Executive Summary

Scotland's Economic Strategy sets an overarching framework for increasing competitiveness and tackling inequality, underpinned by the four priorities of innovation, investment, inclusive growth and internationalisation. As part of the Strategy's emphasis on internationalisation, the Scottish Government committed to the development of a Trade and Investment Strategy to set out our approach to international trade and investment and how we will work with businesses, the wider public sector and the third sector, in Scotland and internationally, and with international partners and institutions to achieve specific trade and investment goals.

This paper provides an evidence base to inform the development of the Trade and Investment Strategy. It summarises the important links between trade, investment and economic performance and analyses Scotland's performance in an international context.

Why do trade and investment matter?

International trade and investment are two key drivers of economic growth, with important links to innovation and productivity:

- OECD evidence finds a link between economic openness and economic prosperity, with a 10% increase in trade exposure associated with a 4% increase in income per person in the long-run.[1]

- OECD evidence,[2] supported by UK[3] and Scotland-specific studies,[4] finds that as businesses become increasingly international they become more competitive and productive. Furthermore, small and medium sized firms who export are more likely to innovate and grow faster.[5]

As a small open economy, these links are particularly important for Scotland's overall economic performance, as well as for individual businesses, sectors, and regions.

In addition to boosting Scotland's international competitiveness, strengthening the net trade position (i.e. exports less imports) will also help move the economy to a more balanced and resilient growth path.

A diverse range of investment – from both domestic and foreign sources – is also important for economic growth:

- Inward flows of foreign direct investment (FDI) are one way in which knowledge, skills, best practice, technology, and innovation are transferred between countries and regions.[6]

[1] OECD (2003). The Sources of Economic Growth in OECD Countries.
[2] OECD (2008). Trade and Innovation Project: A Synthesis Paper. Trade Policy Working Paper No. 72.
[3] Harris and Li (2007). Firm Level Empirical Study of the Contribution of Exporting to UK Productivity Growth.
[4] Harris (2010). SDI Policy Evaluation.
[5] European Commission (2010). 'Internationalisation of European SMEs' Directorate-General for Enterprise and Industry, Brussels.
[6] For an overview, see: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32106/11-805-international-trade-investment-rationale-for-support.pdf

- Both inward and outward FDI have important competition and productivity effects, and inward FDI has the potential to create positive spill-overs within the domestic economy and boost overall productivity.[7] Meanwhile, outward FDI (international investment by Scottish firms) can help Scottish companies access new markets, technologies and knowledge.

Given longer-term productivity challenges in Scotland and weakened performance since the onset of the 2007/08 recession, the links between innovation, trade, investment and productivity are especially important to Scotland's growth prospects.

Finally, trade and investment account for significant levels of employment in the Scottish economy. For example:

- The European Single Market is a key trading area and the Centre for Economics and Business Research estimates that it supports over 300,000 jobs in Scotland.[8]

- Survey evidence from Ernst and Young finds that new FDI projects are associated with an average of 3,700 jobs per year in the Scottish economy.[9]

What are the global trends in trade and investment and the implications for Scotland?

Recent decades have seen the continued globalisation of the world economy, with volumes of world trade quadrupling and the stock of inward investment increasing from $697.9 billion to $25.5 trillion since 1980.[10] In the decade ahead global flows of data, finance, talent and trade are expected to triple.[11] This has been driven by:

- Technological advancements, which have driven down the costs of international trade and investment and increased connectivity;

- The reduction of trade barriers through trade agreements and integration of the European Single Market;

- Growth of emerging markets, such as the BRIC economies (Brazil, Russia, India, and China);

- Growth in the global urban population, which is growing by 65 million a year;[12]

- Increased trade in services, such as business and financial services; and,

- Increasing global integration through global value chains, with different stages of production and company activity taking place across a range of countries.

The shift in the global economy toward emerging markets and to cities within those markets, with the emergence of nearly two billion consumers with discretionary spending ability, is having a profound impact on the nature and pace of global trade. Whilst the

[7] Harris and Li (2014) Investigation into the links between internationalisation and firm performance.
[8] http://www.cebr.com/reports/british-jobs-and-the-single-market/
[9] Ernst and Young 2015 Scotland Attractiveness Survey.
[10] UNCTAD STAT.
[11] McKinsey Global Institute (2014). Global Flows in a Digital Age.
[12] McKinsey Global Institute (2011). Urban world: mapping the economic power of cities.

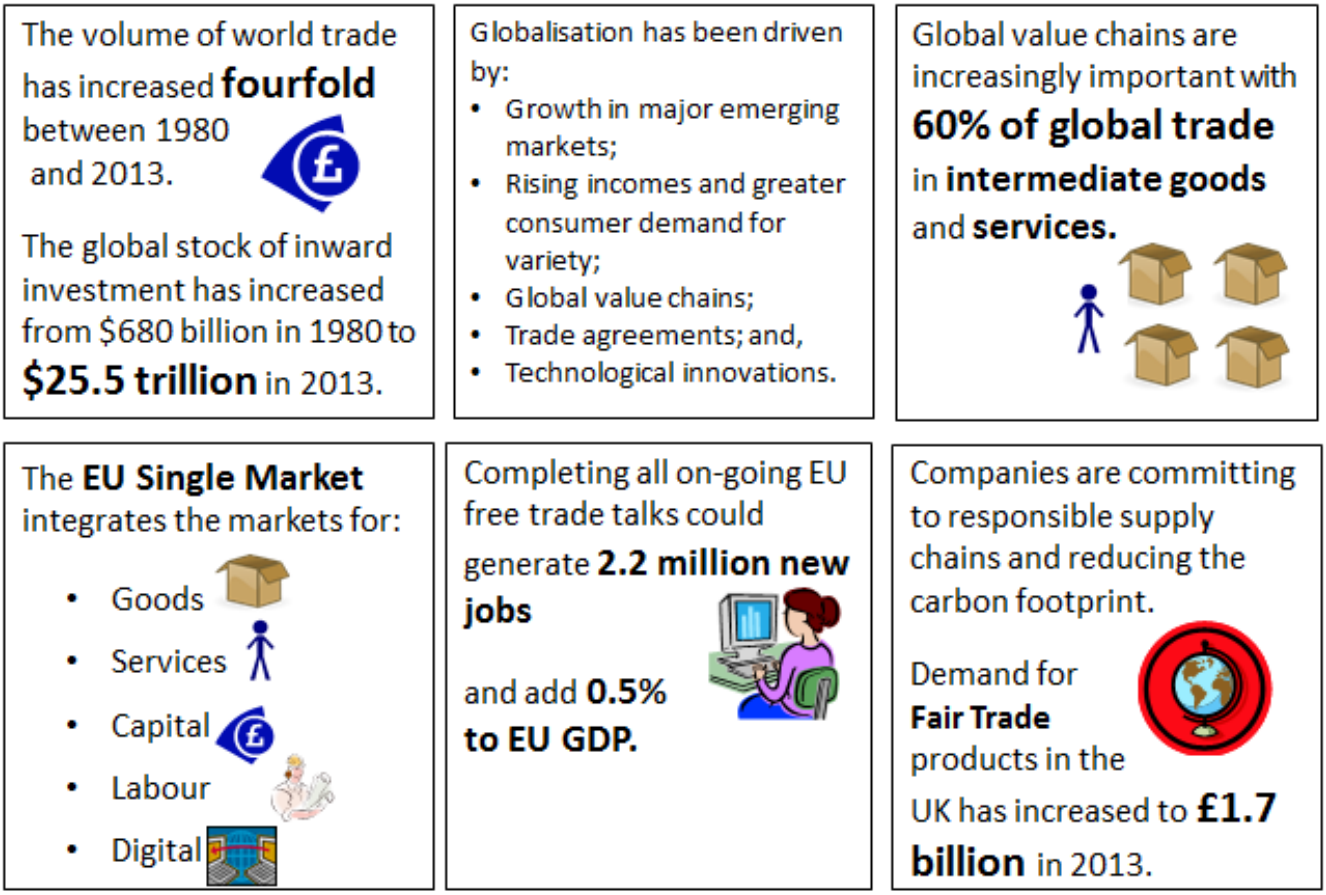
demographic structure of Europe, the U.S., and other advanced economies is becoming increasingly old, the demographic structure of emerging economies has a much younger profile.

The use of global value chains can boost productivity as countries specialise in areas of competitive and comparative advantage. Product-based studies highlight that certain parts of the value chain (e.g. research and development, design, marketing, and business services) tend to be higher value added.

Whilst the increased prominence of global value chains has been identified, other business models are also evident. For example, where supply chain risk needs to be minimised or speed from design to production is important, more locally concentrated supply chains increase in importance.

This paper also highlights that there are other factors that will continue to shape the nature of business models, including social and environmental considerations.

Diagram E.1: Key global drivers and trends



Against this backdrop, there are a number of important developments which will provide opportunities and challenges for Scotland:

- Certain emerging markets are projected to experience faster rates of economic growth in coming years than well-established economies;

- Bi-lateral and Multilateral trade agreements are being negotiated and agreed; and,

- The EU Single Market is set to deepen with further integration in Services, Digital and Capital Markets.

Given the range of products and services where Scotland has strengths, including manufactured goods, specialist technology, food and drink, as well as business and professional services, opportunities are likely to emerge across both established and emerging markets.

How has Scotland performed in terms of trade and investment?

Trade[13]

- Scotland's total international exports amounted to £24.4 billion in 2013, whilst total estimated international imports amounted to £22.2 billion.

- Scotland's export sales to the rest of the UK (RUK) amounted to £41.3 billion in 2013, whilst total estimated import sales from the rest of the UK amounted to £51.6 billion.

- Scotland is an open economy, ranking 11th in the OECD. Total exports and imports – including those to and from the rest of the UK – were equivalent to 103.8% of GDP in 2013.

- Both Scotland and the UK have higher total trade deficits as a percentage of GDP in comparison to other OECD countries, with Scotland ranking 34th (2nd worst) and the UK ranking 33rd (3rd worst)[14].

- Well-established export markets account for the majority of Scotland's exports. The rest of the UK accounts for two thirds of total export sales. Of the export sales that go to destinations outside the UK, 46% of these go to the EU and 14% to the US. While overall growth in these markets is variable and generally slower, they still present sizeable opportunities for trade and are relatively easy to enter.

- Although the value of exports is growing in nominal terms, a limited number of companies account for the majority of Scottish international exports – around 100 companies make up 60% of Scottish international exports. Data suggests that the number of manufacturing exporters and the proportion of small and medium enterprises (SMEs) exporting internationally has been declining in recent years.

- 12% of SMEs in Scotland considered themselves exporters in 2014 compared to 20% in 2006/07, and only 3% of non-exporters plan to export in the next 12 months.[15]

[13] Quarterly National Accounts Scotland (2014); 2013 Global Connections Survey (2015); HMRC Regional Trade Statistics; 2014 Small Business Survey (2015). Figures exclude offshore oil and gas.
[14] These figures exclude offshore oil and gas exports for Scotland. Estimates show that Scotland's trade position is significantly boosted when including offshore oil and gas activity due to the high value of exported crude oil extracted from the North Sea.
[15] Small Business Survey (2014).

- Scotland's top exporting sectors to the rest of the world are food and drink (£5.0 billion, 18% of total international exports, of which 85% is whisky) and onshore oil and gas/ chemical processing (£3.5 billion, 13% of total international exports)[16].

- The nature of Scotland's international exports has changed over the last decade, with a shift in manufacturing from electronics toward food and drink and chemicals.

- The largest sectors for RUK export sales include financial and insurance activities (£7.9 billion, 17% of total RUK exports), utilities (£5.6 billion, 12% of total RUK exports), and wholesale and retail of various goods (£4.8 billion, 10% of total RUK exports).

Investment

With the available scope of data, the key findings on international investment performance in Scotland are:

- Inward investment attracted to Scotland has a positive impact on economic growth, stimulating internationalisation and the productivity levels of domestic businesses. There are over 2,200 foreign-owned companies in Scotland employing 303,000 with a combined turnover of over £100 billion. [17]

- Scotland is an attractive destination for FDI projects, as indicated by Ernst and Young survey evidence, and has ranked in the top two UK regions outside London since 2006 in terms of the number of FDI projects secured.[18]

- In 2014 over 60% of inward investment projects into Scotland came from existing investors, which is higher than other UK locations, highlighting the need to attract new investors to Scotland.[19]

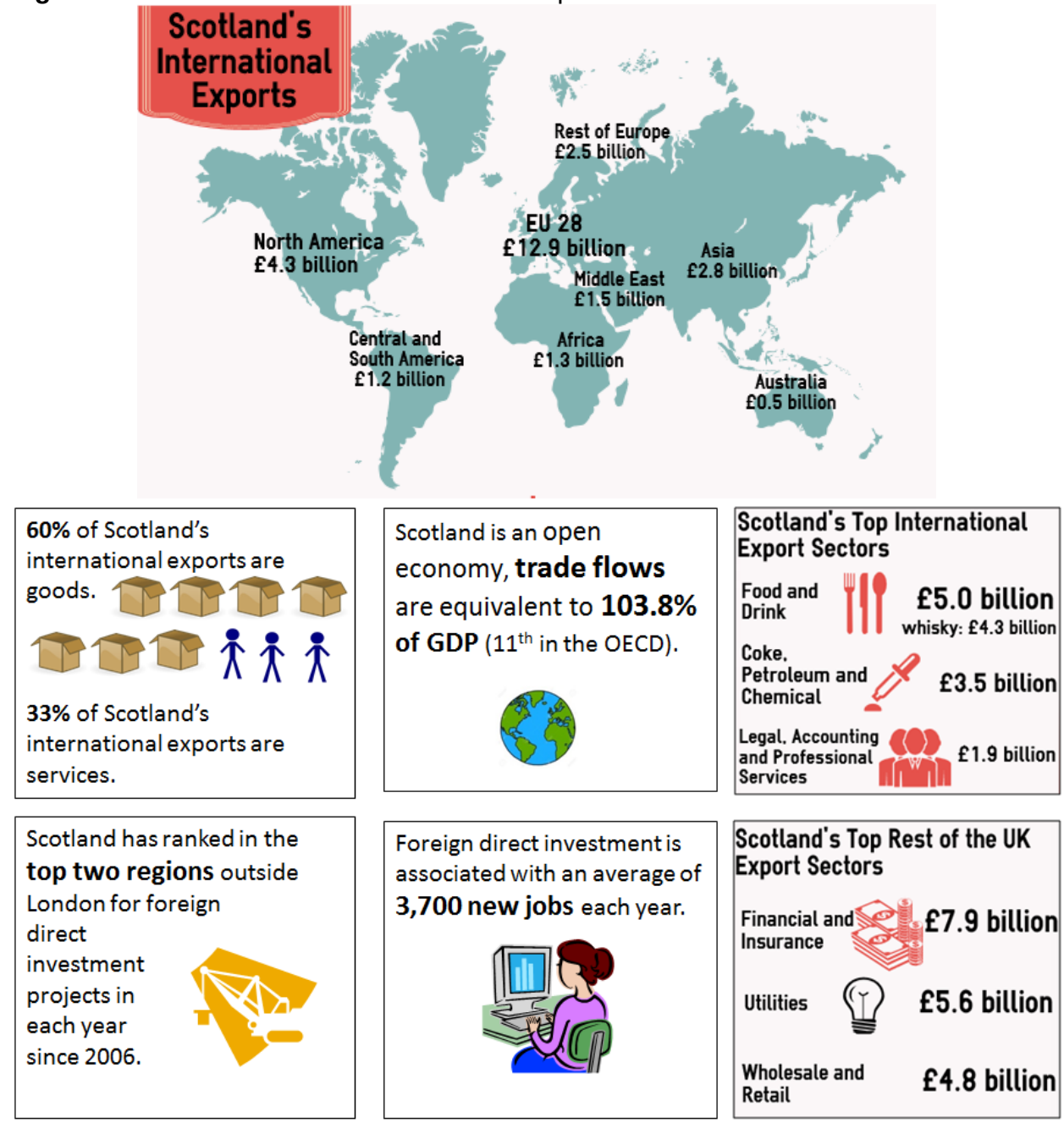
- The U.S. continues to be an important source of investment to Scotland, with around 40% of total projects secured over the past decade coming from the U.S. However, there is relatively low awareness of Scotland among investors in Asia, with China, the fifth biggest investor into the UK, not making Scotland's top 10 sources of investment. [20]

- Whilst directly comparable data for Scotland is limited, the UK is ranked 8th in the world in terms of ease of doing business and 10th in terms of the quality of its infrastructure.[21]

[16] The main source for sector exports in this paper is Scotland's Global Connections Survey which provides coverage across all sectors. However, alternative data sources such as the HMRC Regional Trade Statistics and estimates for particular sectors, such as the ONS Travel Trends and Great Britain Tourism Survey, are also available.
[17] Scottish Development International.
[18] Ernst and Young 2015 Scotland Attractiveness Survey.
[19] Ernst and Young 2015 Scotland Attractiveness Survey.
[20] Ernst and Young 2015 Scotland Attractiveness Survey.
[21] World Economic Forum (2014). The Global Competitiveness Report, 2014-15; World Bank (2015). Ease of doing business index.

- In terms of Scotland's international standing, the 2014 Anholt-GfK Roper 'Nation Brands Index' shows that Scotland continues to score highly, placed in the top 20 (out of 50) nations across the globe.[22]

Diagram E.2: Scotland's trade and investment performance



[22] Anholt-GfK Roper Nation Brand Index (2014).

What factors influence trade and investment performance?

Trade and investment performance are linked to global economic conditions, individual country characteristics, and firm-level factors.

- Export performance is influenced by several factors including the product mix, markets, export barriers, competitiveness, information, and networks.

- Investment is primarily attracted by economic fundamentals, including good infrastructure and a skilled workforce.

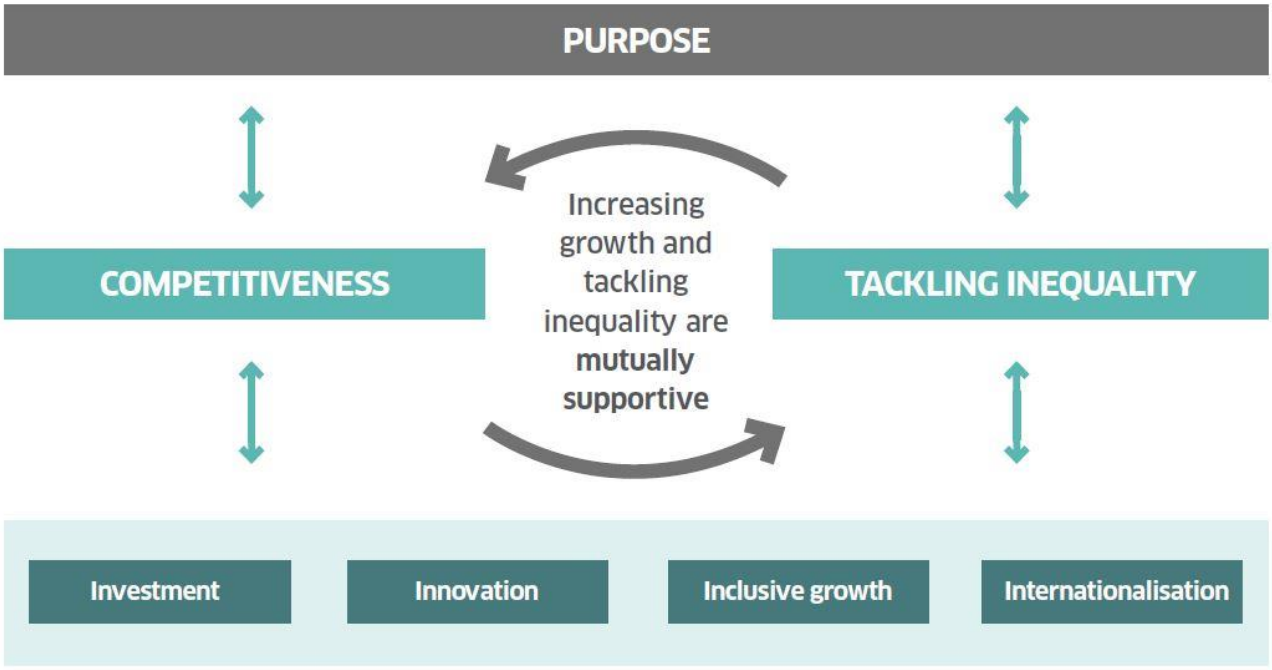
- Embedding supply chain linkages within the domestic economy is important to realising the long-term benefits of inward investment.

Introduction

Scotland's Economic Strategy[23] sets out an overarching framework for increasing competitiveness and tackling inequality, underpinned by four priorities for sustainable growth (Figure I.1):

- **Investing** in our people and our infrastructure in a sustainable way;
- Fostering a culture of **innovation** and research and development;
- Promoting **inclusive growth** and creating opportunity through a fair and inclusive jobs market and regional cohesion; and,
- Promoting Scotland on the **international** stage to boost our trade and investment, influence and networks.

Figure I.1: Scotland's Economic Framework



As a small open economy, Scotland's economic performance is set within a global trading and financing environment. Whilst Scotland already performs strongly on a range of measures, the Scottish Government has set ambitions to boost its economic performance in terms of productivity[24] and a range of other measures including tackling inequality.[25]

[23] http://www.gov.scot/Resource/0047/00472389.pdf
[24] The Scottish Government's Purpose is supported by the productivity target to rank in the top quartile for productivity against our key trading partners in the OECD by 2017. http://www.gov.scot/About/Performance/scotPerforms/purpose/productivity
[25] *Scotland's Economic Strategy* sets out an ambition to be in the top quartile of countries in terms of wellbeing, inequality and sustainability, as well as reducing disparities in economic performance between regions and local areas within Scotland.

A key objective of *Scotland's International Framework*[26] is to boost trade and investment performance. This is important for Scotland's economic performance, through important interactions with innovation and other drivers of productivity and as sources of demand for Scottish products.

Access to global markets provides opportunities for countries to specialise in areas of comparative and competitive advantage and allows resources to be put to their most productive uses. The benefits of international trade and investment include increasing national income, raising productivity, and supporting employment. Trade and investment can also bring other benefits to consumers in the form of lower prices and increased product choice. A number of macroeconomic and microeconomic studies support this. For example:

- OECD evidence finds a 10% increase in trade openness is associated with a 4% increase in income per person in the long term;[27]

- Evidence from the OECD[28] and UK[29] and Scotland-specific[30] studies find that as businesses become increasingly international they become more competitive and productive;

- Small and medium sized firms who export are more likely to innovate and growth faster;[31]

- In addition, both inward and outward FDI can have important competition effects and inward FDI can transfer knowledge, skills, technology and innovation between countries and regions, thereby raising productivity in the domestic economy.[32]

In addition, strengthening the net trade position can help move the economy onto a more balanced growth path, which also has the potential to help boost productivity performance.

Scotland's Economic Strategy highlights that rebalancing will allow the Scottish economy to better withstand economic shocks and help ensure that everyone in Scotland can contribute to, and benefit from, sustainable growth. The Scottish Business Pledge and Convention on Fair Work are two policy initiatives which aim to shape the quality of jobs and conditions in the labour market. The *Economic Strategy* also highlights the importance of realising opportunities across regions of the Scottish economy, including cities, towns and rural areas.

Consideration of the broad aspects of trade policy reflects new thinking that has emerged globally over the past decade relating to economic growth and wider development, and is captured in different degrees by a number of terms such as inclusive growth, environmental sustainability, social sustainability, sustainable competitiveness, shared prosperity and sustainable development. This includes a growing body of research on the impact of inequality on economic growth and broader development.

[26] http://www.gov.scot/Resource/0047/00473547.pdf
[27] OECD (2003). The Sources of Growth in OECD Countries.
[28] OECD (2008). Trade and Innovation Project.
[29] Harris and Li (2007). Firm Level Empirical Study of the Contribution of Exporting to UK productivity growth.
[30] Harris (2010). SDI Policy Evaluation.
[31] European Commission (2010). Internationalisation of European SMEs.
[32] Harris and Li (2014). Investigation into the links between internationalisation and firm performance

Reflecting this trend, international bodies such as the United Nations (UN), Organisation for Economic Co-operation and Development (OECD), International Labor Organisation (ILO), World Economic Forum (WEF), World Bank and the European Union (EU) have issued a range of strategies, statements and programmes to advocate for these issues. A brief selection is included in Box I.1.

Box I.1: Key work from international organisations on sustainable development

- EU's announcement that a new trade strategy will be released in the autumn– articulating a post-2015 agenda that is global and universal, incorporating all three dimensions of sustainable development: social, economic and environmental.[33]
- ILO's *Better Work* partnership with the International Finance Corporation.[34]
- IMF's Communique of *the 31st meeting of the IMF Committee* on 18 April 2015 expressing continuing commitment to sustainable development.[35]
- OECD's 2015 *Ministerial Council Statement – Unlocking Investment for sustainable Growth and Jobs* – highlighting the international processes that reinforce the importance of achieving inclusive and environmentally sustainable global economic policies in the near and long term.[36]
- UN's *Guiding Principles on Business and Human Rights*,[37] as well as the UN's *Sustainable Development Goals* with the commitment to promoting a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organisation; increasing Aid for Trade support for developing countries, in particular least developed countries; and enhancing policy coherence for sustainable development.[38]
- World Bank's Community Driven Development approach.[39]

These initiatives are partly a response to on-going advocacy from Non-Government-Organisations (NGOs) such as Oxfam and Global Justice Now and other organisations such as the STUC, who have expressed concerns about the distribution of benefits and costs of trade liberalisation across the world, as well as specifically in Scotland.

A range of countries are shaping their trade policies with reference to these wider considerations. The UK Government has developed the policy statement, *Good Business – Implementing the UN Guiding Principles on Business and Human Rights.*[40] Countries such as Denmark, Norway and Sweden have adopted further measures, such as linking

[33] https://ec.europa.eu/europeaid/sites/devco/files/com-2015-44-final-5-2-2015_en.pdf
[34] ILO (2015), http://betterwork.org/global/?page_id=304
[35] https://www.imf.org/external/np/cm/2015/041815.htm
[36] OECD (2015), http://www.oecd.org/mcm/
[37] UN (2011), http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf
[38] UN, https://sustainabledevelopment.un.org/
[39] World Bank (2015), http://www.worldbank.org/en/topic/communitydrivendevelopment
[40] HM Government, Good Business - Implementing the UN Guiding Principles on Business and Human Rights https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/236901/BHR_Action_Plan_-_final_online_version_1_.pdf

trade with development aid and using aid as a means of developing trade and export capacity in the developing world. Other actions pursued by these countries include an expectation of business development being linked to principles such as corporate social responsibility, human rights and protecting the environment.

Underpinning this kind of work is recognition of the economic benefits that can derive from trade that considers wider environmental and social concerns. In particular, promoting a rules-based free trade system can raise trade standards globally. Other benefits can include trade affording a means to develop and stabilise emerging economies, as well as broadening and diversifying export markets.

In line with this global trend, alongside the Business Pledge and Convention on Fair Work, the Scottish Government is also part of the SNAP (Scotland's National Action Plan for Human Rights) Better World Action Group, working with partners such as Amnesty International, the Scottish Human Rights Commission and representatives from across the community.[41] One of the commitments contained in SNAP is the development of a coordinated plan of action to implement the UN Guiding Principles by Scotland, building on the UK's Action Plan in this area.

The purpose of this paper is to provide evidence and analysis to help inform the development of a Trade and Investment Strategy for Scotland.

The document is structured as follows:

- Section 1 provides an overview of the factors shaping global trends in trade and investment;
- Section 2 summarises key trends in trade and investment in Scotland;
- Section 3 considers the strengths and resilience of Scotland's trade in more detail, in terms of sectors, markets and companies; and,
- Section 4 considers the factors which can boost trade and investment performance; and,
- Annex A provides the official definitions for trade and investment.

[41] http://www.scottishhumanrights.com/actionplan/betterworld

Section 1 – Global Trade and Investment Trends

Key Points

- Recent decades have seen the continued globalisation of the world economy, with the volumes of international trade and investment rising substantially in the last 30 years;
- Innovations in technology, international trade agreements, and the increased prominence of global value chains (GVCs) have all been major drivers shaping globalisation;
- Future growth is projected to be highest in certain emerging economies and urban areas, providing new market opportunities;
- Established markets will continue to be important to Scotland's trade and investment and on-going integration within the European Single Market will also bring opportunities for Scotland; and,
- There is some evidence of growth in consumer demand for Fair Trade products and ethical business models.

Global trends and emerging markets

Since 1980, the volume of world trade has more than quadrupled and the stock of inward investment has increased from $697.9 billion to $25.5 trillion.[42]

This has been driven by the growth of major emerging markets, rising incomes, greater consumer demand for variety, greater integration of the world economy and the expansion of global value chains, continuing trade liberalisation, and reductions in communication and transportation costs.

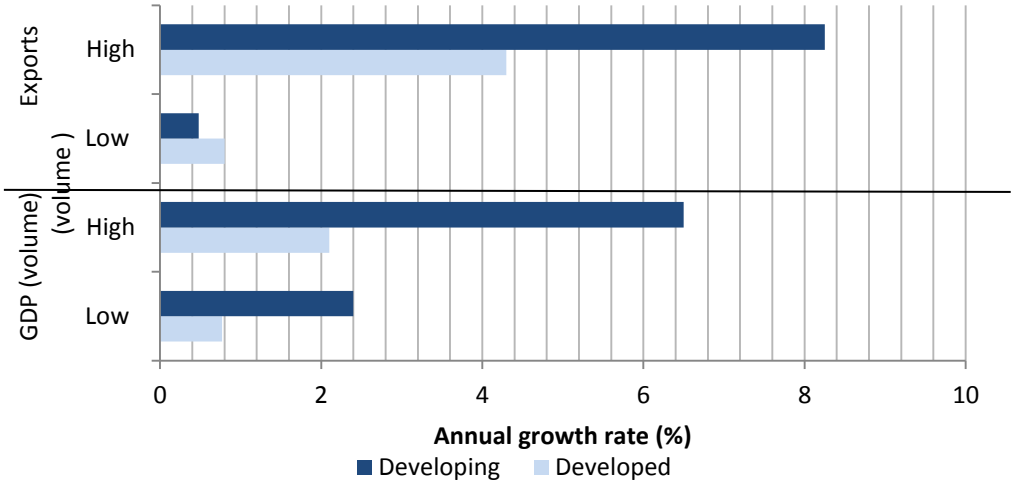
In the coming decades, GDP is forecast to grow faster than the world average in some emerging economies, particularly fast-growing Asian economies such as India and China. The World Trade Organisation (WTO) has forecast global export growth could also primarily come from developing economies in the years to 2035 (Figure 1.1).[43]

Figure 1.1 shows the WTO simulations of projected growth rates of GDP and exports in high and low growth economic scenarios and in highly open trade and less open trade environments.

Although the WTO projects that in a high growth and open trade scenario, the share of GDP and trade going to major developed economies (in particular the EU, US and Japan) would decline, in absolute terms both exports and GDP would continue to increase in these countries and they would be better off than in a low growth and less open trade scenario[44].

[42] UNCTAD STAT, Foreign direct investment.
[43] World Trade Organization (2013). World Trade Report. https://www.wto.org/english/res_e/booksp_e/world_trade_report13_e.pdf. This projection is based on a scenario with increased trade opening and a 50% reduction in applied tariffs and service barriers.
[44] World Trade Organization (2013). World Trade Report 2013. p.99.

Figure 1.1: Predicted annual growth rates of exports and GDP, average 2012 – 2035, by country group (%).



Source: World Trade Organization (2013) World Trade Report.

There has also been growth in the global urban population, which is growing by 65 million a year. It is estimated that nearly half of global GDP growth to 2025 will come from cities in emerging markets. [45]

Three key drivers of globalisation – technological innovation, trade agreements and the increased prominence of global value chains – are discussed in more detail below, as are developments in the European Single Market and new business models.

International trade agreements

Trade agreements affect the nature, scale and pattern of trade between countries and across markets or sectors. They provide a rules based framework for trade (and often investment) between two or more countries. They can have a geographical focus across a range of goods and services, such as those between the EU and South Korea and the EU and Mexico; or through the WTO cover particular groups of goods and services, such as the Information Technology Agreement, across a large number of countries. Historically, trade agreements have primarily focused on reducing tariff duties for particular goods and services. More recently, there has been increased emphasis on non-tariff barriers such as limitations on market access and regulatory regimes

According to the World Trade Organization there are 262 regional trade agreements in force in 2015.[46]The European Union, which has responsibility for trade agreements across all 28 Member states, has trade agreements with over 50 partners and is in the process of negotiating and applying several more.[47] The European Commission estimates that completing all current EU free trade talks could add 275 billion euros to the EU's GDP and generate 2.2 million new jobs.[48] Later this year, the Commission will set out an updated strategy for the European Union's trade policy for the next five years. The Strategy will

[45] McKinsey Global Institute (2011). Urban world: mapping the economic power of cities.
[46] https://www.wto.org/english/tratop_e/region_e/regfac_e.htm
[47] http://trade.ec.europa.eu/doclib/docs/2012/november/tradoc_150129.pdf
[48] European Commission (2013). The EU's bilateral trade and investment agreements – where are we?

assess the state of progress of the EU's bilateral free trade agreement agenda and how the EU prioritises different negotiations; consider the role of the WTO; examine how trade can support sustainable development and in particular if more can be done to promote responsible sourcing supply chains; look at the EU trade relations with major partners such as China; and focus on the transparency of trade negotiations and ensuring the interests of citizens are well represented in EU Trade Policy.[49]

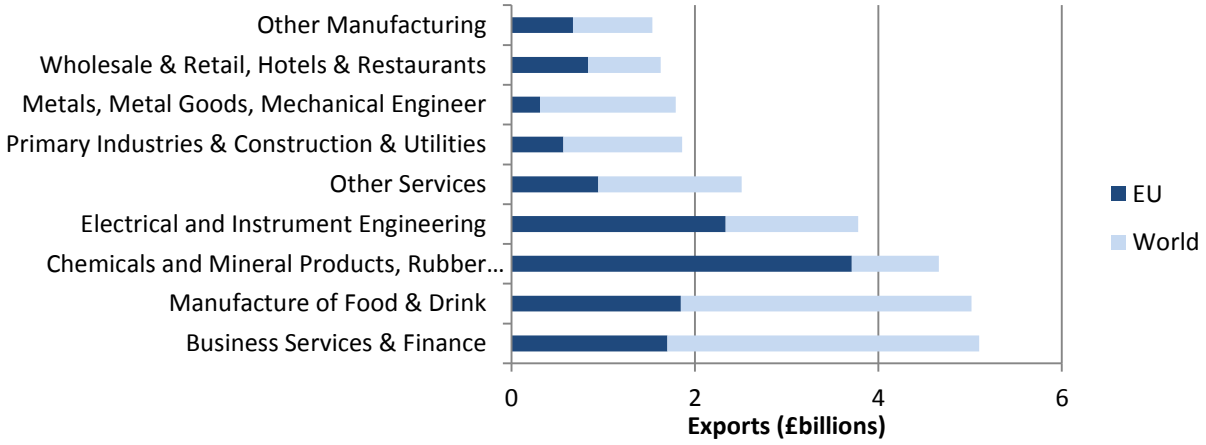
The European Single Market

The European Single Market reduces formal and informal barriers to trade and investment between the 28 EU Member States and is underpinned by the free movement of people, goods, services, and money within the EU (The "Four Freedoms").

Membership of the EU, and access to the Single Market, provides Scottish firms with access to more firms to trade with and more customers to sell to, with over 25 million enterprises and a population of over 500 million[50]. As such, the EU is the main destination for Scotland's international exports, accounting for 46.3% of Scotland's international exports in 2013.[51]

Certain sectors of the Scottish economy are particularly reliant on the EU as an export market, illustrated in Figure 1.2.

Figure 1.2: Total exports to EU and world by sector, 2013 (£ billions)



Source: 2013 Global Connections Survey (2015).

For example, the Chemicals and Mineral Products, Rubbers and Plastic sector (including oil refining) is both the largest contributor to total EU exports from Scotland (accounting for 28.8% of total EU exports, £3.7 billion) and the sector which is most reliant on the EU as an export market (with 80.0% of international exports from the sector destined for the EU).

The Electrical and Engineering industries make the second largest contribution to total Scottish exports to the EU (accounting for 18.1% of total EU exports, £2.3 billion), though the sector is less reliant on the EU as a destination for its exports (with 61.8% of international exports from the sector destined for the EU).

[49] http://trade.ec.europa.eu/doclib/press/index.cfm?id=1274
[50] EUROSTAT.
[51] 2013 Global Connections Survey (2015).

The European Single Market creates greater potential for efficiency improvements by encouraging specialisation and taking advantage of comparative advantages and economies of scale.[52] This also promotes inward investment within EU member states and the EU is an important source of inward investment projects in Scotland.[53]

In addition, membership of the EU Single Market plays a very important role in attracting foreign investment to Scotland from outside the EU. By investing in Scotland, foreign companies not only gain access to Scotland's highly skilled and productive labour force, they are able to export to the large EU Single Market free from import duties and other trade restrictions.

The EU is also an important source of employment in the Scottish economy and the CEBR has estimated that the EU supports over 300,000 jobs in the Scottish economy.[54]
Completing the European Single Market is an on-going process and will include further steps to integrate markets, such as digital and capital markets. For example, the Digital Single Market aims to open up digital opportunities and maximise growth in the digital economy by providing better access for individuals and businesses to high-speed, secure and trustworthy digital infrastructure and services supported by the regulatory environment[55]. The European Parliament has estimated that completing the Digital Single Market could add 4.0% to EU GDP in the long run.[56]

Technology

Another key driver of globalisation is technological innovation, which has significantly reduced the cost of trade and investment.

Innovations have led to lower transportation and communication costs and improved logistics and efficiency, making exporting and importing goods cheaper and easier. These innovations include the use of containerisation in international shipping and developments in aviation. [57]

In addition, advances in computer capacity, power and speed are fuelling the rise of artificial intelligence, reshaping global manufacturing, and accelerating advances in connectivity. The development and diffusion of innovations in telecommunications, computing, and global information networks have been an essential part of the growth in the use of global value chains, by making production coordination across borders easier and lowering the cost of overseas communication.[58] This has been partly responsible for the rise in trade in goods and services and foreign investment flows.

Global value chains and other factors influencing trade and investment

A key development in international business models in recent decades is the growing importance of Global Value Chains (GVCs), which enable businesses to integrate into the

[52] Department for Business, Innovation and Skills (2011). The UK and the single market.
[53] According to the Ernst and Young 2015 Scotland Attractiveness Survey, 17% of total FDI projects in the past decade have come from France, Germany and Ireland.
[54] http://www.cebr.com/reports/british-jobs-and-the-single-market/
[55] http://ec.europa.eu/digital-agenda/economy-society-digital-single-market
[56] http://www.europarl.europa.eu/the-secretary-general/resource/static/files/files/mapping-the-cost-of-non-europe--march-2014-.pdf
[57] World Trade Organization (2008). World Trade Report 2008.
[58] World Trade Organization (2013). World Trade Report 2013.

global economy at lower costs and specialise in areas of competitive advantage by producing only certain components or performing certain tasks rather than complete final products.

Trade in intermediate inputs has steadily grown over the last two decades, with about 60% of global trade now consisting of trade in intermediate goods and services.[59]

The ability of a country or business to create value added from trade depends increasingly on its comparative advantage in tasks within the value chain. The World Trade Organisation reports that most of the value is created in upstream activities such as innovation, research and development and downstream activities such as marketing and logistics, while assembly stages tend to add less value. The existing empirical evidence broadly shows that value add gains are distributed in favour of initial firms in GVCs.[60]

The increasing use of global value chains highlights the importance of considering measures which capture value added, in addition to volume of trade between countries. This is discussed further in Box 2.3 in Section 2.

There is also some evidence to suggest that when supply chain risk needs to be minimised, or speed from design to production is important, more locally-concentrated supply chains can be advantageous.[61]

Whilst comparative advantage and the development of GVCs are important drivers of trade and investment it is important to recognise that citizen and consumer values can also play a role in business models. This includes, for example, increased emphasis on sustainable and responsible supply chains.

Sustainable and responsible supply chain management ensures that businesses promote good standards in labour practices and environmental protection, among other things, in their operations around the world. The OECD has set out guidelines for responsible supply chain management which, for example, encourage companies to co-operate with local communities to promote local skills.[62]

Changes in the nature of consumer demand also play a role. For example, it is estimated that there are now Fair Trade[63] producers in 74 countries around the world and products are sold in over 125. Retail sales of fair trade increased by an estimated 15% in 2013 (the most recent year of data), rising to 5.5 billion euros. Fair Trade International identifies the UK as the largest market for fair trade products, with 2.0 billion euros of sales in 2013.[64]

[59] UNCTAD (2013). World Investment Report 2013.
[60] World Trade Organization (2014). World Trade Report 2014.
[61] Pande (2011). "How to make onshoring work," Harvard Business Review.
[62] http://www.oecdguidelines.nl/oecd-guidelines/g/general-principles--supply-chain
[63]The World Fair Trade Association defines Fair Trade as "a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalised producers and workers – especially in developing countries." http://www.fairtrade.net/fileadmin/user_upload/content/2009/about_fairtrade/2011-06-28_fair-trade-glossary_WFTO-FLO-FLOCERT.pdf
[64]Fair Trade International (2014). Fair Trade Annual Report 2013-14.

Section 2 – Scotland's Trade and Investment Performance

Key Points

This section provides an overview of Scotland's trade and investment performance, set in an international context. It considers overall trade performance in terms of the trade balance and exports, and the available information on FDI performance.

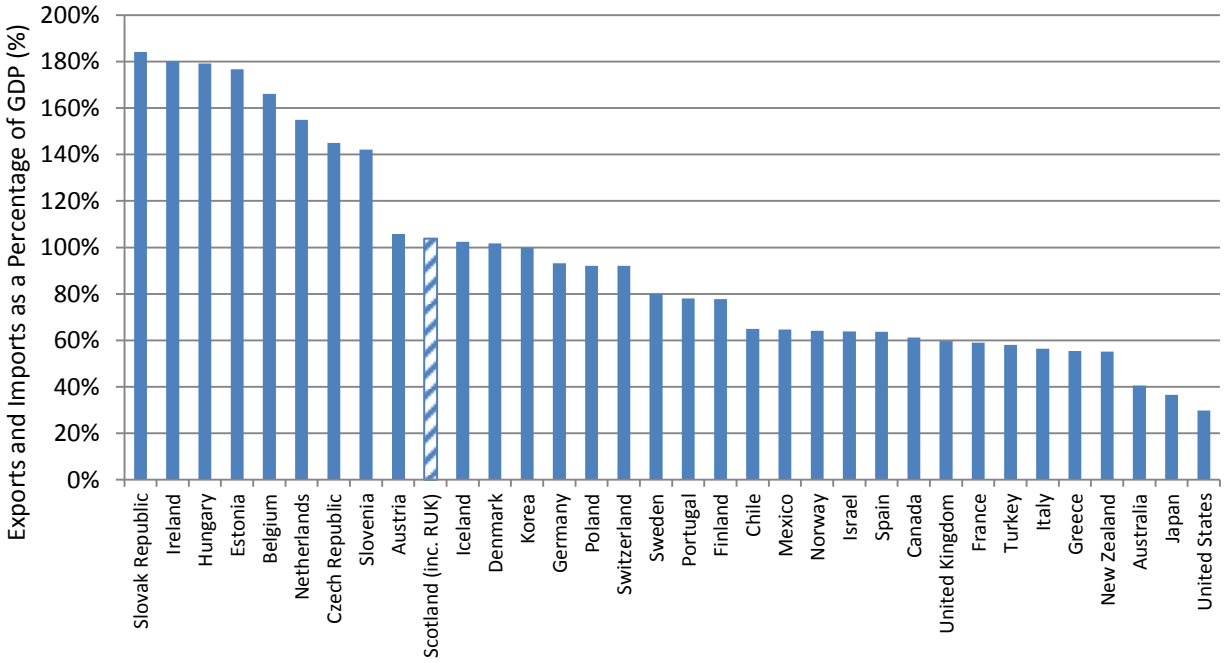
- Scotland is an open economy with a high value of total exports and imports as a percentage of GDP compared to many other OECD countries.
- Scotland has a high total trade deficit as a percentage of GDP in comparison to other OECD countries.
- Ernst and Young has ranked Scotland in the top two UK regions outside London for FDI in each year since 2006 in terms of the number of FDI projects secured.

Trade

Openness to trade

Scotland is an open economy, with a high proportion of total trade (RUK and international exports and estimated imports) to GDP compared to many OECD countries (Figure 2.1). On this measure Scotland ranks 11th of 35 OECD countries, with total trade equivalent to 103.8% of GDP, compared to the UK's position of 27th (total UK trade is equivalent to 59.7% of GDP).[65]

Figure 2.1: Exports and imports as a percentage of GDP in OECD countries, 2013 (%)[66]



Source: UNCTAD STAT, Quarterly National Accounts Scotland (2015)

[65] Scottish National Accounts (2015).
[66] Due to the size of its exports and imports, Luxemburg is excluded from Figure 2.1. Luxemburg's exports and imports were 276.7% of GDP in 2013. However, Luxemburg is included in the ranking of countries.

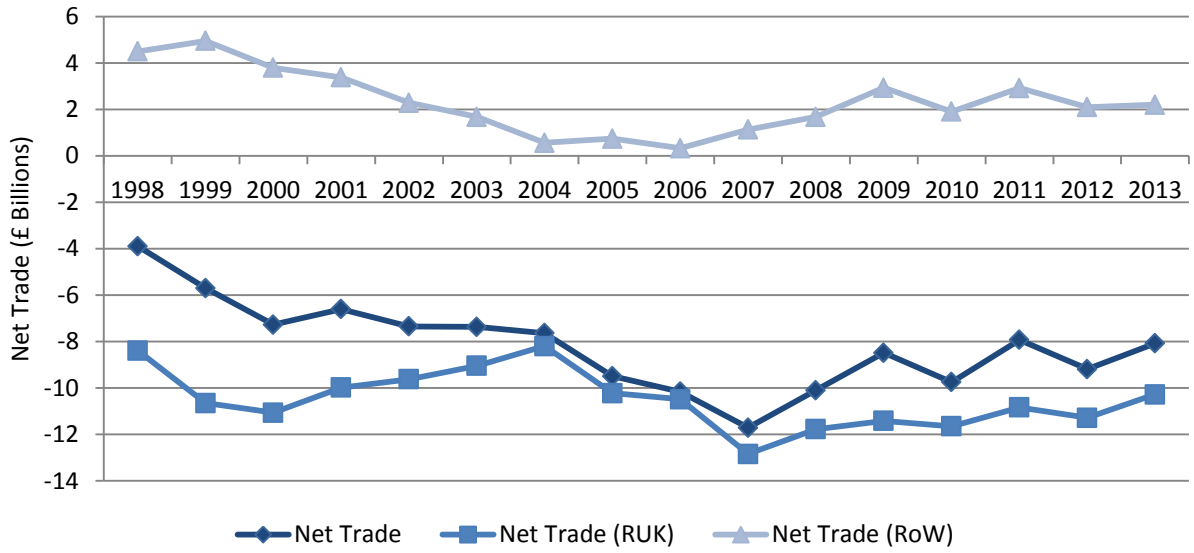
Trade balance

Scotland has run an overall trade deficit in each year since 1998 and Scotland's trade deficit was £8.1 billion in 2013, or 6.0% of GDP (Figure 2.2). Scotland has tended to run a surplus in international trade, but this is offset by a deficit in trade with the rest of the UK.

Estimates show that Scotland's trade position is significantly boosted when including offshore oil and gas activity due to the high value of exported crude oil extracted from the North Sea. However, this needs to be seen in the context that oil is traded offshore by large international companies.[67]

A longer time series is available for the UK, showing that it has tended to run a deficit in net trade in the last two decades. Net trade has often made a negative contribution to the UK's GDP growth in recent years and the Office for Budget Responsibility forecasts that this will continue in future years.[68]

Figure 2.2: Trade balance, 1998 – 2013 (£ billions, seasonally adjusted, current prices)



Source: Quarterly National Accounts Scotland (2015)

Scotland's trade balance as a percentage of GDP compared to OECD countries in 2013 is shown in Figure 2.3. As illustrated, Scotland has one of the weakest trade balances in the OECD. This highlights the importance of rebalancing the economy.

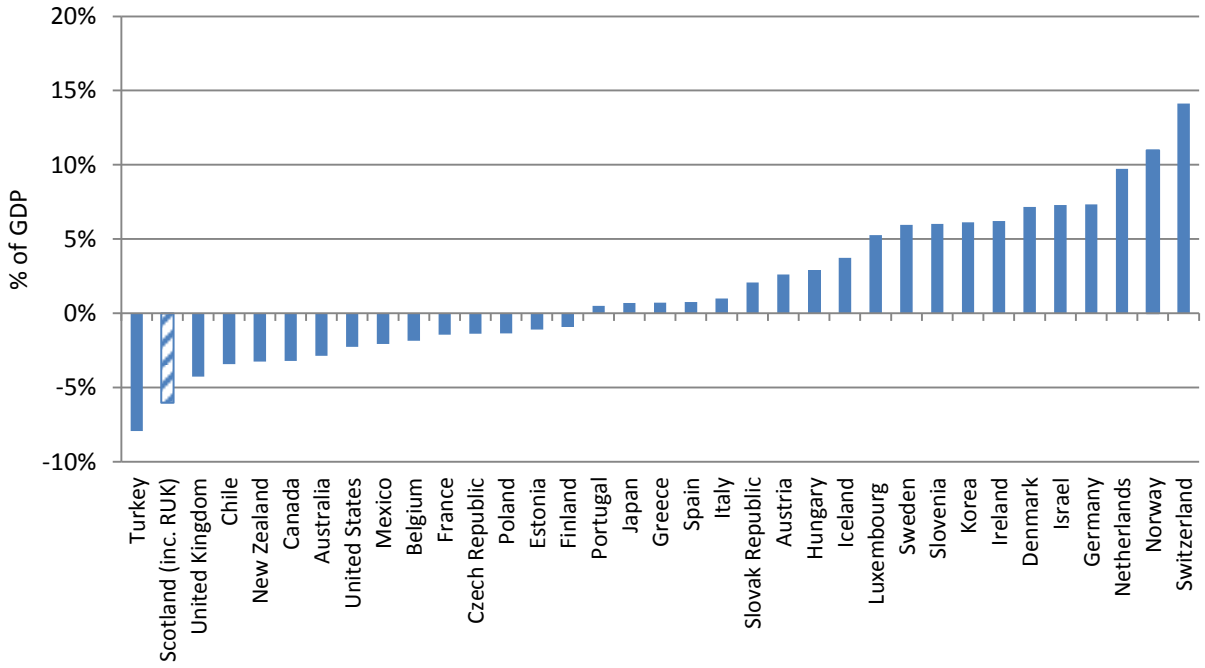
Rebalancing the economy would mean seeing a greater contribution to growth from investment and net trade. Improving a country's net trade position involves improving the trade balance (exports minus imports) either through increasing exports or increasing the share that domestic firms sell in the domestic economy.

Analysis based on Scotland's input-output tables finds that increasing the competitiveness (and thereby the share) of domestically produced products can have similarly positive economic impacts on the Scottish economy as boosting exports, although this type of analysis does not take account of the positive spillover effects from internationalisation.

[67] Scottish National Accounts Project. Oil and Gas Statistics (Experimental Statistics).
[68] Office for Budget Responsibility (2015). *Economic and Fiscal Outlook March 2015*.

The positive links with competition, innovation and productivity resulting from economic openness and international exposure confirm a strong role for boosting exports and promoting openness to free trade.

Figure 2.3: Trade balance as a percentage of GDP in OECD countries and Scotland, 2013 (%)



Source: UNCTAD STAT, Quarterly National Accounts Scotland (2015)

Export sales

Export sales of goods and services from Scotland have grown over the available series of data. Scotland's total exports in goods and services (excluding oil and gas) grew by 69.3% between 1998 and 2013, from £38.8 billion to £65.7 billion in cash terms.[69]

Exports to the rest of the UK (RUK) account for approximately two thirds of total Scottish exports and have grown more rapidly than exports to the rest of the world (RoW). In cash terms, RUK exports increased by 93.6% from £21.3 billion in 1998 to £41.3 billion in 2013, while RoW exports increased by 39.6%, from £17.5 billion to £24.4 billion in the same period.[70]

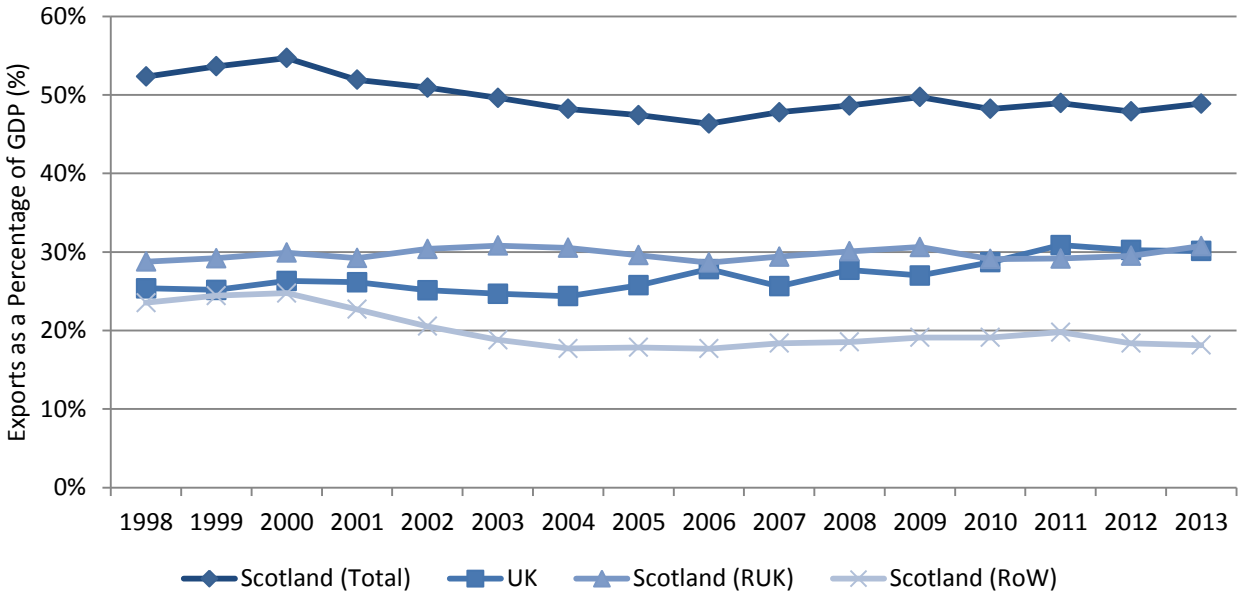
Export intensity

Scotland's export intensity – which measures exports as a percentage of GDP – has also increased in recent years, from 46.3% in 2006 to 48.9% in 2013. However, it remains below its position of 52.3% in 1998 at the start of the data series.[71]

[69] Quarterly National Accounts Scotland (2015). Exports and imports in the National Accounts are estimated on the 'change of ownership' basis.
[70] Quarterly National Accounts Scotland (2015).
[71] Quarterly National Accounts Scotland (2015).

As illustrated in Figure 2.4 this was primarily due to the fall in exports to the rest of the world between 2000 and 2006, following changes in demand and prices of technological goods which had an impact on Scottish exports from the Computer, Electronic and Optical sector, while Scottish exports to the rest of the UK as a percentage of GDP have remained relatively constant over time.

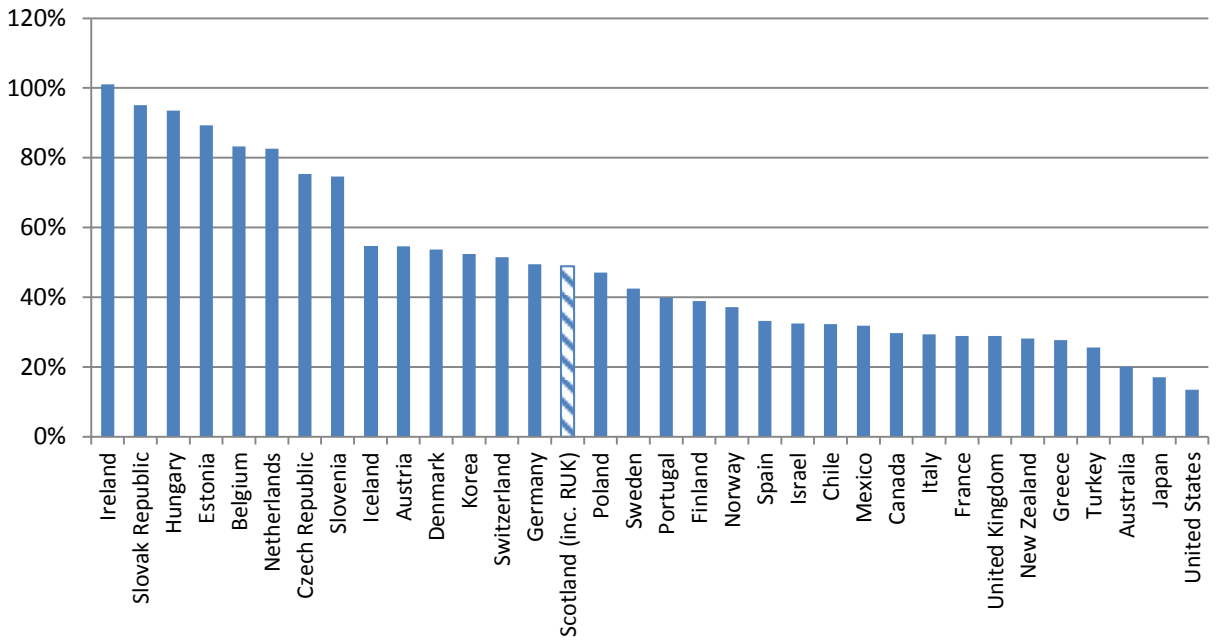
Figure 2.4: Scottish and UK exports as a percentage of GDP, 1998 – 2013 (%)



Source: Quarterly National Accounts Scotland (2014), UNCTAD STAT

When compared to OECD countries, Scotland ranks 16th of 35 in terms of exports as a percentage of GDP in 2013 when including international and RUK exports, compared to the UK's ranking of 29th (Figure 2.5). Smaller countries are expected to have higher propensities to export given the size of their domestic markets. So whilst Scotland performs better than the UK in this ranking, with an export value equivalent to 48.9% of GDP, some other similar sized countries have higher export intensities.

Figure 2.5: Exports as a percentage of GDP, OECD countries and Scottish total exports,[72] 2013 (%)



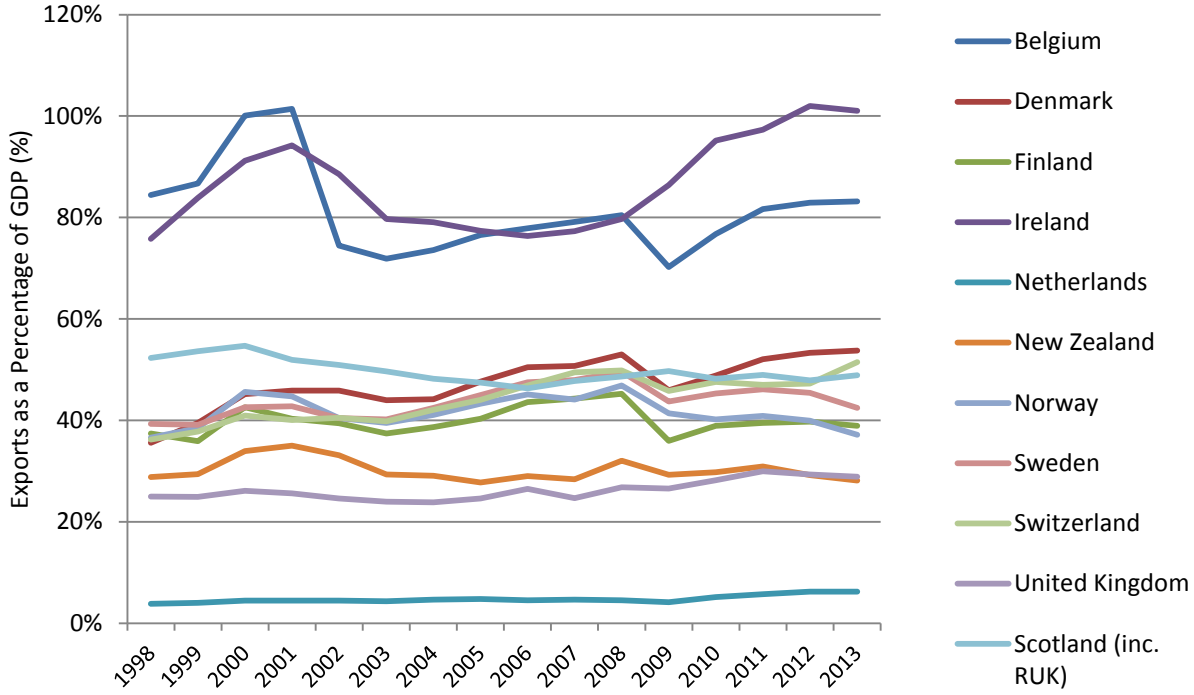
Source: UNCTAD STAT; Quarterly National Accounts Scotland (2014).

As shown in the similarities between the high ranking countries in Figures 2.1 and 2.5, countries with high export intensities also tend to have high import intensities.

Figure 2.6 shows the change in export intensity in selected countries over time. While the export intensities of some countries have remained relatively constant over time, others have increased. For example, the export intensity of Ireland increased from 75.8% in 1998 to 101.0% in 2013 and the export intensity of Denmark increased from 35.6% in 1998 to 53.7% in 2013.[73]

[72] Due to the size of Luxemburg's exports as a percentage of GDP (158.0% in 2013), Luxemburg is excluded from Figure 2.5. However, Luxemburg is included when estimating Scotland's ranking against OECD countries.
[73] UNCTAD STAT (2014). Export statistics for Scotland do not include offshore oil and gas which will impact the data.

Figure 2.6: Exports as a percentage of GDP in selected countries, 1998 – 2013 (%)



Source: UNCTAD STAT, Quarterly National Accounts Scotland (2014)

While this paper draws on measures of international trade based on export and import values, additional measures are being developed to better reflect the value-added in trade across countries. This is particularly important in the context of global value chains. Data is not available for Scotland, but some of the main UK insights from this work are discussed in Box 2.3.

Box 2.3: Global Value Chains and Trade in Value-Added (TiVA)

Increased trade within global value chains means intermediate goods and services often cross borders many times before they are sold as a final good – either in the domestic market or as an export. To avoid double counting the value of goods and in order to understand where a country's competitiveness lies, it is important to consider the value that a country adds (in terms of wages, taxes and profits) to the products it exports within a global value chain.

New measures have been developed which attempt to reflect this. The OECD-WTO TiVA database estimates the value added by 61 countries, including the UK, in their exports and covers 34 industries. The database provides new insight into trade patterns, which can help better understand trade balances and relative strengths.

For example, this measure finds that the UK's domestic value added share of total exports is 77.0%, compared to Germany's 74.5% and France's 74.9% which suggests that UK export production is relatively high value added.

In addition, TiVA better reflects the role of services in adding value to exports. For example, whilst services made up 48.5% of exports from the UK in 2011, they accounted for 67.3% of the value added in exports (OECD-WTO TiVA, 2015).

Although TiVA provides new insights, traditional trade statistics (gross imports and exports) remain important for understanding overall demand in markets and sectors.

Investment

The term investment is used in a number of ways, for example to refer to financial investment, capital investment, or investment in human capital.

The statistical definition of investment used in this paper is Foreign Direct Investment (FDI), a sub-component of financial investment, but investment will also be considered in terms of inward investment projects (see Annex A for full definitions).

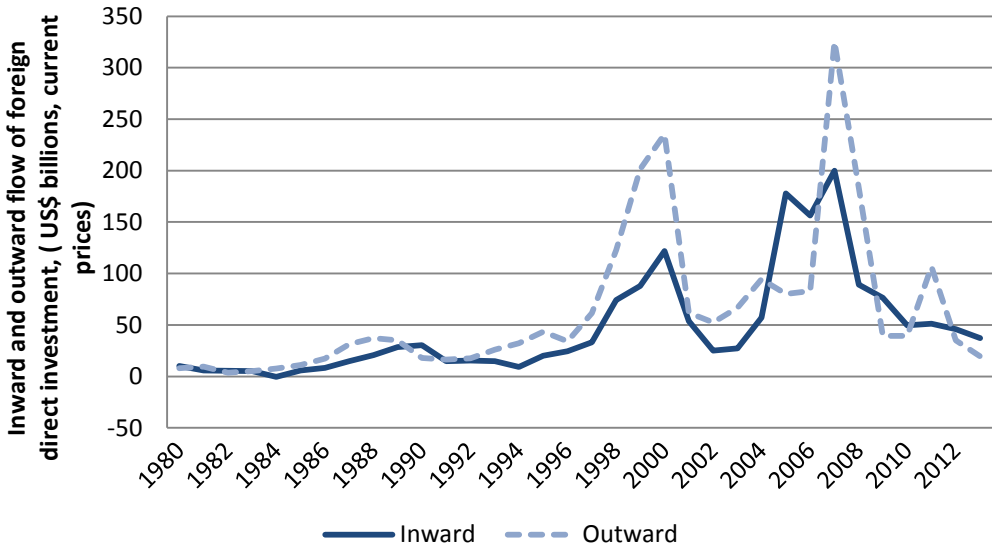
Financial investment

The values of both inward and outward flows of FDI to and from the UK have been volatile over time, rising and falling sharply in the late 1990s and early 2000s, and during the global financial crisis (Figure 2.7).[74]

Outward flows of FDI from the UK were 94.0% lower in 2013 than in 2007 and inward FDI flows fell 81.4% in the same period, due to the global financial crisis and economic downturn. This reflects a wider global trend: the value of global FDI flows fell significantly during the recent financial crisis and inflows of FDI to developed economies remain 57.2% below their 2007 level.[75]

[74] This is partly explained by the volatility in intra-company loans. FDI statistics include equity capital, the reinvestment of earnings and the provision of intra-company loans.
[75] UNCTAD STAT. Foreign direct investment.

Figure 2.7: Inward and outward flows of foreign direct investment in the UK, 1980 – 2013, (US$ billions, current prices at current exchange rates)



Source: UNCTAD STAT

FDI stock is a more stable measure of FDI than annual flows. It primarily reflects historic FDI inflows and demonstrates the long-term interest of foreign investors and their confidence and commitment to the economy.

On this measure the UK is the top country for inward FDI stock in Europe and third in the world after the USA and China. The value of UK inward FDI stock increased by more than 9 per cent in 2014, reaching a record level of £1.065 trillion.[76]

Inward Investment Projects

Another way to consider inward investment is in terms of the number of specific inward investment projects.

Survey evidence suggests that the UK continues to be the top European destination for FDI in terms of project numbers.[77]

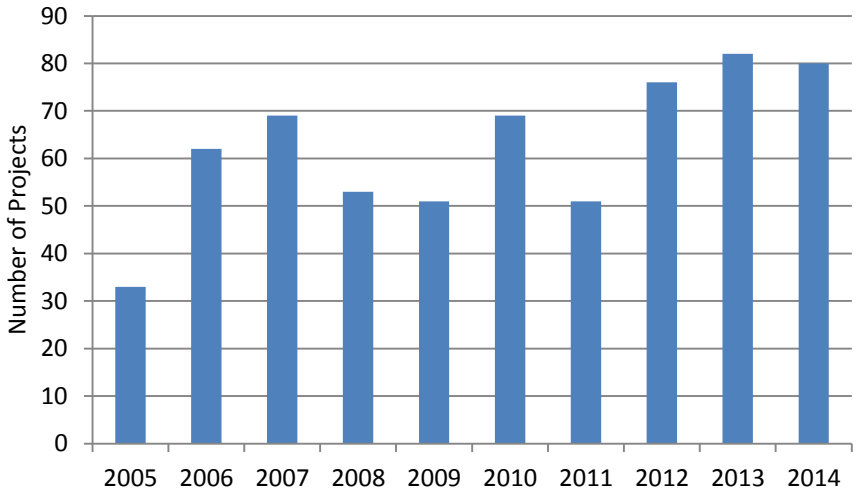
As national statistics for FDI data on Scotland are currently limited, survey evidence is used to provide insight on inward investment performance in Scotland in terms of project numbers.

These indicate that Scotland has performed strongly in recent years. The Ernst and Young Scotland Attractiveness Survey found that Scotland ranked in the top two UK regions outside London for FDI in each year since 2006 in terms of number of FDI projects secured.[78]

[76] UKTI Inward Investment Report 2014/15. Based on OECD estimates.
[77] Ernst & Young UK Attractiveness Survey 2015.
[78] Ernst & Young Scotland Attractiveness Survey 2015.

In 2014 the survey recorded a total of 80 FDI projects coming into Scotland, accounting for 9% of the UK total (see Figure 2.8).[79]

Figure 2.8: Number of FDI projects secured by Scotland in each year, 2005 – 2014



Source: Ernst and Young 2015 Scotland Attractiveness Survey

On average, this survey finds that 3,700 jobs per year are associated with new FDI projects.

It also reports that Scotland has tended to have a high proportion of FDI projects coming from expansion by companies already investing in Scotland rather than new, first-time investors. In 2014 37.5% of projects into Scotland came from new investors, compared to 68% in the UK.

Table 2.1 shows the top ten sources of inward investment in Scotland in the past ten years. The U.S. has been the most important source of inward investment in the past 10 years, accounting for around 40% of total inward investment.

Table 2.1: Percentage of total FDI Projects into Scotland for top ten countries of origin, 2005 – 2014 (%)

USA	France	Germany	Japan	Norway	India	Ireland	Canada	Netherlands	Switzerland
40.7%	8.3%	5.8%	5.4%	3.7%	3.5%	3%	2.9%	2.6%	2.4%

Source: Ernst and Young Scotland Attractiveness Survey 2015.

Another source, the UKTI Inward Investment Report, records a wider range of projects than the Ernst and Young data and includes new investments, expansions (including retentions), mergers and acquisitions, and joint ventures. It reported 119 FDI projects coming to Scotland in 2014/15 (6% of total UK FDI projects), which was associated with 5,474 new jobs.

Scotland is perceived well internationally as a place to invest. The Ernst and Young Attractiveness Survey provides a measure of international perceptions. In its latest report,

[79] Ernst & Young Scotland Attractiveness Survey 2015.

it finds that international investors reported that perceptions of Scotland as a location for basing FDI rose strongly in 2014, possibly linked to a boost in Scotland's profile from hosting high profile international events such as the Commonwealth Games and the Ryder Cup.

The Anholt-GfK Roper Nation Brands Index also finds that Scotland has a strong international reputation. In 2014 Scotland was ranked 17 of 50 nations based on this Index.[80]

[80] The Anholt-GfK Roper Nation Brand Index (NBI) is an annual global survey from GfK Public Affairs & Corporate Communications, which measures the image of 50 nations: http:///www.gov.scot/Publications/2014/12/4339/0

Section 3 – Export Performance

Key Points

This section analyses Scotland's pattern of trade across sectors, markets and companies over time – showing where current strengths lie in international exports and to the rest of the UK.

Whilst trade in general is important for overall economic growth, a diverse profile of exporting markets, sectors, and companies helps to improve resilience of the Scottish economy.

- *Markets*: Traditional markets such as the rest of the UK, European countries and the US dominate Scotland's exports.

- *Sectors*: Scotland has strengths in a variety of sectors, with manufacturing being more important for international exports and services being more important for exports to the rest of the UK.

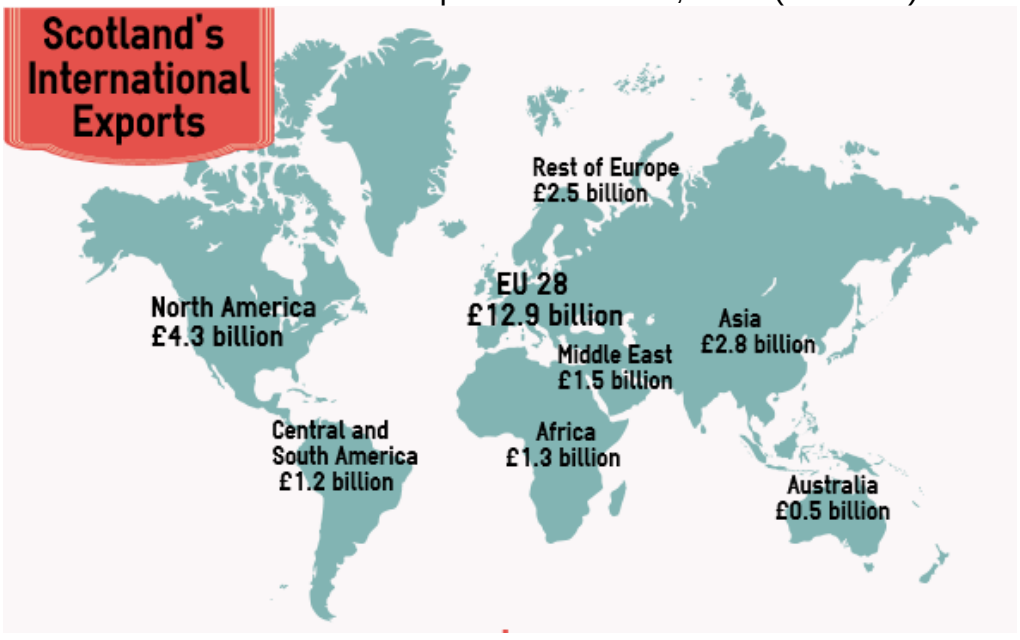
- *Companies*: 100 companies account for around 60% of Scotland's international exports and data suggest the number of manufacturing and the proportion of SME exporters has declined over time.

Export Markets

An important consideration of export resilience is the diversity of export markets. Scotland's biggest trading partner is the rest of the UK, which accounts for two thirds of Scotland's total exports.

Scotland's international exports by region are shown in Diagram 3.1.

Diagram 3.1: Scotland's international export destinations, 2013 (£ billions) [81]



[81] 2013 Global Connections Survey (2015).

Europe is the most important export destination for Scottish exports with all top 10 export markets since 2002 being European, other than the USA, which has been the top single destination for Scottish exports since 2002. In 2013, the EU accounted for 46.3% (£12.9 billion) and the USA for 14.0% (£3.9 billion) of Scotland's international exports.

Scotland's international export markets have remained relatively constant over time (Table 3.1), and while international exports increased from £20.1 billion in 2002 to £27.9 billion in 2013, this was primarily due to an increase in exports in certain key markets. The most important markets accounting for the increase in international sales were the US (+£1.8 billion), Denmark (+£1.0 billion), Norway (+£0.5 billion) and Belgium (+£0.5 billion).[82]

The share of exports going to the BRIC economies – Brazil, Russia, India and China – has not shifted significantly in the last decade. These economies currently account for 4.7% of Scotland's international exports, up slightly from 3.7% in 2002.

Table 3.1 Scotland's top 10 international export markets, 2002 and 2013[83]

	2002		2013	
Rank	**Destination**	**Total Exports (£bn)**	**Destination**	**Total Exports (£bn)**
1	USA	2.15	USA	3.91
2	France	1.93	Netherlands	2.04
3	Netherlands	1.91	Germany	1.95
4	Germany	1.79	France	1.85
5	Italy	1.10	Denmark	1.42
6	Spain	0.91	Norway	1.11
7	Eire	0.80	Belgium	1.00
8	Sweden	0.63	Eire	0.92
9	Norway	0.56	Spain	0.87
10	Belgium	0.53	Italy	0.75

Source: 2013 Global Connections Survey (2015).

Figure 3.1 shows the current destinations of Scotland's exports alongside the average annual growth rate per capita of these destinations between 2005 – 2013. Scotland's largest export markets (as indicated by the size of the circles) have tended to have lower average annual growth per capita than some of the emerging economies, and especially the BRIC economies.

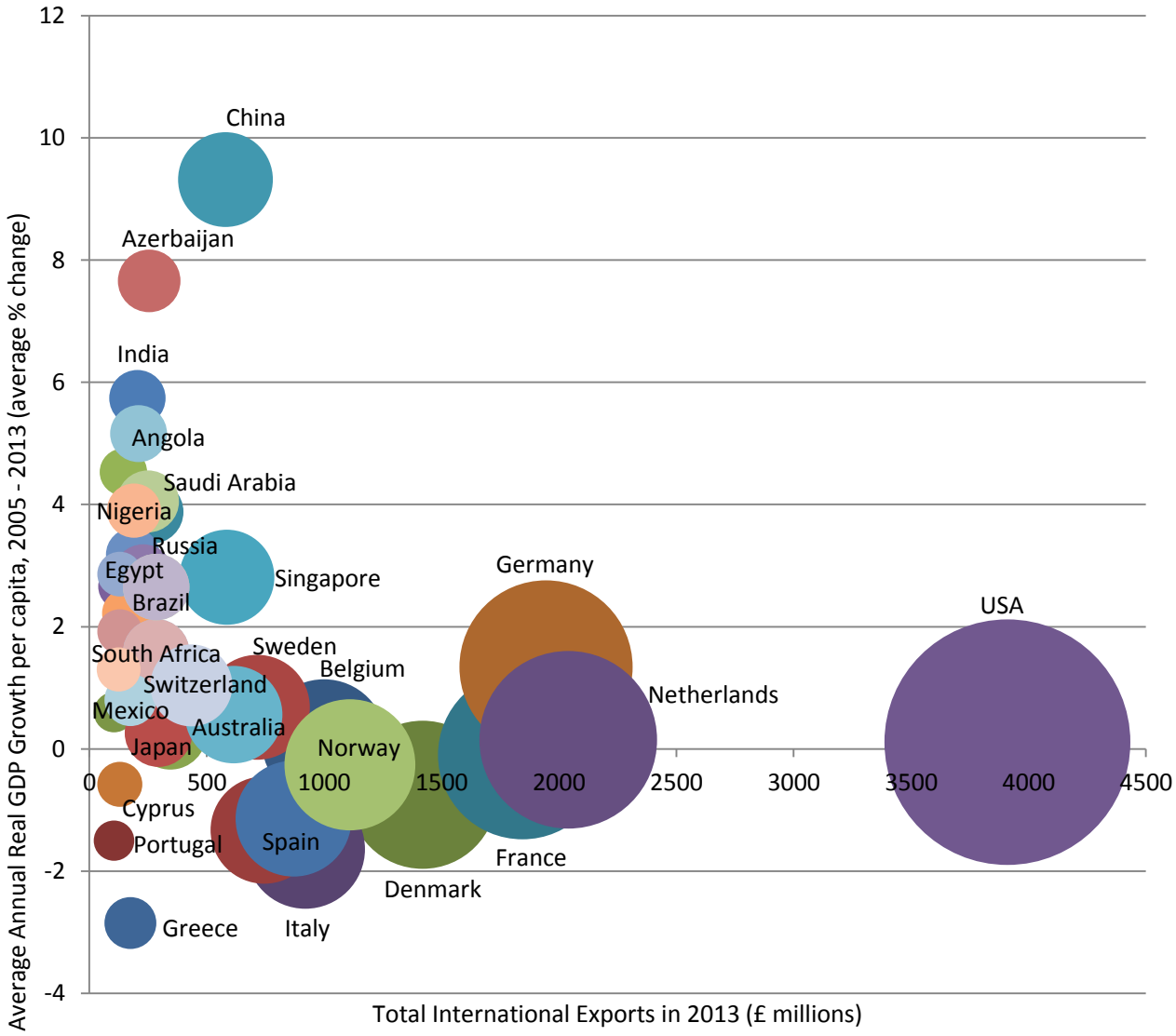
There are growth opportunities in more distant markets such as China, South America, Africa, the Middle East and India, which are new to many Scottish companies. Opportunities to trade in these regions vary considerably, both between different sector niches and in different geographical markets. Achieving success in these markets is more

[82] 2013 Global Connections Survey (2015). Exports in the Global Connections Survey are measured on a 'physical movement of goods' basis meaning the data is not consistent with Scotland's National Accounts (where exports are measured on a change of ownership basis).

[83] Although the Netherlands and Belgium are consistently reported in Scotland's top trading partners, these countries contain key ports and many of these goods are for onward supply to other countries, which the data does not distinguish between.

challenging and long-term for some Scottish companies, with a number of issues including distance and connectivity to market and differences in business regulatory regimes and culture.

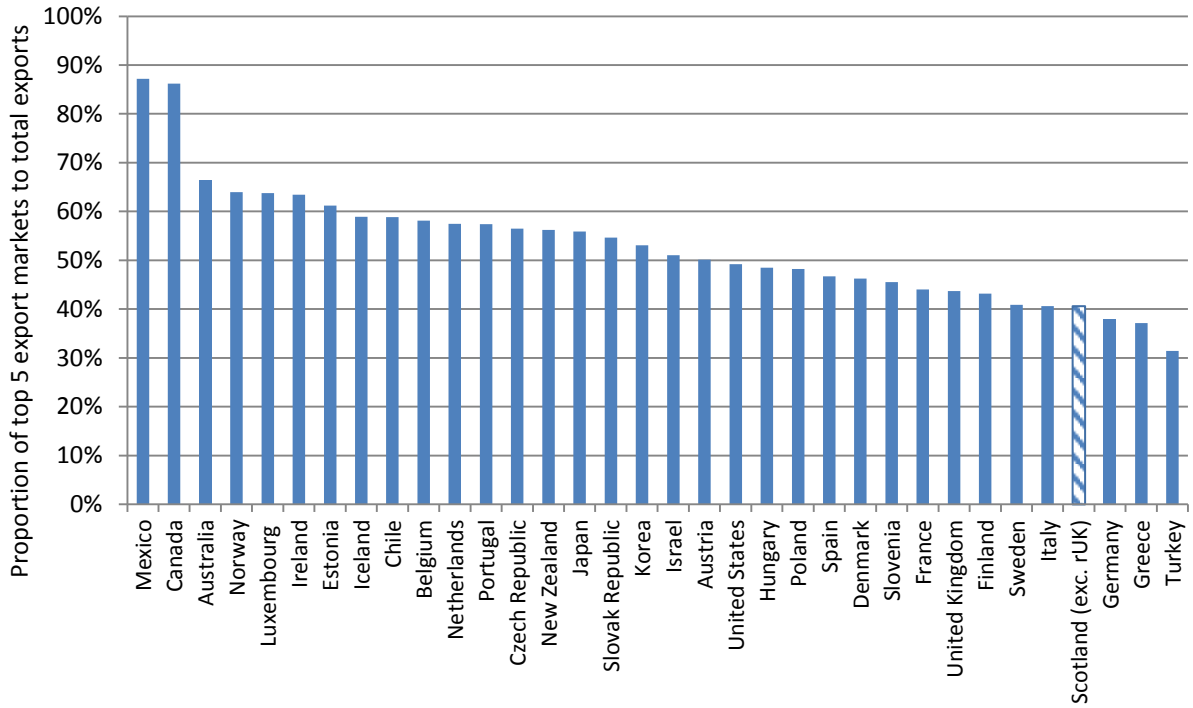
Figure 3.1: Scotland's international export markets in 2013 and the average annual growth rate per capita of these markets.



Source: 2013 Global Connections Survey (2015), UNCTAD STAT

Excluding the rest of the UK, Scotland's top 5 international export markets accounted for 40.6% of all international exports in 2013, which is a lower proportion than most OECD countries in 2013 (Figure 3.2), indicating a high degree of diversity in export markets.

Figure 3.2: Proportion of exports to top 5 international markets to total exports in OECD countries and Scotland in 2013 (%)

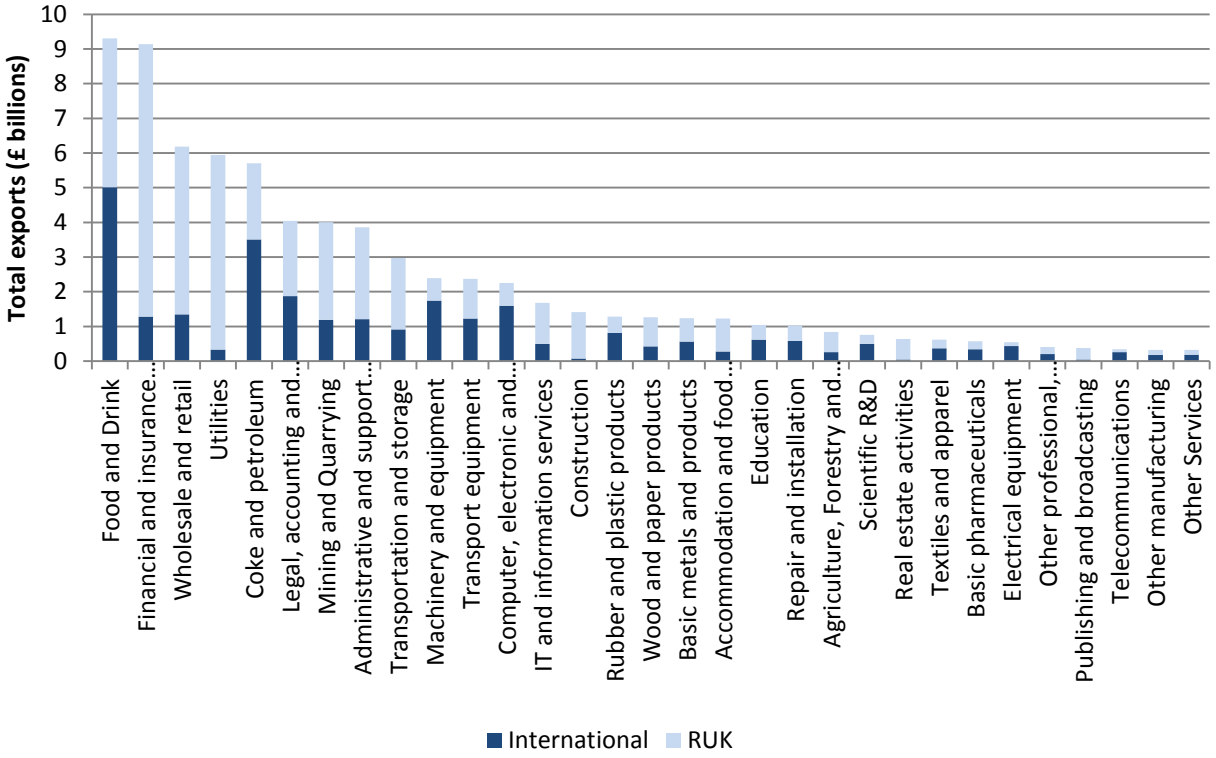


Source: UNCTAD STAT, HMRC Regional Trade Statistics (2014). Data is for merchandise trade only.

Sector Performance

Scotland has existing strengths across a number of sectors and industries. Total export sales across sectors to the rest of the UK and internationally are shown in Figure 3.3.

Figure 3.3: Sector breakdown of Scotland's international and RUK exports, 2013 (£ billions)[84]



Source: 2013 Global Connections Survey (2015)

Manufacturing remains a much more export-intensive industry. While accounting for 11.2% of output, and 7.1% of employment,[85] manufacturing accounts for 39.0% of Scotland's total exports.[86]

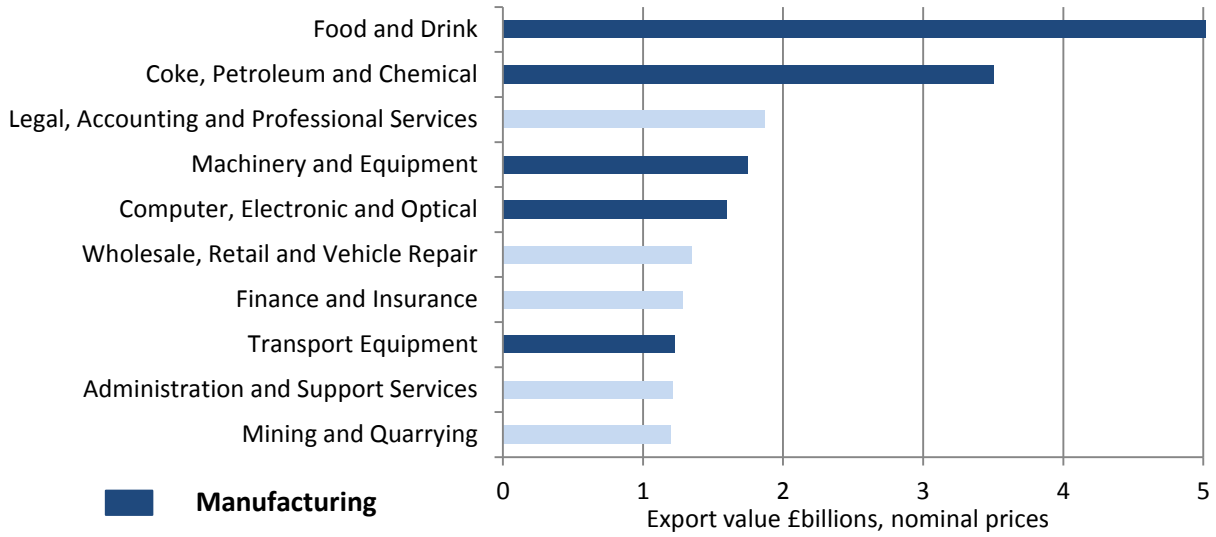
Manufacturing is more important for international exports while exports of services dominate RUK trade. 60.2% of international exports come from manufacturing sectors, compared to 26.2% of RUK exports. Exports from service sector made up 51.4% of RUK exports in 2013, compared to 33.1% of international exports.[87]

International Exports by Sector

The top 10 international export sectors for Scotland in terms of value of sales in 2013 are shown in Figure 3.4.

[84] The main source for sector exports in this paper is Scotland's Global Connections Survey which provides coverage across all sectors. However, alternative data sources such as the HMRC Regional Trade Statistics and estimates for particular sectors, such as the ONS Travel Trends and Great Britain Tourism Survey, are also available.
[85] Office for National Statistics (2014). 2013 Business Register and Employment Survey.
[86] 2013 Global Connections Survey (2015).
[87] 2013 Global Connections Survey (2015). The remainder was attributed to Agriculture, Mining, Utilities and Construction.

Figure 3.4: Top 10 international export sectors by value, 2013 (£ billions, nominal prices)



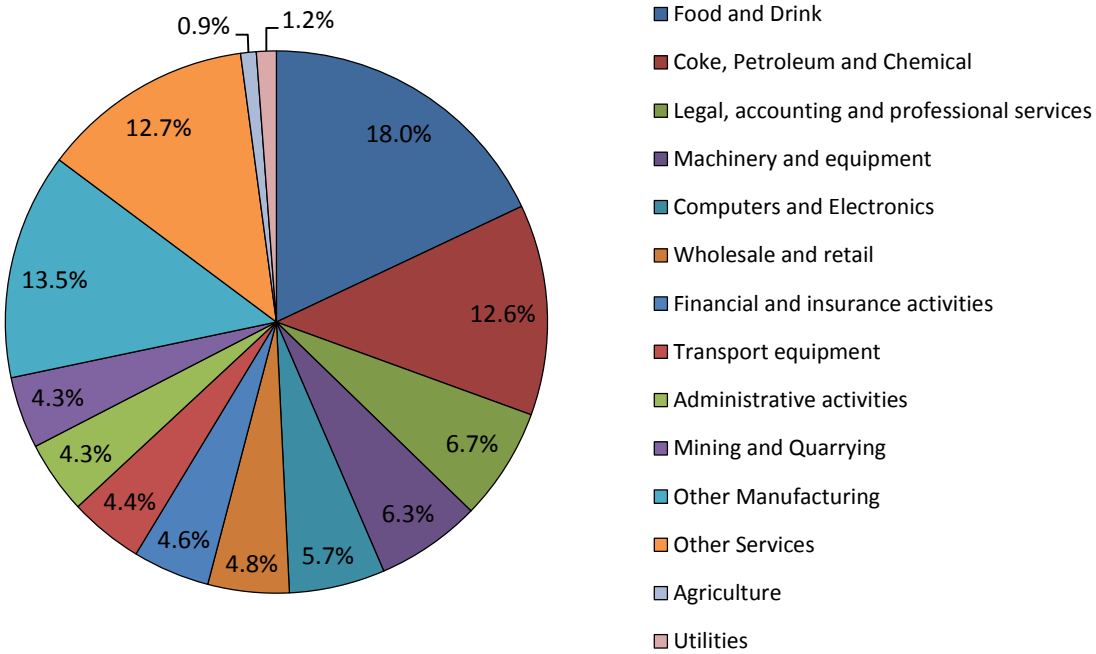
Note: Within sectors, international tourist expenditure in Scotland is £1.7 billion.

Source: 2013 Global Connections Survey (2015).

Food and Drink is the largest export sector (with £5.0 billion of exports in 2013), accounting for 18.0% of all international exports, of which whisky is 85.0%. The second largest exporting sector is Coke, Petroleum and Chemical exports (with £3.5 billion, or 12.6% of total exports). These two sectors have been the top two exporting sectors in each year since 2005.

The percentage of total international exports accounted for by the top 10 sectors (and the remainder) is shown in Figure 3.5.

Figure 3.5: Percentage of total international exports accounted for by each sector, 2013 (%)

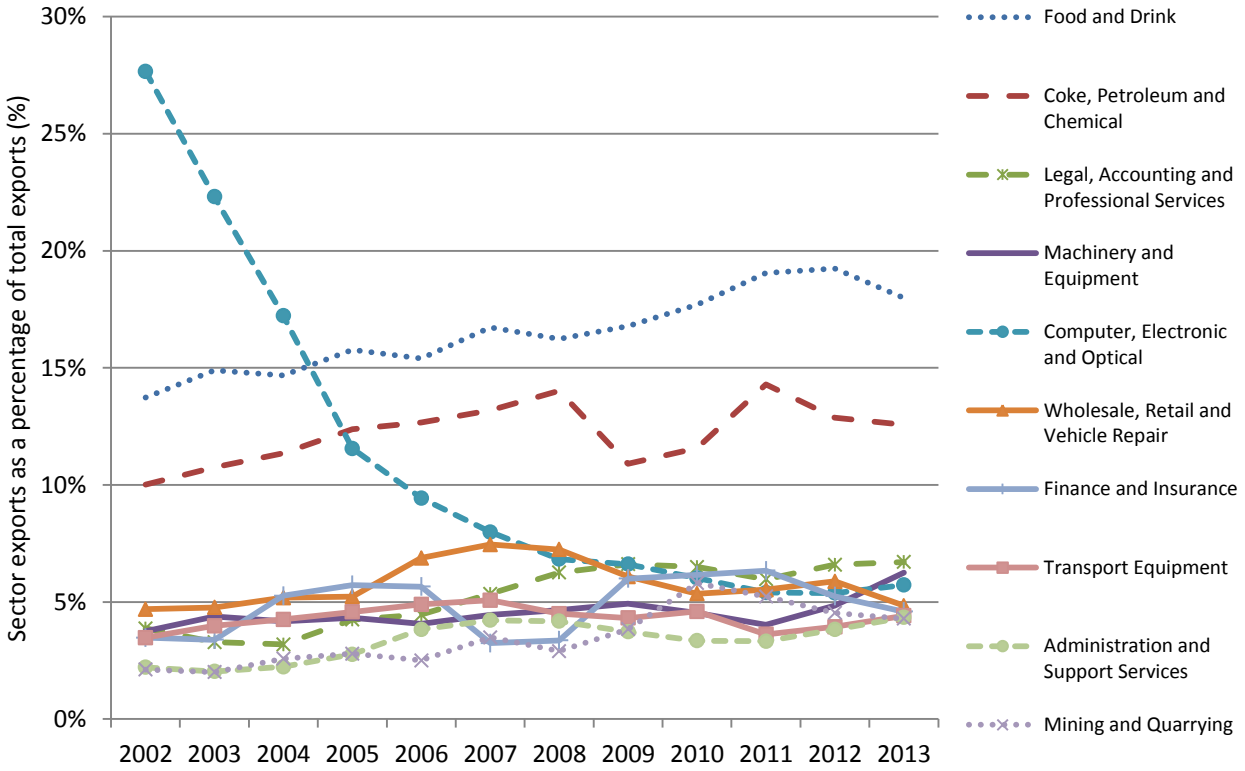


Source: 2013 Global Connections Survey (2015)

Within sectors tourism also generates significant overseas income for the Scottish economy. In 2013 total estimated spending by tourists from the rest of the world in Scotland was £1.7 billion.[88]

The change in composition of exports from these sectors is shown over time in Figure 3.6. The most pronounced changes over time have been the fall in Computer, Electronic and Optical exports (from 27.7% of total exports in 2002 to 5.7% in 2013) and the rise in Food and Drink (from 13.7% of total exports in 2002 to 18.0% in 2013).

Figure 3.6: Scotland's international exports in selected sectors as % of total exports, 2002 – 2013 (%).



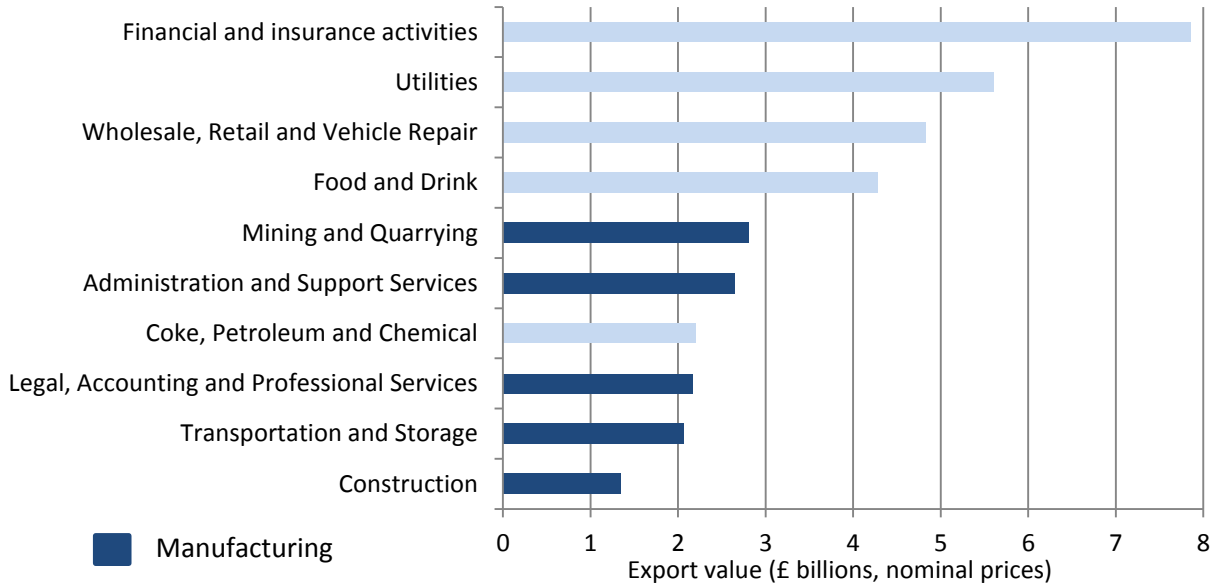
Source: 2013 Global Connections Survey (2015).

RUK exports by sector

The top 10 RUK export sectors for Scotland in terms of value of sales in 2013 are shown in Figure 3.7.

[88] ONS Travel Trends 2013.

Figure 3.7: Top 10 RUK export sectors by value, 2013 (£ billions, nominal prices)



Note: Within sectors, RUK tourist expenditure in Scotland is £2.9 billion.

Source: 2013 Global Connections Survey (2015).

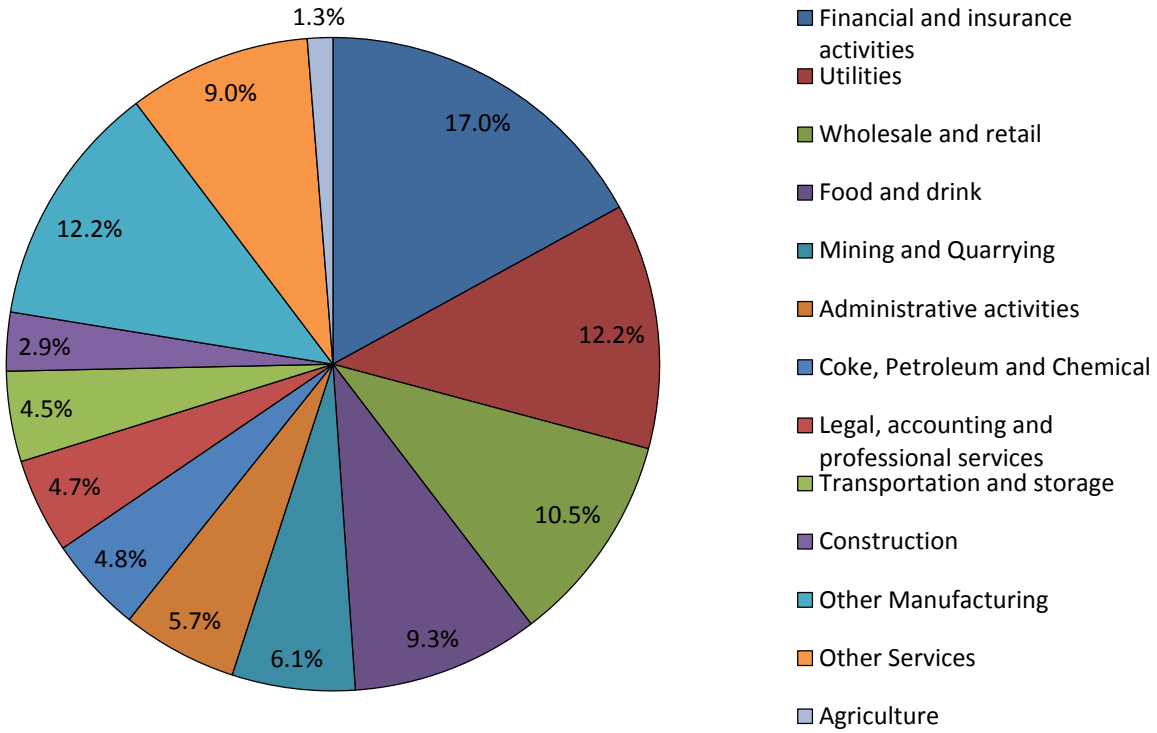
As shown in Figures 3.7 and 3.8, the top exporting sector to the rest of the UK in 2013 was Financial and Insurance services – with exports totalling £7.9 billion, 17.0% of total RUK exports – followed by Utilities with exports of £5.6 billion (12.1% of total RUK exports) and Wholesale and Retail of goods with exports of £4.8 billion (10.5% of total RUK exports).[89] In addition, 8 of the top 10 sectors exporting to the rest of the UK are services.

Within sectors, tourism from the rest of the UK is also important for the Scottish economy. The value of tourism expenditure by RUK visitors in Scotland was £2.9 billion in 2013.[90]

The percentage of total RUK exports accounted for by the top ten sectors (and the remainder) is shown in Figure 3.8.

[89] Sector breakdowns are based on SIC (2007) codes. Utilities include SIC (2007) codes 35 – 39 which includes electricity, gas steam and air conditioning supply, in addition to water supply, sewerage and waste management. Wholesale, retail and vehicle repair includes SIC (2007) codes 45 – 47 and includes all wholesale activities (food and drink, household and recreational goods etc).
[90] Great Britain Tourism Survey (2013).

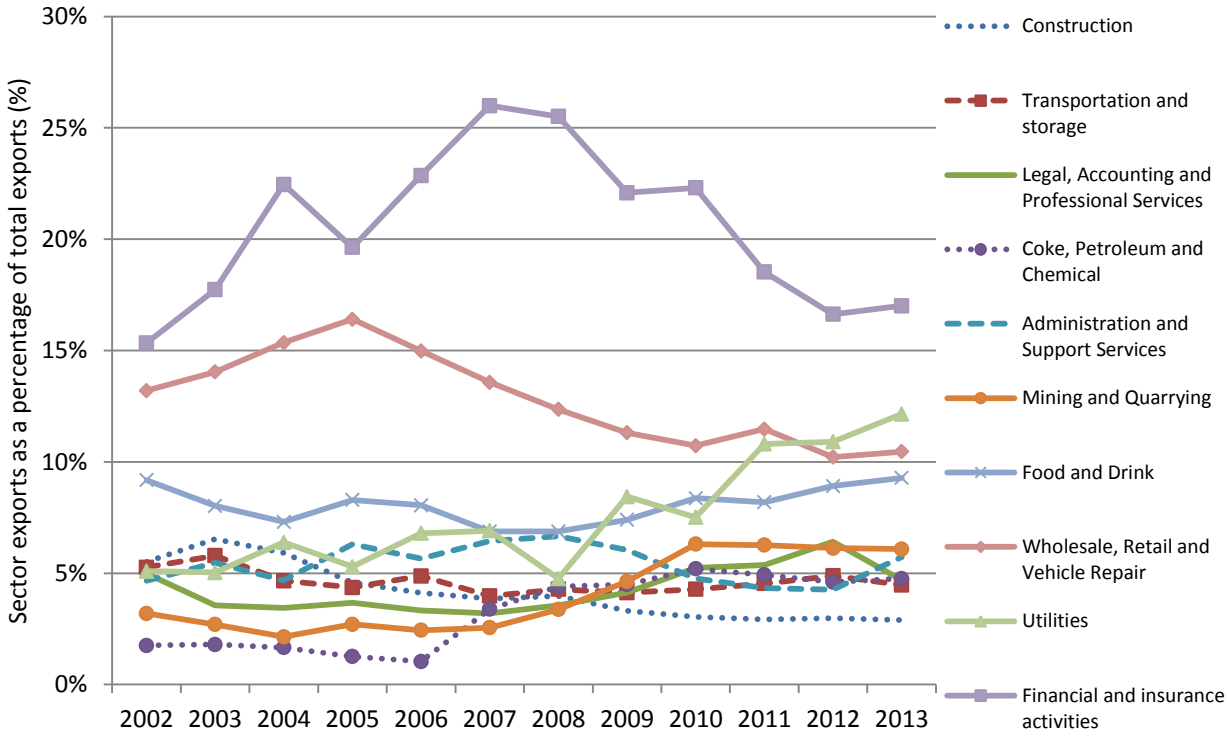
Figure 3.8: Percentage of total RUK exports accounted for by each sector, 2013 (%)



Source: 2013 Global Connections Survey (2015).

The change in composition of RUK exports in these sectors between 2002 and 2013 is shown in Figure 3.9. As a percentage of total exports, the greatest rise has been seen in Utilities – driven by a rise in renewable generation – where RUK exports have increased from 5.1% of total RUK exports in 2002 to 12.1% in 2013. As illustrated, the share of other sectors has changed only slightly over the period.

Figure 3.9: Scotland's RUK exports in selected sectors as % of total exports, 2002 – 2013 (%).



Source: 2013 Global Connections Survey (2015)

Export Performance - Companies

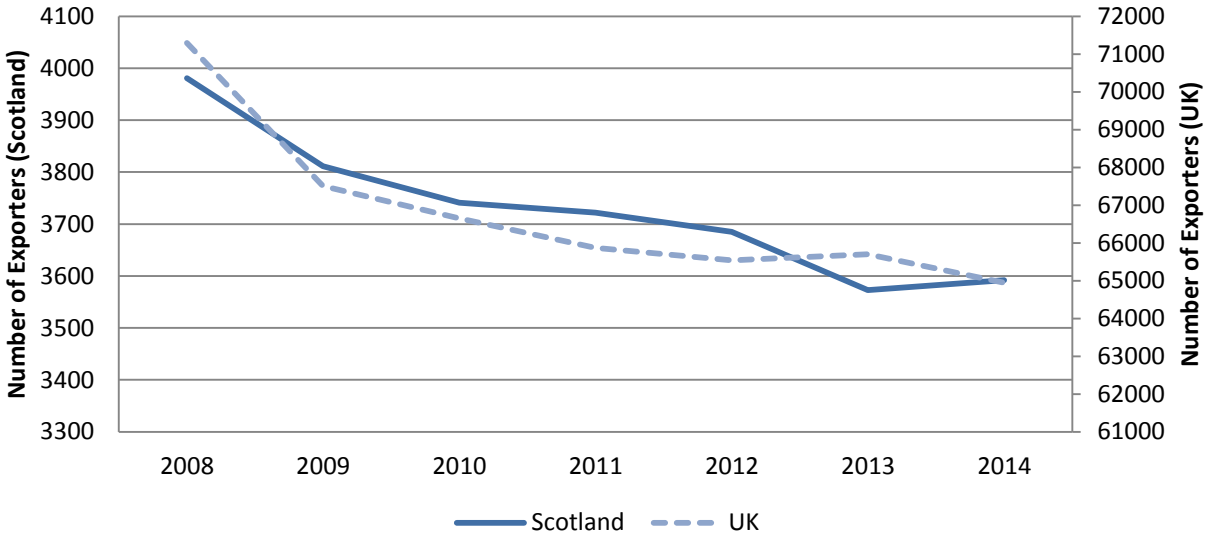
A third factor in considering export strength and resilience is the number of companies exporting. In addition to increasing the value of exports, increasing the number of exporters in Scotland is important for boosting growth and resilience in the Scottish economy.

A small number of companies account for the majority of exports – in 2013, around 60% of the total value of Scottish exports was accounted for by 100 companies[91]– and the need to increase the number of exporting businesses in Scotland was highlighted by the Energy, Economy and Tourism Committee in its May 2015 report.[92]

While there is no definitive data source for the total number of exporters in Scotland, international exporting data for manufacturing businesses is available from HMRC (Figure 3.10). Given that this data only records manufacturing businesses this is an underestimate of the total, but nonetheless gives an indication of exporter trends.

[91] Global Connections Survey. There is no definitive data for the number of exporters, but this provides a guide.
[92] http://www.scottish.parliament.uk/S4_EconomyEnergyandTourismCommittee/Reports/eer-15-05w.pdf

Figure 3.10: HMRC estimation of the number of Scottish manufacturing exporters



Source: HMRC UK Regional Trade Statistics (2015)

The data suggests that the number of manufacturing exporters in Scotland has declined since the start of the series in 2008. The number of manufacturing exporters in the UK as a whole has seen a similar decline and this may in part reflect the effects of the economic recession and a slow recovery in exporting firms.

This trend may be partly explained by the change in the number of manufacturing firms over the period. While the total number of manufacturing firms in Scotland has increased over the period, this is primarily due to increases in the number of manufacturing firms with 0 employees, while the number of manufacturing firms with 1 or more employees has decreased over the period (although the trend has been volatile over time)[93].

The Department for Business, Innovation and Skill's Small Business Survey[94] provides additional evidence on exporting Small and Medium Enterprises (SMEs)[95]. SMEs are an important part of the Scottish economy, accounting for 99.3% of all private sector enterprises, 54.8% of private sector employment and 37.9% of private sector turnover[96], and as discussed in Box I.1, SMEs that export tend to grow faster and are more innovative. Thus understanding the export performance of SMEs is also important to understanding the drivers of economic prosperity.

In 2013 SMEs accounted for 44.6% of the value of Scotland's international exports and 40.0% of RUK exports.[97]

12% of SMEs in Scotland sell goods and services internationally. In comparison, 19% of UK SMEs sell goods or services abroad[98]. Whilst it is difficult to make direct international

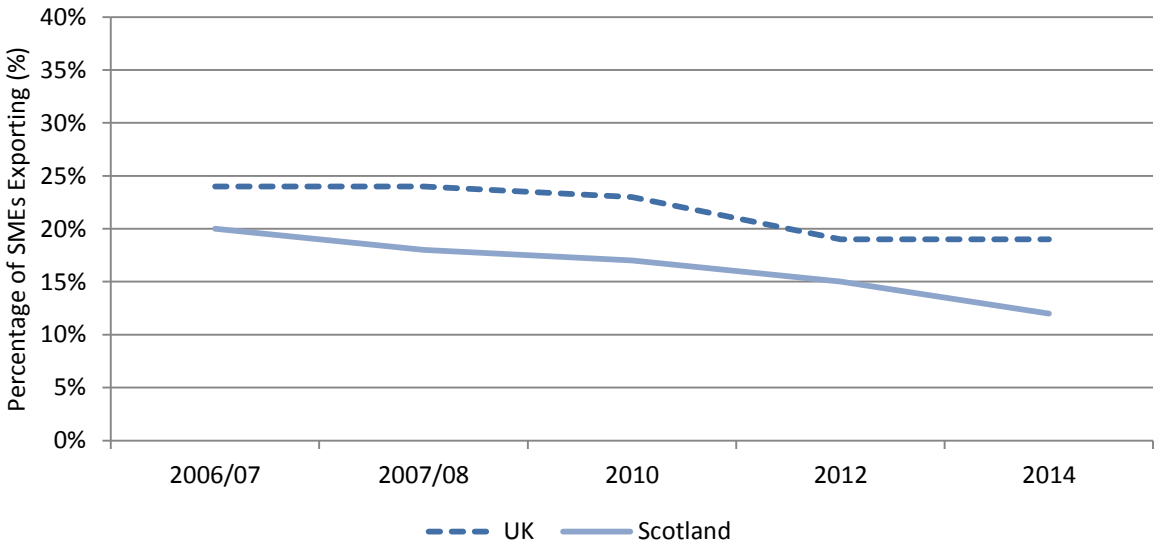
[93] Scottish Government (2014). Businesses in Scotland 2014.
[94] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414963/bis-15-151-small-business-survey-2014-sme-employers_v1.pdf
[95] Small and Medium Enterprises are defined as firms with 0 – 249 employees.
[96] As of March 2014. Scottish Government (2014). Businesses in Scotland 2014.
[97] 2013 Global Connections Survey (2015).
[98] Small Business Survey 2014.

comparisons, this compares to 32% of Nordic SMEs which stated they were exporters between 2006 – 08.[99]

This lower figure for international SME exporters from Scotland will partly reflect that the rest of the UK is the most important export destination for Scotland's total exports. When SMEs exporting to the rest of the UK are considered the proportion of exporters rises to 38%.[100]

Data from the Small Business Survey however shows that the percentage of SMEs exporting in both the UK and Scotland has declined in recent years, from 20% in 2006/07 to 12% in 2014 (Figure 3.11). In addition, only 3% of firms who do not currently export are planning to do so in the next 12 months[101].

Figure 3.11: Percentage of SMEs in Scotland and the UK selling goods or services outside the UK (%)



Source: Small Business Surveys

99 http://ec.europa.eu/enterprise/policies/sme/market-access/internationalisation/index_en.htm#h2-3 Comparable data for Scotland is not available. However, data for the period 2007 – 08 suggests that around 18% of Scottish SMEs were exporters. The figure excludes sole traders. (Source: Scottish Government Annual Survey of Small Business' opinions 2007/08).

100 Small Business Survey 2014.

101 Small Business Survey 2014.

Section 4 – Boosting Trade and Investment

Key Points

This section considers the factors which influence trade and investment performance, and the role for government in helping to create the right conditions to boost trade and investment performance.

- Export performance is influenced by several factors including product mix, markets, export barriers, competitiveness, information and networks, and business support.

- Economic fundamentals, such as good infrastructure and a skilled workforce, are the primary determinant of where to locate FDI, with financial incentives of secondary importance.

- Embedding supply chain linkages with the domestic economic is important to realising the long-term benefits of inward investment.

- The role of the private sector is central. However, governments can also have an important role in helping to provide the right environment for promoting export and investment performance, for example through providing support and advice to companies and ensuring that the key economic fundamentals such as a skilled workforce, good infrastructure and connectivity are in place.

Factors that influence trade and investment performance

Export Performance

A country's overall export performance is influenced by several factors, including:[102]

- The products and services it exports;

- Export markets – including the growth rate and competition in these markets;

- Export barriers (tariff and non-tariff) – impacted by Trade Agreements;

- Competitiveness of exports[103]– this measures how competitive a country is against other exporters and includes costs, relative exchange rates,[104] and non-price factors, including quality, product specification, speed of delivery and service;

- Information – this includes both market information and the networks required to export successfully; and,

- Business support for exporting, Research and Development and innovation.

[102] For a full review of the literature on the determinants of export performance, see Lages (2000). 'A Conceptual Framework of the Determinants of Export Performance: Reorganising Key Variables and Shifting Contingencies in Export Marketing.' Journal of Global Marketing, 13 (3): 29 – 45.
[103] Department for Business, Innovation and Skills (2011). International Trade and Investment – The Economic Rationale for Government Intervention.
[104] A Bank of England bulletin looks at the impact of movements in sterling on UK trade: http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qb110401.pdf

At the firm level, starting to export and exporting successfully is related to a number of organisational characteristics such as productivity, innovation,[105] workforce skills and international experience.[106]

While studies show certain firm characteristics are linked to exporting success, there are a large number of firms with similar characteristics not exporting, suggesting there may be other barriers to exporting.[107] The barriers faced by Scottish firms to exporting and the type of assistance required to improve export performance are discussed in Box 4.1.

[105] Golovko, E. and G. Valentini (2011). 'Exploring the complementarity between innovation and export for SMEs' growth', Journal of International Business Studies, 42, 3, p. 362-380.
[106] Love, J.H. and S. Roper (2013). SME innovation, exporting and growth: A review of existing evidence. In *White Paper No. 5*. Warwick Business School: Enterprise Research Centre.
[107] Navaretti et al. (2010).

Box 4.2: Barriers to exporting for Scottish firms

Barriers to future international business development

Tables 4.1 and 4.2 show the barriers to future international business development by Scottish firms that are currently exporting and those that are currently not. The barriers are broadly similar in the two groups, though the non-exporters report products or services being unsuitable for exporting as the largest barrier, while exporters report exchange rates to be the largest barrier.

Table 4.1: Percentage of all firms reporting barriers to future International Business Development - Non-Exporter (%)

Barrier	% of firms responding to question
Products/services unsuitable for exports	45%
Transport costs	19%
Lack of resources/management time	17%
Legislation and standards	13%
Setting competitive prices	10%
Lack of market information	10%

Source: 2013 Global Connections Survey (2015)

Table 4.2: Percentage of all firms reporting barriers to future International Business Development – Exporter (%)

Barrier	% of firms responding to question
Currency/exchange rates	34%
Lack of resources/management time	32%
Transport costs	29%
Setting competitive prices	26%
Legislation and standards	24%
Lack of market information	18%

Source: 2013 Global Connections Survey (2015)

Assistance required to improve international performance

Table 4.3 shows that assistance identified that would be helpful to improve international performance by exporters tends to be related to information or establishing international networks.

Table 4.3: Percentage of all firms who reported assistance that would help to improve International Performance – Exporter (%)

Assistance	% of firms responding to question
Introduction to Overseas Customers	42%
Exhibiting at Trade Fairs	39%
International Marketing	34%
Market Research	33%
Introduction Agents /Distributors / JV partners	33%
Information Business Opportunities	29%

Source: 2013 Global Connections Survey (2015)

Investment Performance

There are several reasons why firms decide to invest abroad – this includes improved market access, a desire to minimise production costs by taking advantage of specialisation, lower labour costs and economies of scale, and accessing knowledge, technology and scientific expertise in the host country.

Evidence suggests that strong economic fundamentals are the most important determinant of where to locate foreign investment and the literature identifies a number of factors which are associated with higher flows of inward investment. These include domestic market size and industry performance, country openness,[108] skill levels and income, infrastructure, macroeconomic stability,[109] and cultural and physical proximity between countries.[110] In addition, evidence suggests that for research-intensive businesses, strong patent systems and the local presence of high quality university research are also important factors.[111]

While comparable data is not available for Scotland, the World Economic Forum's Global Competitiveness Report 2014-15 ranks the UK 9th in terms of global competitiveness which is made up of several subcomponents, including an efficient labour market (5th), a high level of financial development (15th). The difficulty of accessing loans remains the most problematic factor for doing business (82nd). The UK also ranks 12th for quality of institutions and 10th for quality of infrastructure.[112]

The ease of doing business is also an important consideration for foreign firms. The World Bank ranks the ease of doing business in each country, with a high ranking meaning the regulatory environment of the country is more conducive to starting and operating a business in that country. While Scotland is not ranked in this data, the United Kingdom is ranked 8th overall.[113]

Foreign investment may also be attracted by specific incentives offered by host countries, such as lower taxes or targeted grants. However, research undertaken by the World Bank suggests that these are secondary to economic fundamentals[114]. In addition, investors who are primarily attracted by financial incentives are more likely to relocate if better incentives are offered elsewhere.[115]

A key challenge in boosting investment performance is attracting high value investment – this includes investment that brings high value added jobs and new technology or knowledge. It is also important to embed wider benefits from inward investment and increase resilience by building supply chains (see Box 4.2).

[108] Driffield, N.L. and Munday, M.C. (2000) 'Industrial performance, agglomeration, and foreign manufacturing investment in the UK.' Journal of International Business Studies, Vol. 31(1) pp.21-37.
[109] OECD (2002).*The Economics of International Investment Incentives*.
[110] Driffield et al. (2013). "How attractive is the UK for future manufacturing foreign direct investment?"
[111] Thursby and Thursby (2006). Here of There? A Survey of Factors in Multinational R&D Location, Report to the Government-University, Research Roundtable.
[112] World Economic Forum (2014). The Global Competitiveness Report, 2014-15.
[113] World Bank (2015). Ease of doing business index. The rankings measure the ease of doing business across a range of indicators: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. The city analysed for the United Kingdom is London.
[114] World Bank (2003). "Tax Incentives: Using tax incentives to attract FDI."
[115] OECD (2002). *The Economics of International Investment Incentives.*

Box 4.2: Inward investment and supply chains

Embedding supply chain linkages with the domestic economy is important to realising the long-term benefits of inward investment. The potential spillovers that can occur when knowledge or technology are transferred between or within industries from an international to domestic firm are important considerations in promoting inward investment.

Positive spillover effects can occur through competition effects, demonstration effects, labour mobility, and through links with suppliers and customers and can increase the productivity of domestic firms. Spillovers are expected to be concentrated regionally, given the limits on labour mobility and transportation costs, and depend on domestic firms having the absorptive capacity necessary to internalise them (Harris and Li, 2014, Investigation into the links between internationalisation and firm performance).

Negative spillover effects can also occur, especially if the international firm is producing for the domestic market which can crowd out domestic firms and lead them to produce less, reducing their productivity. The balance of the different spillover effects will determine if the overall productivity effect is positive, negative, or neutral.

Spillover effects are difficult to quantify and the various studies in the area tend to measure them indirectly and the overall findings present a mixed picture. Harris and Li (2014) find that foreign-owned manufacturing firms can have a beneficial spillover effect on the productivity of UK-owned manufacturing firms not engaged in overseas investment. However, no conclusive results are found for spillover effects in service sector firms.

Evaluating the impact of inward investment on the Scottish economy, Gillespie et al. (2000) find that efficiency spillovers have a substantial positive impact on the regional economy and particularly on regional GDP.

Scotland's Economic Strategy sets the aim to look at particular areas of the Scottish economy where supply chain linkages could be strengthened and explore options to better exploit these linkages and ensure that local businesses benefit.

Role for Government

While the factors discussed above are shown to influence trade and investment performance, there are instances where market failures and other barriers to exporting or investment mean there is also a strong role for Government support in this respect.

Governments have a role to play in ensuring the economic fundamentals to promote trade and investment performance are in place and can act to reduce the barriers to free trade and investment, through negotiating well-designed trade agreements and providing market information. The EU's role in trade agreements was discussed in Section 1.

Entering new markets, either by exporting or foreign direct investment, is associated with uncertainty and a lack of information can lead firms to overestimate the potential risks or underestimate the potential benefits. This, in addition to other barriers such as legal and regulatory issues, provides a rationale for government support for trade and investment.

Acquiring necessary information about overseas markets is costly and time-consuming, as is establishing and maintaining the international links and networks necessary to successfully enter these markets. These barriers can have an adverse impact both on the number of Scottish firms exporting and on foreign investors' decisions to locate investment in Scotland. A paper by the Department for Business, Innovation and Skills found that there are a number of roles government can play to reduce these barriers, including:[116]

- Providing market information;
- Strengthening the networks required by businesses to gain access to overseas contacts and opportunities and which enable the flow of knowledge, especially in culturally distant markets; and,
- Providing political and diplomatic support which can help businesses overcome barriers to accessing markets.

[116] Department for Business, Innovation and Skills (2011). Trade and Investment – The Economic Rationale for Government Intervention.

Annex A: Trade and Investment Definitions

Trade definition

International trade is the economic exchange of goods and services between residents and non-residents of a country – imports and exports – and includes both final and intermediate goods and services. Exports also include sales of goods and services to non-residents while they are in a country (i.e. inward tourism) and imports include purchases by residents while in a foreign country (i.e. outward tourism).

Analysis of Scotland's trade performance in this paper considers both international trade and trade with the rest of the UK. International comparisons are also included, where possible. However, given the pattern of trade with the rest of the UK, such comparisons need some care in interpretation.

Statistical investment definition

Financial investments are transactions where money or shares are transferred to an enterprise to add to or acquire a lasting interest that gives the investor managerial influence (10% equity or more).

Financial investments can be domestic – where a UK resident invests equity in a UK company – or international – where a foreign resident invests equity in a UK company (i.e. FDI).

FDI can be measured in terms of annual flows or stocks.