

# Scottish Enterprise Scotland's Economic Performance



# Our focus on economic transformation: the evidence base

Scottish Enterprise focuses on supporting transformative change in **innovation**, **international** and **investment** performance of 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.

Together, they will drive the changes needed to boost business sustainability and productivity and secure a wealthier, fairer and greener wellbeing economy. They are also the areas where Scottish Enterprise can make the biggest difference.

**This analytical paper sets out the key economic research and evidence** underpinning our focus on economic transformation, highlighting:

- Why innovation, internationalisation and investment are important.
- Scotland's recent economic performance – and the shifts needed to match the top performing economies.
- What works in supporting businesses and sectors to improve performance and deliver economic impacts based on insights, evaluation and research evidence.



**INNOVATION** is fundamental for a thriving economy and to tackle challenges in the business environment. Evidence shows that innovative businesses drive productivity growth, are more competitive and are three times more likely to successfully internationalise. Innovation also attracts research, talent, and investment, boosting Scotland's success and reputation in international markets – all helping to create better quality jobs that pay higher wages.



**INTERNATIONALISATION** is a key driver of productivity growth and will be a major contributor to Scotland's long-term economic prosperity. International success will reinforce Scotland's strong inward investment performance, strengthen our supply chains, enhance Scotland's innovation and capital expenditure. It will also increase Scottish exports and build Scotland's position as a magnet for talent - all of which creates more opportunities for Scotland's most ambitious businesses to grow.



**INVESTMENT** is essential for businesses to boost productivity, to remain competitive and to be resilient in the face of skills shortages and resource pressures. Capital investment is a critical driver of productivity, and Scotland's businesses have historically under-invested. We need to see a step change in levels of investment and productivity which in turn will create better quality jobs that pay higher wages.



# Innovation

Innovation is a key driver of productivity, business growth and resilience. Product and service innovation can help businesses create or enter new markets, and process innovation can improve efficiency and productivity. Innovation can also drive the creation of new, high growth sectors and businesses, and create good quality jobs.

Businesses that [innovate](#) have higher productivity, and on average grow twice as fast, both in employment and sales, than those that don't.. Also, innovative businesses more likely to pay [higher wages](#), are also more likely to [export](#).

Management and leadership capability is also important. Businesses adopting better [management practices](#) are significantly more likely to undertake R&D, and to have higher productivity.

The EU's [Regional Innovation Scoreboard](#) highlights that Scotland is a 'Strong Innovator' and just outside the top 30% of regions for innovation performance\*. The Scoreboard highlights Scotland's innovation strengths and challenges:

- **Strengths:** skills, tertiary education and university research
- **Challenges:** sales of innovative products, product innovation, design and trademark applications.

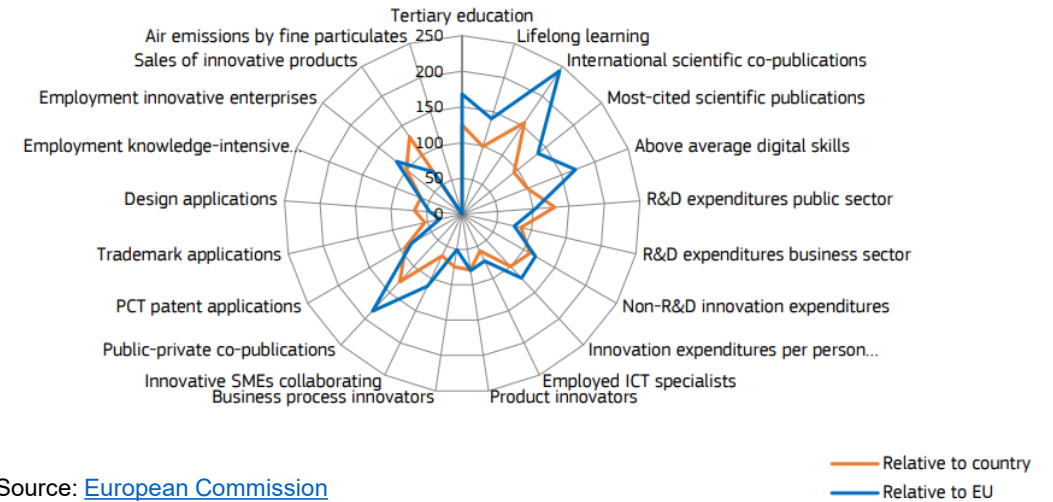
Scotland's [R&D performance](#) has improved in recent years and is relatively strong when compared to other countries. Overall R&D spend as a percentage of GDP (3%) was ranked in the top quartile of the OECD countries in 2021. Within this:

- **Higher education R&D** (1% of GDP) is the highest of all OECD economies
- **Business R&D** (1.9% of GDP) is ranked near the top of the second quartile of OECD economies, and above the EU average (although below UK performance).

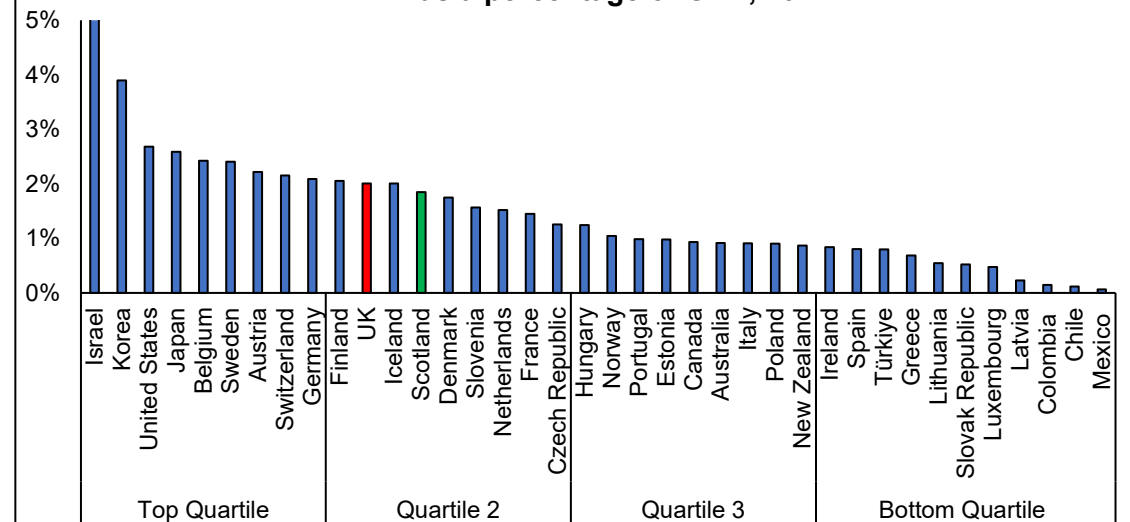
Scotland's annual business R&D investment would need to be £0.4bn higher (+13%) to match best performing economies.

\* The Scottish Government's Innovation Strategy [evidence paper](#) provides a more detailed assessment of Scotland's innovation performance

## EU Regional Innovation Scoreboard 2023 - Scotland



## BERD as a percentage of GDP, 2021



Source: [Scottish Government](#)



# Innovation

Business innovation (including activities such as developing new products/processes and new organisational practices as well as R&D) in Scotland is relatively low compared to other UK countries and regions (and OECD nations). [Over 2018-2020](#) just 39% of Scottish businesses (with 10+ employees) were 'innovation active', and just 22% were product or process innovators.

Although the innovation activity rate has increased since 2016-18 (+7 percentage points), this is still below 2012-14 performance. The reasons for the recent rise are unclear and may have been driven by businesses introducing new products, services and processes in response to the pandemic. This may be a trend Scotland can build on to stimulate business innovation further.

**Scotland would need 2,500 more businesses innovating (+22%) to match best performing EU regions.**

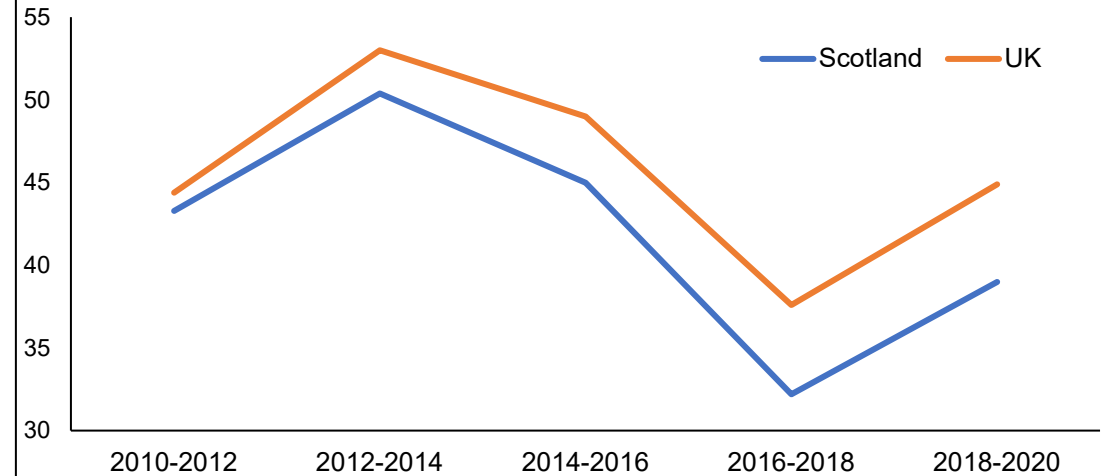
[Universities and research centres](#) can be important sources of knowledge and innovation for businesses and can help build innovative places and clusters. Around a third of Scotland's businesses that have innovation co-operation partnerships are working with universities, government or public research institutes – **a significantly higher rate than for the UK as a whole.**

Scotland's research base can be an [important factor](#) in attracting inward investors who typically invest more in R&D than domestic businesses. Inward investors can also stimulate domestic businesses to be more innovative through partnerships, supply chains and knowledge sharing.

[Barriers to innovation](#) include:

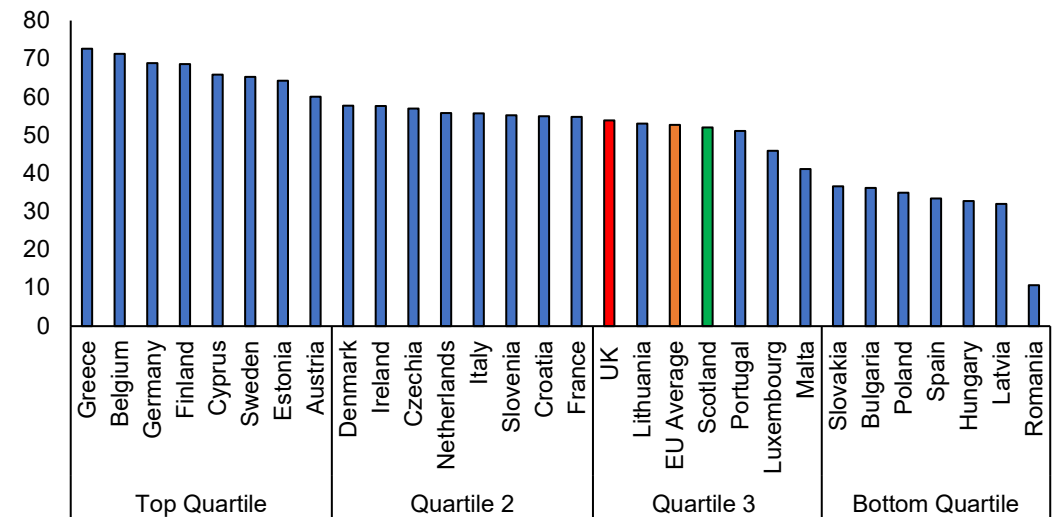
- risks of innovation
- cost of innovation
- availability of funding
- lack of skilled staff
- uncertainty over demand for innovative goods/services

**% of Scottish Businesses (with 10+ employees) that are Innovation Active**



Source: [UK Innovation Survey](#)

**% Share of Businesses that are Innovation Active (2018-2020)**



Source: Eurostat, UK Government and Scottish Government



# Increasing innovation – what works

SE's evaluation and research highlights the following examples of 'what works' and the benefits of innovation support.

## Innovation Specialist Support

- Providing [specialist advice](#) to businesses that may lack skills and capacity to develop and deliver innovation projects
- Specialist and advisor support to help businesses develop innovation funding proposals e.g. SE funds and UK and European [innovation funding programmes](#) (Innovate UK, EU Horizon, etc.)
- Linking innovation specialist support to internationalisation support, so that companies develop the right products for the right overseas markets

## Innovation Funding

- Funding can support innovation projects to [happen faster](#) and/or at a bigger scale
- Funding support, including [grants](#), loans and equity investment, helps de-risk R&D and offsets high R&D costs, providing greater certainty, leading to increased investment by businesses
- Innovation funding can also help [attract inward investment](#) to Scotland

## Innovation networking

- Using [international networks](#) to find collaboration partners to undertake innovation

## Innovation & Research Centres

- Capital funding support for research centres accelerates and increases partner leverage for research centre development (buildings, machinery etc)
- Research centres can help [attract inward investment](#) to Scotland.
- University/public sector research centres are an important [innovation partner](#) for businesses. They provide access to facilities, such as machinery and testing equipment, staff expertise and collaboration opportunities that businesses may not have the resources or incentive to invest in themselves
- [Engaging with universities](#) to access expertise/knowledge boosts business innovation activity and [employment and turnover growth](#) by helping innovation happen at a bigger scale and faster, and by supporting commercialisation
- The economic benefits of research centre development and activity typically take a number of years to achieve (e.g. 3 yrs +) due to the time required to build the asset, engage businesses and support successful commercialisation of innovation benefits

## Over 2022/23 Scottish Enterprise supported:

- almost 340 businesses and partner projects that are expected to deliver £320m of future R&D and innovation investment.



# International

Inward investors (from overseas or the rest of the UK) on average have higher productivity, pay higher wages and are more likely to invest in R&D. Overall, [inward investors employ](#) around 680,000 workers directly across Scotland.

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

- offering supply chain opportunities for Scottish businesses
- knowledge sharing with domestic businesses that can [boost their productivity](#)
- raising Scotland’s profile internationally.

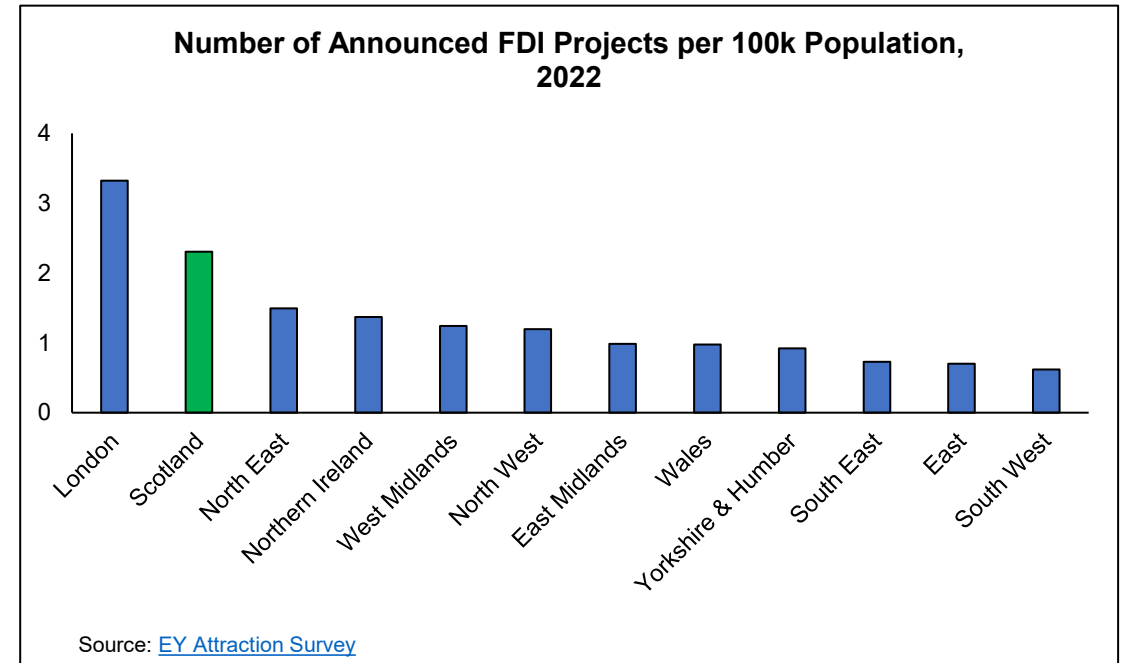
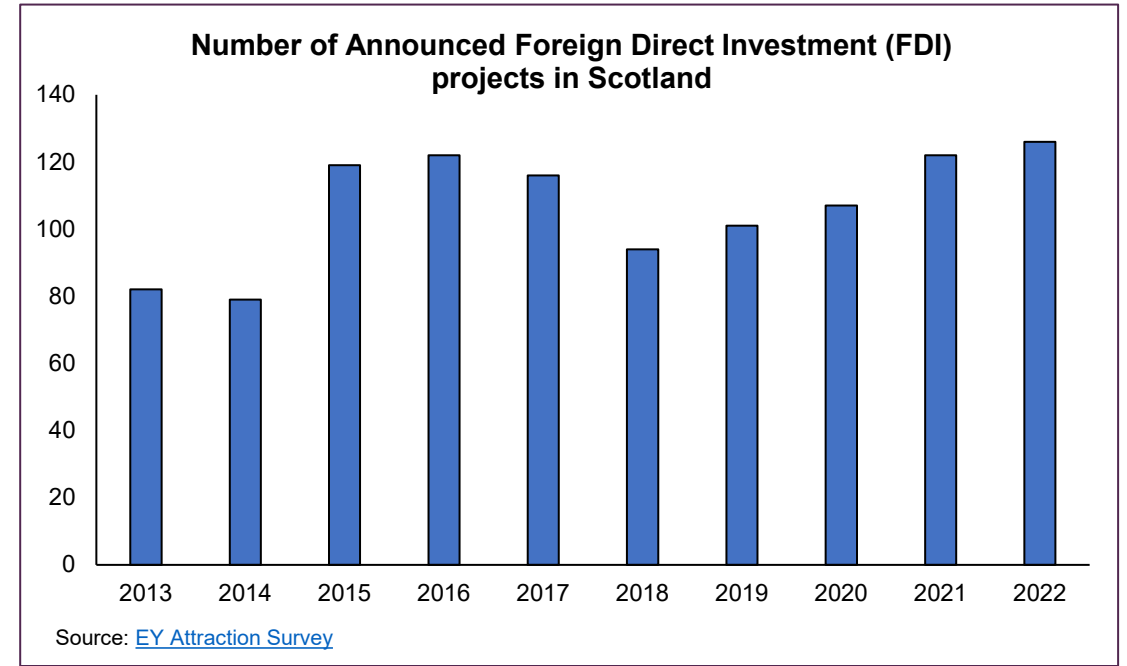
Ernst & Young’s Attractiveness Survey reports Scotland as the [second most attractive](#) nation and region in the UK (after London) for foreign direct investment (FDI). 126 FDI projects were attracted in 2022 (14% of all UK projects). Scotland’s top FDI sectors in 2022 were digital technology, utility supply and business services. Three Scottish cities were in the UK top 10 for FDI projects – Edinburgh (2<sup>nd</sup>), Glasgow (4<sup>th</sup>), Aberdeen (8<sup>th</sup>).

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 projects – and areas of strength for Scotland.

SDI’s Annual Inward Investment Results 2022/23 confirmed over [8,500 planned RLW jobs](#) from 86 supported projects, 24 of which were from Rest of the UK headquartered companies.

Attracting and retaining highly skilled international talent, entrepreneurs and early-stage businesses can help create more scaling businesses in Scotland. For example:

- 47% of [scaling businesses](#) employ staff from the EU, and 36% from outside of the EU – and half say it’s vital/very important they can continue employ international talent.
- for around one in five scaleups, a quarter or more of their staff come from outside the UK.





# International

Accessing international markets offers opportunities for Scottish businesses to grow. Exporters tend (and need) to be [more innovative](#) than non-exporters, have higher levels of productivity ([by on average 21%](#)), and [grow faster](#).

It's [estimated](#) that exporting supports 470,000 jobs in Scotland, directly and indirectly through supply chains and other multipliers.

Exports though are relatively [concentrated](#), with three sectors (food & drink, petroleum/chemicals, professional/scientific services) accounting for over 40%.

The [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 exports to reach 25% of GDP by 2029.

**International exports would need to rise by +£8bn (+23%) to equal 25% of GDP.**

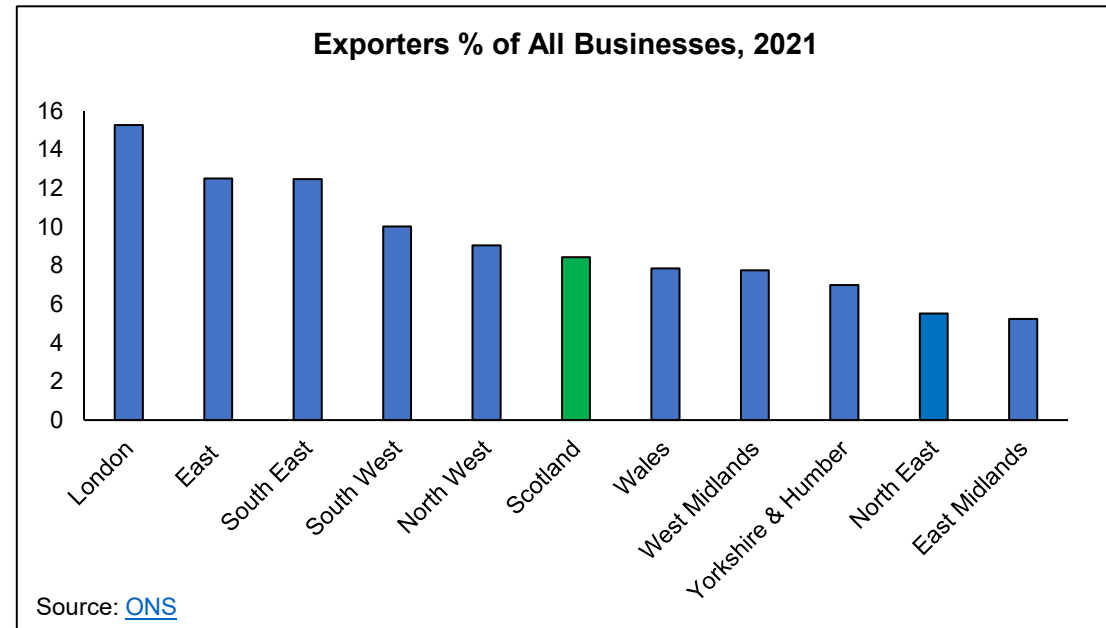
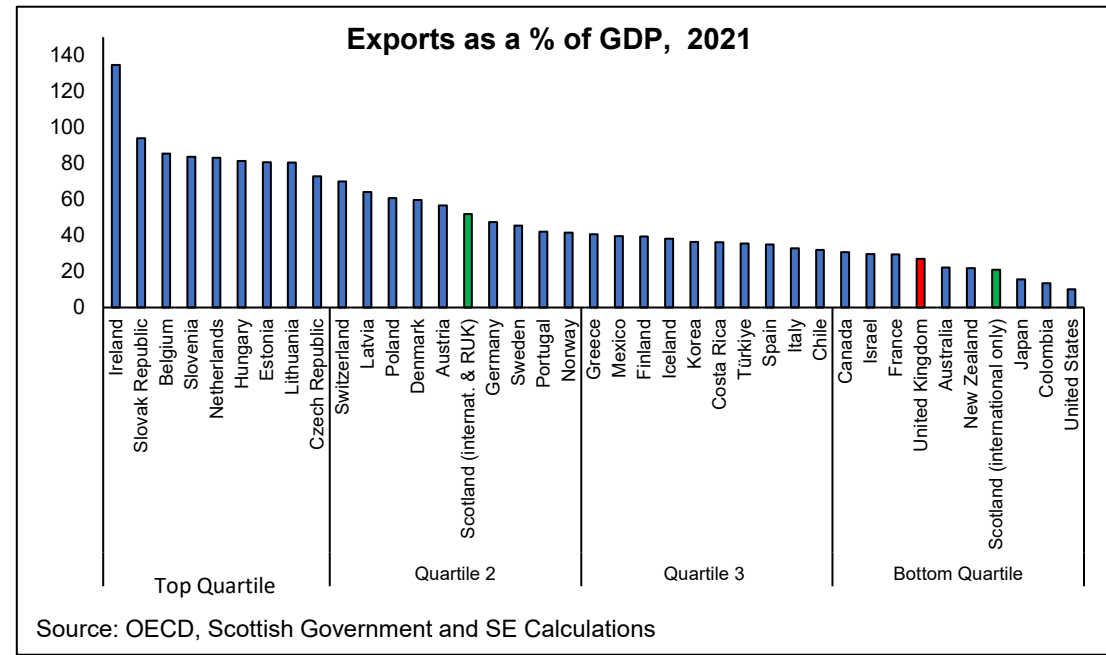
The proportion of businesses in Scotland that [export](#) overseas has gradually risen since 2017 (with the exception of 2020), but lags many UK regions. Just 8.4% (14,800) sold internationally in 2021.

[16% of non-exporters](#) have sold overseas in the past, or believe that they may have goods and/or services suitable for exporting. This suggests Scotland has around 17,000 potential exporters.

Access to international networks, such as [GlobalScot](#) can be important for exporting, for example through learning from the experiences and knowledge of [business peers](#).

### [Barriers to exporting](#) include:

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





# Increasing internationalisation – what works

SE's evaluation and research highlights the following examples of 'what works' and the benefits of internationalisation support.

## Attracting Inward Investment:

Inward investors highlight [a range of support](#) that is important for investment decisions:

- Events promoting Scotland
- Organising visits to Scotland
- Assisting investors to develop projects, including property advice, recruitment, supply chain development.
- Signposting to other specialist advice and resources
- Supporting links with suppliers
- Supporting links with universities to access skills and knowledge
- Financial assistance, including [grants](#), plays an important role of funding support in attracting some inward investment projects:
  - the availability of grant support is as a key differentiator when potential inward investors compare the Scottish offer with alternatives.
  - without grant support, some projects would not have come to Scotland, and others would not have happened as fast or to the same scale

As well as directly creating jobs, inward investors also deliver [spillover benefits](#) to other Scottish businesses via supply chains and knowledge transfer.

## International Trade

- Support to meet businesses' export needs [structured around](#):
  - Awareness raising of export opportunities
  - Building export capacity
  - Supporting businesses to exploit opportunities.
- Businesses value a [bespoke and flexible](#) support delivery approach, and that it can be phased over time, including:
  - 1-2-1 specialist support to assist the development of export strategies and the execution of export plans
  - Advisory support that is Scotland-based as well as in-market via SDI field offices
  - Grant funding to support international growth
  - Access to wider SE support and services e.g. innovation
  - Linking to [GlobalScots](#) who provide key independent in-Scotland and in-market insights/advice on exporting
  - Signposting to partner support
- Prioritisation is given to key markets and key geographies that can offer the biggest export opportunities, and SE works with industry to jointly develop sector wide export plans

## In 2022/23, Scottish Enterprise supported:

- **almost 80 inward investment projects that are expected to safeguard/create over 8,300 jobs\***
- **over 580 businesses with export and growth plans that are expected to achieve £1.7bn of overseas export sales**

\* Excluding inward investment projects supported by Highlands & Islands Enterprise & South of Scotland Enterprise





# Investment

[Investment](#) is key to creating good-quality, well-paid jobs, driving innovation and technological progress, and economic stability. And the UK's (and Scotland's) recent weak productivity performance is due in part to [low capital investment](#).

As well as machinery, equipment and premises, investing in digital technologies is important in driving business performance. Over 70% of businesses [report](#) that digital technology investment boosted productivity, and other benefits include increased innovation, exporting and a shift to low carbon working.

However, Scotland's business capital investment rate lags nearly all OECD economies, resulting in a [lower capital stock](#) per worker than many other European regions, impacting on productivity and job quality. In turn, this can affect the ability to effectively innovate.

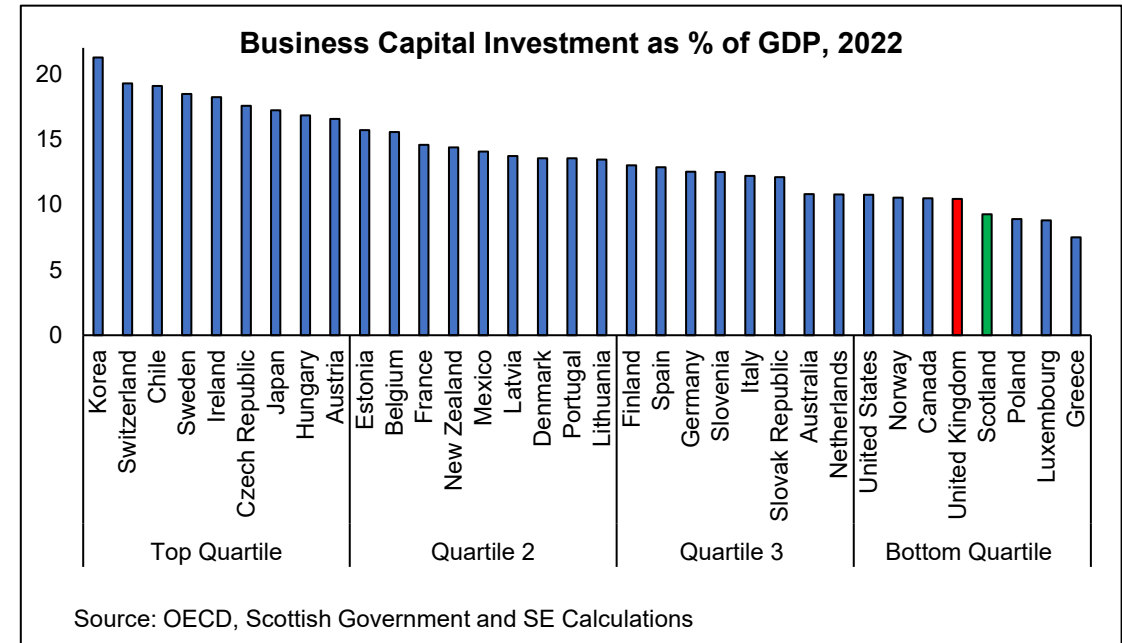
**Annual business capital investment in Scotland would need to rise by £14bn (+80%) to match best performing economies.**

Business investment in suitable workplaces and machinery/equipment can help increase efficiency and reduce emissions, supporting net zero ambitions. Good quality workplaces can also help businesses attract and retain staff, and boost employee wellbeing, in turn increasing productivity.

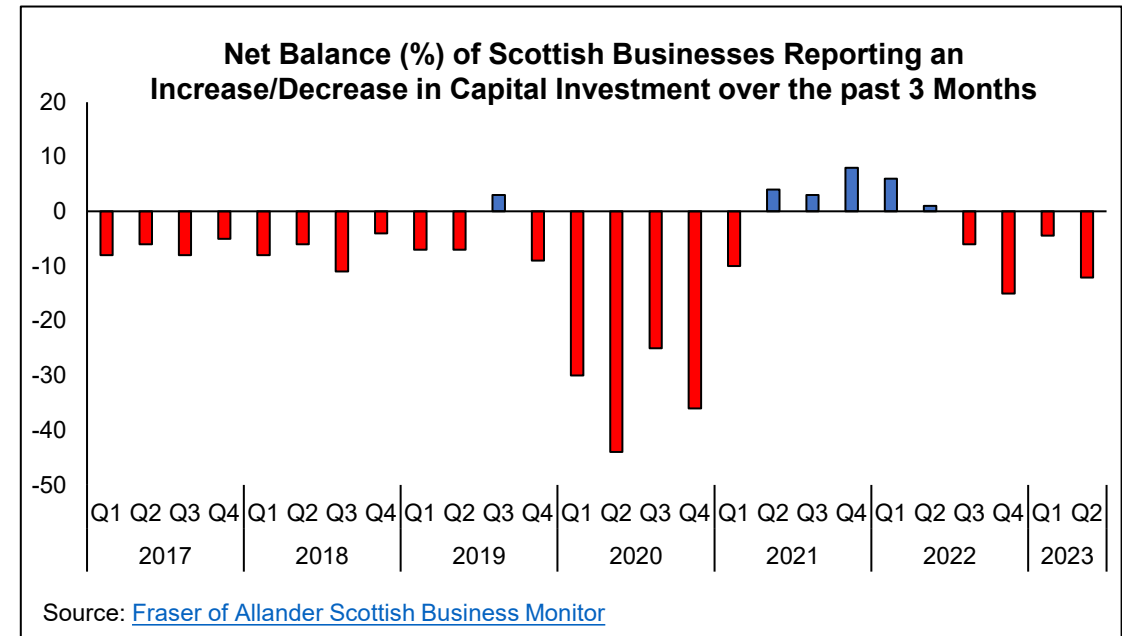
Low business investment performance is a [longstanding challenge](#). Since 2017, the net balance of Scottish businesses reporting an increase in capital investment has been positive (i.e. more businesses increasing rather than decreasing investment) in just 6 out of 26 quarters.

[Barriers](#) to capital investment include:

- availability and cost of funding
- risk aversion
- uncertainty about returns on investment.



Source: OECD, Scottish Government and SE Calculations



Source: [Fraser of Allander Scottish Business Monitor](#)



# Investment

As well as needing more businesses, Scotland needs to increase the number that achieve high growth (having at least 10 employees and growing turnover or employees by 20%+ per year over three years). [High growth, scaling businesses](#) are more likely to be innovative and exporters, and are, on average, significantly more productive (60%+) than other businesses. Scaleups accounted for just 0.5% of Scottish SMEs in 2021, but generated one third of the total SME turnover, contributing £36 billion to the Scottish economy.

**Scotland would need 160 more high growth businesses (+25%) to match best performing UK nations and regions.**

Around 30% of scaling businesses are [early stage](#) (less than 10 years old), and availability of risk capital, and the knowledge and networks of funders, can be key to their success. Almost half of scaling businesses highlight that access to the [right type of finance](#) is key to growth, and 35% are using, or plan to use, equity finance. And businesses in higher turnover or employment growth bands are more likely to be [equity backed](#) than those experiencing lower growth

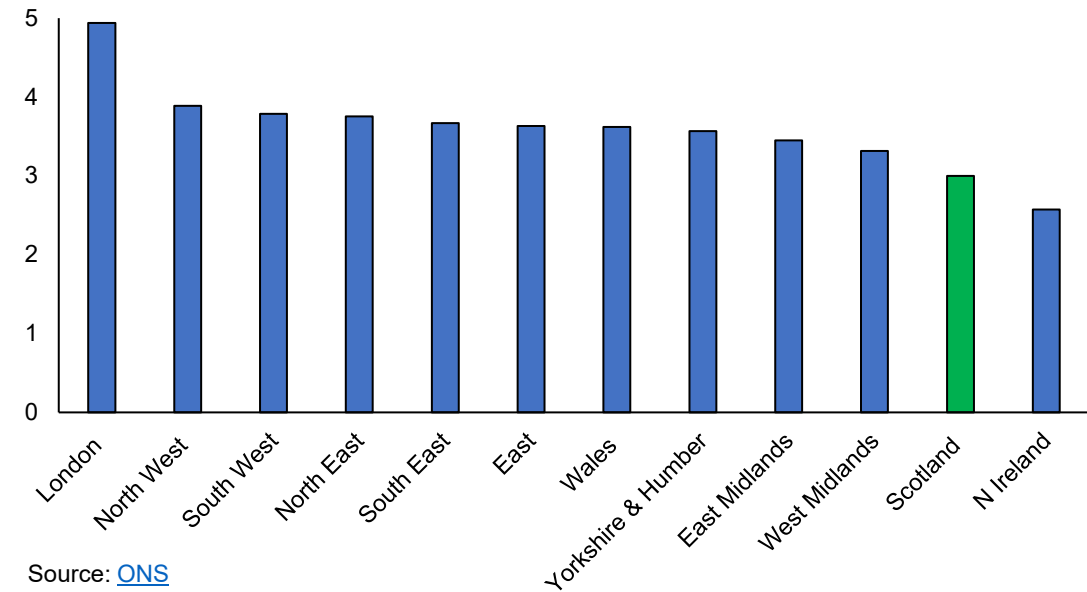
In 2022 there was a [record £953m equity raised](#) across 407 deals in Scotland, including three large deals (combined value of £315m). This is in the context of a UK market where deteriorating investor sentiment contributed to a fall in investment in 2022 and 2023.

[Barriers](#) to accessing risk capital include:

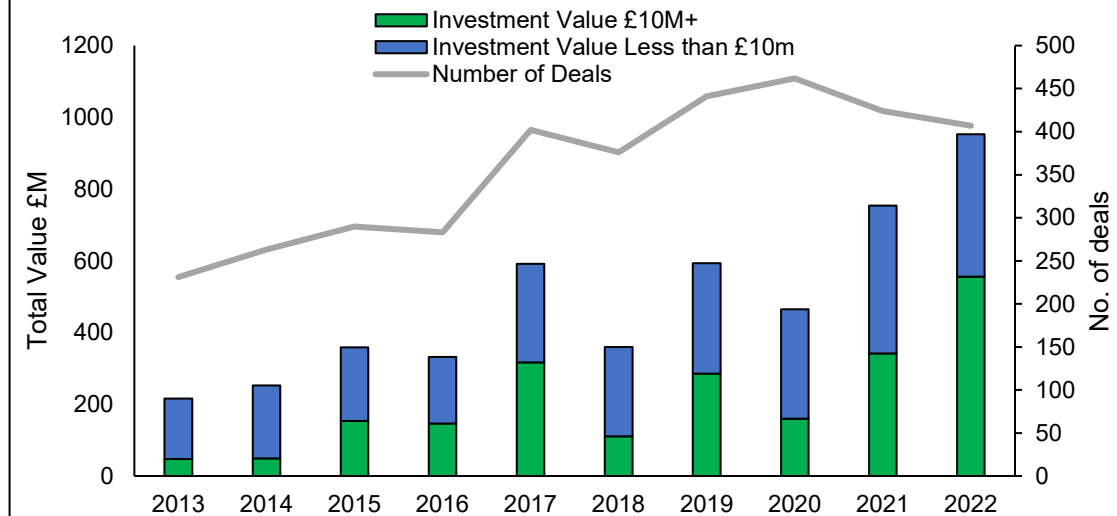
- Investors increasingly focusing on existing portfolios and favouring later stage and lower risk deals
- Reduced valuations and less exits putting pressure on investors to return value (fewer new to equity and mega £100m deals)
- Challenging global and UK market conditions making it significantly harder for companies to raise growth finance.

The Scottish risk funding market was at the top of the second quartile of UK nations/regions for number and value of deals, making it the next best performing market after the 'Golden Triangle' (London, South-East & East of England) which dominates the UK market.

### % of Businesses that Achieve High Growth (Scaling), 2021



### Scotland Equity Risk Funding Deal Numbers and Investment Value





# Increasing Investment – what works

SE's evaluation and research highlights the following examples of 'what works' and the benefits of investment support.

## Growth investment & funding

- High growth start-up support that develops a pipe-line of attractive investment opportunities for early and later stage investors (including international)
- As global investor caution has grown, Scottish Enterprise can meet increased demand for early-stage gap funding and support
- Scottish Enterprise [co-investment funding](#) that has a catalytic and positive impact by increasing supply of scarce capital alongside a diverse base of private investors
- Provision of [early-stage patient equity investment](#) is critical to the progression of technologically innovative businesses with potential to scale
- Adding value to investee companies through dedicated portfolio management and access to tailored and specialist growth support services, for example innovation and exporting support
- Assisting companies to be better prepared to access funding by providing [financial readiness support](#)
- Supporting investee companies to embed and progress [Fair Work](#) and [Net Zero](#) practices that can help businesses be attractive to investors

## Supporting business & capital investment

- [Funding support](#) helps de-risk capital investment, and attracts inward investment to Scotland
- Funding support for capital investment can also deliver significant [job creation](#)
- Specialist and advisor support helps businesses develop better investment projects
- Investing alongside partners to build strategic growth assets such as innovation and research centres

## Supporting businesses to scale

- Specialist scale-up advisory support
- Accessing growth finance, especially equity risk funding
- Innovation support helps businesses develop and bring new goods and services to market
- Support to enter international market

## In 2022/23, Scottish Enterprise supported:

- almost 200 business and partnership projects that are expected to deliver £620m of future capital investment
- almost 330 businesses to raise over £350m of growth funding, including 138 equity and debt deals.



# Scottish Enterprise missions: delivering transformative outcomes

Scottish Enterprise is adopting a mission-based approach to deliver our strategic objectives, with a sustained focus over time on opportunities that will drive up levels of innovation, internationalisation and investment. Three missions have been identified where evidence shows there is the significant potential to transform Scotland's economy, and where SE has the core innovation, international and investment capabilities and resources to make the greatest difference. The economic potential of these missions are highlighted below:

## Energy transition

The Scottish Government's [Energy Strategy and Just Transition Plan](#) identifies significant potential economic impacts of the transition to cleaner energy generation and use:

- **ScotWind:** targeting £28bn of potential Scottish economic activity in Offshore Wind (£1 billion of investment for every gigawatt of capacity built) could support up to 14,400 full time equivalent jobs by 2030.
- **Hydrogen economy:** could support/create between 70,000 and 300,000+ jobs and £5bn- £25bn GVA by 2045
- **Just Transition:** increase number of low carbon jobs in energy from 19,000 to 77,000 by 2050
- **Green heat:** generating almost 16,400 additional jobs by 2030
- **Carbon Capture Utilisation & Storage (CCUS)** could support an average of 15,000 jobs between 2022-2050, with a peak of 20,600 jobs in 2030. In 2045 Scottish GDP could be 1.3-2.3% (£3.8 bn-£6.7bn) higher in scenarios with CCUS, than without.

## Scaling innovation and building high growth industries of the future

Scaling businesses are an important driver of economic growth. They are on average more productive, innovative and international.

Five industries of the future have been identified, using an evidence-based approach, where Scotland has - or will have - international competitive advantage and the ability to grow to scale.

The growth opportunity and potential by 2030 for these are:

- Space:** +6,000 jobs (+480%) and £4bn turnover (+£3.8bn).
- Photonics and Quantum Technologies:** +7,000 (+100%) and £3bn turnover (+£1.7bn).
- Industrial Biotechnology:** +3,000 (+100%) jobs and £1.8bn turnover (+£1.1bn).
- Life Science (Human Health):** 26,500 (120%) and £10.6bn turnover (+£5.7bn).
- Fintech:** +20,800 jobs (+245%) and £2.1bn turnover (+£1.5bn).

## Capital investment to drive productivity

Scotland has been mid-ranking internationally for productivity for over 10 years, with performance near the bottom of the second quartile of OECD countries. The majority of Scotland's businesses are clustered at low levels of productivity.

Increasing productivity can boost output and earnings. If Scottish productivity matched the OECD top quartile today:

- the size of the economy would be over 20% larger (+£35bn)
- and annual average wages could be £2,000 (+5%) to £5,500 (+15%) higher.

Higher capital investment can help businesses and sectors achieve a step change in productivity, competitiveness and resilience – and create better quality jobs.

Scotland lags nearly all other economies for business capital investment, a key driver of productivity.

Scotland's business capital investment would need to be £3bn a year higher to reach the rate of the OECD third quartile.