regional economy database.
Notes: Output per sector is relative to GVA at constant prices, 2015. Employment per sector is relative to total employment.

We can get a clearer sense of potential productivity differences by examining data on labour productivity, which essentially combines employment and GVA information to get a per worker measure of output. Table 6.2 provides estimates of labour productivity for both jurisdictions, from the Organisation for Economic Co-operation and Development (OECD), for both 2015 and 2021. There are consistencies with the data in Table 6.1; for instance, labour productivity levels are substantially higher in Ireland in both manufacturing and information and communications, with these gaps appearing to have widened over the 2015 to 2021 period. Labour productivity in the Irish real estate activities sector was more than double the level reported in NI in 2021. Labour productivity in NI exceeded that in Ireland in both construction and agriculture in 2021; nevertheless, labour productivity in NI lagged that of Ireland in eight of ten sectors in 2021. Across all sectors, taking account of the usual caveats associated with possible distortions in the Irish data, average labour productivity in Ireland was over 2.5 times that of NI in both 2015 and 2021.

TABLE 6.2 LABOUR PRODUCTIVITY-SECTORAL DISTRIBUTION, 000S €

	2015	2021	2015	2021
	Ireland		NI	
Agriculture, forestry and fishing	24	30	23	36
Manufacturing	405	571	106	86
Construction	50	46	63	60
Wholesale and retail trade	64	55	44	43
Information and communication	251	489	80	90
Financial and insurance activities	194	132	103	128
Real estate activities	1,428	1,279	505	544
Professional, scientific and technical activities; administrative and support service activities	131	155	38	35
Public administration, defence, education, human health and social work activities	63	55	44	38
Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organisations and bodies	35	36	36	24
Total	2,644	2,847	1,043	1,087

Source: OECD regional labour markets database.
Notes: The OECD defines labour productivity as the ratio of total output per hour worked. It measures how efficiently labour input is combined with other factors of production and used in the production process. Labour input is defined as total hours worked of all persons engaged in production. Figures are in thousands and converted into euro.

Finally, foreign direct investment (FDI) is widely recognised as an essential factor in understanding the success of the Irish economy over recent decades, so it is useful to contrast and compare the role of such companies in the two economies (Table 6.3). By 2021, foreign-owned firms accounted for 13.3 per cent of employment in NI compared to 28.2 per cent of employment in Ireland. Between 2015 and 2021, the employment share of foreign-owned firms in Ireland increased by 6 percentage points, while falling by 0.7 percentage points in NI over the same period. Between 2015 and 2021, the numbers employed in foreign-owned firms in Ireland increased from 304,000 to 572,000, which compared to an increase from 82,000 to 89,000 in NI over the same period. Foreign-owned business tends to comprise large enterprises in both jurisdictions, as is evident by the fact their share in employment greatly exceeds their share in the total number of businesses. Turnover per worker in foreign-owned firms in Ireland in 2021 was €1.34 million compared to €355,000 in NI. Notwithstanding the usual caveats around data related to the FDI sector in Ireland, the finding that per worker productivity levels in foreign-owned firms in Ireland were almost four times that in NI in the same year points to a sharp divergence in the productive capacity of foreign-owned firms located in Ireland versus those in NI. In terms of the sectoral composition of FDI, 'services' (excluding financials) are important in both economies in terms of both number of enterprises and employment shares. Foreign-owned service companies accounted for 54 per cent of foreign employment in Ireland in 2021 compared to 34 per cent in NI. Between 2015 and 2021, the numbers employed in foreign-owned service firms in Ireland increased from 125,000 to 311,000, while remaining relatively stable over the same period in NI at approximately 29,000.

TABLE 6.3 SHARE AND DISTRIBUTION OF FOREIGN-OWNED BUSINESS

	2015	2021	2015	2021
	NI		Ireland	
Turnover per worker 000s, €	278.9	295.5	1,114.4	1345.7
% of businesses	1.3	1.5	1.3	3.4
% of employment	14.0	13.3	22.2	28.2
Foreign ownership (no. firms) by sector:				
Industry	160	220	672	1,135
Construction	55	75	119	771
Distribution	300	345	842	1,924
Services (excluding financials)	305	485	1,871	8,606
Total	820	1,125	3,504	12,436
Foreign ownership by sector, %				
Industry	19.5	19.6	19.2	9.1
Construction	6.7	6.7	3.4	6.2
Distribution	36.6	30.7	24.0	15.5
Services (excluding financials)	37.2	43.1	53.4	69.2
Total	100	100	100	100
Foreign ownership by employment				
Industry	30,400	32,945	92,600	132,800
Construction	475	1,090	2,251	13,879
Distribution	23,305	24,830	84,637	113,867
Services (excluding financials)	28,225	29,900	124,888	311,096
Total	82,405	88,765	304,376	571,642
Foreign ownership by employment, %				
Industry	36.9	37.1	30.4	23.2
Construction	0.6	1.2	0.7	2.4
Distribution	28.3	28.0	27.8	19.9
Services (excluding financials)	34.3	33.7	41.0	54.4
Total	100	100	100	100

Source: NI: Inter-Departmental Business Register for Northern Ireland and Office for National Statistics for turnover data; Ireland: CSO Business in Ireland 2015 and 2021.

Notes: The data for Ireland exclude the finance and insurance industry. Thus, in the table, the finance and insurance industry has been excluded from the calculations of the foreign-owned sectoral and employment distributions in NI to allow for greater comparability with the data for Ireland, where the comparable information is not available. The foreign-owned sector in NI is defined as non-UK businesses operating in NI. The data for turnover for NI refer to 2017 (for 2015).

6.3 CONCLUSIONS

While some broad similarities occur in the sectoral structure of employment in NI and in Ireland, there are more substantial variations in the sectoral distribution of GVA, pointing to large productivity differences in the two economies. This is borne out by the data on labour productivity, which demonstrates higher productivity levels in Ireland in eight of the ten sectors examined. The particular strength of

Ireland's FDI economy component is likely to be an important factor in explaining some of the differences in sectoral productivity.

CHAPTER 7

Measures of opportunity and well-being

7.1 INTRODUCTION

This chapter compares differences in measures of opportunity related to access to education and healthcare, as well as aggregate measures of welfare that will reflect cumulative differences in opportunities between Northern Ireland (NI) and Ireland across all aspects of the life cycle.

7.2 EDUCATIONAL ATTAINMENT

The academic literature on the importance of early years education is well established, particularly for closing social inequalities (Heckman, 2011). Here, the evidence points clearly to NI being a poor performer, in terms of enrolment rates, relative to Ireland, the EU27 and the United Kingdom (UK). We calculated the percentages of the population participating in education across age brackets, as well as information on both early school leaving and young people in the NEET category (not in employment, education or training) in both regions in 2018 and 2022 (Table 7.1). (For context, we also include the relevant rates for both the EU27 and the UK.) For early years education (3–5 years), NI's enrolment rates were recorded at 87 per cent in 2018, falling to 84 per cent in 2022. The comparable figures for Ireland were at 100 per cent and 93 per cent in 2018 and 2022 respectively. While the 2022 early years enrolment rate for Ireland was in line with that of the EU27 in that same year, it lay below the UK average of 98 per cent.

Enrolment rates among 6–14 year olds, a period that incorporates compulsory schooling ages, were 100 per cent in both NI and Ireland in 2022 – slightly above the averages for the UK and EU27 in that year. In terms of enrolment rates among the 15–19 year old cohort, a life stage that typically involves the end of second-level education in most countries, Ireland substantially outperforms the UK and the EU27. In NI, the enrolment rate among 15–19 year olds stood at 71 per cent in 2022, which was 10 percentage points behind the UK average and 21 percentage points behind the figure for Ireland. The finding that almost 30 per cent of young people aged 15–19 in NI are not enrolled in education, alongside the finding that the enrolment rate actually fell between 2018 and 2022, is extremely alarming. Enrolment rates among 20–29 year olds in Ireland were almost twice those of NI in 2018 and 2022, with NI enrolment rates among this age group also substantially lagging those of the EU27 and UK in 2022, by approximately 13 and 7 percentage points respectively. Data on the educational enrolment rates of older cohorts, which typically reflects lifelong learning, also indicate that educational participation levels in NI were well below the rates observed for Ireland in both 2018 and 2022. While rates of early school leaving in Ireland continued to fall

between 2018 and 2022, from 5 per cent to 2.7 per cent, early school leaving in NI increased from 9.4 per cent to 10 per cent over the same period. Finally, while the proportion of young people who were NEET fell in both economies between 2018 and 2022, the NEET rate in NI was 2.6 percentage points higher than it was in Ireland at the end of that period.

TABLE 7.1 MEASURES OF OPPORTUNITY, %

	2018	2022	2018	2022	2018	2022	2018	2022
Education enrolment rates by age range:	EU27		Ireland		NI		UK	
3–5 year olds	92.2	92.7	100	93.2	86.6	83.8	100	98.1
6–14 year olds	98.0	98.2	100	100	98.1	100	98.2	99.6
15–19 year olds	86.5	87.0	92.6	93.9	73.6	70.6	84.1	82.1
20–29 year olds	27.9	29.9	29.0	30.6	15.2	16.9	20.4	23.8
30–39 year olds	4.5	5.3	7.3	6.5	3.3	4.1	5.8	-
40–64 year olds	1.1	1.4	5.6	3.3	1.3	0.8	2.3	5.4
Rate of early leavers of education and training (in % of the total population aged 18–24)	10.5	9.6	5.0	3.7	9.4	10.0	10.6	10.7
Share of 18–24 year olds who are NEET	-	-	12.6	9.8	13.9	12.4	13.3	13.7

Source: OECD regional economy database.
Notes: UK early school leavers and NEET data are calculated as population weighted averages; Ireland's figure for NEETs in 2022 is also a population weighted average. It should be noted that these figures refer to those resident and enrolled in the jurisdiction and do not include those who have moved from NI to Ireland or the rest of the UK to study (see Smyth and Darmody, 2023).

7.3 HEALTH INDICATORS

In addition to education, access to healthcare is accepted as a key basic human right within advanced economies. Historically, there has been a perception that healthcare services in NI are superior relative to those in Ireland. However, this is no longer the case. Recent research has pointed to convergence in recent years due to a combination of regional disparities in National Health Service (NHS) performance and the combination of a series of austerity budgets in the UK, alongside increased health spending in Ireland (McGuinness and Bergin, 2020; Bergin and McGuinness, 2021). We now examine a number of metrics that provide us with an assessment of trends in access to health services in both jurisdictions. Table 7.2 provides data on waiting lists per 1,000 population for inpatient and outpatient procedures, by duration of wait, for both NI and Ireland, in 2024. Waiting lists for inpatient and outpatient are similar for waits of between zero and six months; however, the rates for longer durations are much higher in NI. There were 86 persons per 1,000 population on waiting lists (inpatient plus outpatient) for more than 18 months in NI, compared to 12 persons per 1,000 in Ireland (Table 7.2).

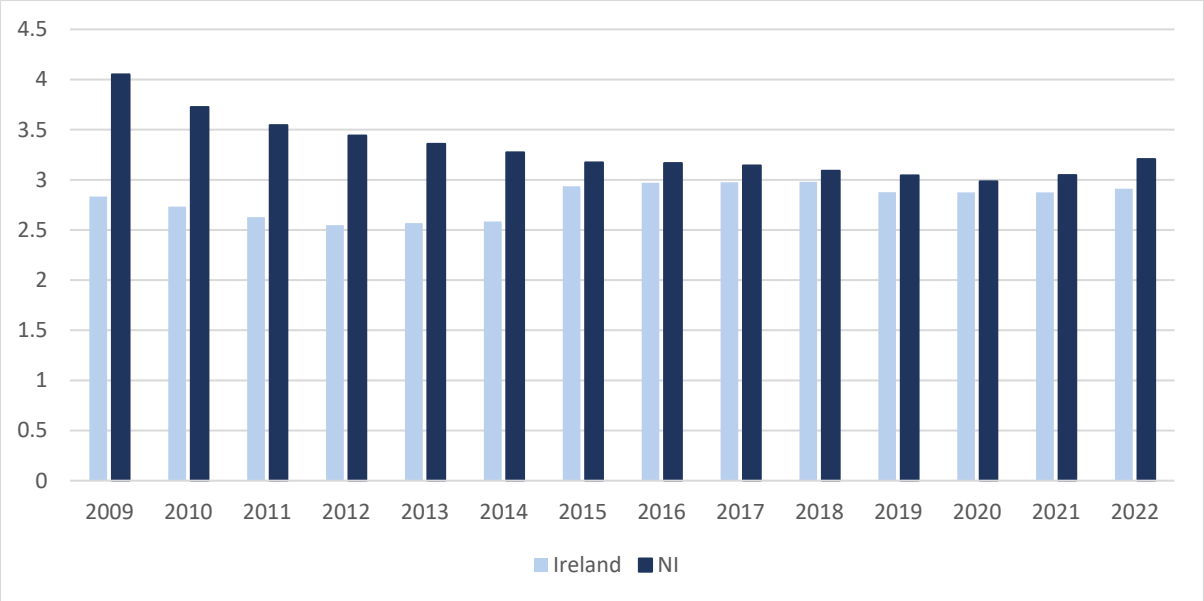
TABLE 7.2 INPATIENT AND OUTPATIENT WAITING LIST TIMES PER 1000, MARCH 2024

	<0–6 months	6–12 months	12–18 months	> 18 months	Total
Ireland:					
Inpatient	11	3	1	1	16
Outpatient	65	27	10	10	112
Inpatient + outpatient	75	30	11	12	128
NI:					
Inpatient	16	7	5	20	48
Outpatient	61	33	23	66	183
Inpatient + outpatient	77	40	28	86	231

Source: Data on waiting lists for Ireland come from the National Treatment Purchase Fund (NTPF) and the Department of Health for Northern Ireland.

Figure 7.1 plots the number of hospital beds per 1,000 population in NI and Ireland between 2009 and 2022. While the rate of hospital bed provision was substantially higher in NI in 2009, at 4.05 beds per 1,000 compared to 2.83 in Ireland, this gap has gradually narrowed over time by virtue of declines in provision in NI (rather than increases in provision in Ireland).

FIGURE 7.1 AVERAGE NUMBER OF HOSPITAL BEDS PER 1,000 POPULATION

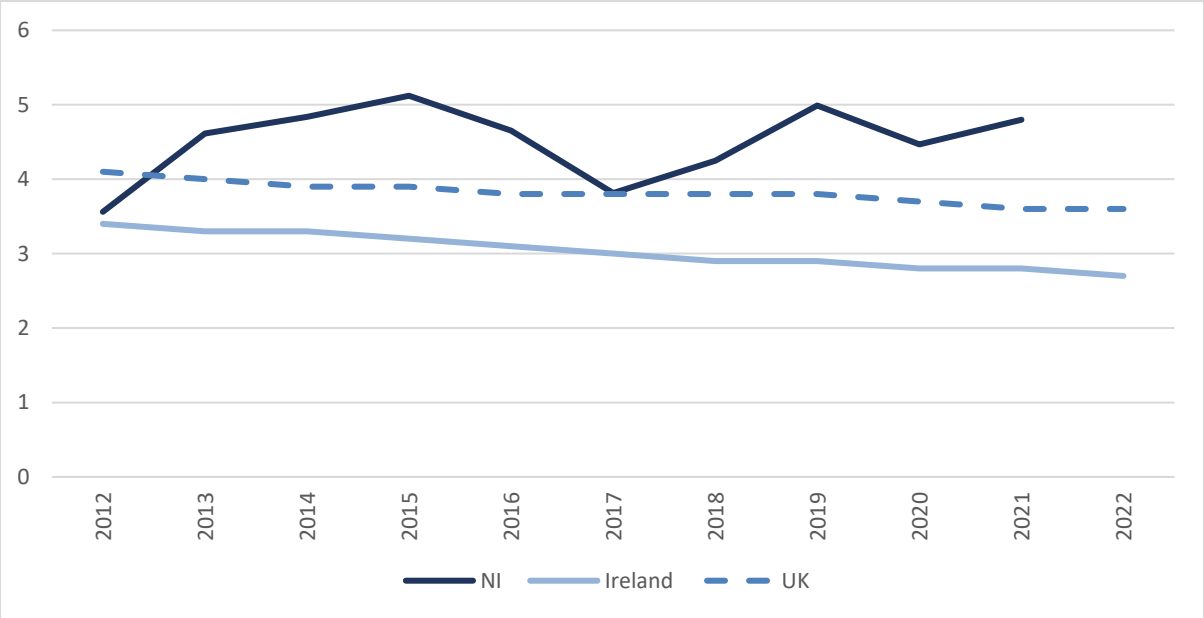


Source: National Healthcare Statistics 2023 for Ireland and Statista for NI.

We examined infant mortality rates per 1,000 live births in Ireland, the UK and NI over the period 2012 to 2022 (Figure 7.2). In 2012, infant mortality rates in NI and Ireland were broadly equivalent and below the UK average. However, the intervening period has seen infant mortality falling in both Ireland and the UK as a whole but rising in NI. In 2021, infant mortality rates per 1,000 live births were 2.8 in Ireland, 3.6 in the UK and 4.8 in NI. The emergence of a substantial infant

mortality rate gap between NI and Ireland over the period 2009 to 2021 is an extremely worrying development.

FIGURE 7.2 INFANT MORTALITY RATES (PER 1,000 LIVE BIRTHS)

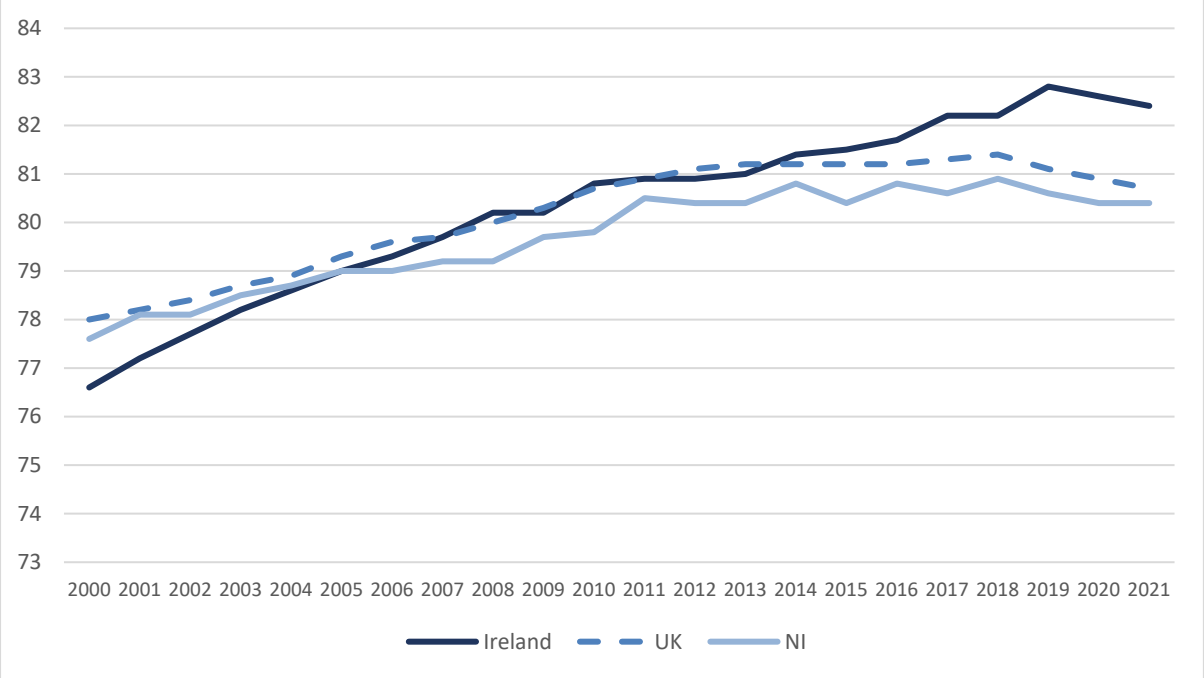


Source: CSO – Vital Statistics Annual Report; NISRA – Registrar General Annual Report for Stillbirths & Infant Deaths.

7.4 LIFE EXPECTANCY

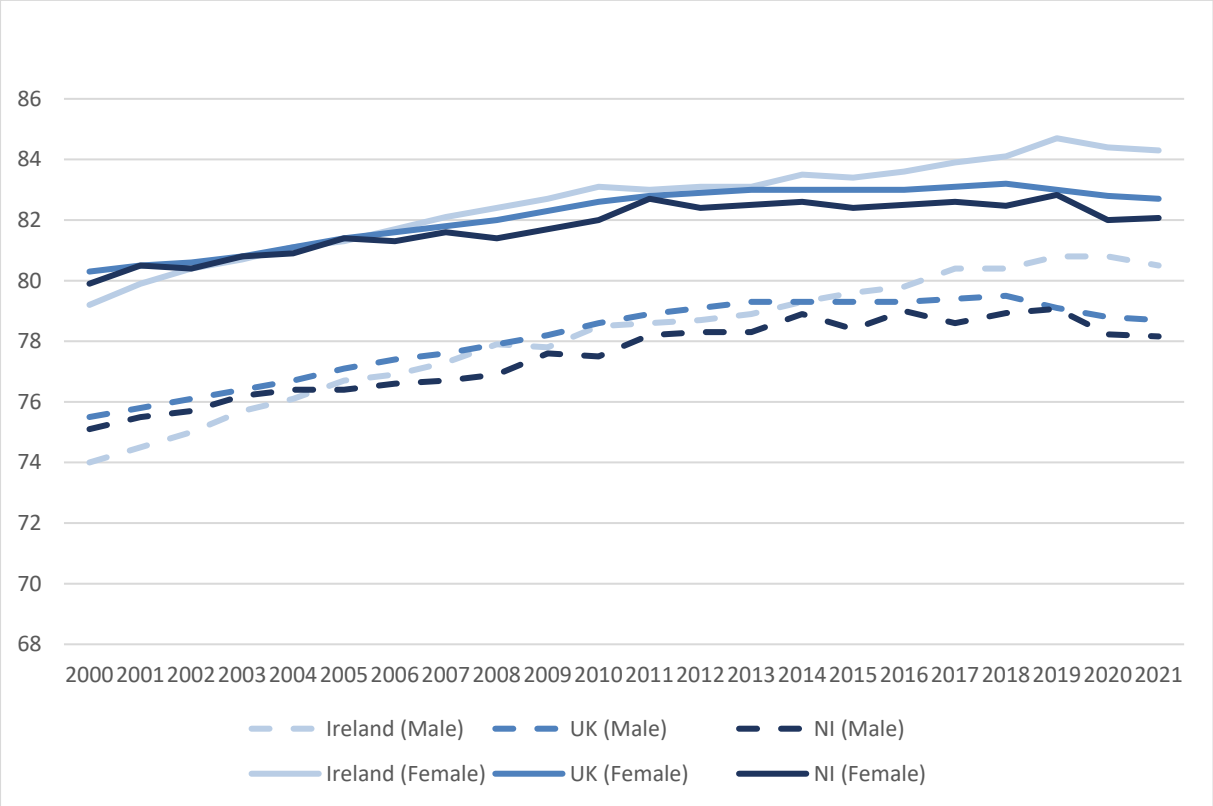
Finally, we examine patterns of life expectancy in both jurisdictions. This indicator reflects the impacts of multiple well-being determinants across a range of areas, including income levels, educational attainment and access to health services. Figure 7.3 plots the life expectancies for children below the age of one in Ireland, NI, the UK and the EU27 over the period 2000 to 2022. In 2000, life expectancy in Ireland was approximately one year lower than that in the UK and NI. The rates had converged by around 2006, with Irish life expectancies increasing more quickly relative to both the UK average and NI thereafter. In 2021, life expectancy for children aged below one in Ireland was 82.4 years compared to 80.4 years in NI and a UK average of 80.7 years. Figure 7.4 plots differences in life expectancy over time by region and gender, and we observed the familiar pattern that female life expectancies exceed those for males across all areas. The gender life expectancy gap in 2021 was 3.8 years in Ireland and 3.9 years in NI, with the figures for the UK average and the European Union (EU) standing at 4.2 and 5.7 years respectively. While the life expectancy rate in NI in 2021 was approximately equal to the EU27 average, the relatively rapid divergence between NI and Ireland over recent years largely reflects a growing divergence over time in key well-being determinants, such as living standards, education and certain aspects of healthcare access.

FIGURE 7.3 LIFE EXPECTANCY FOR UNDER 1 YEAR OLDS



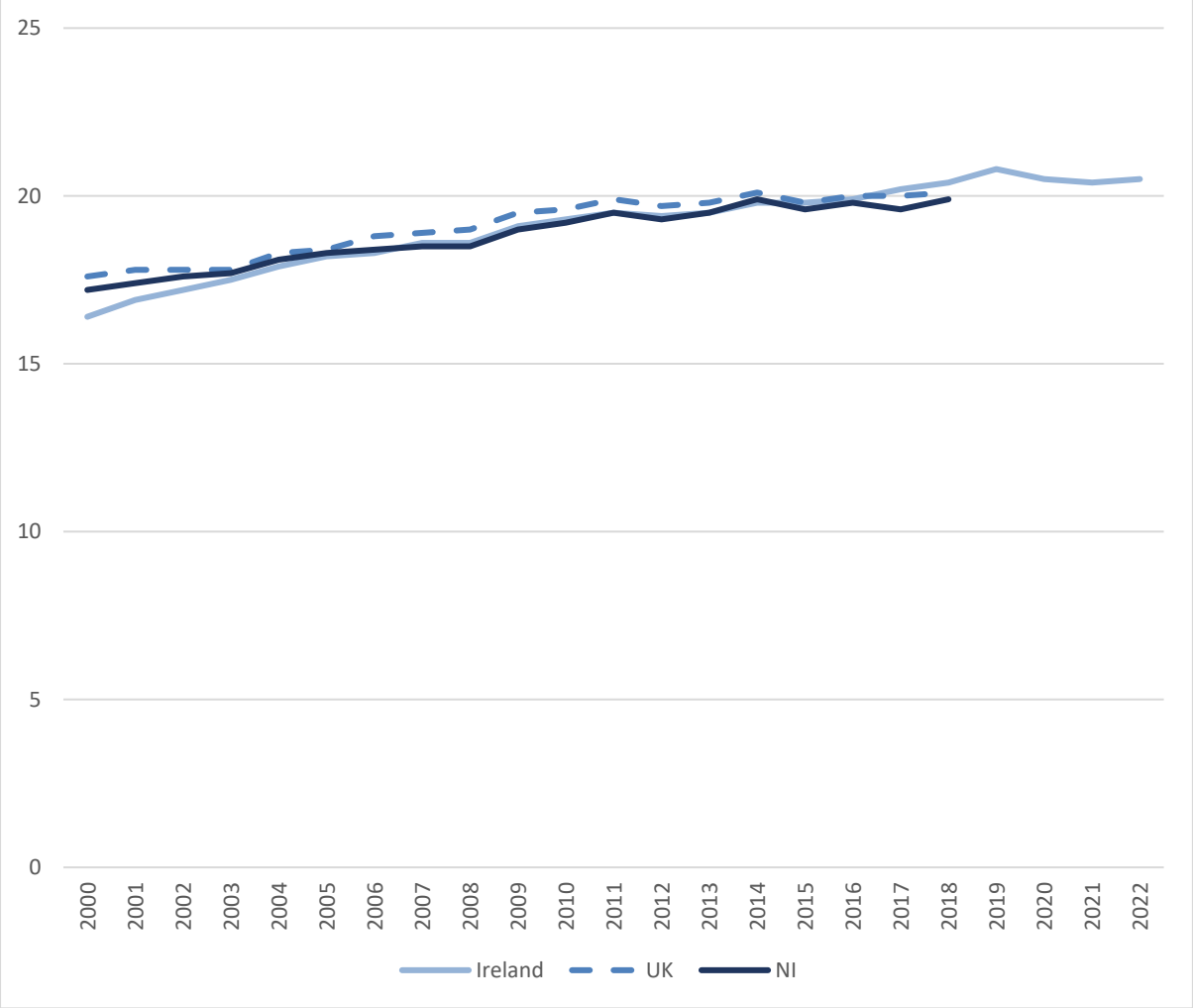
Source: OECD regional demography database.

FIGURE 7.4 LIFE EXPECTANCY BY GENDER FOR UNDER 1 YEAR OLDS



Source: OECD regional demography database.

FIGURE 7.5 LIFE EXPECTANCY, 65+



Source: Eurostat Regional Database.

7.5 CONCLUSIONS

NI lags Ireland in a substantial way in almost all aspects of educational attainment, with some gaps also opening up in access to healthcare in more recent years. While the life expectancy rate in NI in 2021 was approximately equal to the EU27 average, the divergence between NI and Ireland largely reflects a growing gap over time, demonstrated in this study, in key well-being determinants, including living standards, education and certain aspects of healthcare access.

CHAPTER 8
Conclusions

This report provides a high-level comparison of the economies of Ireland and Northern Ireland (NI) for recent years. A range of economic, socio-economic and demographic measures are used to explore similarities and differences in economic growth, living standards and general well-being and economic structures. While the primary focus is to provide a comparison of the economies of Ireland and NI over recent years, we also examine changes over time to assess how relativities have evolved in recent years.

It is important to recognise that the economies North and South on the island are distinct in important structural respects. NI forms a regional part of the overall United Kingdom (UK) economy with important implications, for instance, for NI's trade and labour market flows, as well as the organisation of public services and public policy configuration. Comparisons with Ireland as a national level economy, and an European Union (EU) Member State, will therefore not always be on a like-for-like basis. In making comparisons, it is also important to note the relatively strong economic growth in Ireland and the impact of Brexit on the whole of the UK in recent years, which additionally saw an absence of a functioning Northern Ireland Executive for a prolonged period. These wider contexts are reflected in metrics over recent years, but may not continue to impact in the same way in the time ahead.

In this context, an economic overview of Ireland and NI provides a contemporary analysis of relative economic performance and allows for differences between Ireland and NI to be better understood.

In 2022, the population in Ireland was 5.1 million and that of Northen Ireland was 1.9 million. Over the period of 2010 to 2022, Ireland experienced more rapid population growth, in large part driven by strong net migration flows in more recent years. As a result, Ireland has a younger age structure than that of NI, with an old-age dependency rate (population aged 65 and over relative to the population aged 15–64) of 23.1 in 2022, compared to 27.7 in NI. Having a relatively older population tends to put greater pressure on the social welfare system in later years, effects that are likely to be exacerbated by any continued impacts of Brexit that limit access to international labour markets.

Labour market participation rates for those of prime working age (16–64) are higher in Ireland than in NI, and a widening gap in participation rates has emerged over time. In 2010, the participation rate for those aged 16–64 was 71.6 in Ireland,

0.5 percentage points above that in NI, while in 2022 the participation rate in Ireland stood at 76.8 per cent, which was 4.4 percentage points higher than in NI. Employment rates in Ireland and Northern Ireland have evolved differently over time. Employment rates were higher in NI in 2010 but the subsequent strong recovery from the financial crisis in Ireland led to a large increase in employment rates, so that in 2022 the employment rate for those aged 16–64 was 73.3 in Ireland – 3 percentage points above that in NI. The relatively lower rates of labour market participation and employment in NI, coupled with the demographic challenge, will tend to raise the likelihood of both future and ongoing skill and labour shortages in that jurisdiction.

Overall, the business cycle is more evident in Ireland than in NI, with labour market indicators such as the unemployment rate, migration flows and NEET (not in employment, education or training) rates all displaying more volatility in Ireland than in NI. In recent years, the unemployment rate has been lower in NI while the NEET rate has been lower in Ireland. As a consequence, the performance levels of the Irish economy are much more prone to negative external shocks compared to the situation in NI.

When comparing living standards, we find that household disposable income was 18.3 per cent higher in Ireland than in NI in 2018, a gap that has widened over time. This represents a sizeable gap in living standards between Ireland and NI. We place more emphasis on this measure over other commonly used measures for living standards, as the latter can be heavily distorted for Ireland. This finding on the gap in living standards is reinforced using hourly wage data, which show earnings were 36 per cent higher in Ireland than in NI in 2022. The finding that living standards are diverging across both economies is certainly worrying from a policy perspective, and would tend to suggest that productivity differences are also becoming greater.

A number of important differences exist with regard to the relative structure of both economies in relation to tax revenue sources, spending priorities, labour productivity and the influence of foreign-owned companies. In terms of employment, public sector employment remains higher in NI, accounting for 29.2 per cent of total employment compared to 25.3 per cent in Ireland; however, this difference has narrowed substantially over time. Employment in Ireland is more heavily concentrated in the ‘information and communication’ and ‘financial insurance’ sectors, which account jointly for 9.8 per cent of jobs in Ireland relative to 5.4 per cent in NI. This sector typically contains high productivity and high wage jobs. With respect to trade, it is undoubtedly the case that Brexit has had a substantial influence on both north–south and east–west flows in very recent years. While Great Britain (GB) remains NI’s largest trading partner, there was a marked decline in trade between NI and GB over the 2015 to 2022 period, particularly in the GB share of services imports into NI. Recent years have also seen

an increase in trade activity between NI and Ireland, which has been particularly pronounced in goods exports between NI and Ireland, and services imports from Ireland to NI.

This study also uncovers important differences in the composition of tax revenues and spending priorities between the two regions. At a per capita level, individuals in NI, on average, pay less than half the amount of personal income tax (€2,980) paid by their counterparts in Ireland (€6,725). This disparity suggests that higher average incomes in Ireland, coupled with a more progressive tax system, results in a larger income tax share take. However, it is important to note that despite this, household disposable incomes remain substantially higher in Ireland. Corporation tax receipts per capita (€5,760) in Ireland were more than five times the amount collected in NI (€1,018) based on the most recent year of data. However, the analysis also indicates that corporation tax accounts for approximately 21 per cent of total tax receipts in Ireland (compared to 6 per cent in NI); therefore, almost 80 per cent of Ireland's per capita tax revenues come from sources other than corporation tax. On the expenditure side, health spending accounts for 26.3 per cent of per capita expenditures in Ireland compared to 17.3 per cent in NI. Education accounts for 10.7 per cent and 9.5 per cent of total per capita expenditures in Ireland and NI respectively.

Labour productivity is a key indicator of economic performance, and we found that labour productivity in NI lagged that of Ireland in eight of the ten sectors examined in 2021. A key driver of labour productivity in Ireland has been the growth of employment in foreign-owned businesses over recent decades, which has been accompanied by a rapid expansion in highly productive jobs. Between 2015 and 2021, the numbers employed in foreign-owned firms in Ireland increased from 304,000 to 572,000, compared to an increase from 82,000 to 89,000 in NI over the same period. Notwithstanding the usual caveats around data related to the foreign direct investment (FDI) sector in Ireland, the finding that productivity levels in Ireland's foreign-owned firms were almost four times that in NI in the same year points to a sharp divergence in the productive capacity of foreign-owned firms locating in these two jurisdictions.

When we compare differences in measures of opportunity related to access to education and healthcare between NI and Ireland, a number of important findings arise. The academic literature on the importance of early years education is well established, particularly for closing social inequalities (Heckman, 2006). However, the data demonstrate that NI is a poor performer in early years enrolment rates relative to average for the UK, Ireland and the EU27. For enrolment rates among 15–19 year olds, which typically reflect second level educational participation in most countries, Ireland substantially outperformed the UK and the EU27 in both 2018 and 2022; however, again, NI is an outlier. Educational enrolment rates

among 15–19 year olds in NI stood at 71 per cent in 2022, which was 10 percentage points behind the UK average and 21 percentage points behind the figure for Ireland.

The finding that 30 per cent of young people aged 15–19 in NI are not enrolled in education, and that this rate has been falling between 2018 and 2022, is extremely alarming. On its basis, it is not surprising that early school leaving remains a particular problem in NI. While rates of early school leaving in Ireland continued to fall between 2018 and 2022, from 5 per cent to 2.7 per cent, early school leaving in NI increased from 9.4 per cent to 10 per cent over the same period. Finally, while the proportion of young people who were NEET fell in both economies between 2018 and 2022, the NEET rate in NI was 2.6 percentage points higher than in Ireland at the end of the period. The general finding that gaps in educational attainment between NI and Ireland have continued to widen in some key areas, and that some enrolment rates in NI have actually been declining in very recent years, alongside a rise in early school leaving, is, again, a matter of real concern.

Access to healthcare is accepted as a basic human right within advanced economies, and waiting lists are a primary measure of the efficiency of healthcare systems. The rates of inpatient and outpatient waiting lists are similar across both jurisdictions for waits of between zero and six months; the rates for longer durations are much higher in NI. There were 86 persons per 1,000 population on waiting lists (inpatient plus outpatient) for more than 18 months in NI compared to an equivalent figure of 12 per 1,000 population in Ireland.

Infant mortality is another widely used measure of healthcare efficiency. Infant mortality rates are an important indicator of the effect of overall economic and social conditions on the health of mothers and infants, and is particularly influenced by the effectiveness of health systems, income and maternal level of education. In 2009, infant mortality rates in NI and Ireland were broadly equivalent and below the UK average; however, the intervening period has seen infant mortality falling in both Ireland and the UK as a whole but rising in NI. In 2021 infant mortality rates per 1,000 live births were 2.8 in Ireland, 3.6 for the UK average and 4.8 in NI. The emergence of a substantial infant mortality rate gap between NI and Ireland over the period 2009 to 2021 is an extremely worrying development.

Finally, we examine patterns of life expectancy in both jurisdictions, an indicator that tends to encapsulate the impacts of multiple well-being determinants across a range of areas including income levels, educational attainment and access to health services. In 2021, life expectancy for children aged below 1 year in Ireland was 82.4 years, compared to 80.4 years in NI and a UK average of 80.7 years. While the life expectancy rate in NI in 2021 was approximately equal to the EU27 average, a divergence here between NI and Ireland over recent years largely reflects a

growing gap over time, demonstrated in this study, in key well-being determinants, including living standards, education and certain aspects of healthcare access.

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