The CBI/KPMG Scottish Productivity Index

2021 update

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Contents

Foreword KPMG

Tracking Scotland's productivity is a vitally important task. It provides valuable insight into our nation's health from several perspectives and gives us indications where we must improve.

Productivity is fundamental to how much we earn; how fast wages grow and the quality of our essential public services. Weak productivity growth undermines Scotland's potential, constrains our competitiveness and impacts Scottish business' ability to grow.

Collectively, we must strive to consistently improve Scotland's productivity. Doing so has major benefits for everyone who lives in Scotland, the businesses which operate here, and the generations still to come.

I'm delighted to have been involved once again this year to produce the Index in collaboration with CBI Scotland and our research partners.

What makes this year's Index different?

This year's Index provides a clear temperature read of Scotland's productivity at a time when policy makers and businesses are collectively keen to ensure that Scotland recovers well from the global pandemic. With much of the data recorded in 2020, this Index provides a holistic picture of Scotland's productivity during a period of sustained economic and social disruption due to the pandemic.

After this extraordinarily difficult period, Scotland will emerge to a new world of opportunity, with many businesses keen to shift their focus from resilience and survival to growth once more. To ensure that growth can happen, this Index includes recommendations for businesses and policy makers to take forward to make practical changes.

Improving productivity cannot be achieved overnight, which is why this annual Index provides reliable evidence tracked over time, to ensure decision makers have the information they need to make informed decisions for the long-term.

The Index is based on a wealth of data produced by the Fraser of Allander Institute and is supplemented by the valuable real-world insights of the Business Advisory Group (BAG). I would like to thank all members of the group for their contribution, as well as the many other organisations and individuals who provided further insight and experience to inform the 2021 Scottish Productivity Index. The Index and its recommendations are solely the responsibility of CBI and KPMG.

What does this year's Index tell us?

We need to make the most of Scotland's strengths, including the high numbers of university graduates, a thriving early-stage entrepreneurial scene and a growing share of R&D spending by businesses. And we need to make progress in areas where we lag seriously behind: particularly business investment; exports; and in-work training.

We recognise that many sectors have had to contend with unfathomable operating conditions in recent years, and that many have performed well and remained resilient. We also recognise that the Scottish and UK governments are taking direct measures to address some of the issues where more work needs to be done.

What can we do to improve productivity?

Our work on the Index sets out a series of recommendations both for individual businesses and for the UK and Scottish governments. We have looked at what is working already; where good practice needs to be spread more widely; and where the barriers to progress lie and how to address them.

Our recommendations aim to shine a light on best practices and export these quickly to other businesses and sectors with the aim of improving productivity. There are a range of detailed recommendations in our report on business investment; tax policy; digital connectivity; improving the skills gap, boosting connectivity and mental health.

Both policy makers and businesses of all sizes will benefit from the breadth and practicality of this Index, and I trust it will be useful as we all work to increase Scotland's productivity for the benefit of everyone.

James Kergon
Senior Partner, KPMG Scotland

Overview of the 2021 Productivity Index

What is the Scottish Productivity Index?

CBI Scotland and KPMG developed the annual Scottish Productivity Index in 2019, with research partners the Fraser of Allander Institute and the Diffley Partnership. The Index tracks Scotland's performance across 15 indicators in a productivity dashboard, based on a yearly update of publicly available data. The data is supplemented by qualitative, real-world insights from a Business Advisory Group (BAG) – allowing us to make evidence-based recommendations for policy makers and businesses, with the aim of improving productivity.

The 2021 report provides an update on the previous publications, outlining the latest data and making new recommendations for action based on the latest evidence available.

Why was the Index established?

Improving Scotland's productivity performance is a long-term challenge. It remains the only sustainable way of increasing wages and ultimately improving living standards. While the impact of the pandemic over the last two years has changed the economic landscape, it has made the importance of improving productivity and generating a strong and growing economy even greater.

The aim of the Index is to break down the concept of productivity into meaningful indicators and track Scotland's performance in areas that affect overall productivity. There is no silver bullet to improve Scotland's productivity performance and progress requires a collaborative effort between business and government. The Index aims to make a constructive, evidence-based contribution to the debate on what actions both government and business can take to boost productivity.

How does the Index measure productivity?

The productivity dashboard outlines the latest data available on Scotland's productivity performance for 15 indicators, across four areas:

1. Business practices
2. Skills and training
3. Health and wellbeing
4. Infrastructure and connectivity.

The 15 productivity indicators are not intended to be an exhaustive list but have remained consistent through each iteration of the Scottish Productivity Index to allow us to track Scotland's performance over time.

The dashboard assigns a red, amber or green (RAG) rating to each indicator to show how the latest data for Scotland compares to other parts of the UK and internationally, whether it has improved since the last publication, and what the long-term trend is.

This is accompanied by a short summary of insight and analysis drawing on evidence from the indicators and gathered through the BAG meetings. Alongside one-to-one conversations with other employers and broader CBI research, these are used to inform the development of practical recommendations for business and government to help improve productivity performance.

Due to the timing of data availability covering 2020-21, many of the metrics in the dashboard do not yet reflect the full impact of the COVID-19 pandemic on productivity performance, meaning the BAG discussions added important real-time insights to the 2021 Productivity Index. The Index attempts to keep a focus on long-term trends impacting productivity, while acknowledging the impact of the COVID-19 pandemic and the potential it will lead to longer-term shifts in some of the areas currently tracked in the productivity dashboard.

The Productivity Dashboard explained

The three RAG ratings shown for each indicator in the dashboard are designed to capture:

- the comparison with other parts of the UK and internationally using the latest data, where comparators are available *(How does Scotland compare?)*
- the change relative to the last data point *(Are we improving in the short-term?)*
- the change over time *(Are we improving in the long-term?)*

Methodology

The findings and recommendations outlined in this report are informed by the quantitative data outlined in the dashboard and the qualitative insights from the Business Advisory Group, the Fraser of Allander Institute and one-to-one conversations with other businesses and organisations. It is supplemented by desktop research and broader CBI policy development in areas related to productivity.

2021 Productivity Dashboard

2021 Productivity Dashboard	Latest Performance	Benchmark: how does Scotland compare?	Short-term trend: are we improving?	Long-term trend: are we improving?	Notes
Business practices					
1. **Business investment** as a percentage of GDP	7.4% (2020)	🔴	🔴	🔴	Business investment as a share of Scottish GDP contracted by 1.2-percentage points in 2020, meaning Scotland's performance is now below its long-run average of 7.7%.
2. **Exports** as a percentage of GDP	19.1% (2020)	🔴	🔴	🔴	Exports as a share of Scottish GDP fell from 20.2% in 2019 to 19.1% in 2020; a 1.1-percentage point contraction.
3. **Business R&D spend** as a percentage of GDP	0.84% (2019)	🔴	🟡	🟢	Business expenditure on R&D as a share of GDP in Scotland increased marginally from 0.83% in 2018 to 0.84% in 2019.
4. Percentage of **innovation-active** businesses	32% (2016-18)	🔴	🔴	🔴	Scotland experienced the greatest fall across UK nations, from 45% in 2014-16 to 32% in 2016-18.
5. Total **early-stage entrepreneurial** activity[1]	7.3% (2020)	🟡	🟡	🟢	The latest year (2020) sees a marginal increase of 0.1-percentage points in Scotland's Total early-stage Entrepreneurial Activity (TEA). After a significant fall of almost 3-percentage points in England, there is now no significant difference between UK nations for this indicator.
Skills and training					
6. Percentage of working age population with **Higher Education Certificate** or above	49% (2020)	🟢	🟢	🟢	The latest data shows a rise on the previous year, with Scotland continuing to have the highest share of its working age population with NVQ 4+ qualifications in the UK.
7. Percentage of workforce in **job-related training** in past 3 months	23% (2020)	🟡	🟡	🔴	The latest data (2020) shows this indicator has decreased again for Scotland, although this year-on-year change is not statistically significant.
8. Percentage of employers with **skill shortage vacancies**[2]	3% (2020)	⚪	🟢	⚪	In 2020, this indicator improved (down from 6% in 2017).[3] However, this data does not reflect the current impact of skills and labour shortages across the economy.
9. Percentage of employers with **underutilised staff**[4]	33% (2020)	⚪	🟢	⚪	The latest data (2020) highlights that this measure has improved for Scotland – down from 35% in 2017.[5]
Health and wellbeing					
10. Percentage of hours lost due to **sickness absence**	2% (2020)	🔴	🟡	🟢	Despite experiencing no significant change in this indicator in the period 2019–2020, Scotland continues to have the second highest sickness absence rate in the UK. Over the past decade, sickness absence in Scotland is just under 1-percentage point lower than the period 1995-2009, meaning the long-term trend is positive.
11. Percentage of economic inactivity due to **long-term ill health**	29% (2020)	🔴	🟡	🟢	The latest data (2020) shows that there has not been a statistically significant change since 2019 for Scotland. While there have been longer-term improvements – albeit slow improvements in recent years – Scotland's rate is above the UK average of 24%.
Infrastructure and connectivity					
12. Average **internet speeds** in Scotland	Mean download & upload speed (58.6 & 12.0 Mbps) (Q3 2021)	🔴	🟡	🟢	Scotland's average download speed is down by 1.1 Mbps on the previous quarter (Q2 2021), and its average upload speed is up 0.3 Mbps. Overall speeds continue to lag the UK average.
13. Percentage of premises with access to **full fibre broadband**	20% (Jan 2021)	🔴	🟢	🟢	The latest data for January 2021 shows there has been an increase of 7-percentage points since May 2020 and 3-percentage points since September 2020. Scotland is 1-percentage point below the UK average of 21%.
14. **4G Mobile** coverage	44% (Jan 2021)	🔴	🟡	🟢	The latest data for January 2021 indicates a 1-percentage point rise in this measure since May 2020 for Scotland. However, Scotland and Wales (60%) continue to drag the UK average (69%) down, with England (84%) and Northern Ireland (79%) significantly ahead.
15. **Travel to work** time	26 mins (2019)	🟢	🟡	🔴	The latest data (2019) shows that Scotland has a shorter travel to work time than the GB average of 30 minutes, which is significantly skewed by London. Commute time in Scotland has decreased marginally since 2018.

Business practices

	Latest Performance	Benchmark	Short-term trend	Long-term trend
1. **Business Investment** as a % of GDP	7.4%	🔴	🔴	🔴
2. **Exports** as a percentage of GDP	19.1%	🔴	🔴	🔴
3. **Business R&D spend** as a percentage of GDP	0.84%	🔴	🟡	🟢
4. Percentage of **innovation-active** businesses	32%	🔴	🔴	🔴
5. Total **early-stage entrepreneurial** activity	7.3%	🟡	🟡	🟢

Insight and analysis

Business investment as a share of Scottish GDP contracted by 1.2-percentage points in 2020, meaning Scotland's performance against this indicator is now below the long-term trend. Business investment has fallen across the UK over the period 2019-20, with Scotland lagging the UK as a whole.

Scotland and the UK already suffered from stubbornly low levels of investment before the pandemic, trailing many of our international peers. With many businesses still lacking confidence, the investment outlook is uncertain.

The latest Fraser of Allander Scottish Business Monitor for Q3 2021 shows a net 47% of Scottish businesses experienced an increase in the volume of business in the past three months. 48% expect their volume of business to be higher in the coming 6 months – a level of optimism that has remained unchanged since the previous quarter. Experience in recent years suggests businesses may prioritise investment in labour rather than capital.[6]

The BAG discussions and wider engagement with employers reflected what is shown in the data – businesses have been conservative in their investment because of the pandemic and placed a greater emphasis than usual on preserving cash levels.

The BAG meetings also highlighted a sense of cautious optimism regarding future investment. There is a significant amount of money waiting to be invested, with UK corporate cash reserves over £900bn.[7] However, discussions with firms across a range of sectors highlighted that for a considerable share of that to be invested in Scotland and across the UK, governments at all levels must create a smarter tax environment that rewards investment. From non-domestic rates to the role of regulators, employers are clear that government can and must do more to stimulate investment, which will be key to improving productivity and securing a long-term, sustainable economic recovery. Further details are highlighted in the recommendations below.

Exports as a share of Scottish GDP fell from 20.2% in 2019 to 19.1% in 2020; a 1.1-percentage point contraction. Scotland continues to lag the UK (27.4%) on this indicator and with the decline between 2019 and 2020, is now also falling below its long-term trend (since 1998).

Global trade contracted sharply at the start of the pandemic. Trade in goods recovered back to pre-pandemic levels by the end of 2020, but trade in services continued to perform below pre-pandemic levels in the Spring of 2021.

The end of the Brexit transition period appears to have had an even sharper month-on-month effect on UK trade with the EU than the pandemic did. In April 2020, UK exports to the EU stood at just 75% of pre-pandemic (February 2020) levels. However, the contraction in exports was even sharper in January 2021 when UK exports to the EU fell to under 60% of pre-pandemic levels.[8]

Given that the share of exports going to the EU is higher in Scotland than in the UK overall, trade in Scotland has likely been impacted more significantly from leaving the EU. Despite a quick rebound from the initial decline seen in January 2021,[9] around six months after the end of the transition period, a considerable share of businesses were still incurring extra costs due to trade frictions. 17% of Scottish businesses faced increased transportation costs, 15% experienced additional costs due to increased red tape and 11% incurred higher costs due to extra tariffs or taxes.[10]

As the economy emerges from the pandemic, seizing opportunities in international markets will be crucial to supporting growth across Scotland. Companies are grappling with short-term challenges, but if government and business can navigate those issues and identify new sources of growth and revenue worldwide, the economic recovery will be quicker and stronger.

Companies that export tend to be more competitive, more profitable, more innovative and more productive than those that do not.[11] However, Scotland remains heavily dependent on a small number of firms and sectors for exports.

The latest available data shows the manufacture of food and beverages is Scotland's top international exporting industry, with £6.6 billion worth of exports – representing 19% of all international exports – with whisky and spirits accounting for 82% of this. The second largest industry for international exports is the manufacture of refined petroleum and chemical products, with 11% of total exports.[12]

CBI discussions with both exporters and non-exporters have recognised the significant challenge that creating an exporting mindset among a wider range of sectors and businesses across Scotland presents. Increasing the number of businesses engaged in mentoring programmes has been highlighted as one potential way of helping to remove some of the barriers firms face when considering entering new international markets.

Of Scotland's total exports, just under half (49%) are attributable to services sectors, with an estimated value of £42.8 billion in 2019.[13] Services account for 47% of UK exports, compared to 35% in France and 34% in the United States.[14] Ensuring the new industry-led Trade in Services Council, announced by the Department for Internal Trade (DIT) in the latest export strategy,[15] delivers for services firms in Scotland will be crucial. DIT and the Scottish Government should work with the new council to capitalise on the strengths of our services sectors and the growth in demand for services overseas.

Business Expenditure on Research and Development (BERD) as a share of GDP in Scotland increased marginally from 0.83% in 2018 to 0.84% in 2019. Despite this marginal improvement, Scotland still lags the UK; UK-wide BERD accounted for 1.2% of UK GDP in 2019.

R&D carried out by businesses can result in new goods and services, a higher quality of output, and new production processes. These are all sources of productivity growth at both a firm and national level, supporting higher economic growth and greater tax revenue through the creation of additional high-value jobs.

The percentage of businesses in Scotland that are innovation active fell from 45% in 2014-16 to 32% in 2016-18, the most significant decline across the UK's nations. Scottish innovation has not been this low since 2008-10, when just 33% of businesses were reported to be innovation active. The latest data shows that innovation levels fell across the UK as a whole over this same period. 38% of UK businesses were innovation active in 2016-2018, a fall of 11-percentage points since 2014-2016. UK business innovation has not been this low since 2008-10, when it stood at 37%.

While this data relates to the pre-pandemic period, anecdotal evidence from the BAG indicates that the position may have worsened more recently. The BAG noted that investment in R&D and innovation is one of the areas that has been significantly impacted by COVID-19, suggesting this indicator could get worse before it gets better. The BAG discussion highlighted a continuing recognition of the importance of innovation, and a consensus that existing support for innovation adoption is fragmented, making the innovation support landscape difficult to navigate, especially for smaller businesses.

The BAG raised the possibility that firms adapting to new ways of working following the pandemic may mean this measure increases in the short-term, specifically through the adoption of new technologies and working models. Discussions with employers highlighted the productivity-related benefits of accelerating the adoption of new digital technologies, which can impact a range of business functions, from logistics to sales and marketing.[16] However, suppressed business investment – as seen in the latest figures – may also lead to innovation being suppressed in the medium to long term.

This uncertain outlook, combined with the significant fall in innovation activity shown in the available data, raises the importance of increased government incentives for investment in R&D. This may help to support higher economic growth and greater tax revenue through the creation of high-value jobs. Further details are highlighted in the recommendations below.

Early-stage entrepreneurial activity has not significantly increased over the last year of available data. Data for 2020 highlights that Scotland continues to have the second-highest early-stage entrepreneurial activity in the UK, after increasing by 0.1-percentage point to 7.3%. That equates to 247,000 adults actively engaged in setting up a business or already running an enterprise established in the last three-and-a-half years. A further 5.7% – 194,000 adults – were entrepreneurs running more established businesses.[17]

Around 60,000 18–24-year-olds in Scotland (13%) were early-stage entrepreneurs, the highest rate among the home nations. Around 5.3% of adult women in Scotland were trying to set up a new business or running a young business in 2020 compared to 9.3% of men – a rate that has changed little over the last decade and makes the gender gap in Scotland the highest amongst the home nations.[18]

Total early-stage Entrepreneurial Activity (TEA) rates in 2020 were not significantly different across UK nations. England's TEA fell from 10.5% to 7.7% in 2020, the only significant change on the year across the UK.

While the data shows a complex picture, there is significant room for improvement across the business practices indicators. The BAG meetings, along with wider discussions with employers, highlighted actions to kick-start business investment as being key to improving the business practices outlook as a whole.

Key recommendations

For policy makers

- The UK and Scottish governments should create a smart taxation environment that rewards investment. For example:
    - The UK Government should build on the super deduction and consider how to incentivise longer-term investment, for example by exploring full expensing for capital beyond 2023.
    - The Scottish Government should use the levers at its disposal – including the non-domestic rates system – to incentivise investment.
    - All regulators should be required to prioritise investment and innovation as part of their core remits by setting out new, transformational terms of reference. This would better align regulators with government policy and help to unlock private sector investment that can boost productivity.
- Widen the scope of the R&D Tax Credit to include capital expenditure as an allowable expense and simplify the innovation support landscape to help firms all of sizes to increase innovation activity.
- Work with the new Trade in Services Council to articulate the value of services as exports in their own right, and as enablers of goods trade, and strategically tackle market access barriers in some of the major services growth markets.

For businesses

- Consider joining the Export Champions mentoring programme – either as a mentor or mentee – which helps mobilise the vast experience of Scotland's exporters to support businesses who are either starting their international journey or have a specific exporting challenge.[19]
- Accelerate technology adoption plans beyond just remote working. New digital technologies can boost productivity across a range of business functions, from logistics to sales and marketing.

Skills and training

	Latest Performance	Benchmark	Short-term trend	Long-term trend
6. Percentage of working age population with **Higher Education Certificate** or above	49%	🟢	🟢	🟢
7. Percentage of workforce in **job-related training** in past 3 months	23%	🟡	🟡	🔴
8. Percentage of employers with **skill shortage vacancies**	3%	⚪	🟢	⚪
9. Percentage of employers with **underutilised staff**	33%	⚪	🟢	⚪

Insight and analysis

The percentage of Scotland's working age population with a Higher Education Certificate or above remains the highest in the UK at 49%, according to the latest data (2020). This indicator has not only risen on the previous year but has also been on an upward trajectory since 2004, when the data was first published. The UK average for this indicator is 43%, with Northern Ireland and Wales trailing at 38% and 39% respectively.

Discussions with the BAG and other employers highlighted that while formal qualifications remain important, they are only one part of the skill set employers are interested in. Soft skills – such as motivation, innovation, problem solving, creative thinking, teamworking, and good communication skills – are just as important to businesses.

In the CBI's latest skills survey, employers said the most important factor in recruiting young people is character and behaviours, followed by literacy and numeracy and work experience.[20] Employers expect the need for general workplace skills not attached to formal qualifications to increase but are not confident they will be able to access a sufficient number of people with the skills they need.[21]

The percentage of the workforce in Scotland in job-related training in the past three months has decreased again on the year to 23%, the latest data (2020) shows. Although this year-on-year change is not statistically significant, Scotland is now below its long-term trend (2004-2020). The peak for this indicator was in 2004, when nearly 32% of the workforce was in job-related training. There has been a slight downward trend in the levels since 2004 that has accelerated since 2016. The UK average for this indicator is 24%, with Wales narrowly leading the pack at 25%.

Because of high demand and low supply of skills and labour (detailed below), the BAG highlighted the increase in cross-sectoral competition for talent. Increased movement between sectors in the labour market may stimulate a rise in job-related training, while people returning from work after months on furlough may need new or 'refresher' courses.

CBI discussions with employers continue to highlight the importance of upskilling and retraining, with nearly three quarters of employer respondents to a 2020 skills survey anticipating a need for staff to acquire new skills over the next twelve months.[22] This shows a need to ensure the skills system strikes the right balance between supporting young people and equipping people of all ages with the skills they need in a quicker, more flexible way.

There was a recognition from the BAG that both business and government must do more to promote and provide training opportunities. There are encouraging signs, with 53% of respondents to the 2021 CBI/Birkbeck education and skills survey saying they plan to increase investment in training over the next year compared to the previous 12 months, while four in ten plan to increase investment in skills relative to pre-pandemic levels.[23]

However, while the benefits of training to an individual are often clear – usually through higher pay at the original or an alternative place of employment – employers can underestimate the total benefits of training on productivity.[24] Further government support and incentives can therefore play an important role in delivering the step change needed in job-related training.

The percentage of employers with skill shortage vacancies[25] improved in 2020, down from 6% in 2017 to 3%. There was a consensus among the BAG that while the current impact of skills and labour shortages is not captured in the latest data on skill shortage vacancies, they considered that this is in fact the biggest challenge currently facing employers. It has the potential to significantly impact productivity. The 2021 CBI/Pertemps Employment Trends Survey found around three quarters (76%) of UK businesses reported access to labour as a threat to the UK's labour market competitiveness – the highest proportion since the question was first asked in 2016.[26]

The impact is being felt across the economy and at multiple skill levels. Employers have described facing a 'perfect storm' – many workers from overseas returned home during the pandemic, while workers in sectors that locked down longer than others moved to businesses that stayed open. At the same time, the UK has left the European Union and introduced new immigration rules at a time when firms had very little capacity to adapt and prepare. Many of the most acute labour shortages are being seen in sectors that have traditionally had a high number of EU workers, including food and drink, hospitality, retail and construction.[27]

These shortages are holding back our economic recovery at the exact moment we need to be driving it forward. Most firms believe this is more than a short-term issue and could take up to two years to resolve, based on the time it takes to train new workers, and requires action from both business and government to address. While investment in skills and training provides a long-term solution, short-term changes to immigration rules are needed to make it easier for firms to access skills and labour from overseas to fill the most in-demand roles. Further details are highlighted in the recommendations below.

The percentage of employers with underutilised staff has improved in Scotland – down from 35% in 2017 to 33% in 2020. Hotels and restaurants have the largest share of underutilised staff at 48%.

One of the impacts of economic downturns is that young people often end up in roles for which they are overqualified. Discussions with the BAG and other employers linked this to a wider need to do more to help young people identify where future employment opportunities lie and better align education and skills provision with the needs of the economy.

Lots of strong links between employers and education already exist. A CBI Scotland survey found 76% of businesses have at least some links with local schools across Scotland – 74% with secondaries but less than half (48%) with primaries, which have traditionally been a business blind spot.

Employers can play a more prominent role at all levels of education to help students make the link between their activity in the classroom and the opportunities available to them. This was identified by employers as being particularly important for sectors that are currently struggling to attract young people in sufficient numbers to meet demand.

While the skills and training data shows strong performance on qualifications, there are significant challenges in other areas. The immediate focus should be on how business and government can alleviate the short-term challenges firms are facing in accessing the skills and labour they need. In the longer term, collaboration between all stakeholders is needed to ensure we have an education and skills system that equips people with the skills they need to reach their full potential at all stages of their career.

Key recommendations

For policy makers

- The UK Government should help firms address the immediate challenge of skills and labour shortages by ensuring the Shortage Occupations List is more agile to respond to economic needs. This means urgently updating it in line with the Migration Advisory Committee's outstanding recommendations, asking the Committee what additional roles need to be added before the planned review next year, and committing to annually reviewing it in full. This should include consideration of whether flexibility in skill eligibility is required.
- The UK and Scottish governments should work together to introduce an SME training tax credit as an incentive for firms to invest more in training. The credit could be modelled either on the existing SME R&D tax relief, or on the successful R&D Expenditure Credit.
- The Scottish Government should strike a better balance of funding across traditional undergraduate learning, work-based learning and short training courses that support continual upskilling and rapid retraining – with the aim of giving people the skills they need in a quicker, more flexible way.

For businesses

- Commit to increasing investment in training, relative to pre-pandemic levels. The heightened competition for talent means upskilling and retraining current staff can provide an advantageous alternative to entering the recruitment market.
- Consider ways of opening-up new routes into the business. Examples could include creating a new apprenticeship scheme, redesigning jobs to make them more attractive to jobseekers, or accelerating efforts to draw on talent from across the whole of society through diversity and inclusion strategies that attract under-represented groups in the labour market.
- Consider working directly with a local school, college and/or university to help align education provision with economic needs, develop the firm's future talent pipeline and raise awareness among young people about the opportunities available to them in your sector.

Health and wellbeing

	Latest Performance	Benchmark	Short-term trend	Long-term trend
10. Percentage of hours lost due to **sickness absence**	2%			
11. Percentage of economic inactivity due to **long-term ill health**	29%			

Insight and analysis

The percentage of hours lost due to sickness absence continued to fall across the UK during 2019-20, however Scotland remains the second highest, at 2%. Scotland experienced no significant change in this indicator over the period 2019-20, with a rate higher than Northern Ireland (1.9%) and England (1.8%) but lower than Wales, which has the highest rate in the UK (2.2%). Sickness absence in Scotland averaged 2.2% over the past decade, just under 1-percentage point lower than the period 1995-2009, meaning the long-term trend for this indicator is positive.

However, the data for this indicator may not represent a true picture due to the impact of the pandemic. The declines in sickness absence across the UK seen in 2019-2020 could be a result of there being fewer people in work and therefore fewer people taking time off for sickness. The BAG agreed that recent data for this indicator should be treated with caution.

The percentage of economic inactivity resulting from long-term ill-health has shown no significant change for Scotland since 2019, according to the latest data (2020).

While there has been a longer-term improvement – albeit slow in recent years – Scotland's rate of 29% is above the UK average of 24%. However, it is worth noting that only England (23%) is below the UK average. The rates in Scotland and Wales are very similar, with Northern Ireland's rate of 35% significantly above the other UK nations.

The BAG meetings and CBI discussions with other employers highlighted an increasing concern about mental health issues, caused or exacerbated by the pandemic. This may have long-term implications that make improving performance against this indicator challenging. The treatment backlogs in the NHS maybe also exacerbate this and some employers highlighted long COVID as another potential cause of long-term economic inactivity in the years ahead.

There was a clear feeling among employers during BAG discussions that the challenge of supporting mental health in particular is an issue that will continue to grow and it is important to take action now to try to get ahead of it. Many employers are already stepping up to support staff and now viewing mental wellbeing as a business-critical issue, not solely a health one. A 2014 WHO study has shown that businesses that invest in mental health have employees that are up to 12% more productive, and that every £1 invested in mental health by employers generates £5 in return.[28]

The CBI/Pertemps Employment Trends Survey found 67% of firms identified supporting health and wellbeing as a top diversity and inclusion priority for the next two to five years.[29] The figure was 65% for SMEs, compared to 72% for larger employers, reflecting BAG input that highlighted the difficulties for SMEs in providing mental health support, many of whom do not have a specific HR function. There was broad agreement that government-funded organisations and initiatives have a key role to play in assisting smaller businesses to support their employees.

BAG discussions also highlighted the challenge of monitoring mental health when working remotely, something many firms have had to adapt to over the past two years. There was a consensus that employers should be even more proactive given that it is harder for colleagues to spot hazards or signs of poor wellbeing and because intervening early to give individuals the knowledge and support to improve their wellbeing is linked with better health outcomes.[30] Increasing the availability of local mental healthcare services was also identified by some employers as potentially helping to support early intervention.

Employers are therefore considering how the ways they support employees' mental health and wellbeing may need to change, including creating new channels for employees to reach out and discuss their mental health. The BAG also highlighted the importance of employers measuring output rather than input to counter presenteeism and the negative impact that has on mental health. While the latest data does not capture the full picture, the BAG discussions made clear that action to support mental health should be a top priority for business and government.

Key recommendations

For policy makers

- Expand the network of psychological wellbeing services at a local level, for example through self-referred community-based delivery connected to the wider mental healthcare system currently accessed via GP referral, as recommended by the Scottish Association for Mental Health (SAMH).[31]
- Signpost mental health support available to small and medium sized employers and self-employed individuals through a digital platform. Support should include grant funding for mental health interventions where appropriate.

For businesses

- Signpost employees to heath apps such as Calm or Headspace and create additional ways employees can discuss mental health when working remotely. Examples could include setting up virtual roundtables with trained individuals who can facilitate and direct employees to support services, instant messaging services, anonymous hotlines, or launching employee assistance programmes.
- Establish organisational norms that support staff's mental and physical wellbeing wherever they work. Examples could include making reasonable adjustments in the workplace for people with mental health problems, encouraging flexible working around core working hours and limiting call times to 25 or 50 minutes as well as daily total call time to give employees breaks.
- Encourage managers to establish a mental health action plan with their teams and create an expectation that managers should regularly communicate with individuals in their team, setting aside time to discuss their wellbeing. Managers should also receive training on how to handle wellbeing issues effectively, a growing part of all people management roles, and be supported in that role on an ongoing basis.

Infrastructure and connectivity

	Latest Performance	Benchmark	Short-term trend	Long-term trend
12. Average **internet speeds** in Scotland	Mean download & upload speed (58.6 & 12.0 Mbps)	🔴	🟡	🟢
13. Percentage of premises with access to **full fibre broadband**	20%	🔴	🟢	🟢
14. 4G Mobile coverage	44%	🔴	🟡	🟢
15. Travel to work time	26 mins	🟢	🟡	🔴

Insight and analysis

Average internet speeds in Scotland show a mixed picture of progress, according to the latest data (Q3 2021). Since Q2 2021, Scotland's average download speed is down 1.1Mbps to 58.6 Mbps but its average upload speed is up 0.3 Mbps to 12.0 Mbps. Scotland lags behind the UK average download and upload speeds of 68.9 and 17.9 Mbps respectively.

While speeds have continued to improve over the past five years, the data does not show Scotland catching-up with the rest of the UK. The growth in Scotland's download speed has lagged the UK's slightly, while growth in upload speed has trailed more significantly.

The percentage of premises with access to full fibre broadband in Scotland has increased to 20%, the latest data for January 2021 shows. However, Scotland continues to lag the UK as a whole. While there has been an increase of 7-percentage points since May 2020, and 3-percentage points since September 2020, Scotland falls 1-percentage point below the UK average of 21%. Northern Ireland leads at 63% (up 14-percentage points since May 2020), with England (19%) and Wales (21%) close to the UK average.

Digital connectivity was already the top business infrastructure priority before the pandemic,[32] and the changes to working practices since have only heightened the demand for gigabit-capable connectivity.

Businesses are clear that speeding up the rollout of gigabit-capable connectivity, such as full-fibre broadband, should be a government priority. At the same time, more must be done to ensure businesses are maximising the productivity benefits of new levels of digital connectivity. The Gigabit Take-up Advisory Group, set-up by the UK Government, identified three key barriers to gigabit adoption among businesses: a lack of understanding of the benefits of gigabit-capable broadband; limited business awareness of what gigabit-capable broadband is; and a lack of digital skills currently available to adopt gigabit-capable technology.[33]

BAG discussions highlighted the particular challenge rural areas of Scotland face with digital connectivity. Attracting people to live and work in rural areas is key to the productivity of local firms and to closing the regional productivity gaps that exist across Scotland.[34] Gigabit-capable connectivity can help persuade people to consider relocating. A survey of UK estate agents found a fast internet connection is one of the most important factors for homebuyers, with questions about connectivity up 69% since the pandemic began.[35]

Feedback from employers highlighted anecdotal examples of the ability to work from home already attracting workers to new jobs on London wages, that they can do successfully from their home in Scotland. Improving rural digital connectivity, as well as the supply of available housing, will therefore be crucial if we are to ensure all parts of the country can benefit from more people now being able to do their jobs outside of the big cities.

4G mobile coverage in Scotland rose 1-percentage point between May 2020 and September 2020, with no further improvement shown in the latest data for January 2021. Coverage refers to geographic area catered for by all operators. Scotland (44%) and Wales (60%) continue to drag the UK average (69%) down, with England (84%) and Northern Ireland (79%) significantly ahead.

Investment in mobile broadband generates productivity improvements from employees having access to more advanced mobile connectivity.[36] It is crucial for many businesses' daily operations – from tracking deliveries to processing remote payments.

Consumers also benefit from access to a range of innovative apps and services powered by mobile broadband and firms have highlighted improving 4G coverage as another important way of increasing the attractiveness of rural areas as a destination to live, work and visit.

The Shared Rural Network – developed by the UK's four mobile network operators and government to deliver 4G coverage to 95% of the UK – can deliver significant improvement in 4G coverage across Scotland.[37] The UK and Scottish governments should work together to remove any barriers to these planned improvements.

The average travel to work time across Scotland of 26 minutes is shorter than the GB (and English) average of 30 minutes (which is skewed by London's commute time of 46 minutes) but one minute longer than in Wales. The latest data (2019) shows the average commute time in Scotland has decreased marginally since 2018.

There was a consensus amongst the BAG that this measure could become less relevant as a productivity indicator if working model changes caused by the pandemic become permanent. However, where travel is required to support face-to-face meetings and collaboration, Scotland must have a flexible, digital ticketing offer for public transport that supports new working patterns.

Those new working patterns – specifically hybrid working models – were identified as one way firms can widen the pool of talent they are able to attract, with someone's commuting time potentially becoming less important. On the flipside, it also means the local talent pool can look further afield for employment.

While the ability to work from home varies by sector, 76% of businesses expect flexible working to become more common within their organisation,[38] while 47% expect most of their workforce to adopt hybrid working beyond 2021.[39] Businesses anticipate this is a long-term shift, with 63% of firms responding to the CBI/Pertemps Employment Trends Survey expecting to receive more job applications from people living one to two hours away from their head office.[40]

This has potential implications for the job-related training indicator, with some employers expressing concern about the impact of remote working on coaching and training, particularly relating to soft skills that are often developed in the workplace.

An increased prevalence of hybrid working patterns may also have significant implications for Scotland's office space,[41] as the overall office footprint of many businesses could shrink to account for increased home working. The impacts are unlikely to be distributed evenly, as businesses could take advantage of opportunities to relocate to more productive and better-connected areas, thus creating a patchwork of winners and losers among existing providers of offices. While the net effect of this transition is likely to be positive for overall productivity, it is essential that the places losing out due to these changes can quickly be repurposed towards their new role in the economic landscape.

Moreover, the office itself would need to pivot towards supporting collaborative activities which cannot be performed remotely. This means a greater emphasis must be placed on providing meeting spaces and employee connection, to preserve the crucial knowledge-sharing and teamwork that existed previously. For businesses adopting hybrid working, there needs to be a clear understanding of the requirements on physical space and what changes this entails. By monitoring the way facilities are used, businesses can respond and optimise office use to drive higher productivity as well as employee engagement and satisfaction.

Looking at the connectivity indicators as a whole, CBI discussions with employers have highlighted a strong link between improving connectivity and the ability of firms to maximise productivity benefits from the new ways of working that have been accelerated by the impact of the pandemic.

Key recommendations

For policy makers

- The Scottish and UK governments should work together to roll-out gigabit-capable broadband (such as full fibre) across all of Scotland by 2025.
- The UK and Scottish governments should develop a 'gigabit toolkit' for use by local authorities and local information campaigns, to improve awareness and understanding of gigabit-capable broadband and spur business and consumer adoption (as recommended by the Gigabit Take-up Advisory Group).
- The Scottish Government should deliver a digital ticketing transformation across public transport, with smart payment structures and multi-modal fare options, that responds to customers' increased need for flexibility due to changing working patterns.

For businesses

- Scrutinise your organisation's understanding of, and preparedness for, gigabit-capable connectivity, including the skills needed within the workforce, and develop an action plan to maximise the productivity-related benefits.
- Invest in the technology needed to make meetings and organisational communication as inclusive as possible regardless of working location.
- Invest in management training to support managers to adapt to a hybrid working model and change their approach to team organisation and engagement.
- Investigate and monitor the patterns in office use to develop a strategic approach to hybrid working that enhances the efficiency of the business.

Business Advisory Group

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- **Simon Cotton**, Johnstons of Elgin
- **Rachel Dunachie**, Marks & Spencer
- **Patricia Findlay**, University of Strathclyde
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Productivity dashboard: data sources

1	Business Investment as a % of GDP	Scottish Government/ONS /FAI	2020
2	Exports as a % of GDP	Scottish Government/ONS/FAI	2020
3	Business R&D spend as a % of GDP	Scottish Government/ONS	2019
4	% of innovation-active businesses	UK Innovation Survey	2016-18
5	Total early-stage entrepreneurial activity	NatWest Global Entrepreneurship Monitor (GEM Scotland 2020 Report)	2020
6	% of working age population with Higher Education Certificate or above	ONS	2020
7	% of workforce in job-related training in past 3 months	ONS	2020
8	% of employers with skill shortage vacancies	Scottish Employer Skills Survey 2020	2020
9	% of employers with underutilised staff	Scottish Employer Skills Survey 2020	2020
10	% of hours lost due to sickness absence	ONS	2020
11	% of economic inactivity due to long-term ill health	ONS	2020
12	Average internet speeds in Scotland	Think Broadband	Q3 2021
13	% of premises with access to full fibre broadband	Ofcom	Jan 2021
14	4G Mobile coverage	Ofcom	Jan 2021
15	Travel to work time	Department for Transport	2019

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2. This survey was first published in August 2018 so no long-term trends can be deduced.
3. This survey was a COVID-19 special, carried out solely in Scotland. Comparisons to the national benchmark are therefore not possible as the latest UK-wide Employer Skills Survey is for 2017. Additionally, as this survey was carried out during the pandemic and during a different time of the year to usual, analysis of trends must be carried out with some caution.
4. This survey was first published in August 2018 so no long-term trends can be deduced.
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About the CBI

Founded by Royal Charter in 1965, the CBI is a non-profit business organisation that speaks on behalf of 190,000 UK businesses of all sizes and from across all sectors, employing nearly 7 million people between them. That's about one third of the private workforce. This number is made up of both direct members and our trade association members. We do this because we are a confederation and both classes of membership are equally important to us.

The CBI's mission is to promote the conditions in which businesses of all sizes and sectors in the UK can compete and prosper for the benefit of all. With offices around the UK (including in Scotland, Wales and Northern Ireland) and representation in Brussels, Washington, Beijing and Delhi, the CBI communicates the British business voice around the world.

Our mandate comes from our members who have a direct say in what we do and how we do it

The CBI receives its formal mandate from 9 Regional Councils, 3 National Councils from Scotland, Wales and Northern Ireland plus 16 sector based Standing Committees. These bodies are made up of members in that region, nation or sector who serve a term of office. The chair of each Standing Committee and Regional and National Council sit on the CBI's Chairs' Committee which is ultimately responsible for setting and steering CBI policy positions.

Each quarter this formal engagement process across the CBI Council reaches over 1,000 senior business leaders across 700 of our members who have a direct say in what the CBI do and how they do it, from refreshing their workplan to discussing the key business issues of the day and re-calibrating its influence. Over 80% of the businesses represented on the CBI Council are outside of the FTSE350 as the CBI represents a wide range of sizes and sectors from the UK business community. This formal governance process is supported by a wide range of working groups, roundtables, member meeting and events that makes the CBI unparalleled at listening to and representing British business.

CBI Council in numbers

1000+

Committee and Council representatives

28+

Regional and National Council and sector based Standing Committees

50%

Representatives of the CBI Council at C-Suite level

80%

Of the CBI Council from non-FTSE 350 businesses

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