A Regional Perspective on Ireland, North and South



SECRETARIAT PAPER

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Abbreviations

| BMUA | Belfast Metropolitan Urban Area |
|-------|---|
| CARL | Cognitive Analytics Research Lab |
| CIDRA | Centre for Industrial Digitalisation, Robotics and Automation |
| cso | Central Statistics Office |
| EBR | East Border Region |
| EMRA | Eastern and Midland Regional Assembly |
| EU | European Union |
| FDI | Foreign Direct Investment |
| GDP | Gross Domestic Product |
| GNI | Gross National Income |
| GVA | Gross Value Added |
| ICBAN | Irish Central Border Area Network |
| ISNI | Investment Strategy for Northern Ireland |
| LCDCs | Local Community Development Committees |
| LECPs | Local Economic and Community Plans |
| MASPs | Metropolitan Area Strategic Plans |
| NDP | National Development Plan |
| NESC | National Economic and Social Council |
| NISRA | Northern Ireland Statistics and Research Agency |
| NPF | National Planning Framework |
| NSMC | North South Ministerial Council |
| NSOs | National Strategic Outcomes |
| NUTS | Nomenclature of Territorial Units for Statistics |
| NWRA | Northern and Western Regional Assembly |

| NWRDF | North West Regional Development Fund |
|--------|---|
| OPR | Office of the Planning Regulator |
| ONS | Office for National Statistics |
| PPNs | Public Participation Networks |
| PPS | Purchasing Power Standard |
| RSES | Regional Spatial and Economic Strategy |
| RSF | Regional Strategic Framework |
| SMEs | Small and Medium Sized Enterprises |
| SPCs | Strategic Policy Committees |
| THRIVE | Transformation for Healthcare Research Innovation and Value-based Ecosystem |
| UAPs | Urban Area Plans |
| UK | United Kingdom |
| VAT | Value Added Tax |
| | |

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1.1 Introduction

In May 2021, NESC published a Secretariat paper on the economy, as part of its Shared Island work. That paper described the similarities and differences between the two economies on the island of Ireland and the connections between them. It pointed out that, in addition to the considerable differences between the two economies in terms of productivity and other economic measures, there is also substantial variation within both economies.

The purpose of this paper is to further examine the variations across different regions and counties on the island of Ireland, and to examine regional development policies north and south. Part 1 provides a statistical profile of the regions on the island, beginning in Section 1.2 with an overview of key features of the island of Ireland. An explanation of the regional data used in this paper is presented in Section 1.3. Subsequent sections describe the regions on the island of Ireland in terms of the following dimensions: population, employment, education, value added, output per head and productivity, and income.

Policy issues are considered in Part 2. Section 1.10 provides an outline of the current approaches to regional policy in Ireland and Northern Ireland, and describes arrangements for co-operation on matters relevant to regional development. This section also considers the particular development issues for the border area and the ability of policy to address them, and includes a discussion of the North-West area as a cross-border region. Conclusions are presented in Section 1.11.



1.2 Overview

By 2020 the total population on the island had reached approximately 6.9 million people, comprising around 4.98 million in Ireland and 1.90 million in Northern Ireland. Ireland has experienced very strong population growth since 1991, when the population was just over 3.5 million. Ireland's population increased by 1.45 million people or 41.2 per cent between 1991 and 2020; while continuing growth brought the population to over 5 million by 2021, for the first time since 1851. Over the same period (1991 to 2020), Northern Ireland's population increased by approximately 288,000 people, or 17.9 per cent.

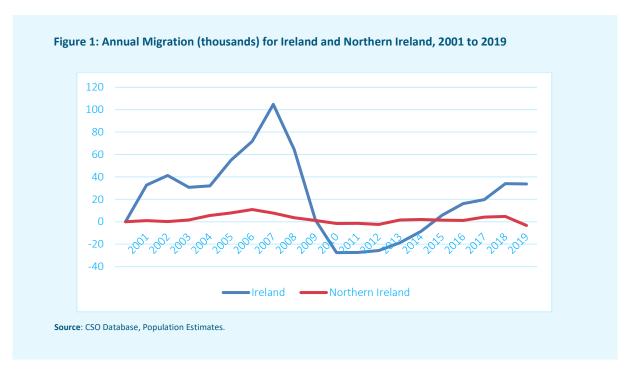
The changes in recent decades take place against a background of very different historical population experiences. Both parts of the island had population declines in the nineteenth century, but that experienced in the area now constituting Ireland was much more severe than that of Northern Ireland. Northern Ireland's population in 2020 was 14.9 per cent higher than its level in 1841, while the population of Ireland in the same year had reached only 76.2 per cent of its 1841 level. These historical differences are reflected in a much higher population density in Northern Ireland, where the average population density was 138.7 people per square kilometre in 2019, compared to 70.9 in Ireland.

Faster population growth in Ireland arises from both a higher natural increase and higher net migration, compared to Northern Ireland (see Table 1). Net migration has had more impact on population trends in Ireland. Of the annual increase in population in Ireland – 62,500 between 2001 and 2019 – the annual contribution from migration was 24,300, or 39.0 per cent. Over the same period for Northern Ireland, the annual increase in population was 10,900, of which 2,500 or 11.2 per cent was from migration. Migration in Ireland is also more volatile than Northern Ireland (see Figure 1).

Table 1: Components of Population Change (thousands), Ireland and Northern Ireland, 2001-2019

| | Ireland | Northern Ireland |
|----------------------------|---------|---------------------|
| Annual births | 68.9 | 23.6 |
| Annual deaths | 30.8 | 14.9 |
| Natural increase | 38.1 | 8.7 |
| Immigrants | 80.6 | 24.1 |
| Emigrants | 56.2 | 21.7 |
| Net migration | 24.3 | 2.5 |
| Change in total population | 62.5 | 10.9 |

 $\textbf{Source}: CSO\ Database,\ Population\ Estimates\ and\ NISRA,\ 2020\ Mid\ Year\ Population\ Estimates\ for\ Northern\ Ireland,\ \underline{https://www.nisra.gov.uk/publications/2020-mid-year-population-estimates-northern-ireland.}$



Migration in Ireland has added to the educated population, although there have been some periods of net emigration of those with third-level education. This was the case during the years 2010 to 2012 following the economic crash. From 2013 to 2021, there has been net migration to Ireland of people with third-level education of 15,400 annually.

A substantial share of population and economic activity is located in areas connected to Dublin and Belfast and in the areas between these two cities. A recent study has described the features of the Dublin-Belfast Economic Corridor. This study defined the Corridor as consisting of Dublin City plus the counties of Fingal, Meath and Louth; and Belfast City plus the district councils of Armagh, Banbridge and Craigavon; Newry, Mourne and Down; and Lisburn and Castlereagh. The population of the Corridor defined in this way was 2.04 million people in 2016, 30.8 per cent of the island's population. Of the approximately three million people in employment on the island in 2019, almost one-third were living (and typically working) in the Corridor. The employment rate along the corridor (i.e., percentage of residents over 16 in employment) was 64 per cent in 2019, slightly higher than the averages for Ireland and Northern Ireland. An above-average share of the population along the corridor has third-level qualifications. This share is highest in Dublin, Fingal, and Lisburn & Castlereagh, where the rates are all close to 40 per cent (Blair *et al.*, 2021).

Eurostat provides data on broadly defined metropolitan regions, which encompasses the areas from which people commute to cities. The population of the Dublin metropolitan region in 2019, as stated by Eurostat was 2.107 million, and that of the Belfast metropolitan region was almost 790,000. The third largest metropolitan region is Cork, with a population of 705,950 people in 2019.² Taken together, these three broadly defined metropolitan regions had a population of over 3.6 million people in 2019 and over half of the island's population (52.9%).

If Derry, Letterkenny and Strabane are viewed together as an urban area, there is a metropolitan area population of 193,000 people and the area is the fourth-largest urban conglomeration on the island (NWRA, 2020). NESC is undertaking further research on the North-West as a cross-border region, so the analysis in this paper pays particular attention to characteristics of this area.

¹ The Corridor as defined in this study does not include all of the areas that are part of the Dublin and Belfast economies. It does not include South Dublin or Dun Laoghaire-Rathdown, nor areas immediately north or east of Belfast.

While the metropolitan regions of Cork and Belfast as defined by Eurostat are similar in size, the population of Belfast city (local government district), of approximately 340,000, is considerably higher than Cork city at 126,000 (2016 data in each case).

1.3 Regional Data

The regional presentation of data in this paper is based on EU classification of NUTS-level regions. Both Ireland and Northern Ireland are NUTS 1 level regions. NUTS 2 level are the basic regions used to administer EU regional policy. Northern Ireland as a whole is also a NUTS 2 level region while Ireland is divided into three NUTS 2 level regions: Eastern and Midland, Northern and Western, and South. Ireland is further divided into eight NUTS 3 level regions. Northern Ireland is divided into 11 NUTS 3 regions. These are considerably smaller than the NUTS 3 level regions in Ireland, and there is no region in Northern Ireland that is comparable to the Border region in Ireland. The analysis in this paper is based primarily on NUTS level 3 regions, for which there is data available north and south. For Ireland, county-level data will also be used.

The eight NUTS 3 level regions for Ireland are: Dublin, Mid-East, Midland, South-East, South-West, Mid-West, West and Border. The counties that constitute each of these regions are shown in Table 2. The NUTS 3 regions are grouped together to form three higher level NUTS 2 regions as follows. The Border and West regions together form the Northern and Western region; the three southern regions (Mid-West, South-West and South-East) form the Southern region; while Dublin, the Mid-East and Midland regions make up the Eastern and Midland region. Each of the three high-level regions have Regional Assemblies. Their role in regional planning is discussed in Section 1.10 below.

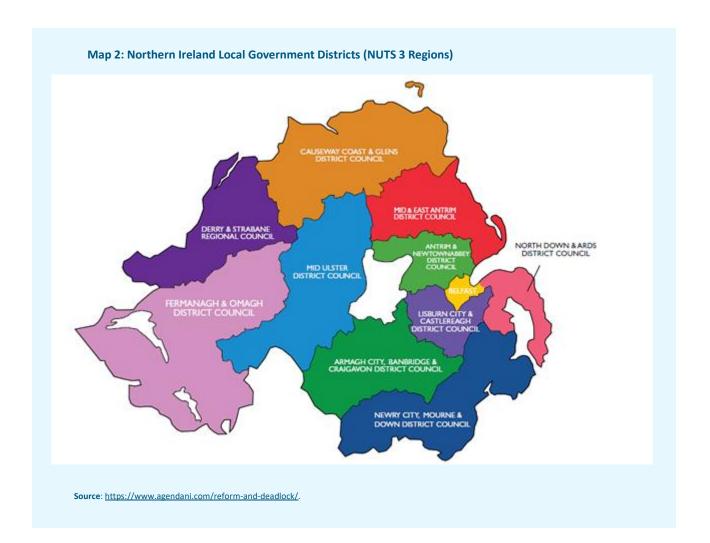
In general, much more data is available at sub-national level for Ireland than Northern Ireland, so more analysis is undertaken for Ireland in this paper.

The NUTS 3 regions of Northern Ireland correspond to the 11 local government districts of Northern Ireland. Belfast is by far the largest in terms of people and the economy. The Antrim and North Newtownabbey district is immediately north of Belfast, and continuing north and along the east coast is Mid and East Antrim. Lisburn and Castlereagh lies to the west and south of Belfast, while the Ards and North Down district is to the east. The Causeway Coast and Glens lies along the north coast. Northern Ireland has no official region that is directly equivalent to the Border region in Ireland. There are five districts that touch the border. Starting from the most north-westerly point of Northern Ireland, these are as follows: Derry City and Strabane; Fermanagh and Omagh; Mid Ulster; Armagh City, Banbridge and Craigavon; and Newry, Mourne and Down.

Table 2: Regions in Ireland

| NUTS 2 region | NUTS 3 Region | County |
|--------------------|---------------|-----------|
| - | Border | Donegal |
| | | Sligo |
| | | Leitrim |
| Northern & Western | | Cavan |
| Northern & Western | | Monaghan |
| | West | Galway |
| | | Mayo |
| | | Roscommon |
| _ | Mid-West | Clare |
| _ | | Tipperary |
| _ | | Limerick |
| _ | South-East | Waterford |
| Southern | | Kilkenny |
| _ | | Carlow |
| _ | | Wexford |
| _ | South-West | Cork |
| | | Kerry |
| _ | Dublin | Dublin |
| _ | Mid-East | Wicklow |
| _ | | Kildare |
| _ | | Meath |
| Eastern & Midland | | Louth |
| | Midlands | Longford |
| | | Westmeath |
| | | Laois |
| | | Offaly |





1.4 Population

1.4.1 Ireland

The population of the official Dublin region (i.e., Dublin City and County) in 2018 was 1.36 million people, which accounted for 28.2 per cent of Ireland's population. Dublin's share of Ireland's employment was higher at over one-third (34.3%) of employment.³ The gap between the population and employment shares points to the significance of commuting to Dublin for work. The Dublin region, in conjunction with the surrounding Mid-East (Meath, Kildare, Wicklow and Louth), represented almost 43 per cent of Ireland's population in 2018. Dublin has by far the highest population density of any region in Ireland (1487.3 people per square kilometre) and is highly urbanised, with over 90 per cent of people living in settlements with populations of over 10,000 (Bradley & Best, 2012).

³ The employment data is from the Eurostat national accounts and so are based on the location of the workplace rather than the residence of the person in employment.

Table 3: Employment, Population and Population Density by Region in Ireland, 2018

| | | Percentage of Total | Donulation | | Percentage of Total |
|----------------------|------------|---------------------|-----------------------|------------|---------------------|
| | Population | Population | Population Density | Employment | Employment |
| Ireland | 4,830,392 | 100.0% | 70.9 | 2,212,040 | 100.0% |
| Northern and Western | 856,252 | 17.7% | 34.5 | 363,460 | 16.4% |
| Border | 400,868 | 8.3% | 35.9 | 162,170 | 7.3% |
| West | 455,384 | 9.4% | 33.5 | 201,290 | 9.1% |
| Southern | 1,604,865 | 33.2% | 54.9 | 715,770 | 32.4% |
| Mid-West | 480,408 | 9.9% | 47.7 | 208,090 | 9.4% |
| South-East | 428,436 | 8.9% | 60.3 | 172,730 | 7.8% |
| South-West | 696,021 | 14.4% | 57.8 | 334,950 | 15.1% |
| Eastern and Midland | 2,369,275 | 49.0% | 167.1 | 1,132,810 | 51.2% |
| Dublin | 1,360,963 | 28.2% | 1,487.3 | 758,360 | 34.3% |
| Mid-East | 708,423 | 14.7% | 104.2 | 267,280 | 12.1% |
| Midland | 299,889 | 6.2% | 46.3 | 107,170 | 4.8% |

Source: Eurostat database. The employment data is from the Eurostat national accounts and so are based on the location of the workplace rather than the residence of the person in employment.

The second largest region in population terms is the South-West, with a population of close to 700,000 or 14.4 of Ireland's population in 2018. The South-West is more urbanised than the rest of Ireland outside Dublin, with close to 40 per cent of the population living in settlements larger than 10,000. The regions with the lowest degrees of urbanisation are the Midland, Border and West regions, with less than one-fifth of the population living in settlements larger than 10,000 in each case (Bradley and Best, 2012). The combined Northern and Western region accounts for approximately 18 per cent of Ireland's population, and 82 per cent of the population live in the Eastern and Midland, and the Southern regions.

All regions have participated in Ireland's strong population growth since 1991, but there are variations. The strongest population growth has been in the areas surrounding or within commuting distance of large urban centres. Between 1991 and 2000, the fastest population growth was in the Mid-East (76.3%) and the Midlands (49.8%), while the South-East (42.6%) was the only other region to have population growth above the average for Ireland (41.2%). All three regions have, to varying degrees, become places from which some of the residents commute to Dublin. Population growth in the Dublin region itself for the period 1991 to 2020 was 38.3 per cent, just below the average for Ireland (41.2%). However, in the decade since 2011, the Dublin region's population increase was above average. The regions with the slowest growth in population over the 1991 to 2020 period were the Mid-West (26.6%) and the Border (30.6%). However, population growth in these regions was still considerably faster than that experienced in Northern Ireland over the same period (17.9%). All regions in Ireland have experienced substantial population growth.

Table 4: Percentage Change in Population by Region in Ireland, 1991 to 2020

| | 1991- 1996 | 1996- 2002 | 2002- 2006 | 2006- 2011 | 2011- 2016 | 2016- 2020 | 1991- 2020 |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Ireland | 2.8% | 8.0% | 8.2% | 8.2% | 3.8% | 4.5% | 41.2% |
| Northern and Western | 1.9% | 6.5% | 8.5% | 8.6% | 1.2% | 3.6% | 34.0% |
| Border | 0.9% | 4.9% | 8.0% | 9.8% | 0.6% | 3.4% | 30.6% |
| West | 2.7% | 7.9% | 8.9% | 7.5% | 1.7% | 3.7% | 37.0% |
| Southern | 2.4% | 7.0% | 7.4% | 6.8% | 2.9% | 3.7% | 34.1% |
| South-East | 2.5% | 9.0% | 9.6% | 8.3% | 3.2% | 4.2% | 42.6% |
| South-West | 2.7% | 6.2% | 7.0% | 7.0% | 3.9% | 3.8% | 34.7% |
| Mid-West | 1.8% | 6.7% | 6.1% | 5.3% | 1.2% | 3.2% | 26.6% |
| Eastern and Midland | 3.6% | 9.3% | 8.7% | 9.1% | 5.4% | 5.4% | 49.3% |
| Dublin | 3.2% | 6.1% | 5.7% | 7.2% | 5.8% | 5.2% | 38.3% |
| Mid-East | 5.7% | 17.0% | 14.0% | 11.5% | 5.3% | 6.5% | 76.3% |
| Midland | 1.3% | 9.6% | 11.7% | 12.2% | 3.5% | 4.0% | 49.8% |

Source: Calculated from CSO Database, Census Time Series. The changes in population from 2016 to 2020 are based on CSO, Annual Population Estimates. These differ somewhat from the Census population, in that the Census refers to the actual population in Ireland on Census night including visitors, but excluding residents who are abroad on Census night. Annual Population Estimates refer to the normally resident population.

The implications of these growth rates are that, since 1991, the population share of the overall Eastern and Midland region⁴ has increased by two percentage points to reach 48.9 per cent of Ireland's population in 2016. This was driven by the large increase in the population share of the Mid-East region of 2.7 percentage points. The South-East also had a small increase of 0.2 percentage points in its population share. All of the other regions have experienced modest declines in their population shares. The largest fall was for the Mid-West region, with a fall of one percentage point to 9.9 per cent in 2016. Both the Border and the South-West regions experienced declines of 0.6 per cent. The West region had a slight fall of just 0.2 percentage points in its population share.

Population growth at county level is available up to 2016 and greater variation is evident at this level (Morgenroth, 2018). By far the fastest growing county over the period was Fingal, with growth of 93.8 per cent compared to 35.1 per cent for Ireland. All of the Mid-East counties had above average growth, in particular Meath (85.1%) and Kildare (81.4%). Laois also had a very strong percentage growth at 61.9 per cent, although this is from a low base. Other counties in the wider Dublin commuting zone with well above average growth were Wexford (46.7%), Westmeath (43.5%) and Cavan (44.3%). Dublin City's population growth was around half the national average at 15.9 per cent, while South Dublin's population grew by only 4.4 per cent.

⁴ This is the combination of the Dublin, Mid-East and Midland region.

Table 5: Regional Shares of Population for Ireland, 1991 to 2020

| | 1991 | 1996 | 2002 | 2006 | 2011 | 2016 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Ireland | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Northern and Western | 18.6% | 18.4% | 18.2% | 18.2% | 18.2% | 17.8% |
| Border | 8.9% | 8.7% | 8.4% | 8.4% | 8.5% | 8.3% |
| West | 9.7% | 9.7% | 9.7% | 9.8% | 9.7% | 9.5% |
| Southern | 34.8% | 34.6% | 34.3% | 34.0% | 33.6% | 33.3% |
| South-East | 8.7% | 8.7% | 8.8% | 8.9% | 8.9% | 8.9% |
| South-West | 15.1% | 15.1% | 14.8% | 14.6% | 14.5% | 14.5% |
| Mid-West | 10.9% | 10.8% | 10.7% | 10.5% | 10.2% | 9.9% |
| Eastern and Midland | 46.6% | 47.0% | 47.5% | 47.8% | 48.2% | 48.9% |
| Dublin | 29.1% | 29.2% | 28.7% | 28.0% | 27.7% | 28.3% |
| Mid-East | 11.8% | 12.1% | 13.1% | 13.8% | 14.3% | 14.5% |
| Midland | 5.8% | 5.7% | 5.8% | 5.9% | 6.2% | 6.1% |

Source: Calculated from CSO Database, Census Time Series.

Outside Leinster, the fastest population growth over the 1991 to 2016 period was in Galway city at 54.7 per cent, while Galway County also had above average growth of 38.5 per cent. Galway is distinctive among Ireland's five county cities⁵ in having faster growth in the city than in the county.

Cork County experienced strong population growth of 47.4 per cent over this period, but Cork City had a small fall in population (-1.3%). In both Limerick and Waterford, population growth was again stronger in the County than in the City, although in both of these cases the combined growth was below the national average. Relative growth of cities and the surrounding county is influenced by the location of the boundaries between city and county.

Table 6: Percentage Change in Population by County in the Border Region, 1991 to 2016

| | 1991- 1996 | 1996- 2002 | 2002- 2006 | 2006- 2011 | 2011- 2016 | 1991- 2016 |
|----------|---------------|---------------|---------------|---------------|---------------|---------------|
| Border | 0.9 | 4.9 | 8.0 | 9.8 | 0.6 | 26.3 |
| Leitrim | -1.0 | 3.0 | 12.2 | 9.8 | 0.8 | 26.7 |
| Sligo | 1.9 | 4.3 | 4.6 | 7.4 | 0.2 | 19.7 |
| Cavan | 0.3 | 6.8 | 13.2 | 14.3 | 4.1 | 44.3 |
| Donegal | 1.5 | 5.8 | 7.0 | 9.4 | -1.2 | 24.3 |
| Monaghan | 0.0 | 2.5 | 6.5 | 8.0 | 1.5 | 19.7 |
| | | | | | | |
| Ireland | 2.8 | 8.0 | 8.2 | 8.2 | 3.8 | 35.1 |

Source: Calculated from CSO Database, Census Time Series.

⁵ These are Dublin, Cork, Limerick, Waterford and Galway.

The Border region has had below-average population growth as noted above, but there is diversity within the region in this respect. The strongest population growth in this region over the period 1991 to 2016 was in Cavan (44.3%), which was well above the national average (35.1%). Cavan's population has been boosted by the rise in commuting to Dublin. The slowest growth was in Sligo (19.7%) and Monaghan (19.7%), while Donegal (24.3%) and Leitrim (26.7%) also had population growth that was below the national average (35.1%). Leitrim experienced declining population for decades, but from the mid-1990s had a population revival, while from 2002 to 2011 its population growth exceeded the national average. From 2011 to 2016, Leitrim's population growth was slower at 0.8 per cent and below the national average (3.8 per cent).

The growth pattern has not been consistent over time (Morgenroth, 2018). The periods 2002-2006 and 2006-2011 saw the lowest divergence in regional population growth rates, and some instances of regions outside Leinster having above-average population growth: from 2002-2006 the West's population grew by 8.9 per cent compared to the average for Ireland of 8.2 per cent, while from 2006-2011 the Border region's population grew by 9.8 per cent.

The period 2011-2016 showed greater divergence in terms of population trends than had been experienced for many decades. During this period, population growth in both Dublin (5.8%) and the Mid-East (5.3%) was well above the figure for Ireland (3.8%). The South-West also had population growth just above the growth for Ireland (3.9%). All other regions had growth below the average for Ireland, with population growth particularly low in the Border region at 0.6 per cent. There were absolute declines in population in Donegal (-1.2%), and Mayo (-0.1%) — this was something that neither county had experienced for several decades. South Dublin also had a large fall in population of 17.8 per cent.

In the 2016-2020 period, population growth in Dublin (5.2%) and the Mid-East (6.5%) continued to be well above the rate for Ireland (4.5%), while the South-West was just below this rate at 3.8 per cent. However, there was a recovery in population growth in other regions: Border (3.6%), West (3.4%) and South-East (4.2%).

The question arises as to why the 2011 to 2016 period was so different from the long-term patterns. The start of this period occurred during the last major recession, although most of the years in question are ones of recovery. The recession was more severe in regions outside Dublin. It is likely that the slower population growth in many regions (and the absolute declines in Donegal and Mayo) in the initial recovery period was a delayed response to this.

Population trends can be summarised as follows. Over the 1991 to 2020 period, total population in Ireland increased by almost 1.5m people or 41.2 per cent. All regions participated in this growth. The strongest population growth was in counties close to or within commuting distance of Dublin, while there was also strong growth in Cork County and Galway City. The slowest population growth was in the Mid-West (26.6%) and Border (30.6%) regions. Dublin's population growth since 1991 at 38.3 per cent was somewhat below the national average (41.2 per cent), but has been above average over the past decade.

1.4.2 Northern Ireland

The Belfast local government district represents just under one fifth of Northern Ireland's population but a much higher share of its employment (30.2% in 2018). A characteristic it shares with Dublin is an employment share that is proportionately greater than its population. However, this gap is substantially wider in the case of Northern Ireland. The next largest district in population terms is Armagh City, Banbridge and Craigavon, which has 11.4 per cent of the population. All of the other districts have less than 10 per cent of the population.

Table 7: Employment, Population and Population Density by Region in Northern Ireland, 2018

| | | Percentage | | | Percentage |
|--------------------------------------|------------|------------|------------|------------|------------|
| | | of Total | Population | | of Total |
| | Population | Population | Density | Employment | Employment |
| Northern Ireland | 1,875,957 | 100.0% | 138.7 | 817,000 | 100.0% |
| Belfast | 340,377 | 18.1% | 2,470.6 | 247,000 | 30.2% |
| Armagh City, Banbridge and Craigavon | 213,219 | 11.4% | 160.0 | 80,000 | 9.8% |
| Newry, Mourne and Down | 179,777 | 9.6% | 107.1 | 62,000 | 7.6% |
| Ards and North Down | 160,397 | 8.6% | 283.4 | 43,000 | 5.3% |
| Derry City and Strabane | 150,449 | 8.0% | 120.2 | 60,000 | 7.3% |
| Mid Ulster | 147,300 | 7.9% | 80.8 | 59,000 | 7.2% |
| Causeway Coast and Glens | 144,105 | 7.7% | 72.6 | 45,000 | 5.5% |
| Antrim and Newtownabbey | 141,994 | 7.6% | 248.7 | 64,000 | 7.8% |
| Lisburn and Castlereagh | 143,286 | 7.6% | 284.6 | 61,000 | 7.5% |
| Mid and East Antrim | 138,441 | 7.4% | 130.8 | 50,000 | 6.1% |
| Fermanagh and Omagh | 116,612 | 6.2% | 40.8 | 46,000 | 5.6% |
| | | | | | |

The slowest population growth over the period 2001 to 2020 was in Belfast, which had growth of just 4.2 per cent. Derry City and Strabane experienced similarly slow growth (5.1%). The fastest growth in population in percentage terms was in areas along the M1 corridor (Armagh City, Banbridge and Craigavon, 23.4%), Lisburn and Castlereagh (17.6%), Newry, Mourne and Down (18.2%) as well as in some rural areas, particularly Mid Ulster (25.1%).

The slow population growth in Belfast may be a concern, but is not a sign of economic weakness. Belfast is a major centre of economic activity and employment: over the period 2000 to 2018 its employment growth (25.4%) was the fastest of any district in Northern Ireland. The slow population growth is partly an issue of geographic scale, with population growth occurring outside Belfast City. However Dublin City had faster population growth, although Dublin City's growth was also slower than that of surrounding areas.⁶

bublin City's population growth is not available for the period 2001-2018 shown in Table 7. However, over the period 2002 to 2016 population growth for Dublin City was 11.9 per cent compared to 3.4 per cent for Belfast City.

Table 8: Percentage Change in Population by Region in Northern Ireland, 2001 to 2020

| | 2001-2006 | 2006-2011 | 2011-2016 | 2016-2020 | 2001-2020 |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Northern Ireland | 3.2% | 4.1% | 2.6% | 1.8% | 12.2% |
| Antrim and Newtownabbey | 3.5% | 4.1% | 1.7% | 1.9% | 11.6% |
| Armagh City, Banbridge and | | | | | |
| Craigavon | 6.4% | 7.0% | 5.0% | 3.3% | 23.4% |
| Belfast | -0.8% | 2.4% | 1.7% | 0.9% | 4.2% |
| Causeway Coast and Glens | 4.6% | 2.5% | 1.9% | 1.0% | 10.3% |
| Derry City and Strabane | 1.4% | 1.6% | 1.3% | 0.6% | 5.1% |
| Fermanagh and Omagh | 3.4% | 3.8% | 2.0% | 1.3% | 11.0% |
| Lisburn and Castlereagh | 2.9% | 5.5% | 4.4% | 3.7% | 17.6% |
| Mid and East Antrim | 3.6% | 2.5% | 1.8% | 1.2% | 9.4% |
| Mid Ulster | 7.2% | 8.9% | 4.6% | 2.5% | 25.1% |
| Newry, Mourne and Down | 5.9% | 5.9% | 3.2% | 2.2% | 18.2% |
| Ards and North Down | 2.6% | 2.3% | 1.7% | 1.5% | 8.4% |

Source: NISRA (2021), 2020 Mid Year Population Estimates for Northern Ireland, All Areas-Population Totals (2001-2020 including historical NI 1821-2020). Available at: https://www.nisra.gov.uk/publications/2020-mid-year-population-estimates-northern-ireland [accessed 15/10/2021].

1.5 Employment

1.5.1 Employment Growth

Notwithstanding the sharp fall in employment in the earlier recession (2008 to 2012), Ireland experienced a large increase in employment from 2000 to 2018 of 30.4 per cent. The corresponding increase for Northern Ireland over this period was 14.4 per cent. Within Ireland, the strongest employment growth was in the Mid-East (41.4%), Dublin (37.2%) and the South-West (34.9%). The slowest employment growth was in the Mid-West (roughly half the rate of Ireland's employment growth) at 14.3 per cent, and the Border Region at 22.6 per cent. Employment growth in the Mid-West over this period was approximately the same as for Northern Ireland (14.4%).

Table 9: Percentage Change in Employment by Region in Ireland, 2000 to 2018

| | 2000 2000 | 2000 2012 | 2012 2010 | 2000 2010 |
|----------------------|-----------|-----------|-----------|-----------|
| Ireland | 2000-2008 | 2008-2012 | 2012-2018 | 2000-2018 |
| ITEIATIU | 25.5 | -13.9 | 20.8 | 30.4 |
| Northern and Western | 23.3 | -17.2 | 21.8 | 24.3 |
| Border | 20.5 | -19.3 | 26.1 | 22.6 |
| West | 25.5 | -15.6 | 18.5 | 25.6 |
| Southern | 22.2 | -14.7 | 19.4 | 24.6 |
| Mid-West | 17.8 | -18.1 | 18.5 | 14.3 |
| South-East | 26.8 | -20.6 | 19.1 | 19.8 |
| South-West | 22.8 | -8.6 | 20.2 | 34.9 |
| Eastern and Midland | 28.6 | -12.3 | 21.3 | 36.7 |
| Dublin | 25.9 | -9.7 | 20.7 | 37.2 |
| Mid-East | 35.8 | -17.8 | 26.6 | 41.4 |
| Midland | 29.7 | -15.9 | 13.0 | 23.3 |
| Northern Ireland | 11.3 | -5.9 | 9.2 | 14.4 |
| Island of Ireland | 21.3 | -11.8 | 17.4 | 25.7 |

Within Northern Ireland, the strongest employment growth was in Belfast with an increase of 25.4 per cent over the 2000 to 2018 period – this was much stronger than other regions/local government districts in Northern Ireland. Two other districts that had above average employment growth were Ards and North Down (16.2%) and Derry City and Strabane (15.5%). The slowest employment growth was in Mid and East Antrim where employment grew by just 2.0 per cent.

Table 10: Percentage Change in Employment by Region in Northern Ireland, 2000 to 2018

| | 2000-2008 | 2008-2012 | 2012-2018 | 2000-2018 |
|----------------------------|-----------|-----------|-----------|-----------|
| Northern Ireland | 11.3 | -5.9 | 9.2 | 14.4 |
| Belfast | 17.3 | -4.3 | 11.8 | 25.4 |
| Armagh City, Banbridge and | | | | |
| Craigavon | 8.2 | -6.3 | 8.1 | 9.6 |
| Newry, Mourne and Down | 7.0 | -6.6 | 8.8 | 8.8 |
| Ards and North Down | 16.2 | -7.0 | 7.5 | 16.2 |
| Derry City and Strabane | 11.5 | -6.9 | 11.1 | 15.4 |
| Mid Ulster | 5.6 | -7.0 | 11.3 | 9.3 |
| Causeway Coast and Glens | 12.5 | -6.7 | 7.1 | 12.5 |
| Antrim and Newtownabbey | 10.3 | -6.3 | 6.7 | 10.3 |
| Lisburn and Castlereagh | 11.1 | -6.7 | 8.9 | 13.0 |
| Mid and East Antrim | 4.1 | -7.8 | 6.4 | 2.0 |
| Fermanagh and Omagh | 9.5 | -6.5 | 7.0 | 9.5 |
| Ireland | 25.5 | -13.9 | 20.8 | 30.4 |
| Island of Ireland | 21.3 | -11.8 | 17.4 | 25.7 |

1.5.2 Employment by Sector

The sectoral composition of employment by region in 2018 is shown in Table 11. The main difference in the composition of employment between Ireland and Northern Ireland is that the **public administration**, **defence**, **health and education** sector is larger in Northern Ireland (by four percentage points), while the **general services** sector (retail and wholesale, food and accommodation etc.) is smaller in Northern Ireland (by two percentage points) compared to Ireland. A significant influence on this is a relatively larger tourism sector in Ireland. In Table 11 employment in **agriculture**, **forestry and fishing** is shown as having a very low share (0.6%) of employment in Northern Ireland. This is likely to be an understatement as other sources show a higher share: the Eurostat Labour Source Survey shows employment in agriculture in Northern Ireland at 2.8 per cent of total employment. The data used here, however, has the advantage of covering each district. In Ireland this sector accounts for just under 5 per cent of employment.

Most employment in public administration, defence, health and education is in the public sector, but there is also private employment – including private hospitals, nursing homes and crèches. The public sector in Northern Ireland, excluding public corporations (operating in the market sector), represented 24.2 per cent of total employment in 2019. The public sector in Ireland (excluding commercial semi-states) represented 17.4 per cent of employment in the same year (Cahill, 2021).

Table 11: Sectoral Composition of Employment by Region, Ireland and Northern Ireland, 2018

| | | | | Information | Public | | |
|----------------------------|---------------------------|-------------------|--------------|-------------------------|----------------------|-----------|-------|
| | Andrew Breeze | | | & Comm., | admin, | | |
| | Agriculture Forestry & | Industry excl. | | Financial, Professional | defence, health & | All Other | |
| | Fishing | construction | Construction | & Technical | education | Services | Total |
| Ireland | 4.9 | 11.1 | 6.9 | 19.5 | 25.1 | 32.5 | 100 |
| Northern and | | | | | | | |
| Western | 8.1 | 12.7 | 8.2 | 12.5 | 26.3 | 32.2 | 100 |
| Border | 9.2 | 11.9 | 8.6 | 11.4 | 26.6 | 32.4 | 100 |
| West | 7.3 | 13.3 | 7.8 | 13.5 | 26.0 | 32.1 | 100 |
| Southern | 7.9 | 13.0 | 7.6 | 15.2 | 24.7 | 31.6 | 100 |
| Mid-West | 8.5 | 14.7 | 7.8 | 13.6 | 25.8 | 29.6 | 100 |
| South-East | 8.9 | 12.3 | 8.1 | 12.3 | 25.8 | 32.6 | 100 |
| South-West | 7.0 | 12.4 | 7.3 | 17.6 | 23.5 | 32.2 | 100 |
| Eastern and | | | | | | | |
| Midland | 1.9 | 9.3 | 6.1 | 24.5 | 25.0 | 33.2 | 100 |
| Dublin | 0.3 | 7.4 | 5.4 | 31.0 | 23.9 | 32.1 | 100 |
| Mid-East | 3.7 | 12.9 | 7.1 | 13.2 | 27.7 | 35.5 | 100 |
| Midland | 8.6 | 14.4 | 8.9 | 6.8 | 25.4 | 35.8 | 100 |
| Northern Ireland | 0.6 | 14.4 | 6.8 | 18.2 | 29.2 | 30.7 | 100 |
| Belfast | 0.0 | 6.9 | 3.2 | 32.8 | 31.5 | 25.8 | 100 |
| Armagh City, | | | | 02.0 | 02.0 | | |
| Banbridge and | | | | | | | |
| Craigavon | 0.0 | 19.8 | 7.4 | 15.0 | 27.2 | 30.9 | 100 |
| Newry, Mourne and Down | 1.0 | 10.0 | 0.0 | 0.7 | 20.2 | 24.4 | 100 |
| Ards and North | 1.6 | 18.0 | 9.8 | 9.7 | 26.2 | 34.4 | 100 |
| Down | 0.0 | 9.1 | 4.5 | 16.3 | 29.5 | 40.9 | 100 |
| Derry City and | | | | | | | |
| Strabane | 0.0 | 13.3 | 6.7 | 15.0 | 35.0 | 30.0 | 100 |
| Mid Ulster | 0.0 | 30.5 | 13.6 | 6.8 | 20.3 | 28.8 | 100 |
| Causeway Coast | | | | | | | |
| and Glens | 2.2 | 11.1 | 8.9 | 8.9 | 31.1 | 37.8 | 100 |
| Antrim and Newtownabbey | 0.0 | 15.9 | 7.9 | 12.5 | 28.6 | 34.9 | 100 |
| Lisburn and | 0.0 | 15.5 | 7.5 | 12.3 | 20.0 | 54.5 | 100 |
| Castlereagh | 0.0 | 13.1 | 8.2 | 14.8 | 32.8 | 31.1 | 100 |
| Mid and East | | | | | | | |
| Antrim | 0.0 | 26.0 | 8.0 | 10.0 | 22.0 | 34.0 | 100 |
| Fermanagh and Omagh | 2.2 | 15.2 | 10.9 | 0 7 | 20.4 | 22.6 | 100 |
| Olliagii | 2.2 | 15.2 | 10.9 | 8.7 | 30.4 | 32.6 | 100 |

The public administration, defence, health and education sector accounted for around one quarter of employment in all regions in Ireland. There is more variation in this sector's share across the regions of Northern Ireland. The lowest shares are in Mid Ulster (20.3%) and Mid and East Antrim (22.0%). Derry City and Strabane has the highest share of employment in Northern Ireland in this sector (35.0%). The counties in the North-West on the southern side of the border, particularly Donegal and Sligo, derive an above-average share of their income from this sector (see Section 1.9).

The biggest regional variation in employment relates to the sector covering **information and communications, financial, professional and technical** services. This sector accounted for a substantially higher share of employment in Belfast (32.8%) and Dublin (31.0%) than in any other region. The South-West region also had an above-average share of employment in this sector, at 17.6 per cent.

The category **All Other Services** covers retail, wholesale, food and drink, and a wide range of personal services. This is the largest sector of employment and covers close to one-third of employment in all regions in Ireland. In Northern Ireland, its share of employment ranges from 25.8 per cent in Belfast, to 40.9 per cent in Ards and North Down. The greater variation in employment shares in Northern Ireland is influenced by the fact that the regions involved are smaller than those used for Ireland.

Industry and construction represent a lower share of employment in Dublin and Belfast compared to other regions. Within Ireland, the regions with the highest share of employment in industry are the Mid-West (14.7%) and Midland (14.4%). In Northern Ireland the districts with the highest share of employment in industry are Mid Ulster (30.5%) and Mid and East Antrim (26.0%). Productivity in Mid and East Antrim is the highest in Northern Ireland, and this is likely to arise from an above-average share of industrial employment. The Midland region has the highest share of employment in construction (8.9%) among regions in Ireland, while in Northern Ireland Mid Ulster has an unusually high share of employment in construction (30.5%).

1.5.3 Labour Force Participation and Employment Rates

The labour force participation rate⁷ (also known as the activity rate) in 2019 for the population aged 15 and over was 62.3 per cent in Ireland, and 60.1 per cent in Northern Ireland. In both cases, this was above the EU average, but somewhat lower than the UK at 63.2 per cent. The situation is different, however, if one focuses on the core workingage population of 15 to 64 years olds. For this age group the participation rates in Ireland (73.3%) and Northern Ireland (72.9%) are close to the EU average of 74.0 per cent, but well below the rate for the UK (78.1%) and the higher-performing member states of the EU, such as Sweden (82.9%) and Denmark (79.1%). The other side of this is that labour force participation rates for older people (aged 65 or over) in both Ireland (12.2%) and Northern Ireland (10.3%) were well above the EU average (6.5%).

A possible influence on the relatively high participation rate for those aged 65 or over in Ireland could be a relatively high share of employment in agriculture, where people often do not retire at normal retirement age. This however does not apply for Northern Ireland, where agriculture is a low share of employment. Another possible factor could be more limited pension provision, in Ireland and the UK, compared to the richer EU member states. The reasons for relatively high labour participation among older people in Ireland, north and south, merits further investigation.

A similar pattern is evident for employment rates: for the population aged 15 or over, both Ireland and Northern Ireland have employment rates above the EU average, but for the population aged 15 to 64 the rates are well below the UK and high-performing EU member states.

⁷ The labour force participation rate refers to the share of the working-age population (which can be defined in different ways) that is in the labour force (i.e. either in employment or seeking employment).

Table 12: Participation/Activity Rates for Ireland, Northern Ireland, UK and Selected EU Member States, 2019

| | From 15 to 64 years | 15 years or over | 65 years or over |
|----------------------|------------------------|------------------|---------------------|
| Ireland | 73.3 | 62.3 | 12.2 |
| Northern and Western | 72.0 | 60.5 | 15.0 |
| Southern | 71.5 | 60.0 | 12.2 |
| Eastern and Midland | 74.8 | 64.6 | 10.9 |
| Northern Ireland | 72.9 | 60.1 | 10.3 |
| Denmark | 79.1 | 62.4 | 8.7 |
| France | 71.6 | 55.3 | 3.4 |
| Finland | 78.3 | 59.4 | 6.6 |
| Sweden | 82.9 | 66.3 | 10.4 |
| United Kingdom | 78.1 | 63.2 | 11.1 |
| European Union (28) | 74.0 | 58.1 | 6.5 |

Table 13: Employment Rates for Ireland, Northern Ireland, UK and Selected EU Member States, 2019

| | From 15 to 64 years | 15 years or over | 65 years or over |
|----------------------|---------------------------|---------------------|---------------------|
| Ireland | 69.5 | 59.3 | 12.0 |
| Northern and Western | 68.4 | 57.6 | 14.9 |
| Southern | 67.4 | 56.7 | 12.0 |
| Eastern and Midland | 71.3 | 61.6 | 10.7 |
| Northern Ireland | 70.9 | 58.5 | 10.2 |
| Denmark | 75.0 | 59.2 | 8.5 |
| Finland | 72.9 | 55.4 | 6.5 |
| Sweden | 77.1 | 61.7 | 10.1 |
| France | 65.5 | 50.6 | 3.3 |
| United Kingdom | 75.2 | 60.9 | 11.0 |
| European Union (28) | 69.2 | 54.5 | 6.4 |

Source: Eurostat database.

Data on regional participation rates for those aged 15 years and over is available at regional level for Ireland. This data shows that the highest labour force participation rate within Ireland in 2020 was in Dublin (64.3%), followed by the Mid-East (62.0%), and the West (61.1%). Participation was lowest in the Border region, at 56.0 per cent. This was five percentage points below the level for Ireland (61.1%), and more than eight percentage points below the level for Dublin. The gap in participation was wider in 2020 compared to 2019 (when the Border region was 3.4 percentage points below the average for Ireland), indicating an above-average impact of the Covid-induced recession on the Border region.

Table 14: Participation/Activity and Unemployment Rates by Region for Ireland, 2019 and 2020

| | Participation, Rate (15 | | Unemployment rate | | |
|----------------------|----------------------------|-------|-------------------|------|--|
| | 2019 | 2020 | 2019 | 2020 | |
| Northern and Western | 60.5% | 58.7% | 4.8% | 5.0% | |
| Border | 58.9% | 56.0% | 4.2% | 5.5% | |
| West | 61.9% | 61.1% | 5.2% | 4.6% | |
| Southern | 60.0% | 59.4% | 5.5% | 5.8% | |
| Mid-West | 59.0% | 57.9% | 5.3% | 6.1% | |
| South-East | 59.3% | 58.2% | 7.2% | 6.6% | |
| South-West | 61.1% | 61.0% | 4.6% | 5.1% | |
| Eastern and Midland | 64.6% | 63.2% | 4.7% | 5.8% | |
| Dublin | 66.1% | 64.3% | 4.5% | 6.1% | |
| Mid-East | 64.2% | 62.0% | 5.0% | 5.1% | |
| Midland | 58.4% | 60.5% | 5.7% | 6.0% | |
| Ireland | 62.3% | 61.1% | 5.0% | 5.7% | |

 $\textbf{Source} \hbox{: CSO Databank, Labour Force Survey Quarterly Series}.$

For Northern Ireland, data on labour force participation/activation, and on employment rates at local government district level, is published for those aged 16 and over, and for 16 to 64 year olds. We focus initially on the data for those aged 16 and over, as this is closest to the regional data published by the CSO. The highest activity or participation rates in Northern Ireland, for those aged 16 years and over in 2019, were in Lisburn and Castlereagh (68.0%) and Antrim and Newtownabbey (67.0%).

Of the five districts along the border, two have participation rates well below the average for Northern Ireland: Fermanagh and Omagh (54.6%) and Derry City and Strabane (57.7%). Labour force participation in Derry City and Strabane is more than ten percentage points lower than the highest region in Northern Ireland (Lisburn and Castlereagh), and three percentage points below the average for Northern Ireland. In the case of Armagh City, Banbridge and Craigavon, the participation rate at 60.9 per cent is almost equal to the average for Northern Ireland (60.8%). The two other districts along the border have above-average labour force participation: Mid Ulster (67.0%) and Newry, Mourne and Down (62.2%).

Table 15: Employment Rate, Activity Rate and Unemployment Rate by Region for Northern Ireland, 2019

| | Employment rate | Activity Rate (16+) | Unemployment Rate |
|--------------------------------------|--------------------|------------------------|----------------------|
| Antrim and Newtownabbey | 65.3% | 67.0% | 2.7% |
| Ards and North Down | 59.5% | 60.9% | 2.2% |
| Armagh City, Banbridge and Craigavon | 59.3% | 60.9% | 2.7% |
| Belfast | 56.9% | 58.5% | 2.7% |
| Causeway Coast and Glens | 52.8% | 54.7% | 3.6% |
| Derry City and Strabane | 56.2% | 57.7% | 2.3% |
| Fermanagh and Omagh | 53.1% | 54.6% | 2.9% |
| Lisburn and Castlereagh | 66.8% | 68.0% | 1.8% |
| Mid and East Antrim | 58.3% | 59.9% | 2.6% |
| Mid Ulster | 65.1% | 67.0% | 2.9% |
| Newry, Mourne and Down | 60.6% | 62.2% | 2.7% |
| Northern Ireland | 59.3% | 60.8% | 2.6% |

Source: NISRA (2020), Labour Force Survey Tables for Local Government Districts 2009-2019. Available at: https://www.nisra.gov.uk/publications/labour-force-survey-tables-local-government-districts-2009-2019 [accessed 15/10/2022].

Outside the districts along the border, participation is also well below average in the Causeway Coast and Glens (54.7%) along the north coast. Participation is also below average in Belfast (58.5%).

A broadly similar pattern is evident among employment rates. The average employment rate for Northern Ireland in 2019 was 59.3 per cent. The regions with the highest and lowest employment rates are the same as for participation rates. The lowest employment rates were for the Causeway Coast (52.8%), Fermanagh and Omagh (53.1%), and Derry City and Strabane (56.2%).

It may seem surprising that both the participation rate and the employment rate for Belfast are both below the average for Northern Ireland, despite that city being a major employment centre. This combination arises from a substantial number of people living in other areas having employment in Belfast, while there is below-average labour market participation among the resident population.

1.5.4 Unemployment

Unemployment is lower in Northern Ireland compared to Ireland. In the first quarter of 2021, the seasonally-adjusted rate of unemployment in Ireland for those aged 15-74 was 7.3 per cent, while the rate for Northern Ireland (aged 16 and over) was 3.8 per cent. Within both jurisdictions, there is less regional variation in unemployment rates, compared to that evident in participation and employment rates. In 2019, the lowest unemployment rate in Ireland was, in fact, in the Border region (4.2%). In 2020 the lowest rate for Ireland for that year was the West (4.6%).

Unemployment is consistently low across all districts of Northern Ireland. In 2020 the lowest rate was in Lisburn and Castlereagh (1.8%) while the highest was in the Causeway Coast and Glens (3.6%).

1.6 Education

The contrasting evolution of education north and south is examined by FitzGerald (FitzGerald, 2018/19). Free education began in Northern Ireland in 1944, while it was not until 1967 that this took place in Ireland. FitzGerald points out that the introduction of free education in Ireland was the beginning of a long process of educational upgrading, resulting in a dramatic increase in the educational attainment of the population. There was not been comparable progress in Northern Ireland. FitzGerald argues that the contrasting education experience in Ireland north and south 'has played a vital role in determining the different experiences of two economies over the last 30 years' (FitzGerald, 2018/19: 195).

The share of the working-age population (aged 25-64) in Ireland with third-level education, as defined by Eurostat in 2019, was the highest in the EU at 47.3 per cent. The share of the adult population in Northern Ireland with third-level education in the same year was 40.6 per cent. This was also above the EU (15) average of 34.7 per cent. However, some EU member states, particularly Germany, combine lower participation in third-level education with higher levels of vocational education. The share of the Northern Ireland population with third-level education in 2019 was below the UK average (44.7 per cent) and the fifth-lowest among 12 UK regions.

The share of the working-age population in Northern Ireland with third-level education has risen in recent years, from 34.4 per cent in 2016 to 40.6 per cent in 2019. In 2016, the share of the working-age population with third-level education in 2016 was the lowest of any UK region.

The share of the population in Northern Ireland for whom lower secondary represented their highest level of education – 23.8 per cent in 2019 – was the highest of any UK region, with the exception of the North East where the share was marginally higher at 23.9 per cent. The share of the adult population in Ireland that had only completed lower secondary education was 16.3 per cent in 2018.

The share of children leaving the education system before completing the Leaving Certificate has fallen dramatically in Ireland since the late 1980s, so that Ireland has one of the lowest drop-out rates from education in the EU. By contrast, Northern Ireland has the second-highest rate of early school leavers in the UK (after Wales) (FitzGerald, 2018/19). In 2018, the share of the population participating in education at age 17 was 96.0 per cent in Ireland, and 87.2 per cent in Northern Ireland (Eurostat data).

The relatively low share of the population of working age with third-level education in Northern Ireland, relative to Ireland and the UK, is due more to the emigration of graduates than to low transition rates to third-level, according to FitzGerald (2018/19), who estimates that Northern Ireland is losing about a quarter of its young people with third-level education via emigration. Graduate emigration is also a feature of Ireland, but this is combined with substantial return migration. In 2011 and 2016, the census data shows that of Irish graduates living in Ireland, 28 per cent were returned migrants. Comparable data is not available for Northern Ireland, but FitzGerald infers from the larger stock of graduates born in Northern Ireland who live in the UK that the rate of return is substantially lower.

Table 16: Educational Attainment of Population aged 25-64 in Ireland, Northern Ireland, UK, Denmark, Germany and EU, 2019

| | | | Upper | |
|-----------------------------|--------------|----------------|---------------------------|-----------|
| | | | secondary | |
| | | Above lower | and post- | Third- |
| | Up to lower | secondary | secondary non-tertiary | level |
| | secondary | (levels 3 to | (levels 3 | (levels 5 |
| | (levels 0-2) | 8) | and 4) | to 8) |
| Ireland | 16.3 | 83.7 | 36.4 | 47.3 |
| Northern and Western | 18.8 | 81.2 | 38.7 | 42.5 |
| Southern | 17.4 | 82.6 | 39.4 | 43.2 |
| Eastern and Midland | 14.8 | 85.2 | 33.6 | 51.5 |
| | | | | |
| United Kingdom | 18.9 | 81.1 | 36.4 | 44.7 |
| London | 13.6 | 86.4 | 26.8 | 59.6 |
| South East (UK) | 15.8 | 84.2 | 35.0 | 49.2 |
| South West (UK) | 17.6 | 82.4 | 38.8 | 43.6 |
| East Midlands (UK) | 19.3 | 80.7 | 42.7 | 38.0 |
| Scotland | 19.5 | 80.5 | 30.1 | 50.4 |
| East of England | 19.9 | 80.1 | 39.2 | 40.9 |
| North West (UK) | 20.1 | 79.9 | 39.8 | 40.1 |
| Wales | 20.7 | 79.3 | 38.2 | 41.0 |
| West Midlands (UK) | 22.3 | 77.7 | 39.9 | 37.9 |
| Yorkshire and The Humber | 22.7 | 77.3 | 40.0 | 37.3 |
| Northern Ireland | 23.8 | 76.2 | 35.6 | 40.6 |
| North East (UK) | 23.9 | 76.1 | 42.0 | 34.1 |
| | | | | |
| Denmark | 18.4 | 81.6 | 41.2 | 40.4 |
| Germany | 13.4 | 86.6 | 56.8 | 29.9 |
| EU (28) | 21.3 | 78.7 | 45.5 | 33.3 |
| EU (15) | 23.7 | 76.3 | 41.6 | 34.7 |
| | | | | |

The data published by the CSO has a higher figure for the share of the population aged 25-64 with third-level education, at 51 per cent in 2020. The CSO data allows us to look at the regional variation in the educational profile of the population within Ireland (see Table 17). The share of the population in Dublin with third-level education, at 62 per cent in 2020, was considerably higher than in any other region. The only other region in which this share exceeded the national average was the West, at 53 per cent. The regions with the lowest shares of the adult population having third-level education were the Border (41%) and Midland (40%).

Just over one-fifth of Dublin's adult population (aged 25-64) in 2020 had a postgraduate degree. This share was notably higher than for any other region, and 50 per cent above the national average (14%). The share of the adult population with postgraduate education was lowest in the Border and Midland regions, at 8 per cent.

Table 17: Educational Attainment of Population aged 25-64 by Region in Ireland for Population, Q2, 2020

| | | | Mid- | | Mid- | South- | South- | | |
|---|--------|--------|------|---------|------|--------|--------|------|---------|
| Highest level of education | Border | Dublin | East | Midland | West | East | West | West | Ireland |
| Primary or below | 7% | 4% | 4% | 4% | 6% | 6% | 3% | 2% | 4% |
| Lower secondary | 11% | 9% | 10% | 12% | 12% | 12% | 10% | 8% | 10% |
| Higher secondary | 22% | 15% | 23% | 25% | 22% | 19% | 21% | 21% | 20% |
| Post-Leaving Certificate | 18% | 11% | 15% | 20% | 17% | 18% | 16% | 16% | 15% |
| Third-level, of which: | 41% | 62% | 48% | 40% | 44% | 44% | 49% | 53% | 51% |
| Higher Certificate or | | | | | | | | | |
| equivalent | 2% | 1% | 1% | 1% | 1% | 2% | 2% | 2% | 1% |
| Ordinary Degree or | | | | | | | | | |
| equivalent | 10% | 11% | 11% | 11% | 9% | 11% | 10% | 13% | 11% |
| Honours bachelor | | | | | | | | | |
| degree or equivalent | 21% | 28% | 23% | 20% | 22% | 21% | 26% | 24% | 25% |
| Postgraduate | | | | | | | | | |
| qualification | 8% | 21% | 12% | 8% | 12% | 10% | 11% | 14% | 14% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Source: CSO (2020b), Educational Attainment Thematic Report 2020. Available at: https://www.cso.ie/en/releasesandpublications/ep/peda/educationalattainmentthematicreport2020/ [accessed 15/10/2021].

The educational attainment of the population in Northern Ireland is shown by district in Table 18. Note that this data is available at district level for the population aged 16-64, which differs from the data presented in Section 1.3.3 above, which was for the population aged 25-64. Lisburn and Castlereagh stands out as having a particularly high share of population aged 16-64 with degree level (or higher) education at 51.4 per cent. All of the districts showing an above-average share of the population with degrees are in the eastern part of Northern Ireland. In addition to Lisburn and Castlereagh, these are Mid and East Antrim (41.0%), Ards and North Down (40.6%), and Antrim and Newtownabbey (37.5%). The share of the population with degrees in Belfast (35.6%) falls below the average for Northern Ireland (36.7%). All of the other districts have below-average shares of the population with degrees.

Table 18: Educational Attainment of Population aged 16-64 by Region in Northern Ireland, 2019

| | Degree level | Below Degree | No |
|--------------------------|--------------|--------------|----------------|
| | and Above | Level | qualifications |
| Antrim and Newtownabbey | 37.5% | 52.9% | 9.6% |
| Ards & North Down | 40.6% | 51.0% | 8.4% |
| Armagh City Banhridge & | | | |
| Armagh City, Banbridge & | 33.4% | 54.6% | 12.1% |
| Craigavon | | 34.0% | |
| Belfast | 35.6% | 46.2% | 18.2% |
| Causeway Coast & Glens | 35.1% | 47.0% | 17.9% |
| Derry City & Strabane | 34.0% | 48.4% | 17.6% |
| Fermanagh & Omagh | 29.8% | 51.4% | 18.8% |
| Lisburn & Castlereagh | 51.4% | 43.5% | 5.2% |
| Mid & East Antrim | 41.0% | 49.2% | 9.8% |
| Mid Ulster | 34.1% | 48.9% | 17.0% |
| Newry, Mourne & Down | 34.0% | 53.0% | 13.0% |
| Northern Ireland | 36.7% | 49.5% | 13.8% |

Source: NISRA (2020) Labour Force Annual Survey 2019. Available at: https://www.nisra.gov.uk/publications/labour-force-survey-annual-report-2019 [accessed 15/10/2021].

A mapping of the population by education level across the island of Ireland is provided by Walsh (2015). This is based on 2011 data, and refers to the entire population aged 16 and over. Low education is defined as lower secondary or lower. This category accounted for 37 per cent of the population in Ireland, and 41 per cent in Northern Ireland. Within Northern Ireland, areas in which more than 50 per cent of the population had this level of education were concentrated along the western part of the border, including the Derry/Strabane district. This was also the case in extensive parts of counties on the southern side of the border. Other areas in which more than 50 per cent of the population had low education level were: parts of west Mayo, west Galway, southwest Clare, the Kerry-Limerick-Cork borderland, and parts of the Midland Region. Relatively high percentages of the population with low levels of education also occur in many traditional industrial towns.

1.7 Value Added

Gross value added (GVA) represents the total value of goods and services produced in a region, less the cost of inputs purchased to produce them (materials and services).⁸ It represents the gross income generated by economic activity in a region, and available to remunerate labour and capital. It is not a measure of the income of people living in a region, since in a global economy, much of the value added generated in one region may accrue as income elsewhere in the world. Changes in the global organisation of production have made it increasingly unreliable as a real indicator of value added for Ireland, and some other countries. The data on it will be briefly discussed for Ireland, as a few points of interest emerge despite the limitations.

GVA is very much concentrated in the Eastern and Midland, and Southern regions, with almost 93 per cent of Ireland's GVA being located in these regions – well in excess of these regions' share of population or employment. GVA is disproportionately generated by multinationals, so this figure reflects the above-average presence of multinationals in these regions, in particular the Dublin and Cork areas. The Southern region accounted for 42.2 per cent of GVA, which exceeds that of the Dublin region (39.8%) in 2018. The Northern and Western region had just 7.1 per cent of GVA in the same year.

There was a marked shift in the regional distribution of GVA in 2015. In that year, the Southern region increased its share of the State's GVA, from 31.0 per cent to 42.8 per cent, while there was a fall in the Dublin region's share from 45.8 per cent to 36.9 per cent. This was also the year in which Ireland's GDP increased dramatically, by 26 per cent. The huge increase in GDP in 2015 was driven by the relocation to Ireland of intellectual property with a value of €300 billion. This intellectual property is used to produce output elsewhere via contract manufacturing arrangements. Contract manufacturing was not new for Ireland in 2015. However, in earlier years the value added from this activity was largely offset by the import of R&D services, so it had little effect on Ireland's GDP. However, when the intellectual property is based in Ireland there is not an offsetting deduction, so Irish GDP increases (CSO, 2016). There was also a very large increase in GNP. Multinational profits are deducted in the calculation of GNP. However, depreciation is deducted in the computation of profit. There was a high level of depreciation of the intellectual property that moved to Ireland in 2015, so this moderated the increase in profits and thereby boosted the increase in GNP.

The shift in the regional balance of GVA in 2015 implies that the companies in Ireland acquiring the intellectual property are based in the Southern region. The CSO has not identified the companies and, from 2015, has ceased producing separate GVA for both the South-West and Mid-West regions. The dramatic increase in GVA for the Southern region is consistent with the possibility that Apple, with substantial operations in the Cork area, is one of the companies concerned.

The pharmaceutical industry is also characterised by very high value added relative to employment. The concentration of this industry in the South West, around Cork, also contributes to the Southern region's high share of GVA.

GVA is similar to GDP. 'The difference between the two concepts is that GDP is measured after including product taxes (e.g. excise duties, non-deductible VAT, etc.) and deducting product subsidies while GVA is measured prior to adding product taxes but includes product subsidies.' (CSO, 2020a). GVA is used here rather than GDP as a time series for the regions of Ireland and Northern Ireland from 2000 is available on GVA from Eurostat as of May 2021.

Table 19: Percentage of Gross Value Added by Region in Ireland, 2000-2018

| | 2000 | 2008 | 2014 | 2015 | 2018 |
|----------------------|--------|--------|--------|--------|--------|
| Ireland | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Northern and Western | 12.0% | 12.0% | 10.8% | 8.6% | 7.1% |
| Border | 4.9% | 5.1% | 4.0% | 3.2% | 2.9% |
| West | 7.0% | 6.9% | 6.7% | 5.5% | 4.2% |
| Southern | 32.5% | 31.8% | 31.0% | 42.8% | 42.2% |
| Mid-West | 10.3% | 8.8% | 7.1% | na | na |
| South-East | 5.8% | 6.7% | 6.1% | 5.4% | 6.2% |
| South-West | 16.4% | 16.3% | 17.8% | na | na |
| Eastern and Midland | 55.5% | 56.2% | 58.3% | 48.6% | 50.7% |
| Dublin | 41.1% | 40.8% | 45.8% | 36.9% | 39.8% |
| Mid-East | 10.8% | 11.6% | 9.5% | 9.1% | 8.9% |
| Midland | 3.6% | 3.8% | 3.0% | 2.7% | 2.0% |

The regional pattern of value added in Northern Ireland is similar to that of employment. By far the largest concentration of GVA is in Belfast, which generates almost one-third of the jurisdiction's value added. This share has been rising gradually since 2000, when Belfast accounted for 29.1 per cent of value added. The share of all other local government districts is below 10 per cent.

Table 20: Percentage of Gross Value Added by Region in Northern Ireland, 2000-2018

| | 2000 | 2008 | 2014 | 2015 | 2018 |
|----------------------------|--------|--------|--------|--------|--------|
| Northern Ireland | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Belfast | 29.1% | 31.3% | 30.9% | 31.1% | 32.1% |
| Armagh City, Banbridge and | | | | | |
| Craigavon | 8.4% | 8.6% | 8.9% | 8.7% | 9.0% |
| Newry, Mourne and Down | 6.5% | 6.6% | 7.0% | 6.8% | 6.7% |
| Ards and North Down | 5.1% | 5.1% | 4.9% | 4.6% | 4.8% |
| Derry City and Strabane | 6.4% | 6.5% | 6.3% | 6.0% | 6.4% |
| Mid Ulster | 8.0% | 7.3% | 7.4% | 7.1% | 7.7% |
| Causeway Coast and Glens | 5.9% | 5.5% | 5.4% | 5.1% | 5.1% |
| Antrim and Newtownabbey | 7.6% | 7.5% | 7.6% | 7.5% | 7.3% |
| Lisburn and Castlereagh | 7.5% | 7.3% | 7.7% | 7.9% | 8.0% |
| Mid and East Antrim | 10.1% | 8.8% | 8.5% | 10.1% | 7.8% |
| Fermanagh and Omagh | 5.3% | 5.4% | 5.3% | 5.2% | 5.1% |

Source: Eurostat database.

1.8 Output per Head and Productivity

Both gross domestic product (GDP) per head, and productivity as measured by GDP per worker are far higher in Ireland than Northern Ireland, as can be seen in Table 21. However GDP, like GVA, is not a reliable indicator of real output for Ireland. The CSO now produces a more reliable measure that seeks to adjust for the distortions with GDP: modified gross national income (GNI*). In 2017, modified GNI* per head and per worker was still higher than the corresponding GDP measures for Northern Ireland (by 31.0% and 26.4% respectively). This difference was driven by multinationals: the level of GVA per worker in foreign-controlled businesses in Ireland is 5.5 times higher than the level for domestically-controlled businesses. The influences on the differences in productivity in Ireland and Northern Ireland are examined in the recent NESC Secretariat paper on the island economy (Cahill, 2021).

The regional variation in value added in Ireland implies large regional differences in recorded GDP per head and per worker⁹. The concentration of value added in the Southern region results in this region having the highest level of GDP per head and per worker. Regional GDP per head and per worker in Dublin are also far above the average for Ireland. The levels of GDP per head and per worker in the Border, West, and Midland regions are, to varying degrees, below the average for Northern Ireland. The Border region has the lowest level of GDP per head and per worker in the South.

While greatly overstated by the macroeconomic statistics, there are genuine regional differences in productivity. One indication of this is the regional variation in industrial wages. Gross industrial wages in 2017 were highest in Dublin, at 12.7 per cent above the average for Ireland, while for the Border region this measure of wages was 18.8 per cent below average. The counties with the lowest level of industrial wages were Leitrim (73.1% of the average for Ireland), Donegal (77.3%), and Monaghan (77.5%). Within the Northern and Western region, the highest wages are in Galway (95.8%) and Sligo (94.5%).

In 2017, output per head in Belfast was 72.0 per cent above the average for Northern Ireland, and far higher than in any other district. The next highest output per head was Mid and East Antrim (127.9% of the NI average). This economic indicator was considerably lower in all other districts.

The particularly high output per head in Belfast reflects the disproportionate concentration of output and employment there relative to the share of population. In other words, its output per head is boosted by the fact that some of its output is produced by workers who live elsewhere (primarily in other districts of Northern Ireland). Belfast also has above average productivity. However, the gap between its productivity and the average for Northern Ireland is 4.2 per cent, much less than the gap in respect of output per head.

Productivity in the Mid and East Antrim district (north of Belfast) in 2017 was unusually high, at more than 50 per cent higher than the average for Northern Ireland, and far higher than any other district. Productivity was marginally above average in Mid Ulster (101.4% of the average), and Lisburn and Castlereagh (100.6%), with all remaining districts being below average and fairly close to the average of the Northern and Western region of Ireland.

Productivity in 2017 was below average in all of the districts along the Border, with the exception of Mid Ulster. The lowest level of productivity was in Derry City and Strabane (85.4%), followed by Ards and North Down (88.7%), and Newry, Mourne and Down (90.5%).

⁹ Modified GNI* is not available at regional level so GDP per head and per capita is used.

Table 21: GDP per head and GDP per Worker (PPS) in Ireland and Northern Ireland, 2017

| | GDP per head (PPS) | GDP per worker (PPS) |
|--------------------------------------|-----------------------|-------------------------|
| Ireland | 54,500 | 121,986 |
| Northern and Western | 22,200 | 53,767 |
| Border | 20,800 | 53,191 |
| West | 23,400 | 54,225 |
| Southern | 66,100 | 154,209 |
| Mid-West | na | |
| South-East | 33,300 | 86,275 |
| South-West | na | |
| Eastern and Midland | 58,200 | 123,704 |
| Dublin | 78,800 | 149,961 |
| Mid-East | 32,200 | 87,947 |
| Midland | 25,000 | 54,036 |
| | | |
| Northern Ireland | 25,800 | 59,846 |
| Belfast | 44,400 | 62,379 |
| Armagh City, Banbridge and Craigavon | 20,200 | 54,276 |
| Newry, Mourne and Down | 18,500 | 54,184 |
| Ards and North Down | 14,300 | 53,055 |
| Derry City and Strabane | 20,400 | 51,117 |
| Mid Ulster | 24,100 | 60,659 |
| Causeway Coast and Glens | 17,500 | 56,016 |
| Antrim and Newtownabbey | 25,000 | 56,281 |
| Lisburn and Castlereagh | 25,300 | 60,183 |
| Mid and East Antrim | 33,000 | 91,094 |
| Fermanagh and Omagh | 21,600 | 54,499 |
| | | |

Table 22: Wages and Employment in Industry by Region, 2017

| | Average Wage (€) | Average Wage Ireland = 100 |
|----------------------|---------------------|-------------------------------------|
| Ireland | €47,241 | 100.0 |
| Northern and Western | €41,469 | 87.8 |
| Border | €38,376 | 81.2 |
| Southern | €48,688 | 103.1 |
| Mid-West | na | na |
| South-East | na | na |
| South-West | na | na |
| Eastern and Midland | €48,593 | 102.9 |
| Dublin | €53,247 | 112.7 |
| Mid-East | €45,004 | 95.3 |
| Midland | €39,588 | 83.8 |

Source: Calculated from CSO Database, Census of Industrial Production 2017, Local Units - Industrial.

1.9 Income

1.9.1 Ireland

Income by Region

The regional variation in disposable income per head ¹⁰ is much less pronounced than in GPP per head or per worker. This reflects the effects of taxation and government spending, while an additional factor is that disposable income is not prone to the accounting issues that affect GDP. While GDP per head in the Border and Midland regions was only around one-third per cent of the average for Ireland, their disposable income per head was 81.8 per cent of the average level in 2018 in each case. These two regions had the lowest average incomes. The highest disposable income per head was in the Dublin region, where income was 17.4 per cent above the average in 2018. Despite the very high GDP per head of the Southern region (24.7 per cent higher than the average for Ireland), disposable income per head was 4.2 per cent below average. Outside Dublin and the Mid-East, the highest income region was the Mid-West (98.9% of the average for Ireland) and South-West (97.2%).

 $^{^{10}}$ Disposable income is total household income less taxes and social insurance contributions.

Table 23: Index of GDP per head and Disposable Income per Head by Region in Ireland, 2017

| | Index of GDP per head (Ireland = 100), 2018 | Index of Disposable Income per head (Ireland = 100), 2018 |
|----------------------|---|--|
| Ireland | 100.0 | 100.0 |
| Northern and Western | 39.1 | 84.8 |
| Border | 34.5 | 81.8 |
| West | 43.1 | 87.4 |
| Southern | 124.7 | 95.8 |
| Mid-West | na | 98.9 |
| South-East | 69.4 | 90.0 |
| South-West | na | 97.2 |
| Eastern and Midland | 105.8 | 108.7 |
| Dublin | 144.2 | 117.4 |
| Mid-East | 62.5 | 103.3 |
| Midland | 33.2 | 81.8 |

Source: CSO (2021), County Income and Regional GDP 2018. Available at: https://www.cso.ie/en/releasesandpublications/er/cirgdp/countyincomesandregionalgdp2018/ [accessed 15/10/2021].

The trend in income per head since 2000 in shown in Table 24. During the earlier decade, 2000 to 2010, it can be seen that there was a narrowing of regional differences in income, with regions outside the Eastern and Midland region experiencing above average income growth, while growth was below average in Dublin.¹¹ In the case of the Border region, disposable income per head increased from 84.9 per cent of the average for Ireland in 2000 to 90.0 per cent in 2010. Most of this period was characterised by strong economic growth and a boom in construction.

The subsequent decade, from 2010 up to 2018, saw a reversal of this trend. Over this period, the strongest income growth was in Dublin (rising to 117.4 per cent of the average for Ireland in 2018), while the Mid-East also saw above average growth. All other regions had below-average growth, with the exception of the Mid-West, where growth equalled the average for Ireland. Disposable income per head in the Border region fell from 90.0 per cent of the average for Ireland in 2000, to 81.8 per cent, which left it lower in relative terms than it had been in 2000. In absolute terms, average income in the Border region increased by about one quarter over this period. The rise and fall of average income for the Northern and Western region and for Donegal, relative to the average for Dublin, is shown in Figure 2.

¹¹ The highest relative income level was reached in the Border and West regions in 2010 while the relative peak occurred in 2004 for the Midland region, in 2007 for the South-East and in 2011 for the Mid-West.

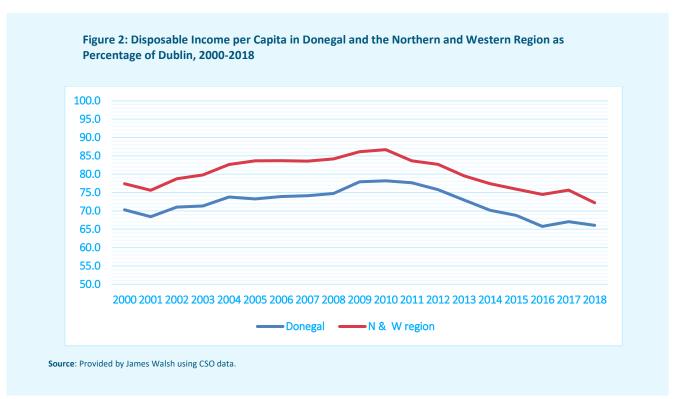
Table 24: Index of Disposable Income per Head by Region for Ireland, 2000-2018

| | | | | Real |
|----------------------|---------------|--------------------------------|---------------|--|
| | (ii | osable Income reland = 100) | | Percentage Change in Disposable Income, |
| Ireland | 2000 100.0 | 2010 100.0 | 2018 100.0 | 2000 to 2018 28.9 |
| Northern and Western | 89.1 | 93.9 | 84.8 | 22.6 |
| Border | 84.9 | 90.0 | 81.8 | 24.2 |
| West | 92.9 | 97.4 | 87.4 | 21.2 |
| Southern | 94.1 | 98.3 | 95.8 | 31.3 |
| Mid-West | 95.7 | 98.9 | 98.9 | 33.2 |
| South-East | 92.3 | 97.1 | 90.0 | 25.7 |
| South-West | 93.9 | 98.6 | 97.2 | 33.5 |
| Eastern and Midland | 108.5 | 103.5 | 108.7 | 29.2 |
| Dublin | 115.2 | 108.4 | 117.4 | 31.4 |
| Mid-East | 101.0 | 99.3 | 103.3 | 31.9 |
| | 91.1 | 91.3 | 81.8 | 15.7 |

Source: CSO Database, County Incomes and Regional GDP. Real change calculated using Harmonised Index of Consumer Prices from Eurostat.

Income by County

Incomes by county in 2018 are shown in Map 3. The two highest-income counties in 2018 were Dublin and Kildare, while the other counties with above-average income were Meath, Wicklow, Cork and Limerick. All other counties had below-average income. The counties with the lowest average income in Ireland in 2018 were Donegal at 77.5 per cent of the average for Ireland, followed by Monaghan (82.1%), and Roscommon (82.9%). Donegal's average income in 2018 was roughly two-thirds of the level for Dublin.



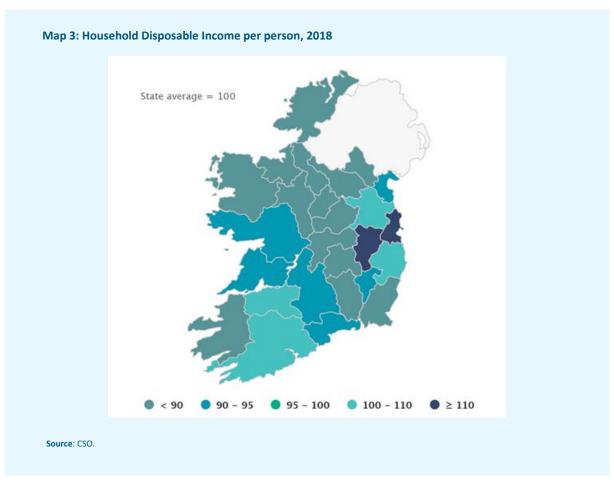


Table 25: Index of Disposable Income per Head by County in the Northern and Western Region, Ireland = 100

| | 2000 | 2010 | 2018 |
|----------------------|-------|-------|-------|
| Ireland | 100.0 | 100.0 | 100.0 |
| Northern and Western | 89.1 | 93.9 | 84.8 |
| Border | 84.9 | 90.0 | 81.8 |
| Leitrim | 87.7 | 100.7 | 88.6 |
| Sligo | 88.8 | 94.1 | 86.1 |
| Cavan | 87.1 | 96.7 | 84.0 |
| Donegal | 81.0 | 84.7 | 77.5 |
| Monaghan | 87.0 | 87.1 | 82.1 |
| West | 92.9 | 97.4 | 87.4 |
| Galway | 94.0 | 101.1 | 90.4 |
| Mayo | 91.7 | 92.5 | 83.9 |
| Roscommon | 91.6 | 93.7 | 82.9 |

Source: CSO Database, County Incomes and Regional GDP.

Composition of income

The composition of income by region is shown in Table 26. Employment represents the most important source of income in all regions, ranging from 54.4 per cent in the South-East, to 67.6 per cent in Dublin. Conversely, the contribution of self-employment to income is lowest in Dublin, where it represented 3.9 per cent of income in 2018, while the highest share was in the South-East, at 11.6 per cent. Rent of dwellings is primarily the imputed income from living in one's own home. This element ranged from 6.7 per cent in the Border region to 10.0 per cent in Dublin. Income from net interest and dividends was a very small share of income in all regions.

The biggest regional variation in the composition of income is in the role of social transfers. These are state social welfare payments to households, as well as occupational and private pensions. The Border region had the highest reliance on these as a source of income, at 26.3 per cent of income in 2018. The share of social transfers was at a similarly high level in the Midland region (25.4%), and South-East (24.3%). The contribution of social transfers to income was lowest in Dublin at 15.1 per cent.

The counties with the highest reliance on social transfers in 2018 were Longford (30.6%), Donegal (29.3%) and Offaly (26.5%). Those with the lowest reliance are all in the east of the country: Kildare (14.4%), Meath (14.7%) and Dublin (15.1%).

The low share of income from interest and dividends may seem surprising, in view of the attention that is often given to income from capital, particularly in the discussion that followed on from the publication of Piketty's book, *Capital in the Twenty-First Century*. There are a number of reasons why capital income is more important than it might initially appear from this data. First, some income from capital is included under other headings. Rental income, including imputed rents, is a substantial and growing component of capital income, and this is shown separately. In addition, social transfers include private pensions, and hence some capital income is also included in this item. Second, interest here is defined in net terms: interest paid by households (e.g. on mortgages) is deducted from interest and dividends received. Third, a substantial share of capital income is saved within the corporate sector annually. This income is often invested by companies in order to generate higher profits in future, which may in turn lead to higher future dividends paid to households. Corporate savings also normally lead to increases in wealth, and households can realise the benefit of this when they sell assets.

Table 26: Composition of Gross Household Income by Region, Ireland, 2018

| | Employee Income | Self- employed | Rent of Dwellings | Income and Dividends | Social Transfers | Total |
|-----------------------|--------------------|-------------------|----------------------|----------------------------|---------------------|--------|
| Northern & Western | 56.7% | 8.8% | 7.4% | 2.8% | 24.3% | 100.0% |
| Border | 55.3% | 9.0% | 6.7% | 2.7% | 26.3% | 100.0% |
| West | 57.9% | 8.7% | 8.0% | 2.8% | 22.6% | 100.0% |
| Eastern & Midland | 66.6% | 4.7% | 9.1% | 3.0% | 16.5% | 100.0% |
| Dublin | 67.6% | 4.1% | 10.0% | 3.1% | 15.1% | 100.0% |
| Mid-East | 66.9% | 5.6% | 7.7% | 3.0% | 16.7% | 100.0% |
| Midland | 58.6% | 6.1% | 7.2% | 2.7% | 25.4% | 100.0% |
| Southern | 58.4% | 10.7% | 7.3% | 2.9% | 20.8% | 100.0% |
| Mid-West | 59.5% | 9.8% | 6.5% | 2.9% | 21.4% | 100.0% |
| South-East | 54.4% | 11.6% | 7.0% | 2.8% | 24.3% | 100.0% |
| South-West | 59.8% | 10.7% | 7.9% | 3.0% | 18.6% | 100.0% |
| Ireland | 62.6% | 7.2% | 8.3% | 2.9% | 19.0% | 100.0% |

Source: CSO (2021), County Income and Regional GDP 2018. Available at:

https://www.cso.ie/en/releases and publications/er/cirgdp/county incomes and regional gdp 2018/ [accessed 15/10/2021].

Table 11 shows that the public administration, health and education sector is a significant source of employment in all regions. A feature of the counties in the North-West is that this sector generates an unusually high share of employee income. This is most pronounced in Sligo, where the sector generated 41.7 per cent of income earned by employees in 2016. This sector also accounts for a very high share of employee income in Donegal and Leitrim (37.8% in each case). In the other Border counties (Cavan, Monaghan, Louth) its share is close to 30 per cent. It is also high in Roscommon (35.7%), and is over 30 per cent in the two other West region counties (Galway and Mayo). In the counties of the Dublin region, its share is lower, ranging from 25.0 per cent in Dún Laoghaire-Rathdown, to 27.7 per cent in South Dublin.

A high share of income from this sector arises in some counties where there is a substantial concentration of employment in this sector (for example in hospitals, third-level education institutions, offices of government departments), in conjunction with more limited employment in other sectors.

Table 27: Composition of Household Income by County in Northern and Western Region, 2018

| | Employee Income | Self- employed | Rent of Dwellings | Net Interest and Dividends | Social Transfers | Total |
|------------|--------------------|-------------------|----------------------|-------------------------------------|---------------------|--------|
| Northern & | | | | | | |
| Western | 56.7% | 8.8% | 7.4% | 2.8% | 24.3% | 100.0% |
| | | | | | | |
| Border | 55.3% | 9.0% | 6.7% | 2.7% | 26.3% | 100.0% |
| Cavan | 58.3% | 10.0% | 6.3% | 2.8% | 22.6% | 100.0% |
| Donegal | 52.9% | 8.5% | 6.7% | 2.6% | 29.3% | 100.0% |
| Leitrim | 55.7% | 9.9% | 6.3% | 2.7% | 25.5% | 100.0% |
| Monaghan | 56.3% | 9.2% | 6.9% | 2.7% | 24.9% | 100.0% |
| Sligo | 56.1% | 8.2% | 7.4% | 2.7% | 25.6% | 100.0% |
| | | | | | | |
| West | 57.9% | 8.7% | 8.0% | 2.8% | 22.6% | 100.0% |
| Galway | 59.4% | 8.1% | 8.7% | 2.9% | 20.9% | 100.0% |
| Mayo | 55.4% | 9.6% | 7.0% | 2.7% | 25.3% | 100.0% |
| Roscommon | 56.6% | 9.4% | 6.7% | 2.7% | 24.5% | 100.0% |

Source: CSO (2021), County Income and Regional GDP 2018. Available at:

https://www.cso.ie/en/releases and publications/er/cirgdp/county incomes and regional gdp 2018/ [accessed 15/10/2021].

1.9.2 Northern Ireland

The highest income districts within Northern Ireland in 2018 were Lisburn and Castlereagh (115.4% of the Northern Ireland average), Ards and North Down (110.5%), and Mid and East Antrim (107.1%). These areas are all in reasonably close proximity to Belfast. Belfast itself had below-average income in 2018 (96.3%). Its relative income position has declined: in 2000, Belfast had the highest income within Northern Ireland (12.8% above average).

The five districts along the border all have, to varying degrees, below-average income. The area with the lowest income in Northern Ireland in 2018 was Derry City and Strabane (11.5% below average), although there has been an increase in its relative income since 2000, when it was almost 20 per cent below average. Income in other districts along the border was less than 5 per cent below the Northern Ireland average.

In 2000, Belfast was the highest-income district in Northern Ireland, with household incomes 12.8 per cent above average. Since then other districts have caught up to the extent that in 2020 income in Belfast was below the average for Northern Ireland.

Table 28: Index of Disposable Income per Head by Region for Northern Ireland, 2000-2018

| | | | | Real |
|----------------------------|---------|---------------------------------------|-------|---|
| | (Northe | sable Income pe rn Ireland = 100), | | Percentage Change in Disposable Income, 2000 to |
| | 2000 | 2010 | 2018 | 2018 |
| Northern Ireland | 100.0 | 100.0 | 100.0 | 54.2 |
| Belfast | 112.8 | 102.6 | 96.3 | 31.7 |
| Armagh City, Banbridge and | | | | |
| Craigavon | 96.2 | 100.0 | 98.3 | 57.5 |
| Newry, Mourne and Down | 96.5 | 97.7 | 95.4 | 52.4 |
| Ards and North Down | 109.3 | 108.4 | 110.5 | 55.9 |
| Derry City and Strabane | 80.5 | 91.3 | 88.5 | 69.6 |
| Mid Ulster | 89.3 | 91.4 | 97.2 | 68.0 |
| Causeway Coast and Glens | 81.4 | 92.1 | 102.2 | 93.5 |
| Antrim and Newtownabbey | 108.7 | 105.5 | 99.3 | 40.8 |
| Lisburn and Castlereagh | 110.9 | 108.2 | 115.4 | 60.4 |
| Mid and East Antrim | 107.2 | 105.4 | 107.1 | 54.1 |
| Fermanagh and Omagh | 87.4 | 93.0 | 95.6 | 68.6 |

Source: ONS (2020), Regional Gross Disposable Household Income: All NUTS level regions, 1997 to 2018 Edition of this Dataset. Available at: https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/datasets/regionalgrossdisposablehouseholdincomegdhi [accessed 15/10/2021]. Real change calculated using Harmonised Index of Consumer Prices from Eurostat.



1.10 Regional and Local Policy Frameworks

This section sets out the regional and local policy frameworks in place in Ireland and Northern Ireland, as well as the framework for co-operation on spatial development issues between the two jurisdictions. The plans for public investment in regional development, north and south, are described, as well as the particular arrangements in place for co-operation in the North-West region, along with other cross-border local authority networks. The final part of this section discusses perspectives on regional policy in Ireland, with a focus on development in the border area.

1.10.1 Ireland

The National Planning Framework

The Government's approach to regional policy is set out in the *National Planning Framework* (NPF) in conjunction with the *National Development Plan* (NDP) (see below). The NDP is discussed in Section 1.10.3 below.

The NPF is organised around 10 'national strategic outcomes' (NSOs), the first of which is 'compact growth'. This desired outcome features prominently throughout the NPF and is probably its most distinctive feature. Other NSOs include a strong economy, strengthened rural economies and communities, and transition to a low-carbon economy.

The NPF projects an increase in Ireland's population of around one million in the 25 years from 2016 to 2040. The high-level goal for regional balance in the NPF, for the period to 2040, is that the increase in population in absolute terms in the combination of the Southern plus the Northern and Western regions, will be at least as high as the increase in population in the Eastern and Midland region.

The NPF proposes that one-half of the projected population growth will be in Ireland's five cities with a population over 50,000 (Dublin, Cork, Galway, Limerick and Waterford), with one-quarter of the growth in Dublin. This strategy implies a central role for the four larger cities (Cork, Galway, Limerick and Waterford). While the target population increase for Dublin City and immediate suburbs is 20 to 25 per cent in the period 2016 to 2040, the target population growth for the other four cities and suburbs is growth of at least 50 per cent. The target population for Cork city and suburbs is growth of 50 to 60 per cent. These targets for the four cities involve major changes in historical patterns: they imply that these cities would grow by more than twice the rate in the period to 2040, compared to the 25 years to 2016.

Stronger growth in these four regional cities, to help balance Dublin's growth, is a central part of the NPF. The NPF recognises that the influence of the five cities does not extend to all parts of Ireland, in particular the North and Western, and the Midland regions. ¹² It identifies both Sligo and Athlone as having the ability to act as regional centres of employment, services and investment. In addition, the NPF recognises the important role of cross-border connections for regional development, specifically the significance of the connections between Letterkenny and Derry as part of the North-West Growth Partnership, and also the Drogheda-Dundalk-Newry links in the context of the Dublin-Belfast Economic Corridor.

Each of the three Regional Assemblies for the three high-level regions have prepared a regional spatial and economic strategy (RSES) in accordance with the NPF. These are designed to provide a long-term regional-level strategic planning and economic framework, in support of the implementation of the NPF. In conjunction with the RSESs, metropolitan area strategic plans (MASPs) have been prepared for the Dublin, Cork, Limerick, Galway and Waterford Metropolitan areas. City and County Development plans and local area plans are required to be consistent with the respective RSESs.

Galway is an important part of the Northern and Western region so it is areas towards the north of this region that lie outside the influence of the five cities. There is long distance commuting from some of the Midland counties to Dublin.

The Northern and Western RSES includes strategic growth plans for Letterkenny, Sligo and Athlone. The target population growth in each case is 40 per cent by 2040. Athlone, which spans counties Westmeath and Roscommon, is also identified as a strategic growth centre in the Eastern and Midland RSES, along with Drogheda and Dundalk. All three towns (i.e. Athlone, Drogheda and Dundalk) are targeted for 'significant growth... to enable them to act as regional drivers, with a focus on improving local economies and quality of life to attract investment and the preparation of urban area plans (UAPs)' (EMRA, 2019: 10).

Population growth is a combination of natural increases and net migration. Walsh (2019) highlights the significant influence of net migration trends on regional population outcomes, and the need for these to change to realise the NPF ambitions. Over the decade 2006 to 2016, the Eastern and Midland region's share of net migration (both international and interregional) was almost two-thirds. If the population targets of the NPF are to be achieved – in particular, halting or reversing the declining population share of the Southern region, and accelerating the population growth of the regional cities – it will be necessary to change the pattern of net migration across regions and cities.

Stronger implementation arrangements have been put in place to support the implementation of the NPF, compared to the earlier *National Spatial Strategy* (Government of Ireland, 2002). The Planning and Development (Amendment) Act 2018 provided a legislative basis for the NPF, and also established an independent Office of the Planning Regulator (OPR). This new office is to have an independent monitoring role, advising the Minister, Government and the Oireachtas on implementation of the NPF under the statutory planning process (NESC, 2019).

Local Economic and Community Plans

The Local Government Reform Act, 2014, made provision for the preparation and implementation of Local Economic and Community Plans (LECPs). The purpose of LECPs is to outline, for a six-year period, the objectives and actions needed to promote and support the economic development, and the local and community development, of the relevant local authority area. The first set of LECPs was prepared for the period 2016 to 2021. The economic elements of the LECPs are developed by the local authority Strategic Policy Committees for Economic Development and Enterprise, while the community elements are developed by Local Community Development Committees (LCDCs). The LECPs as a whole are adopted by local authorities (DECLG, 2015).

The composition of the committees involved in LECPs means that a range of different interests is involved. The membership of Strategic Policy Committees consists of elected members plus representatives of economic, social and environmental interests (including trade union, business, farming, environmental and community and voluntary sectors). The membership of the LCDCs consists of local authority members and officials, people from public bodies who provide funding to the area, people from local community interests, people from the local community, and people from publicly funded/supported local development groups.

A related reform was the introduction of Public Participation Networks (PPNs) in 2016. Membership of the PPN is open to volunteer-led/not-for-profit organisations. One of their roles is to contribute to the development of a vision for the wellbeing of their city or county. PPNs are represented on both local authority SPCs and LCDCs (DPER, 2020).

LECPs are required to be consistent with the relevant RSES, the City or County Development Plan, and other national policies. There is a commitment to a review of both LECPs and PPNs 'to ensure that they are fit for purpose for climate action' (Government of Ireland, 2021a: 72).

Regional Economic Development Policy

Economic development policy, including its regional dimension, is governed primarily by the Department of Enterprise, Trade and Employment and the enterprise development agencies. The Western Development Commission promotes economic development in its area of responsibility, which covers Donegal, Leitrim, Sligo, Mayo, Roscommon, Galway and Clare. Údarás na Gaeltachta promotes development in Gaeltacht areas. These areas have a combined population of just over 96,000 and are located mainly in counties Galway, Mayo, Donegal, Kerry and Cork, plus offshore islands.

The activities of the national enterprise agencies and local enterprise offices are complemented by nine Regional Enterprise Plans. These are developed by regional stakeholders, and are co-ordinated by the Department of Enterprise, Trade and Employment. The implementation of the plans is overseen by steering committees, which comprise representatives of the Local Authorities, Local Enterprise Offices, Enterprise Ireland, IDA Ireland, Regional Skills Fora, Higher and Further Education Institutes, enterprise champions and others. Each committee is chaired by a private businessperson. The first set of these plans was published in 2019 and are being implemented. Work is under way on the preparation of new regional enterprise plans.

Our Rural Future

In March 2021 the Government published *Our Rural Future: Rural Development Policy 2021-2015*, a framework for developing rural areas. It contains 150 commitments to be achieved through government departments, state agencies and local authorities. Not all of these are new: *Our Rural Future* presents a comprehensive statement of new and existing policy commitments that are of relevance to rural areas, along with new implementation and monitoring mechanisms.

This plan was prepared during the Covid crisis and a distinctive feature of the plan is a strong emphasis on the potential of remote working for rural Ireland. Implementation of the National Broadband Plan is critical to this, and there is a commitment to explore how the project can be accelerated to deliver connectivity to rural areas as soon as possible. A significant new government commitment is to have 20 per cent home or remote working in the public sector in 2021, with further annual increases over the period of the plan. There are several other measures in the plan to encourage remote working in rural areas, including the development of an integrated network of over 400 remote working facilities throughout the country. The tax arrangements for remote working are to be reviewed.

There is a strong emphasis on revitalising towns and villages. The plan endorses the principle of 'town centre first', and an interdepartmental group will bring proposals to government on this in 2021. The plan sets out a range of measures to support town and village renewal, including the provision of seed capital to local authorities that will enable them to provide serviced sites at cost in towns and villages, allowing individuals to build homes. Local authorities will be encouraged to use their compulsory purchase powers, where appropriate, to tackle vacant and derelict properties in town centres, while funding will be provided to enhance town centre amenities. The scope for further new supports and incentives for the refurbishment of vacant properties, in order to increase town centre living, will be examined by the Interdepartmental group on 'town centre first'.

The plan outlines the wide range of policies in place to support rural and regional employment. IDA Ireland aims to secure 400 new investment projects for regions outside Dublin over the period 2021 to 2024 (half of the total for Ireland). There is also a commitment to developing 'an overarching Clustering Policy and Framework Programme to advance strong and effective clustering and links between SMEs, multinational corporations and the third-level sector to drive competitiveness and innovation in the regions' (Government of Ireland, 2021a: 12).

On agriculture, the plan points to the forthcoming new Agri Food Strategy to 2030, and commits to implementing *Ag Climatise*, a roadmap towards climate neutrality for the agri-food sector.

Each of the 150 commitments will be led by a named government department, state agency or other organisation. Progress on implementation will be overseen by the Cabinet Committee on Economic Recovery and Investment, which is chaired by the Taoiseach. Progress updates will be published every six months, and the end-year progress report will include an updated work programme for the following year.

1.10.2 Northern Ireland

Regional Development Strategy

The framework for regional policy in Northern Ireland is set out in a 2010 document, *Regional Development Strategy 2035*. The core spatial elements of this strategy are as follows. First, the strategy identifies the Belfast Metropolitan Urban Area (BMUA) as the major conurbation, and seeks to strengthen its role as the central economic driver for Northern Ireland. Concern is expressed about declining population in Belfast, and it is proposed that this be reversed. Provision of housing is viewed as key to achieving this.

Second, the development of a strong North-West is proposed. In this strategy, the North-West is defined as the council areas of Derry and Strabane and extending into Donegal. Continuation of 'the high levels of co-operation between Letterkenny and Londonderry and Strabane as evidenced by the creation of the North West Partnership Board' (DRD, 2010: 62) is recommended.

Third, the strategy identified 21 hubs (main towns and some smaller cities, e.g. Newry) and the potential for some groups of these to form clusters (e.g., Coleraine, Ballymoney, Ballycastle and Limavady). The towns or cities within clusters would be within easy reach of each other and have the potential to share services. The strategy proposed that both economic development and population growth be promoted in hubs. It noted that population growth had been growing disproportionately in smaller settlements, but the strategy considered it better to strengthen population growth in the hubs.

Fourth, in regard to rural areas, 'the aim is to sustain the overall strength of the rural community living in small towns, villages, small rural settlements and the open countryside' (*ibid.*, 76). The strategy proposed improving accessibility of facilities and services to rural communities in innovative ways, including greater use of mobile services and information and communications technology, as well as provision of integrated rural transport initiatives for those in isolated areas.

Fifth, the strategy identifies six gateways. These are 'strategically important transport interchanges which are important for economic development, freight distribution activities and additional employment generation' (*ibid., 79*). The strategy emphasises the need to strengthen gateways for regional competitiveness.

Community Plans

Councils in Northern Ireland have been required to prepare Community Plans since 2015:

Community Planning is a process whereby councils, statutory bodies and communities themselves work together to develop and implement a shared vision for their area. It will involve integrating service and function delivery and producing a community plan that will set out the future direction for development within a council area, which promotes community cohesion and improves the quality of life for all of its citizens (DoE, 2015: 25).

The community planning process seeks to bring together a number of key functions such as planning, urban regeneration, local economic development and local tourism (DoE, 2015). Community Plans in Northern Ireland can be compared to LECPs in Ireland. In both cases, there is a statutory link between the community/local plan and the county development plan (Cave & Semple, 2018). However, Community Plans in Northern Ireland are placed at a higher level in the process than the LECPs in Ireland. Councils in Northern Ireland are required to take account of the Community Plans when preparing local development plans (DoE, 2015). In Ireland, the direction of the requirement is the other way: the LECPS are required to be consistent with the City or County Development Plan as well as the RSES (DECLG, 2015). Another difference is that Northern Ireland lists statutory partners 'that must assist councils with the development and delivery of their community functions whereas Ireland does not' (Cave & Semple, 2018: 38).

1.10.3 North South Framework for Co-operation on Spatial Planning

A framework for co-operation on spatial planning issues between the two jurisdictions on the island of Ireland was published in 2013. The framework represented a non-statutory approach to providing guidance and advice to decision makers. The framework noted many similarities between Northern Ireland's spatial strategy and the strategy then in place in Ireland, the *National Spatial Strategy*. Both strategies:

- have sustainable development at their core;
- promote more balanced regional development;
- recognise the differing but complementary roles the various regions have;
- recognise the critical role that metropolitan centres play as key focal points and drivers of economies in an international context;
- promote tiers of urban centres, gateways and hubs; and
- promote a more broadly based rural economy and strong rural communities (DRD & DECLG, 2013: para 2.12).

A difference at the time of the framework's publication was that the Northern Ireland Regional Development Strategy had a stronger legislative basis than Ireland's *National Spatial Strategy*. However, Ireland's current NPF has a strong legislative basis, so in this respect the strategies have become more similar.

The framework distinguishes two levels of co-operation: Level 1 is the Northern Ireland Executive, the Irish Government and government departments. Level 2 is local authorities.

The framework affirms that government departments will continue to work at a strategic level to share approaches in the development and implementation of their respective spatial strategies, and in the strategic planning of key infrastructure, with a view to maximising the value of investment in shared infrastructure. It was also noted that cooperation at a strategic level can assist in meeting climate change targets, and conserve and enhance energy resources and shared natural, cultural and landscape assets.

Ireland's more recent NPF reaffirms a co-operative approach with Northern Ireland on relevant economic development, infrastructure and environmental issues.

1.10.4 Investment

National Development Plan

Ireland's *National Development Plan 2018-2027* was published alongside the NPF. The National Development Plan (NDP) and the NPF are aligned: the NDP sets out capital investment plans that seek to support the realisation of the vision articulated by the NPF. The investment commitments are organised to achieve the 10 NSOs set out in the NPF.

The initial investment plan was for €116bn over the 2018-2027 period. When the current government took office in 2020, it decided to have a review undertaken of the NDP to take account of changed circumstances, including the impact of Covid-19, and to better reflect the priorities set out in the Programme for Government. A public consultation on the NDP took place.

Following this review a revised NDP has been published for the period 2021 to 2030. The total projected level of public investment for this period is now €165bn, comprising €136bn of exchequer investment and €29bn of additional investment by state-owned enterprises and bodies (such as Eirgrid and the ESB). The exchequer component is based on investment, rising from 4.5 per cent of GNI* in 2021 to a level of around 5.0 per cent over this period. This is substantially higher than the 2018-2027 NDP, under which exchequer investment was to rise to 4.0 per cent of GNI*.

According to the NDP, there is a total all-island funding commitment of more than €3.5bn over the decade to 2030. This consists of the follows: the Shared Island Fund (see below) and Project Ireland 2040 Funds;¹³ annual funding by the Irish Government for north-south co-operation;¹⁴ and the PEACE PLUS programme delivered with the EU, UK and Northern Ireland Executive (see below). There is also a commitment that there will be a focus on identifying and progressing Shared Island projects in the implementation of the NDP.

Shared Island Fund

The establishment of the Shared Island Fund was announced in Budget 2021, with a planned €500m to be allocated for the period to 2025. This Fund is incorporated into the new NDP, and there is a commitment to further funding for the period to 2030 at least the current level (i.e., an additional €500m). It will be used for 'for investment in north-south projects that contribute to the Shared Island objectives set out in the Programme for Government' (Government of Ireland, 2021b: 159).

Of these objectives, the following are of particular relevance to the border area: working with the Northern Ireland Executive to deliver key cross-border infrastructure initiatives, including the A5, ¹⁵ the Ulster Canal connection, the Narrow Water Bridge, and cross-border greenways, in particular the Sligo-Enniskillen greenway; and working with the Executive and the UK Government to commit to investment and development opportunities in the North-West and Border communities, including third-level opportunities for young people from across the region at University of Ulster Magee Campus in Derry.

PEACE PLUS Programme

Since 1995, the EU has sought to foster peace and prosperity in Northern Ireland and the border area through a series of PEACE programmes. A new PEACE PLUS programme is being put in place for the period 2021 to 2027, with an indicative budget of approximately €1 billion. This will be funded by the EU in conjunction with the UK and Irish Governments, and the Northern Ireland Executive. The area for this funding programme consists of all of Northern Ireland, plus six border counties (Cavan, Donegal, Leitrim, Louth, Monaghan and Sligo) with some limited flexibility for funding to extend beyond these areas. A public consultation for the new programme took place in 2021.

As with previous programmes, there is a strong emphasis in PEACE PLUS on supporting communities. The programme will also support economic development through support for SMEs, research and innovation. There is to be a 'renewed focus on rural and border communities' that 'have been most affected from a lack of investment for decades and suffer in relation to geographic isolation and a lack of opportunity and access to services' (Special EU Programmes Body, 2021: 23). A substantial share of the funding is to be allocated to enhancing nature protection, biodiversity and green infrastructure.

The indicative allocations for the PEACE PLUS programme, as set out in the public consultation document, are as follows:

- Theme 1: Building Peaceful and Thriving Communities (€210m)
- Theme 2: Delivering Economic Regeneration and Transformation (€143m)
- Theme 3: Empowering and Investing in our Young People (€110m)
- Theme 4: Healthy and Inclusive Communities (€155m)
- Theme 5: Supporting a Sustainable and Better Connected Future (€265m)
- Theme 6: Building and Embedding Partnership and Collaboration (€47m) (Special EU Programmes Body, 2021).

¹³ The Project Ireland 2040 funds consist of four funds: the Urban Development and Regeneration Fund, the Rural Regeneration Fund, the Climate Action Fund and the Disruptive Innovation Technologies Fund. These funds are for projects in Ireland but the projects supported include cross-border projects.

Annual funding for North/South co-operation includes funding for the following organisations: Waterways Ireland, Intertrade Ireland, Food Safety Promotion Board, the Language Body, the Loughs Agency (responsible for the promotion and development of Lough Foyle and Carlingford Lough) and Tourism Ireland. Total funding by the Irish government for these organisations in 2021 plus other all-island co-operation is €129m. This is to be at least maintained over the period 2021 to 2030, implying a total commitment for this period of €1.29bn (Dáil Éireann, 2021)

¹⁵ The A5 road is from Derry City to Aughnacloy, County Tyrone. It then crosses the border and links with the N2 road to Dublin.

Shared Island Investment Objectives

The NDP shows how the multiple funding streams are to be combined to contribute to three objectives: (i) a more connected island; (ii) a more sustainable island; and (iii) a more prosperous island.

Investment priorities for a more connected island include some of those set out above for the Shared Island Fund. The introduction of an hourly rail service on the Dublin-Belfast line, through investment in new and additional rolling stock, is identified as an early priority. This is to be funded through the PEACE PLUS programme, and by the Irish Government and the Northern Ireland Executive. The Irish Government will work with the Northern Ireland Executive on cooperation in health care, including for example, increased regional access to diagnostic and other services on a cross-border basis. PEACE PLUS indicative funding of €80m is to be made available for collaborative approaches on health and social care services.

Investment priorities to achieve the second objective – a more sustainable island – include: co-ordinated investment to conserve cross-border region peatlands; supporting more all-island approaches to biodiversity protection, building on the success of the All-Ireland Pollinator Plan; and co-ordinated north-south investment on river basin management and water infrastructure.

The investment priorities for a more prosperous island are focussed on education and research. Education priorities include further development of third-level education infrastructure in the North-West, and cross-border apprenticeship programmes. The Shared Island Fund is supporting a new €40m north-south research programme 'to harness the capacity of institutions and researchers across the island to conduct research, providing a knowledge base on strategic issues faced on the island as a whole' (*ibid.*, 168). It is also intended to created new all-island research centres and collaborations funded through Science Foundation Ireland and the Shared Island Fund with Northern Ireland and UK partners. These centres will focus on areas of common priority for both jurisdictions, such as bio therapeutics, climate, cybersecurity, digital, healthcare, food security, infectious diseases and precision medicine. Intertrade Ireland will continue supporting small business across the island and promoting north-south trade. An indicative €143m of the PEACE PLUS budget will be allocated for economic regeneration, comprising SME development (€20m), an Innovation Challenge Fund (€58m), skills development (€35m) and smart towns and villages (€40m).

Investment Strategy for Northern Ireland

The Investment Strategy for Northern Ireland (ISNI) is the equivalent of Ireland's NDP. The current ISNI sets out a 10-year public investment plan for the period to 2021, including transport infrastructure, schools, colleges, enterprise and innovation, health facilities, social housing, and water infrastructure. It is based on the priorities of the Northern Ireland Executive's Programme for Government. The initial indicative total investment for the plan to 2021 was £13.3bn, but the total investment is now expected to be £14.8bn.

As the current ISNI comes to an end, a new one is being prepared for the period to 2031. It will set out planned investment expenditure in the following areas: productive economy; networks (transport, energy, and telecoms/digital infrastructure); learning and skills; health and social care; social and community (including social & affordable housing), and environment (carbon reduction, climate change and resilience, water & waste water, waste management, flood risk management and biodiversity) (Strategic Investment Board, undated).

City Deals

City deals are a UK initiative, whereby cities reach agreements with the UK government on long-term funding for the city (10 years or longer), which is designed to promote urban and regional development. The first deals were agreed for eight English cities in 2012, while more recently deals have been reached with Belfast (in 2019), and Derry City and Strabane (2021).

The Belfast deal is for the development of the Belfast city region, which comprises Belfast City Council plus the councils for five other districts in the region. Queen's University and Ulster University, plus four regional colleges, are also partners to the deal. Funding of £1bn has been agreed, consisting of £350m from the UK government beginning in 2019/20, matched funding of £350m from the Northern Ireland Executive, and £300m from the local councils, universities and the private sector (Belfast Region City Deal, undated).

This long term funding is being allocated over four broad themes: (i) investment in innovation and digital capabilities; (ii) regional innovation hubs; (iii) tourism (for example, new tourism attractions in Belfast City, and investment to improve access to the Mourne mountains); (iv) focussed infrastructure projects (for example, extension of the Belfast rapid bus transit to new areas); and (v) support for skills development, which addresses those seeking to enter the labour force, and the upgrading of existing workers' skills.

The Derry City and Strabane city deal involves a total investment of £250m, comprising £105m from the UK government, another £105m from the Northern Ireland Executive, and an additional £40m from other partners, including Ulster University.

Innovation is central to the deal. One of the major projects is the creation of a new Centre for Industrial Digitalisation, Robotics and Automation (CIDRA). This will support both industry and service businesses in the adoption of digital technologies, robotics and automation. Another major project is the Cognitive Analytics Research Lab (CARL), an applied research centre in artificial intelligence and data analytics. It will seek to bring partner companies together with researchers to find innovative applications of these technologies. This project also has the objective of developing skills in data analytics in the surrounding region, and will form a partnership with Letterkenny Institute of Technology to do this on a cross-border basis. The Transformation for Healthcare Research Innovation and Value-based Ecosystem (THRIVE) is a research initiative focussed on personalised medicine. Central to this project is the creation of a community-owned company that will study the genes of the people of the region. All of these new centres are to be located on the Magee campus of Ulster University. Another project is the creation of a new graduate-entry medical school at this campus.

The Derry-Strabane city deal also involves urban regeneration and tourism projects, which include investment in the central waterfront of Derry and its Walled City area, and the regeneration of Strabane town centre.

The creation of employment is a central objective, with the target of 7,000 new jobs by 2032. Skills development is part of the city deal, and there will be a focus on investing in the skilled people needed to avail of the jobs to be created.

The Belfast and Derry city deals represent substantial investment in developing the potential of their respective regions. The Derry-Strabane deal has the potential to contribute to reducing regional disparities within Northern Ireland, and a stronger North-West region.

Conclusion

The publication of a new NDP, the substantial funding now available, and the forthcoming new ISNI provide a good opportunity for collaboration to promote regional development on the island and in the border area.

1.10.5 North-West Region

Both Donegal County Council, and Derry City and Strabane District Council, have the lowest incomes within their respective jurisdictions and below-average labour force participation. This area includes the fourth-largest urban agglomeration on the island, incorporating Letterkenny, Derry and Strabane. The population of this metropolitan area is 193,000 (NWRA, 2020). Importantly, in recent years both authorities have sought to develop the untapped social, economic and environmental potential of the region, through the adoption of a collaborative place-based leadership model that is designed to achieve the shared vision of a resilient, sustainable and prosperous North West City Region¹6. This has involved the design of a unique place-based governance framework for the development of the North West City Region, in particular the North West Strategic Growth Partnership and the North West Regional Development Group (Figure 3). The North South Ministerial Council (NSMC) endorsed this new governance framework, and mandated the engagement of the relevant government departments and senior officials with these new arrangements, in both jurisdictions. The Irish Government and the Northern Ireland Executive also co-funded the €5m North West Regional Development Fund (NWRDF). This relatively small enabling fund has animated and supported collaborative activity between the two Councils, and other regional development stakeholders, by funding a range of projects.

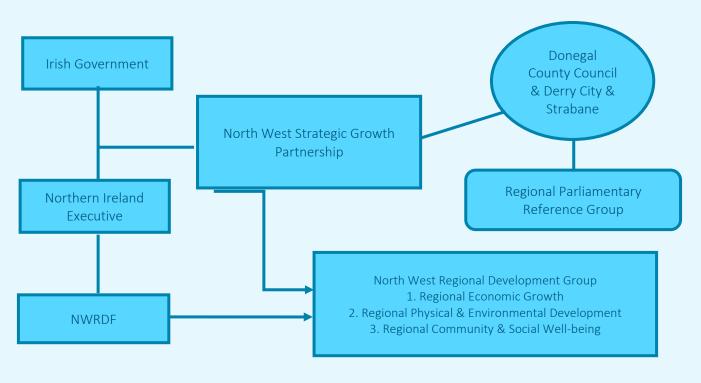


Figure 3: Strategic Partnership and Place-Based Leadership in the North-West

Source: International Centre for Local and Regional Development (2016).

¹⁶ The North West City Region is centred on Letterkenny, Derry and Strabane. For a map of the North West City Region, see NWRA (2020: 281).

1.10.6 Cross-Border Local Authority Networks

In addition to the North West Strategic Growth Partnership, there are two other cross-border local authority networks. The Irish Central Border Area Network (ICBAN) was established in 1995 to promote cross-border co-operation and communication at a local government level, on common regional development concerns. It consists of the following local authority areas: Armagh City, Banbridge and Craigavon; Fermanagh and Omagh; Mid Ulster, and the five counties of Cavan, Donegal, Leitrim, Monaghan and Sligo. These councils see themselves as having a common need to improve infrastructure, and as sharing a perception of peripherality and a sense of distance from centralised decision-making.

ICBAN recently published *The Framework of Regional Priorities* (ICBAN, 2021), which sets out agreed priorities for the Central Border Area. Its activities include management of EU funding programmes that support cross-border projects. Current projects managed by ICBAN for the Central Border Area that are supported by the EU Interreg programme, are Spot-lit and Digi-2-market. The former project supports the development of literary tourism, while the latter supports SMEs to increase sales and exports through the use of story-telling marketing techniques, using technologies such as virtual and augmented reality.

The East Border Region (EBR) is a cross-border network of local authorities along the east coast. The local authorities in this network are Ards and North Down; Armagh City, Banbridge and Craigavon; Newry, Mourne and Down and counties Louth, Meath and Monaghan. The area extends from Gormanston in County Meath to Knocknagoney, west of Holywood in County Down.

Like ICBAN, EBR is also involved in supporting cross-border projects. Its structures include six thematic working groups, comprising relevant council officials, elected members and key stakeholders. These groups are responsible for identifying and implementing cross-border projects. The working groups cover the following sectors: economic development and regeneration, tourism, biodiversity, energy, climate action and social inclusion.

1.10.7 Perspectives on Regional Policy

A discussion paper by the chair of IT Sligo summarises Project Ireland 2040 (i.e. the NPF and the NDP) as developing the four larger cities (Cork, Limerick, Galway and Waterford) to balance Dublin's growth (O'Donnellan, 2020). He argues that a limitation of this strategy is that it does not address the most undeveloped part of Ireland, which he identifies as north of a line drawn between Dublin and Galway. This area includes, for example, seven of the eleven counties with disposable income per head of €18,600 or less in 2018¹⁷. He points out that, within the RSES for the Northern and Western region, the Border region's share of population is expected to fall, and that the Border region has a consistently low ranking across several socio-economic indicators.

The Border Area

O'Donnellan argues that the appropriate response to these conditions is an explicit focus on the Border region and related areas. This would involve seeking to expand employment, achieve a major shift into higher value added sectors, and increase productivity and income. He outlines a 10-point plan to address this, which includes developing a clear view of the existing sectoral and sub-sectoral capabilities in the region and how these can be expanded, as well as identifying the new opportunities that can emerge from current capabilities. He also points to the need for fundamental and urgent transformation of education and training in the region. In addition, he proposes an all-island perspective that would strengthen cross-border collaboration and clustering.

He also suggests the possibility of achieving regional balance on the island through a new northern urban-rural network. This would have Belfast as the key driver, along with Derry-Letterkenny, Sligo-Enniskillen-Omagh, the Mid Border area, Newry-Dundalk-Drogheda, and the Causeway-Antrim towns-rural cluster.

The seven counties are Donegal, Sligo, Cavan, Monaghan, Mayo, Roscommon and Longford. Of the remaining four counties with disposable income per person below €18,600 in 2018, three are immediately south of this line in the Midland region: Westmeath, Laois and Offaly while Kerry is the final county. Kerry has the highest income of this group at €18,557 in 2018.

O'Donnellan's proposal for a stronger focus on the border region draws on earlier research by Bradley and Best (2012), which was a major study of the economy of the border region, north and south. Some positive findings emerged from their research:

Positive findings included the identification of some extremely successful and entrepreneurial manufacturing enterprises in the border region and the intelligent manner in which they made full use of the single island market (within the Single European Market), the more open post-Belfast Agreement environment and the dramatic improvements in some aspects of North-South physical infrastructure (Bradley & Best, 2012: 204).

However, several negative findings also emerged: low population density and low urbanisation; a 'limited number of third-level education establishments that can produce the kinds of graduates with technical and business skills that are in demand in the local business environment' (*ibid., 113*); an economy characterised by 'declining traditional sectors of manufacturing, a high reliance on agriculture, and a lack of the kind of market services required to sustain a modern manufacturing base' (*ibid., 114*), which results in local graduates leaving the region; insufficient engagement of national development agencies with local actors, particularly on the northern side of the border; and limited availability of subregional economic data, particularly in Northern Ireland.

The question arises as to what extent the economic problems in the border region can be attributed to the border itself. From their interviews with companies in the region, Bradley and Best found that:

Perhaps the most surprising conclusion was that the 'border' itself featured far less as a barrier or a problem to firms located in the border region than we had anticipated. This was put to us in a pithy way when we were told by one Monaghan businessman that 'green had always traded with orange', and that the border seemed more of a barrier to people remote from it than for people in its immediate vicinity, who crossed back and forth with ease (Bradley & Best, 2011: 36).

Despite this, Bradley and Best concluded that there is a 'border-related policy fault line' and that the interaction of peripherality and the border presents unique challenges to policy makers. They identify two conflicting pressures affecting the development of the border area:

On the one hand the 'national' development agencies have a remit that legally obliges them to focus on their own jurisdictions, and they have different policy instruments and institutional frameworks that make it difficult to deal with cross-border issues, even when there is political willingness to do so. On the other hand, the local government administrations and other regional institutions that operate in the border region do not have the resources (financial and institutional) to overcome the twin challenges of the peripherality and 'border' problems that are holding back development (Bradley & Best, 2012: 205).

They express support for the idea of a 'Border Development Zone' first articulated by Padraic White. The goal of this:

will be to stimulate a form of development that is uniquely adapted to the region, making maximum use of current 'national' resources (where politically feasible) and stimulating the evolution of local resources and expertise of the kind that were identified during our Cross-Border Economic Renewal research project (Bradley & Best, 2012: 206).

They identify three dimensions of a Border Development Zone. The first is spatial: defining the area where the twin challenges of peripherality and border issues need to be addressed. That is not to say that the border area is a homogenous one in economic terms. The second dimension is sectoral: identifying a range of sectors best suited to promotion in the border region. Third, there is the institutional dimension. They do not propose the creation of new institutional structures from scratch. Instead the objective:

will be to propose ways that elements of the existing institutional policy framework can be improved and refocused in order to overcome the weaknesses caused by coordination failure, mainly by articulating a shared vision of the challenges faced within the 'Border Development Zone' (Bradley & Best, 2012: 206).

This proposal does not offer a simple institutional solution to the problems of the border area, but poses the question of how to improve existing institutions in order to strengthen the development of the border area.

Padraic White proposed that the promotion of economic development in a 'border development zone' would focus on four key areas of indigenous enterprise:

- SME enterprise in goods and services with export potential;
- tourism and recreation;
- agriculture, food and fish processing; and
- low-carbon initiatives, energy saving and renewable energy (White, 2014).

A subsequent Oireachtas Committee report on the all-island economy adopted the recommendation of developing a Border Development Zone. This report made a number of proposals on how it could be implemented, including: appointment of 'industry champions' (successful business people from both sides of the border); creation of a Border Development Zone forum consisting of the business champions plus two local authority chief executives from each side of the border in the three border zones (north west, central zone and Newry-Dundalk); publication of an annual 'state of the Border Development Zone' report; support for the North West Growth Partnership; and implementation of a coordinated development strategy for the cross-border region drawing on the ICBAN Regional Strategic Framework (RSF) (JCJEI, 2016).

In oral evidence presented to the Northern Ireland Assembly, drawing from the Bradley and Best research, John Bradley pointed to the limitations of a strategy based on foreign direct investment to benefit more peripheral areas:

A development policy that is focused on attracting inward investment through low rates of corporation tax – the actual strategy in the South and the desired strategy in the North – is doomed to bypass many peripheral subregions in both jurisdictions. But the policy initiatives that would build on the isolated islands of enterprise excellence that we found in our work are far more challenging and complex. What we found was that very little effective effort was being directed at this objective (Bradley, 2013: 5).

He also pointed out that, however defined, the cross-border region 'constitutes a rather large proportion of the entire island that lies mainly outside the two largest, east coast, metropolitan city regions of Belfast and Dublin' (*ibid.,.* 5).

While foreign direct investment (FDI) is concentrated in Dublin and other cities, this does not mean that the border area cannot benefit from this type of investment. In 2020 there was employment in foreign-owned agency-assisted companies¹⁸ of just over 11,000 in the Border region of Ireland (i.e., south of the border) and this had increased 28.4% since 2011. However, this was the second-lowest increase in this type of employment among regions in Ireland, with the lowest increase being in the South-East region (22.8%). In 2020 there was employment of just over 18,000 in Irishowned agency-assisted companies in the Border region, and this had increased by 30.0% since 2011. The Border region includes places along the Dublin-Belfast Economic Corridor. However, FDI is not confined to this part of the region. In 2020 there was employment of 5,894 in IDA Ireland companies in the North-East (Cavan, Monaghan and Louth) and employment of 6462 in such companies in the North-West (Donegal, Sligo and Leitrim) (DETE, 2021b, 2021c).

Several significant FDI companies are based in Donegal. Pramerica (now owned by Tata Financial Services) has been based in Letterkenny for 25 years and employs 1,500 people. It provides business support services. Another major employer in Letterkenny is Optum, an American health care provider that employ 650 people. Other substantial multinational employers in Letterkenny include Sita (an IT provider for the aviation industry), Zeus (manufacturer of specialist products for the medical devices, automotive and other industries) and Optibelt (manufacturer of belt drives for many industries).

¹⁸ This refers to employment in companies under the remit of IDA Ireland, Enterprise Ireland and Údarás na Gaeltachta. The Department of Enterprise, Trade and Employment (DETE, 2021a) publishes an annual employment survey of these companies.

Multinationals operate successfully in the border region and there may be scope to increase this type of investment. However, a substantial improvement in the economy of this region will require achieving a stronger performance from indigenous enterprises.

The challenge for economic policy-making in low productivity regions is characterised by Bradley and Best as follows, drawing on experience across different countries and regions:

The challenge ... is to design bottom-up policy frameworks to advance a region's production capabilities. For this task, entrepreneurial firms are the drivers. But the key message from a structural competitiveness perspective, as illustrated in earlier case studies, is that firms do not develop capabilities in isolation or compete alone in the global marketplace; the individual and collective capabilities of region's enterprises depends on enabling linkages. The latter includes interfirm cluster dynamic relationships, extrafirm business and technology-development infrastructures, and regional economic stewardship to integrate otherwise fragmented agencies (Bradley & Best, 2018: 184-5).

The need for collaboration is also identified in the Action Plan for Jobs 2013:

Companies increasingly need to collaborate to compete, requiring engagement in networks, clustering activities and in building strategic relationships with HEIs, research institutes, partners and suppliers within and across sectors (DJEI, 2013: 111).

Promoting collaboration and networks is a feature of some of Ireland's enterprise policies. The Skillnets Programme gives employers a role in shaping local training, while there are a number of technology initiatives that encourage collaboration. Other relevant policies in this area are Enterprise Ireland's Pilot Clustering Programme and its Regional Enterprise Development Fund. The Roadmap prepared by the Department of Enterprise, Trade and Employment following the OECD Review of SME policy acknowledged the need to strengthen policy instruments on collaboration and enterprise networks. In the view of Bradley and Best, collaboration among enterprises so that they become more competitive is critical:

It is the crucial element in building a successful indigenous enterprise strategy and needs to be brought centre stage. Knowing what enterprises are present in a region is the start. But the fact that clusters of similar manufacturing activities exist in a region does not tell us if the constituent firms are focussing on core capabilities and partnering for complementary capabilities in a way that creates an organic and highly competitive entity referred to as an entrepreneurial district (Bradley & Best, 2018: 196).

Bradley and Best set out three propositions concerning the role of entrepreneurial firms and industrial policy in promoting regional development:

(First), entrepreneurial firms are the drivers of successful regional growth policies. The second proposition is that SMEs do not compete individually in the global marketplace but as members of networked groups that foster cluster-dynamic processes. The third is that successful industrial policy needs to focus attention on fostering extrafirm infrastructures and not on grants and subsidies to individual enterprises (Bradley & Best, 2018: 184).

In their research in the border area (north and south) Bradley and Best found several examples of successful entrepreneurial firms; they referred to some of the firms they encountered as 'quite extraordinary' (*ibid.*, 189). However, the problem is that there are too few of them. They argue that policy in Ireland and the peripheral regions of the UK is not well focussed on creating the environment to support innovation in entrepreneurial firms:

The industrial ecosystems of Ireland and the peripheral regions of the United Kingdom are fragmented and disorganised when contrasted with those that enabled the successful growth and transformational experiences described in earlier chapters. Germany provides a benchmark for the economic co-ordination of extrafirm infrastructures to innovate and thrive (Bradley & Best, 2018: 206).

It is a major challenge to find effective ways of creating the conditions so that more entrepreneurial firms emerge in the border area.

Clusters

The cluster concept has been part of academic and policy discussion in Ireland now for 30 years. This experience has been reviewed by van Egeraat and Doyle (2018). They consider that the concept has gained limited acceptance in policy but continues to lack an agreed or clear definition. They view implementation as limited: 'While the most recent initiatives may be more encouraging, the potential for exploiting cluster policy as a mechanism to support innovation has only been addressed in a limited way' (*ibid.*, 125).

Clusters are defined by Porter as 'geographic concentrations of interconnected companies and institutions in a particular field' (Porter, 1998). Clusters have the potential to influence competition in three broad ways:

First, by increasing the productivity of companies based in the area; second, by driving the direction and pace of innovation, which underpins future productivity growth; and third, by stimulating the formation of new businesses, which expands and strengthens the cluster itself. A cluster allows each member to benefit as if it had greater scale or as if it had joined with others formally—without requiring it to sacrifice its flexibility (ibid.).

Central to concept of clusters are external economies: these are benefits that a company gets from being in a cluster than are external to the company itself; for example, the benefits to a company of being located in Silicon Valley.

Van Egeraat and Doyle point out that the benefits of external economies exist at different geographic scales, and in the case of a small country like Ireland the relevant scale for cluster policies will frequently be the national level. In their view, national-level cluster policies can benefit many areas including those not in the main cities.

There is also scope for clusters at the level of the island of Ireland. A study by Intertrade Ireland examined the presence of all-island concentrations of activity ('sectoral ecosystems' was the term used in that report) (Magennis & Gough, 2015). A forum has been organised by Intertrade Ireland with the involvement of Science Foundation Ireland, IDA Ireland, Enterprise Ireland and Invest NI to identify sectors where there may be scope to achieve greater economies of scale and scope, through all-island interventions (Blair *et al.*, 2021). There are benefits to companies in being part of a dynamic cluster, but it is challenging to find the mechanisms to effectively promote the development of clusters in a particular context.

In identifying clusters, it is argued by van Egeraat and Doyle that the focus should be on substantial concentrations of employment rather than specialisation *per se*. An area might have an above-average share of its employment in a sector (i.e., specialisation) but this might not provide a basis for a dynamic cluster if there are not many firms or workers involved. Van Egaarat *et al.* (2016) identified 31 substantial sectoral concentrations in Ireland, of which 29 encompassed at least one of the main city regions. Other counties were to some extent incorporated in these concentrations but several counties were not linked in this way. These included Donegal and Leitrim.

They also considered that there was also scope for locally or regionally focussed cluster policies for a more limited set of locations. The locations suitable would be ones with substantial concentrations of firms, particularly those involved in research and advanced production.

The analysis of van Egeraat and Doyle (2018) might seem to imply little scope for promoting clusters in the border area. While the scope for deep clusters centred in the border region may be limited, the issue of relationships between firms and relevant institutions remains important. Two examples from Bradley and Best (2012) illustrate this. First, there was a very successful furniture industry concentrated in Monaghan, which declined sharply from 2007. It is argued by Bradley and Best (2012) that the furniture companies in Monaghan were unable to compete on the basis of a 'go it alone' business model against competitors elsewhere, who used superior production methods that depended on being part of a networked system. A second example is the Town of Monaghan Co-op, a cross-border co-op that subsequently become part of Lakeland Dairies. The Town of Monaghan Co-Op developed a long-term partnership with Abbott Nutrition, one of the largest global producers of infant milk formula, to be its sole supplier of milk in Ireland. This required a radical upgrading of quality standards by the co-op, and these have been sustained over several decades. Its

success is also based on relationships with key customers such as Kerrygold and high-tech suppliers, as well as positive staff relationships.

There is also scope for island-wide clusters to have a presence in the border area. The aforementioned Intertrade Ireland study of sectoral ecosystems identified a concentration of software companies in the Enniskillen-Cavan area, while in chemicals the industry concentrations included Belfast-Portadown-Newry and Dublin-Dundalk-Cavan-Athlone.

Blair *et al.* (2021) have pointed to the possibility of regional or local clusters along the Dublin-Belfast Economic Corridor. They propose that, 'Agreement on a common understanding of what we mean by 'clusters' and on a number of sectoral priorities – from among those identified by different Councils – might be the most suitable starting point for the Corridor' (Blair *et al.*, 2021: 75). This would have the potential to benefit some of the border area.

1.11 Conclusion

Population

The population on the island is approaching 7 million. The combined metropolitan areas of Dublin and Belfast, broadly defined, together have a population of approximately 2.9 million people, over 40 per cent of the island's population. These two cities and the areas between them constitute the Dublin-Belfast Economic Corridor, which is important to the island's economic development. There is potential for enhanced co-operation to realise further mutual benefits from the development of this corridor (Blair *et al.*, 2021: 75).

Ireland has had very strong population growth since 1991, with an increase in population of 1.45 million people or 41.2 per cent between 1991 and 2020. The increase in population in Northern Ireland over the same period was 288,000 people or around 17.9 per cent. Within Ireland, the regions with the slowest growth in population over the 1991 to 2020 period were the Mid-West (26.6%) and the Border (30.6%), although this was still considerably faster than that experienced in Northern Ireland over the same period.

Faster population growth in Ireland is taking place in a context in which the average population density in Northern Ireland is roughly double that of Ireland. In both Ireland and Northern Ireland, population growth has been fastest in areas surrounding the largest city. Faster population growth in Ireland arises from both a higher natural increase, and higher net migration, compared to Northern Ireland. Migration represents a larger share of Ireland's population growth than is the case for Northern Ireland.

Labour Market and Education

Employment growth for the period 2000 to 2018 in Ireland (30.4%) was roughly double the rate experienced in Northern Ireland over the same period (14.4%). Within Ireland, the strongest employment growth over this period was in the Mid-East (41.4%), Dublin (37.2%) and the South-West (34.9%).

Within Northern Ireland, the strongest employment growth was in Belfast, with an increase of 25.4 per cent. The economy of Northern Ireland is centred on Belfast, which had 30 per cent of the employment and 18 per cent of the population in 2018. Productivity in Belfast is above the Northern Ireland average, but there is a degree of divergence between its strong economic position and the resident population, with many people commuting into Belfast to work. The average disposable income in Belfast is around 4.2 per cent below the Northern Ireland average.

The primary difference in the composition of employment between Ireland and Northern Ireland is that the public sector represents a larger share of employment in Northern Ireland (24.2 per cent, excluding public corporations in 2019) compared to Ireland (17.9 per cent, excluding commercial semi-states, in the same year). Within Northern Ireland, employment in public administration, health and education¹⁹ is highest in Derry City and Strabane at 35.0 per cent, compared to a Northern Ireland average of 29.2 per cent. A high share (close to one-third) of employment in

¹⁹ Public administration, health and education is dominated by the public sector but also includes some private employment.

financial, professional and technical services, plus information and communications, is a shared characteristic of both Dublin and Belfast.

In 2019, the labour force participation rate²⁰ (also known as the activity rate) for the population aged 15 and over was 62.3 per cent in Ireland, and 60.1 per cent in Northern Ireland. In both cases, this was above the EU average but somewhat lower than the UK at 63.2 per cent. The situation is different, however, if one focuses on the core workingage population of 15 to 64 years olds²¹. In 2019, participation in the labour market among this age group was at similar levels North (72.9%) and South (73.3%), and close to the EU average (74.0%). However, it was well below the UK (78.1%), and the higher-performing EU member states such as Denmark (79.1%).

Within Ireland, the highest labour force participation rates in 2020 were in Dublin (64.3%) followed by the Mid-East (62.0%) and the West (61.1%), for those aged 15 years and over²². Within Northern Ireland, the highest participation rates (for those aged 16 and over) in 2019 were in two of the three districts closest to Belfast (Lisburn and Castlereagh, 68.0%; Antrim and Newtownabbey, 67.0%) and also in Mid Ulster (65.1%). Unemployment is lower in Northern Ireland compared to Ireland: in the first quarter of 2021 the seasonally adjusted rate of unemployment in Ireland was 7.3 per cent while the rate for Northern Ireland was 3.8 per cent.

The share of the population in Ireland with third-level education (47.3%) is considerably higher in Ireland than in Northern Ireland (40.6%), while the share for whom lower secondary level is the highest level of education achieved is lower in Ireland (16.3%) compared to Northern Ireland (23.8%). Ireland has one of the lowest dropout rates from education in the EU, while Northern Ireland has the second highest rate of early school leavers in the UK (after Wales).

Within Ireland, the share of the population in Dublin with third-level education, at 62 per cent in 2020, was considerably higher than in any other region. The regions with the lowest shares of the adult population having third-level education were the Border (41%) and Midland (40%). Within Northern Ireland, the districts with an above-share of third-level education are all close to Belfast: Lisburn and Castlereagh (51%), Mid and East Antrim (41%), Ards and North Down (41%) and Antrim and Newtownabbey (38%).

Output per Head and Productivity

Although exaggerated by accounting practises, output per head and per worker (the latter being a measure of productivity) are higher in Ireland compared to Northern Ireland.²³ Within Ireland, the recorded level of productivity, as measured by GDP per worker, is highest in the Southern and Dublin regions. The level of productivity in the Northern and Western region is well under half of the national average, but the data for this region is not distorted by the exceptional productivity of a few companies.

Within Northern Ireland, productivity in 2018 was highest in Mid and East Antrim (52.2% above the Northern Ireland average) while it was 4.2% above average in Belfast. The productivity of most districts of Northern Ireland, including those along the border, is fairly close to the average level of productivity in the Northern and Western region of Ireland.

Regional Incomes

There is much less regional variation in income compared to recorded productivity. In 2018, disposable income per person in the Dublin region was 17.4 per cent above the average for Ireland, and higher than any other region. Income was lowest in the Border and Midland regions (18.2% below average in each case). These regions also have relatively high reliance on social transfers as a source of household income, a characteristic shared by the South-East region. The

²⁰ The labour force participation rate refers to the share of the working-age population (which can be defined in different ways) that is in the labour force (i.e., either in employment or seeking employment).

Participation rates among those aged 15 years and over is lower than for those aged 15 to 64 as participation is naturally lower among those aged 65 and over. However, participation among those aged 65 and over in Ireland (12.0%) and Northern Ireland (10.2%) was relatively high compared to the EU average (6.4%) in 2019.

²² For regions within Ireland, data on participation of the population aged 15 years and over is used, as this is published by the CSO. The closest to this at regional level available for Northern Ireland is participation among those aged 16 years and over.

Modified GNI* is a better measure than GDP of real economic activity for Ireland. In 2017, modified GNI* per head and per worker in Ireland was higher than the corresponding GDP measures for Northern Ireland, by 31.0 per cent and 26.4 per cent respectively. Modified GNI* is not available at regional level so GDP is used.

Border and Midland regions also have the lowest shares of the population with third-level education, and below-average labour force participation.

Up to 2010, there had been a trend of a narrowing of regional differences in income in Ireland, with above-average growth in the Border and West²⁴ regions, and below-average growth in Dublin. However, this been reversed since then: over the period 2010 to 2018, the strongest income growth was in Dublin, while the Mid-East also saw above-average growth. All other regions had below-average growth, with the exception of the Mid-West, where growth equalled the average for Ireland.

Within Northern Ireland, the highest-income districts are close to Belfast: Lisburn and Castlereagh (15.4% above average), Ards and North Down (10.5% above average), and Mid and East Antrim (7.1% above average). Derry City and Strabane has the lowest income (11.5% below average) and productivity (14.6% below average) of any district in Northern Ireland, and also falls below average on most of the other economic indicators examined in this paper. However, this district had the third-highest employment growth (15.4%) in Northern Ireland over the period 2000 to 2018; the average growth for Northern Ireland over this period was 14.4 per cent. Its relative income has also increased since 2000. The other districts along the northern side of the Border also generally have below-average incomes and productivity, ²⁵ and a mixed position in terms of other indicators.

Looking across a range of variables for Ireland, one sees a broad division between the north and west of the country and the south and east. For the most part, the more prosperous areas are south of a line between Galway and Dundalk. Both the Border and the Midland regions have incomes that are one-fifth below the average for the south. Within Northern Ireland, there is something of an east—west division. The more affluent areas are clustered around Belfast.

Policy Issues

Both County Donegal, and Derry City and Strabane, are characterised by shared economic characteristics including low income. However, the North-West Region, which covers this area, also has considerable potential and benefits from strong cross-border links. A formal partnership, jointly led by Donegal County Council and Derry City and Strabane District Council, has been established to seek to advance the development of the North West City Region, an area centred on Letterkenny, Derry and Strabane. The RSES of the Northern and Western Region incorporates and supports the idea of a partnership approach to developing this region. NESC is undertaking research on the challenges and opportunities for development in the North-West.

Regional development frameworks in Ireland north and south have been outlined in Sections 1.10.1 and 1.10.2. An interesting feature of these has been the increased focus on improving co-ordination between national, regional, and local policy. It is also recognised that there is no simple off-the-shelf institutional solution to the challenge of balanced regional development. A number of innovative institutional and governance arrangements have been put in place to support regional development, particularly in the border region.

As with other regions, the development of the border area including the North-West needs to be based on an understanding of its resources, and the capabilities of the sectors and enterprises in the area. Opportunities in the border area include the ability to export business and financial services and to engage in remote working. This should inform decisions on public investment to strengthen the area's economy.

Foreign direct investment is central to Ireland's economic development, and has also brought benefits to the border region, including the North-West where some multinationals have successful operations. However, a substantial improvement in the economy of this region will require achieving a stronger performance from indigenous enterprises.

Opportunities for indigenous development in the border area include SMEs with export potential, agriculture and food, tourism, and renewable energy. There are highly successful indigenous enterprises based in the border area but these are relatively few in number (Bradley & Best, 2018). It is a major challenge to build more successful indigenous enterprises. The factors that influence this challenge include education and training, research, how firms collaborate with other firms and with relevant education and research institutes. This challenge will be examined in NESC's further work on development in the North-West.

²⁴ The year the highest relative income level was reached was 2004 for the Midland region, 2007 for the South-East and 2011 for the Mid-West.

²⁵ An exception is Mid Ulster whose GDP per worker in 2017 was 1.4 per cent above the average for Northern Ireland.

One of the conditions needed to strengthen economic development in the border area is increased investment in infrastructure. The establishment of the Shared Island Fund by the Irish Government will make it possible to realise key infrastructure projects. Some of the projects in which this fund is due to invest will enhance tourism, for example the Narrow Water Bridge, and cross-border greenways. The border area enjoys attractive natural amenities and there is strong potential for further tourism development.

Several factors have the potential to contribute to enhanced regional development in the border area and the North-West in the coming years. A revised NDP has recently been published, and a new Investment Strategy for Northern Ireland is due to be completed shortly. The revised NDP includes planned Shared Island investment. City deals have been agreed for Belfast (indicative funding of £1bn) and Derry (£250m). A new PEACE PLUS funding programme for Northern Ireland and the border counties is being put in place with funding of approximately €1bn for the period 2021 to 2027. There is now an opportunity for deeper collaboration to make effective use of the substantial funding available to promote balanced regional development on the island including the border area.

Bibliography

Belfast Region City Deal (undated), Frequently Asked Questions. https://www.brcdinnovation.co.uk/frequently-askedquestions, 15/10/21.

Blair, N., Corrigan, J., Magennis, E. & Ó Broin, D. (2021), Economic Corridor: Current Profile, Potential for Recovery & Opportunities for Cooperation, Ulster University Economic Policy Centre and Dublin City University. https://www.dbec.info/docs/DBEC Full Report 2021-03.pdf, 15/21/10.

Bradley, J. (2013), 'Oral Evidence', Presentation to the Northern Ireland Assembly, "Committee for Enterprise, Trade and Investment", 11 April.

Bradley, J. & Best, M. (2011), 'Bypassed Places? The Post-Belfast Agreement Border Region Economy', *Journal of Cross Border Studies in Ireland*, 6: 25-40.

Bradley, J. & Best, M. (2012), Cross Border Economic Renewal: Rethinking Regional Policy in Ireland, Belfast: Centre for Cross Border Studies.

Bradley, J. & Best, M. (2018), 'Ireland's Divided Economy: Growth without Indigenous Innovation' in Best, M. (Ed.) How Growth Really Happens: The Making of Economic Miracles through Production, Governance and Skills, New Jersey and Oxfordshire: Princeton University Press.

Cahill, N. (2021), Shared Island: Projects, Progress & Policy: The Island Economy, Secretariat Series No.25, Dublin: National Economic and Social Council. Cave, S. & Semple, M. (2018), A comparison of the planning systems in Ireland and Northern Ireland, A joint paper by the Oireachtas Library & Research Service and the Northern Ireland Assembly Research & Information Service.

https://data.oireachtas.ie/ie/oireacht as/libraryResearch/2018/2018-12-18 spotlight-a-comparison-of-theplanning-systems-in-ireland-andnorthern-ireland en.pdf, 19/07/21.

CSO (2020a), Output and Value Added by Activity 2019, Background Notes.

https://www.cso.ie/en/releasesandp ublications/ep/pnaova/outputandvalueaddedbyactivit y2019/backgroundnotes/, 15/10/21.

CSO (2020b), Educational Attainment Thematic Report 2020. https://www.cso.ie/en/releasesandp ublications/ep/p-eda/educationalattainmentthematicr eport2020/, 15/10/21.

CSO (2021), County Income and Regional GDP 2018. https://www.cso.ie/en/releasesandpublications/er/cirgdp/countyincomesandregionalgdp2018/, 15/10/21.

Dáil Éireann (2021), Written answer to Oireachtas questions 11 to 15, 12th October.

https://www.oireachtas.ie/en/debate s/question/2021-10-12/12/#pqanswers-11 12 13 14 15, 15/10/2021.

DECLG (2015), Guidelines on Local Economic and Community Plans,
Community Division, Dublin:
Department of Environment,
Community and Local Government.

DETE (2021a), *Annual Employment Survey, 2020*, Dublin: Department of Enterprise, Trade and Employment.

DETE (2021b), North-East Regional Enterprise Plan Final Progress Report, Dublin: Department of Enterprise, Trade and Employment.

DETE (2021c), North-West Regional Enterprise Plan Final Progress Report, Dublin: Department of Enterprise, Trade and Employment.

DJEI (2013), Action Plan for Jobs 2013, Department of Jobs, Enterprise and Innovation, Dublin: Government Publications.

DoE (2015), Strategic Planning Policy Statement: Planning for Sustainable Development, Belfast: Department of Environment.

DPER (2020), *Public Participation Network: Case Study, Reform Delivery Office*, Dublin: Department of Public Expenditure and Reform.

DRD (2010), *Regional Development Strategy 2035*, Belfast: Department for Regional Development.

DRD & DECLG (2013), Framework for Co-operation Spatial Strategies of Northern Ireland & the Republic of Ireland, Belfast and Dublin:
Department for Regional
Development and Department of Environment, Community and Local Government.

EMRA (2019), 'Regional, Spatial and Economic Strategy: 2019-2031'. Dublin: Eastern and Midland Regional Assembly. FitzGerald, J. (2018/19), 'Investment in Education and Economic Growth on the Island of Ireland', *Journal of Statistical and Social Inquiry Society of Ireland (SSISI)*, 48: 195-210.

Government of Ireland (2002), *The National Spatial Strategy 2002–2020: People, Places and Potential*, Dublin: The Stationery Office.

Government of Ireland (2021a), *Our Rural Future: Rural Development Policy 2021-2025*.

Government of Ireland (2021b), *National Development Plan 2021-2030*, Dublin: Department of Public Expenditure and Reform.

ICBAN (2021), The Framework for Regional Priorities for the Central Border Region of Ireland/Northern Ireland, Enniskillen: Irish Central Border Area Network.

International Centre for Local and Regional Development (2016), The North West Strategic Growth Plan; A Model for Regional Development and Growth of the North West of the Island of Ireland.

http://meetings.derrycityandstrabane district.com/documents/s27182/Nort h%20West%20-

%20Appendix%201.pdf, 15/10/2021.

JCJEI (2016), Report on the All-Island Economy, Joint Committee on Jobs, Enterprise and Innovation, Dublin: Houses of the Oireachtas.

Magennis, E. & Gough, A (2015), Mapping the Potential for All-Island Sectoral Ecosystems: A Summary Report, Newry: Intertrade Ireland Morgenroth, E. (2018), *Prospects for Irish Regions and Counties: Scenarios and Implications*, ESRI Research Series No.70, Dublin: Economic and Social Research Institute.

NESC (2019), Transport Orientated Development: Assessing Opportunity for Ireland, No.148, Dublin: National Economic and Social Council.

NISRA (2020), Labour Force Survey Tables for Local Government Districts 2009-2019.

https://www.nisra.gov.uk/publication s/labour-force-survey-tables-localgovernment-districts-2009-2019, 15/10/21.

NISRA (2021), 2020 Mid Year Population Estimates for Northern Ireland, All Areas-Population Totals (2001-2020 including historical NI 1821-2020).

https://www.nisra.gov.uk/publication s/2020-mid-year-populationestimates-northern-ireland, 15/10/21.

NWRA (2020), *Regional, Spatial and Economic Strategy: 2020-2032*, Ballaghaderreen: Northern and Western Regional Assembly.

O'Donnellan, N. (2020), *Towards an All-Island Perspective on Regional Development*, Discussion Paper, Sligo: IT Sligo.

ONS (2020), Regional Gross
Disposable Household Income: All
NUTS level regions, 1997 to 2018
Edition of this Dataset.
https://www.ons.gov.uk/economy/re
gionalaccounts/grossdisposablehouse
holdincome/datasets/regionalgrossdi
sposablehouseholdincomegdhi,

15/10/21.

Porter, M.E. (1998), 'Clusters and the New Economics of Competition', *Harvard Business Review,* November-December.

Special EU Programmes Body (2021), European Territorial Co-operation 2021–2027, Preparing the EU PEACE PLUS Programme for the 2021-2027 period, Consultation Information Document, Belfast: Special EU Programmes Body.

Strategic Investment Board (undated), Investment Strategy Northern Ireland. https://sibni.org/home/investment-strategy-isni/, 9/9/2021.

Van Egeraat, C. & Doyle, E. (2018), 'Rethinking Irish Cluster Policy', *Administration*, 66(1): 107-28.

Van Egeraat, C., Morgenroth, E., Kroes, R., Curran, D. & Gleeson, J. (2016), 'A measure for identifying substantial geographic concentrations', *Regional Science*.

Walsh, J.A. (2015), 'Education' in Gleeson, J. (Ed.) *The Atlas of the Island of Ireland,* Maynooth: National University of Ireland.

Walsh, J.A. (2019), 'Visions and Plans for Regional Development in Ireland', *Administration*, 67(3): 7-39.

White, P. (2014), 'Introduction to the Border Development Zone', Presentation to the Centre for Cross Border Studies and International Centre for Local and Regional Studies, "Joint Annual Conference", Cavan, 30 January.

Publications

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