SCOTLAND THE BRIEF MINI

2023 EDITION

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All you need to know about Scotland's economy, its finances, independence and Brexit

by Gordon MacIntyre-Kemp

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Creative Industries

OIL and GAS

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A Wellbeing Economics approach

BusinessforScotland

Scotland the Brief
Second edition, updated April, 2023

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Published by Gordon MacIntyre-Kemp on behalf of:
Business for Scotland Ltd, Suite 1A, 3rd floor,
Sycamore House, 290 Bath Street, Glasgow G2 4JR.
businessforscotland.com

Ordering information: you can purchase *Scotland the Brief* direct from **scotlandthebrief.com**

Printed and bound in Scotland
by McAllister Litho Glasgow Ltd

ISBN 978-1-9162636-3-5

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1056914
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Contents

Introduction

The UK Supreme Court has ruled that the people of Scotland do not have a right to self-determination as they are not oppressed. However, by passing that judgement the Supreme Court has democratically oppressed Scotland and proven beyond all doubt that the UK is not a voluntary union. This fact alone makes a majority of pro-Yes MPs almost certain under current UK General Election rules.

Regardless of how you would vote, or even if you are still undecided, the goal of this book is to provide an indispensable fact-rich resource and offer clarity on the question everyone wants answered clearly and concisely: Would independence be good for Scotland's economy? Polling has revealed that 77% of Scottish voters would support independence if they thought that it would be good for the economy.

That is a 30% increase, compared to a survey which asked a similar question, before the 2014 referendum. Polling by Believe in Scotland has found that if the Scottish Government were to put a Wellbeing approach at the heart of its economic plans for independence (a plan that recognised that quality of life, equality, fairness, sustainability, happiness and health are all outcomes that should be given equal weight to economic growth) whilst committing to increase the state pension in an independent Scotland that 60% of Scottish voters would vote Yes in a referendum.

Unlike most books discussing economics, Scotland the Brief is designed to be easy to understand and even fun to read. It will advance clearly explained and indisputable research findings. All data sources are numbered and listed in the full-sized (Maxi) version of the book.We have drawn conclusions from this data and firmly believe that Scotland clearly has what it takes to thrive as an independent nation, that the Brexit vote has broken Britain, laid the foundations of the cost of living crises, staff shortages in industry and the NHS and now has triggered a recession. These observations are clearly marked throughout the book and separated from the factual content, so should you choose, you can study just the facts and draw your own conclusions.

As Scotland is not currently independent, the economic data required to help people reach an educated and informed opinion isn't collected as reliably and isn't as easily accessible as data in fully independent nations. This leads to a lack of clarity, which has allowed politicians and media commentators on both sides of the argument to twist the data to suit their own purposes.

As a result, I felt compelled to write this book to cut through the clutter and offer clarity on the key questions about Scotland's economy and independence. Scotland the Brief presents our research in bite-sized sections, illustrated with graphics that will help you to understand:

- The key assets, opportunities and threats to the Scottish economy
- Scotland's key economic sectors and how they are performing
- The key questions people have about Scotland's economy and finances
- How Brexit will affect Scotland and specific industries within it
- What powers Scotland has and what powers it needs to succeed as an independent nation
- Who really runs Scotland and what that does to Scotland's economy
- Is the UK well run?
- Are smaller or larger nations economically more successful?

As a new addition to the second edition, we will look at key policy decisions made by the UK Government and also the key elements of the Scottish Government's economic prospectus for independence.

We look at the nation's economic assets, its key sectors, governance and infrastructure, human capital and natural wealth, then benchmark those against similar-sized northern European nations to see how Scotland's economy should be performing and not how the UK Government says Scotland is performing.

– *Gordon MacIntyre-Kemp*

1.
WHAT MAKES FOR A PROSPEROUS NATION?

Many factors influence prosperity but there are five key contributory factors:

- **The natural wealth of a nation,** including mineral and fossil fuel wealth, natural landscapes, land mass, the quality of farming land and the size and productivity of territorial waters.
- **The ability to export goods.** Here we look for a positive balance of trade in manufactured goods and raw materials with other nations.
- **A track record in innovation.** This involves looking at performance in both academic and applied research, as well as innovation within sectors such as information technology, biotechnology and life sciences.
- **Advanced governmental and economic infrastructure.** This includes mature but flexible institutions and systems of government, finance, enterprise, justice, tax and welfare. Essential to this is a parliament with the physical capital, in terms of the infrastructure, to invest in and oversee assets such as roads, railways and communications technology.
- **Human capital and potential.** This requires the measurement of the value added to a nation's economy by its people and the sum of their knowledge, skills, creativity, qualifications and approach to work and society.

Let's investigate each of those prosperity factors in detail to find out if an independent Scotland would have what it takes to be a prosperous nation.

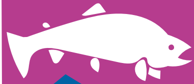
The natural wealth of Scotland

The natural wealth of a nation can form the bedrock of its economic success. Having vast natural wealth to rely on makes it easier for a nation to properly invest in developing the other factors needed to be a successful nation. Such is the case for Scotland. So, how does Scotland's natural wealth compare with the rest of the UK, and even with Europe?

What makes for a prosperous nation?

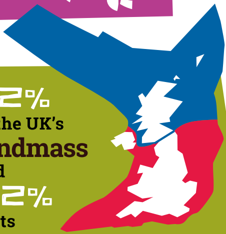
Scotland, with 8.1% of the UK's population, possesses:

69% of the UK's fish landings



17-38% of the UK'S NATURAL WEALTH (money generated from natural assets)

Note: value varies with oil price.



32% of the UK's landmass and 62% of its offshore maritime area

50% of the world's installed tidal stream capacity is in Scottish waters

61% of UK timber production

22.3% of the UK's renewable energy generation and 85% of its hydropower

85% of the UK's oil and gas

90% of the UK's total fresh water

20% of all planned offshore wind power capacity in the EU

For more info on Scotland's renewable sector click here

Observations on Scotland's natural wealth

Scotland's natural wealth could clearly be one of the key foundations of Scotland's future prosperity as an independent nation. It is unreasonable to believe that a country as naturally wealthy as Scotland would not thrive if it were to gain the power to manage these resources for Scotland's benefit rather than have those benefits diluted and distributed across the rest of the UK.

Scotland's natural wealth is something to be stewarded and safeguarded for future generations rather than exploited for short-term financial gain, or to pay down debt from other parts of the UK, as has been the policy of successive UK Governments.

Scotland's exporting performance

A major bonus for any nation's economy is the ability to export specialised manufactured goods. This is one of Scotland's key strengths.

In highly developed economies such as Scotland's, it takes technological advantages, or the natural wealth we have just seen, to develop the specialisms that create high-value export demand and higher prices. This, in turn creates new jobs of a higher quality that pay higher wages than would otherwise be the case.

Let's take a look at Scotland's export performance.

How does Scotland's exporting performance compare with other nations?

Examining the data on international exports of goods for all the UK nations, produced by HMRC, we see that Scotland is the only UK nation to have internationally exported more goods than it has imported every year since records began. In the past few years, Northern Ireland has generated a surplus in goods but persistently operated a deficit in the past. England always run persistent deficits in the international trade in goods.

INDEPENDENT SCOTLAND WILL BE AN INTERNATIONAL EXPORTING POWERHOUSE

Scottish food and drink exports have risen by 81.6% since 2007

WHISKY was the UK's largest food and drink export in 2021, worth £4.5bn, 22% of the UK total

Scotland is the only UK nation with a consistent international TRADE SURPLUS in goods since records began

Scottish seafood exports were worth a massive £1bn in 2021

Scotland's non-EU exports of goods and services increased by 105% since 2002

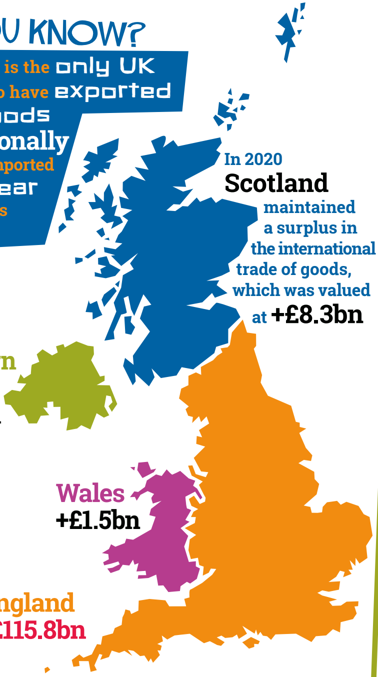
Scotland's international oil and gas extraction was worth an estimated £8.8bn in GVA to the Scottish economy in 2020

Scottish Oil and Gas supply chain exports were almost half oil and gas UK exports at £3.7bn

Scotland's international exports in goods and services have risen by 64% since 2002

DID YOU KNOW?

Scotland is the only UK nation to have exported more goods internationally than it has imported every year since records began



A surplus in international trade in goods is a key strength of Scotland's economy but how does that compare to other similar Northern European nations?

Denmark sets the gold standard in exports and so is clearly a nation that Scotland needs to aspire to match in the medium-to-longer-term. It is worth noting that Denmark does not even come close to having the natural wealth, or as broad-based an economy as Scotland enjoys. Achieving a greater exporting ratio per head than nations such as Finland and Sweden and being close to Norway is a significant result for Scotland.

SCOTLAND'S EXPORTS COMPARED TO SIMILAR NORTHERN EUROPEAN NATIONS AND THE UK

2018, per head of population

Observations on Scotland's exporting performance

The rest of the UK's, and especially England's, international trade deficit in goods is massive and with the **chaotic aftermath of Brexit, and increased economic instability, it is likely that the UK trade deficit will continue to worsen**. It is also probable that the dominance of London's finance sector will continue to diminish. In November, 2022, the value of the Paris Stock Exchange overtook London's for the first time in history. This would have a knock-on, detrimental effect on its ability to compensate for England's poor trade figures through a surplus in international financial transactions.

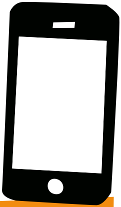
When it comes to exporting, Scotland has many vital advantages and significant untapped potential. However, the effect of Scotland's ports closing has meant that goods are forced to travel further to be exported. That, combined with the new dangers of Brexit, means that **Scottish exports and the Scottish economy are far more likely to thrive with the bespoke policies and attention they would receive in an independent Scotland, particularly if Scotland rejoins the EU**.

Scotland's track record on innovation

Innovation is the key to driving Scotland's economy to future success. Our research shows that Scotland is an innovative nation, excelling across many sectors, such as information technology, life sciences, software, gaming, space technologies and even in terms of university research grants.

Scotland is performing well, but it can still do better. The nature of innovation is changing and Scotland needs to invest and promote innovation, so our economy can grow in added value sectors and create more highly skilled, highly paid, better quality jobs.

Independent nations with similar population sizes to Scotland, such as Norway, Belgium and the Netherlands, outperform the UK on research and development (R&D) spend, as do larger nations such as Germany and France. In fact, the UK spent only 0.7% of its GDP on R&D in 2020, compared to the EU average of 2.3% in the same year. It's clear from this that the



Scotland's digital economy generates 12,800 new highly qualified professional jobs a year

Scotland's Life Sciences sector saw an increased turnover of 92.5% between 2010 and 2020, as well as a 23.3% increase in employment

The number of digital games companies in Scotland soared 2,200% between 2008 and 2022

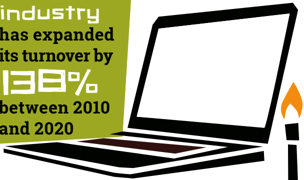
One of the world's top selling game series is made in Scotland: Grand Theft Auto is the fifth most successful games franchise of all time – with 335 million sales and counting

UK's innovation policy is lacking in ambition and that this negatively impacts on Scotland.

The faster growing, more prosperous, smaller European nations spend an average of over 3% of GDP on R&D. Looking at the statistics in detail, the UK spent the same proportion of GDP as Latvia and Malta, while Belgium spent 3.5%, the highest in the EU. A report by NESTA claimed that if Scotland could build towards an R&D spend of 3.4% of GDP over a five-year period, this would mean that its economy would grow by around £12 billion annually.

More satellites are manufactured in GLASGOW than anywhere else in Europe

Sutherland will host the UK's first spaceport



Scotland's software industry has expanded its turnover by 138% between 2010 and 2020

Grangemouth will be the location for a new European hub for the chemical sciences sector

SMEs are a large part of Scotland's economy and they employ more people for less turnover. This creates more jobs than in nations dominated by large corporates, but in turn reduces the top-line productivity ratio of the Scottish economy. One of the best opportunities for rapid growth and increasing productivity in the Scottish economy is to rapidly increase R&D commercialisation, as well as innovation and productivity investment, in SMEs.

Observations on Scotland as an innovation nation

Scotland is an innovative nation, but **it lacks the powers to create the taxation, research connections and investment culture that could take that success to the next level**. The key innovative sectors we currently have rely on EU skilled labour and access to the Single Market, so Westminster's poor Brexit deal now poses a real threat.

Investing in innovation and cutting-edge industries, plus creating bespoke innovation policies for Scotland, rather than a one-size-fits-all policy which caters only for London and the South East's needs, will be a key plank of the economic strategy of an independent Scotland.

An independent Scotland would take control of the powers needed to turbo charge innovation. **The key to building a better future for Scotland and an even stronger economy, is to double down on innovation**.

Scotland's economic, trade and governmental infrastructure

Economic success depends on the economic infrastructure of a country, such as road and rail transport systems, adequate power and water supplies, working sewerage systems, telecommunications and broadband access.

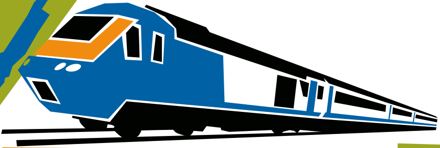
In developing nations, creating and improving these basic infrastructure assets is absolutely vital. In Scotland we take these basic factors for granted, as do other highly developed western and northern European economies.

Let's look first at Scotland's trading infrastructure.

Scotland has a highly developed infrastructure for trade

As a highly developed economy that has punched above its weight in contributing to the UK, Scotland already possesses advanced infrastructure for trade.

Scotland is a water-rich nation whereas England is not. Loch Ness, one of Scotland's 27,000 freshwater lochs, contains more water than all rivers and lakes in England and Wales combined



Scotland has three of the UK's top ten busiest railway stations in terms of exits/entries: Glasgow Central – 33 million a year Edinburgh Waverley – 32 million a year Glasgow Queen Street – 16 million a year

What makes for a prosperous nation?

Scotland's five main airports, Edinburgh, Glasgow, Glasgow Prestwick, Aberdeen and Inverness have international flights that connect millions of passengers to around 150 destinations worldwide

Scotland generated the equivalent of 97% of its electricity demand from renewable energy sources in 2020

In 2019 **Scotland** exported 17.1 TWh of energy, enough to power every home in Scotland for 21 months.

And approximately **£16bn** worth of oil and gas was also sold to the rest of the UK that year

Moving from devolution to independence in terms of governance infrastructure

Prior to devolution, independence would have meant building a parliament and setting up multiple government agencies. There would not have been a Scottish Government with experienced ministers for finance, trade, business, health and communities, education, the environment and social security.

Currently, much public services delivery is already managed in Scotland, at sub-national levels, through local councils and local health boards.

Scotland's governance infrastructure can be broken down into three categories.

- Infrastructure already under Scottish Government/local control
- Infrastructure that would transfer to Scottish Government/local control with independence
- New infrastructure required as a result of independence

Infrastructure already in place and under Scottish Government / local control

Scotland already possesses most of the essential institutions and infrastructure to administer and govern in some of the largest and most important policy areas:

- A fully functioning, if not fully empowered, Scottish Parliament
- Education and training
- Environment
- Health, including NHS Scotland and social services
- Agriculture, forestry and fishing
- Tax-raising powers: 30% of total taxes raised in Scotland
- Some aspects of social security: i.e. disability benefits, Carer's Allowance, Winter Fuel Allowance (15% of Scottish benefits bill)
- Housing
- Law and order
- Local government
- Sports and the arts
- Tourism
- Economic development, including Scottish Enterprise, Scottish Trade International, Highlands and Islands Enterprise and the new South of Scotland Enterprise agency
- Many aspects of transport (Scottish road network, bus policy, ports, harbours)
- Compiling statistics, keeping public records
- Air Passenger Duty; Land and Buildings Transaction Tax; Landfill Tax

Scotland has...

Its own **education** system

Its own **economic development agencies** including **Scottish Enterprise**, **Scottish Development International**, **Highlands and Islands Enterprise** and the new **South of Scotland Enterprise** agency

Its own **tourism agency**, **Visit Scotland**

Infrastructure already in place that would be transferred to Scottish Government / local control in the event of independence

Scotland currently **does not** have the power to govern on these policy areas that are reserved to Westminster but it would inherit the existing UK institutions that already exist in Scotland after independence:

- Pensions/Benefits and Social Security: including 85% of the Scottish benefits budget
- Immigration
- Defence
- Constitutional matters
- Economic and monetary policy: including 70% of total taxes raised in Scotland
- Foreign policy
- Employment
- Broadcasting
- Trade and industry
- Nuclear energy, oil, coal, gas and electricity
- Consumer rights
- Data protection
- Aspects of transport: railways (full legislative control), safety, regulation

Scotland has...

Partial control over benefits paid to the people of Scotland

An independently run Scottish NHS

NHS SCOTLAND

Control over local Government, including council tax and business rates

A key issue to consider about the infrastructure that would transfer over is that some UK Government infrastructure that delivers a service to Scotland, such as the Department for Work and Pensions (DWP), is already mostly based in Scotland. The employment of staff at a job centre in Aberdeen, for example, would remain the same. They would simply be paid by the Scottish Government and report to a Scottish Minister, rather than a UK one, which then charges Scotland for the cost. The UK Government charges the Scottish Government a population percentage share of the costs of running the DWP, so cost considerations are very low in this instance.

Scotland has...

Tax collecting infrastructure already accounting for 30% of Scotland's taxation revenues, including control over Air Passenger Duty, Land and Buildings Transaction Tax and Landfill Tax

New infrastructure and new public sector employment required as a result of independence

Essentially, the only major institutions Scotland would need to establish from scratch would be:

- A Central Bank
- A Financial Services Authority and other financial regulators (assuming alignment with EU financial regulations)

According to research carried out by the London School of Economics, this would require 1,500 staff and cost £50m over five years. However, at the current rate of tax, those staff would return £30-35m to the Scottish treasury.

6,640 public sector jobs would need to be created or transferred to Scotland to build the governance infrastructure. The transition costs over five years (including the £50m for banking and financial regulation above) would be £439m. The additional tax and national insurance revenues to Scotland would be £75m, meaning a net cost of £364m. To put that into context, as part of the UK, the cost to Scotland of the refurbishment of the Palace of Westminster could be around £500m over the same period, a cost that Scotland won't have to meet if it becomes independent.

What makes for a prosperous nation?

Observations on government infrastructure

Scotland possesses highly developed infrastructure and has significant advantages over other nations, in terms of security and sustainability of vital power and water supplies.

Devolution has given Scotland a head start in the process of setting up the infrastructure required to become a self-governing nation. This doesn't mean that independence won't have some costs associated with it, but there is no infrastructural issue that would hinder an independent Scotland's economic success.

Most of the UK public sector workers that provide services to Scotland already work in Scotland and so in most cases government delivery of these services would not look any different. As for the costs of transition and change, those are relatively small, as devolution has already done much of the heavy lifting.

There will be some jobs which will relocate from other parts of the UK and vice versa, but **the Scottish Government has confirmed there will be no redundancies due to independence.**

Setting up a Central Bank is the major investment required. However, the ability to manage monetary policy and set exchange and inflation rates (in the long term) that are tailored to Scotland's needs, means it is an investment that will create powers which will be a massive advantage to the Scottish economy.

Scotland's human capital and potential

The human capital of a nation is the contribution and competitive positioning of the value added by its people, their knowledge, skills and approach to work, innovation and social cohesion and how that contributes to the production of goods, services and creation of ideas in an economy.

Now more than ever, sustainable economic growth is reliant on improvements in human capital and its outputs, such as innovation, creativity, improved productivity and the training and educational standards applied to create those outputs.

Can Scotland gain a competitive economic advantage from its people and their abilities?

In 2022, 95.5% of Scotland's school leavers moved on to positive destinations (further education, work or training)

The Human Capital Index

The UK ranks 11th in the Global Human Capital Index's tertiary education attainment, but an independent Scotland would be in the top ten. This does not only reflect degree level education but vocational qualifications, such as qualified tradespeople and apprenticeships. Scotland's workforce is one of the most educated in the world and this offers Scotland significant competitive advantages.

Youth employment and training

Scotland performs better than the UK on youth employment (58% vs. 53.7%), youth unemployment (8.9% vs. 10.3%) and youth inactivity

(36.4% vs. 40.2%). As of June 2022, there were 36,885 Modern Apprentices in training in Scotland.

In 2021/22, 97.8% of Scotland's school leavers moved on to positive destinations (further education, work or training), including 93.4% of pupils from the most deprived areas. The best comparable figures for England from 2018/19 show 81% of students who reached the end of 16 to 18 study in state-funded schools and colleges went on to sustained education, apprenticeships or employment.

Scottish graduates also have on average **three times less student debt** at graduation compared to English students, as they pay **no tuition fees** whilst studying at university in Scotland

Gender equality

Scotland's people are the **most educated in Europe** – **54%** of people aged 19 to 64 have university, college or vocational **qualifications**, which is **7% higher** than the UK and **20% above the EU average**

Traditional economic texts might not include lower levels of gender inequality as a human capital asset but that's outdated thinking, so we do. Underutilising or undervaluing the economic potential of the female workforce is a major missed opportunity in many nations. The full-time gender pay gap in Scotland is 3.8%, which still needs to be addressed but is significantly better than the UK figure of 8.3%. Scotland's gender employment gap (the difference in the amount of women in employment compared to men) is also lower than the UK, at 2.2% compared to 6.7%.

Employment in **higher skilled** occupations in **Scotland increased by 28.5%** between 2009 and 2020

The full-time **gender pay gap** in **Scotland** is **narrowing quicker** than in the UK, with **Scotland on 3.7%** versus the **UK pay gap of 8.3%**

Observations on Scotland's human capital

The Scottish Government's investment in vocational training, especially youth apprenticeships, seems to be paying off. **Low youth unemployment and increasing positive destinations for school leavers are big successes.** The abolition of tuition fees has clearly also increased access to higher education and the work of Skills Development Scotland has helped increase the on-the-job training offered by companies. Gender equality is also an area where progress has been made, but more needs to be done, especially in encouraging female entrepreneurship.

However, the skills shortages that exist need to be resolved. Unfortunately, **the Scottish Parliament does not currently have the power to influence skilled immigration** and many of the highly skilled workers that Scotland's industry requires to thrive have in the past come from the EU. For example, the IT sector in Scotland needs 11,000 new programmers a year and Scotland simply cannot produce that many highly skilled candidates from our current population. 'The UK also fails to reach its recruitment target for IT jobs, with more than two million vacancies. This was more than any other labour area, with nearly 12 million workers lacking essential skills.

Scotland possesses enormous human capital advantages and is investing heavily in the potential of the younger members of our society. However, Brexit presents the single largest threat to Scotland's human capital advantage, by ending freedom of movement. This means that the flow of skilled workers will drop to unsustainable levels and significantly damage Scotland's economy.

What makes for a prosperous nation – summary

There are several conclusions that can be drawn about the core assets of Scotland's economy and how they relate to independence:

- An independent Scotland would be one of the world's most naturally wealthy nations, far wealthier than it is currently as part of the UK;
- An independent Scotland would be an exporting powerhouse;
- Scotland is already a highly innovative nation and independence would offer the Scottish Parliament the required powers to boost innovation further
- Scotland already has a highly developed infrastructure; for trade and governance and has a head start on the infrastructure needed for independence;
- Scotland has enormous human capital and potential, with significant advantages over the UK as a whole;
- Brexit has caused the greatest harm to Scotland's prosperity and that alone makes Scotland staying within the UK more detrimental and a greater constitutional change.

Observations

Deliberately or accidentally, depending on the political point of view taken, **Scotland's transition to become an independent nation is already fairly advanced**. Devolution has ensured that the remaining steps required to establish the infrastructure and governance of an independent Scotland will be far easier than those needed by most nations to gain or regain their independence.

Although all change involves an element of cost and risk, the costs related to independence are limited and short term, whilst the risks are negligible when compared to staying part of a post-Brexit UK.

2. THE BREADTH OF SCOTLAND'S ECONOMIC ACTIVITY

In the previous chapter, we concluded that Scotland is essentially an A-grade nation in terms of the factors that create economic prosperity and significantly outperforms the UK as a whole on three out of the five key measures. Therefore, why would anyone think that Scotland wouldn't thrive economically as an independent nation?

Clearly the idea that Scotland wouldn't thrive as an independent nation is looking questionable, but let's keep digging. Another important prosperity factor is the breadth of economic activity undertaken in a nation's economy. So let us take a look at the diversity of Scotland's economic output and examine how that compares to other nations.

As it turns out, Scotland's economy is diverse and broad-based. Far from (as is often claimed) being overly-dependent on oil and gas, which would leave an independent Scotland's economy open to oil price volatility, Scotland is actually less dependent on oil and gas than the UK economy is on the finance sector, which, if you remember from 2007/8, is also volatile and prone to crashes.

In 2021 oil and gas made up about 6.8% of Scotland's overall economic output and 8.3% of Scotland's economy by GVA (Gross Value Added). This compares to the UK as a whole, where business and financial services made up 33% of the economy by GVA. This proves that Scotland is not dependent on oil and gas as is often claimed but rather that the UK is overly dependent on financial services.

In fact, over-reliance is a relative concept: the larger an individual sector accounts for a share of a nation's economy, the greater the importance of correctly managing the performance and resources of that sector.

Norway, whose oil and gas sector represents 16.3% of its economy on average since 2016 (7% more than Scotland's over the same period), is the seventh richest nation in the world in terms of GDP per capita and their pension fund, generated from oil and gas sector revenues, is worth £990bn, which means their savings massively outweigh their debt.

Since the oil price fall in 2015, Norway has generated more than £95.3bn in oil and gas sector revenues compared to £5.6bn by the UK. This means that Norway's revenues from oil and gas in this time period were 17 times higher than the UK's.

Think about that – the Government of Norway (a small independent nation with 5.4 million population) is 17 times better than the UK Government at generating revenues from oil and gas when both countries have produced roughly the same amount of oil since 1975. All that whilst Norway's economy is just under one and a half times more dependent on oil than an independent Scotland would be.

In fact, when you look at the top three largest sectors of Scotland's economy and compare those to other nations, you find that Scotland's economy is more diverse than that of the UK. The UK economy is actually less diverse than the six Northern European economies we benchmarked against.

The most diverse nation was Norway, with the top three sectors contributing only 50.72% of GVA, followed by Denmark at 51.23%, Scotland at 52.56%, Finland at 52.98%, Sweden at 53.37% and in last place the UK at 57.77%.

Let us take a look at Scotland's major sectors of economic activity, starting with a true industry of the future – some of the facts might surprise you.

Scotland's renewable energy industry

The renewables industry is about generating energy in ways that are replaced rapidly by a natural process, such as wind, wave, tidal, solar, geothermal or hydroelectric energy. In other words, these are the key environmentally friendly energy sources of the future. Biomass energy is also classified as renewable. Scotland's other natural energy assets such as oil or natural gas, and in the past coal, are non-renewable or, in other words, will run out at some point. These carbon-based energy sources are not environmentally friendly.

Scotland has been at the forefront of the movement towards renewable energy for many years. In 2019, Scotland became the first country in the world to declare a climate emergency and in 2021 Glasgow hosted the landmark United Nations Change Climate Change Conference or COP26. Scotland's commitment to reduce and then move towards zero net carbon emissions has subsequently been followed through, unlike in the UK which has already reneged on its promises.

With ample natural resources, the renewables sector represents a huge potential to transform the Scottish economy, creating highly skilled employment and regenerating rural areas.

IN BRIEF

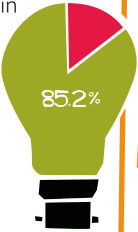
In 2021, Scotland's renewable and low carbon economy generated £5.5bn in turnover and employed more than 28,000 people.

In 2021, Scotland exported 37% of its electricity to England and Northern Ireland. England's reliance on power generated in Scotland is only increasing- up 67% since 2000.

In 2021, the equivalent of 85.2% of gross electricity consumption (total electricity generation minus net exports) in Scotland came from renewable sources.

KEY FACTS

85.2% of gross electricity consumption in Scotland in 2021 came from renewable sources, compared to only 38.1% in England and Wales in the same year. 2022 also saw renewable capacity increase to 13.6 GW in September.



Onshore wind in Scotland supports **3,300 jobs** (66% of the UK total) and is responsible for 57% of UK turnover in the sector.

The total **number of workers** in Scotland's offshore wind sector **increased by 343%** between 2014 and 2021.

In 2021, Scotland accounted for **22.3%** of the UK's renewable energy generation. For more info on Scotland's renewable sector click here.

In August 2022, the Seagreen offshore wind development was powered up for the first time. It is the largest offshore wind development in Scotland and is expected to enter commercial operation in Q2 2023. **Scotland's offshore capacity has increased by 130% over the course of a year**.

Threats to, and opportunities for, Scotland's renewable energy industry

While renewable energy is clearly a major priority for Scotland, it is not a priority for the rest of the UK. The Westminster-led ban on renewable subsidies for onshore wind, and cuts to solar power subsidies, resulted in a fall of 57% of investment in UK renewable energy in 2017. That same year, there was a 50% fall in the number of people working in solar power in Scotland. The total number of low carbon and renewable energy businesses in Scotland also decreased slightly, from an estimated 11,500 in 2014, to an estimated 10,000 in 2020. Due to UK Government cuts to the renewable energy industry, the number of jobs fell by 12% between 2014-2020. The UK government also pulled its promised funding for the Acorn carbon capture and storage plant in Peterhead, causing the project to be halted. The construction of the plant would have assisted the North East of Scotland's transition from fossil fuel dependency to a renewables-based economy.

The current UK National Grid transmission charging system also discourages investment in renewable energy. Scotland presents a goldmine of opportunities in renewable energy in terms of its natural resources. The higher cost to connect to the national grid in Scotland however, means that producers may be discouraged from developing renewable electricity generation sites there.

The greatest potential benefit of Scottish independence, with regards to renewables, is that Scotland could fully take advantage of its renewables potential. Independence would allow Scotland to lead the transition from oil and gas to renewables, allowing Scotland to become a global leader in renewable energy. The Scottish Government's draft Hydrogen Plan sets out the Scottish Government's ambitious approach to make Scotland a leading nation in hydrogen production. The action plan contains an ambition for 5GW of renewable and low-carbon green hydrogen to be produced by 2030 and 25GW by 2045. If Scotland had full control over its own finances, it would be able to invest further in renewables and build a stronger economy and energy sector.

Scotland's oil and gas sector

Scotland is one of only two European nations with significant oil reserves. Since the 1970s, when the oil industry was established in the North Sea, oil and gas have been major contributors to Scotland's economy, in terms of GDP, employment and taxation. Oil and gas fields in Scotland accounted for 85% of the UK's oil and gas production in 2021/22, but the oil industry and all taxation and business policy relating to it are powers reserved to Westminster.

There are many myths surrounding the oil sector and it has clearly been a political football for decades. This chapter will dispel many of those myths but the issue of tax revenues and the politics of how Scotland's oil and gas reserves have been managed will be discussed later in the book.

The price of oil has risen and fallen over the years and it will continue to do so. That is not a problem for nations like Norway which manage their resources well.

The industry has undergone significant change since 2015, with many older, less economically viable (high-cost/marginal) fields being closed down and new higher production lower-cost fields coming on-stream. The price of oil dropped again in 2020 following the government mandated lockdowns in response to the COVID-19 pandemic, falling as low as $20 a barrel. From there the oil price slowly recovered, until the Russian invasion of Ukraine in February, 2022, causing the price of oil to skyrocket to $127, and then falling only to $78 a barrel at the time of writing.

Royal Dutch Shell reported that it was able to reduce its operating costs in North Sea fields by 70% and that they were now able to make significant money in the North Sea at anything over $50 a barrel. Following the sharp rise in oil prices many oil companies operating in the North Sea accrued exorbitant profits in 2022. Shell doubled its profits from 2021, making almost $40bn (£33.3bn) and BP made $28bn (£23.3bn), the highest in the company's 144-year history. In 2021 the

UK was paid a total of £127.3 million in tax from BP, none of which was for its North Sea operations or revenues.

New discoveries, mostly west of Shetland, are predicted by the industry to be productive for up to 40 more years or longer if there are more discoveries. In January 2019, it was reported that the largest gas discovery in a decade had been made and the Glengorm field, which is located in the more mature central area of the North Sea, is expected to contain recoverable resources of 250 million barrels of oil equivalent. More recently, Norwegian oil company Equinor has discovered a new field containing approximately 25-50 million barrels.

A 2018 study by OPITO and Robert Gordon University, estimated a further 40,000 workers will be needed for North Sea-based oil and gas projects up to 2040. This is based upon current known reserves. The single largest growth area in terms of discovered reserves is west of Shetland.

The west coast of Scotland, Shetland and Outer Hebrides areas contain reserves but there is debate as to how much, due to the lack of exploration drilling, concerns about deep waters and difficult geological conditions. In the past, such fields were considered to be economically unrecoverable but new technology has transformed the prospects of those regions. The Clair Ridge alone is estimated to contain about seven billion barrels of oil equivalent. There are credible estimates that those fields could contain as much oil as has already been discovered. Additionally, the recent discovery of the Rosebank oil and gas field could be worth over £24 billion to the Scottish economy.

The older less economically viable fields are being shut down and it is this, combined with higher productivity from the new wells that are significantly lowering the cost of oil production in the North Sea. Between 2016 and 2030, at least 60% of all the platforms in the Northern and Central North Sea will be decommissioned, with 203 oil platforms on the UK Continental Shelf experiencing decommissioning activity between 2018 and 2030. Decommissioning alone is expected to support peak employment of between 17,000 and 23,000 jobs over the next decade.

IN BRIEF

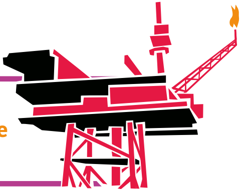
Current oil and gas supply chain company exports amount to £3.7bn, almost matching the £3.8bn from Coke and Petroleum exports. Oil and gas bought by the rest of the UK were almost double the international exports number at £16bn.

Around 11,000 jobs are related to extraction but the total number of jobs, including those indirectly supported by the industry in Scotland, was approximately 105,000 in 2019.

The rise in oil prices throughout 2022 have lead to unprecedented profits for oil companies. Shell reported £33bn of profit in 2022 and BP reported £23.3bn - both were company records. The North Sea Transition Authority has highlighted 33 new projects, targeting 1.3 billion barrels of oil and gas.

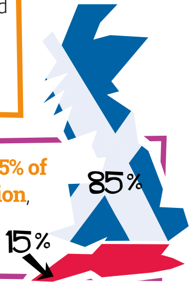
KEY FACTS

If an independent Scotland rejoined the EU, that would **double the EU's total oil reserves**.



In 2017, the amount of gas discovered in the North Sea was at its highest in a decade, with **250 million barrels discovered**.

In 2021/22, Scotland accounted for **85% of the UK's total oil and gas production**, 96% of its crude oil production and 71% of natural gas.



Threats to, and opportunities for, Scotland's oil and gas sector

Brexit has been an unmitigated disaster that has negatively impacted the UK's oil and gas sector.

Negotiations on the Northern Ireland Protocol (NIP) are ongoing and so we still do not know what the final deal on trade with the EU will be. If the NIP is abandoned, that would lead to a harder Brexit and worse impact on trade in goods, the movement of people and could potentially cause future divergences in health and safety and environmental law. The UK has also adopted its own Emissions Trading Scheme to replace the EU system but the cap on emissions set by the UK is 5% lower than the UK's national share under the previous EU system.

Approximately 8% of workers in UK oil and gas are from EU nations and they are often highly specialised and highly skilled workers. There are many reports that skilled EU citizens would be less likely to decide to work in the UK on a personal level due to Brexit, regardless of how likely they are to meet the requirements of the new UK points-based immigration system.

The obvious benefit of an independent Scotland gaining control over its oil and gas sector is that it can take full advantage of all its revenue. In late 2021, it was revealed that Shell and BP had not paid any tax on oil extraction for the previous three years. Independence would give Scotland the economic power to stop subsidising oil companies at the cost of taxpayers. The income from this could be reinvested into a wealth fund, similar to the one Norway started from its own North Sea operations, in the 1990s. Another option would be to simply ring fence the income, to give better access to funding and accelerate projects that aid Scotland's transition to renewables. This would both guarantee Scotland's energy independence and also provide financial backing to safeguard its transition to renewable energy.

Scotland's food industry

Food from Scotland is recognised as being some of the best quality available in the world. It comes from nature and Scotland's natural habitat is world-renowned, adding value to high-quality produce, such as meat, seafood, cereals, dairy products or vegetables. That is why it is in such demand across the world.

IN BRIEF

International exports amounted to more than £1.6bn in 2019, a 164% increase since 2002.

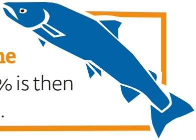
In 2020, the industry's total turnover was £14.7bn, making it part of the foundation of Scotland's economic success.

There are over 17,000 companies involved in Scotland's food industry, employing around 129,000 people.

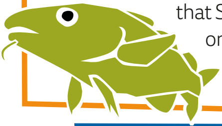
The food industry employs more than 80,000 people in agriculture and aquaculture jobs, making it a key industry for rural and coastal Scotland.

KEY FACTS

Scotland accounts for **67% of all seafood landed in the UK** by weight – of which 72% is then exported to the EU by value.



Scotland possesses almost **30% of the UK's herd of breeding beef cattle**, and **20% of the UK's breeding sheep flock**.



Scotland's fishing zone makes up 60% of the UK's total sea area and **20% of all of the EU's fish** comes from Scottish waters, meaning that Scotland has one of Europe's most resource rich seas.

In 2021, Scotland's **production of Atlantic salmon increased by 7% to 205,393 tonnes**, the highest number ever produced. The country also produces over **two-thirds of the world's langoustines**.

Threats to, and opportunities for, Scotland's food industry

The farming industry is the bedrock of the food industry. Analysis of farm accounts in Scotland has shown that 73% of Scotland's farm businesses would be technically insolvent without EU Common Agricultural Policy payments, which ended on December 31st, 2020. As a result of Brexit, it is expected that Scottish farmers will lose out on approximately £170m between now and 2025, because the UK Government will not and cannot afford to fully replace EU funding. Meanwhile, if Scotland had remained in the EU, farmers would have continued to receive subsidies.

At the beginning of 2022, the UK Government capped the seasonal agricultural workers visa scheme at 30,000 across the UK, despite farmers' unions arguing that at least 70,000 workers are required annually. There was a shortfall of labour of around 20% in 2021, which led to production losses and in some cases, fruit rotting in fields. Even if the UK changes the suggested entry criteria to assist Scottish agriculture, Brexit already creates a disincentive for EU nationals to come to the UK for work and as the Pound sank in value following Brexit, making the UK less attractive for migrant workers.

The EU has the power in trade deals to enforce protection for Scottish regional products, promote quality-assured farming and stop fake and inferior products damaging the reputation of Scottish produce. Concerns have also been raised about the loss of EU consumer protection laws, for example hygiene standards, labels of allergens and restrictions on the use of chlorine wash on chicken. Furthermore, while Scotland has the power to legislate for Scottish products, Westminster's Internal Markets Bill means that Westminster could overrule the Scottish Parliament and change food health and safety laws to aid trade deals and thus allow lower quality food products into the UK.

An independent Scotland in the EU would maintain vital protections for regional products and for consumers. Scotland is already developing an independent food standards agency to be responsive and flexible to the needs of key organisations in Scotland.

Scotland's drinks industry

One of Scotland's most iconic and successful export products is Scotch whisky. To be classified as Scotch, whisky must be distilled and matured in Scotland for at least three years. The drinks industry overall is a major industry and it's not all just about whisky – gin and craft beers are also fast-growing industries.

IN BRIEF

Scotch whisky exports were worth £6.2 billion in 2022, which was an increase of 37% compared to the previous year. To put this performance in context, over 1.6 billion bottles of Scotch whisky were exported to 174 markets around the world.

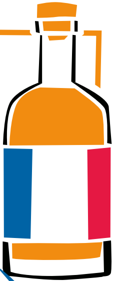
Craft and flavoured gin is the fastest growing area of the drinks industry but the leading brands of gin are mostly Scottish in origin. As a result Scotland produces more than 70-80% of all gin made and consumed in the UK.

The Scotch whisky industry alone contributes approximately £5.5bn in GVA to the Scottish economy a year, directly employing more than 11,000 people in Scotland, of which more than 7,000 are based in rural Scotland.

KEY FACTS

Whisky from Scotland is the single largest contributor to the UK's balance of trade in goods, providing **£5.5bn** in gross value added (GVA) **to the UK economy** in 2021.

There is **more Scotch whisky sold in France** in one month **than Cognac** in a whole year.



Scotch whisky is the world's number one globally traded spirit and was exported to **180 markets** in 2021.

The EU remains Scotland's largest importer of whisky. In 2022, it **imported over £1.6 billion**, or 26% of all whisky exported.

The number of breweries in Scotland has **increased more than ten fold** since 1970.

Threats to, and opportunities for, Scotland's drinks industry

Brexit has created chaos within the drinks industry. There remain concerns that while large producers will be able to afford the cost of Brexit, small suppliers may struggle to ship to the EU.

The EU is the largest single market for Scotch whisky, with three EU member states among the top ten export destinations by value worldwide. Currently EU law requires that all drinks named as whisky or whiskey must be matured for three years. Whisky regulators have called for robust legal protections to be put in place following Brexit. Many feel that the UK will not be able to enforce the protection to the degree that the much larger EU market can.

Scotland's drinks industry would instantly become a major player in an independent Scotland's economy. Rejoining the EU would provide Scotland with access to its largest export market, with less fear over lower sales and supply chain disruption. It would also guarantee protection of Scotch whisky as a product, which has yet to be guaranteed under the current Brexit deal.

With independence the Scottish Government would gain the ability to regulate and tax the industry. Following independence, the focus of power in the industry would naturally move away from London and HQs would move back to Scotland, providing a significant increase in industry employment and a boost for the economy.

Scotland's finance industry

The financial sector is a segment of the economy consisting of organisations providing financial services to individuals, organisations and businesses. The sector is made up of banks, insurance companies, investors, pensions companies, mortgage providers and other lenders.

The breadth of Scotland's economic activity

IN BRIEF

The sector contains around 24,000 businesses in Scotland, ranging from micro businesses right up to some of Scotland's largest businesses, such as banks and insurance firms.

Total exports for financial and business services from Scotland stood at £16bn in 2019, making it a key exporting sector.

The Scottish finance sector contributes £13.5bn (measured in GVA) to the Scottish economy every year and employs 153,000 people.

Finance is a major employer, supporting 5.9% of national employment and generating about 9.2% of Scotland's GVA. The key geographical focus of these activities within Scotland are:

- Edinburgh (48,880 jobs contributing £6.2bn GVA)
- Glasgow (42,050 jobs and £2.9bn GVA)
- Aberdeen (6,760 jobs and £811m GVA)
- Fife (6,230 jobs and £264m GVA).

Of particular note is the new Barclay's campus located in Glasgow, a 500,000 sq.ft. site employing almost 5,000 people. This investment showcases Glasgow (and Scotland) as a global finance hub.

KEY FACTS

Scotland is the UK's **third largest financial and related services exporter**, and the largest global financial hub in the UK outside of London.

Scotland is one of Europe's top financial centres and Scotland is home to **some of Europe's largest financial services** companies.

The most recently available data shows that Scotland has the **highest productivity in the financial services** industry in the UK, outside of London.

In the year preceding the Brexit vote, the number of jobs in Scotland's financial services grew 6.6%, whilst its financial exports increased by 9%. Figures since the Brexit vote (2016-17), show the number of jobs in the UK shrank 6%. However, Scottish financial exports still increased by 7%. **Financial and professional service exports decreased by 7.4%** in 2020 compared to the previous year, while the UK average increased by 8.4% (mostly concentrated in London). Employment also decreased by 3.8%.

Threats to, and opportunities for, Scotland's finance industry

The single largest threat to the industry is the ongoing detrimental impacts of Brexit. The EU accounted for 36% of Scotland's growing global exports in finance and insurance. Besides representing some 5.9% of Scotland's total employment, finance and related services account for a greater share of Scotland's economy compared to other areas in the UK, outside London (by 2.4% above the average outside London). Brexit chaos has threatened Scotland's success by creating trade barriers and uncertainty. Passporting within the EU for the UK financial services sector has officially ended. This previously enabled financial service providers that were authorised in any EU state to trade freely in any other EU state, with minimal additional authorisation.

Having access to highly skilled personnel from the EU could be the most effective way to cover the skills gap in the industry. Financial companies have found that the compounded uncertainty of Brexit and the COVID-19 pandemic have led to reductions in financial service roles, with many being relocated back into other EU countries. Since the EU referendum, 24 finance companies have publicly declared they will transfer just over £1.3 trillion of assets from the UK to the EU.

An independent Scotland rejoining the EU, as indicated in the Scottish Government's economic prospectus for independence, would provide a major opportunity. Scotland's finance sector being back inside the EU could offer the most attractive, cost effective and realistic relocation sites for UK financial services companies who wish to maintain European operations.

The finance industry was noted as one of the key industries in which an independent Scotland could increase exports in the Scottish Government's economic manifesto for independence. An independent Scotland would aim to develop a model for financial services that prioritises both economic growth and serving communities and consumers, with its own Central Bank to regulate policy. The Scottish National Investment Bank was founded in November 2020 to facilitate investment in Scotland and develop a more sustainable economy. This is a policy decision that is not necessarily part of the independence process but would become more relevant if independence were achieved.

Scotland's life sciences sector

Life sciences is a wide-ranging industry encompassing microbe cultures, pharmaceuticals, biomedical science, medical biotechnology, environmental sciences and even some food processing. Basically these are the sciences that have to do with organisms, such as human beings, plants and animals.

IN BRIEF

Around 605 companies, as well as higher education institutions employ more than 40,000 people in Scotland.

Although there are life sciences businesses and research institutions across the country, it is an especially important industry in Tayside. With over 900 researchers from 50+ countries, the University of Dundee has once of the highest concentrations of life scientists across the UK.

The industry body, Life Sciences Scotland, expects the Scottish life science cluster to reach a turnover of £8bn by 2025, which makes it a key sector in Scotland's future economy.

Scotland's universities are amongst the most influential scientific research institutions for pharmaceuticals in the world. Dundee University is currently in first place, beating MIT for the top spot.

This sector's turnover is over £7.4bn a year and is growing fast. The life sciences growth sector identified by the Scottish Government experienced a 92.45% increase in turnover between 2010 and 2020, as well as a 37% increase in employment.

KEY FACTS

Veterinary science in Scotland wins more than **50% of UK veterinary funding**. Scotland is renowned for its veterinary science expertise, with its two veterinary colleges at Edinburgh and Glasgow universities ranked first and second in the UK. Almost a **third of the UK's veterinary graduates** are trained in Scotland each year.

Scotland possesses one of the **largest life sciences clusters** in Europe and has the largest community of animal bioscience and aquaculture researchers, with more than **1,000 researchers**.

Scientists at the Roslin Institute in Edinburgh were the **first in the world to clone a mammal**, named Dolly the Sheep. The institute has helped generate annual productivity gains of £247m through its breeding and genetics research.

The total number of life sciences enterprises in Scotland increased by almost 32% between 2012 and 2022. As of 2022, the sector is on track to achieve its goal of being an **£8bn turnover industry by 2025**.

Threats to Scotland's life sciences sector

Scotland's life sciences sector is thriving but faces a number of unique and unnecessary challenges due to Brexit, beyond the usual human resources gap and jobs losses seen in other industries. This is because the UK no longer has access to many of the benefits of the EU system, including the centralised procedure for market authorisations (MAs), the portal for clinical trials and the Pharmacovigilance database. There is no further mutual recognition of crop protection product marketing applications. Importing materials and access to skilled European labour has also been affected and this is likely to decrease foreign direct investment.

Brexit also threatens to diminish (over time) up to £300m in Scottish pharmaceutical exports to the EU, with an additional £130m of exports to the rest of the the world threatened as the UK has yet to finalise trade deals with many countries that would replace the ones we enjoyed as an EU member.

There has already been unwelcome divergence in legislation between the UK and EU. For example, in early 2021, the UK approved the use of neonicotinoid thiamethoxam, a pesticide banned by the EU due to its toxicity to insects such as bees.

The UK's own regulatory body has had lots of influence in shaping European regulations, but the agency has now relocated from London to Amsterdam due to Brexit. The EMA monitors and evaluates pharmaceutical products before granting them access to the single market. Following the UK's exit from the European Single Market, the increased demand on the UK's regulatory body will slow the authorisation procedure.

Scotland's chemical sciences industry

This sector includes a wide range of organisations researching and creating chemical products and solutions. This would include biofuels, battery storage, some cosmetics, interactive labelling, food ingredients and chemical refining. Closely connected to the life sciences cluster, chemical sciences also include industrial biotechnology, but not medical biotechnology solutions.

IN BRIEF

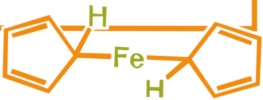
Chemical sciences sector exports reached £4.4bn in 2021, which was a 22.4% increase from 2019, making it one of Scotland's leading exporting sectors. There are around 250 organisations working in the sector.

Scottish Universities outperform their UK counterparts on chemical science research. The REF2021 found that of the six Scottish universities surveyed, around 50% of chemistry research papers were 'world leading', with 94% being at least 'internationally excellent.'

KEY FACTS

The chemical sciences had the **highest GVA per employee** of any industry in Scotland, at £186,400 in 2021.

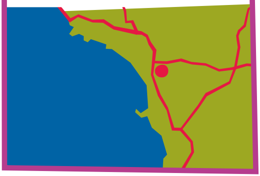
Scotland's chemical sciences research and development is consistently ranked in the **top three in the world**.



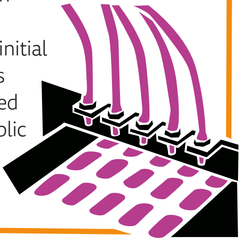
Chemical sciences made up **9.4% of Scotland's total international exports** in 2021.

A **new European hub** in Grangemouth for the chemical sciences cluster is to be established, enhancing Scotland's position in the European chemical science scene. INEOS has backed a bid to establish a **Forth Green Freeport** in Grangemouth, with the potential to create 50,000 new green jobs.

A new technology centre has been announced to open in North Ayrshire operated by the National Manufacturing Institute Scotland, in partnership with the University of Strathclyde. Among the industries targeted are chemical sciences and pharmaceuticals.



A new Medicines Manufacturing Innovation Centre in Renfrewshire, expected to generate £200m in technology innovation in its first five years opened in late 2022. It is delivering 100 initial high-value jobs and is supported by £88m in public and private investment.



Threats to, and opportunities for, the chemical sciences industry

Chemical sciences has been adversely affected by Brexit in a similar way to life sciences. In general, science and technology are more interconnected with Europe than some other sectors, because they depend on funding and information sharing.

All five of the top export destinations for chemical sciences (Netherlands, Belgium, Ireland, Germany and Switzerland) are either part of the EU or have an agreement of association for access to the European Single Market. This means that despite Scotland's advantageous position in terms of resources and training for chemical sciences, the UK having left the EU has made chemical sciences trade with Europe more difficult.

In fact, the UK appears to have missed out in a 'trade boom' throughout 2021, performing worse than expected in exports of chemicals, which is typically a strong sector. This is potentially due to additional costs and supply chain issues provoked by Brexit.

In particular, the development of any chemical regulation laws in a post-Brexit UK is difficult, as the previous system, REACH, relied heavily on the integration provided by the European Chemicals Agency and is also closely tied to the Single Market. Establishing a new system is both a costly and complex affair.

Despite those Westminster barriers to trade, there are still a number of exciting developments in Scotland's chemical sciences sector coming up in the next few years. INEOS has backed a bid to establish a Forth Green Freeport in Grangemouth, with the potential to create 50,000 new green jobs. A new technology centre has also been announced to open in North Ayrshire, operated by the National Manufacturing Institute Scotland in partnership with the University of Strathclyde. Among the industries targeted are chemical sciences and pharmaceuticals.

Scotland's digital industries

Digital industries is a relatively new term that captures the evolving nature of technology in the economy. It blends together the older concept of Information and Communications Technology (ICT) companies and those that are not specifically ICT but operate in the dynamic, digital economy which includes:

- e-commerce / e-business
- Supporting infrastructure (hardware, software, telecoms, communications equipment)
- Software publishing for business operations
- Software publishing for entertainment, e.g. the digital games industry
- Online publishing of information and data.

IN BRIEF

Scotland's digital technology sector is one of the fastest growing industries in the country. It has grown by 107.5% in GVA between 2012 and 2022 and is predicted to grow a further 27% by 2032.

Dundee is globally recognised as one of Europe's leading gaming industry centres, attracting talent and companies from all over the world. DGlasgow and Edinburgh are ranked in the top five cities in the UK to work in the technology sector based on the average salary and cost of living.

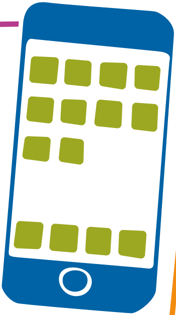
Scotland's digital industries are helping boost its productivity levels, pushing Scotland into the top 50% in the OECD for productivity.

This sector is predicted to reach a target of £6.4bn GVA in 2025, which will create new and highly skilled jobs. The latest available figures show that approximately 11,240 tech companies were registered in Scotland in 2020, with around 97,000 people employed in the sector.

KEY FACTS

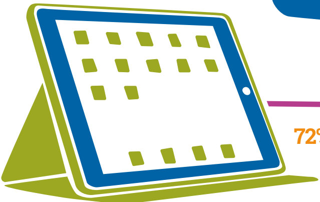
Edinburgh and Glasgow rank in the top five largest tech communities in the UK outside of London, with Edinburgh ranking first and Glasgow fourth.

The number of companies in Scotland's **digital games sector soared 2,200%** between 2008 and 2022.



Scotland's software development sector includes around **5,000 companies employing more than 30,000 people**. Turnover in the sector grew 138% in the decade up to 2020.

The digital games industry has **2,629 full-time games development staff** and supports an additional 4,418 jobs.



72% of Scottish digital technology companies **boosted their sales in 2021**, compared with 44% in the previous year.

Threats to, and opportunities for, Scotland's digital industries

Digital industries clearly represent one of the fastest growing sectors in the Scottish economy and continuing that growth is key to maintaining the nation's prosperity. The high demand for employment has been maintained, with 76% of tech companies expecting to employ more people in the next year. Recruitment and staff retention is also a concern however, with 49% reporting this as the top challenge.

These concerns are compounded by the impact of Brexit in Scotland. Net migration from the EU to the UK dropped by 58% between 2016 and 2020. Data sources suggest that net migration of EU citizens to the UK in 2020 was negative, meaning fewer EU citizens arrived in the UK than those that left. There is a worry that bureaucratic difficulties in relocating to the UK, as well as feelings of not being welcome and concerns about economic stability, may further reduce the number of highly skilled workers moving to Scotland.

With such a high demand for new, highly skilled workers, the digital sector is vulnerable to even small shortages in skilled labour. Despite a positive outlook for the sector as a whole, 68% of tech startups still report that Brexit has slowed growth.

The Scottish Government has identified Scotland's digital industries as a key growth sector and aims to ensure that Scotland is recognised as a 'digital nation'. This involves assisting SMEs with the transition to digital technologies, as the pandemic facilitates greater amounts of digital-based work, as well as attracting further national and international investment.

The 'Building a New Scotland Fund' devised as an economic manifesto for independence, would help to further improve investment in digital technologies and connectivity across the country. Arguably, independence would allow the government to better focus development across more remote or rural areas, which are often excluded due to their distance from UK economic hubs.

Scotland's creative industries

Creative industries include economic activities based on individual and communal creativity, talent and skill, which can be commercialised to create employment and wealth. Success in the sector relies upon creating uniqueness in a product or service and especially one that can be protected by intellectual property and copyright law.

It is a diverse sector – participants may be involved in fashion design, architecture, marketing, graphic and product design, film, theatre, TV, radio, photographic industries, music and dance, publishing and even art galleries and arts and crafts.

IN BRIEF

The creative industries comprise over 13,000 businesses and have been identified by the Scottish Government as a priority growth sector.

The creative industries is a geographically diverse sector in Scotland. For example, in 2018, the Outer Hebrides became the first location in the UK to be recognised as a World Craft City for its production of Harris Tweed. It is also the only material in the world protected by its own Act of Parliament.

Scotland has a rich literary tradition. Edinburgh is the world's first UNESCO City of Literature, designated in 2004. Scotland now has more book festivals per capita than any other country in the world.

A highly visible component of the sector is the Edinburgh International Festival and Fringe, among other festivals. In 2019, the 11 major Edinburgh festivals collectively had a total attendance of almost five million. A study by CEBR estimated that the Fringe festival is worth around £1bn to the Scottish economy.

KEY FACTS

The **Edinburgh International Book Festival** grew from just 30 events in 1983 to more than 900 in 2018, attracting **250,000 visitors** in 2019, its largest audience ever and making it the world's largest book festival.

Harris Tweed production increased by 570% between 2009 to 2015 and the industry continues to expand today. Harris Tweed, a world-recognised multi-award-winning brand, is **exported to more than 50 countries** across the world, with customers including high-end brands such as Vivienne Westwood, Alexander McQueen and Calvin Klein.

An estimated **£400 million was spent on film and TV production** in Scotland in 2019, with the screen sector as a whole generating £567.6 million in GVA.

Spending in Scotland's **film and television industry has increased more than 300%** in the last decade. The industry is predicted to be worth a potential £1 billion by 2030.

Threats to, and opportunities for, Scotland's creative industries

Some 40% of organisations and individuals working within the creative sector received funding from the EU, at an average of £52,000 per organisation. Those organisations also benefited from pan-European arts networks for collaboration. The implications of Brexit have already caused Scotland to lose out on some lucrative film and TV projects –

one of them being *The Lord of the Rings: The Rings of Power*, which is projected to become the most expensive TV production ever made, with an overall production budget in excess of £1bn.

A survey conducted by Creative Scotland found that many respondents highlighted the large amount of travel they do within the EU and worries about the extra bureaucratic procedures making it financially difficult to tour or travel for work, in the event of Scotland remaining outside of the EU. In this sector, highly skilled does not always translate to highly paid and many in the sector are concerned about being able to travel for work or practice, as well as commissioning and recruiting EU-based artists or those from further afield.

Another important factor in the Scottish creative sector is connectivity. A study of creative industries in rural Scotland in 2017 found that many lacked sufficient broadband speed to carry out their work and connect with other professionals. This was further compounded during the pandemic, which increased the prevalence of remote working. These areas are often overlooked as part of the larger UK but independence gives Scotland a chance to further improve connectivity.

The COVID-19 pandemic has hit the Scottish creative sector particularly hard, as creative jobs are often dependent on events which happen in person, such as festivals and performances. Creative organisations have warned of a 'perfect storm' in Scotland's arts sector of Brexit, rising costs and decreased income, which could severely impact funding in the sector.

Broadcasting budgets in the UK are limited in what is allocated to Scotland. Independence would allow for the establishment of an autonomous Scottish broadcaster, without the limits of Westminster funding. While there is understandable concern over the loss of British institutions like the BBC, these could still be broadcast in Scotland alongside a national broadcaster, as they are in Ireland and any country that wants them.

Scotland's education sector

Further education generally includes the learning people undertake after having left school. Further education is generally provided by colleges, but can be provided by work-related adults, and community learning institutions and even some universities. Higher education is generally offered by universities, sometimes by colleges and other academic and chartered institutions.

IN BRIEF

Higher education establishments support 142,000 jobs indirectly and 69% of directly created jobs are located in Scotland's most deprived areas.

There are 19 universities and 15 further education colleges in Scotland and they they support more than 72,000 jobs and more than 36,000 directly employed posts. They contribute £15.3bn to the Scottish economy annually, with £5.8bn of this originating from research activities, and its annual exports amounted to £775 million in 2019.

Scotland's higher education sector includes some of the world's oldest universities and in the last ten years, three new universities have been established. Universities Scotland has 19 member institutions.

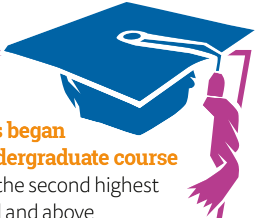
The sector provides services to 282,875 students in full-time and part-time education, of whom 20,550 come from EU nations. 47,630 non-UK students studied in Scotland in 2020/21, contributing £1.94bn to the Scottish economy in tuition fees, living costs and other expenditure.

A strong higher and further education sector is vital to successful modern economies and makes a significant contribution to Scotland's human capital. The advantages were highlighted in section 1.

KEY FACTS

Scotland has **four universities in the top 200** in the world. That's more per head of population than any other country in the world except Switzerland.

The people of Scotland are the **most educated in Europe**. 54% of Scottish people have a university, college or vocational qualifications. That's 7% higher than rUK and **20.6% higher than the EU average**.



29,630 Scottish students began their undergraduate course in 2022, the second highest on record and above pre-pandemic levels.

In 2022 almost **24% of all students entering tertiary education were from the 40% most deprived areas** in Scotland (SIMD40).

Threats to, and opportunities for, Scotland's education sector

As the education system is for the most part completely devolved in Scotland, and has remained distinct from the rest of the UK for most of its history, independence will not change much about its organisational structure. However, there are several threats to the Scottish education system.

There are no prizes for guessing that Brexit represents the biggest threat to Scotland's higher education sector. Pre-Brexit, roughly 11% of competitively won research funding in Scotland's universities came from the EU. Once charities, industries and public bodies based in the EU are added, this rises to 13%, or £88.8m. Universities can continue to access structural funding for the 2014-20 period until 2023, with a replacement UK Shared Prosperity Fund being implemented afterwards. The Scottish Government claims that despite the implementation of this fund, there would still be a total shortfall of £337m between 2022 and 2025.

The UK Government has to announce whether the UK will continue to participate in the Horizon research fund, as well as the EU-dominated European Research Area. This continued uncertainty has left research groups 'in limbo' and in some cases could even cause a loss in current Horizon funding. The lack of confirmation of research funding could also drive away some potential applicants to study and work in Scotland, to seek opportunities in other countries.

Brexit has also had a knock-on effect on the number of EU students applying to study in Scotland. Leaving the EU means that students will be charged international tuition fees, rather than their fees being paid for by Student Awards Agency Scotland (SAAS). This increases the cost of tuition fees from zero to tens of thousands of pounds, which may be more than a lot of prospective students can afford. In fact, the percentage of EU students applying to Scottish universities in 2021 dropped by 56% compared to 2020. The UK government has also discontinued participation in the Erasmus+ scheme, which allowed both domestic students to experience studying in other countries, as well as international students having the opportunity to study in Scotland. This limits opportunities for socially disadvantaged students, whilst wealthier students may still be able to overcome a lot of these issues.

Brexit also reduces opportunities for academics in the UK as they have to go where the research grants are and if these are threatened, they will have to go elsewhere. Between 2016 and 2019, 2,500 academics from the EU left Scottish universities.

Scotland's construction industry

Building things such as homes, extensions, offices and commercial buildings come to mind when you think of the construction sector, but it also includes road and rail engineering, the building products sector, management and demolition.

IN BRIEF

In 2022, Scotland's construction industry registered a £20.7bn turnover between 47,000 companies, employing 157,000 people directly.

Construction is a major employer throughout Scotland. In the Highlands and Islands in particular, it is a significant employer, with 10% of businesses in the region being construction companies, making it the fourth largest employer in the region.

KEY FACTS

In 2021, Scotland built **118 affordable homes per 100,000 population**, around 22% more than England at 92 per 100,000 population.

Dundee's waterfront is undergoing a £1bn redevelopment across 240 hectares, which includes cultural quarters, the design award-winning V&A Dundee, a refurbished train station, offices, hotels and residential developments.

Between 2018 and 2022, **public housing construction** in Scotland is expected **to grow 3.9%** and private housing by 2.9%.

The new St James Quarter opened in June of 2021, a **£1bn investment in the heart of Edinburgh** offering 850,000 square ft of retail space and designed with sustainable construction in mind.

Major Scottish Government **infrastructure projects worth £6.4bn**, which included the Queensferry Crossing and the Aberdeen Western Peripheral Route, have been completed recently.

Threats to, and opportunities for, Scotland's construction industry

About 4% of Scotland's construction workforce hail from EU countries, which is a lot less exposure than the 50% or so you find in London and the South East. However, that could be a double-edged sword as skills shortages in London and the South East might increase wages there and attract skilled Scottish workers to fill the gaps, creating skills shortages in Scotland. An independent Scotland would have greater control over immigration policy, allowing the construction industry to continue to compete with other parts of the UK and account for any skills shortages that may arise.

Labour shortages have been reported in the Scottish construction industry, driven by a combination of Brexit and the recovery from COVID-19. There are already skills shortages, which will drive up wages in the sector (although this is not necessarily bad for the economy overall) at a time when the lower value of the pound has meant that building materials are becoming more expensive.

Brexit has also caused shortages and supply chain issues for construction supplies across the UK. This is not only due to a shortage of lorry drivers but also because around 60% of imported materials used in construction are from the European Union. Continued austerity, and a squeeze on public spending due to Brexit-related slower growth, would also likely cut public-sector infrastructure investment and slow growth in the sector further.

Scotland's tourism industry

Defining and measuring the tourism industry is harder than you might expect. Essentially it is the spending associated with traveling to a nation for business or pleasure by a person who lives outside that country. As such, tourism spend is considered to be a service and an export even though it happens in Scotland.

Some tourism spending can impact on other sectors such as rail travel and, of course, there is internal tourism where people holiday or take business trips that result in an overnight stay.

IN BRIEF

In 2017, Scotland outperformed the UK in terms of attracting visitors to its tourist attractions for the sixth year in a row.

Scotland was voted the world's most beautiful country by readers of travel bible Rough Guides and it is the perception of rugged natural beauty that make people want to see Scotland.

Top attractions include the National Museum of Scotland, Edinburgh Castle, the Riverside Museum and Kelvingrove Art Gallery – hosting approximately 7.5 million guests between them in 2019.

Prior to the pandemic, Scotland's tourism industry generated around £11.6bn for the Scottish economy. This is an increase of 9% from the previous year and contributed and added £7bn through its supply chain to Scottish GDP.

Threats to Scotland's tourism industry

Scotland has seen a huge increase in European tourists since Brexit – while visitor numbers to the rest of the UK have fallen. The latest figures available are for the year September 2017 to September 2018 and they reveal a pre-COVID increase of 22% in European visitors coming to Scotland, compared to the previous 12 months. This contrasts with a 7% drop in European visitors to the UK overall during the same period.

While the COVID-19 pandemic and global lockdowns put a dampener on international travel we expect these numbers to return to their pre-pandemic levels in 2023. The rise in European visitors to Scotland has led to claims that EU citizens are love-bombing Scotland since Brexit, as they see Scotland in a more positive light to the rest of the UK. This is highlighted by the existence of the European Friends of Scotland group within the EU Parliament, which serves as an informal network of MEPs, with the objective of forming a closer relationship with Scotland now that the UK has left the EU.

With the Brexit transition period coming to an end during the COVID-19 pandemic, it has been a particularly difficult time for the tourism industry. At the beginning of 2022, a poll of Scottish tourist operators found that one in three tourism and hospitality operators were at risk of collapse. The sudden announcement of restrictions before holiday periods, as well as rising operating costs, have threatened the livelihoods of several operators, which is particularly damaging in rural communities that rely more heavily on tourism for the local economy.

This year, 2022, has seen further difficulties, with the cost of living crisis hitting both consumers and businesses hard. Domestic tourism is hard to predict and although holidaying abroad on a weaker pound will be more expensive, inflation within the UK itself will also mean that holidaying at home won't save people that much money.

The Scottish Tourism Alliance found that 50% of businesses had fewer than normal bookings for the period of June-August 2022, in comparison to the same time period in 2019. Tourists are reluctant to spend money on holidays in Scotland when their own income is threatened. There have also been difficulties in attracting staff.

Hotels and restaurants specialising in Scottish produce will be less affected by Brexit but with imported food costs rising and the chaos and delays surrounding trade, many businesses have suffered.

The single largest threat from Brexit, though, is that Scottish tourism

KEY FACTS

Edinburgh Castle attracted a record-breaking **2,167,366 tourists** in 2019.

Scotland's tourist industry is thriving and **outperforming the UK**'s in terms of growth.

For the fourth year in a row, **Edinburgh was rated second after London** as the most attractive location in the UK for hotel investment.

Edinburgh's Festivals and Fringe attract approximately **4.5 million visitors** a year and £147.4m in net attendee expenditure for Scotland.

Scotland is also the home of golf and has St Andrews, the oldest public golf course in the world. **Golf** in Scotland supports more than **4,700 jobs** contributing **£286m a year** to the Scottish economy – a 30% increase since 2009.

Scotland's tourist sites attracted a total of **151 million visitors** in 2019, with tourists spending a combined total of £11.6bn.

and hospitality relies heavily on a supply of migrant workers. Waiting, bar and kitchen work in particular will face drastic shortages if freedom of movement continues to be limited by the UK Government's currently unsustainable plan to limit EU workers with a points based approach and unrealistically low caps on seasonal workers from the EU. Migration from EU-8 countries (the Central and Eastern European nations: Poland, Lithuania, Latvia, Hungary, Estonia, Slovenia, Slovakia and the Czech Republic), which joined in 2004, dropping by a massive 126%. Leading tourism industry professionals have commented that Brexit and the staff shortages it has caused are undermining Scotland's reputation in the tourism and hospitality industries.

Scotland's space industry

The space industry is a fast-growing part of the wider aerospace sector, which includes defence and is estimated to be worth £6.4bn to the Scottish economy. The space sector is the largest segment contributing £2.6bn GDP to the Scottish economy directly and as much as another £1bn through its supply chain.

Space industries are of growing importance to Scotland, where it is already well developed and a major European centre.

IN BRIEF

A nascent industry, space-related organisations generate a combined income of £2.6bn.

There are approximately 132 space-related organisations operating in Scotland, 83 of which are headquartered here – a 27% increase on the previous year.

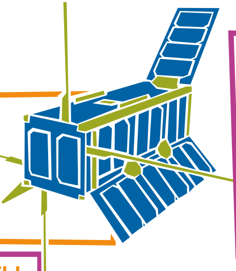
The space sector in Scotland supports 8,440 jobs. The Scottish Government expects the space sector to be worth £4bn by 2030.

Threats to and opportunities for Scotland's space sector

Scotland's space sector is a key area of opportunity for future economic growth. The large expanse of remote rural areas makes it an ideal home for launch sites. Five of the seven potential space port sites in the UK are located in Scotland. Furthermore, a third of all UK space investments were directed towards projects based in Scotland. These investments were contributed to by the Scottish Government and Scottish Enterprise (the Scottish Government's economic development agency).

Scotland's space sector does not only develop significant amounts of space technology infrastructure but also carries out research and investment into space technology, data and software. Edinburgh, which is recognised as a key data centre, has a number of companies developing the technical instrumentation to be used on the satellites built in Glasgow. A strong university and research background supports private sector development.

KEY FACTS



Scotland, with 8.1% of the UK population, employs **nearly one fifth of the UK's space sector**.

Scotland's Sutherland is to host the **UK's first spaceport**.

Glasgow builds more satellites than any other European city, more than 70 a year.

Scotland currently has **five vertical launch spaceports in development**, demonstrating that Scotland has the best vertical launch areas for reaching key satellites.

The Scottish Government has published a roadmap to ensure that Scotland's space industry is 'the greenest on Earth'. Developments must incorporate plans to reduce emissions, support the transition to net zero and satellite data has been used in climate monitoring. This ambitious strategy also aims to create 20,000 jobs and secure a £4 billion share of the global space market.

Brexit once again poses the largest threat to the growing Scottish space sector. European space contracts work on a seven-year cycle and so post Brexit, UK companies were unable to bid for the batch of contracts awarded in 2020, which amounted to grants of €12.6bn in the last cycle.

An independent Scotland as part of the EU would be able to join the European Space Agency and Scottish-based companies would be able to access the next funding round. The Scottish Government's economic manifesto mentions that Scotland would take an active role in the development of the EU's space programme, arguing that: "Scotland is therefore well positioned to contribute to the innovation and growth which will be critical to the EU's long-term prosperity and sustainable growth."

Scotland's unpaid economy

You may be a little surprised to see this being discussed as a sector but it's a much overlooked economic activity across the world and is rarely given due consideration. Unpaid work is misunderstood, partly as money does not change hands and as a result no taxation occurs. However, especially in the case of caring for a family member, if the work was not done then the cost would inevitably fall to the public-sector purse. It is also overlooked by economists as it predominantly occupies women and historically it has not been regarded as real work by wider society. This social construct leads to greater inequality in education and economic exclusion, which has a negative knock-on effect on the rest of the economy.

IN BRIEF

Carers Trust estimated the value of unpaid care work in Scotland to be over £10.3bn.

Post-pandemic, there are estimated to be 887,815 carers aged 18 and over in Scotland, representing around 20% of the adult population. This is larger than the paid social services workforce.

59% of unpaid carers in Scotland are women and 69% of Carer's Allowance claimants are women.

Supporting Scotland's unpaid economy

In March 2019, the Scottish Government announced that 75,000 Scottish carers would receive a new Carer's Allowance Supplement (backdated to April 2018). This supplement amounts to £221 (£8.50 a week), a 13% increase over the UK Government's Department for Work and Pensions (DWP) Carer's Allowance. Through these supplementary payments, the Scottish Government raised Carer's Allowance to the same level as Jobseeker's Allowance. This encourages gender equality, as the majority of Carer's Allowance claimants are women, compared to Jobseeker's Allowance, which is predominantly claimed by men.

In 2022, the Scottish Government announced that this system will be replaced with a new Scottish Carer's Assistance, maintaining the current Carer's Allowance and adding an additional Carer's Allowance Supplement.

Observations on the breadth of Scotland's economy

It is clear that **the economic case for Scotland's independence is not based on oil revenues**, nor even on the damage that has been caused by Brexit. It is also clearly preposterous for anyone to suggest that a nation that has such natural wealth, advanced infrastructure, trade surpluses in goods, innovation and human capital and that also enjoys a hugely diverse economy with leading positions in many high-growth-potential sectors is not capable of thriving as an independent nation.

In fact the more we understand the strengths of Scotland's economy, the **more we can see that it possesses massively higher natural wealth and is more resilient and broader-based than the rest of the UK's economy**. Indeed it is evident that an independent Scotland's economy would actually be in a stronger position than all Northern European wealth leaders except possibly our most similar neighbour Norway. Norway, whose economy is far more dependent on oil and gas than Scotland's, is the tenth-wealthiest economy in terms of GDP per head in the world.

With all those economic advantages, our research demonstrates it would be a **mathematical certainty that Scotland would be better off as an independent nation**. Nevertheless we must look empirically at all the factors that could influence the wealth of Scotland as a nation to fully understand if there is a case to be made that an independent Scotland could not thrive.

From an economics point of view, this isn't a major investment, nor will it greatly stimulate the economy greatly. However, it's a huge statement of intent by the Scottish Government to recognise the importance of the contribution carers make (economically and socially) to Scotland.

When looking at the economics of a nation, it's not just the numbers you want to look at but also the issues relating to wellbeing and the values of the nation.

3.

WHO RUNS SCOTLAND?

What powers would an independent Scotland gain from Westminster upon independence?

1. Constitutional affairs
2. Defence
3. Foreign affairs and international relations
4. Fiscal and monetary policy – 70% of total taxes raised in Scotland
5. Economic policy
6. The Crown
7. Copyright
8. Treason
9. Firearms
10. Extradition
11. Employment law
12. Money laundering
13. Financial services
14. Immigration
15. National security
16. Competition
17. Product standards
18. Telecommunications
19. Intellectual property
20. Import/export control
21. Postal services
22. Nuclear energy
23. Coal
24. Oil and gas
25. General taxation – the ability to set personal allowances or dividend/savings income
26. Transport, including road, rail and air transport
27. Most social security and benefits – 85% of total Scottish benefits bill
28. Pensions
29. Health and safety
30. Industrial relations
31. Abortion
32. Embryology
33. Medicine
34. Broadcasting
35. Nuclear weapons renewal
36. Ordnance surveys
37. Time
38. Consumer rights
39. Data protection

The problem with Federalism

Is Federalism the answer? The problem is that there are several unsolvable flaws with the idea of federalism as an alternative to independence. The first is the powers that federalism would allow Westminster to retain:

1. DEFENCE: renewing nuclear weapons, involvement in illegal wars;

2. FOREIGN POLICY: we were ripped out of the EU, the single market and customs union and have to watch divisive politicians call refugees 'invaders';

3. WELFARE: setting the pensions rate, universal credits, the bedroom tax and so on.

Those are not the last three powers to leave with the UK Government. Those are the first three powers that a progressive nation needs to control.

Secondly, the real problem with the idea of a federal Britain as a radical alternative to independence is that it

To sell federalism requires its champions to dismantle the core case for Unionism cannot be implemented without the permission of the rest of the UK. It is universally accepted that Scotland can vote to become an independent nation following an independence-supporting majority in the Scottish Parliament, as first occurred in 2011 and again in the current parliament. However, the conclusions of a House of Lords report on the constitution that stated: "while independence is a matter for the people of Scotland, federalism would have to win a UK-wide referendum."

Simply put, there is not enough support for federalism or regional parliaments in England, where the vast majority of UK voters live, and in Northern Ireland the DUP would argue it would diminish their status as British, so federalism is a non-starter – a red herring argument.

Observations

The distinction between those arguing for independence and those arguing for the Union is that the former are ambitious for Scotland and the latter are not. **The dividing line is between those that believe in Scotland and those that do not.**

Federalism is not a realistic option, but it will almost certainly be offered, in an ill-defined way, as an alternative to independence. The values and political priorities of Scotland and the rest of the UK have been diverging for a generation. Brexit may have broken Britain as a political union, but Scotland does not need to have Westminster limit its ambitions, its international trade and adversely affect the welfare and well-being of its people in order to remain the closest friends, trading partners, allies and neighbours to the nations and peoples of the rest of the UK.

4.
IS IT BETTER TO BE A SMALL NATION?

Scotland is generally referred to as a small nation. The fact is that Scotland is smaller than the rest of the UK in terms of population but this does not mean it is small when it comes to its economic performance and capabilities.

Scotland is no minnow economically: of the ten smallest nations by population across the European Economic Area, Scotland's economy is larger than the smallest seven put together (they are Liechtenstein, Iceland, Malta, Luxembourg, Cyprus, Estonia and Latvia).

Taking a look at the smaller independent European nations with similar population levels to Scotland we find the following comparisons:

POPULATIONS

GDP – THE SIZE OF THE ECONOMY*

*GDP converted from local currency according to exchange rate as of 03/03/23

Those other nations all have economies considerably larger than Scotland, which has a GDP of £181bn, despite having a similar sized population at 5.5m. However on a per head basis, GDP in Scotland works out as £916 higher than the UK average.

So, something is clearly wrong but not with Scotland's economy. Scotland possesses massively higher natural wealth than all of the similar sized nations listed on the previous page, with the possible exception of Norway. Meanwhile Scotland outperforms all of the small nations and similar-sized nations highlighted in this section across the broad range of prosperity factors. Yet our GDP is £131.5bn smaller than the average of our near neighbours with similar population sizes, and a massive £194bn smaller than Ireland, which has 400,000 fewer people. Ireland's economy is almost twice the size of Scotland's! That clearly demonstrates that smaller independent nations perform better.

Observations

Given its huge economic assets, it naturally follows that **Scotland should be performing better than most if not all of those smaller nations we have benchmarked against.** The fact that it doesn't therefore points to a very important conclusion: that being part of the UK is holding Scotland's economy back and limiting the shared prosperity of the nation.

Ask yourself, other than possessing the full set of powers of an independent nation and the ability to tailor economic, business, social and environmental policies to the needs of their nation, rather than to those of a larger neighbouring nation – **what advantages do those nations of similar size to Scotland possess that Scotland doesn't?** All data points to smaller developed countries having an advantage. As an independent nation, Scotland would have a smaller population than the UK but it would have significantly larger prospects and ambitions.

5.

IS BRITAIN'S ECONOMY BROKEN?

Smaller independent nations are outperforming the UK economically. This has led countries of similar population sizes, but which possess significantly inferior economic assets to Scotland, to develop larger economies than Scotland's, as Scotland seems to be held back by being part of the larger UK.

This leads to the conclusion that being part of the UK is stopping Scotland from achieving its full economic potential. As detailed in the last chapter, smaller more agile nations, able to tailor policy solutions more closely to their needs than Scotland can (whilst still part of the UK) will always perform better than the UK as a whole, or the smaller nations of the UK.

A one-size-fits-all economic policy, including related corporate taxation and fiscal, business and immigration policy, clearly doesn't deliver for the diverse and geographically disparate economy of Scotland.
If it did, and being part of the UK was an economic advantage, Scotland would outperform all similar-sized nations with fewer economic assets.

This leads to the question: is the UK economy OK? Is the poor performance of the UK economy itself weighing Scotland down?

To investigate this, we measured the UK's performance across eleven different measures, arranged into five categories which we believe constitute a good picture of a wellbeing-focussed economy. We then benchmarked the UK's results against sixteen variously sized Northern and Western European nations.

Ranking 1-17 across all economic indicators

1.	Luxembourg
2.	Denmark
3.	Switzerland
4.	Norway
5.	Ireland
6.	Netherlands
7.	Sweden
8.	Iceland
9.	Austria
10.	Belgium
11.	Germany
12.	Lithuania
13.	Estonia
14.	France
15.	Finland
16.	Latvia
17.	United Kingdom

The economic performance indicators were:

1. GDP per head
2. GDP growth across a five-year average
3. National debt as a percentage of GDP
4. Exports as a percentage of GDP
5. Productivity per worker per hour worked

The wellbeing indicators measured four areas: health, environmental quality, happiness, and economic wellbeing.

The health indicators were:

6. Hospital beds per 1,000 of population
7. Healthcare spending per head

The environmental quality indicator was:

8. Greenhouse gas emissions per capita

The happiness indicator was:

9. Ranking on the World Happiness Report

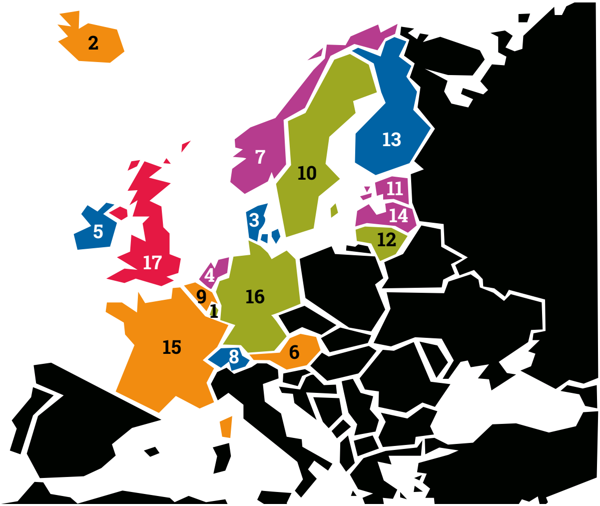
The economic wellbeing indicators were:

10. Pension as a percentage of average income
11. Income inequality (as measured by the Gini coefficient

The results were conclusive. The UK is not OK – far from it. The UK's economy is performing extremely poorly and being part of it is not an advantage to Scotland.

Shown on these pages are the results of the benchmarking exercise. On the previous page is the overall ranking table, showing all the nations we benchmarked against. For brevity, the other tables show only the top five, along with the UK's ranking.

As you can see, overall, the UK came last, making the top ten on only one occasion (for its level of greenhouse gas emissions). As you would expect from the previous chapter, smaller nations significantly outperformed the larger nations. Germany and France came 11th and 14th respectively. Germany was helped greatly by its healthcare system, where it came first for beds per 1,000 of population and second for spending per head. However, without these it would have found itself much further down the table.



Pensions (% of average earnings)

1 Iceland 51.0%
2 Luxembourg 39.1%
3 Denmark 37.2%
4 Belgium 32.5%
5 Norway 30.5%
14 UK 16.7%

Income Inequality (Gini Coefficient)

1 Iceland 0.250
2 Norway 0.261
3 Belgium 0.262
4 Denmark 0.263
5 Finland 0.269
17 UK 0.366

GDP ($) per Capita

1 Luxembourg 132,474
2 Ireland 107,862
3 Norway 79,162
4 Switzerland 77,236
5 Denmark 64,876
14 UK 48,662

GDP Growth Rate (2017-21 average)

1 Ireland 8.44%
2 Estonia 3.86%
3 Lithuania 3.56%
4 Luxembourg 2.34%
5 Latvia 2.1%
16 United Kingdom 0.72%

Hospital beds per 1,000 population

1. Germany	7.82
2. Austria	7.05
3. Lithuania	6.12
4. France	5.73
5. Belgium	5.51
16. UK	2.34

Healthcare spending per head ($)

1. Switzerland	7,178
2. Germany	6,938
3. Norway	6,536
4. Netherlands	6,189
5. Austria	5,882
12. UK	5,018

Greenhouse gas (GHG) emissions per head

(tonnes CO2)

1. Sweden	3.23
2. Lativa	3.52
3. Switzerland	3.78
4. Lithuania	4.02
5. France	4.20
8. United Kingdom	4.94

World Happiness Report ranking

1. Finland
2. Denmark
3. Iceland
4. Switzerland
5. Netherlands

12. United Kingdom

National Debt (% of GDP)

1	Estonia	24.3%
2	Luxembourg	31.0%
3	Switzerland	40.5%
4	Norway	49.3%
5	Denmark	50.3%
17	UK	145.5%

Exports (% of GDP)

1	Luxembourg	211.4%
2	Ireland	134.4%
3	Belgium	85.4%
4	Netherlands	83.0%
5	Lithuania	80.5%
17	UK	27.9%

Productivity (per person and per hour worked)($)

1	Ireland	128.2
2	Luxembourg	99.0
3	Norway	84.4
4	Switzerland	76.6
5	Denmark	75.8
14	UK	60.6

The UK comes last on overall performance, with its lowest rankings being 17th for national debt and exports as a percentage of GDP, rankings that are owed in large part to the disaster of Brexit. Brexit continues to leave scars across the entire UK economy. On the indicators for economic performance the UK only just beats the small nations of Estonia, Latvia, and Lithuania on GDP per capita, productivity and its pension system. While we maintain a level of economic performance that is better than these nations, the UK has experienced weak economic growth over the past years. In contrast, Estonia and Lithuania rank as second and third for GDP growth in our rankings, indicating that the UK is at risk of being economically leapfrogged by these small nations in the near future.

It is therefore no surprise that the UK performs even worse on wellbeing indicators. On pensions, the UK offers one of the worst pensions in the developed world, again only barely beating Estonia, Latvia, and Lithuania. The UK also tied with Latvia to rank 15th for income inequality.

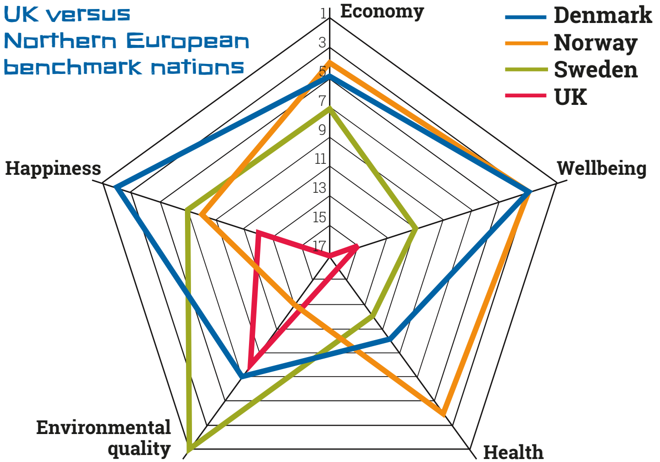
On health, we like to think of our NHS as a world beating institution. However, chronic underfunding has left it as one of the worst in Europe. In the rankings, the UK comes 12th for healthcare spending per head and second last for number of hospital beds per 1,000 of population. Scotland's NHS is fully devolved to Holyrood and the Scottish Government commits £100.00 per head more spending on health care than in England, but even that is not enough, especially given the hammering the NHS has had during the health crises.

Finally, the UK ranks as 17th in the world on the World Happiness Ranking (making it 12th for the nations we considered). For a state with such vast wealth and resources, one would expect to find the UK as higher on this list, but it once again shows that the UK system is broken and fails to deliver for its citizens, and Scotland continues to be dragged along for the ride.

Visualising the UK's Failure

In the diagram below we compare the UK to three benchmarked Northern European nations, using the rankings we developed on the previous pages. These nations have all made efforts to move towards a Wellbeing economic approach. To make the visualisation easier we aggregated the rankings on certain indicators to give an average, such that we ended up with five overall indicators. These are: economy, health, happiness, wellbeing, and environmental quality.

The lower the score the better the performance and so the more a country's line matches the shape of the pentagon the better. As you can see, the UK is by far the worst performer overall and therefore, we would expect all economic indicators to worsen in the next few years as the smaller independent nations benefit from having a more balanced wellbeing-focussed economy. When compared to these nations the UK comes last in terms of its economy, wellbeing, healthcare, and happiness; while Denmark and Norway (two countries most similar in population size to Scotland) are the clear victors.



Observations

The idea that the size of **the UK's economy**, its performance, or even its long-term economic prospects **offer Scotland some form of protection** or advantage, has been completely and **utterly disproven by the data**.

The clear dominance of smaller nations in these league tables and the fact that even the manufacturing powerhouse of Germany could not get out of the bottom three, is highly informative. The top two overall placement of Ireland and Iceland, the former an EU member and the latter a member of the Single Market via its EFTA status, also demonstrates that those nations, which like the UK took a hit from the 2007 financial crash, have bounced back stronger, faster and with greater equality throughout society than the UK, which instead chose an austerity route to deal with the crash.

The UK's terrible scores on both pension levels and income inequality prove that the wealth in the economy is not reaching those who need it most. You gain a glimpse of the soul of a nation by looking at how it treats its most economically deprived and its aged. **The UK is still the world's fifth-largest economy but Westminster just doesn't care as much as other nations about inequality and pensioners.**

It is the case that:

1. **Scotland possesses greater natural wealth and many other significant economic advantages compared to most European nations;**
2. **Smaller nations are more agile and so the limited powers of devolution will have provided some economic benefit;**
3. **The UK is performing badly and holding Scotland back.**

It naturally follows that the economy of an independent Scotland would outperform the UK on the economic indicators shown in this chapter.

6.
BREXIT: WHY IT'S A PROBLEM FOR SCOTLAND – WHY IT'S A PROBLEM FOR YOU

The previous edition of this book was written before the UK's official exit from the European Union on January 31st, 2020. Brexit has delivered so many negative consequences for the UK that we need to also consider the political as well as economic fallout to truly understand the wider picture.

Back in 2016, Business for Scotland led the business arm of the Remain campaign in Scotland, when 62% voted to remain in the EU. Since then, chaos has reigned in the UK, which is currently on its fifth Prime Minister since the Brexit vote. Whilst it has been almost two years since Brexit, its full implications remain unclear. This is partly due to data on economic performance and exports lagging behind real-time changes.

The damage Brexit has done has also been hidden by the fog of COVID-19 lockdowns and the war in Ukraine. It is however undeniable, that economically Brexit has been an unmitigated disaster and laid the foundation blocks for the cost of living crisis, and the current recession and years of austerity budgets that we can expect from the UK Government going forward. It is also the case that several Brexit outcomes are still unclear, such as the Northern Ireland Protocol, which could still lead to a hard Brexit and even more damage.

Since the implementation of Brexit in January 2020, the world has been hit by a global pandemic, worldwide lockdowns, rampant inflation in food and oil prices, which have been made worse by the economic fallout of the Ukraine war. The combination of these three drivers has led to a cost of living crisis in the UK. That economic crisis has been followed by a political one, with the UK having had four Prime Ministers and five chancellors since 2019. Brexit has also reignited political turmoil in Northern Ireland, as the country attempts to square the Northern Ireland Protocol with the Good Friday Agreement. In short, Brexit has been an unmitigated disaster for the UK but most importantly, for Scotland.

The current Prime Minister, Rishi Sunak is supportive of Brexit as are the leaders of the UK Labour Party and Liberal Democrats. To be clear, no UK-wide political party has any intention of rejoining the EU, saying they are committed to making Brexit work. The fact that it is impossible to make Brexit work is being ignored for political expediency.

From a Scottish perspective, it is important to remember that Scotland's goods exports are more than double per head than the rest of the UK. Scotch whisky alone represents 21% of the UK's food and drink exports. Scotland is the only nation in the UK with a positive trade balance in goods since records began and our oil and gas and related exports are worth over £9.25bn per year. This means that for Scotland, there has never been such a thing as a soft Brexit.

During the Scottish independence referendum, a key No campaign argument was that an independent Scotland would not be able to join the EU. A campaigning message tweeted by the No campaign on September 2nd, 2014, summed up their argument: "What is the process for removing our EU citizenship? Voting Yes". Scotland voted No in 2014 but the wish to remain in the EU was clearly a major driver of that result. So, for Scotland to be removed from the EU in the face of a 62% Remain vote has reopened the constitutional debate.

The UK government agreed to a referendum in 2014 as it was certain from the polls that it would win; the current UK Government does not want to agree to a new referendum, as the polls indicate that they would probably lose.

A PanelBase survey conducted by *The Times* in August 2022 found that 72% of voters in Scotland would back rejoining the EU if a referendum on membership was re-run.The Scottish Government has announced that an independent Scotland would rejoin the EU. This will allow an independent Scottish economy to access the world's largest single market for its goods and services and the ability to draw from a talent pool of 500 million workers.

The economic impact of Brexit

RECESSION AND AUSTERITY

The Bank of England confirmed in November 2022 that the UK economy had entered a recession and it is undeniable that the impact of Brexit has worsened the situation. The UK experienced the highest initial drop in output due to the pandemic and has remained the slowest nation in the G7 to recover, apart from Russia, whose economy is currently crippled by international sanctions.

From the Office for Budget Responsibilities' own analysis, we know that exports to the EU have fallen by 10% since Brexit and that overall, the UK economy has become less trade intensive, with trade as a share of GDP falling 12% since 2019. The Centre for European Reform also conducted analysis using a "doppelganger" version of the UK and found that the UK economy is 5.5% smaller than it would have been if it did not leave the EU, with investment being 11% smaller, and goods traded figures being 7% smaller.

In an interview on Bloomberg TV, former Bank of England Policy Committee member Michael Saunders said: "The UK economy as a whole has been permanently damaged by Brexit – it has reduced the economy's potential output significantly and eroded business investment." He continued: "If we hadn't had Brexit we probably wouldn't be talking about an austerity budget – the need for tax rises and spending cuts wouldn't be there if Brexit hadn't reduced the economy's potential output so much."

This is backed up by comments by the editor of the Financial Times, Roula Khalaf, who said: "We will be paying more tax because of Truss and Kwarteng's Brexit mini-budget which was a disaster… Brexit is the elephant in the room, there is no debate about the cost of Brexit".

HIGHER PRICES

Price inflation is currently gripping most developed countries – this is a global issue. However, once again it is undeniable that the situation in the UK is amplified due to Brexit. Adam Posen, a former member of the Bank of England's Monetary Policy Committee, has said that 80% of the reason the UK's inflation rate is higher than the rest of the G7 is due to Brexit.

FALL IN INVESTMENT

Since the Brexit vote was announced, it has been a source of uncertainty for businesses, both within and outside the UK. In 2020, a study by University College London and the LSE predicted that Brexit could reduce foreign investment into the UK by 37%. A recent poll of business chiefs conducted by the Institute of Directors has found that rising costs, trading difficulties and political uncertainty has left them planning to slash investment in late 2022. All of these factors can be traced back to Brexit, as a major cause or a contributing factor.

Brexit and Northern Ireland

The implementation of Brexit has been a source of renewed tension in Ireland. The UK's Brexit agreement is incompatible with the Good Friday Agreement, which demands the avoidance of any hard border between the Republic of Ireland and Northern Ireland. This creates a so-called "Trilemma" of problems – maintaining free movement across the island of Ireland, whilst taking the UK (including Northern Ireland) out of the Single Market and avoiding the imposition of a customs border in the Irish Sea, which would be unacceptable to the Democratic Unionist Party (DUP) in Northern Ireland.

These three goals conflict with each other and whilst a tentative agreement was eventually reached, the DUP refused to form a government in May 2022 because of the Northern Ireland protocol, bringing administration from Stormont to a standstill. The breakdown of the Northern Ireland Protocol would violate the Good Friday Agreement, which has maintained peace and stability in Northern Ireland for the past 24 years; that would be unacceptable to Ireland and therefore the EU. The UK government has threatened to end the protocol but that would undo the current Brexit Agreement and lead to what is known as a hard border with the EU which, under current circumstances, would crash the UK Economy.

Loss of EU funding

EU finding was vital to Scotland. For the period 2014-2020, Scotland was allocated €944m in funding through European Structural and Investment programmes. This fund aims to reduce economic disparities between European nations by supporting business growth and investment.

There are several other funding streams that are lost due to Brexit. For example, Scottish farmers face losing £170m in EU funding by 2025 due to Brexit. This is funding that, so far, the UK government has failed to replace at an equal level.

In its first year of dishing out money, the UK Government's Shared Prosperity Fund allocated £151m less to Scotland than the amount that would have been paid by EU Structural Funds. The role of managing EU funding was previously under the direct control of the Scottish Government. However, the Shared Prosperity Fund is managed by Westminster alone.

Under the government's mis-named "Levelling Up" agenda, Scotland will once again lose out. The proposed 'Levelling Up and Regeneration Bill' does not give the Scottish Parliament any role to scrutinise the content of missions assigned to ministers by the UK government. In other words the Levelling Up funds will follow the UK government's agenda and not the needs of Scotland's economy and communities.

Regulations timebomb

After leaving the EU, the UK became responsible for implementing and updating legislation previously covered by EU law. To this end, Jacob Rees Mogg championed his Brexit Freedoms Act. This bill is designed to replace all EU legislation that was in place in the UK, with new separate laws being adopted at the end of the transition period. The bill includes what is known as a 'sunset clause', which means that any laws which are not reviewed or repealed by the end of 2023 would no longer apply. Legal experts have said that this time frame to adapt over 2,400 laws for the UK outside of the European Union is not realistic. The Scottish Government has also argued that the bill does not account for devolution and has also involved no consultation with Holyrood.

Does Brexit mean the UK will benefit from increased sovereignty?

The EU operates a Single Market and Customs Union, which means that trade between member nations is without tariffs and is free of other trade barriers such as customs checks. Financial and other services can also be traded throughout the EU without restriction. If a nation leaves, it loses access to the Single Market and the EU's Four Freedoms for goods, services, capital and people no longer apply.

A key pro-Brexit argument was that the net gain of leaving is in regaining full sovereignty. Yet, the UK already had full sovereignty. In order to join the EU in the first place, a nation must be fully sovereign. Being an EU member necessitates full sovereign independent nation status. It does not negate it.

All member states of the EU are therefore sovereign nations. They have not lost any sovereignty. They simply exercise that full sovereignty to align their rules and regulations with other EU members and to facilitate greater and easier trade through more equalised market conditions. This prevents a nation with lesser standards (working, quality or environmental) and therefore much lower costs, flooding the single market with cheaper products (such as chlorinated chicken). That also benefitted the UK.

So, all the sacrifices that Brexit entails are to regain full sovereignty, but that is not actually something the UK has ever lost. All the UK really gains from Brexit is the requirement to renegotiate all the trade deals that the UK enjoyed as a benefit of its EU membership. However, it will only be able to offer access to a 66-million-person market as negotiation leverage, compared to access to a 508-million-person market, offered when the EU negotiates on the UK's behalf.

The UK has effectively torn up all of its global trade deals negotiated via the might of the EU bargaining position, in order to renegotiate the same deals from a weaker position of being a single country.

So, Who Has Lost Sovereignty?

To believe that Brexit is a good thing, or that Scotland will benefit from Brexit in the face of a rapidly growing mountain of data which proves that any sort of Brexit is a monumental act of self-harm, is to suspend all critical thinking and replace it with a dogmatic, almost cultish, adherence to the mantra of British nationalism. I am a Northumbrian-Scot and an internationalist, and if Scotland were an independent sovereign nation my priority would be to use that sovereignty to rejoin the Single Market through full EU membership. However, without that independence, Scotland's interests don't count.

The fact that Brexit has happened demonstrates the phenomenon known as the democratic deficit, where votes cast in Scotland do not impact on the result of UK elections and referendums, as the population of the rest of the UK, and England in particular, is so much larger than that of Scotland. Scotland voted 62% to Remain in the EU referendum but that vote was overwhelmed by the larger Leave vote in the rest of the UK.

An independent Scotland will rejoin the EU

The Scottish Government has announced that it intends to reapply for EU membership when Scotland achieves independence. By rejoining the EU, Scotland will be back inside the world's biggest single market. It will regain access to a talent pool of highly skilled workers, drawn from the 500 million population of the EU and Scotland's people will have their freedom of movement restored. Scotland can free itself from the unequal, unfair, high-cost, failing, Brexit-based UK economy and we can thrive through the creation of an inclusive, wellbeing-based economic approach.

Scotland is likely to be accepted back into the EU with open arms. If there had been a Yes vote in 2014, an independent Scotland would be in the European Union today. The rest of the UK, if it wanted to leave, would have had to negotiate a protocol with Scotland, of the kind that applies to Ireland since Brexit and has boosted Northern Ireland's economy.

In 2014, the No campaign continually and dishonestly suggested that Scotland might not be allowed to join; or that it would have to join a "queue" for membership – even though there isn't a queue. Membership is reviewed on a case-by-case basis. History has revealed that the real risk to Scotland's EU membership was actually from staying in the UK.

The other most significant change of circumstances today is that the UK is no longer an EU member. The UK Government is not on good terms with the EU and in these circumstances, they would find it difficult to convince any member country or any senior official to threaten Scotland by saying that it would not be allowed to join as an independent country.

A number of senior EU figures and MEPs from every corner of Europe have also said that the EU would welcome an independent Scotland with enthusiasm. This includes the Vice-Chair of the Green group in the European Parliament, German MEP Terry Reintke, who said:

"If Scotland were to become an independent country, an accession procedure to the European Union would be much easier – as Scotland had previously applied the full acquis [EU statutes book] already."

Fabian Zuleeg, chief executive of the European Policy Centre in Brussels, said: "The mood on the EU side is rather positive" and suggested an independent Scotland might be able to conclude membership negotiations in "two to three years" – similar to Finland in the mid-1990s.

Scotland was a member of the EU for more than four decades. Most of its laws are compatible with EU statute; it shares the values of the rule of law, support for human rights and cooperation. Every single council area in Scotland voted to remain in the EU – it was a strong and unified voice. Despite that, the UK decided to pursue the hard Brexit sought by a factional government.

Scotland can be confident that returning to EU membership will be straightforward and should take less than three years. The process of accession could begin while Scotland is still negotiating the details of its independence with the UK Government.

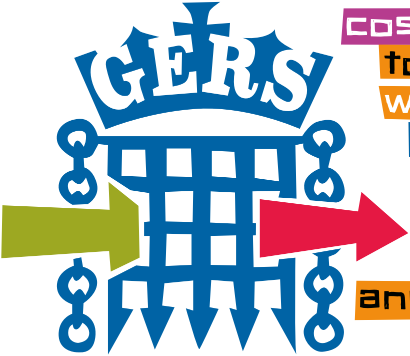
7.
SCOTLAND'S FINANCES

It's remarkably clear from the evidence of earlier chapters that Scotland has everything it takes to be an extremely prosperous and successful independent nation.

This prompts the question – how does an oil-rich nation with a strong and resilient onshore economy, booming exports, a highly educated population, low unemployment and strong key economic sectors end up with a set of accounts that suggest Scotland has a financially weak economy?

That is a trick question – it doesn't.

There is no set of accounts that tells us how an independent Scotland's economy would fair, nor what its finances would look like. We do have a set of financial reports called GERS (Government Expenditure and Revenue Scotland), but the government the GERS accounts relate to is the UK's and GERS includes the hidden costs of being part of the UK – those are what produces a false deficit we find in the GERS figures.



costs are applied to Scotland... without any reference to where the economic benefit of any expenditure accrued

How debt loading works

There is an expenditure line in GERS called Public Sector Interest Expenditure (PSI. From year to year, PSI can be the fifth or sixth largest expenditure of the Scottish Government and is sometimes even larger than Scotland's allocated share of the UK Armed forces expenditure. Historical analysis of GERS reports demonstrates that every year since records began, Scotland has been paying interest on a population share of the UK's debts. In the last five years (2017-22), PSI has added £26.5bn – an average of £5.3bn per year to the cost of running Scotland.

That's not paying back the capital on the UK's national debt, it's just the interest on that debt.

Scotland has recently been granted very limited borrowing powers, but whilst the UK's debt was being built up, Scotland had no borrowing powers.

So, how did a nation without the ability to borrow end up paying billions of pounds in interest on debt every year? It does so because the allocation of the debt is not related to the UK region or nation which generated the debt, nor where the money was spent, nor where the economic benefit from the related spending accrued.

The UK's debt is allocated to Scotland's accounts on a population percentage basis, regardless of whether Scotland needed that debt or whether it was spent in Scotland. It is the price of being a member nation of the United Kingdom.

Looking at Scotland's GERS reports going back 42 years, Scotland's share of UK debt interest amounted to a staggering £3.511bn per year on average – quite literally stripping billions of potential investment out of Scotland's economy. That was investment that Scotland would have enjoyed as an independent nation. That is why Scotland's economy slowed and did not keep pace with its benchmark nations of Norway, Ireland, Finland and Denmark.

Analysing those figures also demonstrates that, for much of that time, Scotland's accounts (even with the debt loading) actually showed a surplus. Were Scotland an independent nation that launched an oil fund, as Norway did, without the costs of servicing the UK's debt, then Scotland's entire borrowing requirement over those 42 years could have been zero, as any annual borrowing requirements could have been met from the profits of the fund.

> Scotland did not contribute to the creation of the UK's debt

If we look back as far as reliable historical figures for Scotland's revenues and expenditure go, we can see that in 1980-81 Scotland managed to record a surplus of just over £1bn. Indeed, using GERS, Scotland's finances showed a surplus until 1990, when the cumulative weight of debt loading had the effect of putting GERS into a false deficit.

It is undeniable that in an independent Scotland those surpluses would either have been invested to grow Scotland's economy, or possibly put into a sovereign wealth fund such as Norway's.

Let's explore three alternative scenarios for how an independent Scotland could have managed its finances.

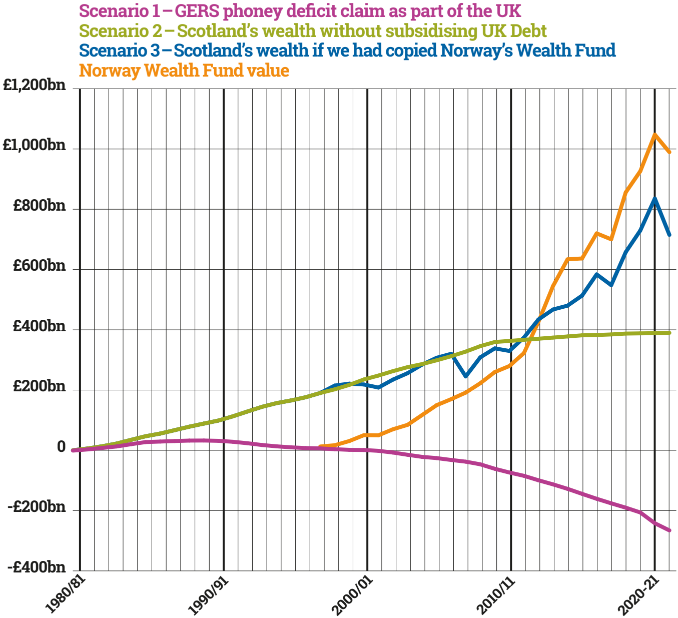
What's the daftest thing Scotland could have done?

Assuming that an independent Scotland would not have gifted its massive surpluses to another country so that the other country could pay down its debts, what is the lowest rate of return an independent Scotland could have received on those 1980s surpluses?

What if an independent Scotland's government had been so daft, so absolutely incompetent, that it could not figure how to invest those massive surpluses and as a result did nothing with them but stuff them into a bank and let them gain interest at the standard market rate?

Even then, that government would have had to have constantly made significantly worse economic decisions, and more mistakes than Westminster did in running Scotland's economy, to not see significant growth and better finances compared to being part of the UK.

What if we also assume the worst, and that even without those debt interest payments holding Scotland's economy back Scottish Government revenues didn't rise, and that the economy grew much



more slowly than other European nations with comparable populations. What would have happened?

Well, those cumulative surpluses, plus standard bank rates of interest, would have grown until Scotland had £391bn in that bank account today.

Yes, that's right, the daftest thing Scotland could have done as an independent nation would have left Scotland at least £654bn better off today than GERS currently falsely suggests Scotland is, as part of the UK. However, had the Government of an independent Scotland simply copied Norway, then Scotland now would be £979bn better off than GERS suggests and its false deficit indicates that we are in the UK today.

If it weren't subsidising UK debt, Scotland would be at least £654billion better off today than GERS falsely claims it is

£654bn is missing from Scotland's economy from the practice of debt loading alone and upon that accounting trick rests the entire economic case for the Union.

Observations

In the 1970s, Scottish oil revenues stopped the UK from going bust and requiring a bailout, but they were not enough to stop the UK debt mountain from growing. Scotland was then allocated a population percentage share of the costs of servicing that debt as well. **Despite this double bailout of the UK, Scotland's economy and its finances still managed to show a higher GDP per head and lower illustrative deficits than the UK** until 2015. At that point, the UK's mishandling of Scotland's oil and gas wealth caught up with it and it decided to slash Scotland's oil revenues to bail out the big oil companies, which finally made Scotland's finances look worse than the rest of the UK's.

But it's the UK's deficit, not Scotland's. If an independent Scotland had done the daftest thing it could have done with its historical surpluses, then as a nation Scotland would be £654bn richer than GERS suggests it is as part of the UK.

It's fair to say that in 2014 many people just didn't believe Business for Scotland when we explained that Westminster was completely, economically incompetent, that Westminster truly didn't care about the impact of its policies on Scotland and was deliberately acting against Scotland's best interests. Now, however, Brexit is making that thinking mainstream and slowly but surely, as Brexit unravels, more and more people are beginning to see that **Scotland cannot afford to continue subsidising this failing, disinterested and dysfunctional Union**.

The evidence is clear – the UK Government has created a situation where Scotland's finances show a false deficit, one that is not related to the economic performance of Scotland. Pro-Union politicians and the biased media point to that false deficit as proof that Scotland can't afford independence.

GERS when properly analysed actually proves emphatically that Scotland's economy is remarkably resilient, and resistant to oil price fluctuations and that it is underperforming due to carrying the weight of years of Westminster economic incompetence and wrong-headed thinking on its back. That is before the full impact of Brexit is known.

8.
A WELLBEING ECONOMY

Since its inception in 2011, Business for Scotland (BfS) has called for a fairer, greener, more entrepreneur/small business focused approach to independence. BfS has championed the cause of wellbeing economics since before it was a widely used term. BfS and our sister campaign organisation Believe in Scotland were always going to make the case for independence based on Wellbeing economics, even if the Scottish Government didn't.

Upon his election as Scotland's First Minister Humza Yousaf created a new Cabinet Secretary position for The Wellbeing Economy and Fair Work. This move signals a major change in direction towards the Wellbeing Economic Approach and potentially a turning point in Scotland's constitutional debate.

We looked at nations that were talking about pivoting towards Wellbeing: Norway, Finland, Sweden, Iceland, Denmark, New Zealand, and even Scotland and Wales. None had fully developed ideas, but all had suggestions from which to pick and choose.

We created a wellbeing values framework, polled 1,000 voters living in Scotland and found there was majority support – usually higher than 75% – for each of the values/policy statement positions in our manifesto.

Have a read below and ask yourself: wouldn't you like to live in a country with a social/economic/environmental policy framework based on this set of values? Wouldn't you like to be able to vote to create such a nation? The majority of Scots would.

Believe in Scotland's values framework for a Manifesto for Wellbeing

- Quality of life, equality, fairness, happiness and health are all economic outcomes that should be given equal weight to economic growth.
- The focus of the economy should be to serve the needs of people and society more than the needs of big business and finance.
- To be able to live with dignity while experiencing wellbeing and security should be a basic human right, not something that comes only with wealth.
- You cannot have a thriving economy without a thriving society and you cannot have a thriving society without a thriving economy.
- Austerity has failed, slowing economic growth, harming people and society and making the country more susceptible to economic and health crises.
- Post coronavirus, our economic policies need to be re-engineered to generate higher levels of equality in health, wealth, wellbeing and access to opportunity.
- If we build society and our economy more successfully after coronavirus, we can create a new economic approach, allowing both our economy and our society to thrive and be more resilient in the face of crises.
- The nature of work is changing, we need to invest more heavily in innovation, encouraging better business practices and preparing for the future of work.
- Education is an investment in our children and young people, it should always be free and open to everyone.
- Small businesses are the backbone of our economy. Greater government investment in creativity and innovation is needed to help them grow and create better quality jobs.
- Government expenditure on welfare and health is higher due to inequalities in the current economic system and a wellbeing approach would reduce those costs.
- Economic success being more equally shared amongst society would result in better growth.

- Greater access to personal development opportunities for all will increase social mobility and benefit the economy in the long-term.
- Ending poverty, inequality and unfairness, while increasing minimum wage and job security will boost the economy.
- People need to feel more secure in their livelihoods. A universal basic income (UBI) for every adult citizen would provide that security and end both in-work and pensioner poverty.
- Decision making should be less centralised, to give people a greater democratic voice in local issues.
- We need to reduce our economy's carbon outputs and waste, make transport more sustainable and make recycling and repairing far more prominent.
- Independence is a normal state of affairs for a country. With all the powers of a normal independent nation, we can create a more prosperous, fairer, greener, happier and healthier nation.
- Scotland is for the people of Scotland, but not just those born here or who currently live here – Scotland can be reborn in our newest Scots.
- Scotland's civic nationalism is inclusive, internationally focused and welcoming. It rejects exceptionalism. We are not "better" than anyone else by virtue of being Scottish. We simply want the chance to use independence to create a nation that reflects our political, economic, environmental and social values and thus enhances our nation's wellbeing in ways that cannot be achieved without nation status.

The implementation of a Wellbeing approach cannot happen and we can't build back better unless Scotland becomes independent, so it's time to press reset – it's time to believe in Scotland.

9. CONCLUSIONS

This book set out to uncover the facts and make an analysis of the data to answer the question: Does Scotland have what it takes to succeed economically and allow our society to thrive as an independent nation?

The answer is not only a very definitive yes, but the evidence demonstrates that it is absurd to even suggest that Scotland would not be one of the wealthiest and most successful nations in the world.

So why do we even need to ask the question?

The people of Scotland live in a country where the mainstream press fall over themselves to play down the natural strengths of the Scottish economy and the nation's potential. Clearly, the people of Scotland need a better question to ask. It's a simple and pointed question, and one that any self-respecting journalist should consider before republishing any economic scare story handed to them in the form of evidence-free press releases.

They should simply ask, "How come?" How come, when Scotland is a country with an almost unmatched abundance of economic advantages, do we have a smaller economy than any similar-sized independent northern European nation?

How come, being run from Westminster is supposed to be such an advantage, when GERS clearly demonstrates that it is not?

How come, small-to-medium-sized independent nations such as Ireland, Denmark and Finland significantly outperform the UK (and therefore Scotland) across the full range of economic and wellbeing measures?"

Those nations would love to have Scotland's oil and use it to benefit their own citizens. Norway does, and it is far more reliant on oil than

Scotland. However, it has been saving up for a rainy day. They can increase investment to stimulate growth and save jobs by investing from its oil fund. How come the Westminster Government didn't do that?

Let's not make the same mistake again with renewable energy and allow Westminster to under-invest in the sector, or treat it as another cash cow. As part of the UK, billions were syphoned away from Scotland when we should have been investing in diversifying and strengthening our economy, instead of paying off the rest of the UK's debt.

The answer this book provides to the "how come" question is that those smaller independent nations get to make decisions for themselves. They get to elect governments that create bespoke policies for their economic and social needs – not ones for a larger neighbouring country, with vastly different priorities and needs. Those smaller independent nations choose governments who are better placed to understand and solve problems, as well as realise the opportunities of the country they represent.

When the UK Government's strategy has been, for generations, ripping the wealth, youth, talent, power and opportunity out of other regions, to then drain them into the London and South East bubble and load them with costs for debt they didn't incur, it becomes inevitable that the accounts of other regions will show false deficits. Phoney deficits are not an argument against independence, they are an argument for independence.

Scotland's economy weathered the oil price crash so much better than the UK weathered the financial crash and given that the oil price has surged again, there will be a massive increase in north sea revenues in 2022/23 but they will not be reinvested in Scotland.

So of course Scotland has what it takes. It possesses massive natural wealth. It is an exporting powerhouse and an innovative nation. It possesses highly advanced economic, government, trade and societal infrastructure and a significant advantage in human capital.

The idea that the size of the UK's economy, its performance or even its long-term economic prospects offer Scotland some form of protection or advantage has been completely and utterly disproven by the data in this book. We do not benefit from the broad shoulders of the UK, rather the burden of the UK's inadequacies in governing Scotland sits on our shoulders like a dead weight.

That dead weight was identified by our financial research, where we found that if an independent Scotland had done the daftest thing it could have done with its 1980s surpluses, then as a nation Scotland would be £654bn richer than it is, according to GERS, as part of the UK today. If Scotland had simply copied Norway, it would have at least £716bn in a Scottish sovereign wealth fund right now.

The economic case for independence is simple: Scotland is far more likely to thrive once it becomes an independent nation.

Many people in 2014 said that their hearts said yes, but their heads said no. They wanted to vote for independence, but they were just unsure and worried about the changes that independence would bring. Well, now there is no status quo to cling on to. The UK left the EU on January 31st 2020 and began to slowly disintegrate thereafter. Change is coming, one way or another. Brexit closes the doors to opportunity but independence re-opens them and today the UK that Scotland voted to stay part of in 2014, no longer exists.

So the question now before the people of Scotland is what sort of nation do we want to build? Do we want a progressive, fairer, more equal, sustainable and successful, pluralistic, internationally and wellbeing-focused Scotland; a smaller nation that's thinking big? Or do we want to remain part of a post-Brexit Britain – the bigger nation that has started thinking small?

The economic facts are clear. Your heart and head can now operate in harmony and all you have to do to help Scotland achieve its full potential is just **Believe in Scotland**.

Join the discussion on Scotland's future

Scotland the Brief is a research project from Business for Scotland (BfS), one of Scotland's leading business networks and business and economic policy lobbying groups. BfS is also the founder member of the campaigning initiative Believe in Scotland, which advocates for a wellbeing-based approach to developing Scotland's socioeconomic policy to create a better Scotland and therefore for Scottish independence as a means to that end.

Engage with us through any of our social networks.

You can join our Believe in Scotland Facebook Group, which has attracted 30,000 members in just over eight months. In this group, we discuss what tactics, messages and styles the independence movement itself should adopt and how we can help undecided voters understand the huge benefits of self-determination. We also want to focus on what an independent Scotland might look like and how we can create a better, fairer, greener and more successful nation through independence.

- Twitter: @believeinscot
- Facebook: /believeinscot
- Instagram: @believe_in_scotland

You can also connect with Business for Scotland's social media pages

- Twitter: @bizforScotland
- Facebook: /BusinessforScotland

Entrepreneurs explain why they have supported Scotland the Brief

WE ARE PROUD to be associated with the second edition of Scotland the Brief. Not only because the first was such an incredible success but because it is even more vital today that the truth about Scotland's economy and its incredible potential in the world is kept as up-to-date as possible.

ChimaeraBio is a leading supporter of the Life Sciences sector in Scotland and for more than 20 years has supported some of Scotland's most innovative and exciting companies. High quality, sustainable jobs, where people are valued are the lifeblood of a thriving society and in Life Sciences we have an industry which, fairly uniquely, can provide health, wealth and happiness. These, along with fairness, must be the guiding principles for a newly independent Scotland.
– Karen and Jim Reid, Founders and Directors of ChimaeraBio Limited

WHEN THOSE who disproportionately benefit from maintaining the status quo feel threatened, misinformation and widespread scaremongering are rife. Scotland the Brief is the antidote to that: a fact-rich, data-based resource offering a clear explanation of how and why independence will benefit Scotland's economy.

At e-Learn Design, we believe that it's time for Scotland's historic reputation for innovation, creativity, and adaptive collaboration to be harnessed for Scotland's future. If Scotland is to achieve its full potential in a global marketplace, independence is the logical step.
– Derick Turner, Founder & Managing Director, e-Learn Design

PUBLIC AWARENESS of Scotland's potential has come a long way since the first edition of Scotland the Brief was published. The book's reliable data on the sources of Scotland's wealth and our nation's huge potential contributed to this.

Scotland's reputation in the world has gone from strength to strength and the increased awareness of the climate emergency has led many people to reset their priorities. Meanwhile, the self-inflicted decline of the UK and the instability of its successive governments have rendered the union less and less appealing.

The solid research behind the new edition of Scotland the Brief illustrates how the seeds of the Wellbeing economy, which a vast majority of Scots are yearning for, are ready to take root and burst into life once the country finally regains its independence.
– Françoise and Ian Henderson, Joint founders of Rubric Ltd.

BREXIT HAS UNDERMINED all trust in the Westminster political system and any semblance of credibility which the UK had as a safe bet for people worried about constitutional change has disappeared. Scotland the Brief demonstrates that the UK is holding Scotland's economy back from achieving its natural prosperity and diminishing its success. Scotland's economic future is now far safer in Scotland's hands.
– Malcolm Purves, Managing Director, C-Tec Scotland and NE Ltd

THIS BOOK WILL be an important asset to people looking to make up their minds in the next vote on Scottish independence, ensuring everyone has the information on the economics of Scotland. Scotland is a naturally resource-rich nation, no stranger to leading the way in innovation and adapting to changing economic times. Independence will offer the chance to further grow and diversify our economy and work collaboratively with our neighbours for global success. We want to open doors to do business here, not close them.

Independence makes financial and economic sense for Scotland and long gone are the myths that remaining in the UK is the most secure option for Scotland's future.
– Niall McLean, Director, Geo-Rope Ltd

SINCE 1995, Boxfish has provided independent advice on utilities for businesses and charities. Invited to join Business for Scotland in 2013, I was shocked to discover that I had been misled into believing that Scotland was too small to regain its independence. *Scotland the Brief* destroys that myth.
Donald Maclean,
Chair of Business Cost Consultants Ltd, T/A Boxfish. weareboxfish.com

Help us to help you

Please support our research and our engagement and education initiatives such as *Scotland the Brief*.

Believe in Scotland, is Scotland's largest, most active, most effective and most innovative independence supporting campaigning group. We need your help to accelerate our research and campaigning activities to bring the truth about Scotland's economy and the benefits of independence to the people of Scotland.

Detailed and disciplined research such as the data published in this book is expensive and time-consuming to collate. Business for Scotland and Believe in Scotland are wholly funded by donations and memberships . We are not affiliated to, nor do we get assistance from, any political party or government organisations.

If you would like to support our work then please go to **believeinscotland.org/donate** where you can use our Direct Debit system to set up one-off or repeat donations from £2.50 to £50.00.

To make a larger donation than listed above, please email **info@believeinScotland.org** to make arrangements.

Thank you for your support and for believing in Scotland.

Believe in Scotland

BelieveInScotland.org

GORDON MACINTYRE-KEMP is an economist, campaigner, newspaper columnist and business owner based in Glasgow.

After graduating in Economics and Business Management from Heriot-Watt University in 1991, Gordon worked for major corporates such as Procter and Gamble and Northern Foods PLC, before moving back to Scotland as a Senior Executive at Scottish Enterprise, the Scottish Government's economic development agency.

In 2011 Gordon became the Chief Executive of one of Scotland's largest and most influential business networks, Business for Scotland. In 2019 he launched the grassroots Scottish independence campaign group Believe in Scotland, which, at the time of writing, has 137 affiliated local and national campaign groups across Scotland.

Gordon has given evidence to several Scottish and Westminster Parliamentary Committees, The House of Lords and submitted policy advisory papers to the OECD. Gordon has also served as a Director of Glasgow Chamber of Commerce.

A leading advocate for a switch from global capitalism to a Wellbeing Economic Approach, Gordon's work through his economic and policy research team at Scotianomics Ltd is defining the emerging Wellbeing Economics approach.

Gordon has appeared regularly on radio and TV as a business, political and economics commentator and has written hundreds of articles for newspapers and online publications. The first edition of his book on Scotland's economy, *Scotland the Brief*, sold more than 60,000 copies.

ALL YOU NEED TO KNOW ABOUT SCOTLAND'S ECONOMY, ITS FINANCES, INDEPENDENCE AND BREXIT.

First published in 2019, *Scotland the Brief* has now sold more than 60,000 copies. It has contributed significantly to people's understanding of, and faith in, Scotland's economy. 53% of Scottish voters now say that an independent Scotland would be more or equally prosperous than under Westminster rule. Had this been the case in 2014, Scotland would have almost certainly be an indepedendent national already.

Scotland the Brief is an **in-depth investigation into the breadth, structure and quality of Scotland's economy**. Written in layman's terms by Gordon MacIntyre-Kemp and colourfully illustrated by Stewart Bremner, it is easy to understand and fun to read.

Scotland the Brief answers the burning question – would Scotland prosper as an independent nation?

Often surprising, always interesting and enjoyable to read, *Scotland the Brief* is also hard-hitting, with over 500 sourced facts in the full-sized book and available online, mixed with credible and informed opinion.

It takes an in-depth look into the UK Government's economic record compared to other Western and Northern European nations – with frankly shocking results. **The fact is that you cannot truly understand Scotland's economy and its finances until you have read Scotland the Brief.**

However you feel about independence, **Scotland the Brief will open your eyes, engage and educate**, by supplying the facts you need to truly inform your opinion on Scotland's future.

ISBN 978-1-9162636-3-5

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£3.50

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