Delivering balanced regional growth in Northern Ireland

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1 Introduction

1.1 Economic growth is almost always geographically uneven. It has long depended on factors such as the availability of natural resources or concentrations of a healthy and educated population. This unevenness is sometimes regarded as an acceptable trade-off for overall (or national) economic efficiency and growth, which can be driven by the clustering of resources (agglomeration) and the mobility of capital, labour and skills.

1.2 Historically the expected result was that people move to those growth areas, adding to both the strengths of one place and the weaknesses of another which should then converge over time as the growth region becomes less (cost) competitive.[1] However, there are a number of concerns about this approach.

1.3 Firstly, there is growing evidence that increasing regional inequality may actually contribute to lower not higher aggregate economic growth[2]. Secondly, there is little evidence of the expected convergence, as the data identifies clearly significant inequalities across OECD countries, between regions both large (e.g. Northern Ireland (NI) as a UK region) and small (a Local Government District (LGD) within NI).

1.4 The average GVA per capita gap between top and bottom-performing regions' is 2.5 times and is even higher in the United Kingdom (UK), Hungary, Ireland (RoI) and Turkey[3]. Finally, there is evidence that these gaps are growing over time, and this may be linked to wider political discontent with the 'revenge of the left behind places'[4].

1.5 Regional questions are not new across the OECD. The North/ South divide in the UK or Italy existed for much of the 20th century. This picture is now in NI with a sub-regional divide opening since the 1950s. In recent years the aspiration towards a (more) regionally balanced economy has found its way into Executive commitments. In 2016 the first outcome of the draft Programme for Government was that *"We prosper through a strong, competitive and regionally balanced economy"*. This was followed in 2020 in the New Decade, New Approach agreement's commitment that *"A top priority of the Executive will be to develop a regionally-balanced economy with opportunities for all."* Then in February 2024, the Minister for Economy's Economic Vision set out a range of objectives, including *"to promote Regional Balance."*

1.6 The subsequent publication of the *Sub-Regional Economic Plan* included the provision of funding for Local Economic Partnerships (LEPs) to support local

[1] Glaeser and Gottlieb (2009); Puga (1999).
[2] Carrascal-Incera et al (2020); Batheldt et al (2024)
[3] Königs et al (2023).
[4] This phrase shows the UK/US origin of much commentary but it exists in discussions of 'la Espana vaciada' (or 'hollowed out/emptied Spain') or 'abgehangte regionen' ('suspended regions' in Germany); see Pike et al (2024).

economic strategies and proposals[5]. These are to be co-designed by Councils, enterprise agencies and other local stakeholders, and this builds on the earlier transfer of economic development and planning powers to the eleven Councils. The Councils have already taken a lead in developing and achieving funding for four City and Growth Deals and all eleven now run Labour Market Partnerships (LMPs), formalising their strategy and funding role in the areas of employability and addressing skills gaps.

1.7 In line with this move towards a greater local delivery of economic development there are ongoing reforms in Invest NI, including an enhanced regional focus, with greater resources in the regional office network and a commitment to sub-regional investment targets.

1.8 This research is written with this evidence and context in mind. The report explores if the same regional inequality trends – clear performance gaps which, in many cases, are growing – hold at the level of NI and its small TL3 regions or local government districts. Also, if these inequalities have persisted, improved or diverged over time, and if this is acting as a drag on overall economic performance in NI.

1.9 The report also reviews the explanations sometimes given for the existence of regional economic inequalities and the extent to which these operate at an NI level, as well as those factors or place-based policies which may promote regional balance.

[5] DfE (2024a).

2. Regional inequality trends in advanced economies

2.1 The nature of the unevenness in economic development has been changing in recent decades. The previous pattern of diverging economic performance *between* countries across the world has been reversed. Inequality between countries has been falling as poorer countries have narrowed the income and output gaps with richer countries. However, the opposite has been the case *within* most countries as regional and sub-regional income inequalities have been increasing.

Trends in OECD countries

2.2 Recent reviews by the OECD[6] identify several different trends in regional inequalities:

- Inequalities have been growing within countries at the same time as they have been falling between countries;
- This trend is true to a greater extent for smaller regions compared to larger regions; and
- This is not the case in every country with regional inequality declining in some and growing in others.

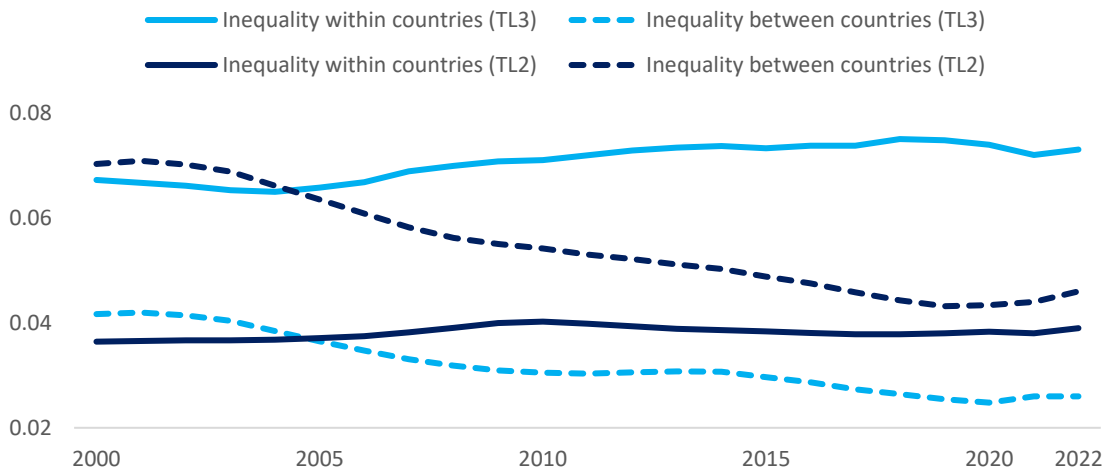
2.3 Figure 1 overleaf captures the first two trends. Since 2000, across all OECD economies for which regional data exists, both TL2[7] and TL3[8] regions have converged with other regions of the same size in different countries. This convergence trend has been stronger in larger regions, perhaps because the level of inequality between countries was much higher at the TL2 level in 2000.

2.4 Figure 1 also shows that the levels of inequality between regions within a country have been increasing. This has been greater for regions of smaller size. The increase for TL2 regions since 2000 has been marginal, peaking in 2009-11, then falling before a small increase in 2021-22. The increase for TL3 regions has been greater and has risen steadily from a low point in 2004 before a dip after 2019[9]. This difference between larger and smaller regions means that, at a UK level, income inequalities between LGDs should be greater than those between the 12

[6] OECD (2022b); OECD (2023).
[7] TL2 regions are the 394 large regions or the first administrative tier of subnational government across the OECD. TL2 is equivalent to the UK's ITL1 classification or 12 regions including Northern Ireland.
[8] TL3 regions in the OECD represent 2,258 small regions or the second administrative tier of subnational government. These are equivalent to the UK's ITL3 classification which are council areas, as in NI.
[9] Looking at the coefficient of variation of TL3 regions' GDP per capita – measuring the deviation between the highest and lowest performing TL3 regions as a percentage of the mean – this has increased in 27 OECD countries although the same measure for TL2 regions has remained the same.

larger regions, including NI. This pattern is repeated across most OECD countries, suggesting that the differentials become greater the smaller the population size.

Figure 1: Theil inequality index of GVA per capita, OECD TL2 and TL3 regions, 2000-22



Source: OECD Regional database; UUEPC analysis.

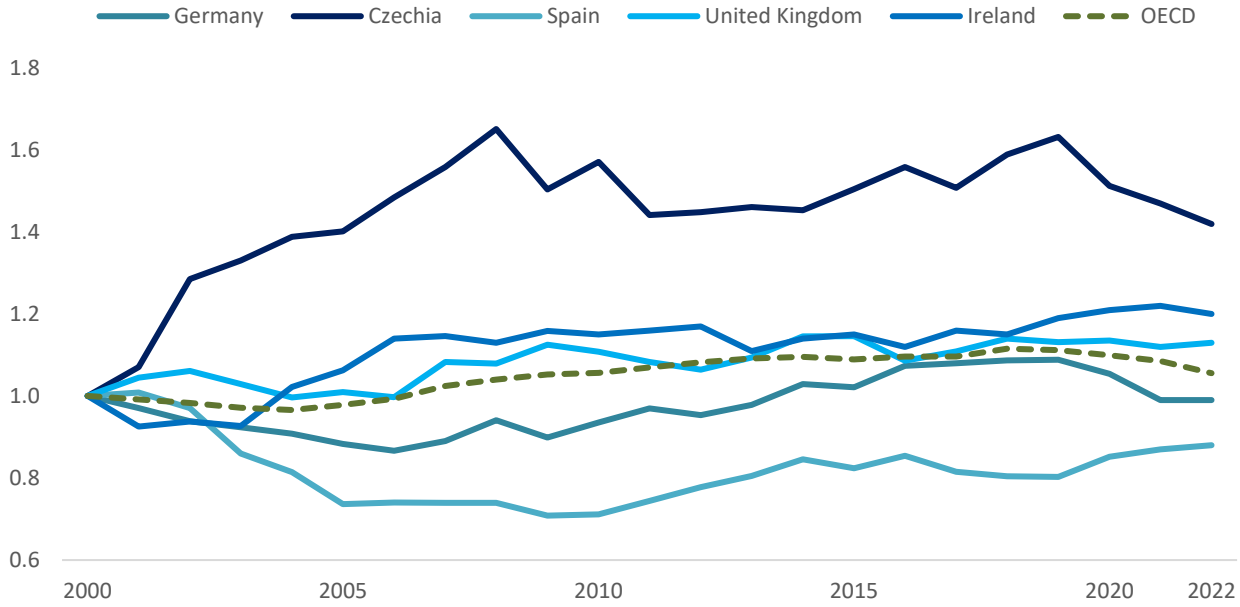
Note: The Theil index measures inequality in GDP per capita and breaks down this into inequality due to differences with countries and that due to discrepancies between countries. The database covers 409 TL2 regions in 31 OECD countries and 1,585 TL3 regions in 28 countries

2.5 Another important point identified by the OECD is that not all places are the same when it comes to the direction in which their regional inequalities are moving (OECD, 2023). Four different cohorts or 'clubs' of countries have been identified:

- Wealthy economies with increasing regional inequalities, including Belgium, UK, USA or Ireland.
- Wealthy economies where regions have converged in their incomes, including Germany, New Zealand and Netherlands.
- Economies which have been converging at a national level with richer nations have also experienced increased regional inequality, including the Czechia and other Eastern European economies.
- Low growth economies where regional gaps have closed to a degree, including Spain and other southern European countries.

2.6 Figure 2 shows how Ireland and the UK have moved ahead of the overall OECD trend towards higher inequality at the TL3 regional level, although not to the same extent as in the fast-growing Czechia. The chart also shows how slower-growth Spain saw a fall in regional inequality (although may be rising again after the sharp fall). Finally Germany has also remained below the OECD trendline though its growth rates in the period have been much higher than those in Spain.

Figure 2: Theil inequality index of GVA per capita, selected OECD countries, TL3 regions, 2000-22



Source: OECD Regional database; UUEPC analysis.

Trends in the UK

2.7 Longer-term analysis of regional economic inequality in the UK suggests that inter-regional inequality was generally lower in the UK than in Europe or the USA in the early decades of the twentieth century and would remain relatively low in the second half of the century, as inequality fell sharply across Europe[10]. The main change came from 1990 onwards, after which UK regional inequality began to rise sharply so much so that, by the 2010s, the UK joined the more regionally imbalanced economies alongside Italy and Belgium.

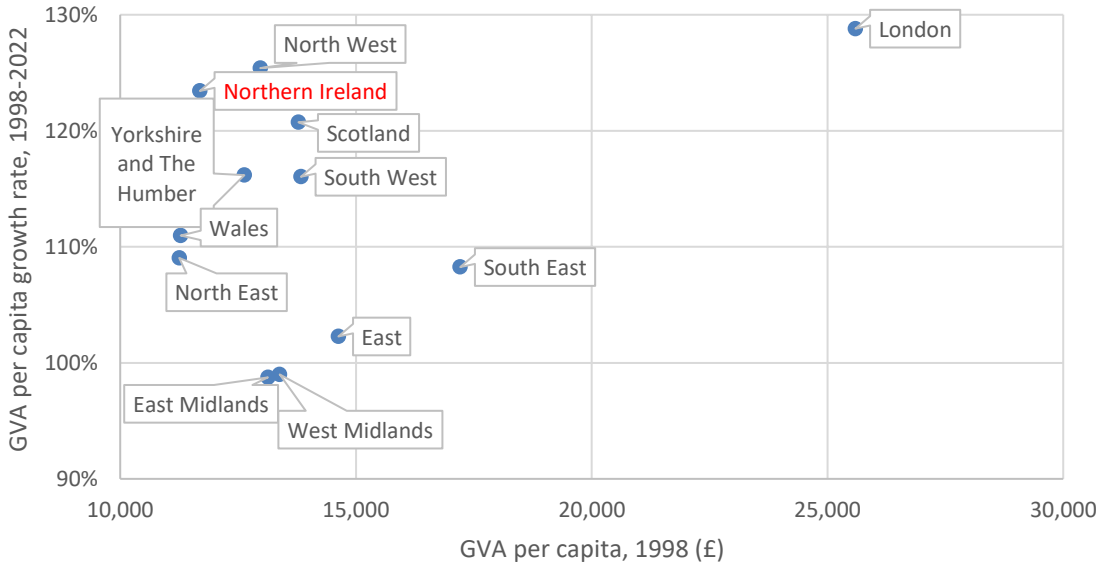
2.8 Analysis comparing the UK and Germany at the scale of TL2 and TL3 regions has found that the former has moved towards greater levels of inter-regional inequality as the latter has converged its regional economies to some degree[11]. The two countries passed one another around 2000 and the UK now has inequality levels closer to German levels before unification.

2.9 As Figure 3 and Table 1 show, the regional disparity within the UK is primarily a case of London's performance being persistently ahead of other regions and the capital having a GVA per capita growth rate which is among the highest of all regions. Over both time periods, London started ahead of all other regions in terms of output per head of population and has remained well out in front. Other analysis shows that the broader 'South' of the UK (which also includes South

[10] Carrascal-Incera et al (2020); Maddison (2006).
[11] Carrascal-Incera et al (2020).

East, East, South West and East Midlands) has continued to out-grow the 'North', even though parts of the 'South' (such as the East) have begun to fall behind their peer regions.

Figure 3: Growth in Real GVA per capita, UK TL2 regions, 1998-2022



Source: ONS, UUEPC analysis

Table 1: Index of GVA per capita, UK TL2 regions, 1971-2022 (UK=100)

UK=100	1971	1981	1991	2001	2007	2016	2022
North East	75	79	76	71	74	72	71
North West	94	96	85	85	86	86	88
Yorkshire & Humber	81	86	85	81	83	78	82
East Midlands	81	85	85	82	80	79	79
West Midlands	96	90	90	84	80	82	80
East	104	100	98	95	91	89	89
London	153	164	163	165	174	180	176
South East	106	104	107	111	106	107	108
South West	91	94	92	89	88	87	90
Wales	79	78	75	72	71	73	72
Scotland	92	85	78	87	92	92	92
NI	80	85	78	79	79	76	79

Source: ONS, UUEPC analysis

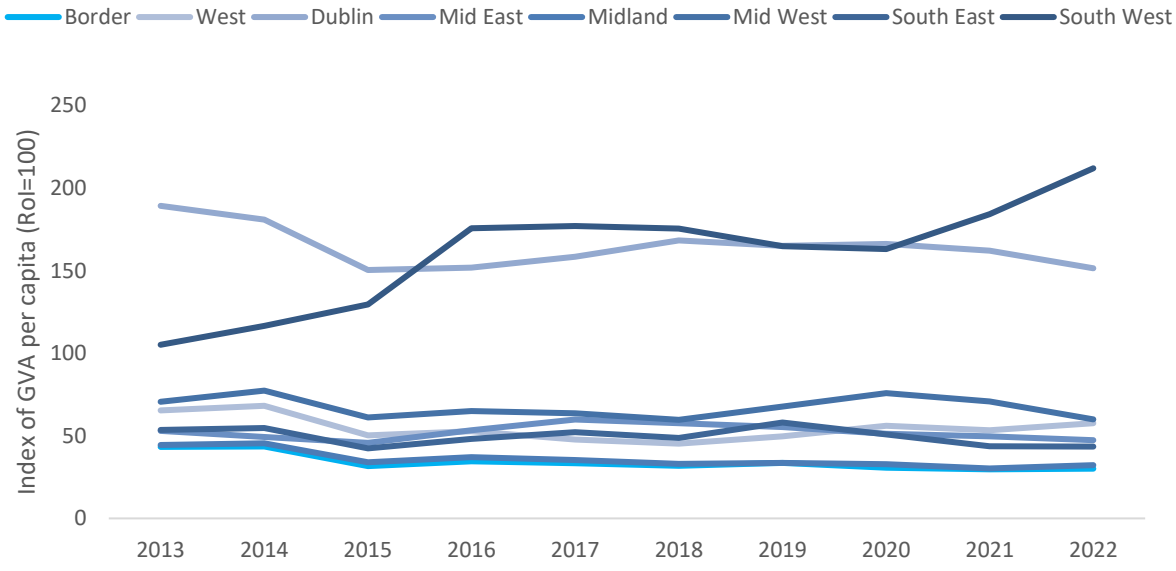
2.10 Figure 3 also shows how NI, Scotland and the North West regions have all performed well in terms of growth rates in the last twenty years. However, many began from such a low base that, as in the case of NI, it continues to have a similar proportion of the (London-driven) UK average GVA per capita as it did in 1991. The gradual falling behind of the East of England and both East and West Midlands is also clear from Figure 3 and Table 1, showing regions do not stand still, relatively or absolutely.

Trends in the Republic of Ireland (RoI)

2.11 In the RoI, the aims of balanced regional development and creating a counterbalance to Dublin have been central to both the National Spatial Strategy (NSS) and the National Planning Framework (NPF). However, an historical trend of regional divergence – driven by the growth of Dublin and more recently the South West and West regions – continues and is increasing. Even with regional targets for enterprise development agencies the regional share of employment in all agency-assisted firms has become more concentrated in these three regions. By 2022, 65% of employment in agency-assisted firms was in the three leading regions (Dublin, South West and West) with the capital accounting for almost 40% (van Egeraat et al, 2023).

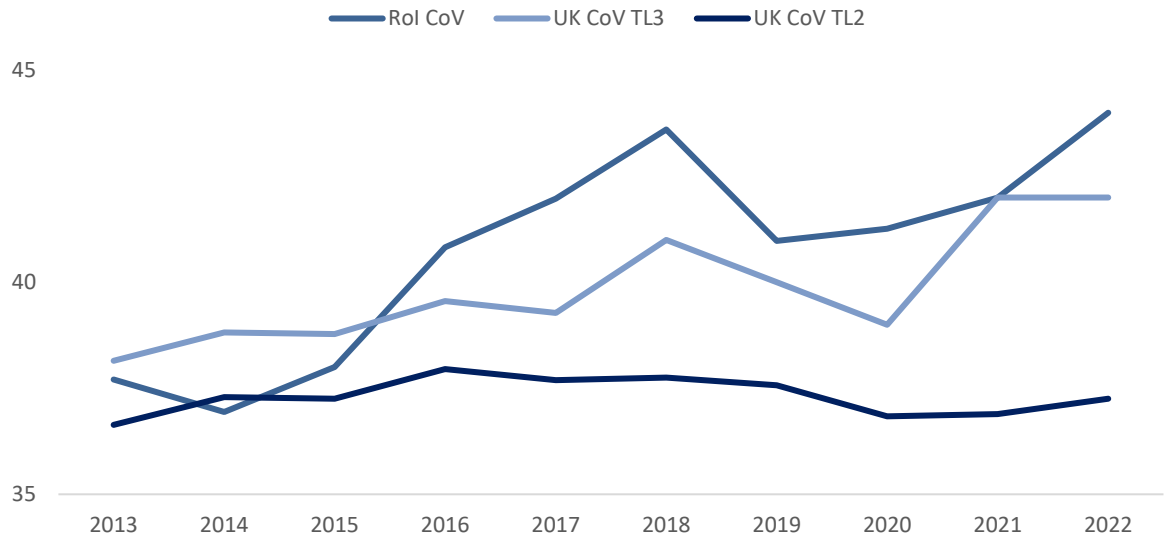
2.12 This points to employment in agency-assisted firms becoming increasingly concentrated over time and the research shows that this is occurring faster than the growth in population shares. Thus, not surprisingly, the GVA per capita index (see Figure 4) shows Dublin and the South West ahead of the other six regions. These other regions are all below the state-wide average and have been so throughout the 2013-2022 recovery period. This suggests that none have fully recovered from the 2008 crash. This includes the West region which, though performing well on agency-assisted employment, is very reliant on those agency assisted firms, indicating continuing challenges there in terms of both productivity and structural change. The persistence of the Border and Midland regions at around a third of the national average in terms of GVA per capita shows that there may be a higher level of regional inequality in the RoI than in the UK at either TL2 or TL3 regional levels (see Figure 5).

Figure 4: Index of GVA per capita, RoI regions, 2013-2022



Source: CSO, UUEPC analysis

Figure 5: Coefficient of variation of GVA per capita, UK and RoI regions, 2013-2022



Source: CSO, ONS, UUEPC analysis

Measuring the trends at a (sub-)regional level

2.13 The ability to analyse economic trends at a regional or sub-regional level has improved significantly in recent years. This has been made possible by an adjustment of focus since the 2000s, in particular by the OECD, towards producing data which shows the role of economic growth in regions and cities. Datasets have been produced at TL2 and TL3 regional levels covering both OECD and EU member states. This availability of sub-regional data and changing analytical techniques lie behind the annual OECD Regional Outlook reports and the biennial 'Regions and Cities at a Glance' reports, published since the early 2000s.

2.14 The same improvements can also be seen in the efforts by NISRA and the UK Office of National Statistics (ONS). NISRA has rolled out sub-regional data to support Community Planning and, more recently, the statistics dashboard to assist Council-level LMPs. Since late 2021 ONS has had a dedicated Sub-national Statistics and Analysis division and more recently launched the ONS Local service available to assist local development. There is more to be done in this area, in part through resourcing a greater use of administrative data, before a full evidence base is available to understand balanced regional growth in a timely and reliable manner.

Table 2: Selection of methods in current use to illustrate regional inequalities

Concept	Definition	Measurement
Increase/decrease in regional income inequality	Increase/decrease in mean-to-median ratio. Theil entropy index measures inequalities across all regions and can be broken into inequality of regions *within* a country and inequality *between* countries.	Mean TL2/TL3 GVA per capita over median TL2/TL3 GVA per capita in any given year. Theil index of TL2/TL3 GVA per capita in any given year.
Between regional group inequality	Variability in means across a group (country) vs overall OECD income per capita mean.	Theil index between/within decomposition based on TL2/TL3 GVA per capita ion a given year.
Within regional group inequality	Variability in regional income per capita vs group mean.	
Concentration of income in Top regions	Increase/decrease in the top 20% to mean ratio.	Mean GVA per capita in top 20% TL2/TL3 regions over mean in a given year.
Concentration of income in Bottom regions	Increase/decrease in the bottom 20% to mean ratio.	Mean GVA per capita in bottom 20% TL2/TL3 regions over mean in a given year.
Polarisation/depolarisation	Increase/decrease in the top 20% to bottom 20% ratio.	Mean TL2/TL3 GVA per capita in bottom 20% regions over mean TL3 in top 20% in a year.

Source: Adapted from OECD (2023), Table 2.2

2.15 Alongside a growing evidence base there has been the development of analytical methods to better understand regional inequalities. Table 2 above details some of the different concepts that can be used to explain the trends in regional inequalities. We use some of these as well as standard deviations, coefficient of variation and scatter plots in the next chapter to illustrate the extent to which NI regions are catching up with each other or falling behind.

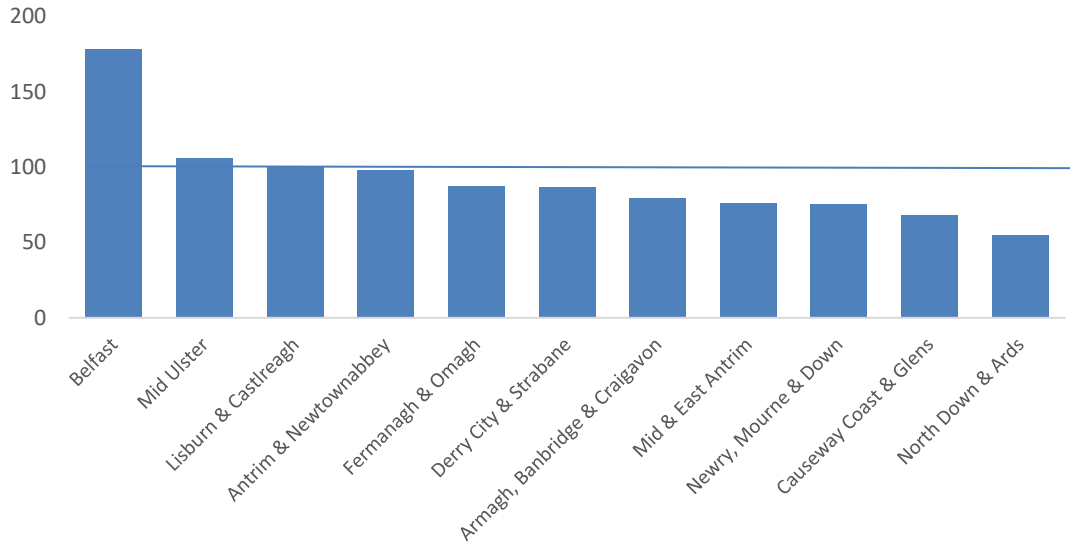
2.16 In addition, regional output growth is decomposed into different components using the Shift Share Analysis (SSA) method to explain the evolution of economic performance of regions in NI since 2000. SSA is used to compare employment growth of individual district councils to NI as a whole and quantifies the extent to which regional economic growth reflects exogenous nationwide (NI) industry trends or unique sub-regional-specific factors. The results of the SSA analysis are presented in Chapter 4 and the GVA results in Appendix 2.

3. Catching up or falling behind in Northern Ireland

Introduction to regional growth in NI

3.1 The *Sub-Regional Economic Plan* published by the Department for Economy in October 2024 issued a call to readers to recognise the extent of economic imbalance across NI. Figure 6 below supports the point about the unevenness of economic growth across the devolved region. The chart shows a clear imbalance with Belfast significantly ahead of the next Council area (Mid Ulster), and has a GVA per capita of more than three times the level of the lowest performing LGD (North Down & Ards).

Figure 6: Index of GVA per capita (NI=100), LGDs, 2022

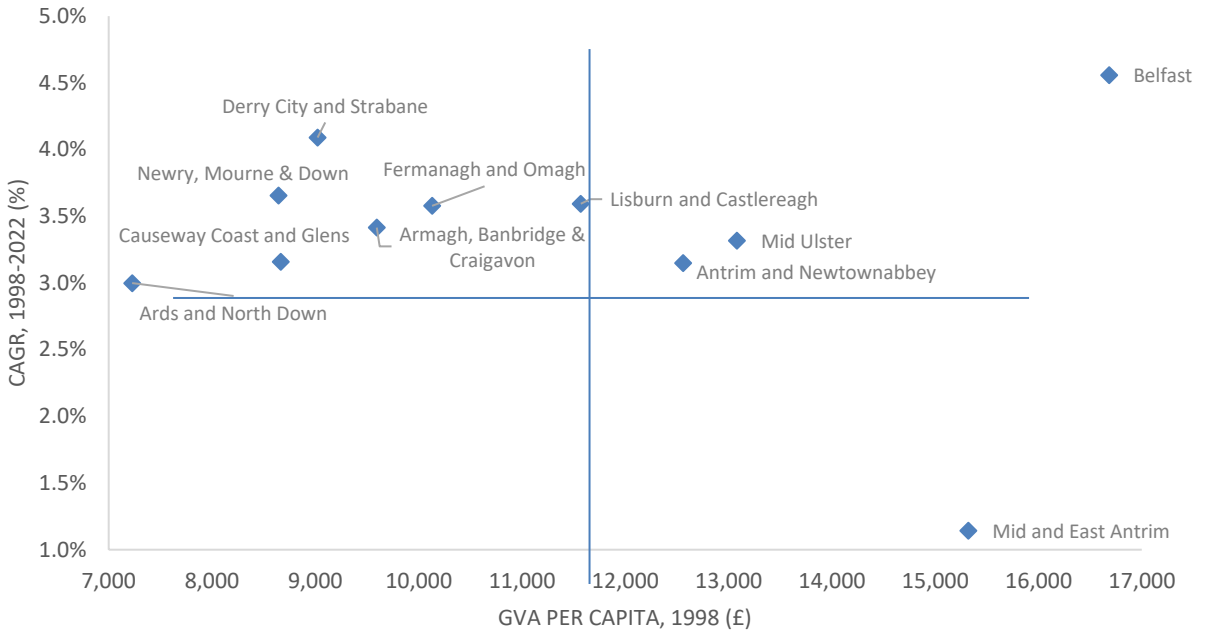


Source: ONS, UUEPC analysis

3.2 The *Sub-Regional Economic Plan* makes the point that the sub-regional economic disparities across NI are persistent and details this in the supplementary technical annex[12]. Regional imbalance in GVA per capita goes back at least two decades in NI – Figure 7 shows Belfast with a GVA per capita almost 42% above the NI average going back to 1998. Given its annual growth rate since has been 0.4 percentage points faster than the second fastest-growing Council area, Derry City & Strabane, Belfast has ended the period almost 80% above the NI average. In the case of Derry City & Strabane, it began the period 77% of the NI average and ended it closer (at 85%) but still well behind top performing Council areas.

[12] DfE (2024b).

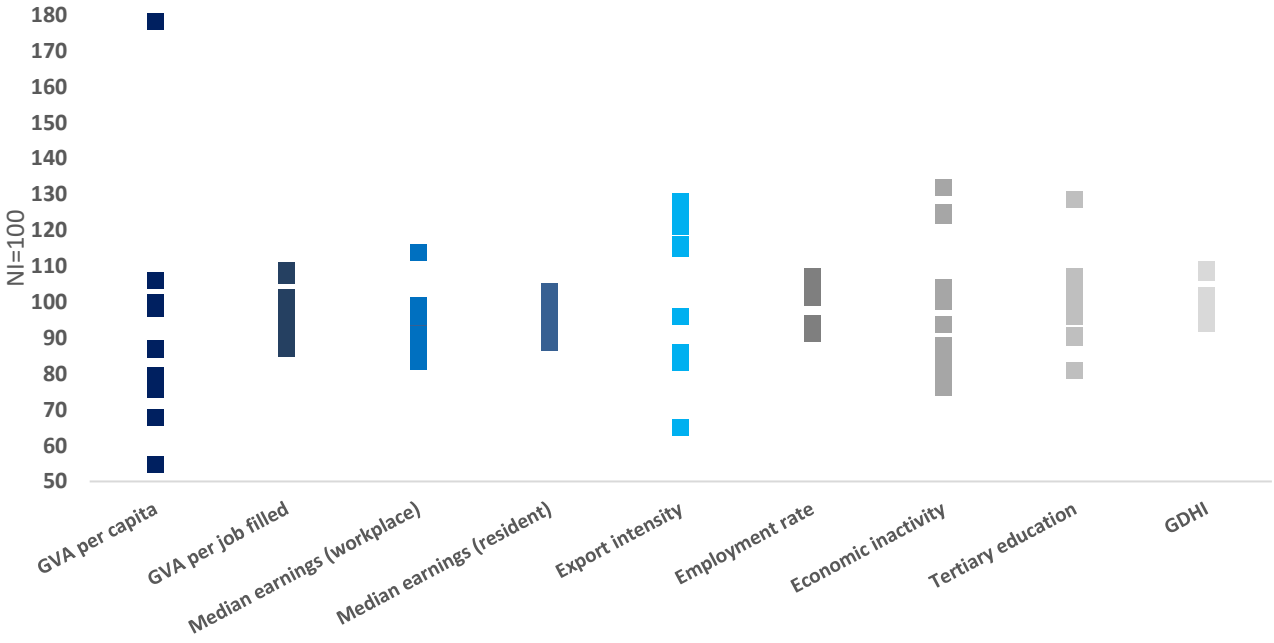
Figure 7: Real GVA per capita and growth rate, LGDs, 1998-2022



Source: ONS and NISRA, UUEPC analysis
Note: The lines show the NI averages of £11,690 in 1998 and 3.1% CAGR.

3.3 By way of perspective, Figure 8 and the supporting data in Table 3 overleaf shows that the spatial inequality in GVA per capita is much greater than for other indicators. However, the inequalities are also clear in economic inactivity rates, median workplace wages and qualifications.

Figure 8: Index of various economic indicators, LGDs, latest data



Source: ONS and NISRA, UUEPC analysis

Table 3: Index of various economic indicators (NI=100), latest data

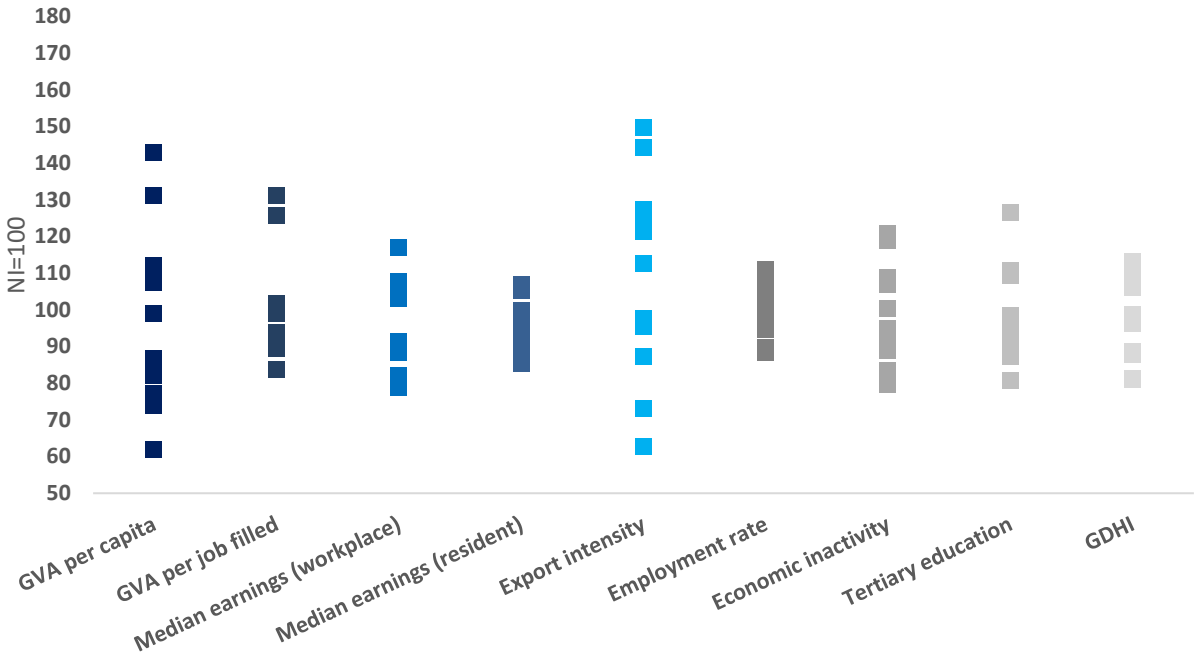
LGD	GVA per capita	GVA per job filled	Median earnings (workplace	Median earnings (resident)	Export intensity	Employment rate	Inactivity rate	Tertiary qualification	GDHI
	2022	**2022**	**2024**	**2024**	**2022**	**2022**	**2022**	**2022**	**2022**
Antrim and Newtownabbey	98	101	98	103	83	104	80	104	102
Armagh City, Banbridge and Craigavon	80	95	99	101	124	105	84	96	98
Belfast	178	109	114	98	115	91	125	101	99
Causeway Coast and Glens	68	92	86	92	96	94	124	81	96
Derry City and Strabane	87	87	91	89	116	94	132	97	94
Fermanagh and Omagh	87	98	96	101	121	102	104	90	97
Lisburn and Castlereagh	100	101	96	103	96	104	88	128	109
Mid and East Antrim	76	96	91	101	86	107	94	99	101
Mid Ulster	106	107	99	101	128	103	76	91	99
Newry, Mourne and Down	76	95	88	93	124	104	80	98	98
Ards and North Down	55	90	83	95	65	101	100	107	108

Source: ONS and NISRA, UUEPC analysis

3.4 The persistence of inequality is supported by Figure 9 and Table 4 overleaf which shows the earliest LGD level indicator data (the years being between a decade and 25 years old) and how gaps were also evident then. However, the variation across most indicators (except for GVA per capita) was perhaps more obvious then than now, suggesting that matters have not deteriorated over time. In contrast, gaps in productivity performance, export intensity or levels of Gross Domestic Household Income (GDHI) were larger in the past.

3.5 However, context is important and a reduction in inequality is not always the result of positive developments. In the case of productivity and exports, top performing LGDs (such as Mid & East Antrim and Mid Ulster) have come back into the pack rather than improvements made in other areas.

Figure 9: Index of various economic indicators, LGDs, earliest data



Source: ONS and NISRA, UUEPC analysis

Table 4: Index of various economic indicators (NI=100), earliest data

LGD	GVA per capita	GVA per job filled	Median earnings (workplace	Median earnings (resident)	Export intensity	Employ ment rate	Inactivity rate	Tertiary qualification	GDHI
	1998	**2004**	**2015**	**2015**	**2011**	**2009**	**2009**	**2009**	**1998**
Antrim and Newtownabbey	107	102	103	107	63	111	83	110	107
Armagh City, Banbridge and Craigavon	82	92	89	95	113	103	89	91	99
Belfast	143	101	117	100	98	90	119	109	113
Causeway Coast and Glens	74	89	79	90	95	95	107	81	81
Derry City and Strabane	77	84	89	85	121	88	121	87	81
Fermanagh and Omagh	87	92	88	93	127	100	109	98	88
Lisburn and Castlereagh	99	99	91	105	73	107	95	127	108
Mid and East Antrim	131	131	108	106	125	111	80	94	106
Mid Ulster	112	126	91	94	150	106	92	90	89
Newry, Mourne and Down	74	93	91	99	144	99	100	96	96
Ards and North Down	62	94	82	99	87	108	90	111	109

Source: ONS and NISRA, UUEPC analysis

3.6 The remainder of this section looks at these (and other) indicators under the four priorities of the Department's vision to identify the trends over time and whether

the inequalities are larger or smaller than the gaps between other TL3 regions in GB.

Productivity and its signals

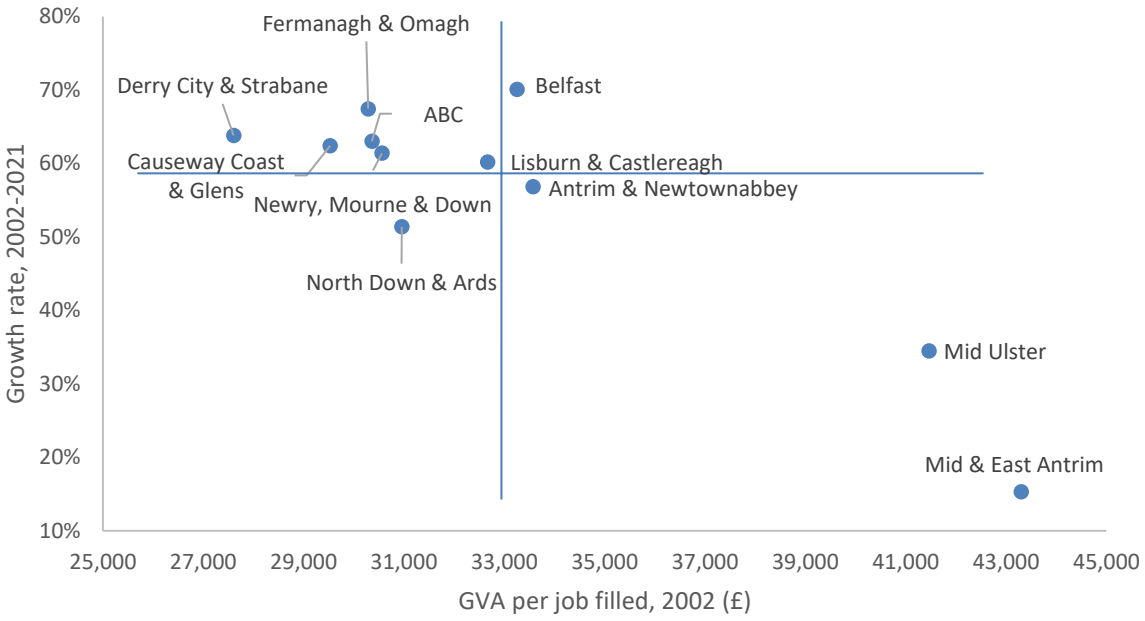
3.7 The challenge to improve levels of productivity across the private and public sectors in NI has been widely rehearsed for a long period of time. Whether measured by GVA per job filled or GVA per hour worked the NI average has remained consistently rooted below 90% of the UK average. By both measures there had been some improvement in 2020 and 2021, helped by a smaller than average fall in GVA alongside a larger than average decrease in hours worked. However, this has been followed by a widening of the gap in 2022 to 13 percentage points below the UK average, suggesting that any improvement may have been temporary[13].

3.8 Performance in productivity at a sub-regional level is complicated by councils rankings differing across different measures:

- GVA per hour worked shows Mid Ulster, Antrim & Newtownabbey and Fermanagh & Omagh as the leading Council areas. With Armagh, Banbridge & Craigavon (ABC) as the clear lagging council
- GVA per job filled identifies Belfast, Mid Ulster and Antrim & Newtownabbey as the top three. With Derry City & Strabane as the clear lagging council
- Firm-level data suggests Belfast and Mid Ulster are the lead-performing LGDs but that their lead has been declining since 2014 with areas such as Fermanagh & Omagh and Causeway Coast & Glens strongly converging (Fliers et al, 2023).

[13] Donaldson et al (2024).

Figure 10: GVA per job filled and by growth rate, NI LGDs, 2002-2021



Source: ONS, UUEPC analysis
Note: The lines show the NI averages of £32,995 in 2002 and 58% growth rate for 2002-2021.

3.9 Figure 10 shows the trend over time for GVA per job filled at the LGD level. By this measure of productivity there has been a convergence between Council areas over time, a closing of the gap between top and bottom by 16 percentage points to 20%. A smaller gap in GVA per hour worked has also closed. As the earliest data shows (see Figure 9 and Table 4 above) the closing of the productivity gap is mainly the result of growth rates far below the NI average in the two top performing Council areas in 2002 (Mid Ulster and Mid & East Antrim). Since then Belfast has come to the fore as the Council area with the highest level of GVA per job filled with the highest growth rate over 20 years. Although the lagging LGDs, including Causeway Coast & Glens and Derry City & Strabane, have seen higher-than-average growth rates over the two decades and have closed gaps, they remain well behind the leading performers.

3.10 The *Sub-Regional Economic Plan* identified indicators such as business birth rates, export intensity and levels of Business R&D as a 'snapshot' for the productivity priority. Belfast led the rankings in 2022 for business birth rates, though Derry City & Strabane and ABC were closely behind, although birth rates have been volatile since 2010.

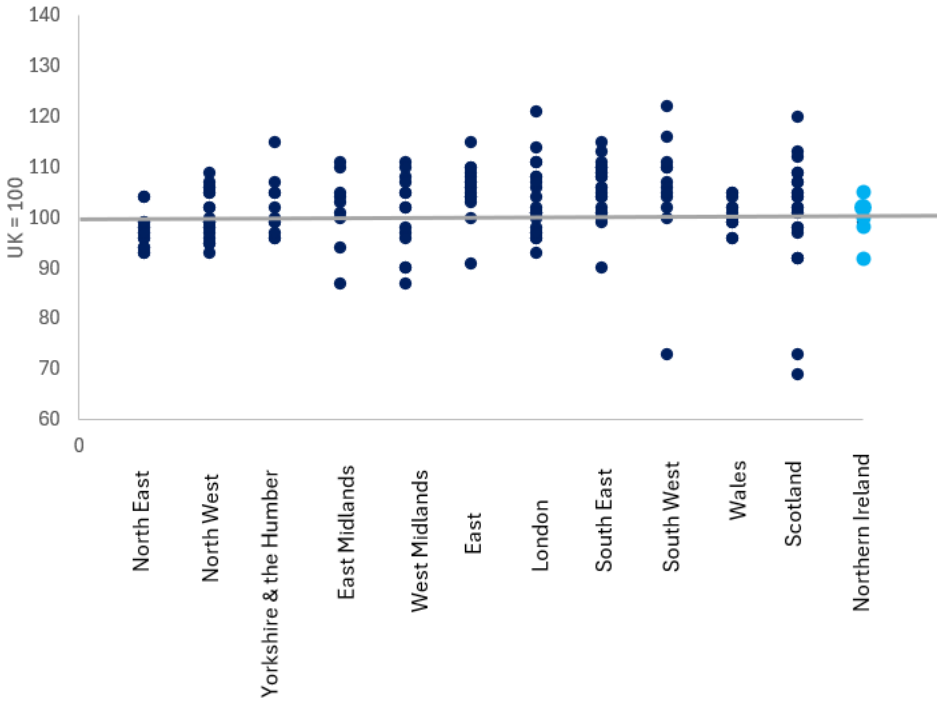
3.11 In terms of Business Enterprise Research & Development (BERD), Belfast's value as a proportion of business output is close to ABC's with Mid Ulster and Antrim & Newtownabbey following. In 2023, these four LGDs accounted for 80% of total BERD expenditure with a few Councils consistently lagging (including Ards & North Down and Causeway Coast & Glens).

3.12 A different set of rankings emerges for export intensity (whether this includes GB as a market or not) as Newry, Mourne & Down, Mid Ulster and ABC have led the rankings going back to 2011. Belfast may have the highest number of firms selling outside NI but, when looking at export sales as a proportion of total sales, the other Council areas are ahead.

3.13 New jobs from Foreign Direct Investment (FDI) presents a different picture again. Belfast accounts for 78% of new jobs between 2015 and 2022, with Derry City & Strabane a distant second (at 11%) and nine other LGDs sharing just over 10% of new jobs between them. This level of concentration is much higher than many regions across GB, one explanation for this being that places such as Scotland or Wales have more than one large city to choose from, Scotland has three cities within the UK top 20 locations in 2023 and Wales two (EY, 2024).

3.14 The partial convergence in the productivity measures means that while inequalities are evident and persistent, they are not deteriorating. Figure 11 shows that NI has a similar level of sub-regional disparity to other poorer performing regions, such as the North East or East Midlands. However NI does not have the outlier poor performers of the South West or Scotland, nor does it have the outlier high-performers of London, the South West or Scotland. Interestingly both Scotland and the South West have both some of the highest performing ad lowest performing TL3 regions in the UK.

Figure 11: GVA per hour worked, UK TL3 regions, 2022



Source: ONS, UUEPC analysis

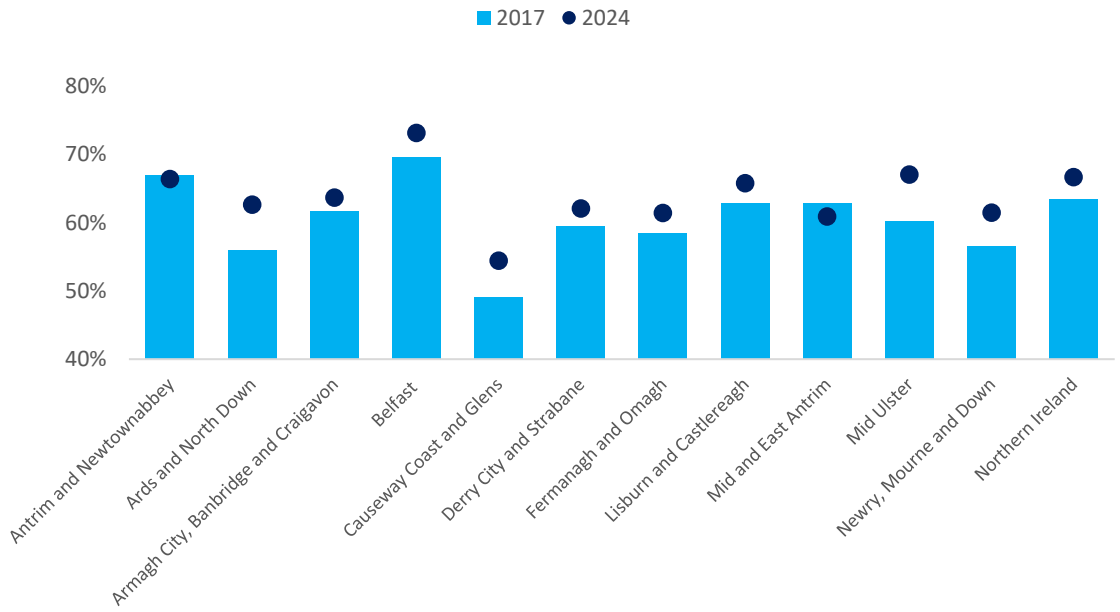
Good Jobs: Wages and conditions

3.15 The recent release of 'Good Jobs 2024'[14] shows a decline in the proportion of employee jobs at the NI level from a high point in 2022, though still an improvement on 2017 levels. The data at LGD level shows a similar improvement in every council area bar two (Antrim & Newtownabbey and Mid & East Antrim).

3.16 Figure 12 shows the significant percentage point difference between the best performer, Belfast, and the worst, Causeway Coast & Glens. This has closed only marginally from 20 to 19 percentage points over the seven years. The *Sub-Regional Economic Plan* 'good jobs' indicators are median weekly wages (workplace), the proportion of employees earning above the Real Living Wage (RLW) and employees in secure employment.

3.17 The largest component of the variation among LGDs is a combination of workplace wages and the percentage of employees who earn above the RLW. The difference on the secure employment measure is 5-percentage-points between the highest ranking LGD, Mid & East Antrim, and the lowest, Causeway Coast & Glens. This is not to downplay the importance of secure employment in a' good job' but recognising that pay tends to drive sub-regional differences.

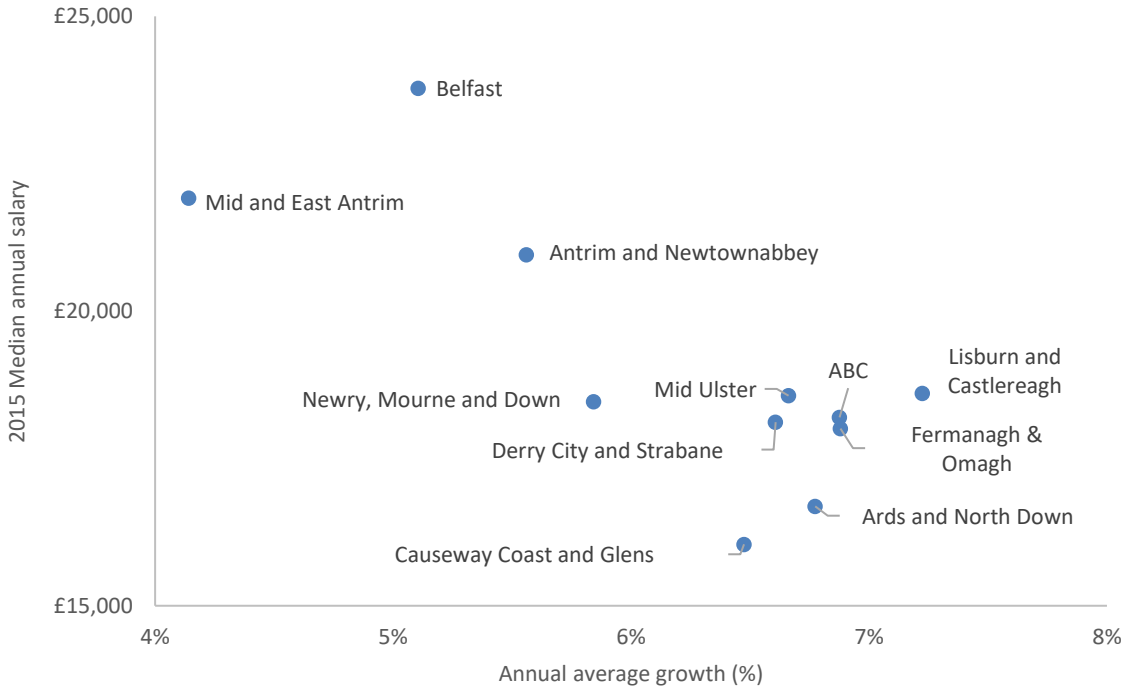
Figure 12: Good Jobs rate, NI LGDs, 2017 and 2024



Source: NISRA

[14] A Good Job is defined as one where the employee has a permanent contract, a non-zero-hour contract and one which pays above the Real Living Wage

Figure 13: Median annual workplace wages, 2015, and annual growth rates, 2015-2024, NI LGDs

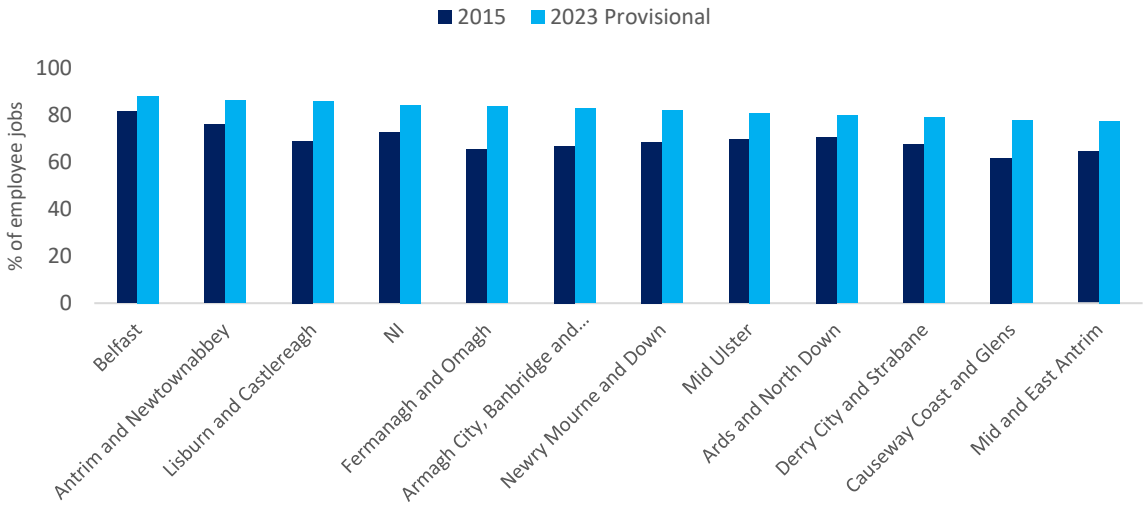


Source: NISRA ASHE, UUEPC analysis

3.18 Figure 13 shows the earliest data for median workplace wages and the growth rate over the past decade. Belfast stands out as the Council area with the highest median annual wages in NI, although the annual growth rate since 2015 has been lower than most other LGDs. As a result, a persistent gap remains but has been declining slightly over time.

3.19 The variation in median workplace wages across NI is reflected in the different proportions earning above the RLW which can be seen in Figure 14. The proportions have increased in every Council area since 2015 with an average of 10% more employee jobs now paid above the RLW than was the case in 2015, now 84% across NI. The variation – from Belfast at 88% to Mid & East Antrim at 77% – is smaller than was the case in 2015.

Figure 14: Proportions of employee jobs paid above the Real Living Wages, NI LGDs, 2015 and 2023

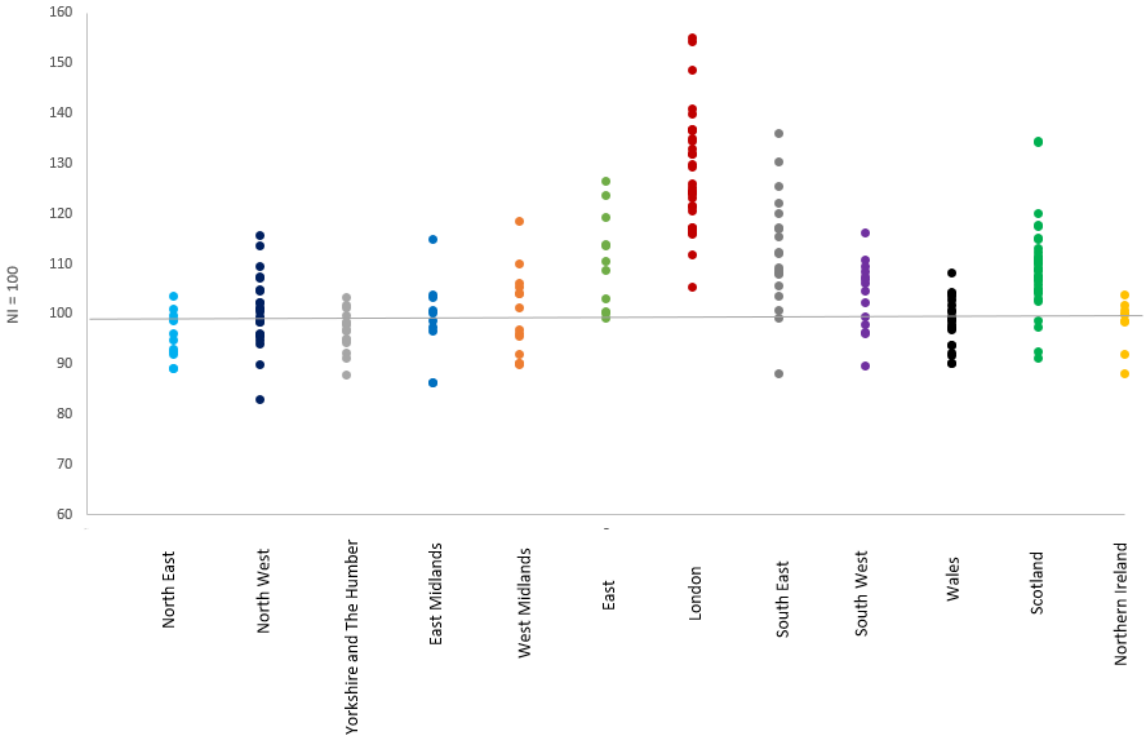


Source: NISRA ASHE, UUEPC analysis

3.20 Therefore, in both 'good jobs' and 'productivity', a persistent performance gap exists, however the sub-regional variations have been declining slightly over time the good job indicators. A similar trend has been observed in the UK at the TL3 regional level, based on wage data back to 2008 with the largest variations in London and the South East (IFS, 2020).

3.21 Figure 15 below shows that the variation in workplace wages is much smaller in those regions where the median wage is below the UK average. Therefore, typically lower average pay rates in a region is consistent with greater pay convergence. This is the case in NI, Wales, the North East of England and Yorkshire and the Humber.

Figure 15: Median annual full-time wages by workplace, 2023, NI LGDs and UK TL3 regions



Source: ONS ASHE, UUEPC analysis

Regional Balance: Education, work and incomes

3.22 To assess 'regional balance' the *Sub-Regional Economic Plan* has adopted a headline indicator which combines those in employment with those in further or higher education to acquire qualifications for use in employment. This combined 'sub-regional employment rate' shows a 10-percentage-points gap between the top (Mid Ulster) and bottom Council areas (Derry City & Strabane). This gap has closed significantly over time (based on a 2017-2022 data series) from 19-percentage-points, encouragingly driven by improved performance in the poorer performing LGDs.

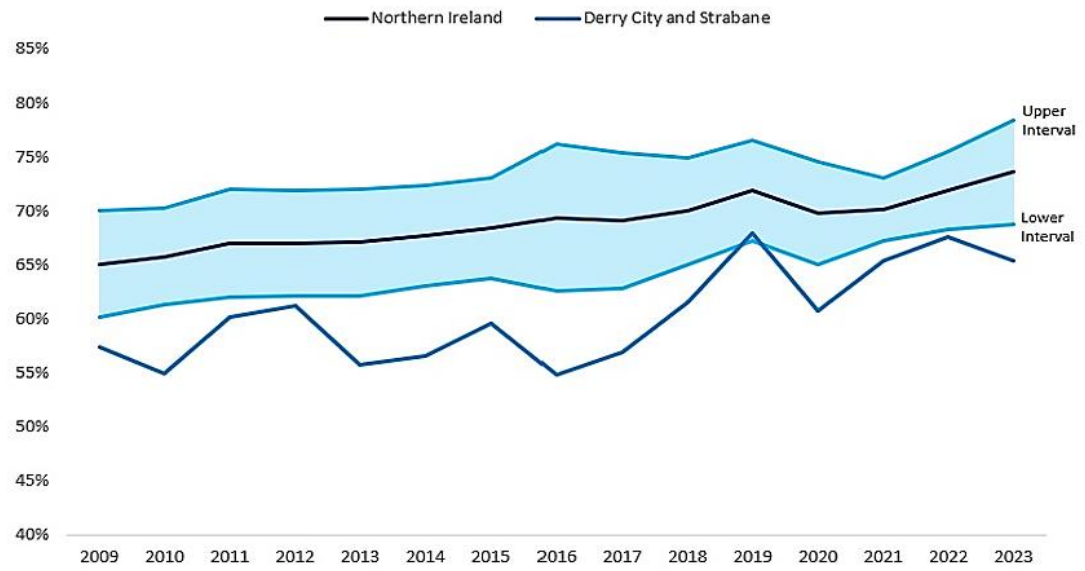
3.23 Other indicators to provide a regional balance snapshot in the *Plan* include: resident employment rates; economic inactivity rates; levels of third level educational attainment; and Gross Disposable Household Income.

3.24 Employment rates in NI remain below the UK level of 75% but have increased over the long term despite sharp falls in 2008-2009 and again in 2020. Employment rates in the UK have also grown over time and the evidence now points to significantly lower levels of inter-regional inequalities in employment

rates than in productivity or GVA per capita[15]. The change reflects the general fall in unemployment since the 1990s.

3.25 Despite the improving employment fortunes of most areas, there are still significant employment rate deviations between LGDs, suggesting that some local labour markets are working better for residents than others, in terms of the available opportunities matching experience and skills. The latest data for 2023 suggests that NI is part of a group of regions (along with Wales, North East and North West) with the lowest level of rate deviations. Two potential reasons have been identified: firstly, NI does not have the very low Council area employment rates (sometimes less than 40%) experienced in remote parts of Scotland or the South West; and secondly, the lower average employment rate in NI may compress internal variations compared to GB regions with higher employment levels.

Figure 16: Variation in resident employment rates, NI LGDs and Derry City & Strabane, 2009-2023



Source: NISRA LFS, UUEPC analysis
Note: Upper and lower intervals show expected variability – outside that is beyond the norm.

3.26 As Figure 16 shows this increase in employment rates has occurred in every Council area since 2009 including an impressive 8-percentage-point rise in Derry City & Strabane which has long had the lowest rates in NI. Figure 16 also shows that the variance between LGDs in NI has not altered significantly between 2009 and 2023.

3.27 The gaps between Council areas widened to their highest in 2016 (21 pp between Derry City & Strabane and Lisburn & Castlereagh) before returning to the same

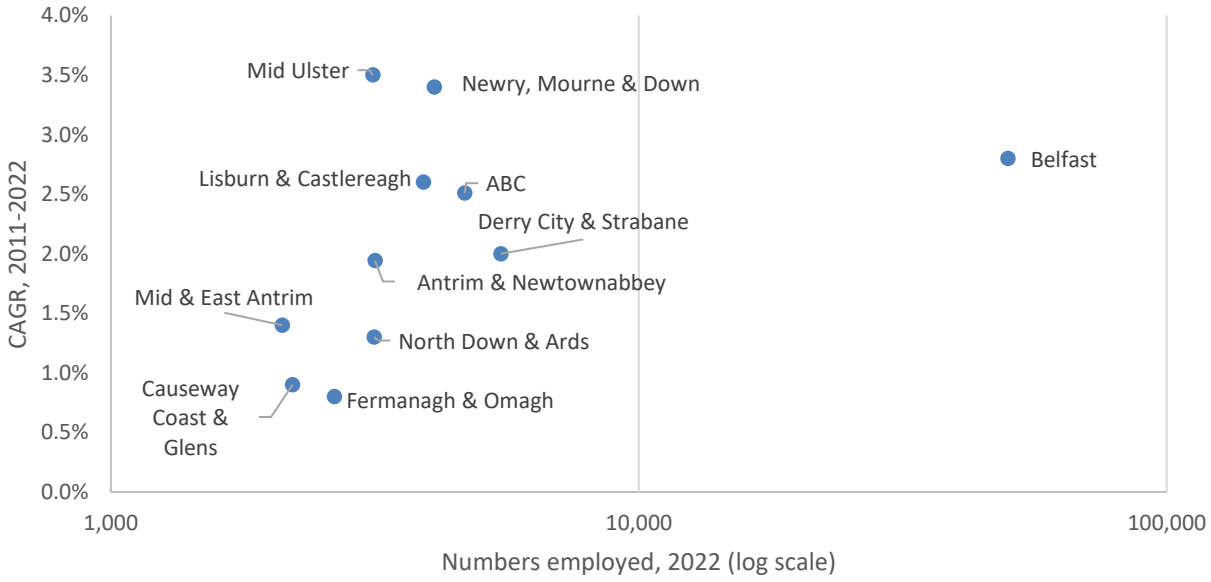
[15] Stansbury, Turner and Balls (2023)

15 pp gap in 2022. Even in a situation where the wider economy is growing in terms of employment, the interplay between the ability to enter the local or commuter labour market and the opportunities on offer and within reach (both physically and on a criteria basis) leads to varying resident employment rates. This can often explain why some places have persistently low employment rates even as the business cycle improves.

3.28 Resident employment rates are only one part of the story, as jobs are often located in areas where employees either: live close by; move to; or can commute to. The statistics for workplace employment provide an insight into the location of jobs and, like employment rates, show an improving picture since 2011. However, while jobs growth has occurred in most places, some LGDs (notably Mid & East Antrim) have experienced very little increase in the number of jobs. Workplace employment is concentrated in Belfast with 30% of total NI jobs located in the city. However, Belfast has experienced lower annual employment growth than rate six other LGDs (notably Mid Ulster, Newry, Mourne & Down and ABC).

3.29 Importantly, private sector employment growth in Belfast has been above the NI average and a growing proportion of those jobs tend to be in tradeable services (58% of the total tradeable services sector jobs in NI are based in Belfast – a marginal increase over the decade). Figure 17 shows Derry City & Strabane experiencing a lower growth rate than Belfast with 9% of the NI total jobs. Mid Ulster and Newry, Mourne & Down have shown above-average growth, but from a lower base.

Figure 17: Tradeable services jobs, 2022 and annual growth rates (2011-2022), NI LGDs



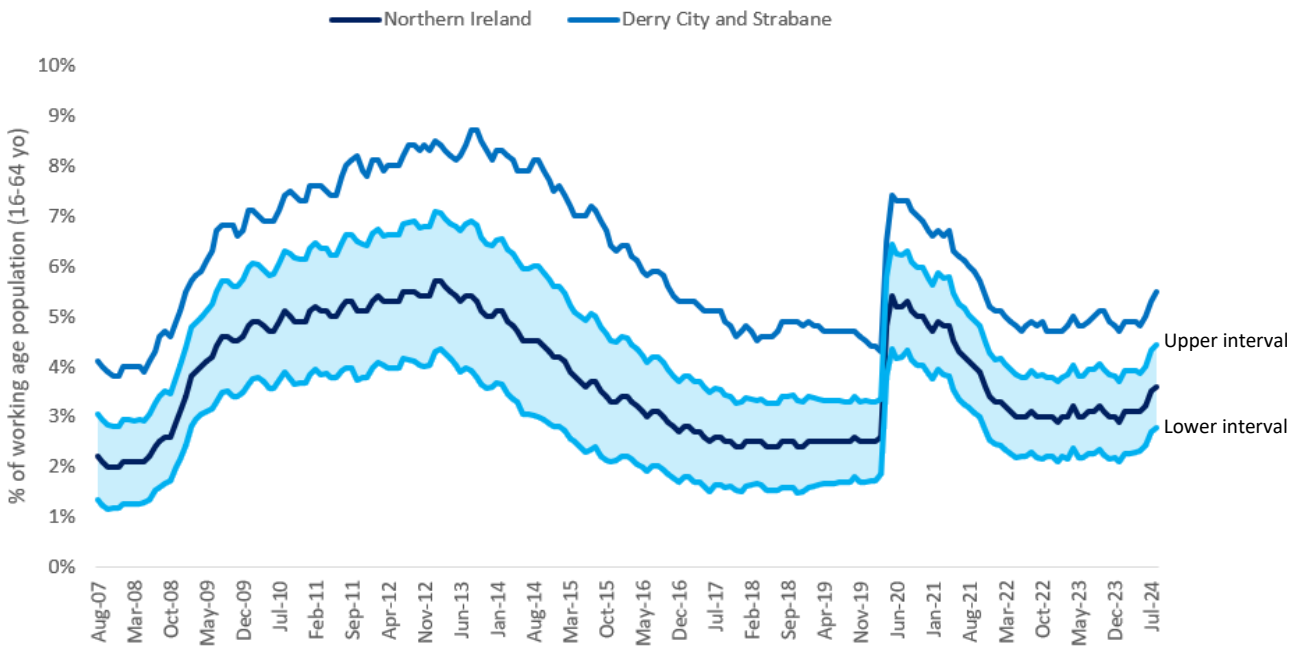
Source: NISRA BRES, UUEPC analysis
Note: Tradeable services incl the Financial Services, Professional Services and ICT sectors.

3.30 The sub-regional picture for vacancies within NI shows normal variation year-to-year given the business cycle and other economic shocks. The 8-year annual vacancy level in NI has been 62,500 but this ranged from 45,800 in 2020/21 to 91,100 when the shutdowns began to ease. In 2023/24, the number of vacancies fell across all LGDs to 2015/16 levels.

3.31 Some local labour markets have a higher relative vacancy rate (per 1,000 residents); this is especially true in Belfast and to a lesser extent in Lisburn & Castlereagh, Antrim & Newtownabbey and ABC. Although those LGDs may have more opportunities per head of population, this depends on the types of jobs available and if the skills are available locally. Looking at vacancies as a share of employee jobs there is much less variation across the Council areas with Belfast and Derry City & Strabane having a similar proportion of vacancies by this measure.

3.32 The overall growth of employment since 2013 across NI has reduced unemployment rates to levels below the UK average. Even with the sharp increase in both the ILO unemployment rate and the Claimant Count rate during 2020, rates still range from approx. 2% in Lisburn & Castlereagh to 5% in Derry City & Strabane. As Figure 18 shows (and supported by a falling coefficient of variation) there has been a marginal closing of unemployment gaps at the Council level over time. The evidence points to greater variation occurring within LGDs at the level of Super Output Areas.

Figure 18: Claimant Count unemployment rate, NI LGDs and Derry City & Strabane, 2007-2024

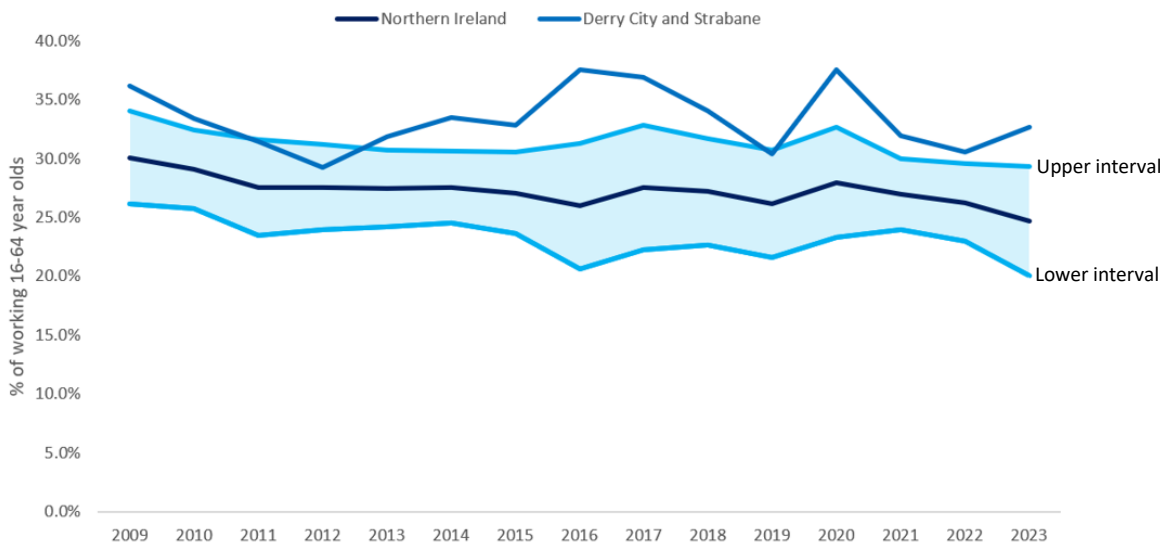


Source: NISRA, UUEPC analysis

3.33 Economic inactivity rates in NI have been steadily falling from 32% in late 1994 to 26% in 2024. Even with this improved performance, the NI rate is still significantly above the UK average and consistently the worst performing of all UK regions in respect of ill-health inactivity.

3.34 Figure 19 shows the fall in inactivity rates but also that the issue remains persistent in some LGDs where it has not fallen at the same rate[16]. The coefficient of variation for economic inactivity was larger in 2023 than in 2009 indicating an increase in the performance gap between highest and lowest LGDs. This has been caused by some LGDs (including Lisburn & Castlereagh and ABC) with historic lower inactivity rates improving further at a faster rate than other LGDs (such as Derry City & Strabane and Causeway Coast & Glens) which historically have had higher inactivity rates.

Figure 19: Economic inactivity rates, NI LGDs and Derry City & Strabane, 2009-2023



Source: NISRA LFS, UUEPC analysis
Note: Upper and lower intervals show expected variability – outside that is beyond the norm.

3.35 However, some of the improving areas had smaller proportions of students who are inactive in 2022 than in 2014 while both Derry City & Strabane and Causeway Coast & Glens have higher proportions of students. The reasons for inactivity show different patterns across LGDs which have been recognised by LMPs in their action plans. Separately, both Belfast and Derry City & Strabane have more than twice the rate of inactivity due to health reasons than Lisburn & Castlereagh.

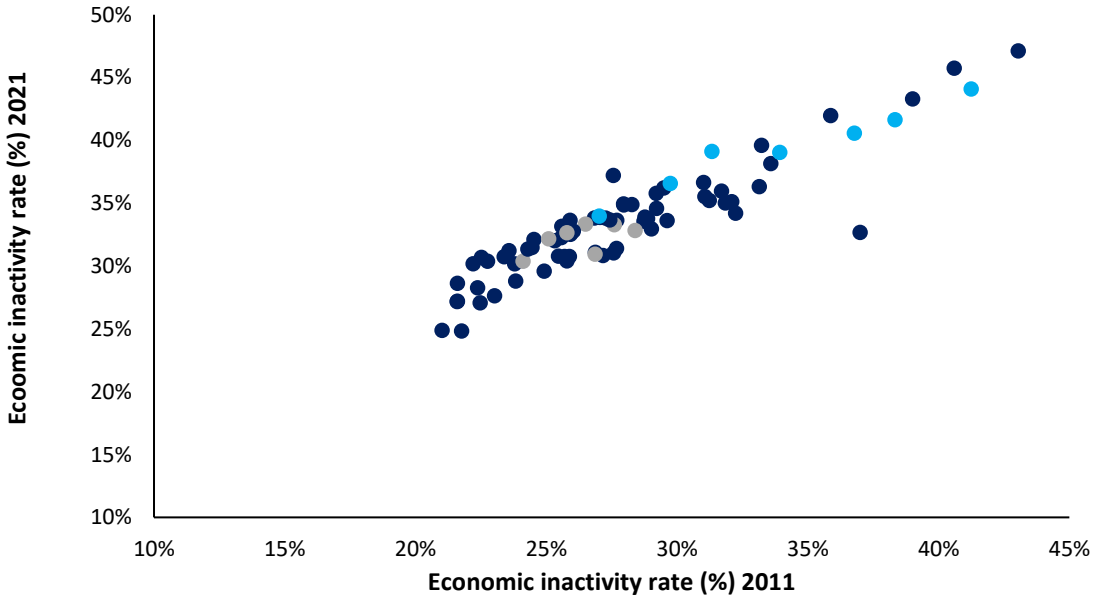
3.36 As noted with the Claimant Count measure, there can be a higher level of variation within LGDs as between them. The same holds for economic inactivity rates at District Electoral Area (DEA) level which also shows firstly, that LGDs

[16] UUEPC (2023).

with higher overall levels of economic inactivity tend to have the highest variation between DEAs within the Council area, and secondly, that higher rates persist to an even greater degree over time within smaller geographies.

3.37 Figure 20 shows the total economic inactivity rates from the 2011 and 2021 Censuses at DEA level. Derry City and Strabane's DEAs show the widest range in economic inactivity rates, reflecting a substantial disparity between the highest (Faughan, 43%) and lowest (The Moor, 27%) levels of inactivity in the sub-region, well spread around the Council area average rate (34%). Whereas DEAs in Ards and North Down show the narrowest range in economic inactivity rates (Ards Peninsula, 28%) and (Comber, 24%), indicating a less varied level of economic inactivity compared to other areas in NI and clustered around the Council average (29%).

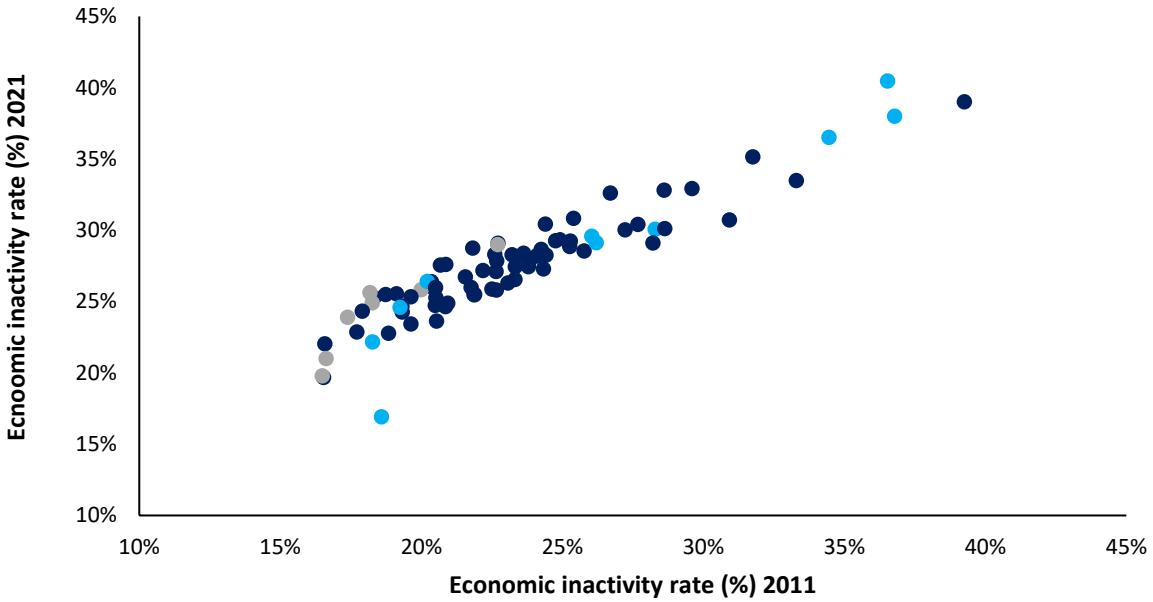
Figure 20: Economic inactivity rate (%), NI DEA, 16-64, 2011 vs 2021



Source: NISRA; UUEPC analysis
Note: Ards & North Down highlighted in grey with Derry City & Strabane in light blue.

3.38 The picture excluding students is slightly different. In this case DEAs in Belfast show the widest range in rates, between the highest (Court, 37%) and lowest (Lisnasharragh, 18%). This represents a broad range across the Council areas average rate excluding students (24%). Lisburn and Castlereagh's DEAs show the narrowest range in economic inactivity rates excluding students, between Lisburn South (23%) and Killultagh (16%), and close to the Council area rate of 18%, the lowest in NI.

Figure 21: Economic inactivity rate excl. students (%), NI DEA, 16-64, 2011 vs 2021



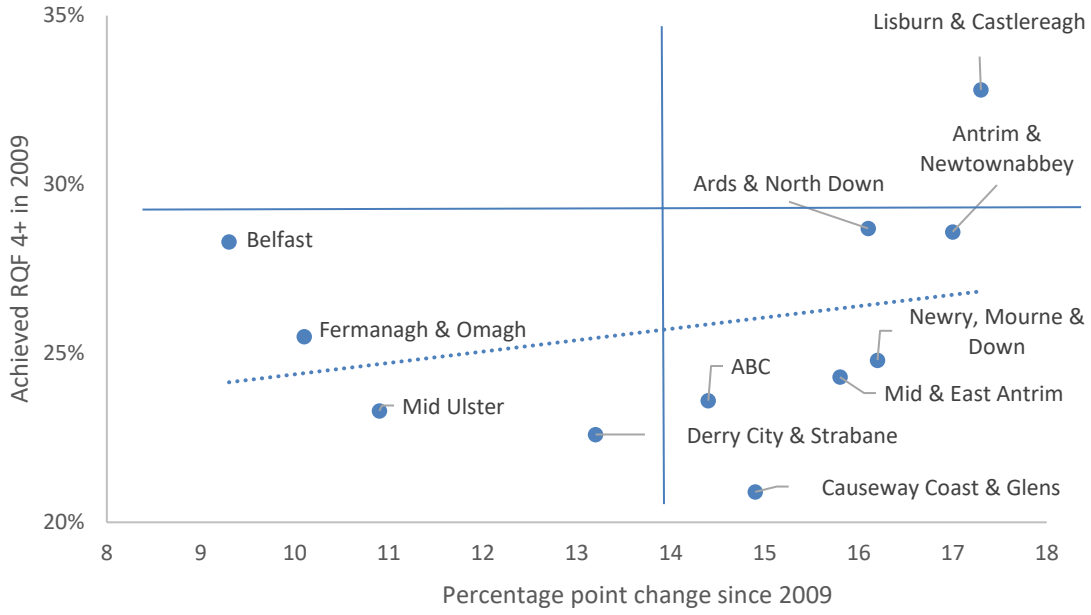
Source: NISRA; UUEPC analysis
Note: Lisburn & Castlereagh highlighted in grey with Belfast in light blue.

3.39 The relationship between qualification levels and a higher employment rate is well-established[17]. The proportion of the working age population that holds a tertiary level qualification has been growing over time in NI from 26% in 2009 to 40% in 2023; this signifies a greater number of school-leavers going on to higher education as well as the retirement of older workers who are less likely to have formal qualifications.

3.40 Figure 22 overleaf shows this change at an LGD level. Council areas such as Belfast and Derry City & Strabane have seen an increase in the proportion of residents with RQF 4+ qualifications but with a below average change resulting in a lower stock of qualifications and skills than other LGDs. The extent to which local residents, rather than in-bound commuters, can take advantage of higher-skill employment opportunities is an important factor in this pattern.

[17] UUEPC (2025).

Figure 22: Stock of resident RQF 4+ qualifications, 2023, and change since 2009, NI LGDs

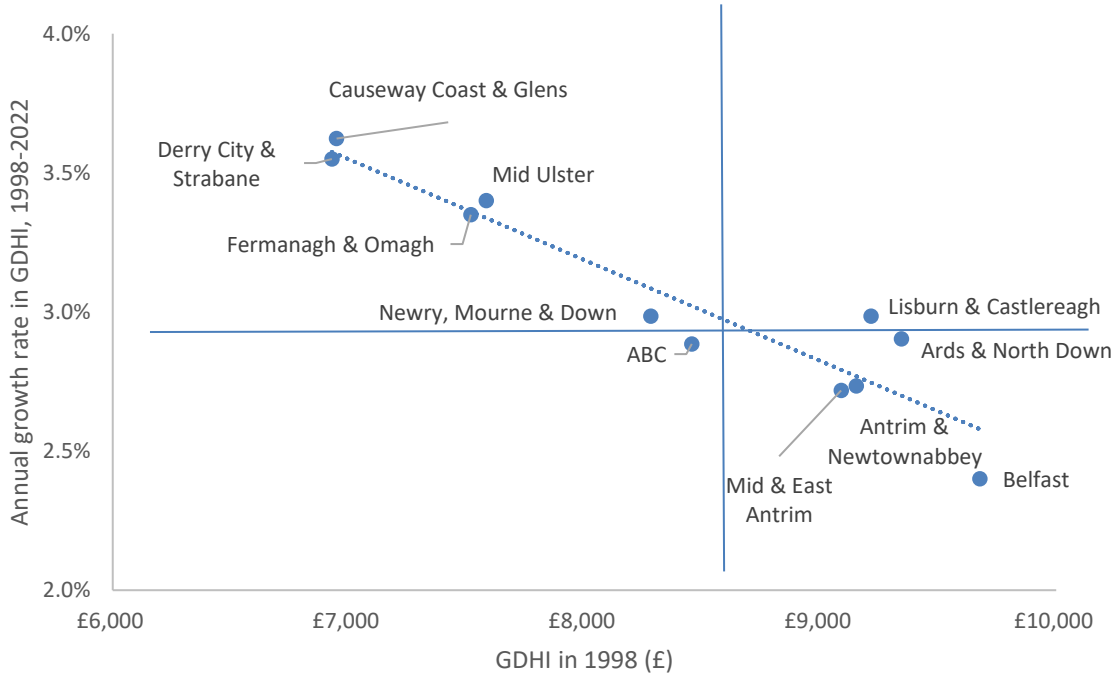


Source: NISRA LFS, UUEPC analysis
Note: Lines mark the NI averages.

3.41 Finally, the *Sub-Regional Economic Plan* has identified GDHI as the preferred income levels indicator[18]. The Plan clearly shows that, in 2022, income per head in Lisburn & Castlereagh was 1.17 times that of the lowest ranking Council, Derry City & Strabane. This is a very similar level to the 1.18 times differential in the North East of England but much lower than the 2.15 times differential in the South East. The GDHI indicator has identified a persistent income gap between the NI sub-regions since 1998, when the differential between top and bottom (between Ards & North Down and Derry City & Strabane) was 1.22. Figure 23 shows the partial catch-up by the four Council areas with the lowest GDHI per capita in 1998, recording the highest annual growth rates up to 2022.

[18] GDHI estimates income levels based upon administrative data for individuals as did the recent Department for Communities report on poverty (DfC, 2023). These data sources and the long-running Family Resources Survey (which provides the data on the equivalised incomes of households, median incomes and the prevalence of relative and absolute poverty) all identify the same six LGDs as having the lowest GDHI levels and highest prevalence of relative poverty.

Figure 23: Total GDHI per capita, 1998, and annual growth rates, 1998-2022, NI LGDs



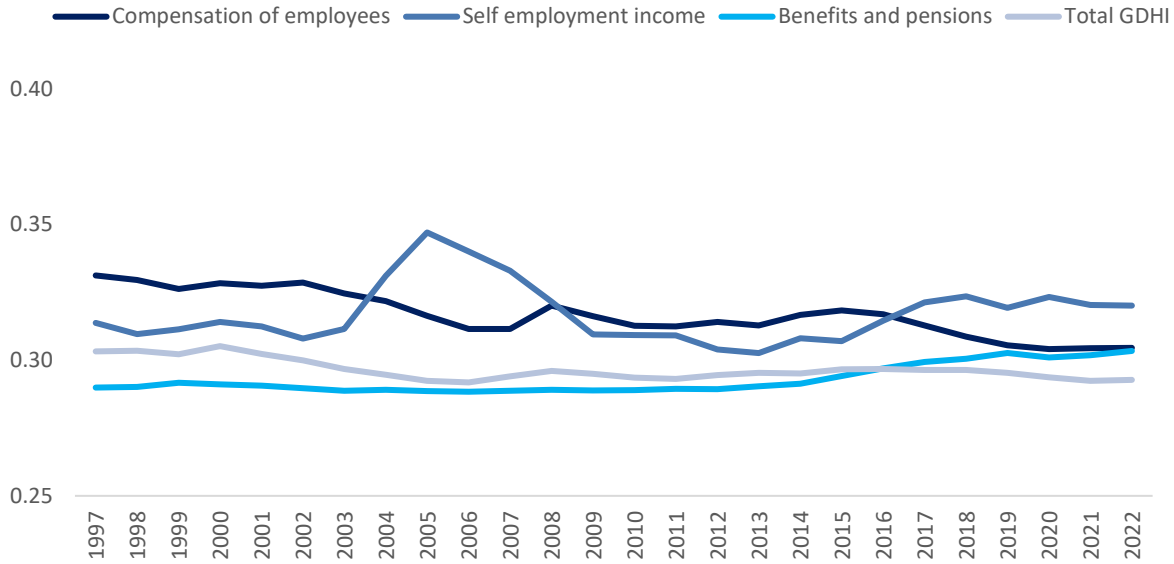
Source: ONS, UUEPC analysis
Note: Lines mark the NI averages.

3.42 Any convergence in GDHI will occur in one or more of the following components: wages and salaries, self-employment income, incomes from benefits and other miscellaneous incomes (including investment dividends, etc). An analysis of UK GDHI data at the level of LGDs in 2019 highlighted that there were increasing disparities in self-employment income and in the income that households receive from investments (such as stocks and shares)[19]. Both were particularly skewed to some London boroughs and others in the South East.

3.43 Income from pensions, benefits and salaries were all more evenly spread across LGDs and regions of the UK, even though the latter had not fully eroded its disparity. This is even with the closing gaps in employment rates and median wages. This spatial disparity in employment income (i.e. employee and self-employed wages) has consistently been the largest contributor to overall spatial gaps in household incomes over time, even if investment income has been contributing more.

[19] A good summary of the different components of GDHI can be found in Judge and McCurdy (2022).

Figure 24: Coefficients of variation of various components of GDHI, NI LGDs, 1997-2022



Source: ONS, UUEPC analysis

3.44 Figure 24 above shows the disparities over time for total GDHI in NI across the components – wages and salaries, self-employment income and benefits and pensions. The coefficient of variation for GDHI is largely unchanged over time, moving back and forth between 0.3 to 0.29 over the 25 years. A similar trend and range can be seen for benefits and pensions; it should be noted that a larger proportion of pre-tax income in Causeway Coast & Glens, Derry City & Strabane and Ards & North Down come from benefits and pensions showing that there remain population concentrations of older people and those supported by social security.

3.45 The disparity in wages and salaries is larger, but has declined marginally over time and is now on a par with the disparity in pensions. Self-employment income remains the component of GDHI with the largest disparities across NI's LGD and has increased over time, though the peak for this in 2006 has long passed. This variation is likely due to differing levels of self-employment in some LGDs – Mid Ulster and Fermanagh & Omagh stand out – as much as a significant deviation in median earnings in this group.

3.46 The point that wages and salaries are the largest contributor to overall household incomes is a reminder of the need to reduce not only regional imbalance in employment rates (and opportunities), but also productivity differentials as these will ultimately contribute to different salaries, earnings and household incomes in different places.

4. Decomposition of sub-regional economic growth in Northern Ireland

Shift-Share Analysis (SSA)

4.1 The growth rate of a particular region or sub-region reflects the complex interaction of external and region-specific factors[20]. In terms of external factors, regional growth partly depends on exogenous factors that are determined by national industrial trends, with some industries growing faster than others in response to post-industrial transition developments, global forces and policies with industry-specific implications. To varying degrees, these broad industry trends filter down to the regional level. This means that regional growth is partially dependent on national level changes in certain industries in combination with localised differences in industrial composition or mix.

4.2 In addition, regional growth may partly reflect the contribution of unique regional factors that enhance (or detract from) the performance of businesses within a particular place. Some places may perform better compared to others due to factors that impact the competitiveness of businesses, including quantity and quality of infrastructure, and the skills and productivity of the workforce.

4.3 Within this chapter, the SSA framework is used to separate the underlying national (i.e. NI-level) and regional (i.e. local or Council-level) drivers of employment growth to gain insights into the sources of regional variation across NI over the period 2001 to 2022. The analysis is focused on the private sector and therefore excludes the Public Administration, Education and Health sectors.

4.4 The traditional SSA technique has been widely applied in regional economics[21]. Here we apply a recent development of this technique using multi-factor partitioning. With this approach, the interest is to explain the difference in the growth rate between specific regions and the national growth rate. To capture time series dynamics, annual differences are added over time to yield cumulative differential growth rates. Using this technique, SSA is used to disaggregate differential employment growth rates into three main components.[22]

4.5 First, the **industry-mix effect** which measures the change in regional employment that is attributable to industry trends at the national level (NI), taking into account the industrial structure of the local economy (LGDs). A positive industrial mix effect indicates that a LGD has a higher concentration of

[20] Martin et al (2019).
[21] See Selting and Loveridge (2002) and Lahr and Ferreira (2021).
[22] The methodology follows Ray (1990), Gardiner et al. (2013), Visagie and Turok (2022). The decomposition also includes an additional term, known as the allocation effect, which is used for balancing purposes but is of less relevance from an interpretation point of view. See Appendix 1 for more detail.

employment in sectors which are growing faster than the NI average, while a negative industrial mix effect indicates that a LGD has a higher concentration of employment in industries that are growing slower than the NI average. The Location Quotients in Table 5 provide an overview of which sectors were most concentrated in which LGD in 2001, the start of the analysis period of employment growth. Figure 25 further below shows the sectors which grew fastest in NI over the period, all (with the exception of Utilities) in the tradeable services area. The industry-mix effect is therefore dependent on NI sectoral trends, rather than sectoral trends in a particular LGD.

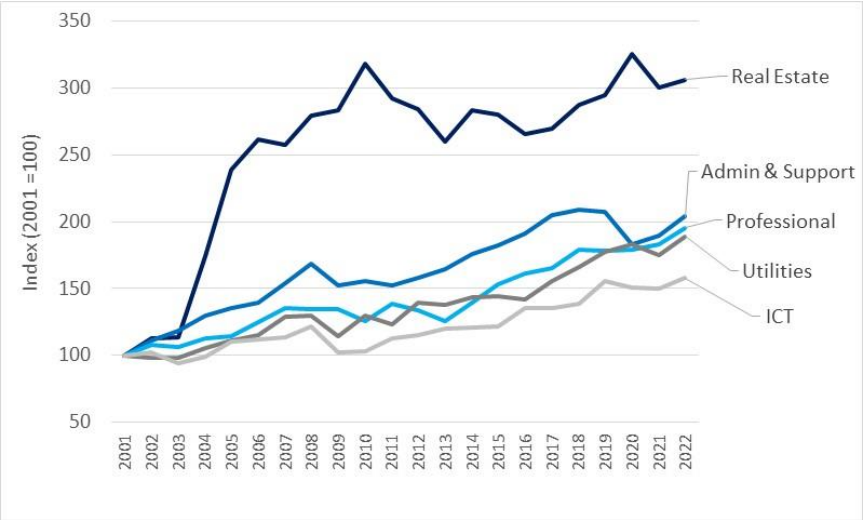
4.6 The second component is the **region effects**, which measure the contribution of the overall growth rate of the LGD. This captures local competitiveness effects due to the general business climate within the LGD that may benefit or hinder all businesses, regardless of industry. Finally, there is the **industry-place interaction effects** which measure the sector-specific regional advantage, as well as the impact of region-specific unusual events, that are in addition to the industrial-mix and region effects. This component captures whether businesses in a particular sector in a LGD are performing better compared to similar businesses elsewhere, taking into account the general regional competitiveness effect.

Table 5: Concentration of employment in an economic sector by LGD: Location Quotients (Employment 2001)

	Antrim & Newtown abbey	Armagh, Banbridge & Craigavon	Belfast	Causeway Coast & Glens	Derry City & Strabane	Fermanagh & Omagh	Lisburn & Castlereagh	Mid & East Antrim	Mid Ulster	Newry, Mourne & Down	North Down & Ards
Agriculture	0.47	1.37	0.00	1.81	0.86	2.79	0.53	1.15	2.24	1.85	0.84
Mining	0.19	1.61	0.23	1.44	0.67	2.35	0.41	1.89	3.03	1.11	0.32
Manufacturing	1.13	1.31	0.51	0.90	0.94	1.03	1.04	1.64	2.01	1.01	0.69
Electricity & Gas	0.73	0.32	1.94	0.07	0.29	0.58	0.52	3.86	0.10	0.11	0.36
Utilities	1.70	1.33	0.66	0.72	1.04	1.04	0.70	0.96	0.80	1.98	0.63
Construction	1.13	1.03	0.44	1.46	0.99	1.39	1.01	0.96	1.51	1.48	1.17
Wholesale & Retail	1.09	1.04	0.83	1.02	1.01	0.88	1.30	1.01	0.89	1.04	1.32
Transport & Storage	2.65	1.05	0.93	0.86	0.73	0.72	0.50	1.30	0.68	0.89	0.62
Hospitality	0.86	0.84	1.09	1.32	1.00	0.86	0.77	0.86	0.73	1.15	1.38
ICT	0.79	0.35	2.25	0.30	1.72	0.60	0.34	0.25	0.27	0.25	0.62
Finance	0.43	0.43	2.13	0.57	0.56	1.04	0.58	0.65	0.46	0.58	0.84
Real Estate	0.69	0.77	1.60	0.80	1.02	0.62	0.61	0.88	0.42	0.62	1.48
Professional	0.46	0.85	1.63	0.82	0.81	0.66	0.91	0.54	0.59	0.76	1.39
Admin & Support	0.95	0.89	1.68	0.61	0.75	0.25	0.97	1.70	0.43	0.35	0.52
Public Admin	0.45	0.79	1.77	0.69	1.08	0.73	1.10	0.71	0.29	0.51	0.88
Education	1.10	1.00	1.01	1.20	1.23	0.93	0.63	0.80	0.99	1.16	0.88
Health	1.11	0.95	1.11	0.85	1.11	1.01	1.43	0.64	0.58	0.92	0.95
Arts & Entertainment	0.65	1.05	1.02	1.03	0.92	0.81	1.03	0.84	0.62	1.10	1.92
Other Services	0.80	0.85	1.32	0.90	0.89	0.51	0.93	1.11	0.58	0.97	1.32

Source: NI Business Register & Employee Survey and UUEPC analysis
Note: A Location Quotient >1 indicates the LGD is more specialised in an economic sector compared to NI, while a value of <1 indicates that the LGD is less specialised compared to NI.

Figure 25: Evolution of NI Employment - 5 sectors displaying highest growth, 2001 to 2022



Source: NI Business Register & Employee Survey and UUEPC analysis

Results of the analysis

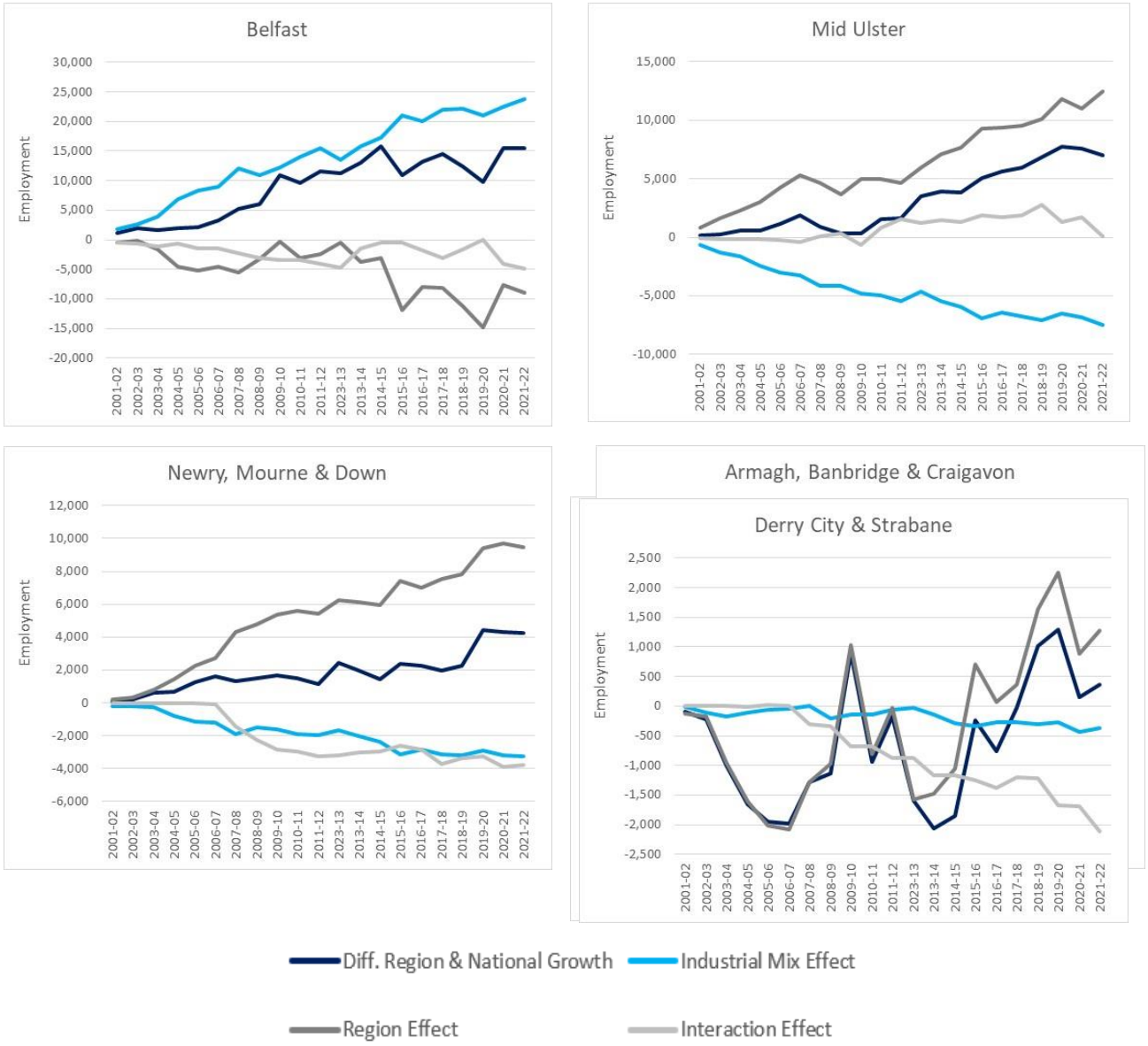
4.7 The results of the application of this technique to employment at the LGD level in NI are shown in Table 6 below and Figures 26 and 27. Further results, based on analysis of GVA, are provided in Appendix 2 and provide a similar picture.

Table 6: Cumulative difference between regional and national growth of employment and decomposition based on SSA, 2001 to 2022

	Diff. Region & National Growth	Industrial Mix Effect	Region Effect	Interaction Effect	Allocation Effect
Belfast	15,451	23,755	-8,905	-4,859	5,460
Mid Ulster	6,974	-7,461	12,459	69	1,906
Newry, Mourne & Down	4,279	-3,277	9,460	-3,784	1,879
Armagh, Banbridge & Craigavon	3,180	-2,809	3,107	567	2,315
Lisburn & Castlereagh	967	-982	1,264	-885	1,570
Derry City & Strabane	370	-374	1,283	-2,113	1,574
Fermanagh & Omagh	-2,892	-3,906	1,492	-1,829	1,351
Antrim & Newtownabbey	-4,090	-417	-3,491	-1,945	1,764
North Down & Ards	-5,538	16	-4,803	-2,122	1,371
Causeway Coast & Glens	-7,446	-2,511	-5,120	-1,190	1,374
Mid & East Antrim	-11,254	-2,034	-6,746	-4,013	1,539

Source: NI Business Register & Employee Survey and UUEPC analysis

Figure 26: Evolution of cumulative employment growth and decomposition, selected LGDs, 2001 to 2022



Source: NI Business Register & Employee Survey and UUEPC analysis

4.8 The results show that six LGDs grew at a faster rate than NI as a whole over from 2001 to 2022, namely Belfast, Mid Ulster, Newry, Mourne & Down, Armagh City, Banbridge & Craigavon, Lisburn & Castlereagh and Derry City & Strabane (shown in Figure 26). The differential in cumulative employment is particularly marked for **Belfast City Council**. Belfast could have expected to gain 15,451 fewer jobs over the period 2001 to 2022 had it grown at the same rate as NI. The dynamics indicate that the growth differential widened steadily up to 2015 and remained around this level in the following years. Decomposing Belfast's growth into different components demonstrates that the growth is attributable to positive industry mix effects rather than place-based factors. In other words, this reflects Belfast's high concentration in high growth sectors that performed strongly at the NI level.

4.9 As shown by the Location Quotients in Table 5, Belfast has particularly high levels of concentration in sectors that grew strongly at the NI level over the period of analysis (see Figure 25). These include the Professional Services and ICT, reflecting ongoing structural changes in the NI economy. In contrast, the regional effect component exerted a negative impact on growth in Belfast. While this was insufficient to offset the overall positive differential in employment growth compared to NI, the deepening of the downward contribution of this component from 2016 should be a concern as it may reflect a loss of local competitiveness.

4.10 In contrast to Belfast, the other five Council areas that displayed growth compared to NI did not benefit from favourable industrial mix effects (Figure 26). In these cases, employment growth primarily reflected favourable regional effects; this indicates that businesses in all sectors benefitted from an LGD-wide boost due to the general performance of the local economy that enhanced local competitiveness.

4.11 The positive region effect is particularly high in **Mid Ulster**. In addition, this LGD displayed a positive overall cumulative industry-place interaction effect, indicating that specific sectors performed better in the local area compared to NI. It is apparent that the Manufacturing, Construction and Retail sectors exerted substantial positive contributions to this component. The interaction effect has weakened in the later years. The industrial mix component exerted a negative impact on growth, and this impact grew steadily through the period of analysis. This reflects the under-representation of high growth sectors, such as Professional Services, ICT and Admin & Support Services in Mid Ulster, as well as a concentration in some sectors that underperformed at the national level, such as Agriculture.

4.12 The decomposition shows that the growth in employment in **Armagh City, Banbridge & Craigavon** is similarly attributable to favourable regional and industry-place interaction effects. Like Mid Ulster, the Manufacturing sector increasingly exerted a positive impact on the industry-place interaction

component in the latter years, highlighting the important contribution of this sector within the local area.

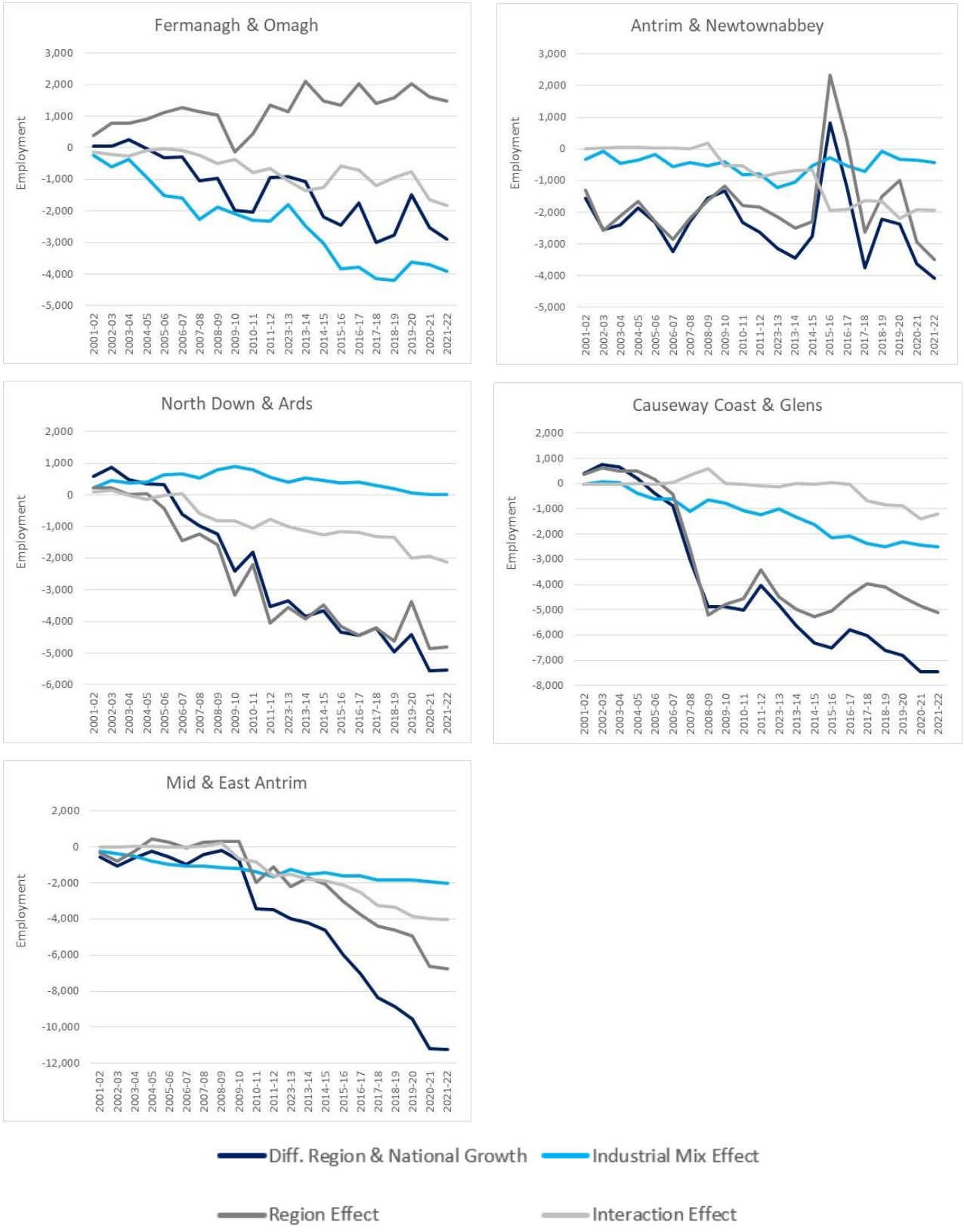
4.13 In **Newry, Mourne & Down; Lisburn & Castlereagh** and **Derry City & Strabane** the relatively strong performance reflects the contribution of favourable regional effects that boost local competitiveness. The contribution of region effects within these areas were partially offset by negative industrial mix and interaction effects. Within **Newry, Mourne & Down**, the industry-place interaction effect exerted a negative impact on employment primarily due to the contribution of the Agriculture, Construction and Hospitality sectors at the local level. While insufficient to offset the overall industry-place interaction effect, the local Manufacturing sector performed strongly in the latter period. The industrial mix effect had a growing negative impact on employment throughout the period of analysis, reflecting the relatively low concentration in high growth sectors such as Professional Services and ICT and a higher concentration in poorer-performing sectors at the local level, such as Construction.

4.14 **Derry City & Strabane** also bore a negative industrial mix effect, although to a smaller extent. This is attributable to the relatively low concentration in high growth sectors such as Professional Services and Administration & Support. In this LGD, the industry-place interaction effect exerted a greater negative impact on employment. This is primarily due to the poorer local contribution of the Retail, Professional and ICT sectors. This means that while firms in the LGD benefitted from local competitiveness effects, the Retail, Professional Services and ICT sectors under-performed within the local economy.

4.15 A similar picture can be seen in **Lisburn & Castlereagh** where the overall employment growth was hindered by the negative effects of the industry-place interaction and industrial-mix components.

4.16 The remaining LGDs exhibited slower growth when compared to NI over the period 2001 to 2022 as shown in Figure 27. **Mid & East Antrim** exhibited the largest negative cumulative differential change in employment when compared to NI. The dynamics shown in Figure 27 indicate that the gap accelerated sharply in 2016/17 in line with the major closures of the Michelin and JTI Gallaher factories. However, it is important to state that employment displayed a negative relative trend prior to this shock. All three SSA components exerted a negative impact on growth. The negative industry-place interaction effect is partly attributable to the negative contribution of the local Manufacturing sector, including prior to 2016/17. The downward impact of the industry mix component reflects the unfavourable industrial composition with a low level of concentration in high growth sectors, such as ICT and Professional Services, and a higher concentration in Manufacturing which saw low growth at the NI level.

Figure 27: Evolution of employment GVA growth and decomposition, selected LGDs, 2001 to 2022



Source: NI Business Register & Employee Survey and UUEPC analysis

4.17 Both **Causeway Coast & Glens** and **Antrim & Newtownabbey** also under-performed, to a lesser degree, due to negative contributions from all three components. Within Causeway Coast & Glens, the industrial-mix effect has had an increasingly negative impact on growth throughout the period of analysis. This was exacerbated in 2008-09 by a significant deterioration in regional effects, with businesses in all sectors suffering from a general lack of dynamism that has hindered or reflected local competitiveness. The place-industry interaction effect has also exerted a growing negative impact in recent years, due to the under-performance of the local Construction sector. The Construction sector has also had a negative impact on the overall interaction effect within Antrim & Newtownabbey, alongside a downward impact from the local Transport sector. The regional component or local competitiveness within Antrim & Newtownabbey has been volatile over the period but generally exerted a negative impact.

4.18 **Ards & North Down** has under-performed primarily due to a marked negative regional effect or lack of local dynamics. To a lesser extent the place-industry interaction effect exerted a downward impact due to the LGD-wide under-performance of the Construction and Retail sectors. As a counter to this, the industry mix effect exerted a slight positive impact, partly due to a higher concentration in the Professional Services and Real Estate sectors. The negative impact in **Fermanagh and Omagh** is largely attributed to the downward impact of the industrial mix effect, with high levels of concentration in low growth sectors at the NI level, especially Agriculture and Construction, and low levels of concentration in high growth sectors such as Professional Services, Administration & Support Services and ICT.

Implications of the SSA results

4.19 The SSA demonstrates that both external and local factors have played a role in the variable nature of regional economic growth in NI. While some LGDs have not benefitted from a favourable industrial composition, with low concentrations in sectors that have displayed strong NI-wide growth, this has been more than offset by the significant contribution of place-based factors. This can be seen in Council areas such as Mid Ulster, ABC and Newry, Mourne & Down.

4.20 The place-based factors capture a range of locally specific factors that impact the competitiveness of a local area, including improving the operating environment to enhance the efficiency of businesses through modernising infrastructure, ensuring connectivity to wider markets, promoting entrepreneurship and innovation and developing the skills and productivity of the local workforce by boosting investment in education and training.[23]

4.21 Along with generic regional effects that raise the competitiveness of all types of businesses within the local area, some regions have benefitted from sector-

[23] Visagie and Turok (2022), Gardiner et al. (2013) and Martin et al. (2019).

specific advantages; this highlights that the local context matters for specific sectors, and it is appropriate to continue to build on these strengths. It is evident that although the Manufacturing sector exhibited only modest growth at the NI level, it performed strongly in certain areas and made a key contribution to local growth. The potential to harness this advantage in the future should be explored, particularly the possibility to strengthen the existing Manufacturing sector with new techniques and processes that boost productivity.

4.22 The agri-food sector has played an important role in supporting growth in rural areas. It would be beneficial to take further advantage of the asset base of rural areas through the development of new products and processes within the food and drink industry which make substantial contributions to value added and export trade.[24]

4.23 While the analysis suggests that some regions have not been held back substantially by an unfavourable industrial composition (in terms of NI-wide growth rates), as this has been more than offset by the positive impact of place-based factors, it would be imprudent to overlook sectors displaying high growth at the NI and wider level. The strong performance of the tradeable services sectors reflects post-industrial structural changes and the ongoing transition to a service-based economy. Where possible, regional policy should encourage the expansion of high-value, high growth sectors. Growth in Knowledge Intensive Business Services is desirable as they typically have higher productivity growth and are more likely to be traded internationally[25]. It is recognised that non-city regions do not have a comparative advantage in Knowledge Intensive Business Services, but it would be advantageous to exploit potential opportunities in these areas due to their high value and low base.

4.24 In contrast to more rural regions, it is evident that Belfast has certainly benefitted from the structural transition from goods-oriented businesses towards service-oriented businesses, particularly Knowledge Intensive Business Services. Knowledge-based businesses tend to prosper in cities such as Belfast due to agglomeration benefits wherein firms in specific industries group together within the same region to exploit larger supplier networks, specialised skills and shared infrastructure and services[26]. These benefits of agglomeration naturally (though not inevitably) arise in cities and generally outweigh negative factors such as high rental costs, congestion and overstretched public infrastructure and services. Going forward, however, care needs to be taken that any adverse effects from poorly planned agglomeration do not become increasingly problematic, resulting in lower rates of sub-regional growth.

[24] Patton et al., (2016).
[25] Martin et al., (2019).
[26] Visagie and Turok, (2022).

5 Considerations on what matters and what (not) to do for regional balance

Introduction

5.1 Any considerations of what to do (or not) for regional balance tend to be guided by the dominant economic theory at a point in time. In the mid-20th century regional policies were informed by the Keynesian approach which advocated for government intervention to stimulate demand and address unemployment, including region-specific interventions or investments in more deprived areas to initiate convergence.

5.2 Post-war policies in the UK and US reallocated industry to less-developed regions through public works, subsidies and state-led job creation. The underlying belief was that left to itself, the market would not fix regional imbalances. In this view strong public investment, for example in infrastructure or through state-owned industries or regional development agencies, is needed to boost declining regions' economies. From the 1940s to the 1970s the UK's regional wage subsidies and investment grants aimed to encourage firms to locate in high-unemployment areas.

5.3 In the 1980s, regional policy was then dominated by efficiency arguments and neo-classical 'spatially blind' economics. This view can be summed up as follows: regional policies 'that aim to spread growth amongst regions are running counter to the natural growth process'[27]. Different levels of growth potential are attributed to different levels of endowment and a typical result of this is people and capital moving to thriving places, increasing regional disparities. In a 'spatially blind' policy, the aim is to ensure all members of society can benefit from growth wherever this occurs, and policies therefore set out to increase the growth potential of all regions. This can result in tensions between prioritising the allocation of labour and capital to places where they are most productive and prioritising the reduction of regional imbalances.[28]

5.4 However, regional policy has been changing with a turn towards place-based approaches as awareness grows that the 'spatially blind' policy was not reducing inequalities. Furthermore, there is growing international evidence of a possible link between lower national growth and high internal inequalities.[29] The World Bank has revisited its previous position recognising that the 'spatially blind' approach was not working as it should in theory. Whilst the OECD has gone further to argue that regional inequalities *within* countries – when these are large

[27] HM Treasury (2007); World Bank (2009).
[28] Coyle and Sensier (2020).
[29] Carrascal-Incera et al (2020); Ferrara et al, (2022).

and persist over time – are potentially creating economic, social and political costs.[30]

5.5 These views challenge the mainstream economists' view: that society faces a significant trade-off between equality and efficiency, or between inclusivity and prosperity. The trade-off remains relevant but the current economic realities (minimal wage and productivity growth since the 1970's and widening inequalities in advanced economies), have given rise to questions whether the trade-off leads to an efficient economy, or whether other factors mean that success and effort are not inherently linked.[31]

5.6 With regard to changing practice in regional policy, there is a question whether people-based and place-based policies are naturally opposed[32]. The concern about an earlier Keynesian focus on places arose in the 1960s where regional policies were seen as naturally welfare-reducing and likely to redirect economic activity away from successful places through distortionary incentives. In the EU, the replacement of regional policy with Cohesion Policy in the 2000s came with the aim of making all regions more competitive through horizontal interventions to uplift innovation, skills, entrepreneurship and productivity.

Table 7: Traditional Regional Policy vs. Modern Place-Based Regional Policy

	Traditional Regional Policy (Top-Down)	**Modern Place-Based Policy (Bottom-Up)**
Objectives	Compensate lagging regions for disadvantages (usually temporary aid for convergence).	Tap into underutilised potential in all regions to drive development everywhere (focus on inclusive growth).
Unit of Intervention	Administrative units (e.g. provinces, governed from the centre).	Functional economic areas (city-regions or localities defined by real economies).
Strategies	Sectoral programs imposed uniformly, often focused on single industries or state-led projects in target areas.	Integrated development projects tailored to local context; cross-sectoral initiatives (e.g. linking education, business, infrastructure in a region).
Tools	'Hard capital – subsidies, grants, and infrastructure spending (roads, factories) directed by central government.	Mix of 'hard' and 'soft' capital – infrastructure plus business support, innovation funding, networking, credit facilitation, etc., designed with local input.
Actors	Central government as primary actor: local bodies administer central decisions ('top-down').	Multi-level governance: collaboration between national, regional, and local governments, along with private sector and civil society ('bottom-up').

Source: OECD (2023).

[30] Grover at al (2022); OECD (2023).
[31] Rodriguez-Pose et al (2024).
[32] McCann (2023).

5.7 The Keynesian and neoclassical approaches have, more recently, begun to be superseded by 'people-in-places' or place-based policies – see Table 7 for more details. This approach recommends that policy should be tailored to specific regional contexts, leveraging local strengths and knowledge rather than treating policy as 'spatially blind'. This builds on the previous track records of both Keynesian and Neoclassical approaches. It requires less top-down and sectoral policies that ignore local factors and more focus instead on *endogenous* growth potential, identifying underutilised assets in each region (such as a skilled workforce, natural resources or a niche industry) and addressing the failures holding regions back. This poses the problem of policy design to ensure the right level of resources, political will, timescales and geography to make such policies work.

Firms and their location decisions

5.8 The location decisions taken by businesses is critical to regional development. The economic theory suggests that while some location determinants are fixed – places cannot change their geographical location – there are some elements that can be improved or altered to make places more attractive to firms. The locations of businesses – be these new domestic firms or the result of inward investment – are not random decisions, whether these are made in NI or in any advanced economy. When asked, businesses normally cite one or more of the following (in no particular order)[33]:

- **Availability of suitable skills:** Businesses almost always refer to the need for a strong skills base in the first place or encourage them to remain in the future. For NI, this means both the upgrading of skills and qualification levels in most places, but also ensuring the right skills are available in the right places for the opportunities on offer. This means ensuring the provision of places at apprenticeship, FE and HE levels as well as the right amount of retraining and upskilling programmes, all aligned with industry needs. Any place-based intervention also needs to reflect the changing requirements for businesses depending on their level of sectoral complexity and their stage in the business life cycle.

- **Availability of first-class infrastructure and connectivity:** The availability of robust and efficient transport, digital and energy infrastructure is essential for any region or sub-region seeking to attract business. Bottle-necks in the provision of road, rail or airport infrastructure are commonly identified as issues potentially blocking new business formation or investment but the availability of serviced industrial land should not be taken for granted either as a local infrastructure element.

[33] This draws on McCoy et al (2018); Artz et al (2015); Audretsch et al (2005)

- **Provision of a stable and predictable business environment:** Regulatory stability and certainty around market access are highly valued by firms, especially so in the decade since the Brexit referendum and the current tariff disputes. Clarity on regulatory changes or those affecting business taxation are expected by businesses, though little of this is decided at an NI level or its sub-regions. The extent to which localised incentives or subsidies may affect decisions – even if these were available as sub-regional levers – has been debated in the case of regional development in Ireland and reunification in Germany.[34]

- **Attachment to place:** Many entrepreneurs like to locate close to home, ranging from a 'stickiness' of a place for family and personal reasons, through to the social networks and broader social capital that they may draw upon. This attachment to local social capital tends to outweigh any potential to erode personal competitiveness[35]. Another factor in this local embeddedness is that the start-up business reflects a 'local brand' (often associated with food, tourism, creative industries, etc).

- **Access to local sectoral specialisation and clusters:** Much is made of the need to embrace the power of clusters and specialisation, including the provision of innovation hubs, fostering university-industry collaboration, and facilitating networking among local firms. The evidence supports this past a certain point in the development of regional complexity when firms are at a certain scale, though this also risks amplifying what the market is already signalling, so that success breeds success in places.[36]

- **Liveable places including housing:** Cities, typically larger cities, have the downsides of growth, including congestion and a lack of affordable housing. The improvement of housing supply of all types alongside investments in amenities (parks, local transport, healthcare and schools) all add to liveability and is a factor in supporting firm formation and retention. The same issues of housing supply and amenities can be found not only in secondary cities but also across many sub-regions in NI making this a key issue.

- **Emphasis on environmental sustainability:** The transition of the economy to greener models requires sub-regions to consider sustainability objectives as a means of being competitive. The support for green infrastructure and energy attracts firms looking to ensure a lower carbon footprint. Measures like low-emission zones, green spaces and circular waste systems are all part of this attractiveness area or a way to market regions as green and forward-thinking.

[34] Ryan et al (2024); Enenken and Rösel (2022).
[35] Sorenson and Dahl (2012).
[36] Pinheiro et al (2025).

5.9 In conclusion, the key factors influencing firm location – from market size and skilled labour to infrastructure, policy and quality of life – are deeply interrelated. While no single factor guarantees success for a place, the availability of the right mix of skills, strong connectivity and liveability seem essential to firm location decisions and their continued presence over time.

What role do cities play?

5.10 The evidence from most advanced economies is that the role that cities play is as a driver of regional and national economic growth. The differing geographical impacts of the knowledge economy and globalisation have contributed to a strengthening of the role of cities, as these forces have generated a more complex landscape of sectoral specialisation, firm location and knowledge diffusion. Indeed, much of the discussion has now become about whether economic growth adds further to an already existing 'something to build on' in successful cities or whether this can be replicated and spread to other places, rural areas as well as other cities.[37]

5.11 One reason for the differing economic performance is that density brings with it many benefits, including higher wages, shorter distances to travel, stronger innovation activity, lower energy consumption per capita and reduced costs of service provision. It also creates greater costs, including higher levels of pollution, higher construction costs and larger skills/wage gaps. Housing signals are a mixed benefit, with higher rents and prices for landlords and owners, but also the same for renters and homebuyers.[38]

5.12 The Marshallian[39] theory is that the agglomeration effects in an economy are expected to be stronger in cities due to their size and these are likely to include:

- **Knowledge Spillovers**: Proximity fosters idea-sharing and innovation, increasing productivity[40]
- **Labor Market Pooling**: Large urban areas attract a diverse talent pool, leading to better matching between workers and firms[41]
- **Economies of Scale**: Firms in cities benefit from shared infrastructure, supplier networks, and consumer demand concentrations.

[37] Kemeny and Storper, 2020; Barba Navaretti and Markovic, 2021.
[38] Ahlfeldt and Pietrostefani, 2019.
[39] The theory is that the gains of concentration come from a reduction in transport costs – for goods, for people or for ideas; see Marshall (1920).
[40] Combes (2012); Glaeser and Xiong (2017).
[41] Moretti (2012).

5.13 In large cities (of more than 250,000 people[42]), these agglomeration effects tend to lead to a concentration of top jobs and learning opportunities, as well as the availability of attractive amenities and diverse social networks. For many urban economists these combine to act as magnets for the higher educated, further reinforcing the advantages of cities[43]. In some industries or sectors the evidence points to the agglomeration effects growing stronger over time, in highly specialised sectors where R&D and innovation is important (medical devices and pharmaceuticals are often cited for this effect), as well as those where proximity to other employers in the same sector or universities is key. This pattern is particularly strong for high-skilled services sectors (such as cyber-security or fintech) and, in the UK, this can be seen in London, but also, to a lesser extent, in Manchester, Birmingham and Leeds.[44]

5.14 There is also contrary evidence which suggests that agglomeration effects can weaken as some sectors become more mobile and the same effects can be found (or created) elsewhere. Automation of processes is a key element in this and has been seen, initially at least, in different Manufacturing sub-sectors. Another weakening factor is how externalities such as rising congestion or issues with housing supply and costs can begin to limit the attractiveness of large cities[45]. This helps to identify two other things to consider in agglomeration effects:

- How can there be an ebb and flow in the effects, something which was evident in Europe where the concentration of people and growth in the largest cities began to slow since the early 2000s due to congestion, pollution issues and a high cost of living (in particular housing costs) – something which has been addressed in some but not all of these centres.

- How a weakening in one larger city may open opportunities up for other smaller urban centres to attract businesses and workers but that this is dependent on the size, skills and amenities (including connectivity) on offer in these places.

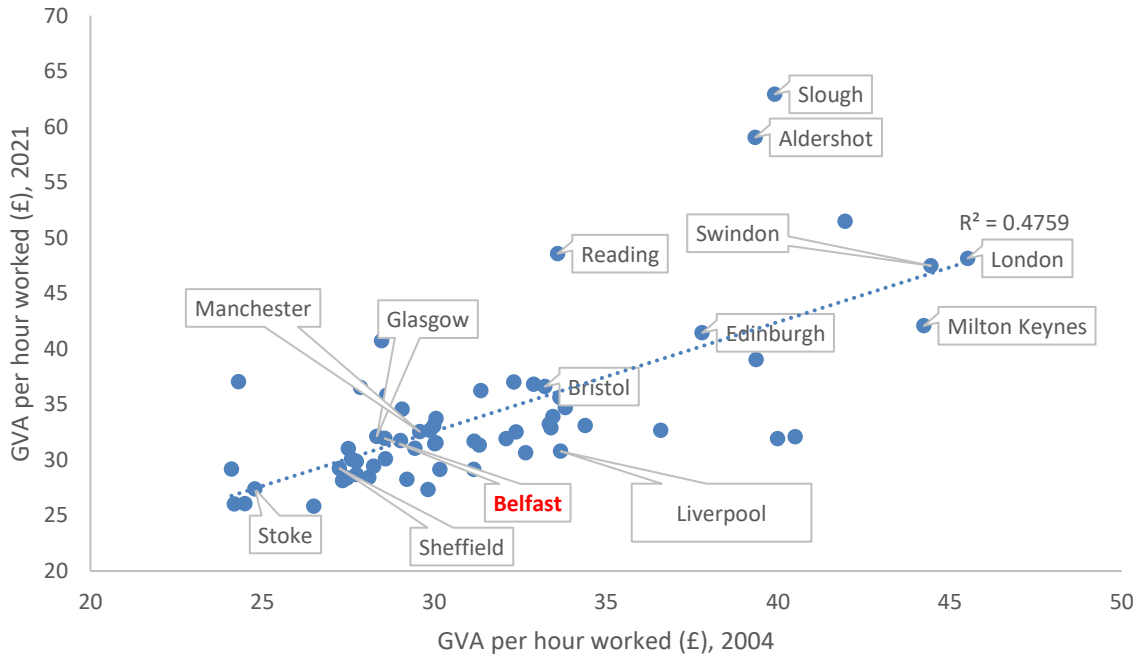
5.15 One final – and yet unfinished – process which may impact agglomeration is the increase in the number of jobs that can be done in a totally remote or hybrid fashion. This may weaken some of the negative externalities – for instance

[42] There is a question of how far agglomeration effects operate where urban density is thin. For example, in Wales, where Cardiff (population of 350k) is followed by Swansea (170k) and Newport (130k), this question has been raised, if not definitively answered (Brill et al (2015)). The Welsh cities have low GVA per capita when compared to their larger Scottish or English peers and their population size ranks behind Belfast (384k) but ahead of Derry (85k).
[43] Moretti (2012); Dauth el al (2022).
[44] Xu (2023).
[45] Dijkstra, Garcilazo and McCann, (2013).

congestion and high housing costs – though this, in turn, could increase the attractiveness for a different generational group.

5.16 Alongside weakening agglomeration effects, there is also strong evidence especially in the UK, Ireland and some Northern European countries, that not all cities perform at the same level when it comes to strong economic growth[46]. Belfast is a good example, with it's workplace economy – in terms of output per capita and productivity – is well above the NI average (see Figures 6 and 7). However, when compared to the UK average for productivity it has performed below par and this position has persisted over time as shown in Figure 28. This is, in part, about how poorly the UK hierarchy of cities operates but also about how productivity in cities tends to be increasingly driven by the functions or tasks we do within sectors and less about the sectoral specialisation, something which is becoming more difficult to address by policy.[47]

Figure 28: GVA per hour worked, UK cities, 2004 and 2021



Source: ONS and Centre for Cities database.

5.17 Within NI there arises another question about the performance of the key second-tier city, Derry. As shown in the previous chapter and well-known to most people in NI, Derry City and the North West in general has lagged the NI average on many indicators and although performance has improved over time, it still sits well behind other places in NI. As in NI, the trajectory of second cities is a subject that matters in many countries or regions. In some countries, such

[46] Frick & Rodriguez Pose (2016); Frick & Rodriguez Pose (2018) ; Venables (2018).
[47] Martin et al. (2019); OECD (2020).

as Germany or Spain, the second cities (Munich or Barcelona) add significantly to the national growth.

5.18 Recent work on Cork city identifies success in terms of economic performance and the same could be said of Limerick or Galway, though there has been less in terms of delivering compact cities in Ireland[48]. However, in the UK, many of the second-tier cities are performing below the UK average and the series of City and Growth Deals has been an attempt to improve levels of skills, productivity and innovation to bring similar economic success to second-tier cities across Scotland, Wales, the north of England and latterly NI.

How peripherality matters

5.19 Peripherality is a term that is defined in different ways in the academic and policy literature but in both the key issue is generally distance from the 'core', normally a large or smaller urban centre, measured either by travel time or distance (kms or miles). A recent OECD paper has tried to put a definition both on the urban core and the distance beyond which the region becomes peripheral or, as they term it, remote[49].

5.20 The urban core is a densely populated area of more than 50,000 people and up to several million people in the case of a metropolitan area. The surrounding areas include towns where more than 15% of their employed residents commute to the city. The distance is a 60-minute drive, and a peripheral region is one where more than half of the population live at or beyond that distance. If Belfast city is a metropolitan area and Derry city a small/medium city, then by the OECD definition very little of NI would be regarded as remote as no Council area would have more than 50% of its population more than an hour's drive from either city.

5.21 In looking at peripheral places and their relationship with regional development, the key academic discipline is economic geography; the definition is also focused on distance, this time from markets or population/pools of labour. The key issue is how far distance, transport costs and connectivity act as constraints on growth and can result in 'lagging places'. In these 'lagging places', as a result of more limited access to opportunities, individuals and households can often experience lower well-being and worse levels of lifetime achievement.

5.22 Further, a combination of more limited opportunities and less geographic mobility can hamper the ability to move to more dynamic places with higher potential[50]. These effects not only persist in certain places but can also transmit through generations, and the costs can increasingly impact on the wider regions and countries. Any compensations or mitigations of the effects of regional inequality

[48] Ryan et al (2024); Brady (2016).
[49] Fadic et al (2019).
[50] Kemeny and Storper (2020).

may outweigh any advantages gained from the original 'place-blind' or national growth policies.[51]

5.23 Among economists (whether advocates of neo-classical, cumulative causation, New Economic Geography or 'growth poles' theory), the argument is not whether core areas tend to have advantages over peripheral areas. Rather, it is a debate about whether poorer places naturally converge over time or whether (as in Gunnar Myrdal and Paul Krugman's views) the advantages tend to accumulate for the core over the periphery. If you agree with this view, the question then becomes whether or not intervention works and what enables some peripheral areas to thrive despite the economic disadvantages.

5.24 The nature of the disadvantages has also changed as the economy has continued its structural shift from an agrarian/industrial base to one where tradeable services are the most important. A heavier reliance on services addresses many of the transport costs and distance issues related to a peripheral location, but equally it is clear that for many of the knowledge-intensive service firms the advantages associated with agglomeration usually arise in city centre locations[52]. Whether a greater adoption of remote or hybrid working patterns and the increased use of digital technologies will change the core-periphery dynamics associated with agglomeration is not clear, though early evidence suggests major urban agglomerations are retaining their pull due to the enduring appeal of face-to-face networks.[53]

5.25 Finally, there is a growing field of research which argues that peripherality is about more than economics. For some policy makers (and especially those working in the spatial policy area), this can mean that distance from services or amenities is as important as commuting distances. An emphasis on the outcomes of peripherality, such as population decline and/or a falling away of local service provision, can result. A decline in the school or health provision, declining diversity in retail, hospitality or financial offerings are the things that make peripherality felt at a local level.

5.26 Another way it can be felt are through negative assumptions made about life in peripheral places, the expectations that others may have of peripheral living and, consequently, the expectations of businesses and people who work in these regions[54]. There is also a view that some factors mark peripheral regions, including how local leadership and innovation can make a difference. This would mean that peripheral places should not be seen as passive victims of distance but rather empowering regions to leverage their unique assets. Ultimately,

[51] Dijkstra, Poelman and Rodríguez-Pose (2019).
[52] Storper & Venables (2004).
[53] Bond-Smith and McCann (2022).
[54] Pugh & Dubois (2021).

however, without deliberate efforts, market processes are likely to reinforce the advantages of cores over peripheries.

Skills and education institutions

5.27 Human capital theory posits that education and skills are key drivers of productivity and earnings at both the national and regional level. This means that a higher stock of human capital should foster economic growth – usually measured as qualification levels (or the share of the population with a degree). These tend to vary across regions – as is the case in NI – and the reasons for this include:

- Places building upon initial advantage usually in the shape of a strong set of further and higher educational institutions.
- Places which are seen to capitalise on existing strengths in quality-of-life amenities (associated with entertainment, green spaces, lower crime rates and urban transport facilities) or seek to improve these.
- Places which create/enable 'lower barriers to entry' for individuals with diverse attributes, developing on the link between tolerance of others and places which can thrive.[55]

5.28 There is a body of evidence (UK, Europe and USA) that universities do not 'make' a success of a place but are usually correlated with it[56]. Universities that actively engage with their region can help spur knowledge-based development and policies have long provided intentional support (funding for collaborative research and incentives for staff engagement and industry partnership programmes) to assist this work. There are stand-out examples of success (e.g. Cambridge, Oulu, etc.) but it has been less straightforward in many places.

5.29 The EU has refined its policies in recent years away from the ERDF approach of investing in infrastructure, innovation and human capital in less-developed regions, towards Smart Specialisation Strategies (S3), which call on each region to identify priority areas of economic potential (often knowledge-based sectors) and build innovation capacity around them. A key requirement of S3 is the involvement of higher education and research institutions in the strategy design and implementation, though the challenge to engage with stakeholders remains.[57]

5.30 The existence of a strong Higher Education presence in a region or sub-region raises the retention issue. This can mark out whether such institutions can become more than a necessary condition for regional growth, becoming instead

[55] Florida (2002); Glaeser et al (2001); Jacobs (1961).
[56] Kempton (2015); Benneworth and Fitjar (2020).
[57] Pugh (2014).

a sufficient one. In an open labour market, the theory suggests that graduates will migrate to where opportunities are best. This leads to 'spatial sorting' (or 'brain drain'), whereby highly educated people concentrate in certain cities or regions, while other areas lose talent. There is research to support sorting effects and that the resulting concentrations of high-skilled workers in the UK is a primary factor behind regional wage disparities[58]. This goes further to suggest a self-reinforcing feedback loop, where prosperous areas attract and produce even more talent. The result can be diverging trajectories of places with some becoming skills hubs with high wages, while other places see persistent skill deficits and weaker economies.

5.31 These differences in people (education levels and/or occupations) can explain differences between places. Some research, for GB, estimates that at least two-thirds of the gap in average earnings between regions is due to who works where, not just what industry or sector you work in[59]. This underscores the idea of 'sorting people by their skills rather than by place' and captures a fundamental challenge in regional development; how to ensure that skills find opportunities (ideally everywhere), instead of only certain places accumulating all the skilled people.

5.32 The research literature provides a nuanced understanding. Human capital or skills is seen as critically important, so that regions with more educated, skilled workers tend to do better economically and many disparities can be traced back to these differences. However, skills don't exist in a vacuum; they flourish in places where there are plentiful opportunities. The trick is to do this without widening gaps between certain areas.

5.33 The investment in people and places need not be seen as an either/or as investments in people (skill building, apprenticeships, lifelong learning) could be combined with investments in place (business development, R&D infrastructure, quality of life improvements). For instance, a scholarship program to send local students to university (people-based) might be paired with the development of a local innovation park/hub attracting businesses to employ them later (place-based). The two-way process is highlighted in low levels of BERD existing alongside a strong university research base in the UK. The idea of 'hubs and no spokes' suggest a need not just for policies to stimulate Higher Education Institution (HEI) research but also for its adoption in firms, especially in lagging regions[60].

5.34 In conclusion, expanding access to higher education in lagging regions is necessary to grow local skills, but without local opportunities, graduates will be mobile. Opportunities for attractive, graduate-level jobs in local economies –

[58] Overman and Xu (2022).
[59] Gibbons et al (2011).
[60] Haldane (2018).

without significant levels of underemployment – is essential. If successful, this too can make places attractive to further high skilled individuals as higher graduate retention rates with higher skills levels in local jobs will be metrics of success.

Sectoral specialisations, clusters and 'building on strengths'

5.35 Industrial policy (or supports to influence the structure or development of specific industries and sectors) has had a revival at the same time as support for place-based policy has grown. They often merge into one, for example in the Regional Enterprise Plans (since 2017) in the RoI[61], the 'Levelling Up'-supporting Local Industrial Strategies in England (2018-2023) and subsequent new UK industrial strategy (2024)[62], the various place-based measures undertaken in the Biden presidency (2020-2024)[63] or the Draghi report for the EU which builds upon the earlier Smart Specialisation Strategies (S3) which were behind the ERDF funding for 2014-2020 and now the 'Smarter Europe' policies under the EU budget period 2021-2027.[64]

5.36 These different forms of local industrial strategies, S3 frameworks, regional enterprise strategies or local growth plans may operate at different spatial scales, but all will generally have a common sectoral focus. This is unsurprising given that some sectors – Manufacturing, Life Sciences, ICT and Professional, Scientific and Technical Services – have a higher-than-average productivity whether measured by GVA per hour or per job filled. There is also the association of stronger economic growth with the presence of supported clusters - geographic concentrations of related industries, firms, skills and research institutions – which has been recognised since the work of Michael Porter in the 1990s. Sectoral priorities can also allow a focus not on traditional sectors but on emerging technology areas (as, for example, in the 10X strategy in NI where Agri-Tech and FinTech both featured).

5.37 The selection of and support for sectoral priorities at a regional or sub-regional level normally include phrases such as 'building on local strengths'. The process

[61] There are nine Regional Enterprise Plans based on NUTS3 regions except for the Border region split into North East and North West and current plans run to 2027 with €260 million in funding.
[62] Four LISs were drafted for West Midlands, Greater Manchester, West of England and Oxford-Cambridge Arc before the policy was dropped in 2023.These strategies have been replaced by Local Growth Plans, also to be undertaken at the sub-regional level in England with support from the What Works Centre. See 'The UK's new industrial strategy', Economics Observatory, 9 April 2025; https://www.economicsobservatory.com/how-can-past-industrial-policies-help-inform-the-new-industrial-strategy .
[63] The Inflation Reduction Act, the CHiPS and Science Act and the Infrastructure, Investment and Jobs Act all involved regional actors, sometimes in partnership with the Federal government, sometimes on their own; see Gansauer and Westwood (2024).
[64] Interreg Europe (2020).

to establish local sectoral strengths or priorities are usually a mix of two different workstreams:

- The discovery process typical of the S3 approach in the EU in which local stakeholders decide in a decentralised and collective manner which activities are held as being most promising and should be targeted in policy.
- The use and analysis of data (including on industries, occupations, trade and patents) to determine whether a region possesses relevant capabilities to develop a new activity and to which other regions can connect to get access to complementary capabilities.

5.38 Both workstreams are essential to identify what local strengths exist but both have their limitations. Local stakeholders can identify strengths and capabilities that the data cannot or does not point to, and they are often best placed to identify the local constraints that need to be addressed. At the same time, local stakeholders can either over-reach to identify specialisations or clusters that no data would support or ignore emerging trends that incumbents might not spot.

5.39 A final challenge to 'building on local strengths' is what to do if the existing sectoral strengths offer little or no opportunities for growth. There is a risk that policy interventions on the basis of supporting such priorities and strengths could end up worsening the existing sub-regional disparities in productivity and income[65]. An approach that encourages 'clubs' of areas with similar sectoral specialisations with targeted supports may need to be considered alongside other more localised approaches.

Infrastructure, connectivity and amenities

5.40 Investment in infrastructure is widely regarded as an important determinant of economic growth as it has the potential to increase the productive capacity of the economy, boosting labour productivity and, in turn, economic output[66]. Much of the emphasis tends to be on investment in 'hard' infrastructure such as transport, housing and utilities. Such improvements can lower transport costs, allow businesses to benefit from economies of scale through expanding the size of geographical markets and increases the effective supply of labour by reducing travel to work times[67].

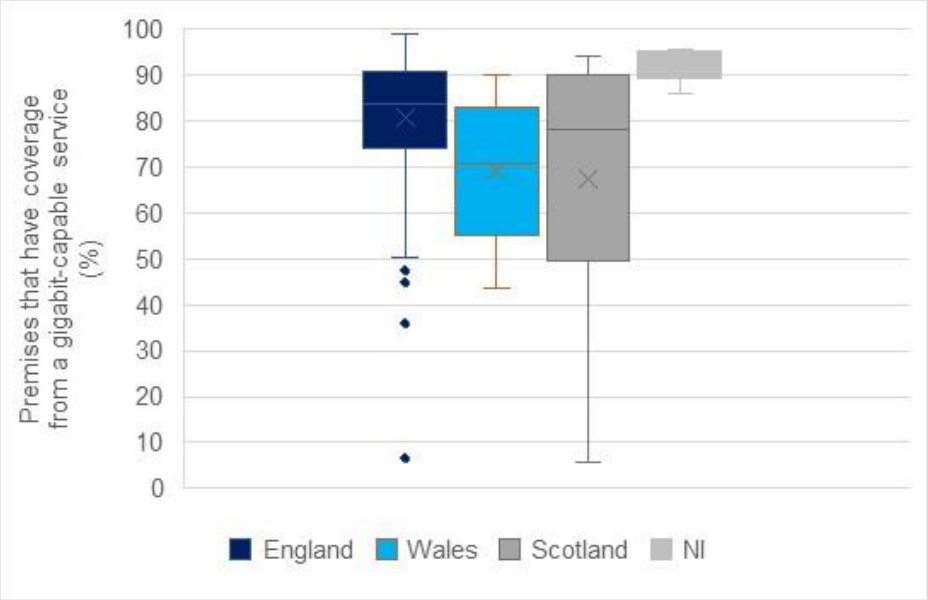
5.41 Investment in housing may also reduce travel-to-work times and increase the supply of labour and is, in turn, dependent on the provision of suitable utility infrastructure such as electricity networks, water treatment and waste removal. Current pauses in planning applications for residential and business development

[65] Mealy and Coyle (2019); Coyle (2024).
[66] Stupak (2018).
[67] Munnell (1991).

projects across NI due to capacity constraints in the wastewater infrastructure, show the importance of utility infrastructure.

5.42 The development of digital infrastructure, particularly broadband, has provided an important step change in technology, which has rapidly become an essential element of modern economies[68]. It can open new markets, as well as leading to productivity gains through enabling businesses to improve the efficiency of operating systems and stimulate innovation. There is sub-regional variation in gigabit-capable broadband for 2024 across LGDs in NI, with the percentage of premises that have coverage from a gigabit-capable service ranging from 86.1% to 95.6%. However, as shown in the boxplots in Figure 29, the median is considerably higher in NI compared to England, Scotland and Wales and the level of variation is smaller.

Figure 29: Box plots of gigabit capable broadband by region, 2024



Source: ONS Local Statistics
Note: The top edge of the box shows the upper quartile (25% of the data lies above the upper quartile value), while the bottom edge of the box shows the lower quartile value (25% of the data falls below this value). The line dividing the box in half represents the median value, while the X marks the average value.

5.43 Investment in 'soft' infrastructure, such as hospitals and schools, underpins productivity gains as a whole but the outcomes are likely to take longer to materialise. Investment in health infrastructure influences economic growth through the quality of the labour force. It is argued that improvements in the

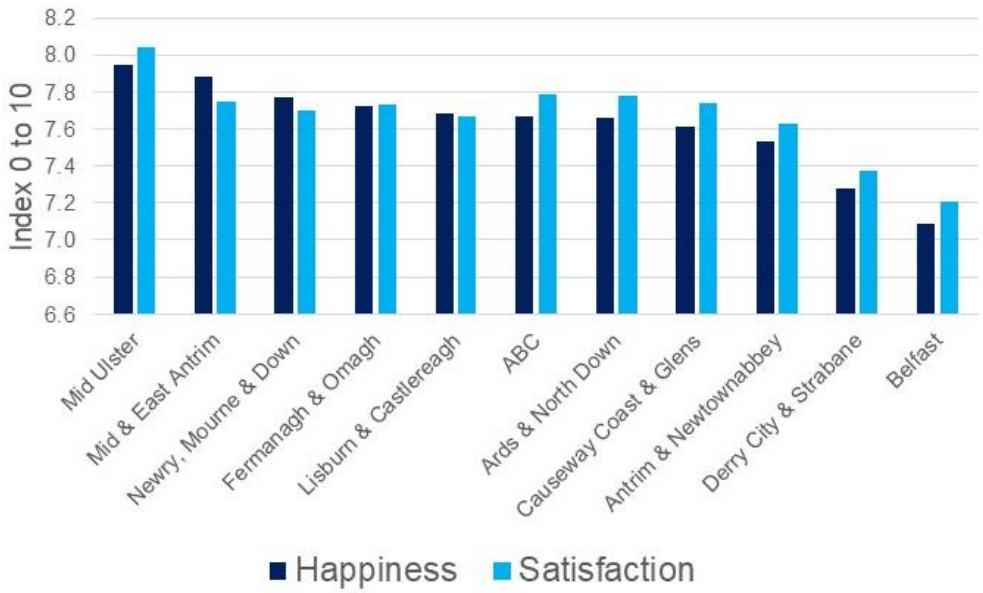
[68] NIC (2017).

health status of the population leads to healthier workers that are more productive and less likely to be absent due to illness.[69]

5.44 Amenities also matter. Research into the inter-relationship between population and employment growth in NI has found that jobs are drawn to locations that appeal due to personal preferences, as well as the more widely recognised process that people are drawn to locations that offer economic opportunities[70]. This suggests that policy should also strive to enhance the attractiveness of regions in terms of a place to live that appeals to quality-of-life preferences and offer a range of amenities[71].

5.45 Although quality-of-life is difficult to pin down, surveys that measure self-reported happiness and life satisfaction offer some insights. These capture subjective well-being and show lower levels of happiness/satisfaction in Belfast and Derry City & Strabane (see Figure 30). This is in line with the literature that generally shows higher levels of well-being in rural areas compared to urban areas. This is partly attributed to greater social interaction and stronger community feeling in rural areas, along with the inconveniences associated with greater population density and higher levels of noise, light and atmospheric pollution in urban areas. However, it is also evident that access to amenities is an important factor, which contributes to regional differences in well-being.[72]

Figure 30: Self reporting of happiness and satisfaction indices by LGD, 2022/23



Source: ONS Local statistics
Note: Indices 0 = Not at all Happy/Satisfied; 10 = Completely Happy/Satisfied

[69] Johansson (2016).
[70] Feng and Patton (2016).
[71] Visagie and Turok (2022).
[72] Hand (2020).

Regional policy and its failures

5.46 Economists remain divided on the question of regional policy and whether it works. The argument that migration from less to more prosperous places is the natural response to economic forces and that any policies which over-determine local land use or reduce its supply, will tend to be inefficient and welfare reducing at the national level, is long-standing. Recent versions of these arguments recognise that there are market failures which lend support to calls for place-based policies, but the belief is that these policies will not work in the face of 'spatial sorting'[73].

5.47 However, economists, geographers and planners recognise that there is a growing case for looking again at places, in particular given the growing evidence that the regional convergence mechanisms that were supposed to enable less prosperous places to catch up have not worked across advanced economies.[74] This shift in thinking has led to greater efforts to understand why the many efforts at regional policy have not worked (as regional inequalities continue to grow). One review in the UK has interviewed many of those involved at the most senior levels and identified four potential (and inter-related) explanations for failure:[75]

5.48 ***While the widening regional inequalities in the UK should not be seen as inevitable, they are significant and correcting or reducing them is hard to do***: This reflects a dilemma for policy-makers across advanced economies of how to address structural changes (especially the severity of de-industrialisation and the shift to knowledge-based services) and pre-existing inequalities in a way that not only slows but reverses the widening of gaps.

5.49 In the UK, the power of the economic concentration in core regions in the South East has made this a larger issue as other regions converged around one another, including NI. All UK regions have grown and the modernisation of places like Greater Manchester, Liverpool or Glasgow has been striking but, in a sense, London can be seen as the real success story of regional policy in the UK, if you consider Crossrail, HS 1 and 2 and the investment for the 2012 Olympics.

5.50 Within NI, as shown in Chapters 3 and 4, a slightly different process has occurred with Belfast and Mid Ulster moving ahead in the early 2000s, albeit much less sharply than London, and other LGDs converging towards the NI average. Again, all regions (except Mid & East Antrim) have grown since the 1990s in terms of output and employment but not all at the same rate.

[73] Moretti (2012); Glaeser and Gottlieb (2008); Austin, Glaeser and Summers (2018); Card et al (2025).
[74] Barca (2009); Muro et al (2021); Carrascal-Incera et al (2019).
[75] Turner et al (2023).

5.51 ***Past policies which aimed at increasing the levels of growth in the UK regions were never ambitious enough:*** Generally, there is agreement about what success looks like: high employment rates, innovative firms, quality transport systems, thriving town and city centres and attractive places where people would want to live. When speaking of transfers from the centre to the regions, those involved in past policy generally believe that more capital spending would have helped and that there is a natural bias towards spending in those places where the rate of return will be higher. This is what Diane Coyle, and others have identified as the 'Mathew Principle': to those that hath, more will be given.

5.52 Beyond this focus on the need for ambition there is less agreement about what to do with it[76]. When successes in other places (Germany, Netherland, Spain, Pittsburgh) are cited, there is often an argument that these do not mean much out of their context. Long lists of potential areas/methods of intervention can meet the (understandable) answer that there is no 'silver bullet'. In addition, there can often be a sense in discussions that, for some places, the legacy of past decisions and past performance means a mountain to climb.

5.53 Looking at NI, investments in road and rail remain popular choices, although improvements in local bus services might be more pivotal to serve the sub-regional labour markets. A greater level of investment in local regeneration might also be useful, and not just the showpiece investments, but also for affordable housing, childcare facilities and youth/sports facilities.

5.54 ***Policy instability in regional policy has resulted in short-termism and damaged both outcomes and credibility:*** Regional policy in the UK (and many other jurisdictions) is a policy area subject to significant levels of churn. Rarely does a regional body or institution see the consistency of an independent Bank of England or Low Pay Commission, both more than 25 years old. Where structures and scale of funding have been in place (perhaps with the London mayoralty and the devolved Scottish Government) a more successful set of regional outcomes have been the result. Elsewhere in England and Wales a series of institutions (Regional Development Authorities, Local Enterprise Partnerships, Mayoral Combined Authorities) have come and gone since 1997 with a belief that these never managed to gain enough credibility either upstream (in central Government) or downstream in local government and the communities they serve.

5.55 In NI balanced regional development or 'regional balance' has been discussed for a decade before the *Sub-Regional Economic Plan* was issued in 2024 and the LEPs established in 2025 with funding for an initial period to 2028. A Regional Development Strategy was issued in 2001 and a revised version in 2012, both of

[76] Turner et al (2023), especially pp. 21-7.

which highlighted the need for growth in all sub-regions, as well as the development of Belfast and Derry as regional drivers – Belfast for NI and Derry for the North West. This was heavily influenced by EU Cohesion Policy where all regions would be supported to develop rather than targeting growth in particular places. How far the new *Plan* reaches the scale, longevity and interdependence of policy identified by Diane Coyle as necessary to success will be seen in time.

5.56 ***The UK government (along with the devolved administrations) have relied too heavily on centralised approaches to deliver balanced regional growth:*** This tendency is much stronger in the UK and Ireland than in other parts of Europe where devolution of powers to regions (including taxation and spending) is a central part of governance. Various reasons can be given for this tendency to centralisation, from a 'Treasury View' of distrust of the capability of local government to the weakness (in the UK) of regional identities beyond the devolved nations/regions demanding powers. There is also the political need to ensure that in areas such as health, education or industrial policy, central or national standards and targets are adhered to, leading to a reluctance to cede control in these key areas.

5.57 In NI, the *Sub-Regional Economic Plan* lays emphasis on the Department for Economy and Invest NI working in partnership with local actors. Being able to simultaneously gain trust locally and support at the centre will not be straightforward. The last word on this can be left to the current Scottish First Minister: 'There is always the risk that Holyrood [seat of the Scottish Government] doesn't think anyone could do it better than Holyrood. We've got to guard against that.'[77]

[77] Quoted in Turner et al (2023), p. 33.

6 Conclusions and policy suggestions

6.1 While economic growth, as a rule, is geographically uneven this research shows how the questions about regional balance in Northern Ireland are the same as those asked across OECD countries in recent decades. The evidence shows that inequalities between large and (in particular) small regions are increasing and that this disparity may be linked to slower national economic growth. This has led some policy makers to turn their minds again to the 'regional problem'. For others, the concept of 'left behind' places, which highlights a growing political and societal problem associated with inequalities, has been a call to action.

6.2 Overall, when measured by GVA per capita, the sub-regions of NI have followed the broader pattern of widening gaps between Council areas. The Shift Share Analysis used to analyse sub-regional growth helps identify the broad economic factors which are driving employment and GVA changes in local economies. This supports the picture of variable growth in different places – six Council areas performed above the NI average employment growth and five below average, several significantly below average.

6.3 There has been some convergence or 'catch-up' across some economic indicators in NI, especially those in the labour market, but even this has not greatly reduced regional inequalities where the initial gaps were already large. This means that the differences in employment opportunities, productivity performance and earnings persist across Northern Ireland's LGDs. While these are, in the main, smaller than found in other regions of GB or Ireland, they are still keenly felt in local places.

6.4 Our review of the research, policy literature and case studies of regional development policy and practice elsewhere show that the debate between 'people-based' interventions (focusing on skills, housing supply, etc.) and 'place-based' supports (with a focus on infrastructure, regeneration, clusters, etc.) has not been resolved but there is a move towards a 'people in places' approach. In this approach, regeneration or infrastructure investment go together with skills development, supports for entrepreneurs and for firms scaling up – all largely guided by 'building on strengths'. The effort is initiated and led locally with support from the centre, including long-term funding. Above all, a variety of stakeholders and collaboration for a common goal will be essential with a 'place leadership' that is open to new ideas, outside influences and a willingness to coordinate with wider policy.[78]

[78] McCann (2023); Crescenzi and Guia (2016).

6.5 The following high level policy suggestions have been identified from the analysis undertaken to improve regional balance:

- **Invest in Regional Infrastructure and Connectivity** – improving transport, utility and digital infrastructure in underdeveloped areas is foundational for balanced growth. Good connectivity allows businesses in smaller regions to access larger markets and talent pools and enables people to commute or trade more easily. Policymakers should prioritise projects that not only better link lagging regions with economic hubs, but also improve internal connectivity (local roads, public transport). Similarly, investing in high-speed broadband particularly in rural areas can enable remote work and entrepreneurship in more peripheral places.

- **Strengthen Education, Skills and Innovation Ecosystems** – human capital development and innovation capacity are key drivers of regional competitiveness. Policies should ensure that Higher Education and skills training are accessible across regions, not just in larger urban areas, and aligned with local industry needs. This could involve expanding or creating education campuses, research centres and vocational institutes in deprived regions. The Basque Country in Spain is an often-quoted example, it was historically an industrial region, but invested heavily in education and R&D, creating a successful economic transformation.

- **Create Place-Based Business Development and Clusters** – encourage the development of industry clusters and support local enterprise, focusing on each area's unique strengths. Rather than a generic approach, tailor business support to the sectors that have potential in each area. Typically identify 2-3 key sectors (evidence-based) per area, where possible create cluster development programs for each (with dedicated facilitators) and attract anchor investments into more deprived areas.

- **Build Multi-level Governance and Local Capacity** – empower local and regional institutions to drive economic development, supported by coherent central policies. The 'entrepreneurial discovery' partnership approach favoured by Smart Specialisation Strategies (S3) offers a possible model for building local approaches although a commitment of time and availability of local and specialist knowledge will be necessary in the initial period. The partnership approach also requires effective governance alongside building the capacity of local councils and their business and community stakeholders.

- **Leverage External and Cross-Border Opportunities** – utilise comparative advantages of external linkages, such as cross-border cooperation with the RoI and other regions in the UK, but not ignoring any related expertise, specialisation and spillovers in places nearer to home.

- **Monitor, report, evaluate and adapt** – ensure that regional balance efforts are monitored via clearly defined metrics (e.g. reduced unemployment disparities or higher productivity in the poorest region). Regular public reporting on these metrics will keep a focus on results, alongside flexibility to adapt policies as some initiatives will work better than others and learning should be continuous.

6.6 The *Sub-Regional Economic Plan* is about places reaching their potential or, at the least, arresting their decline in a world where economic geography continues to be uneven. Not every place will be 'turned around' – some will lack the viable firms or strong local institutions to fully adopt the changes needed – while other places and cities have inherent competitive advantages[79]. There will also continue to be important debates about the trade-offs between supporting regional competitiveness and addressing sub-regional inequalities[80]. However, with the right place leadership at the local level, the support of the centre to decentralise decision-making to where it is best done, and strong evaluation of any initiatives, delivering regional balance across NI could become a reality in the long run.

[79] Grover et al (2022); Mealy and Coyle (2019).
[80] Some researchers deny there is a trade-off (Rodríguez-Pose et al (2024)) but others insist it exists (Driffield et al (2022)).

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Appendices

Appendix 1: Multi-Factor Partitioning Methodology

Following the methodology set out by Ray et al (2003) and empirical applications by Gardiner et al (2013) and Visagie and Turok (2021), the difference between total employment growth in the region and national employment growth is decomposed into four components: Industry Mix effect, Region effect, Interaction effect and Allocation effect. Let *E* be the employment in industry *i*, region *j* and time *t*, then:

(i) Industry Mix effect $\sum_i E_{ij}^t \, (\hat{g}_{in} - \hat{g}_n)$

Difference between the standardised industry growth rate and the standardised national growth rate. This effect quantifies the growth that a region would have experienced had employment in each sector grown at the national rate and captures the effect of the mix of industries in the region based on national industry trends.

(ii) Region Effect $\sum_i E_{ij}^t \, (\hat{g}_j - \hat{g}_n)$

Difference between the standardised region growth rate and the standardised national growth rate. This component captures a general regional competitiveness effect that affects all industries equally.

(iii) Interaction Effect $\sum_i E_{ij}^t \, (g_{ij} - \hat{g}_{in} - \hat{g}_j + \hat{g}_n)$

Deducts the standardised industry growth rate and the standardised regional growth rate from the actual (non-standardised) regional growth rate of each industry and adds the standardised national growth rate. It captures the net effect of all the interactions for each region (Lamarche et al, 2003) and varies by industry, thereby quantifying industry-specific regional effects that are in addition to the general regional competitiveness effect and national industry trends (Visagie and Turok, 2021).

(iv) Allocation Effect $\sum_i E_{ij}^t \, (\hat{g}_n - g_n)$

Difference between the standardised national growth rate and the actual national growth rate. This component is used for balancing purposes.

where $\hat{g}_{in}$ is the standardised industry growth rate, $\hat{g}_j$ is the standardised regional growth rate and $\hat{g}_n$ is the standardised national growth rate. Standardised rates are used to remove industrial composition effects from the regional effects, which is a shortcoming of the traditional shift share method (Ray, 1990).

Appendix 2: Shift Share Analysis using Gross Value Added

The results presented within the main body of the report are based on applying the SSA technique to employment. Within this appendix, Gross Value Added (GVA) is used as an alternative measure of economic growth; GVA provides a more complete measure of growth, although it embodies the impact of price effects which vary across sectors.

The results of the application of SSA to district councils in NI based on GVA are shown in Table A2.1 and Figure A2.1 (see over). In general, the results are broadly in line with those using employment, with Belfast benefitting from a positive industrial mix effect. While Mid-Ulster, ABC, Derry City & Strabane, Lisburn & Castlereagh and Newry, Mourne & Down bear negative industrial mix effects, these are more than offset by positive region effects.

Table A2.1: Cumulative difference between regional and national growth of GVA (£ millions) and decomposition based on SSA, 2000 to 2022

	Cumulative Diff. Regional & National Growth	Industrial Mix Effect	Region Effect	Interaction Effect	Allocation Effect
Belfast	1,072	1,096	-483	79	379
Mid Ulster	324	-240	444	5	115
Armagh City, Banbridge and Craigavon	270	-92	144	103	114
Derry City and Strabane	221	-5	206	-55	74
Lisburn and Castlereagh	177	-66	144	13	87
Newry, Mourne and Down	168	-108	281	-97	93
Fermanagh and Omagh	41	0	28	-52	65
Ards and North Down	-191	-67	148	-334	62
Antrim and Newtownabbey	-217	-111	178	-387	104
Causeway Coast and Glens	-296	-84	-306	26	68
Mid and East Antrim	-1,569	-322	-783	-574	111

Source: ONS Regional Accounts and UUEPC analysis

Figure A2.1: Evolution of cumulative GVA growth and decomposition, 2000 to 2022

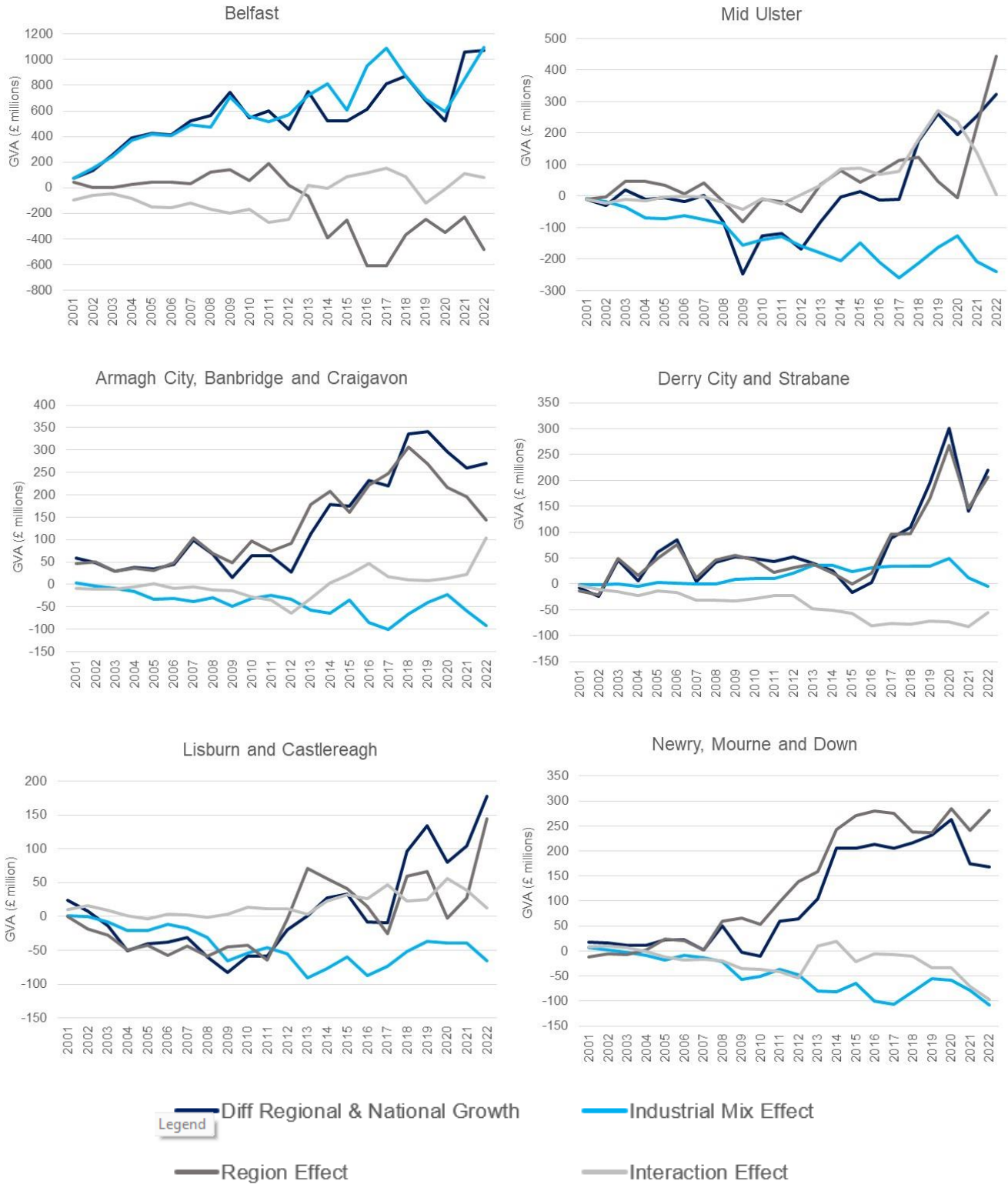

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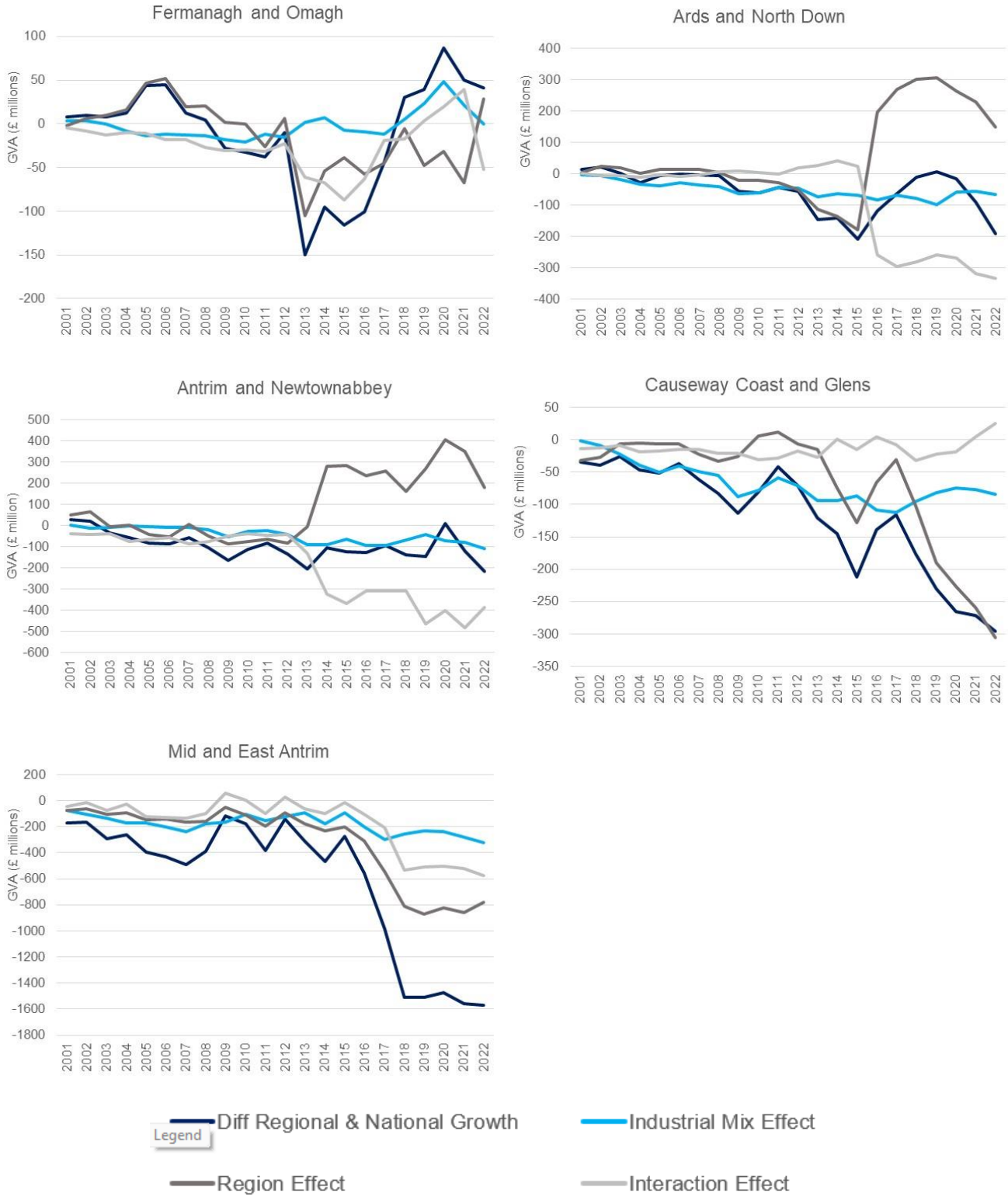
Figure A2.1 (continued): Evolution of cumulative GVA growth and decomposition, 2000 to 2022



Source: ONS Regional Accounts and UUEPC analysis

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