

Executive Summary

- Scotland's post devolution economic performance has been mediocre, with little or no apparent benefit coming from more powers or from extensive economic regeneration funding sources.
- However, post 2014, but pre Covid 19, this performance has become worrying, with GDP per capita growing at less than half the rate seen for the UK as a whole:
- Such slower growth is costing Scotland dear, with higher taxes needed to compensate for the £1 billion funding shortfall that has resulted and with the potential for this to rise to £2 billion by the start of the next decade;
- Long term issues remain a concern, including:
 - low business start ups and business growth;
 - low private sector R&D spend;
 - mismatch of, and missing, skills
- A collection of new economic issues also need to be addressed, including:
- the lessons from the Financial Crisis;
- the further, post crisis, decline in productivity;
- the economic and social impacts of the pandemic (de-globalisation, working from home etc);
- enhanced climate change concerns and net zero targets;
- the war in Ukraine's energy and geopolitical implications.
- Recent attempts to identify solutions, such as the Scottish Government's

- 'National Strategy for Economic Transformation', have been ill focussed.
- Areas that can be highlighted as key strands of any new economic strategy include:
- improving R&D spend and coordination;
- increasing UK wide collaboration opportunities, in terms of: innovation; climate change; publicly funded research bodies; and financial support bodies;
- improving the international trading record of business;
- enhancing the performance of areas where Scotland has a competitive advantage, including: renewable energy; tourism; higher education and services in general.
- · Initial steps include:
 - a re-orientation of the Scottish National Investment Bank and greater coordination with UK equivalents;
 - creating a new 'Treasury' department in order to: improve the prioritisation of spending; introduce more growth incentives; and enforce better value for money;
 - raising private sector R&D spend in key areas like pharmaceuticals;
 - improving the trading record of Scottish SME's, with both the rest of the UK and the rest of the world.
- Consistency and patience are the watch words of any successful economic strategy.

Introduction



There has been an upsurge in interest in revising and updating Scottish and UK Growth Strategies.

At a Scottish level this has included:

- the Scottish Governments 'National Strategy for Economic Transformation' (NSET) and;
- Oxford Economics 'Raising Scotland's Economic Growth Rate' report for the Hunter Foundation.

While at the UK level we have seen:

- the UK Governments 'Levelling Up' White Paper (LUWP);
- the Resolution Foundations 'The Economy 2030 Inquiry: Enduring Strengths' report.

The drivers behind such initiatives have been a mixture of:

- an acceptance that past strategies to improve productivity and the growth rate, especially post the Financial crisis of 2009, have been largely unsuccessful;
- an acknowledgement that international economic conditions have changed as a result of: the pandemic; the war in Ukraine (both of which have created a push towards deglobalisation); and an increased focus on the environment.

Such multiple drivers of change has led to a confused growth strategy landscape, where a variety of, potentially conflicting, goals are attempting to be achieved at the same time and often using the same tools. These goals include:

- reductions in social and spatial inequality;
- · a resurgence in productivity and GDP growth; and
- reaching ambitious climate change targets.

The purpose of this paper is five-fold:

- First, to review where Scotland has come from, post devolution, in terms of economic performance and policy setting;
- Second, to review some of the recent evidence from various reports on what are the key weaknesses of the Scottish economy;
- Third, to summarise the productivity issues that have been much discussed post 2009;
- Fourth, to pick out key areas that any revised economic growth strategy should help to address;
- Fifth, to make some initial recommendations as to how to move forward now as well as how to set up positive growth conditions for the longer term.

While making policy recommendations is clearly an essential element of such a strategy review, it should not hide the fact that most successful economic and industrial strategies take time to succeed.

This means that any such revised strategy requires both patience and consistency of approach by governments, something that has been sadly lacking across the UK in the past.

Some of the key elements that will be considered throughout the report include:

- how Scotland can best leverage the advantages of the United Kingdom (UK) single market and shared institutions;
- how to best improve Scotland's international trading performance in light of Brexit and the growing pressures towards de-globalisation;
- how to best transition away from oil and gas and towards cleaner energy, in both a general sense and specifically with regards to the North Sea;
- the best role for the transformational 'Scottish National Investment Bank' (SNIB).

This report is not the end of the journey. It simply maps out, hopefully in a more coherent way than elsewhere, the initial stage of identifying the problems and beginning to hone in on some of the answers and so start to prioritise where the limited public funds available should be allocated.

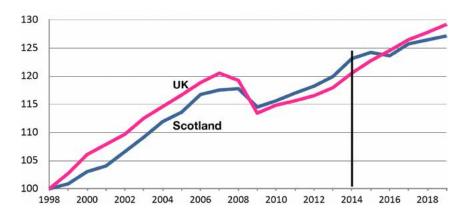


Scotland's Post Devolution Economic Performance

Any strong impact from political devolution on the Scottish economy is difficult to discern. Since 1999 there has been no obvious jump up, or down, in its growth performance relative to the UK or in international terms.

Growth in GDP per capita (the traditional measure for judging relative economic performance) shows annual growth for Scotland, 1998 - 2019, of 1.15% - little different to the UK figure of 1.25%. However, the latest revised data (May 2022) shows that in the years leading up to the pandemic (2014 to 2019) Scottish GDP per capita had grown at less than half the rate seen for the UK as a whole, 0.65% compared to 1.4% (see Figure 1).1

Figure 1: GDP per person, Scotland and the UK, 1998-2019



Source: Scottish Government National Quaterly Statistics, May 2022

Part of this recent differential can be explained by the UK rebounding quicker from a deeper recession around 2008-9 and part of it is likely to be due to the recent decline in North Sea activity, but a worryingly large differential remains and has some serious consequences.

Digging deeper into the data, for the period leading up to the pandemic, we find that the sectors whose relative performances are the poorest are:

- the 'Retail and Wholesale' sector where overall output in Scotland fell by almost 10%, whereas for the UK as a whole it grew by 3%: and
- the 'Education' and 'Health and Social Work' elements of the Public sectorwhich grew by less than 1% in Scotland compared to around 10% in the UK as a whole.

The 'Retail and Wholesale' outcome seems surprising as the sector is not known to be highly divergent in nature across the UK and it is not a sector that is likely to have been badly affected by the decline in North Sea activity.

The 'Education' and 'Health and Social Work' outcome is also surprising as, the latter in particular, has been largely protected from public sector funding cuts. This result heightens the interest in how productive the Scottish public sector is compared to that of its counterparts in England (a point returned to in Section D).²

An important consequence of the economy's poor performance post 2014 has been its impact on the government's Budget. The two areas are now linked, mainly via the devolution of Income Tax powers. As a result, the Scottish Government is forecast to have received around £1 billion less in funding in the current financial year (2022-23) than it would have gotten under the old Barnett

¹ The analysis ends at 2019 to avoid any Covid related distortions.

² Recent revisions to Scottish (and UK) GDP data substantially changed the picture of how growth evolved since 1998 and the pattern of growth across industries, in both absolute and relative (to the UK) terms. The data should now be more robust, although further revisions will inevitably occur. The scale of the revisions highlights the difficulties of making economic policy prescriptions when what had been thought to be underperforming sectors - for example, 'Information & Communications' and 'Business services' - now turn out to be performing relatively well.

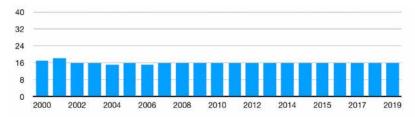
system.³ This impact has been largely offset (£850 million) by the raising of income tax rates to above those set for the rest of the UK, but these higher tax revenues were intended to be for extra spending, not to help offset the impact of lower growth.

Current economic forecasts suggest Scotland's relatively slower growth will continue, with on-going, negative, government budget implications. Policy decisions by the Scottish Government will determine exactly how much of this is to be offset by even higher taxes.

Returning to its general economic record post devolution, Scotland's productivity ranking, compared to other OECD countries, has been disappointing - consistently around 16th out of 38 countries (see Figure 2) - despite its improvement being a key target since 2007.4

Figure 2: Scottish Productivity Ranking

Source: Scottish Government - National Indicator Performance webpage



Note: Scotland's position compared to 37 other OECD economies

There is also a question mark over whether targeting a change in productivity ranking is wise, due to: data accuracy and consistency issues; the lack of change to such rankings over time; and a lack of correlation between productivity ranking and a country's wider economic performance (McLaren 2019 i).

With regards to the labour market, Scotland's international position, like the UK's, is better than average in terms of (low) unemployment. However, this does not feed through to income levels, which are more in line with its productivity ranking (McLaren 2019 ii).

In terms of economic policies, while there has been much activity it does not appear to have shifted performance, despite spending on economic development support being higher in Scotland than in any other part of the UK (see Figure 3) and 60% higher than the UK average. This brings into question whether the Scottish economy's performance would have been even worse without such funding, or whether much of this funding is effectively going to waste.

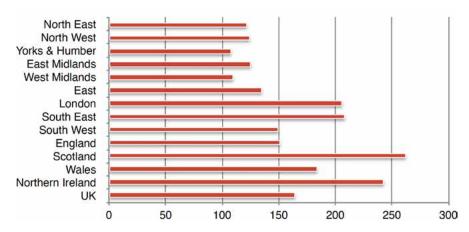


Instead of working with each other in a single market setting, the Scottish and UK Governments are often working in isolation and at times in an actively confrontational (rather than collaborative) manner.

³ Scottish Fiscal Commission 2022

⁴ While 16th out of 38 may appear above average, the 14 bottom places are all taken up by countries with less developed economies, including those in Eastern Europe and Central and South America, leaving Scotland 16th of the 24 more developed economies.

Figure 3: Annual average UK Spending on Enterprise and Economic Development, 2016-17 to 2019-20 by Region, £ per head



Source: HMT country and regional analysis 2021 (2022) Note: Figure 3 does not include data for 2020-21 as this was heavily influenced by Covid-19 funding.

Part of the problem may be both the diversity of initiatives - the NSET outlines 32 economic growth related strategies - and the quick turnover in policies and strategies.

In terms of the Scottish Parliament, its focus is skewed more towards the social rather than the growth side of the economy. For example:

- industrial policy might be interpreted as taking on more of a 'saviour' role helping prop up declining industries and companies in difficulty - rather than a more creative role - helping new companies emerge and grow;
- discussion of the economy tends to fixate on negative economic growth impacts and externalities - for example, relating to unemployment, inequality, pollution etc - rather than on how to improve productivity and raise the growth rate.

Indeed, in general, it could be argued that one of the drawbacks of devolution has been the lack of emphasis on, and interest in, economic issues. This may be related to the fact that the Scottish Government lacks a strong economics department, with the Finance & Economy Portfolio being of a much lower status, and less well staffed, than the UK Treasury.

Another weakness is the insular approach to economic matters post devolution. Instead of working with each other in a single market setting, the Scottish and UK Governments are often working in isolation and at times in an actively confrontational (rather than collaborative) manner.

Devolution was intended to allow constituent nations within the UK to do things differently but not at the expense of weakening existing ties that allow for positive externalities like economies of scale and learning from relative policy success stories elsewhere.

Although the Scottish Government has little in the way of macroeconomic powers, in the modern day such powers offer less scope to improve economies, being largely beholden to independent central banks and bond markets. Rather, it is with regards to microeconomic powers, where the Scottish Government is largely autonomous, that the main tools for improving economic performance are concentrated.

While some might consider growth in the economy, as measured by GDP, to be out-dated, it remains important across a wide range of high profile performance indicators. In particular, growth in productivity remains key to raising wages and so households standard of living.

Figure 4 highlights the close relationship between the two.

Figure 4: annual growth rate in standard of living and productivity over time periods

	1977-1990	1990-2007	2007-2019
Standard of living	3.07	1.96	0.47
Productivity	2.35	2.34	0.21

Source: NIESR Productivity Commission (2022)

Growth in wages and profits also raises more government revenues and allows for interventionist policies to reduce poverty and improve public services.

So a permanent reduction in the rate of economic growth is not something we can become blase about, it matters.



Scotland's Long Term Economic Problems

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The picture that emerges is of a Scottish business landscape which is not uniquely bad in one or two areas, but rather exhibits an across the board underperformance.

Analysis over time has been fairly consistent in identifying the areas where the Scottish economy is relatively weak. Often these areas coincide with UK weaknesses, although some are more Scotland specific or at the bottom end of a poor UK standing. The following areas comprise the usual suspects.

Low business start ups and business growth

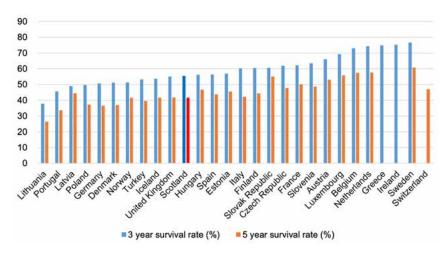
Scotland has long lagged the UK as a whole in terms of entrepreneurship and business start-ups with a secondary, possibly related, problem being the lack of scale up amongst SME's to develop into large scale companies.

The recent Oxford Economics report (2021) highlighted Scotland's poor record within the UK, including:

- a lower businesses per resident ratio (900 per 10,000 adults in 2019 vs 1,100 for the UK);
- a lower business birth rate ratio (4 per thousand people in 2019 vs 5.8 for the UK):
- lower rate of scale-ups (40 per 100,000 people in 2018 vs 51 for the UK).

Another part of the problem is business survival rates. Figure 5 shows that Scotland's survival rate after 3 and 5 years is relatively poor, although above some countries who perform well on other entrepreneurial measures, such as Denmark, Iceland, Germany.

Figure 5: 3 and 5-Year Survival Rate: Scotland compared with OECD Countries, 2018



Source: Scottish Government - 'National Strategy for Economic Transformation' (2022)

The picture that emerges is of a Scottish business landscape which is not uniquely bad in one or two areas, but rather exhibits an across the board underperformance.

This points to systemic problems with regards to entrepreneurialism which may be related to weaknesses with regards to the likes of education, culture and support networks.

Research and Development (R&D) spending

Both the UK and Scotland have a poor international record with regards to R&D spend. This is well recorded in recent analysis by the Scottish Government (2022) and Oxford Economics (2021).

However, the picture for Scotland is not straightforward, as a recent Nesta report (2020) highlighted. Nesta shows that Scotland does not share the same problem as most other, non South-East England, regions do. Its situation is 'average' for the UK, whereas the rest of the UK is split between 'high' (London and the South East) and 'low' (all other regions) R&D spenders.

Figure 6: levels and potential shortfall in HERD and BERD across UK regions

Region/nation	Govt. +HE R&D/£m	Business R&D/£m	Govt. +HE per head/£	Business per head/£	Extra needed to level up: Govt. +HE /£m	Extra needed to level up: business /£m
East of England	953	4,393	156	720		
London	2,395	2,296	275	263		
South East	1,875	4,693	209	522		
North East	288	302	110	115	289	956
North West	817	2,346	114	326	762	1,096
Yorkshire & The Humber	646	750	120	139	540	1,835
East Midlands	418	1,655	89	352	614	592
West Midlands	463	2,303	80	398	805	461
South West	638	1,500	116	273	568	1,126
Wales	271	435	87	140	410	1,050
Scotland	1,223	1,072	227	199		1,504
Northern Ireland	160	481	86	259	248	407
Totals	10,147	22,224			4,234	9,026

Source: Nesta (2020)

Figure 6 illustrates that, within its overall 'average' position, Scotland has a very good placing with regards to 'Government & HE' R&D spend - in per head terms, 2nd only to London - and a very poor 'Business R&D' (BERD) position - in per head terms, below every





UK region bar the North East, Yorkshire & the Humber and Wales.

The Nesta report calculates that if the more usual 2:1 ratio of private to public R&D spend applied in Scotland then an extra £1.5 billion of investment could be leveraged in.

So the question for Scotland is why is this not happening? Is it caused by:

- the industry make up of Scotland being less R&D compatible;
- the typical size of firms being too small to generate much in the way of R&D activity:
- the attitude and approach of HE institutions towards co-operation with the private sector being in some way off-putting?

At present, it is difficult to know the answer, although the first explanation seems unlikely given the industry breakdown of Scotland vs the UK.

ONS data for UK BERD shows that, while some high R&D spend sectors, like Motor Vehicles and Aerospace have little presence in Scotland, many of the significant R&D spenders do e.g. Pharmaceuticals, Computer Programming and Software Development. However, Scottish BERD data shows that, while Pharmaceuticals business R&D spend is relatively large within Scotland, it is still well below its population share of the UK figure.

It is also worth noting that the Scottish BERD figure for Pharmaceuticals needs to be inferred as the actual figure for the most recent years is suppressed, for reasons of disclosure control. This is telling in its own right suggesting that a small number of large companies are involved.

Data for the biggest BERD sector in Scotland - 'technical testing and analysis' undertaken by the 'Financial and Business Services' sector - is also concerning, as it more than doubles in 2017, which seems implausible.

The geographical split across Scotland is also of interest, with the City of Edinburgh accounting for a third of BERD in recent years, presumably related to financial services, while Aberdeen, Glasgow and West Lothian together account for another third.⁵

UK BERD data also shows that, for Manufacturing, company size is important, with around 60% of R&D being undertaken by companies with between 400 and 5,000 employees. However, on the Services side this is not so true with almost 30% of R&D being undertaken by companies employing under 100 people.

The key question that needs to be addressed then is how to raise private sector R&D spend.

⁵ Data issues may also be a concern here with the BERD survey sample size being relatively small scale and some of the annual sectoral changes being difficult to explain.

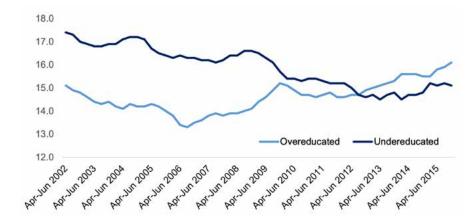
Mismatch, missing skills and poor management practices

On skills, the Scottish position shows good and bad aspects. Its international record on adult skill levels is relatively good, with one of the most educated workforces in the OECD and it is near the top 3 amongst EU regions for the proportion of the working age population with a tertiary education (The Productivity Institute, 2021).

However, within this positive position lie some problems. First, Scotland has a relatively high percentage of adults without any qualifications, almost 10% (although this figure has halved since 2004), and which is a particular problem for Glasgow.

Second, the high skills of the workforce are often being underused in their jobs, i.e. mismatch exists. It is estimated, for 2015, that around 15% of people in employment in Scotland were overeducated and another 15% undereducated in relation to their jobs, a 30% overall mismatch, see Figure 7.

Figure 7: Jobs mismatch in Scotland



Source: Scottish Government - 'National Strategy for Economic Transformation' (2022)

The appropriate emphasis here may be less on academic skill levels and more on attitudes and management skills, which suggests a greater role in tertiary education for broader courses that can, regardless of the main course content, incorporate such learning.

At the lower skills end, equality issues in relation to school level education remain relevant. Here the evidence remains strong that early years interventions can be highly effective (Heckman 2005) but, as ever, it is the implementation of these policies that is crucial to increasing the chances of success. Thus far, in Scotland, the mind/rhetoric is willing but the flesh/funding is weak.

There is increasing evidence that management practices are an important factor in both the productivity and the likelihood of expansion of businesses (Scur 2021). In particular, better information technology and digitalisation skills are key to improved performance (Logan 2020) and to SME's successfully navigating the difficulties brought about by pandemic period restrictions (NIESR 2022).

Finding new ways to increase the skill levels of the future labour force is important, as it will be very difficult to replicate the improvements seen in the second half of the last century - which saw the inclusion of a greater number of women in the workforce along with a much expanded higher education sector. In more recent times, higher rates of net inward migration may also have helped. The question is what new source of skills upgrading might emerge to provide further boosts?



While each of the areas discussed in Section B have been identified as weak, recent policy analysis has tended to look at economic strategy from a different perspective. Rather than company and industry characteristics, the focus has been more on problem solving, with an emphasis on: i) the environment and the green economy; ii) reducing inequality and poverty; and iii) improving 'well being'. These two different approaches can lead to discordant attempts at synthesis in economic strategy, with goals that seemingly clash with, rather than complement, each other.

The approach taken in this report is that an economic strategy should be just that, based on improving the performance of the economy. A government's social or environmental targets are best met through other strategies. While the economic strategy must be compiled so as not to detract from achieving these other goals, it should not be derived with such 'alternative' goals at the forefront of its thinking, as is the case at present in Scotland.

A high productivity economy should result in better jobs and higher taxes that can be used to intervene where markets are failing or inefficient with regards to social or environmental outcomes. This is not trickle down economics, rather it is using the benefits of a successful economy to help offset any existing or emerging inequalities and negative externalities. The remainder of this report places the emphasis on widespread innovation and improvement across business and companies, as opposed to a 'mission' orientated strategy.

The problem areas highlighted above should not detract from the fact that Scotland already has the fundamentals in place for a successful economy, including:

- · a highly skilled workforce;
- mature and internationally respected institutions;
- · a well developed physical infrastructure;
- · key areas of comparative advantage.

But Scotland is failing to properly leverage its assets. A fundamental overhaul is not needed, rather, a re-orientating of existing policies and practices, along with a more engaged and consistent strategy, should suffice to improve outcomes.





The Problem(s) with Productivity



While Scotland appears to be looked upon favourably in terms of a destination for overseas business investors, this does not translate through to actual jobs and investment. Both the UK, and Scotland within it, have had a productivity problem since at least the end of the Second World War (see Crafts 2018). While the initial deteriorating position ended around 1980 and there was some improvement up to the end of the century, there was no dramatic turnaround and there has been yet another fall post the Financial Crisis. So a poor productivity record has been a long term, stubborn, issue.

Further complicating matters is just how little economists know about why productivity changes over time and how to improve it. While some countries have seen noticeable improvements over the last 50 years, most of these have related to catch up (e.g. South Korea, Eastern Europe) or unique circumstances (e.g. Ireland, Iceland, Norway). What is more remarkable is how little things have changed in terms of economies relative rankings. (McLaren 2019 i). For example, across 2000 to 2017:

- surprisingly low productivity economies like New Zealand, Japan and Canada - did not improve;
- high productivity economies like Belgium, Germany and the USA - remained well placed;
- there is no easy explanation for those economies that did notably rise in the rankings like Denmark and Austria.

It is also important to highlight the weaknesses in the data used to compile such comparisons. While the distortionary idiosyncrasies in the Irish economy are well known (Central Bank of Ireland 2021), even between countries like the USA and the UK revisions to data and methodologies can make huge differences in the calculations. For example, recent adjustments recently led the OECD (2018) to cut the UK productivity differential in comparison to the USA from -24% to -16%. In other words, one third of the productivity shortfall disappeared.

Equally the robustness of data on regional productivity within the UK remains questionable, with many difficult to explain quirks across time and regions.

All of this suggests that, yes, improving productivity is hugely important, but how this is best achieved, using international comparisons and targeting changes in levels and rankings, is highly debatable. Instead, it is better to concentrate on improving the basics and strengthening any weaknesses.

One useful way to help sidestep the less than robust productivity data is to consider key components leading to its growth. To this end, the CBI and KPMG produce an annual Productivity Index, containing 15 pertinent indicators (CBI/KPMG 2021).

The latest edition suggests a number of areas where Scotland lags the UK average, including concerns over:

- · business investment and innovation;
- · exporting;
- · ill health;
- · connectivity.

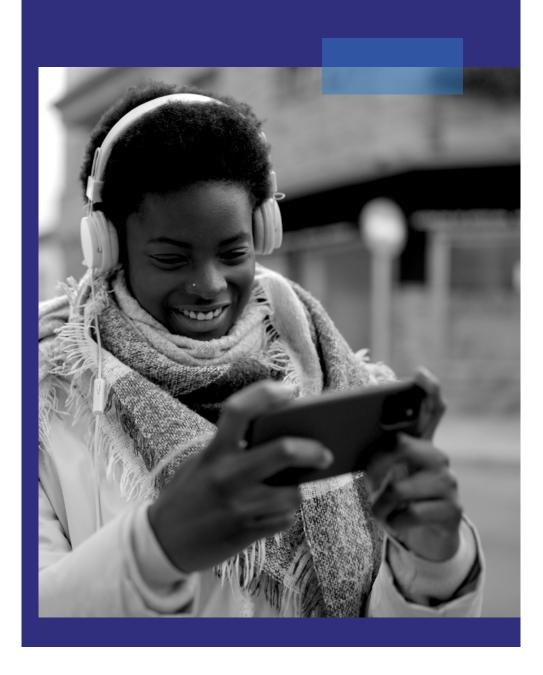
Another signal of a successful and innovative economy is the degree to which other countries would like to invest in it. Inward Investment data for the UK (DIT 2022) shows that, while Scotland appears to be looked upon favourably in terms of a destination for overseas business investors, this does not translate through to actual jobs and investment. For example, of the 1,589 foreign direct investment (FDI) projects, only 119 came to Scotland and of the near 85,000 jobs these created Scotland only gained 4,408 (5%). This is disappointing given that such investments are commonly thought to improve productivity in general.§

Both the NSET and the LUWP highlight the key areas that lead to improvements in productivity. While expressed in different terms in the two reports, these elements consist of:

- · human capital (skills);
- physical capital (company capital, national infrastructure, local housing);
- · intangible/intellectual capital (entrepreneurship, innovation, ideas and patents);
- social capital (equality of opportunity, community links, personal health/safety and trust);
- · financial capital (access to funding);
- institutional capital (leadership, capacity).

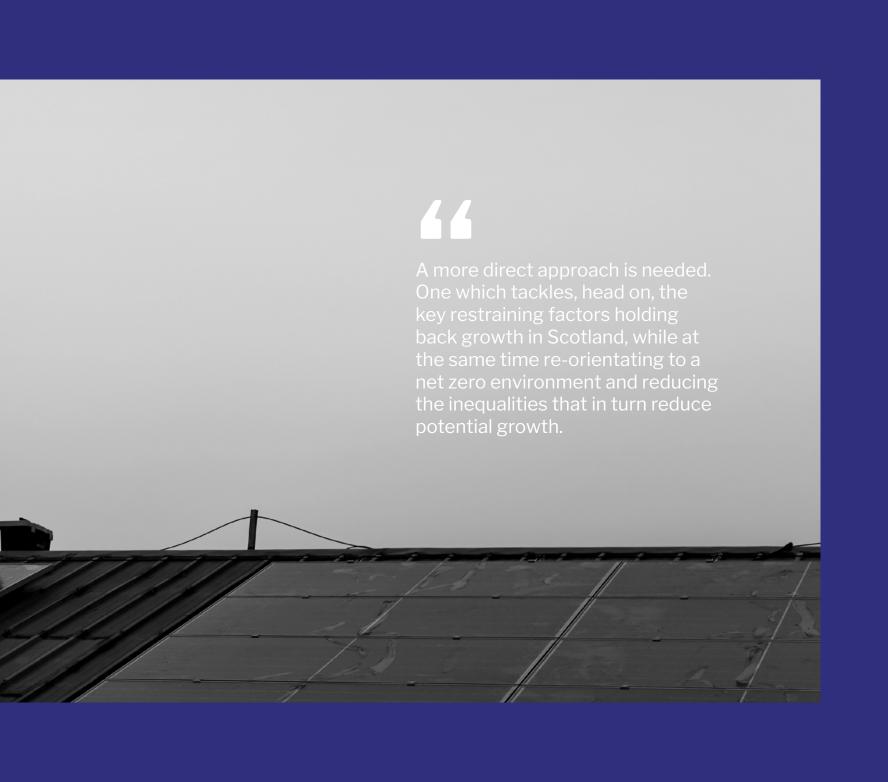
Clearly these essential elements cover a very wide range and no strategy can be expected to focus on all, or even most, of them without ending up allocating trivial amounts to each. Therefore prioritisation decisions must be made.

This highlights one of the problems with the NSET, which is that its five new policy areas essentially cover all of the six types of capital outlined above and so it is not offering much in the way of focus or prioritisation.



 $^{6\,}$ Ernst & Young survey data shows a slightly more optimistic picture with Scotland getting an above population share of FDI investments and jobs in recent years.





Key Areas for a Successful Economic Strategy to Address

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There are some areas where Scotland clearly has a competitive advantage that is being underexploited.

So where to start, what to prioritise?

This section gives an overview of some of the likely areas that need to be addressed, without claiming to be comprehensive.

In some ways the strategy does not have to identify the best possible actions, rather its success rests on the actions being useful, as well as politically acceptable (i.e. not unpopular with the public) and being properly implemented. Without the latter two elements no strategy will be a success.

In addition, it needs to take into account the changed circumstances of recent years, as well as the long term problems that have dogged the economy. This means taking on board:

- the lessons from the Financial Crisis:
- the further, post crisis, decline in productivity;
- the economic and social impacts of the pandemic (de-globalisation, working from home etc);
- enhanced climate change concerns and net zero targets:
- the war in Ukraine's energy and geopolitical implications.

The lessons to be learnt from these changes in circumstances are important as, if they are not taken on board, then any strategy may soon find itself out of date.

A good example of this can be seen by looking back less than a decade to the Independence White Paper of 2013. At that time, what were claimed to be reasonable assumptions were made with respect to the important role of North Sea oil and gas in Scotland's future economy. Continued North Sea output, for

decades ahead, was assumed, based on "reserves of up to 24 billion barrels of oil and gas that can still be recovered, which could be worth £1.5 trillion – a greater value than the amount extracted to date" (Scottish Government 2013).

That outlook is now redundant. Instead the race is on to end oil and gas production as soon as possible. This highlights the need to properly identify the initiatives that are relevant, regardless of future circumstances, as well as those that will address likely new and emerging problem areas.

With these warnings in mind, what might reasonably be seen as a good starting point for drawing up a new economic strategy?

In terms of building on strengths, where does Scotland appear to have a solid base?

Existing and Emerging Areas of Comparative Advantage

While identifying 'winners' is largely to be avoided, there are some areas where Scotland clearly has a competitive advantage that is being underexploited. These include:

Renewable energy - while the merits of the initial seabed sale for offshore wind power remain questionable there are many more opportunities ahead which need to be grasped. First, there is a need to ensure that supply chain benefits from the first round come to fruition. Then, there is the potential for greater Scottish involvement in subsequent rounds, be it through a revived National Energy Company or by some other means.

However, care needs to be taken over putting too much emphasis on any particular type of renewables energy. Relative shifts in the price of different

energy sources change over time, along with shifts in attitudes to different risks and negative externalities (from pollution to radiation to landscape disfigurement, etc). This means it is difficult to forecast what will be the winning strategy with respect to developing energy sources, even looking just a decade into the future.

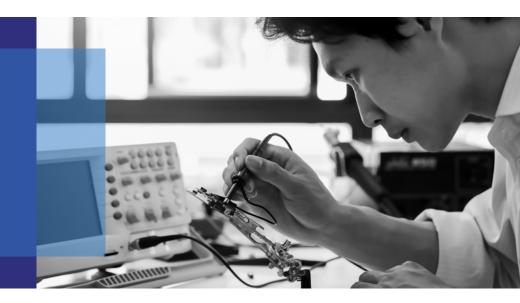
Higher Education - in a lecture at the Glasgow School of Art (BoE 2019), Andy Haldane, then of the Bank of England, highlighted the role of universities in creating more innovative graduates than currently exist. He cited worries that

Apprenticeship etc); and the, already discussed, apparent over-education of some graduates.

Tourism - clearly not all kinds of tourism are relevant for Scotland, but strong niches exist, including with respect to: natural landscape and environment; history and genealogy; sport; arts, food and drink. However, the basic tourist infrastructure, involving hotels and catering, is often unimpressive and the ability to maximise the number and spending of tourists is not matching the opportunities. For example, over the period 1998 to 2019 the 'Hotels &

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As Scotland exists within a single UK economic and political system, then the positive benefits of such an arrangement should be maximised. At present, this is not the case.



the education system stifles rather than encourages creativity by being heavily skewed towards developing cognitive skills which were more appropriate to earlier forms of industrial development. In the future, what may be more appropriate are 'multiversities' which expand disciplinary horizons and are less subject-singular. These may also need to straddle generations, as well as disciplinary divides. Together with a greater focus on creativity, more emphasis on management issues and information technology could also be integrated into more courses.

Further pertinent, HE related, questions exist over long standing traditions like: length of study; type of study (Higher Education vs Further Education vs

Catering' sector, an important element with regards to tourisms impact on an economy, grew by only 0.6% a year, whereas for the UK as a whole it grew by more than double this, at 1.4% a year.

Services in general - as the recent Resolution Foundation report (2022) pointed out the UK is a "services-exporting superpower" and many of Scotland's industries with the greatest comparative advantage also rest in the Services sector. This should not be too surprising given that services account for three-quarters of the Scottish economy. Areas of real and potential strength include: Business and Financial services; Higher Education; and Culture.



Contributing factors to a growth formula for Scotland

How might these, real and potential, strengths be bolstered and the weaknesses highlighted in Section B be strengthened? This requires improvements in existing institutions and initiatives.

UK wide collaboration

As Scotland exists within a single UK economic and political system, then the positive benefits of such an arrangement should be maximised. At present, this is not the case.

Areas where greater cross UK co-operation might apply include:

- with respect to wind power generation in the North Sea, the whole of the eastern seaboard can play a role and co-operation may lend itself to easier scaling up of operations;
- meeting climate change targets, where a recent report from the Climate Change Committee (CCC), which advises both governments, claimed that greater cooperation was needed and that without it agreed targets would be missed (UK Parliament 2022);
- the distribution of funds by UK wide Trusts and Charities. For example, the
 degree of analysis of Scottish, Welsh and Northern Irish policies in general
 (including health, education etc) is very much biased towards the English
 system, which is often quite different to what happens in the other UK
 constituent nations. For example, the Health Foundation, with its £1 billion
 endowment fund should be looking to invest its knowledge UK wide rather
 than being concentrated in England. Section A's discussion of Scotland's
 recent relative underperformance in Education and Health highlights the
 need for greater analysis of public sector outputs;
- health related lessons from the pandemic. Such insights will relate to

 (i) public-private sector collaboration, with regards to on-going vaccine research for example, and (ii) lessons learnt by the NHS and GP's in terms of: improved efficiency; future risk management; and changes to doctor and patient behaviour;
- setting regional migration targets within any national target. The suggestion here is that, like in Australia, there should be greater scope for nations (and regions) to identify their owns needs and wants within any overall UK level total.

In these cases, and likely many others, it should not be forgotten that, regardless of the constitutional position of Scotland, its on-going relationships

with UK institutions and the UK economy will inevitably remain crucial to how well the Scottish economy performs. Furthermore, as London is a global hub it offers many opportunities, as well as threats, to piggy back on its success. In recent times, i.e. post devolution, some of these ties have weakened, due to a mutual lack of interest and now need to be restrengthened, even more so than before given the weakening of EU collaboration ties.

Private and public sector R&D

As discussed previously, Scotland does not suffer the same degree of under investment in R&D as many other parts of the UK. However, its R&D is skewed very much towards the public sector. The issue is how to achieve greater private sector buy-in?

One new route to helping understand the issue(s) better may come from the new Glasgow Innovation Centre, being established as part of the LUWP. As well as the Glasgow Centre, Scotland should be looking to learn the lessons thrown up by those to be established in Greater Manchester and the West Midlands. Each centre will concentrate on different industry clusters but some of the lessons are likely to apply in a wider sense.

A recent paper looking at where the UK appears to have some degree of international comparative advantage (CEP 2022 i), in terms of innovation, identifies some promising areas within Scotland, for example, Wind and Ocean energy and COVID-related.

Financial Support

The need for some form of public sector financial support body has long been recognised and has resulted in the creation of the Scottish National Investment Bank (SNIB). However, while a welcome innovation, its conceptualisation looks flawed. As others have pointed out (Reform Scotland 2022) its mission is confused and misaligned with Scotland's immediate economic needs. Its underwhelming performance thus far reflects this and its funding may also be insufficient to affect the required change.

What is needed is a rapid re-assessment and re-orientation of SNIB so that it becomes geared more to helping in those areas identified here, for example: to assist current and wannabe exporters; to leverage in more private sector R&D; to ensure offshore wind power opportunities are fully exploited, etc.

Financial support is another area where increased UK wide collaboration is important. In particular, how will the SNIB's approach fit in with the strategies of UK led business support banks like: the British Business Bank (BBB); the UK Infrastructure Bank (UKIB); and the Green Investment Bank - now Group - (GIG).

All three of these UK institutions have core functions that include addressing climate change and regional economic disparities and, in the case of the BBB, working with smaller businesses. Furthermore, their budgets are considerable, with the UKIB having an initial £22 billion of financial capacity and the BBB being allocated £1.6 billion at the 2021 UK Spending Review - £150 million of which is identified for Scotland.

Like the SNIB, the UKIB is still finding its feet, having only been established in 2021. This makes now a good time to ensure that the funding from each of these sources is complementary and maximises Scottish investment potential, leading to collaboration rather than competition across the Banks and UK levels of government. Thus far, little in the way of such collaboration and cross country communication has been seen.

Trade

At a time when there is a rising risk of de-globalisation, and post Brexit, finding ways to counter such trading threats is important. Scotland's recent exports record is unimpressive to start with and is very much concentrated in a small number of firms and industries.

Some of the problem may lie with the firm structure within Scotland, in terms of the dominance of SME's, but this should be seen as a challenge rather than a reason not to act.

Brexit has also hit smaller exporters more (CEP 2022 ii), which heightens the need for some form of intervention.

Other countries may offer lessons here, although for some small countries such export driven success is based on narrow, and often non-replicative, specialities. This includes Iceland - Aluminium, Fish, Tourism - and Finland - timber, Nokia. However, there may be relevant points of interest with regards to countries like Denmark, Austria and Belgium.

It also needs to be remembered that the rest of the UK (RoUK) is, to some degree, an exports market. Indeed official Scottish Government figures split Scottish exports into two categories: i) International, and ii) Rest of the UK. Figure 8 helps identify their relative importance.

Figure 8: Scotlands (onshore) exports markets, 2019

Exports, £ billion	Manufacturing	Services	Other	Total	Total (%)
EU	10	5	1	16	18
Overseas (non EU)	9	8	2	19	22
UK	11	29	12	52	60
Total	29	43	15	87	100

Source: Scottish Government - 'Exports Statistics Scotland 2019' 2021 Note: Other includes: Agriculture, Forestry & Fishing; Mining & Quarrying; Utilities; and Construction.

Broken down even further we find:

- by far the biggest international export outside the EU comes from Distilling (£3.7 billion, 20% of all exports to non EU);
- the biggest EU export comes from Petroleum & Chemical products (£3.2 billion, 20% of all exports to EU);
- the biggest RoUK export comes from Financial Services (£9 billion, 17% of all exports to RUK);
- of the top 8 export product destinations, by value, 6 relate to the RoUK (Financial Services, Utilities, Wholesale & Retail, Professional Business services, Food & Drink and Information & Communication) 1 to the EU (Petroleum & Chemical products) and 1 to the rest of the world (Distilling).

As the UK is currently, by far, Scotland's biggest 'exports' market (although it is difficult to be exact about the numbers) then it is hugely important that this aspect of 'internal market' exporting is considered. For some firms, expanding to the UK market will act as a first step to exporting to an international market. This means that policies to grow firms and to increase exports should also bear in mind the potential of the UK market, acting as a half way house to accessing wider markets.

All together, these priority areas of action should be seen as a reinforcing network of initiatives that can, with time, improve Scotland's productivity record and economic performance, while at the same time steering Scotland towards improved equality and more environmentally friendly outcomes. They represent threads that run through this analysis of what needs to be addressed:

- Expansion particularly amongst smaller companies;
- · Skills both missing and mis-matched;
- Funding of companies, institutions and initiatives;
- · Innovation picking up ideas and spreading them.



Summary and Recommendations

The analysis in this report highlights a number of policy areas that need to be addressed in order to improve Scotland's economic performance.

Long Term Issues revolve around low private sector capital and R&D investment, as well as under investment in management skills.

Post Great Recession Issues point to low productivity at the same time as climate change concerns are on the rise.

Current Issues highlight post COVID-19 behaviour changes as well as Brexit and the war in Ukraine.

This is a big field to take on, especially given the public sectors limited ability to seriously influence some of the outcomes.

Where governments work best in such circumstances is by addressing market failures through the introduction of effective incentives.

These incentives can emerge from a mixture of sources, including:

- financial impetus in the case of raising private sector capital investment levels;
- improved co-ordination in terms of strengthening collaboration between the private and public sectors, as well as across the UK;
- leadership within government by showing greater policy consistency and focus as well as stronger engagement on economic issues.





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Post devolution, a lack of economic focus has likely contributed to Scotland's underperformance. This relative weakness, even compared to the UK, is already having a significant impact on households. Post devolution, a lack of economic focus, possibly related to the lack of a Treasury equivalent department, has likely contributed to Scotland's underperformance. This relative weakness, even compared to the UK, is already having a significant impact on households.

Taxes are higher than elsewhere in the UK while at the same time a new period of austerity for public services, outside of health, has been introduced, both driven by the need to compensate for a, growth related, funding shortfall.

At present, the Scottish Fiscal Commission (SFC) estimate this shortfall to be around £1 billion (2022-23) and that by 2026-27 the shortfall will have risen to around £1.5 billion. This figure is close to the existing budget for GPs and dentists combined or the Scottish Police Authority. Furthermore, based on SFC economic growth trends, then such a shortfall may well exceed £2 billion by the start of the next decade. $^{\rm Z}$

The reality is likely to be that, instead of this shortfall feeding through as Budget cuts, the Scottish Government will keep on imposing higher taxes than are seen elsewhere in the UK. Regardless, the on-the-ground impact of slower growth will be costly for Scots households, whether it be through higher taxes or reduced public services.

This makes the re-ignition of the Scottish economy a top priority and not one that has been properly addressed by the Scottish Government's 'National Strategy for Economic Transformation'.

A more direct approach is needed. One which tackles, head on, the key restraining factors holding back growth in Scotland, while at the same time reorientating to a net zero environment and reducing the inequalities that in turn reduce potential growth.

Now comes the hard bit, how to start this process off and to make it work, when so many other such strategies have failed.

Some immediate changes that would improve matters include:

- a refocusing of the SNIB's remit, an increase in its budget and improved coordination with equivalent UK institutions;
- creating a new 'Treasury' department in order to improve the prioritisation of spending, introduce more growth incentives and to enforce better value for money;

⁷ The future shortfall may be affected by the current Fiscal Framework review but it seems unlikely that this will seriously impact on the inherent growth risk involved

- actions to ensure that the Scottish supply chain benefits appropriately from stage 1 of the offshore wind power sale;
- action to address missing skills and information sources that may be holding back the trading ambitions of SME's;
- a review to ensure that Scotland (Wales and Northern Ireland) benefit appropriately from UK wide bodies, including charity trusts, funding for research and for policy evaluation.

In the medium term other initiatives should include:

- overhauling the approach to tourism to better capture Scotland's natural advantages;
- leveraging in more private sector R&D to reach the 2:1 ratio that is seen elsewhere in the UK.

However, the most important recommendation is to have a consistent and long term approach to economic growth policy, as few of the recommendations here will make a difference quickly. Rather, they have the capacity to make an impact over time, as has been experienced in other countries who have taken a patient approach.

The alternative approach, chopping and changing over time and with funds dispersed widely and intermittently, will inevitably lead to the all too familiar failure experienced in the past.



References

Bank of England - 'The Creative Economy' (2019) (see https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/the-creative-economy-speech-by-andy-haldane.
pdf?la=en&hash=4A3B2C4C6F810E5F16BE72A6990C37C7C59CF4BA)

CBI/KPMG - 'Scottish Productivity Index' (2021) (see https://www.cbi.org.uk/media/mondc3sh/scottish-productivity-index-2021.pdf)

Central Bank of Ireland - 'Is Ireland really the most prosperous country in Europe', Economic Letter Vol 2021, No.1 (2021) (see https://www.centralbank.ie/docs/default-source/publications/economic-letters/vol-2021-no-1-is-ireland-really-the-most-prosperous-country-in-europe.pdf?sfvrsn=25)

Centre for Economic Performance - 'Innovation for a strong and sustainable recovery' (2022 i) (see https://cep.lse.ac.uk/pubs/download/cepcovid-19-014.pdf)

Centre for Economic Performance - 'Unravelling deep integration: UK trade in the wake of Brexit' (2022 ii) (see https://cep.lse.ac.uk/pubs/download/dp1847.pdf)

Crafts, N. - 'Forging Ahead Falling Behind and Fighting Back: British Economic Growth from the Industrial Revolution to the Financial Crisis', Cambridge University Press, 2018

Department for International Trade - Inward Investment results 2021 to 2022 (2022)

Heckman & Masterov - 'Skill Policies for Scotland' in 'New Wealth for Old Nations: Scotland's Economic Prospects' ed. Coyle et al, Princeton Press (2005)

Industrial Strategy Council - 'UK Regional Productivity Issues: Evidence Review' (2020) (see https://industrialstrategycouncil.org/uk-regional-productivity-differences-evidence-review)

Logan, M - Scottish Technology Ecosystem Review (2020)

McLaren, J. - 'Scottish Productivity - what does new data and research tell us?' Scottish Trends (2019 i) (see http://scottishtrends.co.uk/wp-content/uploads/2019/05/Scottish-Productivity-May-2019-final.pdf)

McLaren, J. - 'Scotland's International Ranking in terms of GDP per capita and Material Well-being' Scottish Trends (2019 ii) (see http://scottishtrends.co.uk/wp-content/uploads/2019/10/GDP-per-capita-Sep19.pdf)

Nesta - 'The missing £4 billion - Making R&D work for the whole UK' (2020) (see https://www.nesta.org.uk/report/the-missing-4-billion/)

NIESR - 'Covid-19 and Productivity, Impact and Implications', Ballicu et al in 'The Digital Divide and Technology Adoption in Covid Times' (2022 i) (see https://www.niesr.ac.uk/wp-content/uploads/2022/02/0P62-Covid-19-and-productivity.pdf)

NIESR - 'Productivity in the UK: Evidence Review', UK Productivity Commission (2022 ii) (see https://www.niesr.ac.uk/wp-content/uploads/2022/06/ Productivity-in-the-UK-Evidence-Review.pdf)

OECD - 'International productivity gaps: Are labour input measures comparable?' (2018) (see http://www.oecd.org/officialdocuments/ publicdisplaydocumentpdf/?cote=SDD/DOC(2018)12&docLanguage=En)

Oxford Economics - 'Raising Scotland's Economic Growth Rate' (2021) for the Hunter Foundation (see https://www.thehunterfoundation.co.uk/wp-content/uploads/2021/04/Raising-Scotlands-economic-growth-FINAL-EMB-TO-00.01-0N-7-APRIL-1.pdf)

Productivity Insights Network (PIN) - 'Productivity Perspectives Synthesis' by Phillip McCann (2018) (see https://productivity-Perspectives-Synthesis-updated-21.11.18.pdf)

The Productivity Institute - 'Scotland's Productivity Challenge: Exploring the issues' (2021 i) (see https://www.productivity.ac.uk/publications/scotlands-productivity-challenge-exploring-the-issues/)

The Productivity Institute - 'UK's Industrial Policy: Learning from the past' (2021 ii) (see https://www.productivity.ac.uk/publications/uks-industrial-policy-learning-from-the-past/)

Reform Scotland - 'Mission Accomplished? Assessing the Performance of the Scottish National Investment Bank' (2022) (see https://reformscotland.com/2022/05/mission-accomplished/)

Resolution Foundation - 'The Economy 2030 Inquiry: Enduring Strengths' (2022) (see https://economy2030.resolutionfoundation.org/wp-content/uploads/2022/04/Enduring_strengths.pdf)

Scottish Government - 'Scotland's Future' White Paper (2013) (see https://www.gov.scot/publications/scotlands-future/documents/)

Scottish Fiscal Commission - 'Trends in Scotlands population and effects on the economy and income tax, August 2022' (2022 ii) (see https://www.fiscalcommission.scot/wp-content/uploads/2022/08/Trends-in-Scotlands-population-and-effects-on-the-economy-and-income-tax-August-2022.pdf)

Scottish Government - 'Exports Statistics Scotland 2019' (2021) (see https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2021/10/export-statistics-scotland-2019---publication/export-statistics-scotland-2019---publication/govscot%3Adocument/Export%2BStatistics%2BScotland%2B2019%2B-%2BPublication.pdf)

Scottish Government - 'National Strategy for Economic Transformation' (2022 i), both the main report and the evidence paper (see https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/documents/)

Scottish Government - 'National Indicator Performance' webpage (accessed May 2022) (see https://nationalperformance.gov.scot/measuring-progress/national-indicator-performance)

Scottish Government - 'GDP Quarterly National Accounts, Scotland' (2022 ii) (see https://www.gov.scot/publications/gdp-quarterly-national-accounts-2021-q4/)

Scur et al - 'The World Management Survey at 18: Lessons and the Way Forward', NBER Working Paper 28524 (2021)

UK Government - 'Levelling Up' White Paper (2022) (see https://www.gov.uk/government/publications/levelling-up-the-united-kingdom)

UK Parliament - Climate Change Committee 'Progress in reducing emissions' (2022) (see https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/)

