Unlocking Scotland’s Economic Potential

Overview of Scotland’s economic performance

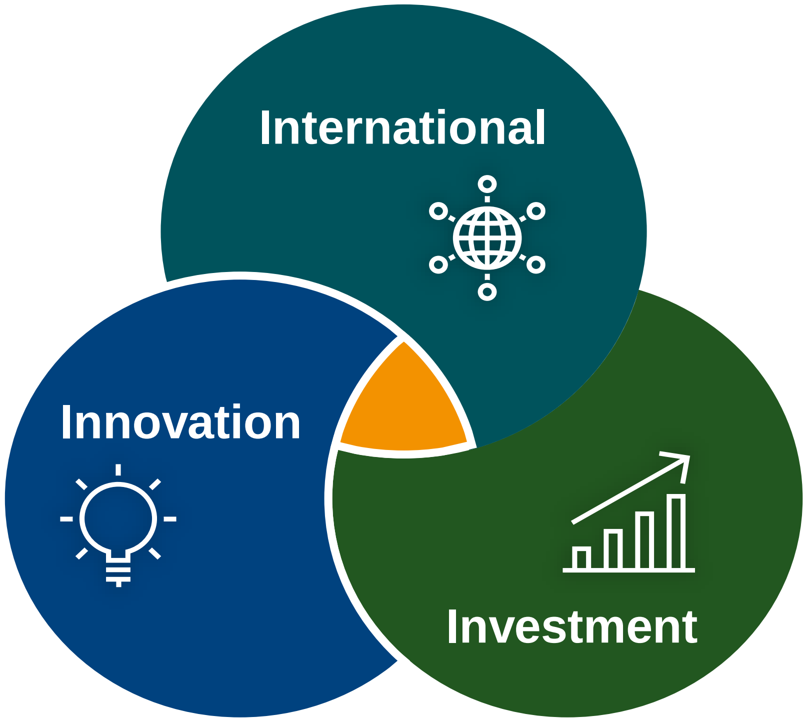
December 2022

Scotland’s Economic Context & Performance

Scottish Enterprise’s Corporate Plan focuses on supporting transformative change in **Innovation, International** and **Investment** performance across Scotland’s economy. These are the drivers of a successful, productive, net zero and fair work economy and are the areas of greatest opportunity and challenge for Scotland’s businesses and sectors.

This paper sets out:

- the current and near-term global and domestic economic environment that is impacting business and sector performance, confidence and future investment and growth decisions
- Scotland’s innovation, investment and international performance compared to other economies, and the scale of the transformational change required to match the best performers
- ‘what works’ in supporting business and sector innovation, investment and internationalisation



Purpose

Help businesses innovate and scale to transform the economy

What's changed in the economic environment over the last 12 months?

HEADWINDS

Slowing/weak domestic and global economic growth
Weak economic demand in both global and domestic markets likely to persist through 2023 and into 2024, lowering demand (especially in consumer facing sectors), business confidence and investment

High energy and input costs
Likely to persist through 2023 and into 2024. Over 60% businesses are absorbing some/all costs and just under half expect to reduce operations to a limited extent

Worker shortages/ recruitment difficulties
Exacerbated by low unemployment and loss of EU workers post-Brexit. Labour shortages are impacting on business' ability to meet demand and may affect investment plans and Scotland's attractiveness to overseas investment

Rising interest rates
BoE interest rate expected to stay above 4% to 2025 compared with <1% up to Q3 2022. This raises the cost of borrowing and may make some investment projects less attractive. Already some businesses are reluctant to borrow and invest

Brexit, exporting and talent attraction
Higher export costs owing to Brexit (paperwork, levies/customs, border restrictions) likely to persist. 16% of current exporters with 10+ employees report lower exports. Reduced flow/availability of EU nationals working in Scotland

TAILWINDS & OPPORTUNITIES

Business innovation & digital adoption
Many businesses started to/increased innovation in response to Covid-19. Businesses can further innovate to respond to current challenges to boost efficiency, productivity by adopting digital technologies and introducing new products and services for domestic and overseas markets

Net Zero
More businesses are taking actions to reduce emissions. Most have taken 'easier to implement' activities, opportunity for businesses to build on this and take more impactful emission-reducing actions, boosting innovation, efficiency and productivity

Research assets
Scotland's network of research assets (universities, research centres) are an important innovation partner for businesses, and an attractor of inward investment. As assets are further developed this will support business innovation capacity

Attracting investment
The factors that make Scotland highly attractive to inward investors, including risk capital, have not fundamentally changed (skilled workforce, research assets, supporting policies). This can be built on to attract investment when the global economy starts to recover

Overseas markets
Scottish exporters are successful in overseas markets, and there many non-exporters that have the potential to sell overseas. Increased innovation and global economic recovery will open up more exporting opportunities for more Scottish businesses

Current economic environment

Global economic activity is experiencing a broad-based and sharper-than-expected slowdown, with inflation higher than seen in several decades. The cost-of-living crisis, tightening financial conditions in most regions, Russia's invasion of Ukraine, and the lingering COVID-19 pandemic all weigh heavily on the outlook'. *IMF Economic Outlook*

The IMF expect **global economic growth to slow** over 2023 due to high inflation, rising interest rates and falling business and consumer confidence are key reasons.

Both the OECD and IMF highlight a number of further **downside risks** to the global economy:

- government monetary policy (e.g. interest rates) to reduce inflation being too loose or tight
- reduction in gas supplies impacting business production and raising prices
- slowdown in China due to high levels of corporate debt/weakening housing market
- poor harvests and adverse weather leading to food scarcity and further rising prices
- further waves of COVID-19 infections.

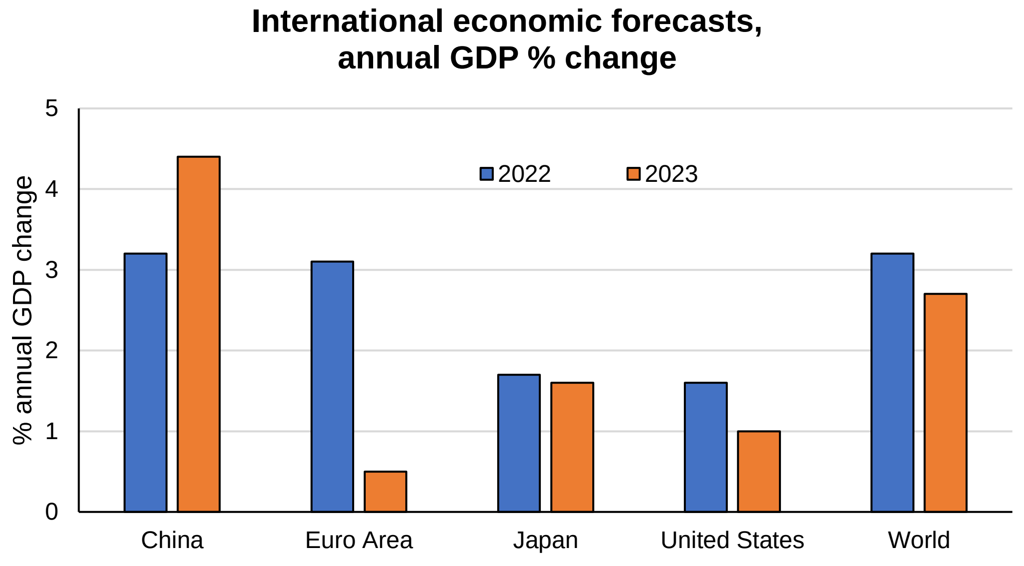
The Office for Budget Responsibility is projecting **UK output to fall** by 1.4% in 2023, returning to growth in 2024 (+1.3%).

Similarly, the Scottish economy is forecast **to contract** in 2023 (-0.6%), with growth in 2024 (+0.8%).

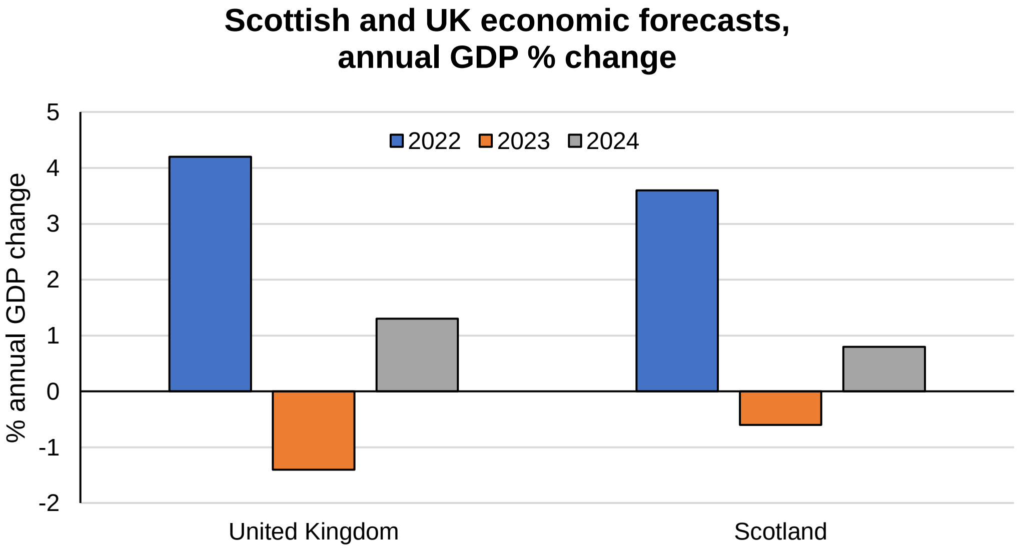
UK consumer price inflation rose to 11.1% in the year to November, although the Bank of England expects inflation to ease over 2023 to around 5%.

UK producer (including manufacturing) **input price inflation** has reached 20%, with higher costs of energy and raw materials driven by:

- increased demand as the global economy recovered from the pandemic
- continued supply constraints (e.g. Covid-19 lockdowns in China)
- the conflict in Ukraine.



Source: IMF



Source: Fraser of Allander Institute (Scotland), OBR (UK)

Current economic environment

Despite slowing economic growth, central bank **interest rates are rising** across most advanced economies, and are expected to further increase over 2023.

The Bank of England **raised interest UK rates to 3%** in October (the highest level since 2008), and market expectations are that rates will peak at 5.25% in the 3rd quarter of 2023 (although the Bank has hinted that the peak may be lower).

The value of sterling has depreciated over 2022 against the dollar by over 10%. As many **commodities are priced globally in US dollars** (such as fuels and metals), this has pushed up import costs for many businesses – this in addition to commodity price rises due to increased global demand following Covid-19 and supply challenges.

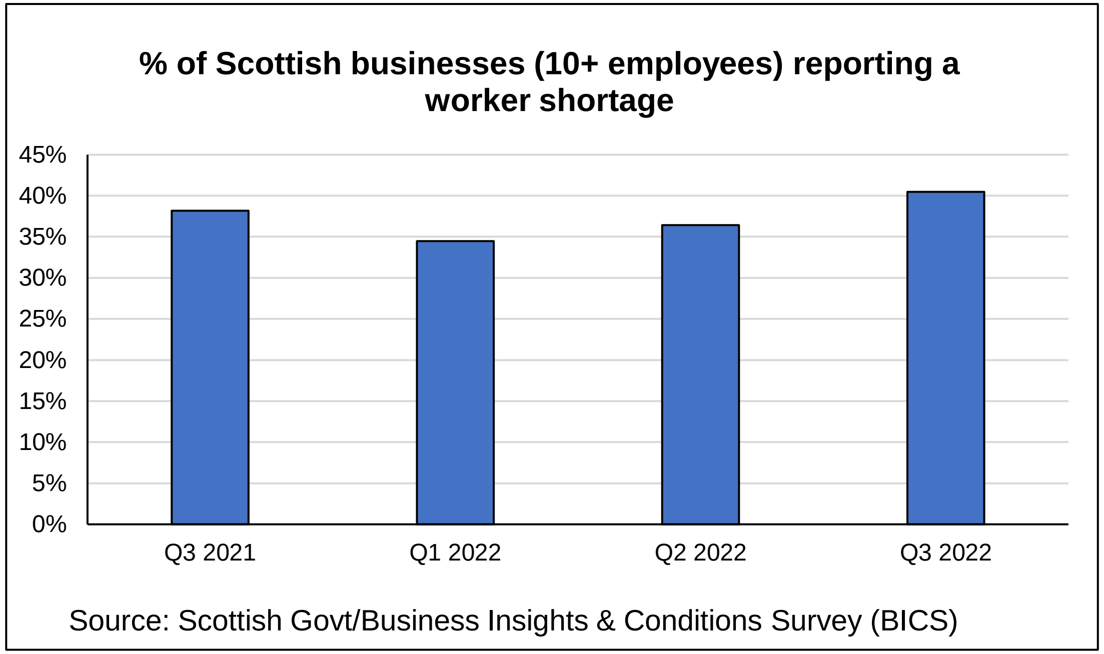
Recruitment difficulties are also a key challenge for many Scottish businesses. Around 40% reported worker shortages and recruitment difficulties over September/October due to low numbers of applicants, lack of qualified/skilled applicants, and a reduced number of EU applicants. Many are also reporting challenges in retaining workers, as competition for staff is pushing up wages offered by other employers.

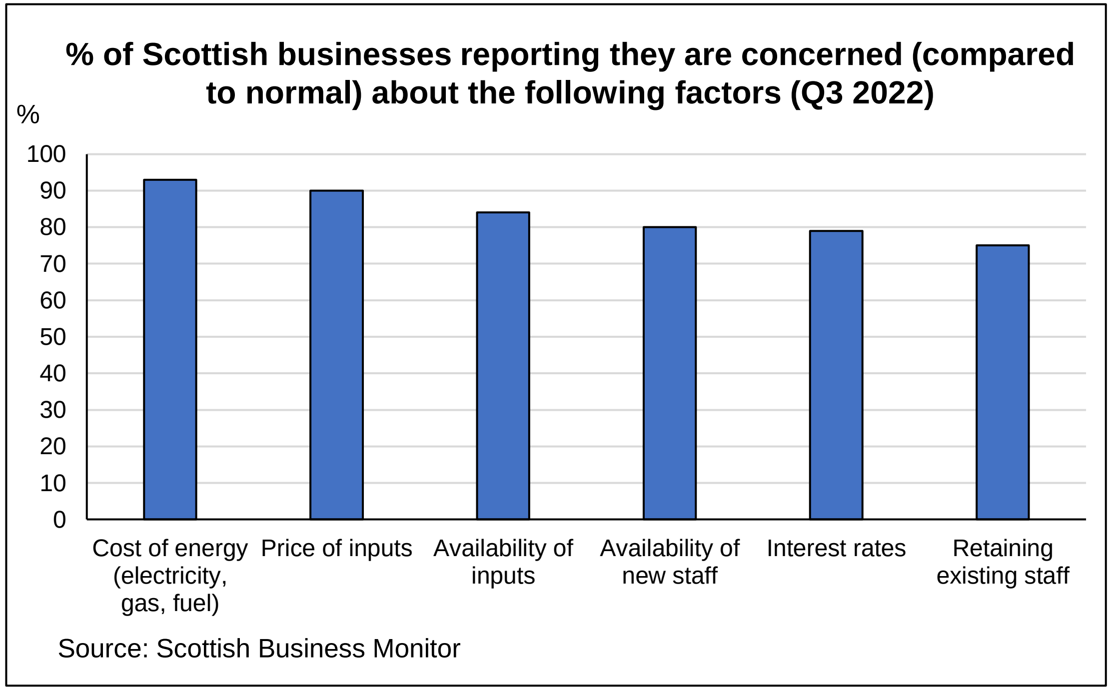
Around 40% of Scottish exporters report increasing challenges in selling to the EU due to **Brexit.** Higher transportation costs, more red tape, borders disruptions and customs/levies issues are the main causes. There is also evidence that some small exporters have stopped selling to EU markets.

Implications of the current economic and business environment

The **key concerns** raised by Scottish businesses obviously reflect the wider economic and business environment:

- energy and input prices (30%-40% of businesses are currently on fixed energy contracts that expire in 2023).
- availability of inputs
- attracting and retaining staff
- rising interest rates/costs of finance.





Economic context: why the 3 I's are still important

INNOVATION

- Innovation drives productivity growth, strengthens regional clusters and builds resilient supply chains
- Innovative businesses grow twice as fast as non-innovative, are more productive, export focused and pay higher wages
- Innovation assets attract inward investment

- **Business innovation** activity is low - just 39% of Scottish businesses are 'innovation active'
- **Business R&D investment** is concentrated - 10 businesses account for almost 50%; inward investors account for 65%.
- **Scotland needs 2,100 more businesses innovating (+25%)** and **£230m a year more R&D (+8%)** to match best performing economies

INTERNATIONAL

- Internationalisation drives productivity growth, strengthens supply chains, and enhances Scotland's R&D and capital expenditure
- International businesses are more innovative and pay higher wages
- Inward investors employ 700k workers

- **Exporting activity is low** Just 6.5% (11,500) sold internationally in 2020, lower than other UK regions and countries, but 16% of non-exporters believe they have goods and/or services are suitable for exporting
- **Focusing resource on more strategic investments** that shape places and deliver high value jobs
- **Scotland needs 7,600 more exporters to match best** performing economies **and £9bn more exports** (+30%) to meet Scottish Government target.

INVESTMENT

- Business investment boosts efficiency and productivity
- Risk capital supports innovative, high-growth potential and early-stage businesses to reach scale
- Increased attraction of international capital investment into business infrastructure boosts innovation assets
- Scaling businesses are more productive, innovative and export focused

- **Scotland's business investment rate lags** all other OECD economies, resulting in a low capital stock. This can affect the quality and productivity of the workplace, the quality of jobs and in turn, the ability to effectively innovate
  A lower proportion of Scotland's businesses achieve high growth/scaling than other parts of the UK
- **Scotland needs £15bn more capital investment a year** (+125%) and **160 more high growth businesses** (+25%) to match best performing economies

Scotland's Innovation Performance

A business is defined as ['innovation active'](#) when developing:

- new or significantly improved product (good or service) or process
- new or significantly improved forms of organisation, business structures, practices or marketing concepts/strategies.

Just 39% of businesses in Scotland (with 10+ employees) were **innovation active** over 2018-2020, lower than nearly all other UK nations and regions. And just 17% were product innovators and 13% process innovators.

Although Scotland's business innovation rate increased between 2016/18 and 2018/20 (perhaps due to more businesses innovating in response to the Covid-19 pandemic), it is still **significantly lower** than 2010 to 2016 performance.

Key barriers to innovation include cost of innovation & availability/cost of funding; risks of innovation; lack of skilled staff.

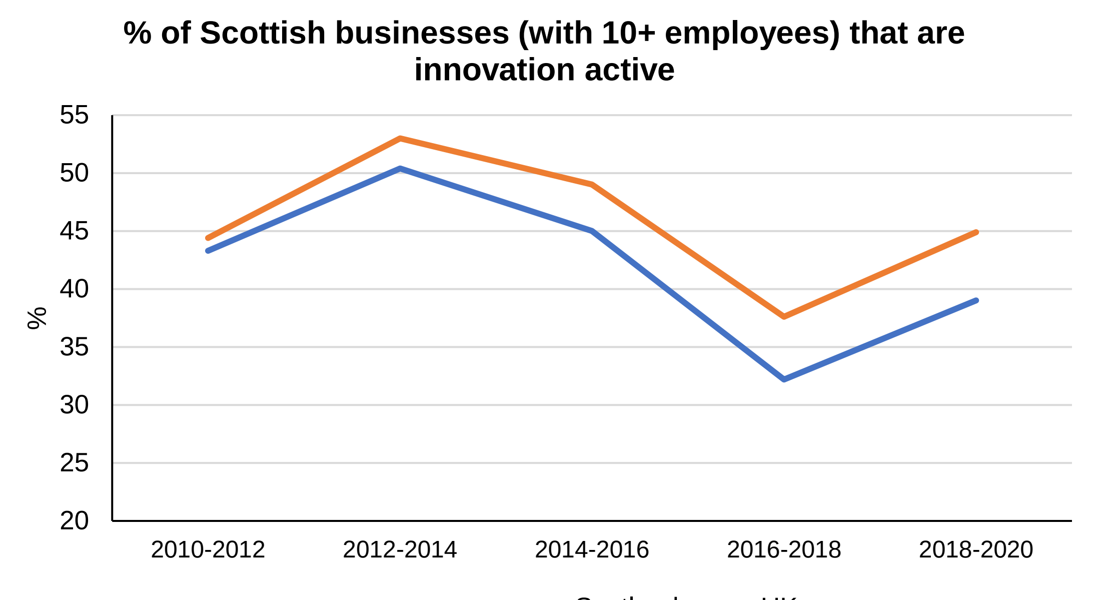
Scottish businesses also tend to generate a **lower proportion of turnover from product innovation** (32%) than the UK average (38%) and those in all other UK nations/regions.

The EU's Regional Innovation Scoreboard highlights that Scotland is a 'Strong Innovator' and in the top 20% of regions for innovation performance. The Scoreboard highlights Scotland's (see radar graph on next page):

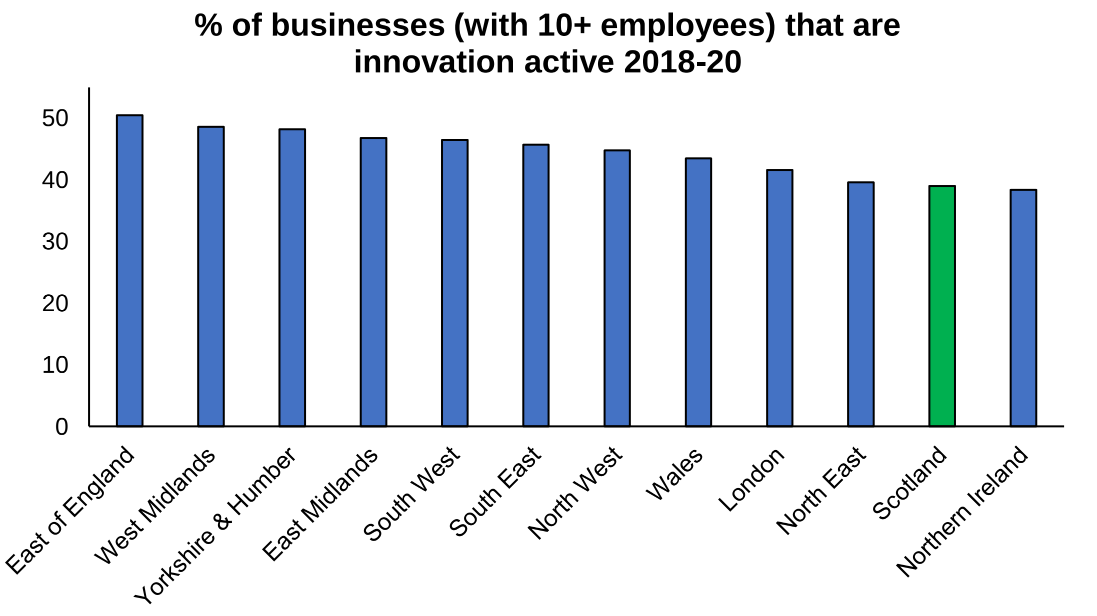
- **Strengths:** skills, scientific publications and SME collaborations
- **Challenges:** sales of innovative products, business product/process innovation, design and trademark applications.

Scotland needs:

- **more businesses innovating**: +2,100 (+25%) to match best performing UK countries and regions.
- and innovating businesses to **generate more 'innovation sales'** from the new and improved products and services developed (for example in export markets).



Source: UK Innovation Survey



Source: UK Innovation Survey

Scotland’s Innovation Performance

Scotland’s **business R&D** performance may have been under-reported in recent years, in particular R&D by smaller businesses. New figures provisionally ‘uplift’ Scotland’s business R&D from £1.4bn to £2.9bn in 2020, showing **R&D performance** now near the top of the second quarter of OECD economies

Scotland annual BERD would need to be £230m higher (+12%) to match OECD top quartile performance (based on the uplifted R&D expenditure estimates).

Scotland’s **universities** are an important source of R&D and knowledge generation. In 2019, Scotland ranked seventh among the OECD countries for **Higher Education R&D** spend as a percentage of GDP in 2019, well above the UK, EU and OECD averages.

This highlights the importance of universities as ‘**innovation assets**’ that can help boost business R&D and innovation activity. The strength of the research base is an important attractor of **inward investment**.

Compared to the UK average, a higher proportion of Scotland’s innovating SMEs **collaborate on innovation projects with universities** (35% vs 23%) and/or with **government research centres** (32% vs 22%). Scotland’s better performance may reflect the benefits of the Innovation Centre network, and other research centres such as NMIS and the Faunhofer Institute.

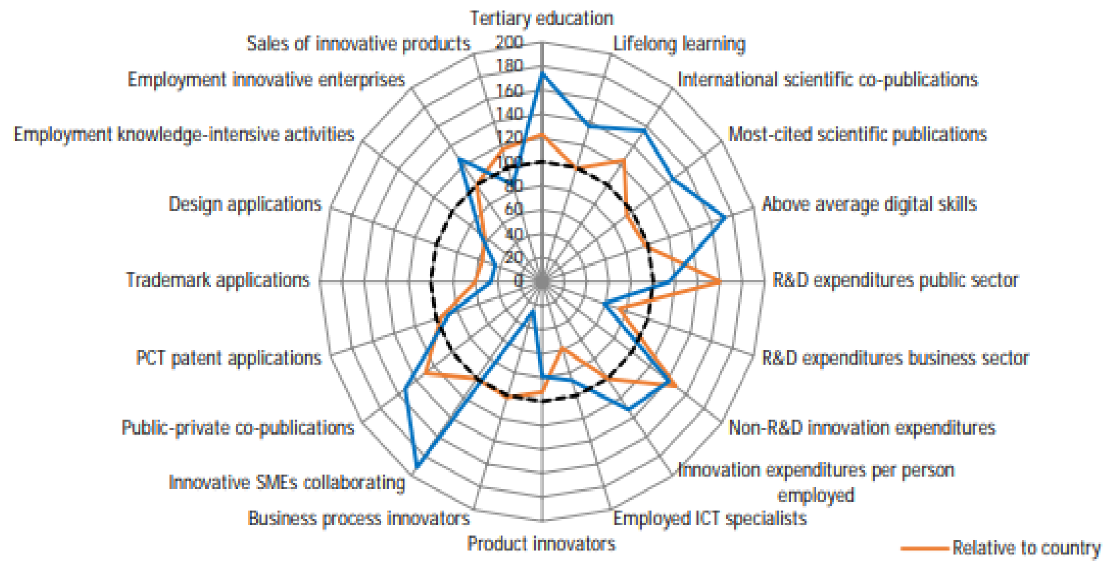
This suggests that in Scotland the challenge is not so much business engagement with innovation assets, but **encouraging businesses to be innovation active** in the first place.

Evidence also shows that:

- the strength of the **research base** is an important attractor for inward investment
- businesses that are **exporters** are more likely to be innovators
- exporters benefit more from innovation (in terms productivity gains) than non-exporters

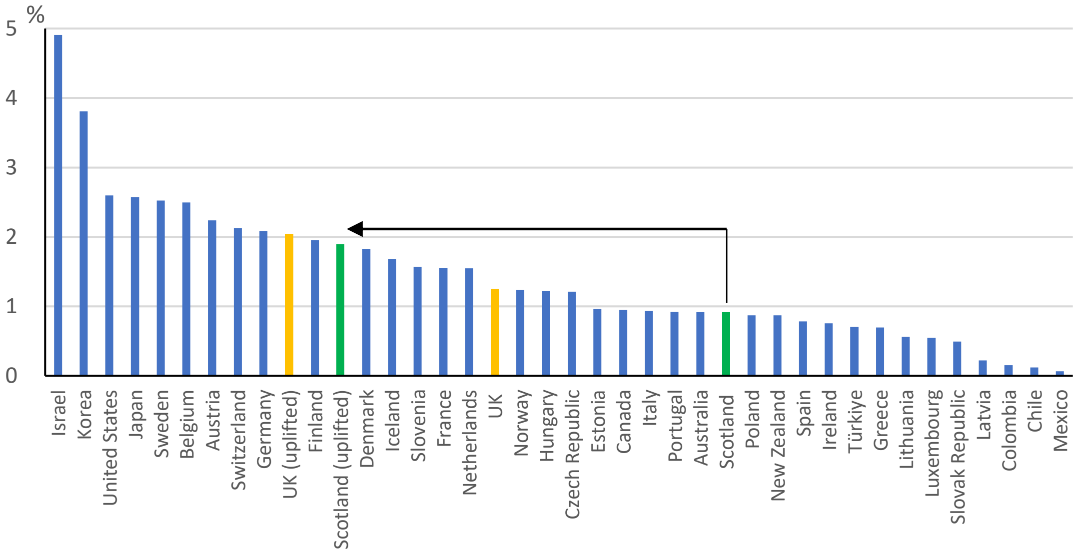
This highlights the **interconnection** between innovation, investment and internationalisation in supporting business and sector growth.

Scotland’s Innovation Scoreboard 2021



Source: EU Regional Innovation Scoreboard

Business Enterprise R&D (BERD) expenditure as % GDP 2020



Source: ONS, OECD

Scotland's International Performance

Scotland is the second most attractive location in the UK (after London) for **foreign direct investment** (FDI) projects. 122 FDI projects were attracted in 2021 (12% of all UK projects) and are expected to generate over 10,000 jobs. In addition, Scotland attracted 35 inward investment projects from the rest of the UK over 2021/22.

Scotland's **top FDI activities** in 2021 were business services, manufacturing and R&D (highlighting the importance of inward investors in supporting Scotland's innovation performance). And three Scottish cities were in the UK top 10 for FDI projects – Edinburgh (2nd), Glasgow (5th), Aberdeen (9th).

A highly qualified and cost-competitive workforce, the strength of local business networks, and support from government and Enterprise Agencies (including grants and investment/R&D incentives) are all **key success factors** in attracting investment – and areas of strength for Scotland.

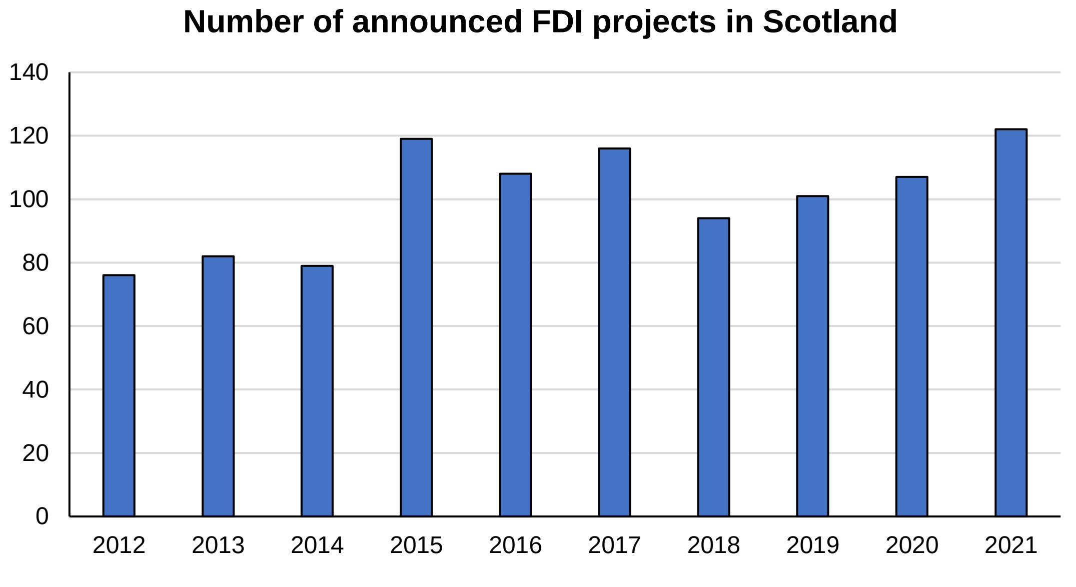
Attracting and retaining **highly skilled talent, entrepreneurs and early-stage businesses** from overseas and the rest of the UK will help create more scaling businesses in Scotland. Evidence shows that:

- 47% of UK high growth, scaling businesses employ staff from **overseas** – half of which say its vital/very important they can continue to do so
- for around one in five **scaleups**, a quarter or more of their staff come from outside the UK.

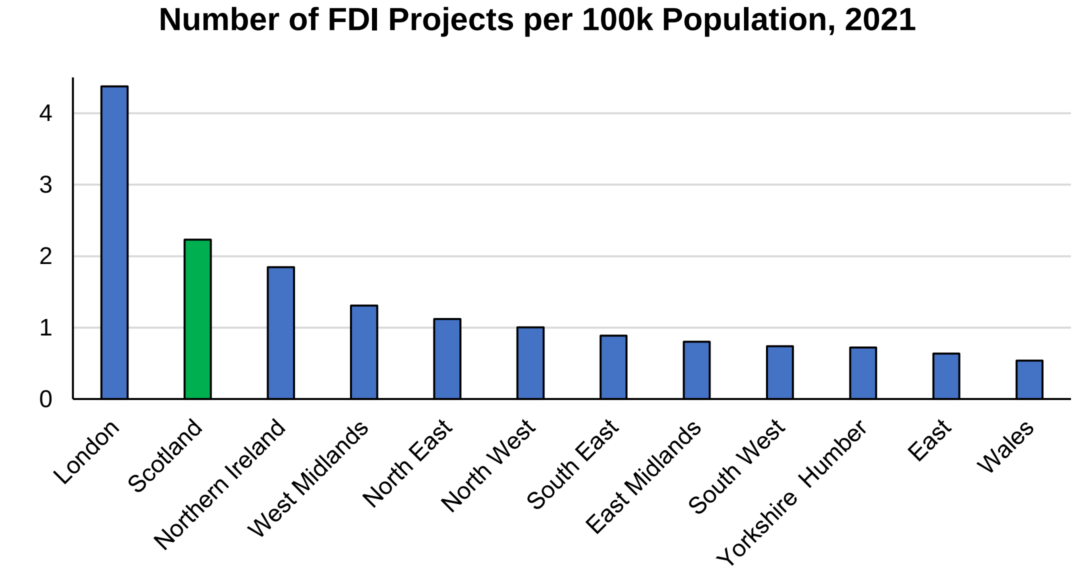
Inward investors (from overseas or the rest of the UK) on average tend to have **higher productivity**, pay **higher wages** and are more likely to **invest in R&D**. Overall, inward investors employ almost 700,000 workers directly across Scotland.

Inward investment provides other 'spillover' benefits for the economy. For example:

- offering supply chain opportunities for Scottish businesses
- knowledge sharing between businesses
- raising Scotland's profile internationally.



Source: Ernst & Young



Source: Ernst & Young; Scottish Enterprise calculations

Scotland’s International Performance

The proportion of businesses in Scotland that **export internationally** is lower than most other UK regions and nations. Just 6.5% of Scottish businesses (11,500) sold internationally in 2020 (although this is a 13% increase since 2017, reflecting +10% across Great Britain as a whole).

16% of non-exporting SMEs in 2021 believed that they have goods and/or services suitable for selling overseas. This suggests Scotland has around **17,000 potential exporters.**

Scottish SMEs are on average more ‘**export intensive**’ (in terms of the proportion of overall turnover accounted for by exports) than those in the rest of the UK. Overseas sales account for over half of turnover for 40% of Scottish SMEs (31% in the UK).

This suggests Scotland’s businesses can be successful and benefitting from selling to overseas markets – the challenge is that not enough of the business base are exporters.

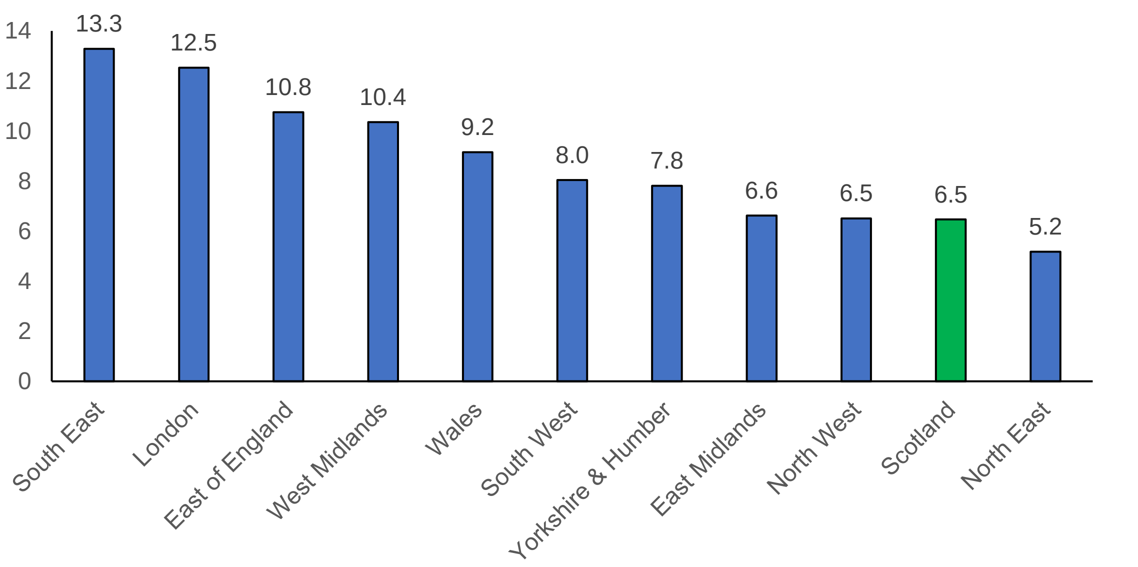
Scotland would need **7,600 more exporters** (+65%) to match best performing UK nations and regions.

Barriers to exporting include access to in-market contacts, customers and networks; costs of accessing markets; lack of knowledge; and capacity (managerial time, staff skills).

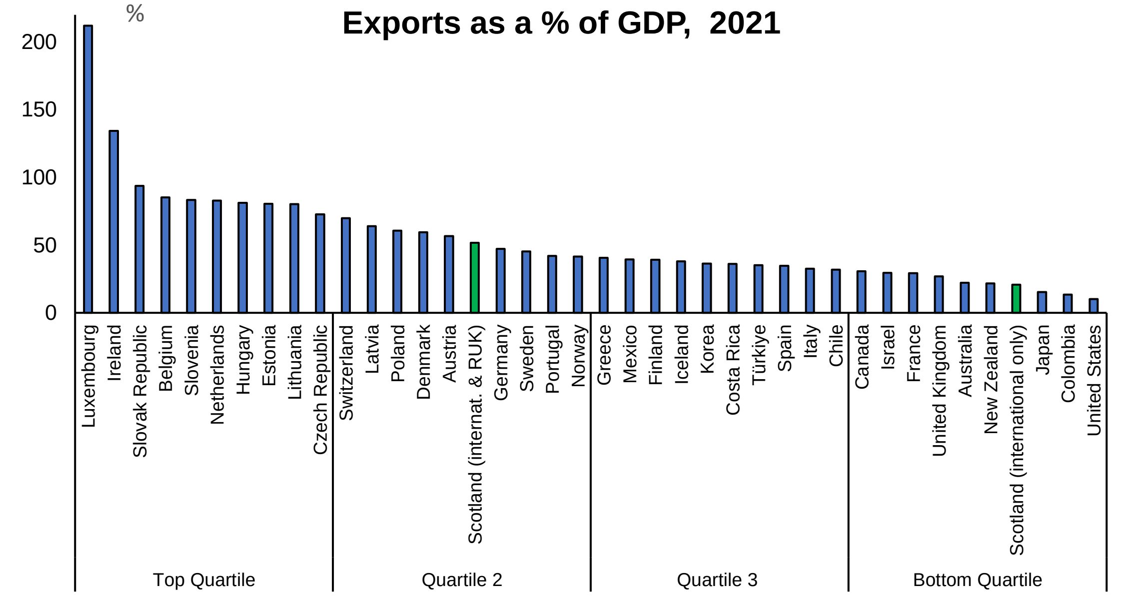
Scotland’s Trading Nation strategy focuses on increasing overseas exports by existing exporters. The value of overseas exports has increased in almost every year over the last decade, and the Scottish Government has ambitions for international exports to reach **25% of GDP by 2029.** Exports though are relatively concentrated, with three sectors (food & drink, petroleum/chemicals, professional/scientific services) accounting for over 40%.

International exports would need to rise by +£9bn (+30%) to meet the Scottish Government’s ambition of exports equalling 25% of GDP

Scotland’s **low business innovation rate** likely in part be due to low exporting activity. Selling to overseas can be a driver of innovation as businesses access knowledge and ideas in international markets.



Source: Office for National Statistics



Source: Scottish Government, OECD

Scotland's Investment Performance

Business capital investment boosts efficiency and productivity by providing workers with efficient and modern machinery and equipment, and good quality workplaces. However, Scotland's business capital investment rate **lags all other OECD economies**, resulting in a low capital stock that impacts on productivity and job quality. In turn, this can impact the ability to **effectively innovate**.

Also, **exporters** need to have higher levels of productivity to effectively compete in overseas market, highlighting the role of investment in supporting internationalisation.

Barriers to capital investment include availability and cost of funding, risk aversion and general economic uncertainty.

Scotland's annual business investment rate would need to be **£15bn higher** (+125%) to match best performing OECD countries.

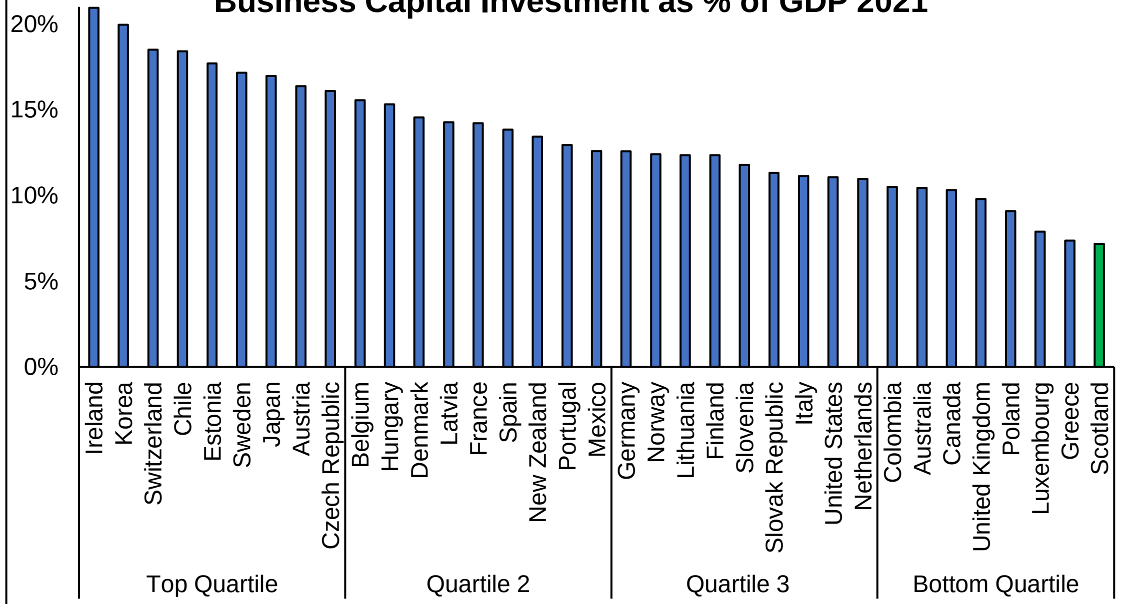
The availability of **equity risk finance** is key to the success of early stage, innovative and high growth potential businesses. Scottish businesses (in common with those in other parts of the UK) are at a disadvantage when seeking to raise equity finance with most of the investment (84% in 2021) going to those located in London and the surrounding regions.

Scotland's **risk capital market** has seen steady growth with £10m+ deals becoming a regular feature and "mega" deals (£50m+) now contributing to sizeable peaks. The '**underlying market'** (deals below £10m) has grown steadily demonstrating overall health and stability. Over recent years growth has been concentrated in the £2m-£10m band, with the earliest and highest risk stages (below £2m) being the most challenging for businesses seeking to raise growth finance.

While Scotland is on track to achieve the **highest level of equity investment on record** for 2022 (helped by 2 deals above £50m), the strong start has been disrupted by wider macroeconomic concerns and impending recession contributing to **growing investor caution**.

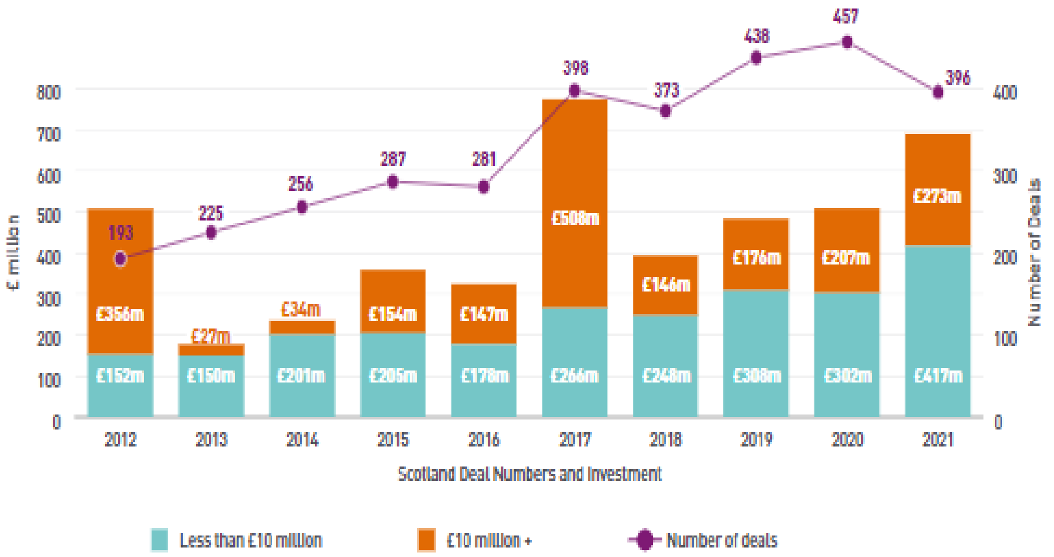
While overall UK and global trends are concerning, even in an increasingly challenging environment there are still investors competing for attractive opportunities. Scotland, with one of the most active equity investment markets in the UK, is **well positioned** to face into these challenges.

Business Capital Investment as % of GDP 2021



Source: Scottish Government, OECD

The number/level of Scottish Investment Deals 2012-2021



Source: Scottish Enterprise

Scotland's Investment Performance

Entrepreneurial activity is an important driver of business creation, competition and innovation. A larger, innovating business base also increases the pool of **potential high growth, scaling businesses**.

Scotland's entrepreneurial activity rate (proportion of the adult working age population that is actively trying to start a business, or that own/manage a business which is less than 3.5 years old) was 9.5% in 2021 (up from 7.3% in 2020), lower than the UK average of 11.5%.

An expert assessment of Scotland's entrepreneurial framework conditions highlights **areas of weakness** (a score below 5) including entrepreneurial school education, access to finance and growing/markets. An area of particular strength is government entrepreneurial support.

Scotland would need Scotland would need almost 145,000 more people to be entrepreneurially active (+35%) to match the OECD top quartile rate.

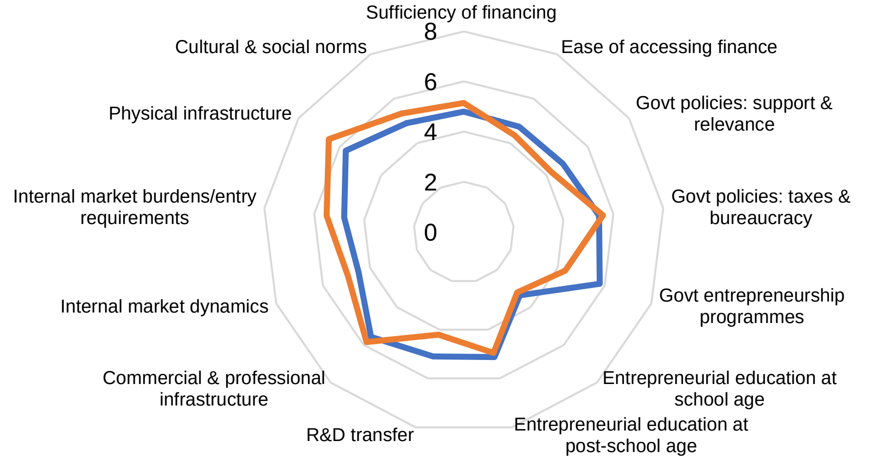
Lower entrepreneurial activity over a number of years has resulted in Scotland having a **smaller business base** (relative to population) than nearly all other UK nations and regions.

Scotland would need Scotland would need almost **70,000 more businesses** (+40%) to match best performing UK nations/regions.

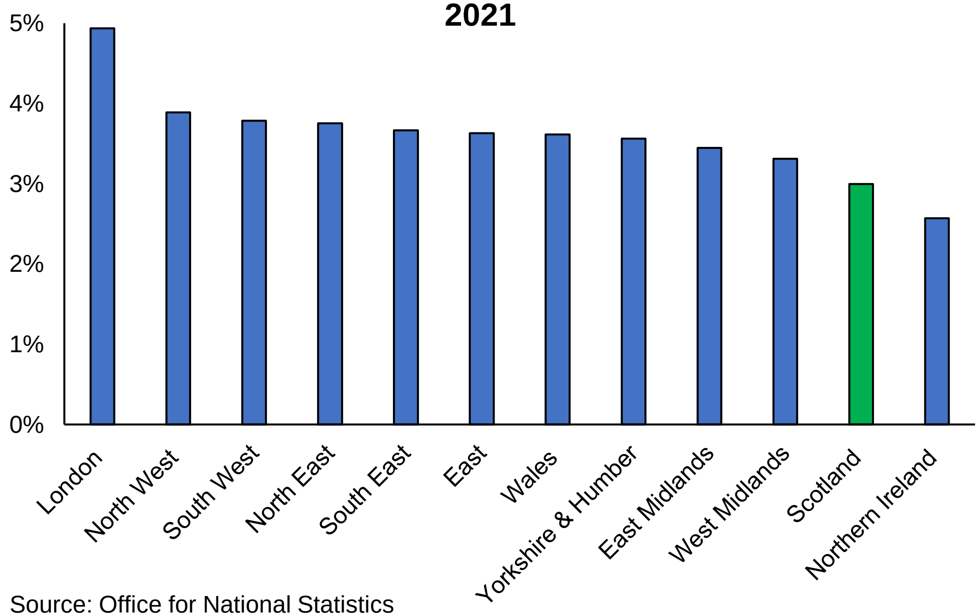
High growth, scaling businesses represent less than 1% of UK SMEs, but 50% of total SME turnover, so are a key driver of job creation and economic growth. Also, most scaling businesses **invest in innovation** (72%), and **export** (57%) so are, on average, significantly more productive (+24%) than other small businesses.

However, the proportion of businesses that achieve high growth is **lower** in Scotland (3.7%) than all other UK nations and regions. **As well as needing more businesses, Scotland needs more that are high growth and scaling.**

Scotland would **160 more scaling/high growth businesses** (+25%) to match the high growth rate of the best performing UK nations and regions.



Source: GEM Scotland & UK Reports



Source: Office for National Statistics

High growth defined as having at least 10 employees and growing their turnover or employee count by at least an annualised rate of 20% per year over three years

Net Zero and Fair Work

Net Zero

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 **skilled workforce.**

The proportion of businesses in Scotland taking **emission-reducing activities** has increased significantly over recent months (from 56% in April 2021 to 79% in October 2022), although performance does lag some other UK regions.

Those businesses that have taken action tend to have focused on **easier to implement activities** with potentially smaller emission-reduction impacts. Relatively low proportions of businesses have taken actions that require higher investment. Just:

- 25% have taken steps to electrify vehicles
- 11% have improved building insulation
- 10% have installed renewable energy sources.

Barriers to taking net zero actions include costs, perceived lack of net appropriate zero solutions, and lack of capacity/willingness.

Fair Work

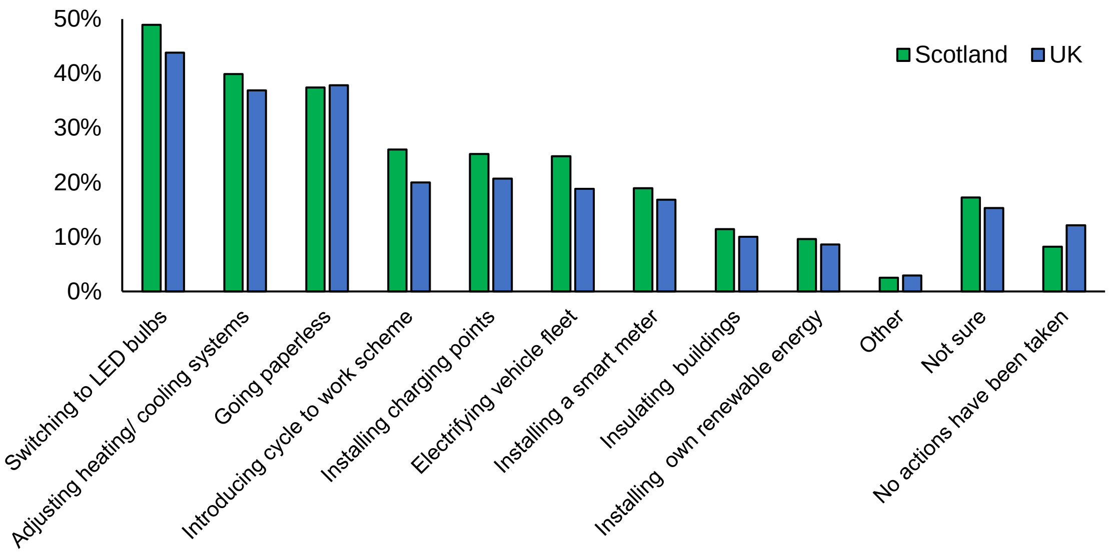
A range of evidence shows that adoption of **fair work practices** by businesses not only improves the wellbeing of workers but can **improve business performance** and competitiveness through increased innovation and productivity.

Compared to other OECD countries, Scotland's **fair work performance is mixed** at best. Broadly, Nordic countries tend to perform well on measures of fair work.

Recent analysis by the Fair Work Convention shows that although there has been **some progress in Scotland** in certain fair work elements since 2015 (when the Convention was established), many are not improving.

Barriers to adopting fair work approaches include perceived costs, lack of knowledge about fair work practices and benefits, and organizational capacity to implement.

Proportion of businesses that have taken actions to reduce emissions, (Sep to Oct 2022)



Source: Business insights & conditions survey (BICS)

Scotland's Fair Work Performance

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

Source: Scottish Enterprise assessment of available data

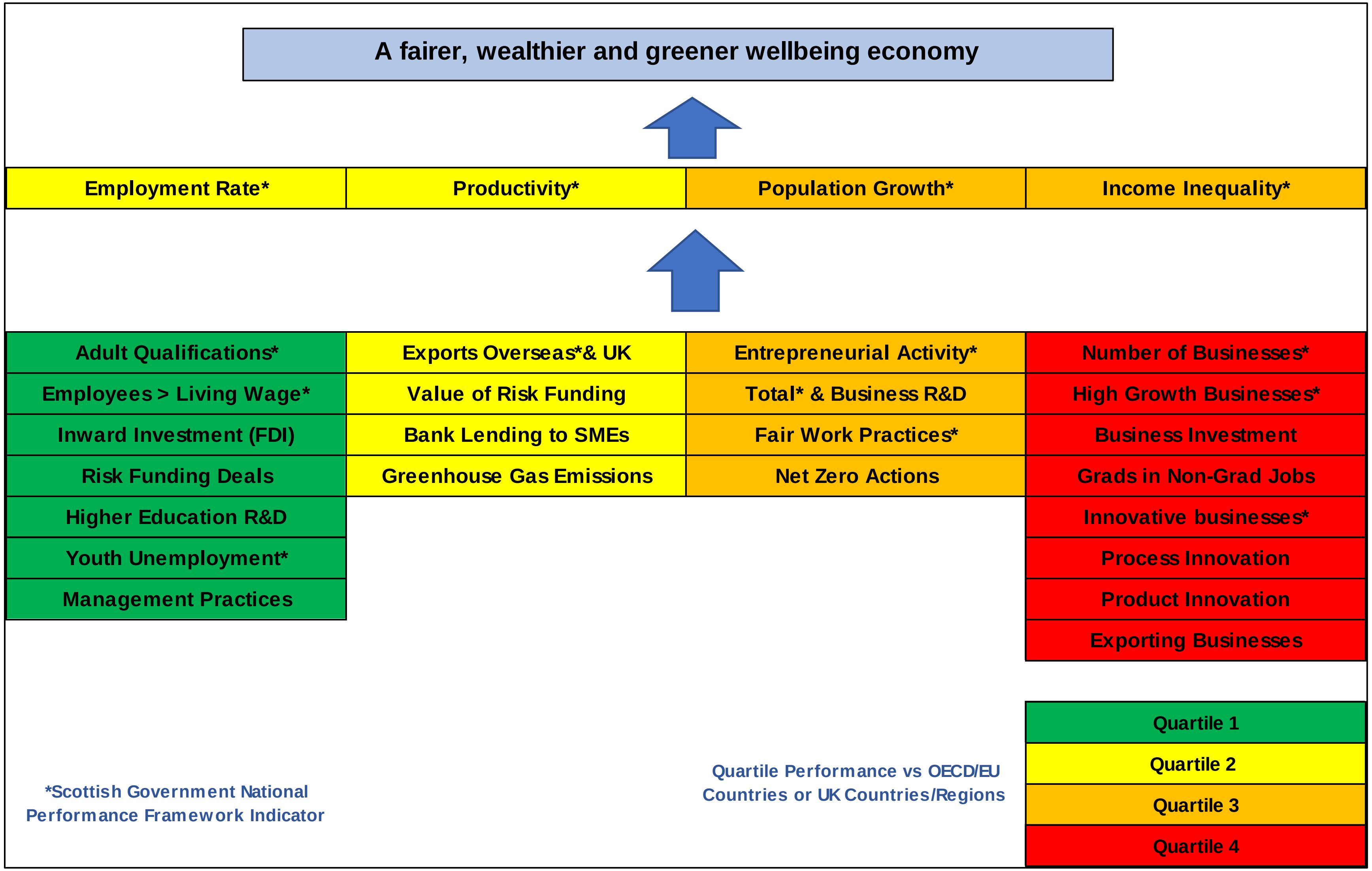
Innovation, Internationalisation & investment - lessons and evidence of 'what works'

Support activity	What works and learning (based on economic research and SE's appraisal and evaluation evidence base)
Supporting business R&D and innovation	• Funding support (e.g. grants) to help to de-risk R&D • Supporting businesses to access UK innovation funding programmes e.g Innovate UK. • Specialist and advisor support to help businesses that may lack skills and capacity.to deliver innovation projects • **Impacts:** R&D/innovation activity R&D jobs over the shorter term; business turnover/jobs growth after 5-7 years as innovation commercialised.
Innovation asset development e.g. innovation & research centres	• Capital funding support can help accelerate and increase partner leverage for asset development (buildings, machinery etc) • Important to ensure technology focus of research/innovation centres matches the innovation capacity of Scottish businesses and inward investors • **Impacts:** over the shorter term can be limited and can take a number of years to build (development of the asset, engaging businesses, successful commercialisation of innovation). As longer term impacts are unclear, robust monitoring and evaluation frameworks are important to assess progress.
Capital investment	• Funding support (e.g. grants) can help to de-risk capital investment, and attract investment to Scotland • Specialist and advisor support to help businesses develop better investment projects • **Impacts:** can deliver high impact over short term.
Growth investment/funding	• Co-investment models attract funders to Scotland, and increases the number and scale of risk funding deals • Alongside risk funding, importance of support and advice from specialists, including Account Managers and Growth Investment Portfolio Team • **Impacts:** lower over the shorter term, potentially higher over the medium longer term as businesses scale.
Early-stage entrepreneurship/ scaling	• Specialist advice to high-growth spinouts/scaling businesses • Funding support e.g. risk funding, grant support • Impacts: lower over the shorter term, potentially higher over the medium to longer term as businesses scale.
Exporting	• Supporting overseas events and trade missions, and in-market sector specialists to develop contacts/networks • Financial support to access markets • Specialist advice and knowledge to support management teams to develop strategies and capacity. • **Impacts:** high impacts over short-term.
Inward investment	• Supporting investors to make the case to their HQ for investing in Scotland • Financial support, especially where there is competition for a project from other locations • Support for property, recruitment, supply chain development and education links • **Impacts:** High impact over short-term (as average project size large).
Account Management model	• Benefits of combination of both AM expertise and support types above • **Impacts:** can deliver high impacts over the shorter term.

Note: many Scottish Enterprise projects receive **combinations of support**, so activities are often 'interlinked' (e.g. inward investors receiving innovation and capital investment support)

Scotland’s Economic Performance: Overview

Scotland's Economic Performance Dashboard, 2022



Source: Scottish Enterprise analysis of available data

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 nations and regions in terms of quartile rankings.