

# Fraser of Allander Institute

## Scotland in 2050: Realising Our Global Potential – Final Report

March 2019

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The Fraser of Allander Institute

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## Disclaimer

The analysis in this report has been conducted by the Fraser of Allander Institute (FAI) at the University of Strathclyde. The FAI is a leading academic research centre focused on the Scottish economy.

The report was commissioned in June 2018 by Shepherd and Wedderburn.

The analysis and writing-up of the results was undertaken independently by the FAI. The FAI is committed to informing and encouraging public debate through the provision of the highest quality analytical advice and analysis. We are therefore happy to respond to requests for factual advice and analysis. Any technical errors or omissions are those of the FAI.



# Executive summary

## Scotland in 2050: Realising Our Global Potential

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- Scotland has always been an open and global trading nation, and this will continue to be a key source of growth in the years ahead.
- But recent political and economic instability has helped to create a more uncertain outlook both here at home and internationally.
- In an uncertain world, what are the global risks and opportunities for Scotland? And what lessons can we learn from past experiences, and the success of others, to deliver a more prosperous future?
- With this in mind, Shepherd and Wedderburn commissioned the Fraser of Allander Institute in the summer of 2018 to set out the key global trends that will shape Scotland's future.
- But an academic exercise can only take you so far. Ultimately, it will be Scotland's businesses that will be key to delivering success. We therefore embarked upon a series of conversations with firms from across Scotland to learn at first hand their experiences and ideas.
- The results were revealing. Whilst all were universally positive about Scotland's economic strengths, and upbeat about future opportunities, there was also a refreshing frankness about where Scotland needs to improve.
- This final report summarises both the evidence that we have collected and the feedback we have received from Scotland's businesses.
- What is clear is that the conversation should continue. We hope that this report helps to inform that ongoing debate.

# Scotland in 2050

## Recommendations from business engagement

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As part of this project, we undertook a ‘conversation’ with more than 100 Scottish business leaders, trade bodies, academics and representatives of private, public and third sectors through a series of sector-focused workshops in Edinburgh, Glasgow and Aberdeen. We also created an online platform for further feedback.

### Foundation: What does the future economy look like?

1. Infrastructure that is fit for the future: Scotland must invest in its infrastructure (physical and digital) to support the economic drivers of the future economy.
2. An economy that harnesses and trades on knowledge: Scotland should focus exports around the knowledge-based economies, trading on its know-how, professional services, IP, high-end production and manufacturing, and technological development.
3. An ecosystem that nurtures and retains businesses of scale: Scotland is effective at developing start-up and SME businesses; what it needs is to find a way of nurturing and retaining these businesses as they scale up.

### Supporting pillars: What are its components?

4. An appropriately-skilled workforce: Scotland has a highly qualified workforce and must build upon equipping this workforce, and just as importantly its leaders, with industry-relevant skills. Scotland must be able to continue to attract, develop and retain the best talent from around the world.
5. Closer collaborative links between industry and academia to more effectively commercialise innovative research.
6. A nationwide strategy that focuses financial resource towards sectors and areas of economic activity identified as having the greatest growth potential. Currently, access to investment, support and funding is patchy and diffuse.

### Joined up action: policy and collaboration

7. Government policy, both UK and Scottish, that is longer-term in its objectives. Administrations of all political hues have been too short-termist. Policymakers need to pick a strategy and stick to it, harnessing the fiscal and regulatory environment to drive change.
8. A more joined-up approach. Organisations need to learn from successful industries and work in closer collaboration with other businesses, government support agencies, industry bodies, academia and policymakers to expand in/enter overseas markets.

# Introduction

## A world evolving

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As we summarised in our interim report, we live in eventful times both politically and economically.

Brexit continues to dominate newsfeeds and the inboxes of many business leaders.

While the UK's decision to leave the EU will have a significant impact on future growth and business opportunities, the global economy is itself going through major structural changes that have the potential to transform the way we do business.

The rise of new and emerging markets is fundamentally re-shaping the balance of global economic power and influence. The pace of technological growth is the fastest it has ever been, and will only quicken in the future.

But Scotland's existing strengths and market access provide a solid foundation upon which to build.

We live in a rich and successful nation. We have substantial natural resources with key strengths in diverse sectors such as food and drink, tourism, energy and financial services.

That should give us a platform to look forward with confidence to the opportunities that will shape our prosperity in the years ahead. And it should provide us with the resilience to tackle head-on the consequences of an ageing population, the scourge of inequality and the ever increasing strain we are putting on the planet's natural resources.

In a more unsettled world, what are the key global risks and opportunities for Scotland and how can we take advantage of them? How will our economy adapt to major new trends in the global economy, and how can businesses seize the opportunities available and plan for new and emerging risks?

In June 2018, The Fraser of Allander Institute (FAI) was commissioned by Shepherd and Wedderburn, as part of its 250th Anniversary, to start a conversation with Scotland's business community on how we can best position our economy for the future.

This report summarises the key outputs of these discussions.

It is structured as follows:

- In Section 1, we discuss the importance of internationalisation for Scotland's long-term economic success.
- Section 2 looks at major global economic trends and how they might impact Scotland.
- Finally, in Section 3 we discuss how Scotland might take advantage of these global opportunities and help deliver greater prosperity.

# Why internationalisation is important

## Section 1

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As we outlined in our interim report, internationalisation will be crucial to Scotland's long-term economic prosperity.

External markets provide an important source of demand for Scottish businesses. At its most basic level, businesses gain from accessing a much larger customer base than is supported by a small open economy like Scotland's.

But, of course, international trade and investment creates further positive spill-over effects which ripple across supply chains and households.

For every 100 jobs directly supported due to exporting, an additional 66 jobs are supported from spill-over effects in the Scottish economy.

*Source: FAI analysis*

There is also evidence that firms that export – and/or are part of an international supply chain – tend to become more productive, innovative and competitive over time.

Businesses that export account for 60% of UK annual productivity growth and are, on average, 70% more productive than businesses that do not export.

*Source: ONS & Department for Business, Energy & Industrial Strategy*

At a national level, countries with a strong export base can often be more resilient and have more balanced growth trajectories.

In 2010, there were 800 EU-owned enterprises in Scotland employing around 96,000 people. As of 2018, this stands at 1,100 enterprises employing over 121,000. This is around 4.8% of employment among 16-64 year-olds in Scotland.

*Source: Scottish Government, ONS, FAI*

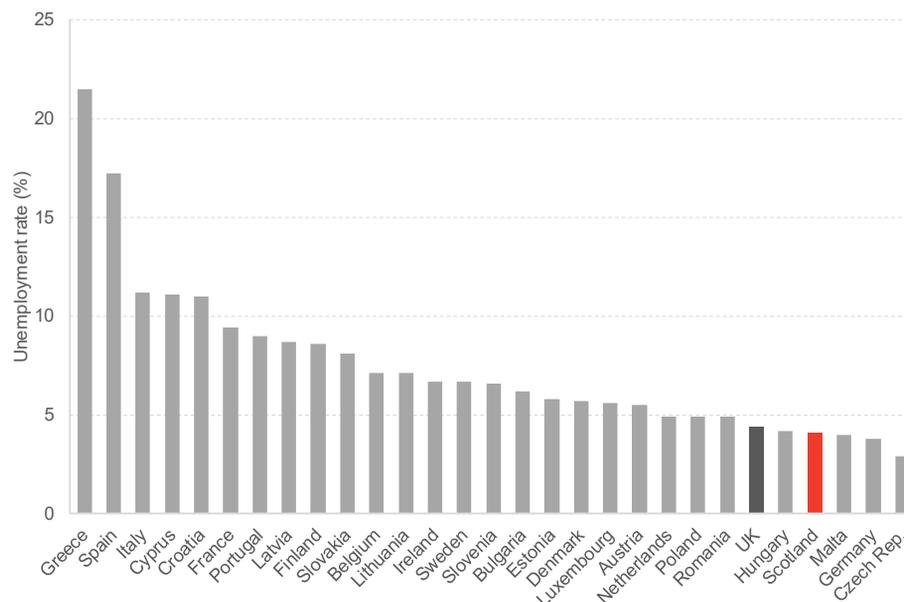
## Scotland's economy

From the statistics and feedback from business, it is clear that Scotland is without question a rich and successful nation

We are ranked highly in the OECD in terms of income per head and rank 3rd in the UK in terms of the amount of output we produce per head of population.

Unemployment in Scotland is currently at its lowest level since such records were first collected on a consistent basis in the early 1990s.

**Chart 1:** Unemployment rate in EU countries, 2017



Source: Eurostat, ONS

The total number of people employed in Scotland (aged 16-64) has increased by 111,600 between 2010 and 2018.

Source: ONS

As businesses have told us throughout our engagement, Scotland benefits from substantial natural resources, a skilled workforce and key strengths in sectors such as food and drink, energy, precision manufacturing and financial services.

Our universities are world renowned and of 98 'regions' in the EU, Scotland is ranked 3rd – behind London and Paris – in terms of the proportion of our work force with a degree qualification.

We are also leading many of the new ways of working. In Edinburgh, the growth of the digital and tech economy continues apace. And in Glasgow, the establishment of the National Manufacturing Institute and the country's first innovation district in the city are good examples of a positive approach to collaborative working between the public sector, universities and industry.

Scotland continues to have a strong reputation abroad, ranking 16th out of 50 countries.

Source: Anholt GfK Roper Nation Brands Index

But Scotland's economy also faces challenges.

Like many other countries, our economy has been experiencing a period of weak growth, with most indicators suggesting this will continue for the foreseeable future.

Output per head is only around 2% higher than it was just before the financial crisis. To put that in context, that same indicator grew by nearly 10 times that amount in the preceding decade.

Source: FAI new analysis

On many measures our economy appears unbalanced. Average income in North Ayrshire is a fraction of that in Edinburgh. Our export base is too narrow. And on R&D, almost 40% of such expenditure is attributable to just five companies.

Meanwhile, for all the recent debates upon ‘inclusive growth’, nearly 1 million people – including nearly 1 in 4 children – live in poverty.

In 2016/17, 17% of people in Scotland (around 900,000 people) were living in households classified as in relative poverty before housing costs. After housing costs, this was 19% (around 1 million people).

Source: Scottish Government

Levels of entrepreneurship in Scotland, alongside business start-up rates, are lower than the UK average.

Total early-stage Entrepreneurial Activity measures entrepreneurs who are in the process of starting or have recently formed a business as a proportion of the working-age population. In 2017, this was 6.7% in Scotland compared to 8.7% in the UK.

Source: Global Entrepreneurship Monitor

Many of the businesses that we spoke with expressed the view that tackling such issues requires a boldness that we have arguably yet to see from policymakers of any political colour.

## Productivity in Scotland

At the heart of boosting Scotland’s growth prospects will be greater levels of productivity. This has been a constant theme throughout our engagement with business.

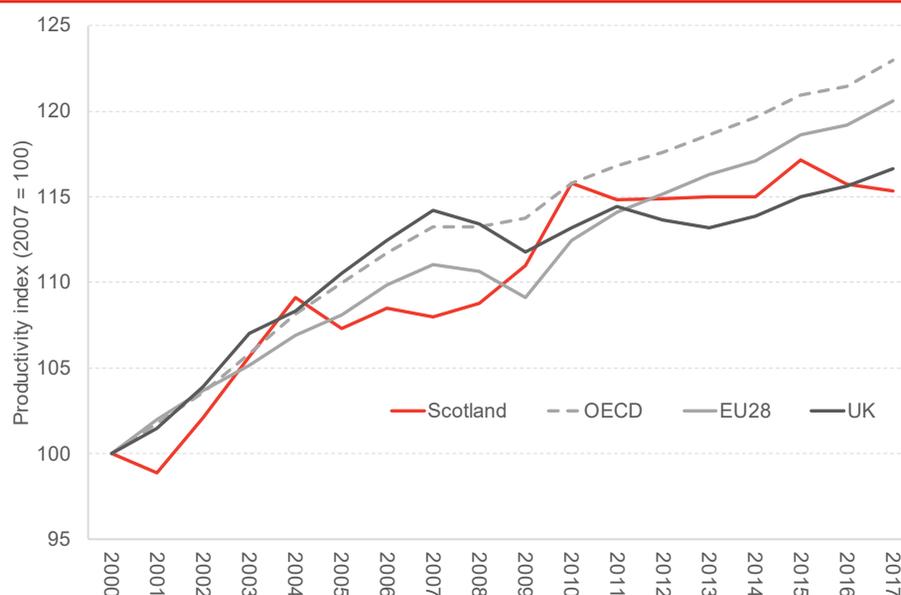
As we outlined in our first report, as a nation our productivity remains below the best performing OECD countries, despite a target to match them by 2017.

Scottish productivity is currently over 20% lower than the top performing countries in the OECD. The Netherlands can produce in four days what it takes Scotland five days to produce.

Source: FAI analysis

Since 2010, and in contrast to many of our competitors, Scotland’s productivity performance has barely changed.

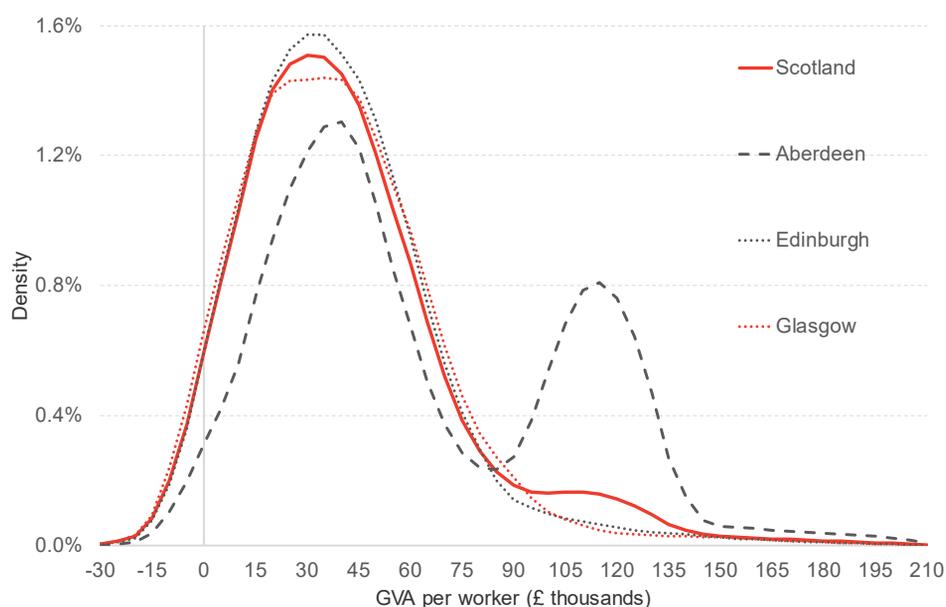
**Chart 2:** Real productivity growth, Index 2007 = 100, 2000 - 2017



Source: Scottish Government

Interestingly, Scotland appears to be a story of two different – very different – types of companies. Chart 3 shows the proportion of Scotland’s firms at different levels of productivity. The long tail relates to a small set of highly productive and externally-focused firms. However there is a much larger group of businesses ‘making do’ with low levels of productivity.

**Chart 3:** Distribution of labour productivity by firm in Scotland, 2015



Source: ONS/FAI

A key point of discussion has been about how to best shift levels of innovation, investment, training and development across this core business base in Scotland.

This is perhaps less about high level, expensive investment and more about core digital skills, workplace innovation, process innovation, fair work, and better management. This is vital to create the conditions for more firms to have the ambition and efficiency to compete internationally.

“Skills and qualifications are two different things. We have the most qualified workforce in Europe (SCQF level 7 (Advanced Higher) and above) but productivity is nowhere near that level. It’s about workplace innovation and changing the business structures as well.”

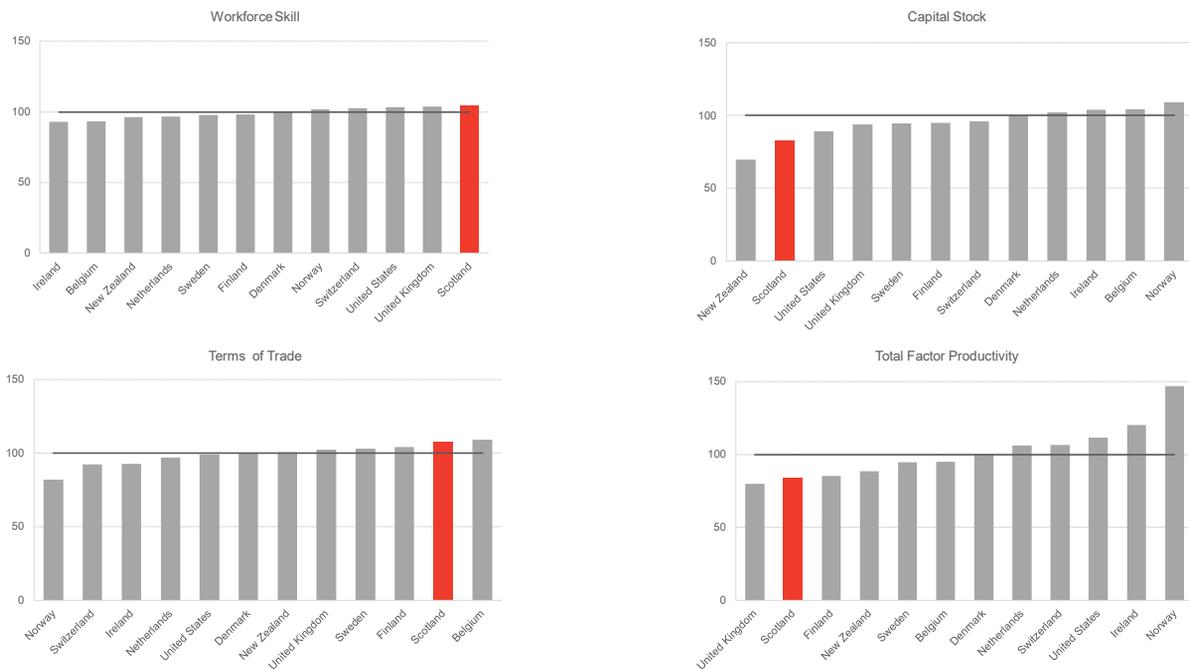
*Stakeholder at education sector workshop - Glasgow*

Indeed, when looking at the drivers of productivity, and how Scotland compares internationally, Scotland scores well on measures of human capital (i.e. the skills of our workforce). Scotland does less well on measures of capital investment (including business investment and overall capital stock) and so-called “Total Factor Productivity” – that is, the efficiency with which an economy combines its productive resources to grow its economy. Chart 4 examines Scotland’s relative productivity performance, and some of these drivers of productivity, alongside a selection of OECD countries.

“We have many people with degrees, but it is not preparing them for business.”

*Stakeholder at rural workshop - Aberdeen*

**Chart 4:** Scotland’s relative productivity performance, by key driver, Denmark = 100, 2014



Source: Mitchell and Zymek (2018)

This further suggests that solutions for Scotland should focus upon boosting investment – both public and private – and on the quality of management within firms and the need to tackle the prevalence of less efficient firms.

“Infrastructure investment has been lacking... infrastructure suffers from an aversion to public funding and involvement in such projects, but the private sector is not willing to invest in it.”

Stakeholder at housebuilding workshop - Edinburgh

All of this matters not just for the economy, prosperity and jobs, but also for the public services upon which we all depend.

## Scotland’s Budget

Scotland’s budget now depends upon three elements –

- the remaining Westminster block grant as determined by the ‘Barnett Formula’;
- tax policy choices of the Scottish Government; and
- the relative performance of Scottish devolved tax revenues as determined by the growth in Scottish tax revenues relative to the Block Grant Adjustment (BGA).

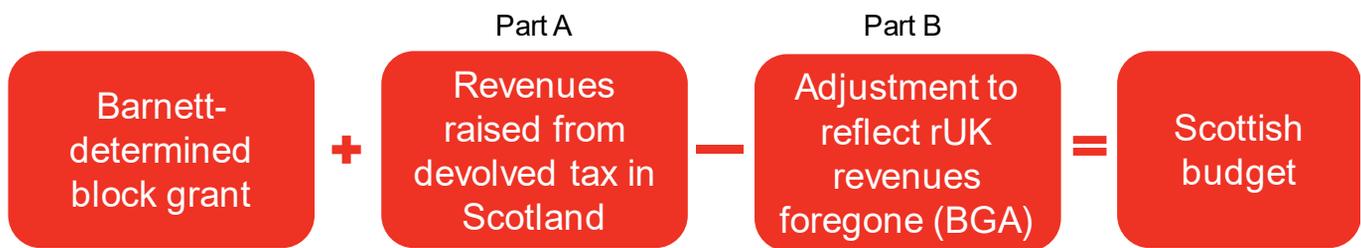
The BGA is an estimate of the revenues the UK Government is now no longer receiving because the power has been transferred to Holyrood. In year 1, it was equal to the revenues transferred to Scotland. From Year 2 onwards, it grows in line with taxes per head in the rest of the UK (rUK).

Around 40% of ‘devolved expenditures’ are now funded by revenues raised in Scotland. When around half of VAT revenues are assigned to Scotland in a few years time, this will rise to 50%.

Source: FAI analysis

Under the new funding arrangements, if devolved Scottish taxes per head (Part A in diagram below) grow faster than the rUK taxes per head (Part B below), then the Scottish Budget will benefit from additional revenue. But if Scottish revenues per head lag behind the rUK, the budget will be worse off.

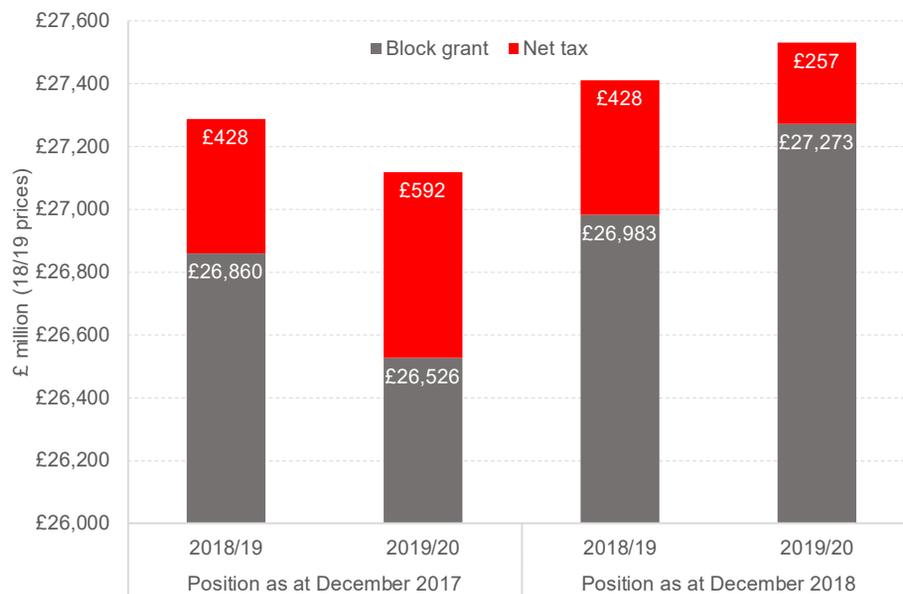
**Diagram 1:** The Scottish Budget



Source: Fraser of Allander Institute

Interestingly, we are perhaps already seeing the effects of relative economic performance feeding through to the Scottish Budget – with lower tax forecasts (shown by the red bars falling from £592m to £257m) for this year offsetting the boost to the budget from consequentials from the UK Government (shown by the black bars increasing between positions) – see Chart 5.

**Chart 5:** Changes in the Fiscal Resource budget (£m, 2018/19 prices)



Source: Scottish Government / FAI

## Recommendations from business engagement

- Infrastructure that is fit for the future: Scotland must invest in its infrastructure (physical and digital) to support the economic drivers of the future economy;
- An ecosystem that nurtures and retains businesses of scale: Scotland is effective at developing start-up and SME businesses; what it needs is to find a way of nurturing and retaining these businesses as they scale up;
- An appropriately-skilled workforce: Scotland has a highly qualified workforce and must build upon equipping this workforce, and just as importantly its leaders, with industry-relevant skills. Scotland must be able to continue to attract, develop and retain the best talent from around the world;
- Closer collaborative links between industry and academia to more effectively commercialise innovative research;
- A nationwide strategy that focuses financial resource towards sectors and areas of economic activity identified as having the greatest growth potential. Currently, access to investment, support and funding is patchy and diffuse.

# The world tomorrow - key global trends

## Section 2

Recent political and economic instability – both localised and global – has created a more uncertain outlook for the global economy.

The term ‘slowbalisation’ has been coined to describe the recent flat-lining in global trade patterns, and rising protectionist sentiment within some of the world’s major trading superpowers.

The value of cross-border investment by global companies had fallen by around 20% in 2018.

Source: *The Economist*

Some of this stems from geopolitical tensions that may or may not subside. But some of it is also the product of deeper challenges in the underlying international economic system.

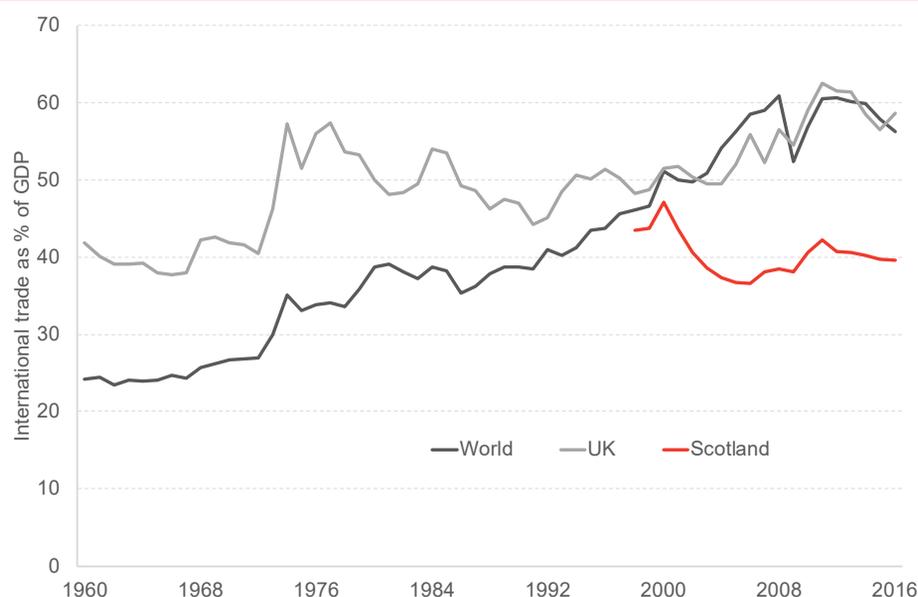
Following a rapid growth in globalisation in the 1980s and 1990s, agreeing how to reduce barriers on key growth sectors such as in technology, health care, intellectual property etc. has proven elusive.

It is therefore understandable that many people’s confidence in the model that has been the foundation of our economy over the last few decades has been shaken. But this makes focusing upon where we can be confident of future opportunities all the more important. Recognising and understanding them will be crucial to Scotland fulfilling its economic potential.

In a more unsettled world, what are these opportunities and what can we do to take advantage of them? Firstly, it is important not to overstate either the risks to the global economy or their impacts.

Despite slipping back in recent times, and 20 years having passed since the last major multilateral trade agreement, trade as a share of the global economy remains high by historical standards.

**Chart 6:** International trade as a percentage of GDP, 1960 - 2016\*



\* Scottish data is available from 1998.

Source: World Bank, Scottish Government, FAI

While most forecasts suggest a ‘cooling’ global economy in the near term, over the long-term the growth potential remains strong.

With 3.7% global growth in 2018 and an average growth rate of 3.8% since 2010, real world GDP in 2018 was 40% higher than at the beginning of the decade.

Source: IMF

Although we should be wary of the uncertain outlook, there is certainly no need to be pessimistic. Most businesses that we spoke with were optimistic about their growth prospects in both traditional markets, such as Europe and North America, but also in new and emerging markets, such as Asia, the Middle East, South America and Africa.

Exports already make an important contribution to Scotland’s economy. A key question is how more can be made of this?

We estimate that Scotland’s exports and tourism to Scotland in 2015 supported around 952,600 Scottish jobs (2015 is the latest year for which such analysis is possible).



**952,600**

jobs supported by external demand in 2015

Exports to the rest of the UK account for the majority of this (545,200 jobs supported), while exports to the EU supported 143,900 jobs and exports to the rest of the world (non-EU) supported 186,600 jobs. The remaining 75,500 jobs are supported by ‘non-resident’ spending (e.g. tourism to Scotland).

Clearly, exports are vital to the Scottish economy and the effects of exporting on the economy are far-reaching.

The latest figures from 2017 show that international exports are worth around £32.5bn each year to the Scottish economy.

**Table 1:** Scotland’s exports in 2017 (excluding continental shelf oil and gas)

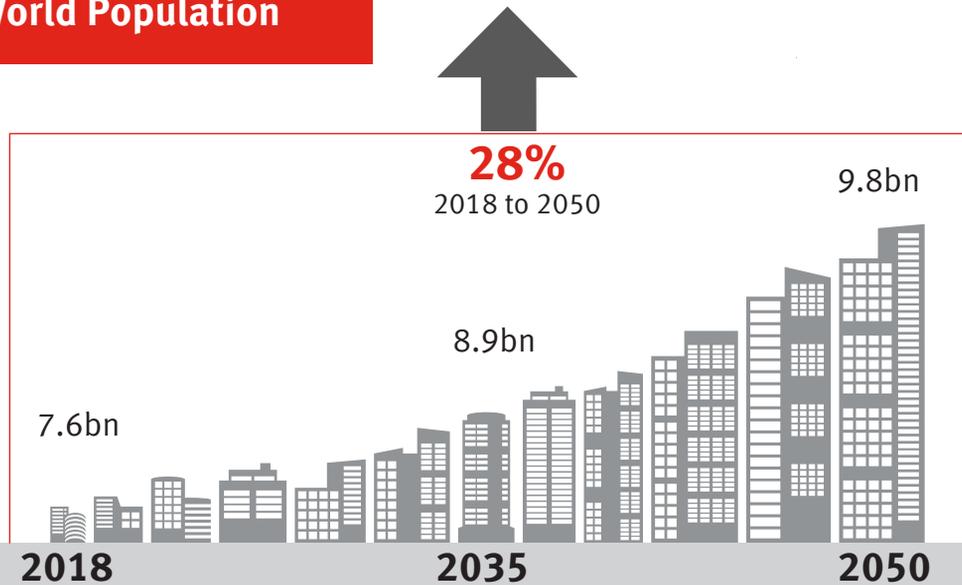
Destination	2017 exports (£ million)	2002 – 2017 growth
Rest of the UK	48,915	71%
International	32,440	58%
Of which		
EU	14,850	29%
Non-EU	17,585	95%
<b>Total</b>	<b>81,355</b>	<b>66%</b>

Source: Scottish Government

In our engagement with the business community we focused upon four key opportunities that we believe will shape the global economy to 2050:

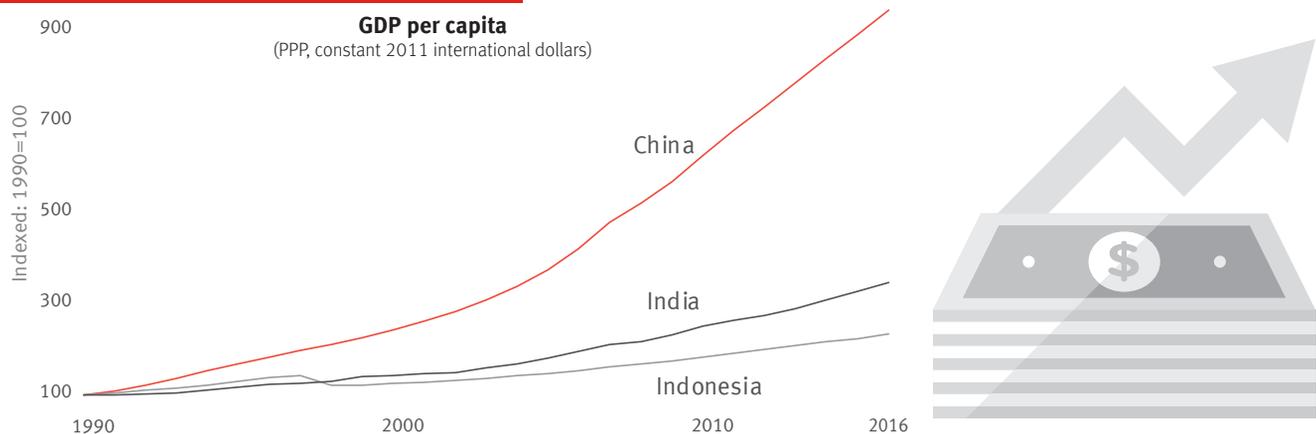
- a growing world population;
- the emergence of new economic leaders;
- the economic impacts of climate change; and
- the dissemination of new technologies.

## 1 World Population



- By 2050, the world population is predicted to grow by 28%.
- Much of this growth is expected to be in emerging economies. By 2050, the population of less developed regions is forecast to increase from 6.3 billion to 8.5 billion.
- This will create significant new opportunities for growth but will also pose challenges in managing global resources such as food, water and fuel.

## 2 New economic leaders



Sources: World Bank

- GDP per capita in emerging economies has grown significantly over the past couple of decades. China has seen real GDP per capita grow by 943% since 1990.
- Many emerging economies have seen an expanding professional class. The combination of growth in incomes and population present clear opportunities for future export markets.
- The BRICS countries – Brazil, Russia, India, China and South Africa – have attracted much attention but new leaders, such as Indonesia, South American and other Asian and African nations, have the potential to be key drivers of global growth.

### 3 Climate change

World	2018 — 2050
Carbon dioxide emissions	+22.7%
Renewable energy consumption	+88.2%
Energy use	+36.1%



2015 Paris Agreement **<2°C** by 2050

To achieve this, the world must stay within a limit on its emissions - a 'carbon budget'.

Even if the current carbon reduction targets are met by all countries

**80%**

of the carbon budget will have been spent by

**2030**

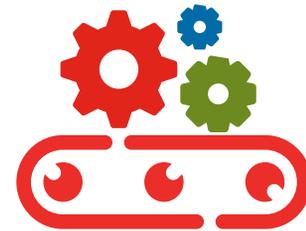
Sources: EIA.gov, UNEmissions Gap Report 2017

- Global emissions are on track to rise significantly, with major targets like those set out in the 2015 Paris Agreement likely to be missed.
- Climate change will have serious economic consequences for many countries, with the poorest likely to lose out the most.
- But it also provides an opportunity in new sectors – such as renewable energy – and for countries that can gain ‘first-mover’ advantage in transitioning to a low carbon world.

### 4 Automation



**3** in every **10**  
Scottish jobs  
are at **high risk of**  
**automation**



Source: SCDI, FAI

- If the last 20 years have been dominated by globalisation, the next 20 years will be dominated by rapid technological change.
- Even in the last decade, we have seen major changes in sectors from retail to banking. International trade is becoming easier with more automated distribution and tracking systems.
- Many current jobs will be replaced but at the same time, many new jobs will be created, in part, supported by higher incomes. Despite fears of a large number of job losses, the net impact of automation – once new jobs are accounted for – might not be negative.

# Seizing global opportunities

## Section 3

We asked businesses a series of questions about how Scotland might best position itself in the years ahead to seize future global opportunities.

We grouped these under the following headings:

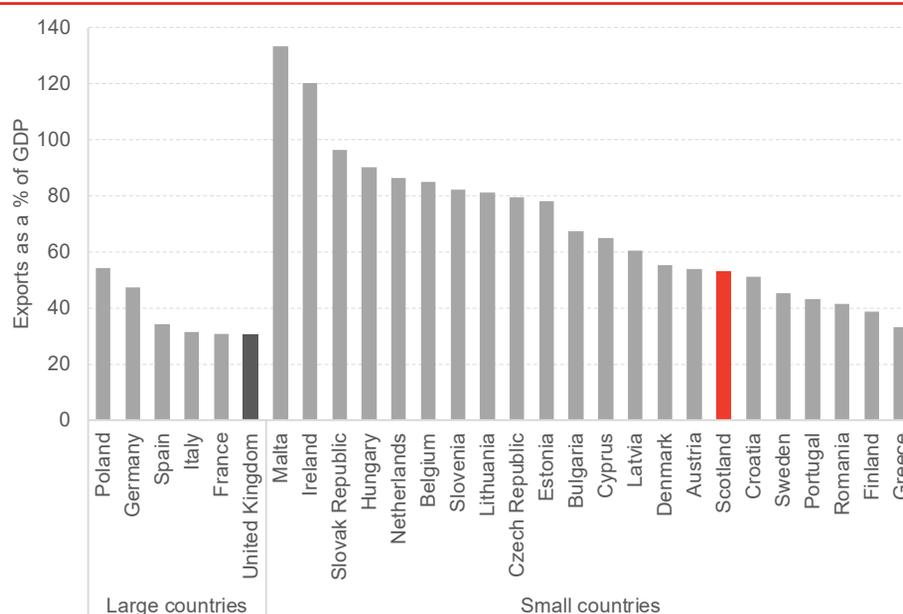
- expanding our export base;
- preparing for Brexit;
- accessing new markets;
- the exports should Scotland focus on; and
- the role of policy.

### Expanding our export base

A critical point of discussion was what can be done – by both business and policymakers – to boost Scotland’s export base.

As a share of our economy, Scotland exports less than many comparable countries within the EU.

**Chart 7:** EU28 exports as a percentage of GDP, excluding Luxembourg, 2017



Source: World Bank & Scottish Government

Including UK exports, Scotland has a ratio of exports to GDP of around 53%.

But this falls to 20% when looking only at international exports, compared to EU and OECD averages of 45% and 28% respectively.

In Q1-Q3 2018, over 8,400 Scottish firms exported goods. This accounts for 5.8% of UK exporting firms, lower than a per-capita share.

Source: HMRC

One further interesting fact is that compared with similar sized nation states, such as Ireland and Denmark, Scotland depends much more upon one market (i.e. the rest of the UK).

If we exported the same proportion to international countries as the UK as a whole, this would be equivalent to £15.9 billion of *additional* exports.

*Source: FAI analysis*

Moreover, just five sectors account for over half of all Scottish international exports, with whisky accounting for a significant proportion of that (Table 2).

**Table 2:** Scotland’s five largest exports, 2017

Sector	International exports (£ million)	Percentage of all exports
Food and drink	5,855	18.0
Professional, scientific and technical activities	3,670	11.3
Refined petroleum and chemical products	3,485	10.7
Mining and quarrying	1,940	6.0
Retail and wholesale	1,890	5.8
<b>Total</b>	<b>16,840</b>	<b>51.9</b>

*Source: Scottish Government*

A challenge appears to be encouraging small businesses to seize opportunities overseas.

Just 14% of SMEs in Scotland reported that they had sold goods or services outside the UK in the last 12 months. This compares to 20% in the UK as a whole. Of those SMEs not currently exporting, 97% have no plans to start.

“How do we provide businesses of the right scale with the confidence and support to get into export markets?”

*Food and drink sector workshop - Glasgow*

Two conclusions flow from this.

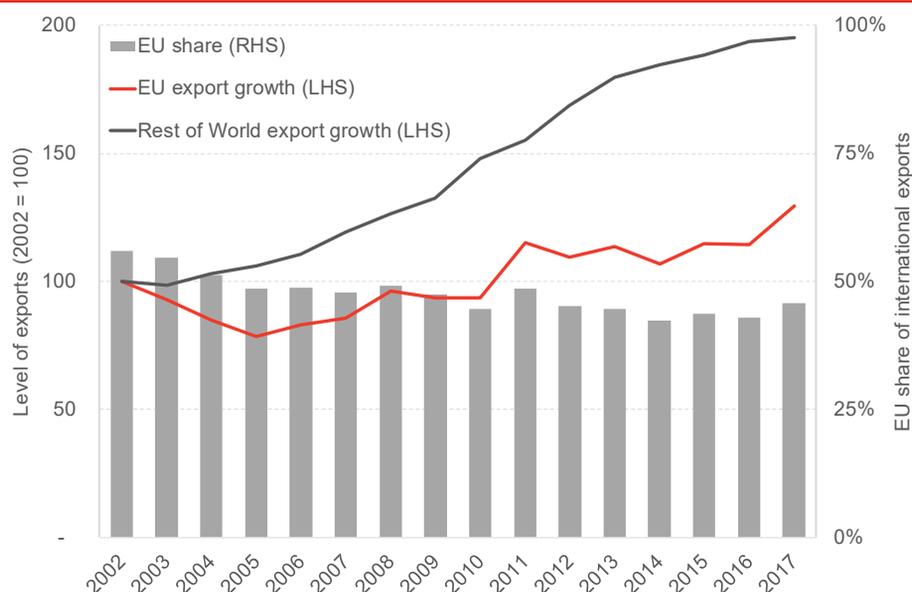
Firstly, it is clear that more needs to be done to encourage and assist SMEs to see exporting as a growth opportunity for them.

Secondly, if Scotland is to turn around its export performance more quickly then it will need its existing exporter base to seek out new opportunities and target established markets and sectors where Scotland has a clear comparative advantage.

Chart 8 shows EU exports, as a share of all international exports, have fallen since 2002. This is due to stronger growth in exports destined for the rest of the world.

But, as we discuss below, some markets are easier to export to than others. This is not just because of preferential trading arrangements, but because the legal and business environment to do business is more supportive and straightforward to navigate.

**Chart 8:** EU and RoW export growth since 2002 (left hand side lines) & EU share of international exports (right hand side bars)



Source: Scottish Government

Therefore, we need to focus on continuing to grow and develop these core markets. As Table 3 highlights, well established markets are the major source of export demand.

“There’s no shortage of export ambition but access to markets is challenging.”

Food and drink sector workshop - Glasgow

There was much discussion around the level of business ambition in Scotland. There were diverging views. But one area of agreement was that there was a sense that there can be a shortage of skills in key areas – e.g. leadership and practical areas like language competence – that are required to support exports.

“There are problems around accessing skilled and highly skilled workers, problems in accessing significant growth funding in Scotland and general access to capital, and the risk aversion of many companies in trading overseas.”

Digital and technology sector workshop - Glasgow

**Table 3:** Scotland’s top 10 export destination countries, 2017

Rank	Destination	International exports (£ million)	Percentage of all exports
1	USA	5,545	17.1
2	Netherlands	2,475	7.6
3	France	2,425	7.5
4	Germany	2,345	7.2
5	Ireland	1,470	4.5
6	Norway	1,015	3.1
7	Belgium	990	3.1
8	Denmark	875	2.7
9	Spain	850	2.6
10	Italy	760	2.3

Source: Scottish Government

“There is a general fear of failure holding back genuine ambition to grow.”

*General workshop - Aberdeen*

## Summary of business engagement

- There was a consensus that lack of ambition is not the only issue. But often businesses benefit from being encouraged and inspired to grow, take risks and seek out new opportunities.
- If Scotland is to turn around its export performance, in the short-run, identifying the companies, sectors and markets that can provide ‘quick-wins’ will be important. This should help to crystallise where any new investment should be targeted. This could then be used to help encourage a climate of internationalisation more broadly.
- To help grow the export base, there was a consensus that more mentoring, awareness of successful SME exporters, Scottish champions etc. should be encouraged.
- Basic leadership and management training should become more embedded across the business community. It is this that is a key factor in the ‘fat middle’ of less productive firms.
- Many small and medium-sized businesses still experience difficulties identifying where to get advice when taking their first steps toward becoming exporters. Recent moves to create a single portal approach were welcomed, but for many the support provided remains confusing and fragmented.
- Finally, many businesses expressed the importance of building the right skills base for exporting, from language skills through to leadership and entrepreneurship, which will act as an important enabler for internationalisation in the wider economy.

## Preparing for Brexit

Unsurprisingly, Brexit dominated much of the engagement. For some sectors that we spoke to, for example, agriculture and food and drink, the risks of a dislocation in key markets are huge.

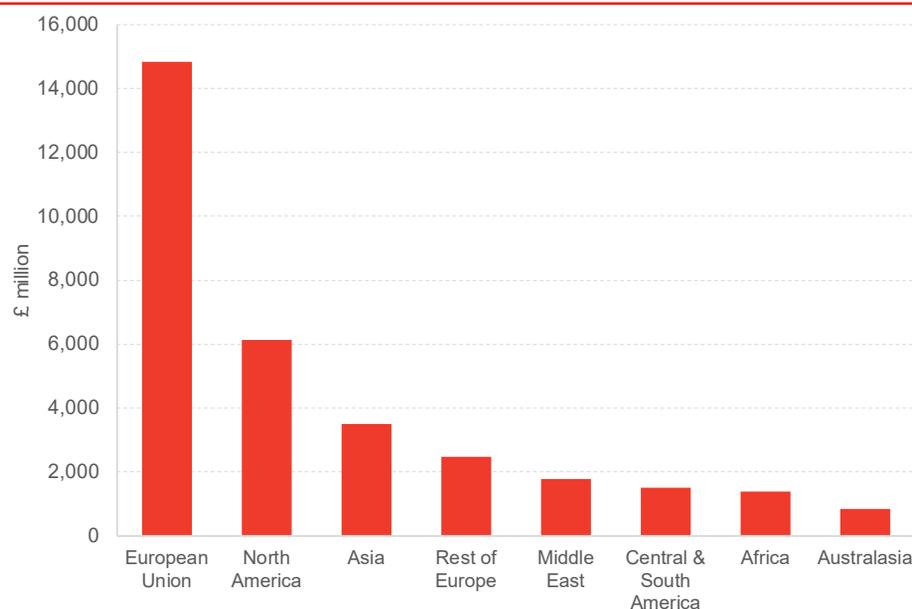
The EU is our largest international export market. In 2017, Scotland exported around £14.9 billion worth of goods and services to the EU, or over 45% of Scotland's total international exports.

EU GDP in 2017 was \$17,282bn, compared to \$2,622bn for the UK and around \$200bn for Scotland.

Source: World Bank, Scottish Government

This is more than Scotland's combined exports to North, Central and South America, the Middle East, Asia and Australasia.

**Chart 9:** Scotland's international export destinations, 2017



Source: Scottish Government

A concern for many businesses was understanding the differences between Scotland and the UK in terms of renegotiation priority.

According to HMRC, five of Scotland's top 10 largest exporting sectors to the EU do not enter the top 10 EU export sectors for the UK as a whole.

Source: FAI analysis & HMRC

For better or for worse, no firm in the UK will be left untouched by Brexit. It is essential for companies to prepare.

A survey by the Fraser of Allander Institute in February 2019 showed that many Scottish companies have undertaken no preparation at all, with 61% of surveyed businesses saying they had done no contingency or scenario planning to help prepare for a 'no-deal' Brexit.

“We have concerns over the shortage of a younger workforce – Scotland’s ageing population, combined with the impacts of Brexit on workforce numbers, stand to seriously impact our service offering in Scotland.”

*Hospitality and leisure sector workshop - Edinburgh*

A key concern was over the potential implications from Brexit for Scotland’s population.

Scotland’s working age population is projected to decline in the years ahead, putting pressure on the economy and the public finances. Migration can help address this, particularly given that EU nationals moving to Scotland tend, on average, to be younger.

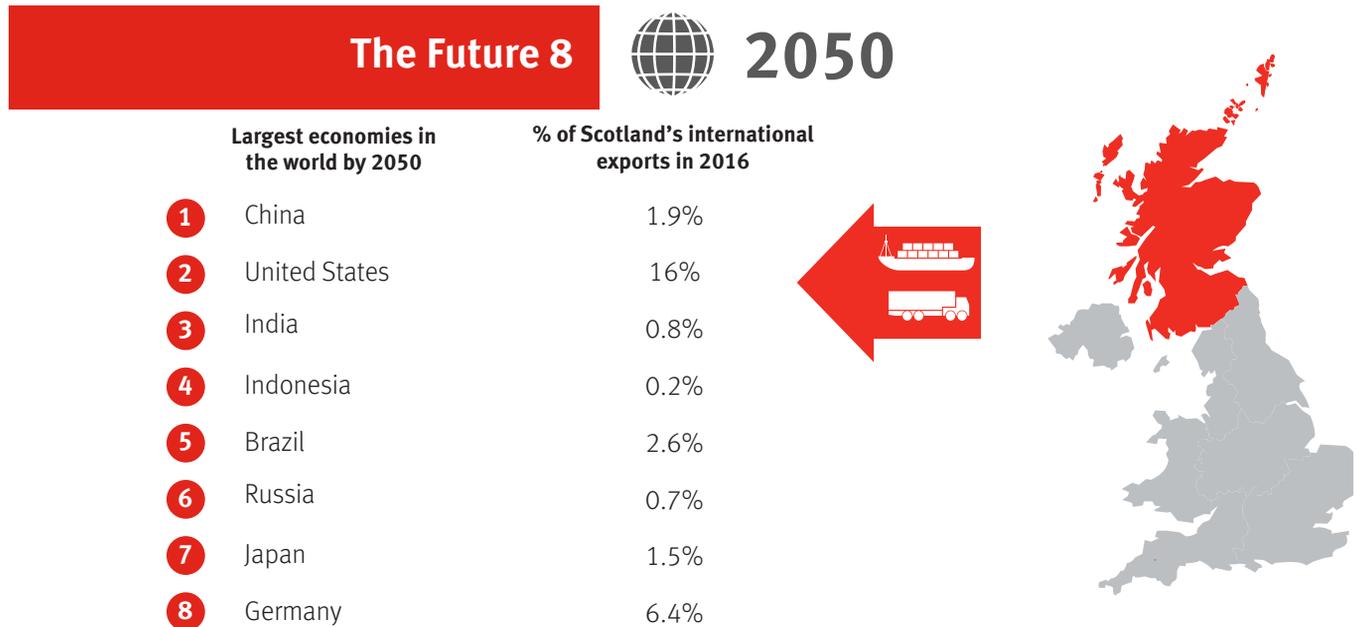
## Summary of business engagement

- Whatever happens with Brexit from a political perspective, the clear view of the businesses that we spoke with is that the priority must be to retain a close economic relationship with our largest trading partner.
- There were concerns that the UK was not yet adequately prepared for leaving the EU, in terms of basic logistics, IT support, custom activities etc.
- Export subsidies are not an option under WTO rules. But temporary support to offset new administrative burdens – in logistics, customs etc. – would be important in the short-term.
- Retaining access to talent was seen to be crucial post-Brexit, particularly from the EU. It is essential for key export sectors like food and drink, but also for our universities and high value sectors that support growth across the economy. New ways to encourage migrants – and to support existing vital EU staff – would be crucial (e.g. support for visa payments).
- Successful businesses go through churn all the time, there is a need to prepare for resilience and also seek out new opportunities.

## Accessing new markets

As highlighted above, accessing new markets is a key growth opportunity for Scotland.

In our interim report last year, we undertook new projections – based upon forecast growth rates for a country’s economy and population – to illustrate the growth potential of these markets.



Yet, as it stands, we export little to these countries. So, securing even small market shares in these growing economies – particularly as their households become wealthier and demand more services and quality products – presents significant opportunities.

Exports to India were £240 million in 2017, less than the £320 million of exports to Luxembourg.  
*Source: Scottish Government*

The businesses that we spoke with highlighted how difficult it can be to enter such markets. They need flexible, dynamic and patient strategies to navigate these markets.

Even then, this might not be enough. Evidence shows that the businesses that tend to be successful in emerging markets are often those that are prepared to adjust their brand and market positions to local preferences and are able to ride out the short-term economic and political storms that will occur from time to time.

“The issue is not so much export ambition but rather the hurdles to exporting. China and Indonesia [Future 8 export destinations] are perceived as difficult export markets.”

*Pharma & life sciences workshop - Edinburgh*

They also need to invest – and take time – in understanding how different economies and economic systems operate, the different commercial regulatory and legal practices, not to mention language and culture.

“We need increased awareness of successful SME exporters, including but not exclusively those that export to the Future 8, through media coverage and other events.”

*Online survey feedback*

“There is less evidence of a collaborative nature among Scottish businesses compared with the likes of Germany, where companies pool resources to enter new markets.”

*General workshop - Aberdeen*

A constant theme was collaboration across industries and businesses. Here there is much to learn from other countries such as Germany, which – particularly in manufacturing – is the world leader at coordinating entry into new markets across a number of firms and sectors, creating hubs, building deep levels of trust and confidence with its hosts, pooling expertise and sharing costs.

“Collaboration with other businesses is a way to break the capacity barrier. This includes teaming together to access large, difficult markets such as China.”

*Food and drink sector workshop - Glasgow*

There are also lessons to be taken from Scotland, where in areas such as food and drink (including whisky), oil and gas and higher education, collaboration on an international level has worked well.

“[It is] bizarre, given the size of Scotland, that we don’t cooperate more. Cities are getting together to promote themselves overseas, however Scotland has these distinct regions all aggressively competing for resource... we can’t build critical mass with this lack of cooperation.”

*General workshop - Aberdeen*

A further theme was about thinking creatively about what opportunities might exist in the future. For services firms – particularly in legal services, financial services and wider advisory roles – this might not be about immediate exporting opportunities in these markets. However, they could better support companies in the rest of the UK enter into such markets. Better understanding these supporting roles was identified by many as a key opportunity.

“We should look at mentoring schemes... perhaps we could piggyback on oil and gas offshore companies with existing, strong export links?... we should consider forming a joined-up group to sell our expertise into foreign jurisdictions, perhaps on an advisory/consultancy basis – we should be more service focused.”

*Clean energy sector workshop - Edinburgh*

A further common theme was the importance of securing appropriate transport links to key growth markets. This is often seen as a barrier in terms of costs and logistics and perceptions of our peripherality.

“Communication and transport links are not fit for purpose, and lag behind lesser developed countries.”

*General workshop - Aberdeen*

## Summary of business engagement

- Moving into new and emerging markets is not straightforward. There is clear consensus for a coordinated approach, perhaps through extensions of ‘hub-style’ initiatives.
- Many businesses highlighted the challenges of doing business in more complex markets. A gap needs to be filled in providing political, regulatory, tax, marketing and legal advice on market entry and doing business in select markets.
- We should bring together businesses of all sizes to build consortia and collaborate for large international contracts.
- There is a need to recognise that in some markets – e.g. emerging markets – the focus will be on selling final products. But for many advanced markets, it is about becoming part of global value chains. This requires a different focus for businesses and policymakers. There are also opportunities for Scottish organisations, as part of such chains, to act as ‘beach-head’ organisations for others.
- Support to more complex markets – and business model approach – needs to be tailored. A ‘one-size-fits-all’ approach will not work.
- More could be done to take advantage of the international alumni network of Scotland’s universities across the industry as a whole.

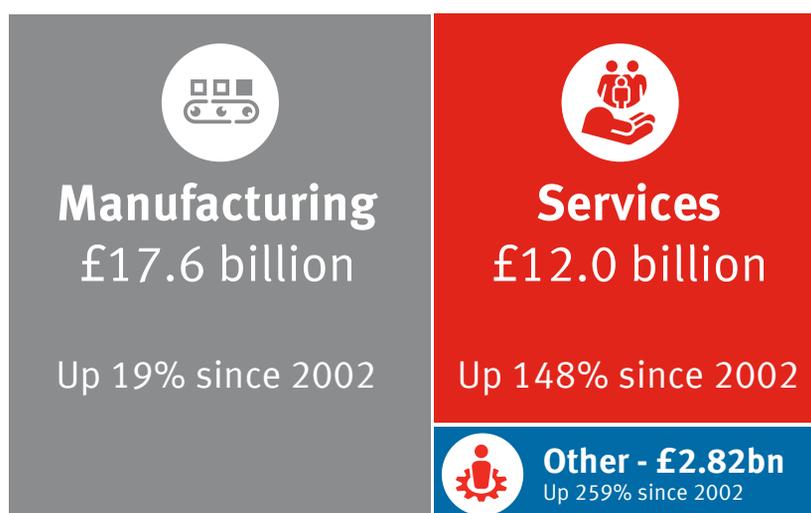
## Scotland’s export focus

In our interim report, we asked firms what sectors Scotland should focus upon and perhaps what the country should be best known for around the world.

The majority of international trade remains in goods, rather than in services.

Indeed, despite manufacturing accounting for just 11% of the Scottish economy, it makes up over half of our international exports. That is not to say that there are not opportunities in services, and many of the businesses that we spoke with were bullish about future opportunities, but it is often more difficult to move into new markets given legal and regulatory challenges.

**Chart 10:** Scotland’s international exports in 2017



Source: Scottish Government/FAI

A number of key sectors were highlighted as growth areas, ranging from well established sectors such as energy, food and drink and tourism, through to growing markets such as fintech and life sciences.

“Scotland is extremely well placed to capitalise on the opportunities afforded by fintech. Other sectors need similar proactive strategies.”

*Online survey feedback*

As part of this, there was agreement that – because of issues of scale – Scotland could not expect to become a world leader in each and every sector, but that it can identify niches where it can develop the scale and comparative advantage to succeed. For example, Scotland has key strengths in sectors likely to be significant growth sectors in the future, such as some aspects of renewables, business advisory services and water intensive industries.

“Renewable technologies are a huge opportunity for Scotland as new technologies are introduced to make renewable energy developments more affordable and commercially viable. If Scotland is to realise the potential in this opportunity, industry will need to be re-tooled to be fit for the future.”

*General workshop - Aberdeen*

A more common thread was on focusing on a small number of core areas of economic activity, from which growth – across a wide variety of sectors – could occur.

There were three themes in particular.

Firstly, the importance of investing in digital skills and infrastructure.

“Scotland can expand its export base by improving and enhancing its digital infrastructure so that businesses (start-ups, SMEs and larger businesses) can use technology to better market services and products, tailor them to new markets etc. Digital connectivity underpins everything that businesses (across all sectors) do.”

*Online survey feedback*

Secondly, there was agreement that the prospects of a 4th industrial revolution present significant opportunities for Scotland. In particular, there is:

- an opportunity to position the country to take advantage of the new developments as they emerge. That means a focus on digital infrastructure, cyber-security, transferable skills and an openness to adopting new technologies; and
- potential for Scotland to lead the development of these new technologies.

“Automation, the digital factory of the future and other initiatives are not optional scenarios for Scottish manufacturing companies. The key issue is how quickly our businesses can adopt and adapt to these opportunities.”

*Online survey feedback*

Thirdly, the importance of better capitalising on the strength of Scotland’s universities.

We have world class universities with their R&D the 4th highest in the OECD. However, we are 8th in the UK in terms of the amount of the R&D that takes place amongst our businesses.

More generally across the UK – and in Scotland – while we score well on indicators of research, there is significant progress that can be made on improving our development, diffusion and dissemination of the innovation that flows out of our universities.

“IP can be a source of revenue, not only physical shipping of product.”

*Food and drink sector workshop - Glasgow*

There is clearly more that can be done around the boundary between universities and drivers of innovation and economic development.

New developments such as the country’s first innovation district in Glasgow city, the National Manufacturing Institute in Renfrewshire and the embedding of data-driven innovation in Edinburgh as part of its City Deal, were all cited as exciting new initiatives that could provide a useful model for the future.

Revealed Comparative Advantage (RCA) is a transparent measure for examining the competitiveness of a country in exporting a good, relative to the rest of the world. A RCA greater than one would indicate that Scotland proportionally exports more in this particular sector than other countries in the world.

It can be helpful, therefore, in identifying sectors where Scotland already has an existing comparative advantage.

The table below provides a selection of sectors where Scotland is currently thought to have such an advantage. Take Scotland’s RCA for beverages at 23.4 as an example. That is, Scotland proportionally exports 23.4 times more beverages than other countries do. While petroleum and petroleum products are easily Scotland’s most exported product group, it ranks fourth in revealed comparative advantage. And Scotland has revealed comparative disadvantages in some of its top 10 product exports – e.g. electrical machinery and appliances (RCA of 0.3).

**Table 4:** Selection of product groups with a large amount of exports and high revealed comparative advantages, 2017

Product	RCA	% of Scotland's Exports
Beverages	23.4	14.2%
Fish, crustaceans, molluscs and preparations thereof	3.9	3.3%
Power generating machinery and equipment	3.4	7.6%
Petroleum, petroleum products and related materials	3.3	29.8%
Other transport equipment	1.9	4.0%
Chemical materials and products, n.e.s.	1.9	2.4%
Professional and scientific instruments, n.e.s.	1.2	2.8%
Other industrial machinery and parts	1.2	4.5%

*Source: FAI analysis, HMRC, UNCTAD*

“Scotland needs to improve and enhance its digital infrastructure so that businesses can use technology to better market services and products and tailor them to new markets.”

*Digital and technology sector workshop - Glasgow*

These figures can be helpful for identifying areas of existing strength upon which we can build.

These can also be compared to different international markets to see not only where Scotland has a relative export advantage, but also which sectors might be open to greater market opportunities in the future.

The table on the previous page provides an overview of product groups with large international markets and a high revealed comparative advantage for Scotland.

## Summary of business engagement

- There was a consensus that Scotland should be clear about the small number of things it can excel at internationally and in which it has proven assets to succeed.
- Scotland has a great track record of alignment when companies or industries are in trouble – as recent events have again demonstrated. But that alignment, joint working etc., is not always evident in ‘normal’ times.
- There was a belief that policymakers should not just focus upon foreign direct investment (FDI) for FDI’s sake. We need to consider how such investment is being embedded and integrated into the local economy.
- We should focus on digital – infrastructure and skills – as they are crucial for taking advantage of future international opportunities. This was seen as particularly important for rural communities.
- Technological change will shape Scotland’s future industrial base and offers significant opportunities and risks. A question was posed on a number of occasions as to whether or not our enterprise, skills and investment policies are fully aligned behind this.

## The role of policy

In the final part of our discussion with business we focused upon the role of policy.

“Scotland does not take critical decisions to commit to certain projects but instead spreads its money thinly, which does not add a huge amount of value.”

*Oil and gas sector workshop - Aberdeen*

For the purposes of this report, we asked businesses to focus explicitly on what they would like to see to help boost internationalisation.

“Companies in Scotland have poor access to funding and fundraising in general in Scotland. Funding, notably to tech companies, is lacking ambition and, as a result, decent companies with global potential are being bought out by foreign corporations with access to finance.”

*Financial services sector workshop - Edinburgh*

In both Scotland and the UK, numerous initiatives have been launched. A number of reports – including a number of recent influential reviews – have sought to see what Scotland’s policy makers can learn from other countries.

“We need to develop a mentoring programme for near to export businesses to help them cross the line. We also need to invest in investigating the potential of foreign markets to identify those that present the greatest export opportunities for products made in Scotland.”

*Online survey feedback*

What is clear is that countries that have been successful in achieving their international ambitions have developed a clear plan and stuck to it. This has meant that they have had to make difficult choices and cannot be ‘all things to all people’.

“Politicians need to deliver consistency over the budget process, harnessing collaboration and long-term thinking.”

*Food and drink sector workshop - Glasgow*

At the same time, a constant theme in our discussions has been around a so-called ‘cluttered landscape’ (something that is not just limited to Scotland).

“In the UK, the government is trying to do everything at once. Our approach is not joined up.”

*Clean energy sector workshop - Edinburgh*

Back in 2014, the Wilson Review of Support for Scottish Exporting identified a “landscape confused by the existence of a plethora of other bodies, all of them with a stake in the promotion of exports”.

This conclusion seems to remain just as relevant today as it was then. While progress has been made in recent times, this was highlighted as a key barrier for some firms. There remain 16 different links and sources of advice on the ‘Get exporting help and support’ page at [www.mygov.scot](http://www.mygov.scot).

## Summary of business engagement

- There was consensus that the policy landscape is cluttered, not just in Scotland but across the UK. Access to export finance initiatives is a good example of the complexities faced by business.
- There is a sense that the actions of both governments are not always joined up. The aim of devolution should be for devolved and reserved policymakers to work in partnership and coordinate efforts. This can sometimes lead to gaps in UK programmes being less visible in Scotland and Scotland less visible in some overseas markets.
- Progress has been made in recent years to improve the accessibility of business advice and support for exporting. There was a view that much more could still be done to provide more accessible platforms to support firms to export.
- Access to finance remains a key issue, particular for more risky markets.
- The One Scotland approach, as highlighted in the Scottish Government's Trade and Investment Strategy, was widely welcomed.
- There was a sense that the policy landscape is full of relatively small initiatives designed to tackle a particular 'issue of the day' or to support a new 'big idea'. But this was not always supported by evidence or an evaluation to measure success. In this regard, there is a need to understand what is working and what is not, and target resources of scale at these areas.
- Finally, resources. Resources are tight and there are numerous competing priorities, but the feedback was clear that if policymakers and businesses are serious about boosting Scotland's exporting performance then it will require significant investment over a number of years – on a level not yet witnessed in Scotland.

## Recommendations from business engagement

- Government policy, both UK and Scottish, that is longer-term in its objectives. Administrations of all political hues have been too short-termist. Policymakers need to pick a strategy and stick to it, harnessing the fiscal and regulatory environment to drive change.
- An economy that harnesses and trades on knowledge: Scotland should focus exports around the knowledge-based economies, trading on its know-how, professional services, IP, high-end production and manufacturing, and technological development.
- A more joined-up approach. Organisations need to learn from successful industries and work in closer collaboration with other businesses, government support agencies, industry bodies, academia and policymakers to expand in/enter overseas markets.

# Conclusion

## Section 5

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Both the economic analysis and engagement with business has shown that Scotland has key strengths that should give the country optimism for the future.

These strengths are embedded across a wide range of sectors, and in a highly-skilled workforce and global reputation for excellence.

However, in many areas there is scope for improvement. Our export base is too narrow, both in terms of the range of businesses that are exporting and the market opportunities we are exploiting. In this regard, we lag behind many of our key competitors.

If Scotland is to take advantage of the changing nature of the global economy over the next few decades it will need to boost its level of internationalisation.

Doing so will not be easy. And Brexit is likely to make that challenge all the more difficult.

This report suggests that a number of different actions are needed.

Firstly, greater action is required to encourage existing exporters to scale-up, both in markets where Scotland already has had success and in emerging economies. This has implications across a wide range of areas, from export promotion, access to finance and the degree of coordination between UK and Scottish Government initiatives.

Secondly, there needs to be a more intense ‘export culture’ across Scotland’s business base, particularly amongst SMEs. Citing a “lack of ambition” and doing nothing about it, is not a credible response. Instead, there needs to be a much greater focus upon providing leadership and mentoring to growing firms to help move into international markets. The public support system needs to be de-cluttered to make it easier to access the advice and support required. A greater focus is required on understanding what works, as opposed to simply announcing new policy initiative after new policy initiative.

Finally, the importance of collaboration was stressed repeatedly. A small open economy provides significant opportunities to get ahead and to work in partnership to grow market opportunities at scale. Whatever happens with Brexit, Scotland needs to continue to engage proactively in international markets and remain an open and welcoming place for global investment and talent.

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