

Northern Ireland Productivity Dashboard 2022

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83.2% NI's productivity relative to UK average

12th NI is the worst performing of UK's twelve regions for productivity

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 (NVQ4+)			
	% of population with no or low skills (NVQ1 or lower)			
	% 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
- Improvement over time
- Data unavailable
- Equal to UK average, or Lower than UK average but above median
- No change over time
- Worsening over time
- Worse than UK average

What is productivity and why is it important?

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

Northern Ireland has the worst productivity performance of any region in the UK. The most recent data shows productivity in Northern Ireland is 17% below the UK average (Figure 1). Northern Ireland also lags behind the Republic of Ireland, where productivity is around 29% higher than the UK average.

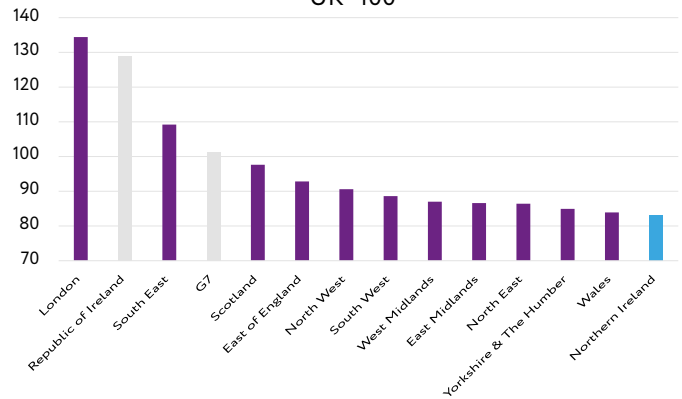
Between 2019 and 2020, Northern Ireland's productivity gap to the UK closed slightly, by around 1%. Over the past decade this gap has remained relatively stable, at between 15% and 20%. This gap is not a new phenomenon and is a persistent feature of the local economy.

In the Northern Ireland Productivity Forum's Insights Paper, '[Northern Ireland's Productivity Challenge: Exploring the issues](#)', we examined the different explanations for Northern Ireland's productivity gap. These included economic structure, peripherality, capital and investment, human capital, infrastructure, public policy, and institutions and governance. While the relative importance of each has varied over time, they all remain important factors in explaining Northern Ireland's persistently low productivity.

Inspired by a similar undertaking for Scotland, [The CBI/KPMG Scottish Productivity Index](#), and based on the factors affecting productivity identified in our Insights Paper, we have constructed a new productivity dashboard for Northern Ireland. This 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/worse but above the median (orange). Performance across the short-term (1-year) and long-term (5-years) is also displayed, to show whether there has been an improvement (green), worsening (red), or no change (orange) over time.

Figure 1: Value of output per hour worked in 2020, UK=100



Source: For UK regions: [ONS \(2022\) Subregional productivity](#). For G7 & Republic of Ireland: [OECD \(2022\) Level of GDP per capita and productivity Comparison](#). Comparison with G7 & Republic of Ireland made using GNI per hour worked (USD, current prices, current PPPs).

The dashboard demonstrates that Northern Ireland possesses weaknesses across a number of key areas: 11 of the 18 drivers are below the UK average, with only 2 being green, and the remaining 5 either equal to the UK average, or below, but above the UK median.

There are success stories. Significant progress has been made within skills, including a reduction in the brain drain, and a drop in the number of individuals with no or low skills. Access to Gigabit-capable internet services is also the best within the UK, reflecting recent investment.

There are some drivers where Northern Ireland performs better than most other UK regions, including export intensity, R&D per job, and gross fixed capital formation. However, both exports and R&D have failed to see improvements over time, and the long-term decline in gross fixed capital formation is concerning for future productivity growth.

Finally, there are areas of particular weakness requiring improvement. Business innovation, entrepreneurial activity, and employer provided training, are all areas where improvement is needed if productivity is to be raised. Despite being a focus of policymakers, Northern Ireland's relatively low level of FDI is disappointing. Continued political uncertainty and government policy, alongside legislation and regulation, continue to affect the running of local businesses.

Further detail on how Northern Ireland performs across each driver of productivity is provided in the attached Annex.

Northern Ireland Productivity Dashboard 2022

ANNEX

Business performance & characteristics

Exports as % of GDP

Northern Ireland's foreign exports as a percentage of GDP was 24.8% in 2020. This was below the UK level of 28.3%, and sees Northern Ireland placed 6th amongst the UK's twelve regions. A fall was experienced between 2019 and 2020 across most UK regions, reflecting the effects of the Covid-19 pandemic. Over the long-term, this measure has remained relatively stable for Northern Ireland. Increasing the export intensity of local firms is important, as firms which export tend to have higher productivity.

Sources: [ONS \(2022\) Subnational trade in goods](#); [ONS \(2022\) Subnational trade in services](#); [ONS \(2022\) Regional gross domestic product](#); [NISRA \(2022\) Broad Economy Sales & Exports Statistics](#)

R&D per job

Historically, levels of R&D expenditure have been low in Northern Ireland, with this strongly linked to low productivity. Yet measuring R&D expenditure per job sees Northern Ireland perform relatively well. While the figure of £707 per job for 2020 is below the UK average of £801, this still places Northern Ireland in 5th place amongst UK regions, with around twice the R&D expenditure per job of the worst performer, Wales. Northern Ireland saw a slight fall between 2019 and 2020, and remains at approximately the same level it achieved in 2015 in real terms.

Source: [ONS \(2021\) Business enterprise research and development, UK: 2020](#)

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 significantly improved product or process; engaging in innovation projects; improving organisational structures, practices, and strategy; and/or generating or acquiring knowledge or equipment linked to innovation activities.

Between 2018 and 2020, 38.4% of businesses with 10 or more employees in Northern Ireland were innovation active. This was lower than the UK average of 44.9%, placing Northern Ireland last amongst the UK's twelve regions. In the short-term, there was an improvement in the level for Northern Ireland compared to 2016-2018, when only 32.1% were innovation active. In the long-term, the level was unchanged relative to 2014-2016, although Northern Ireland has moved closer to the UK average.

Sources: BEIS UK Innovation Survey, [2017](#), [2019](#), [2021](#)

% 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 2020, 10% rated access to external finance as a major obstacle to running their business over the next 12 months. This was slightly above the UK average of 8%, and placed Northern Ireland 9th equal amongst UK regions, alongside Wales, the North West, and the East Midlands. There was a slight short-term improvement for Northern Ireland, falling from 12% in 2019. Over the long-term the situation has worsened, as in 2015 only 7% found access to external finance a major obstacle, although the overall UK picture has also worsened during this time.

Source: [BVA BDRC \(2021\) SME Finance Monitor 2020 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. Northern Ireland saw a business birth rate of 9.9% in 2020. This is lower than the UK average of 11.9%, placing Northern Ireland in 11th place, above only Scotland (9.8%). This performance was a decline from 10.4% in 2019, reflecting a similar fall in the UK average, likely as a result of the Covid-19 pandemic. Over the long-term, business births remains approximately equal to its 2015 value (9.7%). This supports [findings for early-stage entrepreneurial activity](#), which is consistently lower in Northern Ireland.

Source: [ONS \(2021\) Business demography, UK](#)

Skills & training

% of population with tertiary education (NVQ4+)

Northern Ireland has historically suffered from a brain drain of highly skilled individuals. This situation has recently improved, with a rapid increase in the proportion of the working population possessing tertiary education, from 30.5% in 2016, to 41.6% in 2021. This places Northern Ireland close to the UK average of 43.5%, and 5th amongst UK regions. This is an area where policy has been successful, but the failure of this improvement to translate into higher productivity demonstrates that improving tertiary qualification levels alone will not close the productivity gap.

Source: [Nomis \(2022\) Labour Force Survey](#)

% of population with no or low skills (NVQ1 or lower)

Northern Ireland has a persistent attainment gap. In 2021, 19.7% of the working population had no or low skills. This is higher than the UK average of 16.1%, and the worst of the UK's twelve regions. Improvements have been made over both the short and long-term, as this proportion was previously 24.5% in 2016 for Northern Ireland. However, other regions have also continued to improve. A failure to further close the attainment gap will severely hamper attempts to improve productivity.

Source: [Nomis \(2022\) Labour Force Survey](#)

% of employers providing training in past 12 months

Only 59% of employers in Northern Ireland provided training within the last 12 months in 2019. This is below the figure for England (61%), and Wales (62%). Scotland's survey was conducted separately in 2020, meaning its figure (59%) was affected by the Covid-19 pandemic. Northern Ireland has seen a decline over time, from 63% for the previous survey in 2017, and 62% in 2015. 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\(UK\) \(2020\) Employer Skills Survey 2019](#); [Scottish Gov. \(2021\) Scottish Employer Skills Survey 2020](#)

% of vacancies which are skill shortage vacancies

The proportion of vacancies which are skill shortage vacancies in 2019 was 22% for Northern Ireland in 2019. This was lower than for Wales (24%) and England (25%), but slightly above Scotland (21% in 2020). Northern Ireland's short-term situation worsened slightly, up from 21% in the previous 2017 survey.

Over the long-term, skills shortage vacancies in Northern Ireland have increased, from only 14% of total vacancies in 2015, which was significantly below the UK average of 23% at this time. Alongside recent short-term labour market supply pressures, the [NI Skills Barometer](#) forecasts that 37% of labour demand over the next decade will be for higher qualified individuals, with the potential for increased skills shortages in the future.

Source: [DFE\(UK\) \(2020\) Employer Skills Survey 2019](#); [Scottish Gov. \(2021\) Scottish Employer Skills Survey 2020](#)

Policy & institutions

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

In 2020, 31% of SMEs in Northern Ireland rated political uncertainty and 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 24%, and placed Northern Ireland 12th out of the UK's twelve regions. This was around the same level of 32% in 2019, but there has been a sizeable increase over the long-term, where only 10% of SMEs rated this as a major obstacle in 2015, which at the time was equal to the UK average.

Source: [BVA BDRC \(2021\) SME Finance Monitor 2020 Annual Report](#)

% of SMEs where legislation & regulation is a major obstacle

In 2020, 26% 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. This was higher than the UK average of 21%, and placed Northern Ireland 12th out of the UK's 12 regions. There was a short-term improvement, falling from 29% in 2019, but it was much higher than the 12% recorded in 2015, although the UK average was also lower at this time, at 11%.

Source: [BVA BDRC \(2021\) SME Finance Monitor 2020 Annual Report](#)

Health & wellbeing

Economic inactivity rate

High rates of economic inactivity remain a persistent feature of the local economy. For those in the working age population (aged 16-64), 28.3% were economically inactive in Northern Ireland for April-June 2022, compared to only 21.4% for the UK. This was the worst performance of any UK region.

While the inactivity rate is relatively unchanged from 28.1% in 2021, over the long-term the situation has worsened, increasing from 26.8% in 2017. High rates of economic inactivity may mean labour is not allocated efficiently within the local economy, creating a barrier to productivity growth.

Source: [Nomis \(2022\) Labour Force Survey](#)

% of economic inactivity due to long-term ill health

Long-term ill health accounted for 30.7% of economic inactivity in Northern Ireland in 2021. This has remained relatively unchanged in both the long and short-term, and is significantly higher than the UK rate of 24.8%, with Northern Ireland the worst performing UK region. A recent [report by UUEPC](#) highlighted the relatively poorer labour market outcomes for people with disabilities in Northern Ireland compared with the rest of the UK. This reinforces the need to ensure those who have a long-term health condition or disability are being appropriately supported to work and help maximise their potential.

Source: [Nomis \(2022\) Labour Force Survey](#)

% of population aged 16-64

Those aged 16-64 currently account for around 62% of Northern Ireland's population, equal to the UK average and placing it 3rd equal. The size of the working age population in Northern Ireland is expected to [see its growth slow over time](#), with the dependent population increasing in both absolute and relative terms. This means that economic growth will increasingly need to be driven through improvements in productivity, rather than through jobs growth. An ageing population, and the demands this places on health and social care, will also increase the need to seek improvements in productivity from existing jobs, to fund the increases in demand on public services and finances generated by an ageing population.

Source: [Nomis \(2022\) ONS Population Estimates](#)

Investment, infrastructure & connectivity

FDI per job

Northern Ireland had the second lowest level of total inward foreign direct investment amongst the UK's twelve regions in 2019, at £18,041 per job (calculated as total inward FDI position divided by the total number of jobs in the local economy). This compares to the UK figure of £48,484 per job, although this average includes FDI which is not allocated to a region, and is also skewed by London, which is the only region above the average. Yorkshire & the Humber was immediately ahead of Northern Ireland, with £20,385 per job, while Wales was last, with £14,128 per job.

There was both a short-term fall for Northern Ireland relative to 2018, and a fall relative to 2015, which suggests increasing the relative intensity of inward FDI remains a priority.

Source: [ONS \(2021\) Foreign direct investment involving UK companies by UK country and region: inward](#)

Gross fixed capital formation per job

This measures the total amount of investment into tangible and intangible assets, such as buildings, structures, roads, transport equipment, machinery, ICT equipment, and intellectual property products. In 2020, Northern Ireland saw gross fixed capital formation (GFCF) per job of £10,576, slightly below the UK average of £10,944. This placed Northern Ireland 4th amongst the UK's twelve regions.

In both the short and long-term, Northern Ireland has seen a fall in GFCF per job, which is concerning for the local economy's future performance, as investment is a key driver of future productivity growth.

Source: [ONS \(2022\) Experimental regional gross fixed capital formation \(GFCF\) estimates by asset type](#)

Access to Gigabit-capable internet services

In May 2022, 85% of premises in Northern Ireland had access to Gigabit capable services. This is higher than the UK average of 68%, and the highest proportion of the UK's four nations: England is next highest (69%), followed by Scotland (63%), and Wales (49%).

Increased coverage of premises in Northern Ireland has been aided by investment through the Project Stratum broadband intervention scheme. It is not all good news: while business broadband coverage shows that SMEs in Northern Ireland had higher than average coverage in 2021 for Full fibre (55%) and Gigabit capable connections (60%), they had lower Superfast broadband business coverage (84%), lagging behind England (94%), Scotland (89%) and Wales (89%).

Sources: [Ofcom \(2022\) Connected Nations update: Autumn 2022](#); [Ofcom \(2021\) Connected Nations 2021: Main report](#)

5G mobile coverage

In May 2022, between 24%-34% of premises could receive outdoor 5G coverage from at least one operator, compared to 48%-64% for the UK. Northern Ireland has the lowest proportion of the UK's four nations: England has the best coverage, with 51%-67%; Scotland is next with 43%-57%; followed by Wales, with 29%-42%. Data for previous years is unavailable. This slower rate of adoption of new technology is reflected across other types of infrastructure: Northern Ireland only has 17 public electric vehicle charging devices per 100,000 people, compared to the UK average of 48, placing it 12th amongst the UK's twelve regions.

As new technologies emerge and become more commonplace, such as 5G and electric vehicles, a slower rate of adoption in Northern Ireland may create further barriers to productivity growth.

Source: [Ofcom \(2022\) Connected Nations update: Autumn 2022](#); [DfT \(2022\) Electric vehicle charging device statistics: July 2022](#)