

Scotland's Economic Performance

October 2021

Scotland's Economic Performance and Context

This slide pack sets out Scotland's current **economic performance** to provide the evidence and context for transformational change. The analysis considers Scotland's recent and trend performance for a range of drivers of sustainable economic growth (including a number of [National Performance Framework](#) Indicators), how Scotland compares to other economies, and the **performance shift** required for Scotland to match the best in class.

Data for a number of indicators in this analysis will not fully reflect the effects of the **pandemic, Brexit** and **current global trends** on economic performance (due to timeliness)

Scotland's economic performance - conclusions

- The data and analysis show that, despite having a very highly **educated workforce**, a strong **higher education R&D** rate and being an attractive location for **inward investment and risk capital**, Scotland's **productivity and employment rates lag many other economies**.
- This means **not enough good quality jobs** are being created across Scotland to **fully utilise** the talent and knowledge we have, impacting on earnings and wellbeing.
- Low productivity is in large part due to **weak business innovation and dynamism** - we need more businesses in Scotland with growth ambitions that are starting up, scaling up, innovating, exporting, investing and adopting fair work and high-performance work practices.
- Scotland's weak dynamism is likely due to a relatively **small business base** that **reduces competitive pressures** to innovate, invest and export, resulting in **fewer 'growth' peers** that business leaders can be inspired by and learn from.
- Also, the benefits of and opportunities to access quality jobs are **not evenly spread across Scotland**, with some parts of the West of Scotland in particular performing less well.
- However, the analysis shows that there is **significant potential** to achieve economic transformation if Scotland can match the top-performing economies for a number of drivers of innovation and growth.
- To achieve this, Scotland needs more **entrepreneurship** (including early-stage/high-growth potential), and needs more **businesses to adopt the practices** that evidence shows can increase growth and productivity, and create better jobs - and doing so **sustainably**:
 - innovating
 - looking internationally as well as domestically for markets and growth
 - investing in equipment and the workplace, and embracing digital technologies
 - adopting net zero practices
 - adopting fair work and high-performance practices
 - building management and leadership skills and ambition.

Economic development: what works

Our extensive evaluation evidence base highlights ‘what works’ in supporting business and sector growth and economic development:

Supporting innovation, productivity and sector growth: SE evidence of ‘what works’

Helping **management teams** improve their practices and build **leadership skills** and **ambition**

Supporting business **workplace innovation** and implementing **fair work** practices

Direct **innovation** advice and funding support, including helping businesses link to **universities** and other innovation and research **assets**.

Encouraging and supporting businesses to adopt **digital** technologies

Supporting **exporting** and **internationalisation**

Attracting **inward investment**, that bring higher-quality jobs to Scotland and offers Scottish businesses supply chain innovation opportunities, drawing on both our field offices and support in Scotland

Helping innovative, high-growth potential and **early-stage** businesses access **growth funding** (including risk funding), alongside **business growth advice**

Supporting businesses to improve **efficiency**, **productivity** and **reduce waste** (including Scottish Manufacturing Advisory Support)

Peer-to-peer **networking** and building **connections** to share best practice and raise ambition

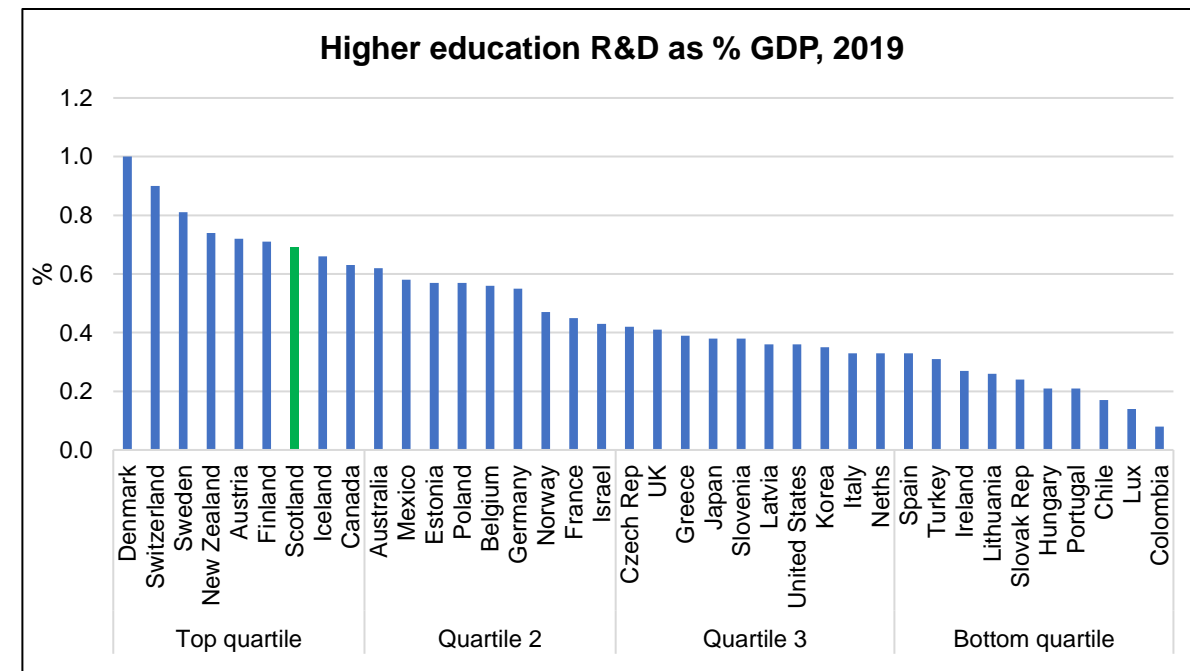
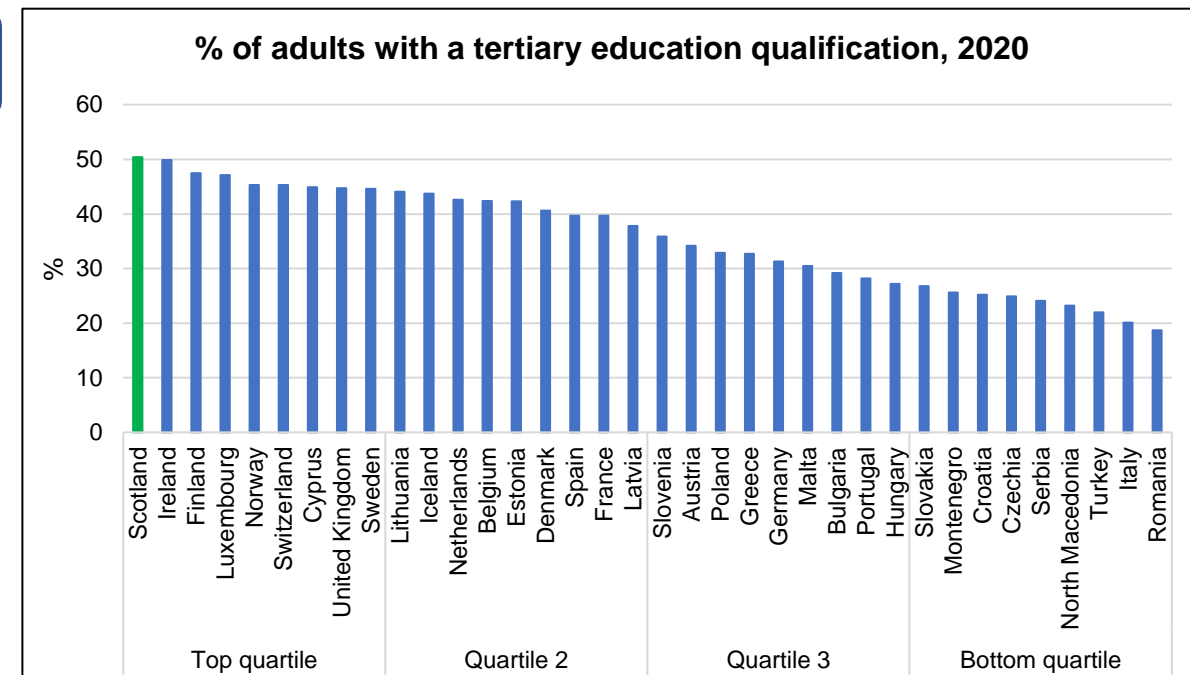
Building **sector** capacity and assets to exploit global opportunities (e.g. National Programmes)

Scotland's economic performance

Scotland's economy has a number of **strengths**:

- The proportion of the working-age population with a **tertiary education** is higher than all EU countries, suggesting businesses in Scotland can access **highly-qualified workers**.¹
- The **Higher Education R&D** investment rate is in the top quartile of comparator economies, and higher than the UK as a whole.² However, this strength is not reflected in business R&D activity.
- Scotland is the second most attractive country and region in the UK (after London) for **foreign direct investment**. A highly-qualified workforce, and university research strengths are key success factors.³
- Scotland has a strong **risk capital market**, with the second highest **number of risk funding deals** (per 10,000 businesses) of UK countries/ regions (again after London), and the relative **value of investment** in the second quartile.⁴
- The highest proportion (85%) of workers earning at least **the real living wage** within the UK.⁵ This may in part be due to the Scottish Government's focus on fair work, and increased conditionality of support, for example for SE grant funding.
- A lower **youth unemployment** rate than most OECD countries.⁶

Despite these strengths, Scotland's **productivity** lags many other advanced economies, as not enough higher-quality jobs being created by businesses. This is explored further in the following slides.

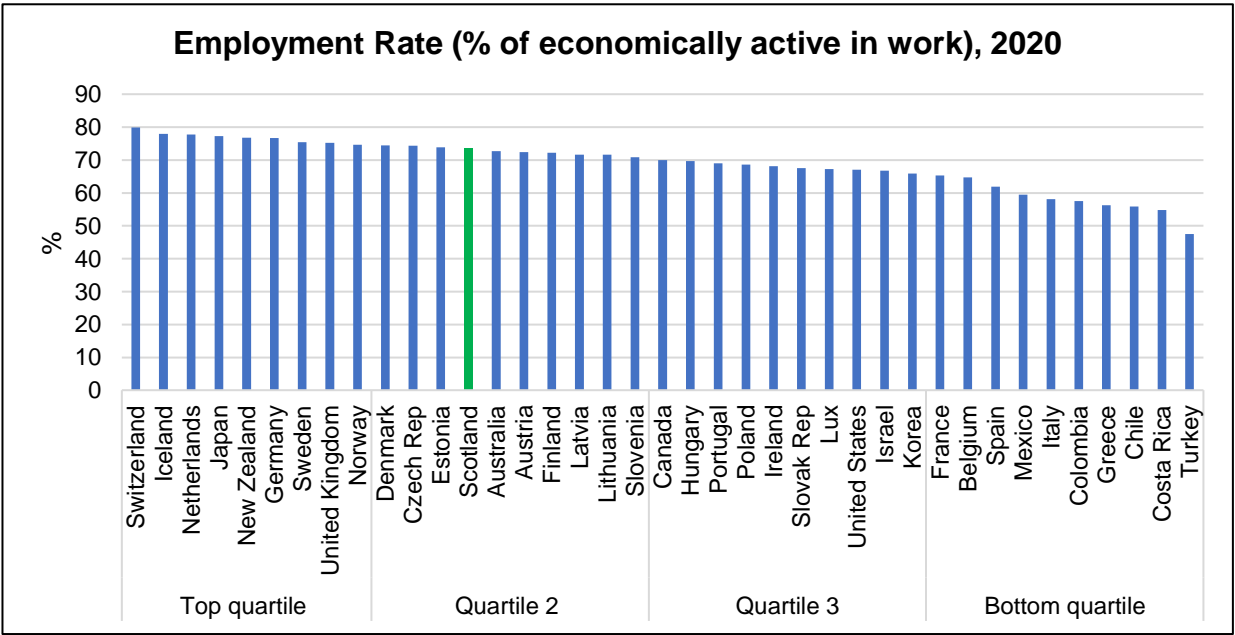
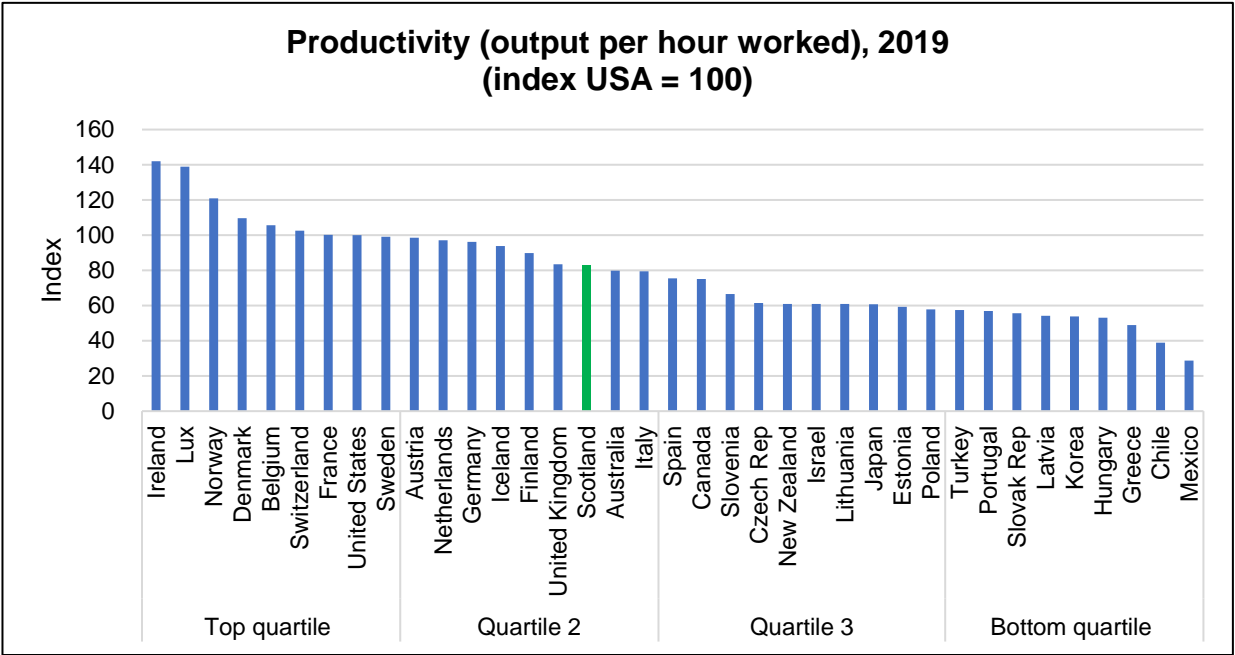


Scotland's economic performance

Despite performing well on a number of indicators, Scotland lags some competitors on two key drivers of economic performance – **productivity** and the **employment rate**.

- Higher **business productivity** can increase international competitiveness and resilience, and allow businesses to pay **higher wages** and create **better jobs**. If Scotland's productivity matched the OECD top quartile, the economy would be 20% larger.⁷
- Scotland's **employment rate**⁸ has been rising in recent years, and is close to top-quartile performance. To reach Q1 performance, over 40,000 more people would need to be in work.
- In recent months, there has been an unprecedented increase in **vacancies** among Scottish employers (at a rate even higher than at the UK level – and 30% above pre-pandemic levels). In October, there were over 55,000 online adverts for jobs in Scotland.⁹
- However, **candidate availability has fallen** with many workers wary of moving roles and COVID-19, Brexit (reducing the supply of EU workers) and strong demand contributing to candidate shortages.¹⁰
- This mismatch between demand and supply is placing significant **upward pressures on pay**, and may affect business growth plans.¹⁰

Businesses with higher productivity are more likely to be able to **create better-quality jobs**, pay higher wages and export. Innovation and productivity are closely linked.

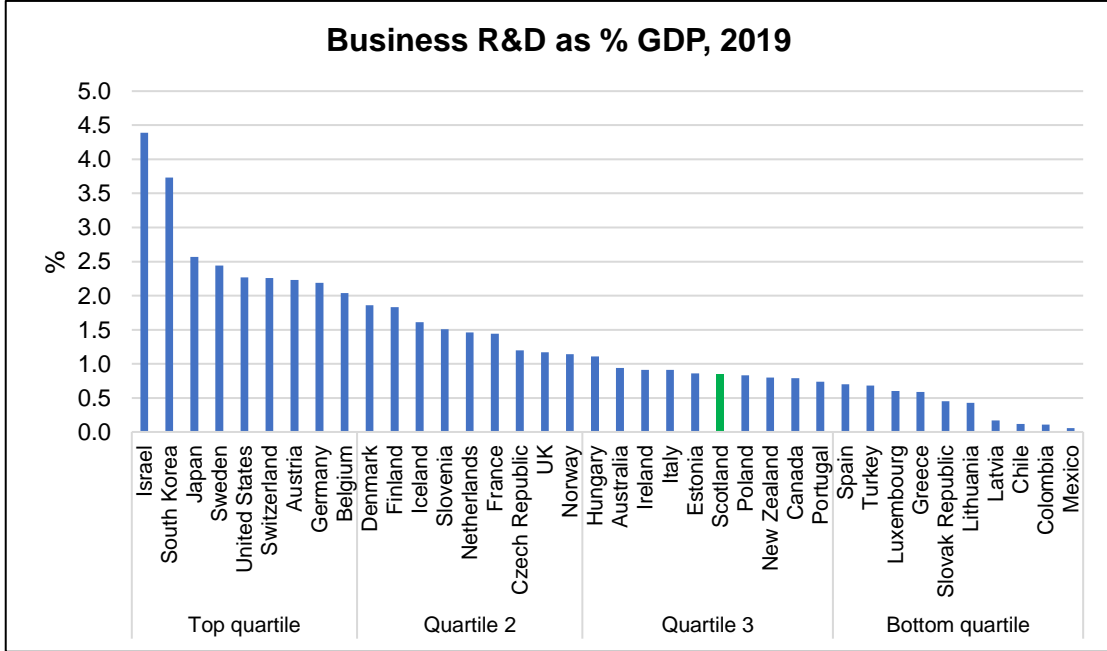
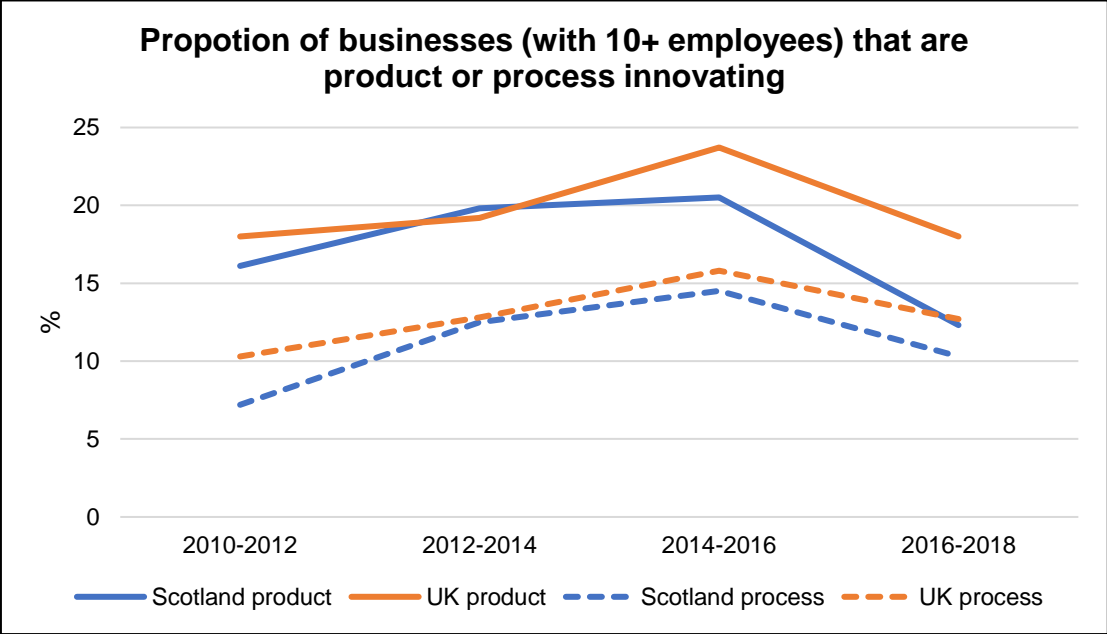


Scotland's economic performance

To achieve a step change in productivity, Scotland needs to address a number of **longstanding challenges**:

- Business **innovation activity** is low and declining - just 32% of Scottish businesses (with 10+ employees) are 'innovation active'. And just 12% are 'product innovators', and 10% 'process innovators' (lower than most other UK countries and regions).¹¹
- Scotland has tended to **lag UK performance** due to a lower proportion of the business base in sectors that are more likely to innovate (and vice versa), and potentially weaker competitive pressures to innovate (see next slide)..
- The reasons for declining innovation since 2014-16 are not clear, but innovation may have increased more recently as many businesses **responded to the pandemic** by introducing new products, services and processes. This may be a trend we can build on to stimulate more business innovation.
- Scotland's strong **higher education** R&D performance is not being replicated by businesses. Although **business R&D investment**¹² is rising (+47% since 2015) and more businesses are carrying out R&D, growth is slower than many other economies. So Scotland's business R&D rate **lags most other OECD countries** - and the gap to the best performers is widening.
- Also, business R&D investment is **concentrated**.¹³
 - just 10 companies account for almost 50% of all business R&D
 - inward investors account for 65% of R&D.

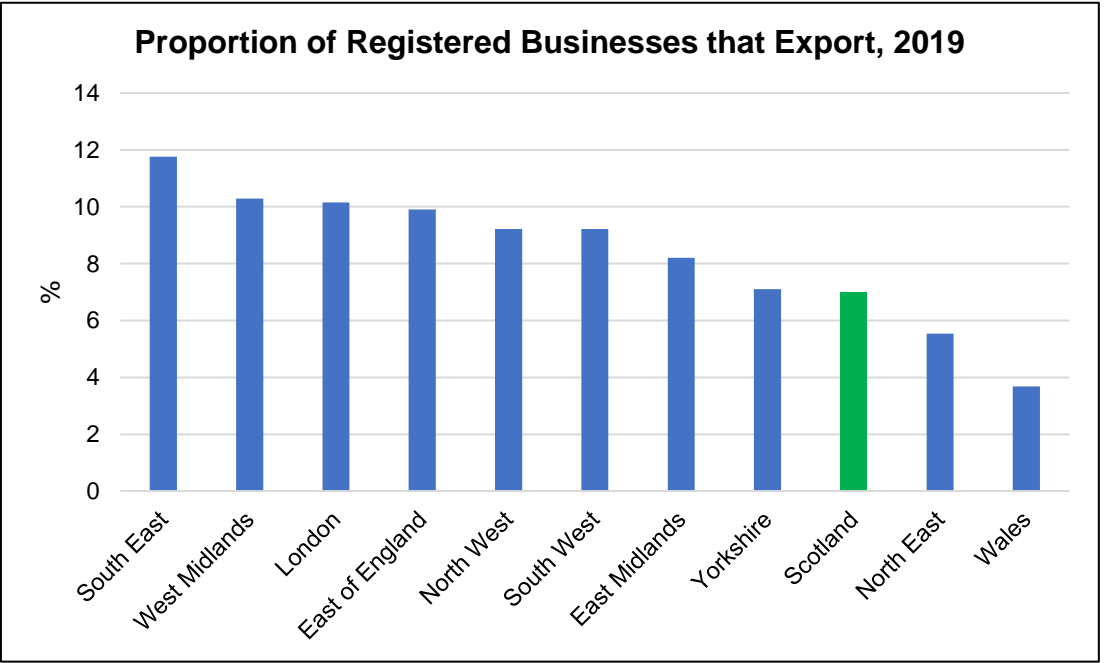
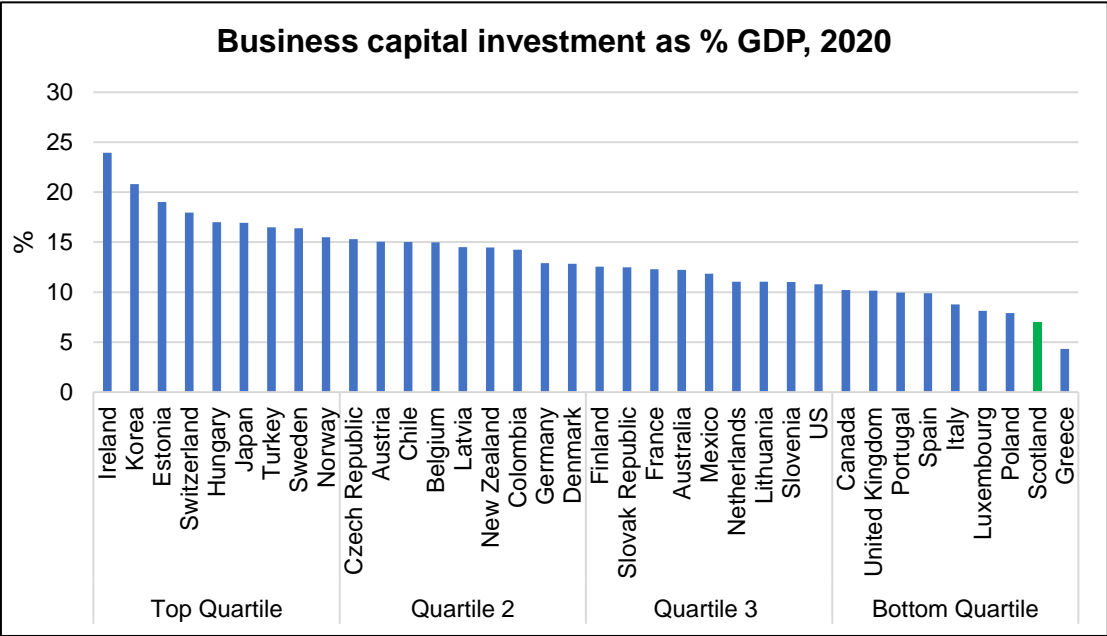
Focusing in improving Scotland's business innovation and R&D investment performance will be key in achieving in helping more businesses create new growth opportunities domestically and overseas.



Scotland's economic performance

- Scotland's **business investment** rate lags nearly all other OECD economies¹⁴, resulting in a **low capital stock** – this can affect the quality of the workplace and the productivity and quality of jobs (through outdated equipment, inefficient premises, etc). In turn, this can impact the ability to **effectively innovate**.
- The proportion of Scottish businesses that **export** overseas (a driver of innovation and productivity), is lower than most other UK regions and countries.¹⁵ Just 7% of Scottish businesses (12,400) sold internationally in 2019 (+22% since 2017).
- 18% of non-exporters believe that they have goods and/or services are suitable for selling overseas.¹⁵ This suggests Scotland has around **20,000 potential exporters**.
- The **Trading Nation** strategy focuses on increasing overseas sales by **existing exporters**. The **value of exports** has increased in almost every year between 2010 and 2018 and in 2018, was 39% higher than in 2010.¹⁶
- Exports though are **relatively concentrated**, with three sectors (food & drink, petroleum/chemicals and professional/scientific services) accounting for over 41%.¹⁶

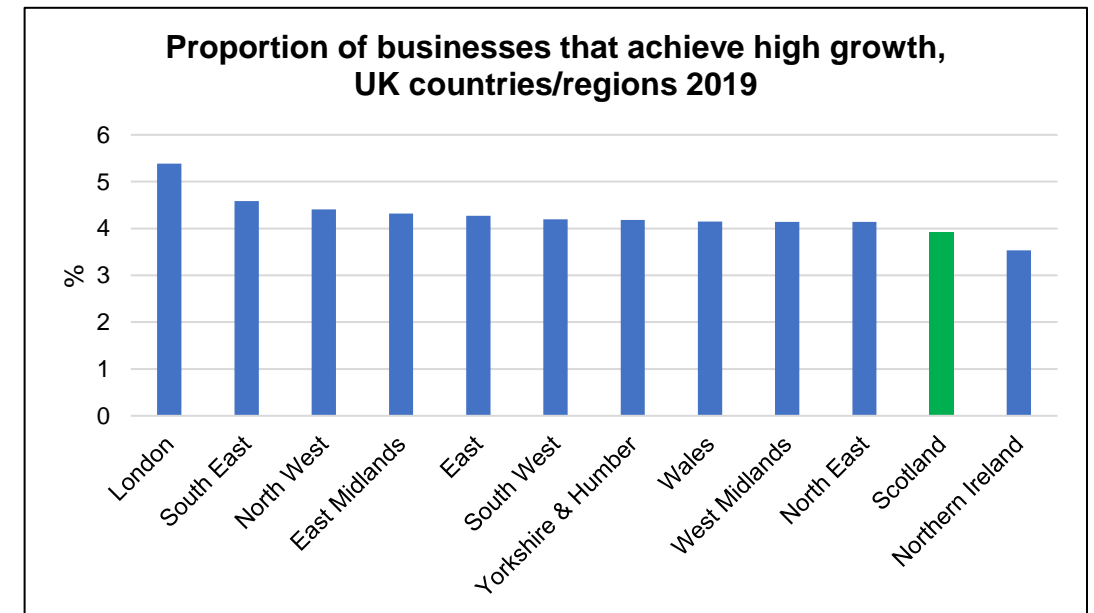
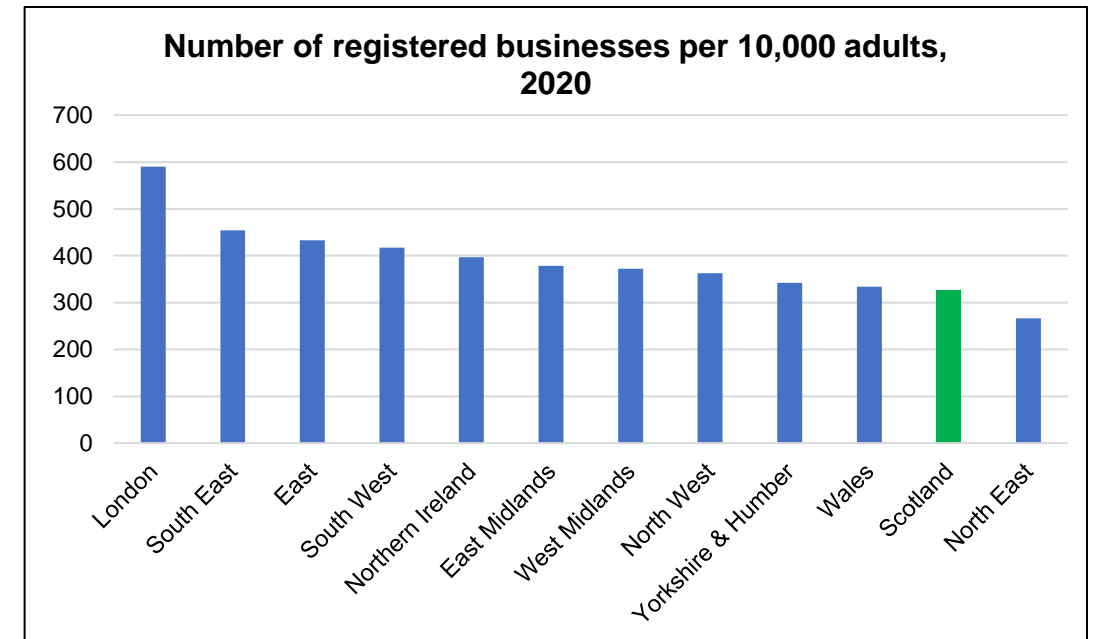
Exporting, innovation and productivity are closely linked. Innovative companies are more likely to export, and exporting drives further innovation and productivity growth.
 Having the right capital equipment can boost productivity, helping businesses be competitive in international markets.



Scotland's economic performance

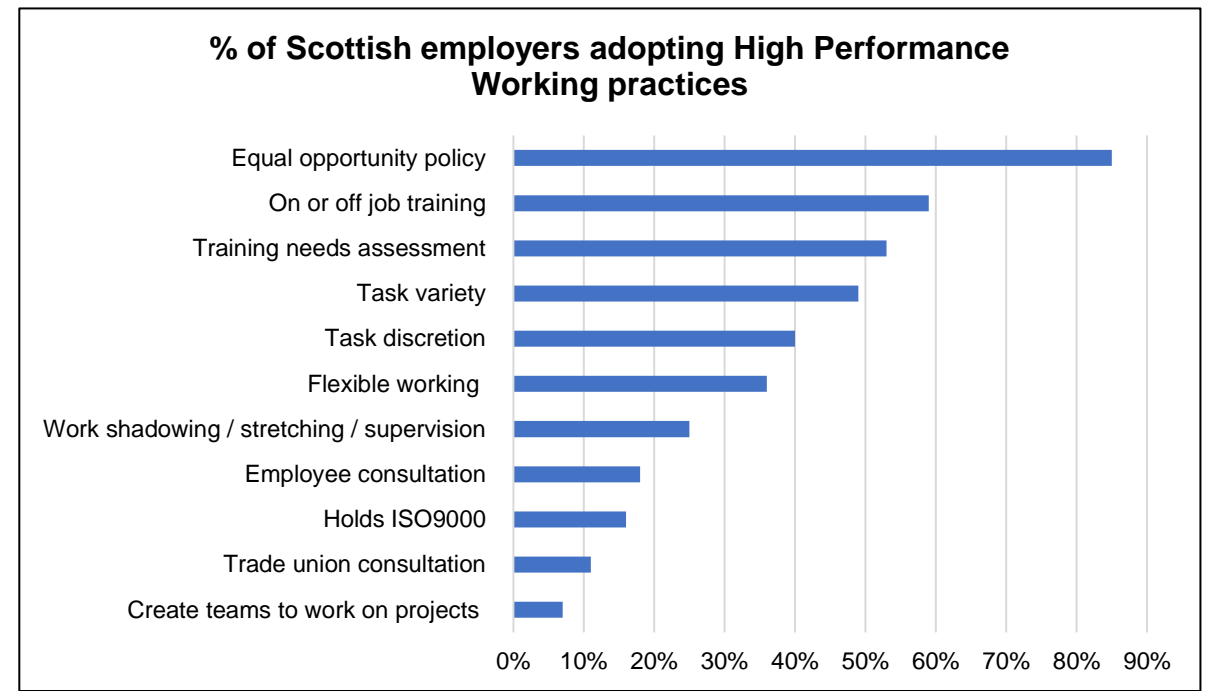
- Economies with greater business dynamism tend to have **higher rates** of innovation, more businesses achieving **high growth**, and higher levels of productivity.
- Scotland's **entrepreneurial activity** is lower than most other OECD countries.¹⁷ Although the number of businesses is growing (+5% registered businesses since 2015), we still have **too few businesses**.¹⁸
- This is resulting in **weak business dynamism**, and few 'growth peers' businesses can learn from, and potentially **weaker pressure to innovate** and enter new markets.
- **Scaling businesses** tend to be more productive and more innovative, and disproportionately contribute to job creation.
- A lower proportion of Scottish businesses have **aspirations to grow** than most other parts of the UK.¹⁹ And a slightly lower (and falling) proportion of businesses in Scotland **achieve high growth**.²⁰
- Scotland's economic challenges are resulting in **businesses not creating enough skilled, quality jobs** to fully utilise the highly-qualified workforce. The number of workers that are over qualified and/or under utilised in their job could range between 200,000 and 400,000 (8% to 16% of those in employment).²¹
- This is a significant **underuse of talent** – and a lack of skilled and quality jobs can impact on workers' earnings potential and welfare.

Scotland not only needs more businesses, but more achieving high growth and scaling. Recent growth in entrepreneurship may increase the pool of early-stage, high-growth businesses. And improving links and collaboration between entrepreneurs and Scotland's innovation and knowledge assets (e.g. universities) would create more early-stage, high-potential businesses.



Fair work

- A range of evidence shows that **adoption of fair work practices** by businesses not only improves the **wellbeing of workers** but can improve business performance and competitiveness through **increased innovation** and **productivity**.
- Businesses that are considered as ‘good employers’ will be more likely to **attract and retain workers**, and **customers** are increasingly opting to buy from businesses that adopt responsible working practices.
- Compared to other OECD countries, Scotland’s **fair work performance** is **mixed** at best.²² Broadly, **Nordic countries** tend to perform well on measures of fair work.
- Recent analysis by the [Fair Work Convention](#) has shown that although there has been progress in certain **fair work elements** since 2015 (when the Convention was established), **many are not improving, and some are worsening**.



- There are 11 ‘[high performance working](#)’ practices that help ensure employee skills are harnessed and nurtured and used to their best effect.
- In 2020, just 7% of Scottish businesses were ‘**high performance workplace**’ employers (adopting 7 or more of the 11 practices above).²³ So, there is scope for many businesses to improve workplace practices that would have a significant impact on Scotland’s workers.

Implementing fair work and high performance working practices can deliver significant business benefits, and in most cases **will not require a major financial investment**. There is scope for significantly more businesses to change and improve their business models and work practices, that in turn can boost innovation and create better jobs.

Fair work element	Scottish performance trend since 2015	Scottish performance compared to other economies
Effective voice	Improving	Mixed
Opportunity	Maintaining	Mixed
Security	Improving	Mixed
Fulfilment	Worsening	Poor
Respect	Maintaining	Mixed

Net zero opportunity

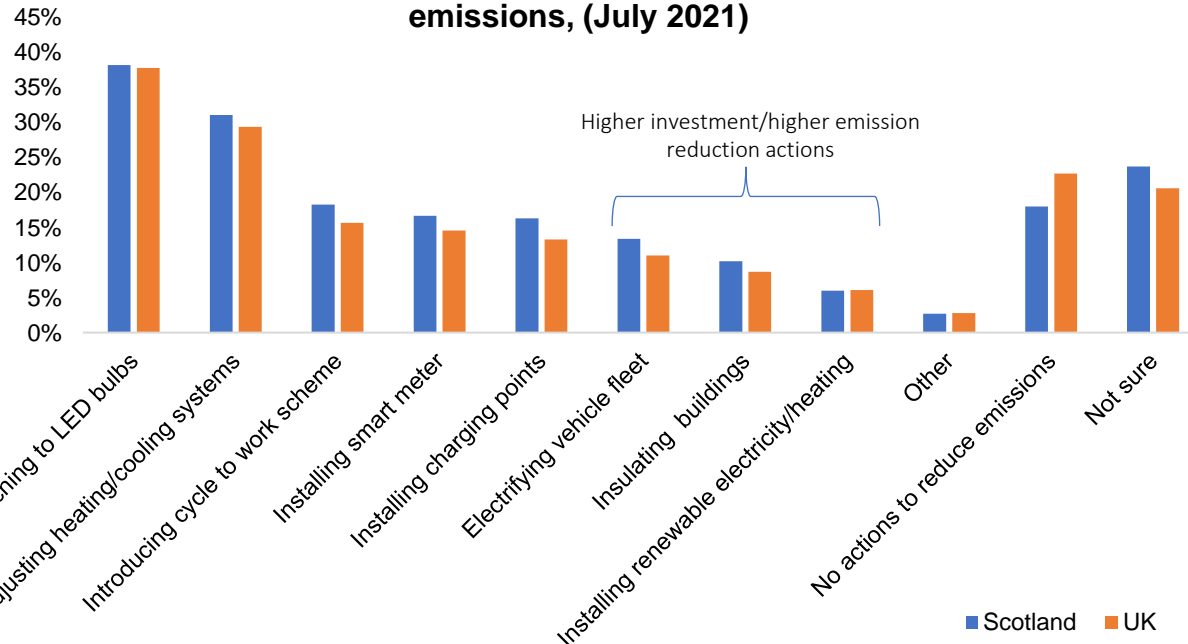
- Net zero is a **global policy focus** to address climate change, and also a **significant market opportunity**. For businesses, **net zero actions** not only reduce emissions and **improve efficiency and productivity**, but also provide significant opportunities for **innovation**, and to enter and develop **new markets** both domestically and internationally.
- Additionally, businesses that adopt net zero actions can **improve their reputation** that in turn can **attract and retain employees and customers**.
- [Research](#) suggests that **green growth opportunities** are especially strong in Scotland, due to the existing base of green economy activity (particularly in the energy sector) and access to a workforce with relevant skills.

There is 'a strong statistically significant relationship between both technological and organisational net zero practices and business performance, proxied by employment growth'. [Enterprise Research Centre](#)

- There is a lack of robust data on the net zero or emission reduction performance of businesses.
- Limited data that is available shows that although Scottish businesses appear more likely to have taken **emission-reducing activities** than the UK average, a significant proportion (41%) have **taken no action** (or are not sure).²⁴
- Those that have taken action tend to be **lighter investment** with potentially smaller impacts.²⁴ Only:
 - 13% of Scottish businesses have taken steps to electrify vehicles
 - 10% have improved building insulation
 - 6% have installed renewable energy sources.
- Increasingly customers and workers are looking at the net zero credentials of businesses before making purchasing or employment decisions. **So net zero and business competitiveness are becoming more closely linked.**
- Scottish Enterprise's [Net Zero Framework for Action](#) sets out how activities can **accelerate** Scotland's net zero transition by helping many more businesses commit to and realise their own net zero ambitions.

There is significant scope for more businesses to take emission reducing actions – and in particular higher impact emission reduction actions. And net zero offers innovation and growth opportunities across all sectors, both in domestic and overseas markets.

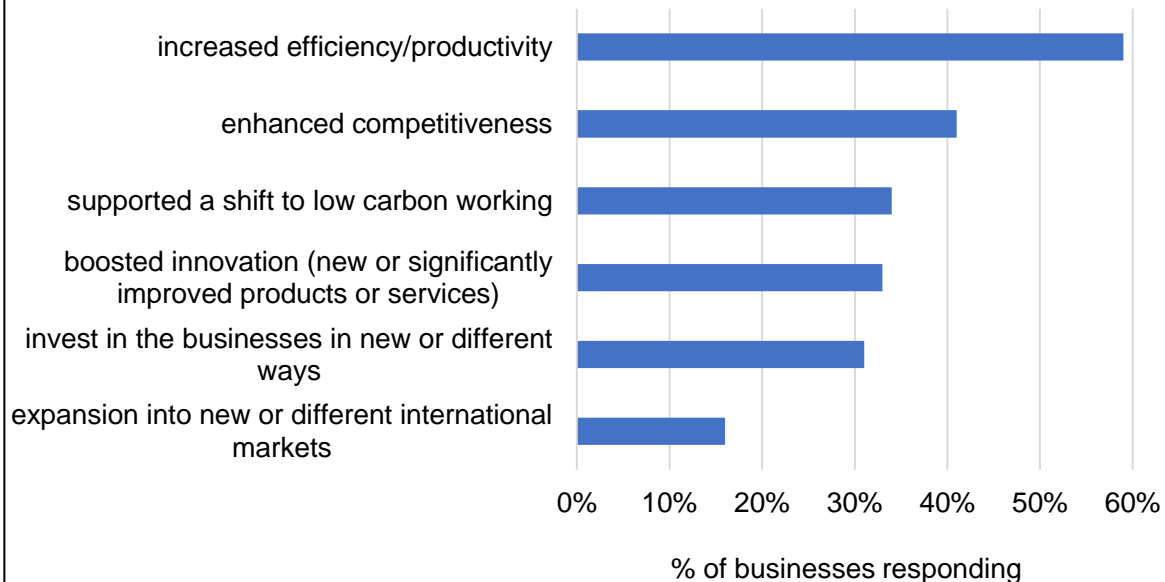
Proportion of businesses that have taken actions to reduce emissions, (July 2021)



Role of digital

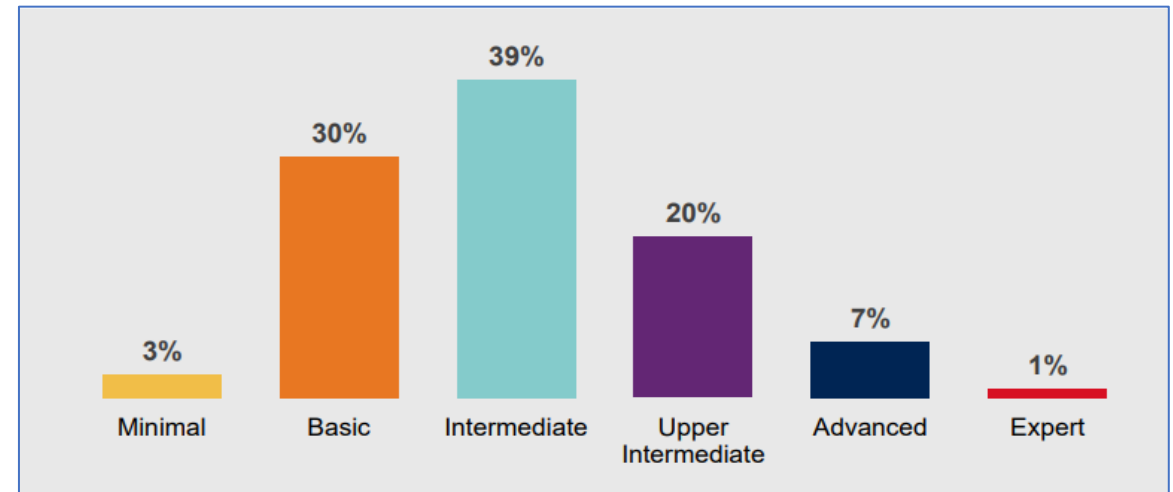
- Investment in **digital technologies** (from company websites to management software to cloud computing to data analytics) can be an important **enabler** of Scotland's transition to a more resilient, productive, innovative, internationally focused and net zero economy.
- In response to the pandemic, many businesses **invested in digital technologies** as they innovated and adapted their business models and workplace practices.
- Scottish businesses report a wide range of **business benefits** and impacts from the use of digital technologies.
- For many businesses, adopting new digital technologies can be the **first step** in being **more innovative** in terms of products and processes.

Impacts of digital technology on Scottish businesses, 2021



More digitalised SMEs were better equipped to weather the storm of the Covid-19 pandemic and maintain the same turnover or grow if they introduced digital technology in operations which resulted in increased innovative activity' [Enterprise Research Centre](#).

Scottish Business Digital Maturity Index, 2021



- However, **just 28%** of Scottish businesses are 'higher level' digital technology adopters (upper intermediate + and above), and a third have no more than basic adopters.²⁵

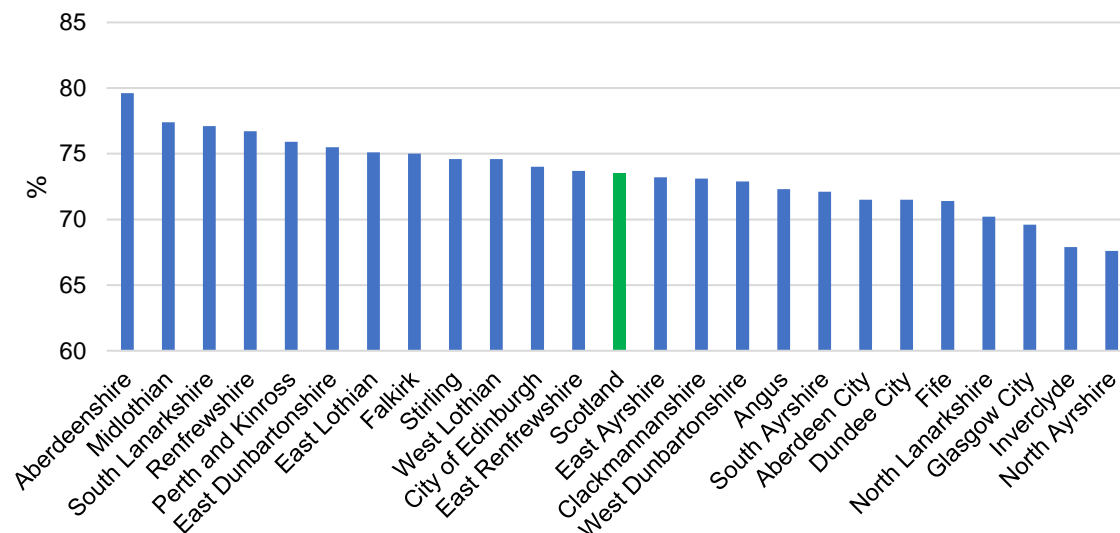
There are major opportunities for Scottish businesses to both adopt and provide more **digital technologies and services**, that will **boost innovation and productivity**, and create **better workplaces and quality jobs** – and also help support the **shift to net zero**.

Place

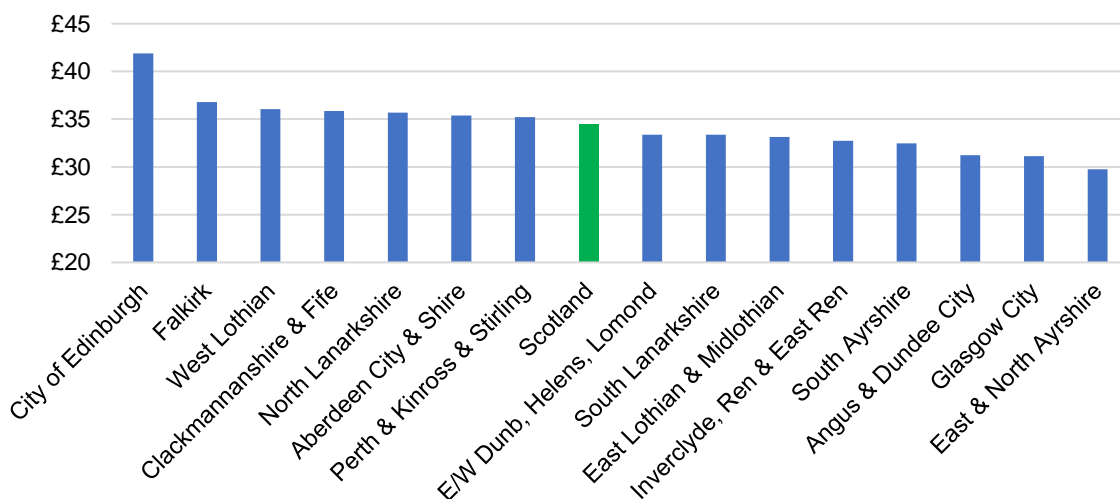
- Scotland's **employment rate** has rising been in recent years, and the number in work has almost reached pre-pandemic levels.²⁶ However, the employment rate across **Scotland's local authorities** ranges from almost 80% in Aberdeenshire to below 70% in Glasgow, Inverclyde and North Ayrshire.
- Although the **employment rate gap** between the best and worst-performing local authority areas has been declining, it is still around 15 percentage points. If the employment rate in underperforming local authorities in the Scottish Enterprise area matched the Scottish average, there would be almost **45,000 more people in work**.
- Average **productivity** of jobs in places across the SE area also differs e.g. on average, jobs in Edinburgh are **35% more productive** than those in Glasgow.²⁷ Areas with lower productivity **also** tend to have lower employment rates, highlighting not only the availability of job opportunities, but also the availability of **quality jobs**.
- Productivity is a key driver of wages, and an indicator of job quality. The proportion of jobs that pay **below the real living** is over 25% in some local authorities – all in the **West of Scotland**.²⁸
- Areas with lower productivity and higher proportions of jobs paying less than the living wage also tend to have higher proportions of employment in '**low wage**' sectors (having at least one-quarter of their workforce with gross hourly earnings below two-thirds of the UK median wage – for example, retail, food service activities, residential care).

Scotland needs to ensure that the benefits and opportunities of economic growth are spread across all places, particularly in the West of Scotland, by building assets that can attract investment and create better quality jobs.

Employment rate (%), selected (SE area) local authorities, 2020



Productivity of jobs (GVA per hour worked), selected local areas, 2019



Scotland's Economic Performance: Overview

Scotland's Inclusive Economic Growth Dashboard, 2021

Increased sustainable economic growth & more new, better and green jobs that will support greater wellbeing across Scotland



Employment Rate*	Productivity*	Population Growth*	Income Inequality*
------------------	---------------	--------------------	--------------------



Adult Qualifications*	Exports Overseas* & to RUK	Entrepreneurial Activity*	Number of Businesses*
Employees > Real Living Wage*	Value of Risk Funding	Total* & Business R&D	High Growth Businesses*
Inward Investment (FDI)	Bank Lending to SMEs	Fair Work Practices*	Business Investment
Risk Funding Deals	Greenhouse Gas Emissions*	Exporting Businesses	Skills utilisation*
Higher Education R&D		Business Net Zero Actions	Innovative businesses*
Youth Unemployment*			Process Innovation
Management Practices			Product Innovation

*Scottish Government National Performance Framework Indicator

Quartile Performance vs OECD/EU Countries or UK Countries/Regions

Quartile 1
Quartile 2
Quartile 3
Quartile 4

The dashboard sets out Scotland's performance for a range of indicators that drive and influence overall sustainable economic growth and wellbeing, focusing on those indicators that can be more influenced by the Enterprise Agencies.

Scotland's performance is compared to either OECD, European or UK countries and regions in terms of quartile rankings.

The dashboard allows quartile rankings over time to be monitored, and to estimate the change in performance required to reach the top quartile (and this is considered in the next slide).

Scotland's economic performance

- Scotland's **economic challenges** are not new, and performance for some indicators has mostly been in the 3rd or 4th quartile of **comparison economies** annually for a number of years.
- The **size of the performance gap** to the top quartile is also **considerable** for many of the indicators. Although the gap is narrowing for some, it is **widening** for others. The table below shows the change in performance (absolute and percentage) required to reach the performance of top-quartile comparator economies. For example, Scotland's business capital investment performance would need to more than double (+120%, +£13.3bn) to reach Q1.
- The analysis shows that to match the best economies will require a **transformational shift** in Scotland's performance, and will take time.

	Scotland's Quartile Ranking (vs OECD Countries//EU Countries or UK Regions)			Increase required in Scotland's performance to reach Quartile 1	Scotland indicator performance improving or worsening	Gap to Q1: narrowing or widening
	2017/18	2018/19	2019/20			
Employment rate (no. in work)				+43,000 (+1.5%)		
Exporting Businesses				+5,570 (+45%)		
Entrepreneurially active people				+200,000 (+85%)		
Business R&D investment				+£1.8bn (+75%)		
Number of Businesses				+60,000 (+35%)		
High Growth Businesses				+100 (+15%)		
Business capital Investment				+£13.3bn (+120%)		
Innovation Active businesses				+1,500 (+20%)		
Product Innovating businesses			N/A	+520 (+10%)		
Process Innovating businesses			N/A	+1,246 (+25%)		



Data Sources

1. Eurostat
2. Scottish Government <https://www.gov.scot/publications/gross-expenditure-on-research-and-development-scotland-2019/>
3. EY Attractiveness Survey 2021 [FDI attractiveness surveys | EY UK](#)
4. Scottish Enterprise, Investing in Ambition Scotland's Risk Capital Market in Context Report 2021 Investing in Ambition. [Scotland's Risk Capital Market in Context \(scottish-enterprise.com\)](#)
5. Annual Survey of Hours and Earnings 2020 [Annual survey of hours and earnings: 2020 - gov.scot \(www.gov.scot\)](#)
6. OECD and Scottish Government Data [Employment, unemployment and inactivity for young people \(16-24 years\): Scotland and UK - April 2019 to March 2020 - gov.scot \(www.gov.scot\)](#)
7. SE calculations based on OECD and Scottish Government data.
8. OECD and Annual Population Survey data
9. [Adzuna](#) and ONS analysis <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/onlinejobadvertestimates>
10. RBS Report on Jobs <https://www.natwestgroup.com/news/2021/09/royal-bank-of-scotland-report-on-jobs.html>
11. UK Innovation Survey 2019 [UK innovation survey 2019: main report - GOV.UK \(www.gov.uk\)](#)
12. Scottish Government <https://www.gov.scot/publications/gross-expenditure-on-research-and-development-scotland-2019/>
13. Scottish Government [Business Enterprise Research & Development 2019](#)
14. OECD and Scottish Government [GDP Quarterly National Accounts: 2021 Quarter 1 \(January to March\) - gov.scot \(www.gov.scot\)](#)
15. ONS [Annual Business Survey](#)
16. Export Statistics Scotland 2018 <https://www.gov.scot/publications/export-stats-scotland-2018/>
17. Global Entrepreneurship Monitor [GEM Global Entrepreneurship Monitor \(gemconsortium.org\)](#)
18. ONS - UK Business Counts & Population Estimates (accessed through NOMIS)
19. SME Finance Monitor Q2 2021 [PowerPoint Presentation \(bva-bdrc.com\)](#)
20. ONS [Business demography, UK - Office for National Statistics \(ons.gov.uk\)](#)
21. SE calculations based on [Scottish Employer Skills Survey](#) and ONS [Employed graduates in non-graduate roles, parts of the UK, 2015 to 2019 - Office for National Statistics \(ons.gov.uk\)](#)
22. SE assessment of available data
23. Scottish Government [Scottish Employers Skill Survey 2020](#)
24. ONS [Business insights and impact on the UK economy - Office for National Statistics \(ons.gov.uk\)](#)
25. Digital Economy Business Survey 2021 [Digital Economy Business Survey 2021: findings - gov.scot \(www.gov.scot\)](#)
26. Annual Population Survey
27. ONS: [Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions](#)
28. Annual Survey of Hours and Earnings [Annual survey of hours and earnings: 2020 - gov.scot \(www.gov.scot\)](#)