























































Northern Ireland Productivity Dashboard 2024




Authors: **Ruth Donaldson, David Jordan** and **John Turner**, Queen's University Belfast
On behalf of the Northern Ireland Productivity Forum. View last year's [NI Dashboard](#).




86.8% NI's productivity relative to UK average

10th of the UK's twelve regions for productivity performance

Category	Driver of productivity	Relative to UK average	Change over time	
			Short-term	Long-term
Business performance & characteristics	Exports as % of GDP*			
	R&D per job			
	Innovation active businesses			
	% of SMEs where finance is a major obstacle			
	Business births as % of all active enterprises			
Skills & training	% of population with tertiary education (RQF 4+)			
	% of population with no or low skills (below RQF 1)			
	% of employers providing training in past 12 months*			
	% of vacancies which are skill shortage vacancies*			
Policy & institutions	% of SMEs where political uncertainty & government policy is a major obstacle			
	% of SMEs where legislation & regulation is a major obstacle			
Health & wellbeing	Economic inactivity rate			
	% of economic inactivity due to long-term ill health			
	% of population aged 16-64			
Investment, infrastructure & connectivity	FDI per job*			
	Gross fixed capital formation per job			
	Access to Gigabit-capable internet services			
	5G mobile coverage			

Key

	Better than UK average
	Equal to UK average, or Lower than UK average but above median
	Worse than UK average

	Improvement over time
	No change over time
	Worsening over time

	Data unavailable
---	------------------

* No new data since 2023 Dashboard

Has Northern Ireland's productivity bubble burst?

In [last year's dashboard](#), Northern Ireland (NI) saw its largest ever recorded annual improvement in productivity, at 6.7% in real terms. Has this improvement continued, or has NI's productivity bubble burst?

Productivity measures the total value of output produced in the economy for a given amount of work. Higher productivity means higher wages and better living standards. It can also mean more money available to invest in public services.

NI has persistently had the lowest productivity of the UK's twelve regions. But it saw an improvement during the Covid-19 pandemic, moving up to 7th place.

The most recently published data shows this improvement has not been sustained. Productivity in NI was 13% below the UK average in 2022 (Figure 1), widening from 11% in 2021. This led to NI falling back to 10th place amongst the UK's twelve regions, ahead of only the East Midlands and Wales. NI also lags behind the Republic of Ireland, where productivity is 8% higher than the UK average. This means productivity in NI is 20% lower than in the Republic of Ireland.

That NI has not maintained its improved performance is consistent with this partly being the result of a temporary improvement, reflecting both Covid-19 restrictions during 2021, and the issues this caused for measuring economic activity.

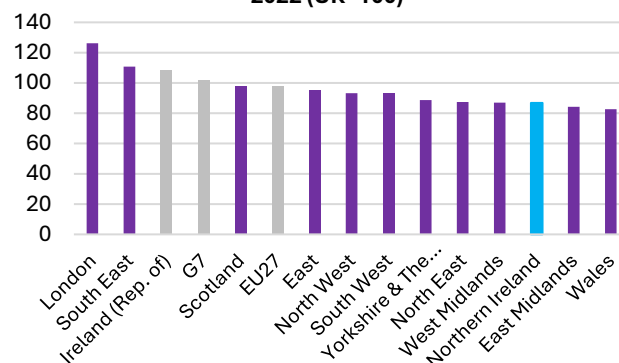
While NI's performance has slipped back, it is still ahead of its pre-pandemic performance. The productivity gap was previously between 15% and 20% below the UK level. An important part of the reason for this improvement has been the performance of previously underperforming local government districts (LGDs).

Figure 2 shows the LGDs which experienced the greatest improvement in productivity between 2019 and 2022, showing where this was due to a change in the total value of output (GVA) or in the total hours worked. Most LGDs saw an improvement in both measures, with Derry City & Strabane, Mid Ulster, Lisburn & Castlereagh, and Mid & East Antrim seeing the greatest improvement. Belfast, Fermanagh & Omagh, and Causeway Coast & Glens all saw increases in hours worked, while Ards & North Down was the only LGD to see a decrease in GVA.

Will these improvements for LGDs persist? Or will NI's productivity bubble burst, and see it return to last place in next year's dashboard?

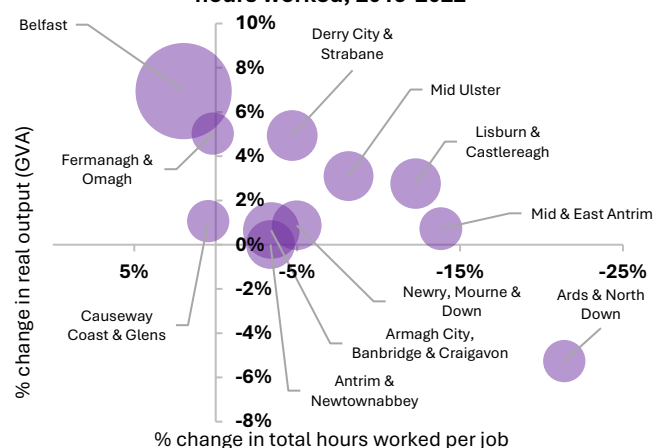
Our dashboard assesses NI's performance across the key drivers of productivity which provide the foundations for long-run productivity growth. Overall, there has been no change from last year's dashboard. 14 of the

Figure 1: Value of output per hour worked in 2022 (UK=100)



Sources: UK regional comparison uses [ONS \(2024\)](#). G7 & EU27 comparison uses GDP, [OECD \(2024\)](#); Rep. of Ireland comparison uses modified GNI, [CSO \(2024\)](#) and GNI for UK, [ONS \(2024\)](#). Hours worked from [OECD \(2024\)](#); in USD, current PPPs, current prices.

Figure 2: Change in total value of output and hours worked, 2019-2022



Source: For GVA, [ONS \(2024\)](#); for hours worked, [ONS \(2024\)](#).

dashboard's 18 drivers are red and below the UK average. Only 2 drivers are green and therefore better than the UK average; and 2 drivers are either equal to the UK average, or below this but above the UK median.

Across the three editions of the dashboard since 2022, it is clear that NI possesses deep-seated issues that must be addressed before we will see meaningful progress. While some drivers have seen both short and long-term improvements – such as exports and qualifications – these are in the minority. 8 drivers have experienced no improvement in either the short and/or long-term.

With the return of the NI Executive in February 2024, and the new draft Programme for Government, there is an opportunity for the Executive to make progress in improving these key drivers of productivity. This will require a long-term commitment to prioritising productivity when designing, implementing, and evaluating policy.

Further details on how the dashboard is constructed, and discussion of NI's performance across each productivity driver, is provided in the Annex.

Northern Ireland Productivity Dashboard 2024

ANNEX

Background

This year marks the third edition of the Northern Ireland Productivity Dashboard. In 2022, we published our first [dashboard](#), inspired by a similar undertaking for Scotland, [The CBI/KPMG Scottish Productivity Index](#). We constructed our dashboard based on the factors affecting productivity identified in our 2021 Insights Paper, '[Northern Ireland's Productivity Challenge: Exploring the issues](#)'.

The dashboard measures how Northern Ireland performs across key drivers of productivity, relative to the UK average and other regions, and over time. It highlights where barriers to productivity growth exist, their severity, and whether progress is being made to address them.

On the dashboard, Northern Ireland's performance for each driver is compared against the UK average, and whether it is better (green), worse (red), or equal to this value or worse but above the UK median (orange). Performance across the short-term (1-year) and long-term (approx. 5-years) is also displayed, to show whether there has been an improvement (green), worsening (red), or no change (orange) over time.

The sections below provide a description of each productivity driver, using the most recently available data.

Business performance & characteristics

Exports as % of GDP

Increasing the export intensity of local firms is important, as there is a strong, positive link between exporting, innovation, and productivity, with this [particularly important for small economies](#). Using the most recently published data by NISRA for Northern Ireland's trade in 2022, and scaling this by ONS regional GDP data, shows that Northern Ireland's export intensity has increased over both the short-term (since 2021) and long-term (since 2017). No new data for UK regional trade has been published since our 2023 dashboard, and so our comparisons with other UK regions cannot be updated. In last year's dashboard, Northern Ireland's foreign exports as a percentage of GDP was 25.6% in 2021. This was below the UK level of 28.7%, and placed Northern Ireland 8th amongst the UK's twelve regions. Most UK regions experienced an increase between 2020 and 2021, likely reflecting a recovery from the immediate effects of the Covid-19 pandemic.

Source: [ONS \(2023\) Subnational trade in goods](#); [ONS \(2023\) Subnational trade in services](#); [ONS \(2023\) Regional gross domestic product](#); [ONS \(2024\) Regional gross domestic product](#); [NISRA \(2024\) Northern Ireland Economic Trade Statistics](#)

R&D per job

Historically, expenditure on R&D has remained low in Northern Ireland in comparison to the other UK regions. However, when measured as per job in the total workforce, it is placed 3rd out of 6 regional groupings, performing better than Scotland, the North of England (which includes the North East, North West, and Yorkshire and The Humber) and Wales. In 2022, R&D per job in Northern Ireland was £1,144 (in 2023 prices), below the UK average of £1,572 per job. Until 2022, Northern Ireland had seen continued real-terms growth in R&D per job over time, increasing from £949 per job in 2018. However, in 2022 Northern Ireland saw a short-term decrease relative to 2021, when R&D per job was £1,195, at a time when the UK average remained relatively unchanged.

Source: [ONS \(2024\) Business enterprise research and development, UK](#)

Innovation active businesses

Being innovation active measures businesses' approach to continual improvement, which is an important driver of productivity growth. This measure of innovation includes: introducing a new or improved product or service; engaging in innovation projects; improving organisational structures, practices, and strategy; and/or generating or acquiring knowledge or equipment linked to innovation activities. During 2020-2022, 32.1% of businesses with 10 or more employees in Northern Ireland were innovation active. This was lower than the UK average of 36.3%, placing Northern Ireland 11th amongst the UK's twelve regions, ahead of only Wales (30.9%). In the short-term, there was a worsening in the level for Northern Ireland compared to 2018-2020, when 38.4% were innovation active. In the long-term, the level was unchanged relative to 2016-2018, although Northern Ireland has moved slightly closer to the UK average, reflecting a wider fall in innovation active businesses across the UK.

Sources: [Department for Business & Trade \(2023\) United Kingdom innovation survey 2023: report](#)

% of SMEs where finance is a major obstacle

Access to finance can place a constraint on firm growth, creating a barrier to improving productivity. For SMEs in Northern Ireland during 2023, 11% rated access to external finance as a major obstacle to running their business over the next 12 months. This was above the UK average of 7%, and placed Northern Ireland joint last amongst UK regions, alongside London. This figure for Northern Ireland was unchanged from 2022, but represents a long-term deterioration, almost tripling from 4% in 2018, which was below the UK rate of 5% at that time.

Source: [BVA BDRC \(2024\) SME Finance Monitor 2023 Annual Report](#)

Business births as % of all active enterprises

The rate of new enterprises being created is an indicator of the level of entrepreneurial activity in the local economy. The rate of business births in Northern Ireland was 8.3% in 2023, below the UK average of 11.0%. This was the worst performance amongst the UK's twelve regions, with the South West being the next lowest at 9.8%. While Northern Ireland's performance is unchanged since 2022 (8.3%), there has been a long-term decline since 2018 (9.2%), although all regions have experienced a long-term decline, with the UK rate falling from 12.3%.

Source: [ONS \(2024\) Business demography, UK](#)

Skills & training

% of population with tertiary education (RQF 4+)

Northern Ireland has persistently struggled with a lower proportion of its working age population educated to tertiary level. In 2023, 39.7% of those aged 16-64 were educated to RQF 4+. This placed Northern Ireland in 11th place, ahead of only the North East (39.6%). In the short-term, Northern Ireland saw an improvement from 38.8% in 2022, although this change was within the survey's confidence interval. Over the long-term, there was an increase from 34.5% (NVQ 4+) in 2018. It should be noted that the recording of qualifications changed from 2022 onwards, with RQFs replacing NVQs. One reason for the low level of tertiary educated population is out-migration, known as the 'brain drain'.

Source: [Nomis \(2024\) Annual Population Survey](#)

% of population with no or only entry level skills (below RQF 1)

Northern Ireland has persistently had the highest rate of individuals with no qualifications. In 2023 this was 12.3% of those aged 16-64, almost double the UK average of 6.6%. This was the highest proportion of any UK region, placing Northern Ireland in last place, with Wales next lowest at 8.6%. There was a short-term improvement from 13.6% in 2022, although this change was within the survey's confidence intervals. Improvements have been made over the long-term, as this proportion was previously 14.5% in 2018 (using the previous NVQ framework). Continued improvements are important, as a failure to further close the attainment gap will severely hamper attempts to improve productivity.

Source: [Nomis \(2024\) Annual Population Survey](#)

% of employers providing training in past 12 months

No new data has been published since our 2023 dashboard. Only 58% of employers in Northern Ireland provided training within the last 12 months in 2022. This was below the figures for England (60%), Wales (60%) and Scotland (64%). Only the East Midlands (57%) saw a lower share in 2022. Northern Ireland has declined over time, from 59% in the previous 2019 survey, and 63% in 2017. These figures suggest more needs to be done to ensure employees receive ongoing training to develop skills, which are crucial for raising productivity and maximising employees' potential.

Source: [DfE\(UK\) \(2023\) Employer Skills Survey](#)

% of vacancies which are skill shortage vacancies

No new data has been published since our 2023 dashboard. The proportion of vacancies which were skill shortage vacancies in 2022 was 35% for Northern Ireland. This was slightly lower than England (36%), but worse than Scotland (31%) and joint 5th overall, equal to Wales and the South West. Northern Ireland's short-term situation notably worsened, up from 22% in the previous 2019 survey. Over the long term, skills shortage vacancies in Northern Ireland have increased, from only 21% of total vacancies in 2017, which at that time was below the UK average of 22%. The highest proportion of skill-shortage vacancies was within the transport sector in Northern Ireland (60%).

Source: [DfE\(UK\) \(2023\) Employer Skills Survey](#)

Policy & institutions

% of SMEs where political uncertainty & government policy is a major obstacle

In 2023, 29% of SMEs in Northern Ireland rated political uncertainty and future government policy as a major obstacle in running their business as they would wish in the next 12 months. This was higher than the UK average of 22%, and placed Northern Ireland 12th out of the UK's twelve regions, immediately behind Wales (28%). While Northern Ireland's result was an improvement compared to the previous year (31%), it has seen a substantial worsening over the long-term, with only 14% of SMEs rating this as a major obstacle in 2018, which was below the UK average of 19%.

Source: [BVA BDRC \(2024\) SME Finance Monitor 2023 Annual Report](#)

% of SMEs where legislation & regulation is a major obstacle

Nearly one-third (29%) of SMEs in Northern Ireland rated legislation and regulation as a major obstacle in running their business as they would wish in the next 12 months in 2023. This was higher than the UK average of 20%, and placed Northern Ireland joint last of the UK's twelve regions, alongside Wales. There has been a worsening for SMEs in Northern Ireland viewing legislation and regulations as barriers to running their business. This has increased over the short term from 26% in 2022; and over the long term it has increased from 15% in 2018, which was below the UK average of 19%.

Source: [BVA BDRC \(2024\) SME Finance Monitor 2023 Annual Report](#)

Health & wellbeing

Economic inactivity rate

High rates of economic inactivity remain a persistent feature of the local economy, and can mean labour is not allocated efficiently within the local economy, creating a barrier to productivity growth. For those in the working age population (aged 16-64), 27.5% were economically inactive in Northern Ireland for May-July 2024, compared to only 21.9% for the UK. This was the worst performance of any UK region, with Wales next worst with 27.2%. Northern Ireland's inactivity rate has fallen over the short-term, down from 28.2% in 2023 (data for 2023 was revised by the ONS since the publication of our last Dashboard), but it has worsened over the long-term, increasing from 25.8% in 2019.

Source: [Nomis \(2024\) Labour Force Survey](#)

% of economic inactivity due to long-term ill health

Long-term ill health accounted for 37.8% of economic inactivity in Northern Ireland in 2023. This is significantly higher than the UK rate of 27.5%, with Northern Ireland consistently the worst performing UK region. Northern Ireland's performance has also worsened over the short-term, rising from 35.4% in 2022, although this increase was within the survey's confidence interval. There has also been a worsening over the long-term, increasing from 28.6% in 2018. A recent [Pivotal report](#) found that the increase in inactivity due to sickness and disability this cannot be solely blamed on the Covid-19 pandemic, as there has been a sustained increase since 2013. The report instead points to a lack of resources for a number of public services, such as health.

Source: [Nomis \(2024\) Labour Force Survey](#)

% of population aged 16-64

Those aged 16-64 currently account for around 62.0% of Northern Ireland's population, just below the UK average of 62.8%, with this national figure skewed by the large working age population in London. Northern Ireland therefore performs well relative to other UK regions, being placed 6th. Over the short term, Northern Ireland saw its working-age population shrink slightly, down from 62.1% in 2022, and over the long term it has fallen from 62.9% in 2018. An ageing population means productivity growth will become an increasingly important source of future economic growth, particularly in order to fund the increases in demand on public services and finances generated by this ageing population.

Source: [Nomis \(2024\) ONS Population Estimates](#)

Investment, infrastructure & connectivity

FDI per job

No new subnational data for foreign direct investment has been published since last year's dashboard. From our previous publication, Northern Ireland had the fourth lowest level of total inward foreign direct investment amongst the UK's twelve regions in 2021, at £24,228 per job in the total workforce (calculated as total inward FDI position divided by the total number of jobs in the regional economy, in 2022 prices). This compares to the UK figure of

£62,681 per job, although this average includes FDI which is not allocated to a region, and is also skewed by London, which is one of only two regions above the average. The North East was immediately ahead of Northern Ireland, with £25,377 per job, while Yorkshire & the Humber was in last place, with £14,989 per job. There was a short-term improvement for Northern Ireland relative to 2020, contributing to Northern Ireland's movement up from 11th to 9th place. However, FDI levels in Northern Ireland have fallen in real terms since 2016, which suggests increasing the relative intensity of inward FDI remains a priority.

Source: [ONS \(2023\) Foreign direct investment involving UK companies by UK country and region: inward](#)

Gross fixed capital formation per job

Gross fixed capital formation (GFCF) is a measure of the total amount of investment into tangible and intangible assets, such as buildings, structures, roads, transport equipment, machinery, ICT equipment, and intellectual property products. Since the publication of last year's dashboard, ONS have released new data for GFCF, although this is limited to measuring investment dwellings and other buildings & structures. In 2022, Northern Ireland saw GFCF per job in the total workforce of £4,560 (in 2023 prices). This was substantially below the UK figure of £8,262. This placed Northern Ireland last amongst the UK's twelve regions. Over both the short and long terms, Northern Ireland saw a fall in GFCF per job, which remains a concern for the local economy's future performance because investment is a key driver of future productivity growth. Over the short term, Northern Ireland saw an inflation-adjusted decrease, down from £4,689 in 2021, but a long-term increase from £4,153 in 2017. An alternative measure of infrastructure tells a similar story for public investment: Northern Ireland has the lowest proportion of A roads at 8.9% of the total road network. This is lower than the UK average of 11.9%, and is the lowest of any UK region, immediately behind the East of England (10.1%).

Source: [ONS \(2023\) Experimental regional gross fixed capital formation \(GFCF\) estimates by asset type: 1997 to 2022](#); [DfI\(NI\) \(2021\) Northern Ireland Transport Statistics 2020-21](#); [DfT \(2023\) Road lengths in Great Britain: 2022](#)

Access to Gigabit-capable internet services

In January 2024, 94% of premises in Northern Ireland had access to Gigabit capable services. This is an improvement compared to January 2023 (90%). It is higher than the UK average of 80%, and the highest proportion of the UK's four nations: England is next highest (81%), followed by Scotland (75%), and Wales (69%). Access to full fibre broadband is also higher in Northern Ireland (92%), compared to the UK average (62%). For businesses in January 2024, Northern Ireland saw 93% of commercial premises being able to receive Superfast broadband coverage with speeds of at least 30 Mbit/s. This is ahead of the UK figure (88%), England (88%), Wales (87%), and Scotland (85%).

Source: [Ofcom \(2024\) Connected Nations update: Spring 2024](#)

5G mobile coverage

A slower rate of adoption across new infrastructure technology can create barriers to productivity growth for businesses in Northern Ireland, as it restricts their ability to take advantage of new markets and technologies. In January 2024, 72%-79% of premises in Northern Ireland could receive outdoor 5G coverage from at least one operator, compared to 85%-92% for the UK. This is the lowest proportion of the UK's four nations: England has the best coverage, with 87%-93%; Scotland is next with 79%-87%; followed by Wales, with 74%-82%. However, Northern Ireland has seen a significant improvement since our last dashboard, with coverage increasing from 54-60% in April 2023, substantially narrowing the gap with the rest of the UK. Northern Ireland's tendency to lag behind in the adoption of new technology is reflected across other types of new infrastructure. Northern Ireland is the worst performing region for public electric vehicle charging devices, with only 32 per 100,000 people in July 2024, compared to the next lowest region, Yorkshire and The Humber with 56, and the UK average of 96. While Northern Ireland has seen an improvement since our last dashboard, other regions have continued to improve as well, leaving Northern Ireland continuing to lag behind.

Source: [Ofcom \(2024\) Connected Nations update: Spring 2024](#); [DfT\(UK\) Electric vehicle public charging infrastructure statistics: July 2024](#)