

Transporting Scotland's Trade 2020 edition

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Executive Summary

This year's *Transporting Scotland's Trade* is set against the backdrop of the Covid-19 pandemic that brought changes of an unprecedented scale to transport, trade and livelihoods in Scotland and across the world. The UK also formally left the EU on the 31st January 2020 and under the agreed terms of exit (the Withdrawal Agreement) the UK entered a transition period lasting until 31st December 2020. During this period the key rules affecting trade remain unchanged and therefore the full impact of EU exit on trade is not expected to be felt until after the transition period ends; and will depend on the precise terms of any deal on the future EU-UK relationship which the two sides are able to agree and ratify.

With these two phenomena setting the scene, this 2020 edition¹ of Transporting Scotland's Trade provides a summary of Scotland's key exports and imports of goods; largely presenting the picture before the pandemic and associated lockdown. However, more recent data on the movement of goods to, from and within Scotland is analysed for comparison, and as an early indication of the impact Covid-19 has had thus far. An overview of some of Scotland's key transport hubs and trading partners is also presented. Below is a summary of key highlights from each chapter contained within this report:

Scotland's Trade

- Scotland traded² (imports and exports) over £57.3 billion worth of **goods** in 2019, 59% of which were exports. Of the £33.8 billion worth of goods exports destined for international markets, £16.7 billion worth (49%) went to the EU.
- The top 5 international destinations for Scottish goods exports in 2019 were the Netherlands, China, USA, Germany and France.
- Scotland's key exports include 'Petroleum, petroleum products & related materials',
 'Beverages' and 'Power generating machinery & equipment' these three commodity groups combined accounted for 60% of the value of Scottish goods exports in 2019.
- Including services, intangibles, and the rest of the UK, Scotland's trade³ (imports and exports) was over £180 billion in 2019.

Transporting Scotland's Freight

In 2019, total freight (road, port and air) carried in Scotland was approximately 202 million tonnes. Road⁴ freight – including journeys that originated and had a final

¹ Previous editions can be accessed on the Transport Scotland website.

² HMRC Regional Trade Statistics includes all merchandise trade within the scope of the UK's Overseas Trade Statistics. It therefore excludes trade in services (e.g. banking, tourism) and intangibles (e.g. financial investments or transfers) and also the movement of goods between regions of the UK. The estimates also include oil and gas trade.

³ Gross Domestic Product - quarterly national accounts: quarter 1 2020, Table G1 https://www.gov.scot/publications/gdp-quarterly-national-accounts-for-scotland-2020-q1/

- destination in Scotland made up the largest proportion (67.0%), followed by sea port⁵ freight (33.0%) and then air⁶ freight (<1%)⁷.
- Over the latest financial year 2019/20, Scotland's rail freight network carried 4.3 million tonnes of freight across the network.
- The majority of freight lifted in Scotland was carried by HGV on the road network and remained within Scotland (96 million tonnes).
- Less than 0.5% of Scottish road freight traffic (both directions) in 2019 had a non-UK origin or destination 98% of which was in the EU.
- HMRC data for overseas (non-EU) trade in goods through Scottish ports (air and sea) show that both Non-EU imports and exports fell over the first half of 2020 (January to June), down 29% and 37% respectively, compared with the same period in 2019.

Transport Links to Key Trade Destinations

- Edinburgh and Glasgow ranked in the top 10 UK airports for number of terminal passengers in 2019 (6th and 9th respectively). Edinburgh Airport ranked 9th for volume of freight movements over the same period.
- Scotland's number one international export destination is the Netherlands. This is largely due to the Dutch port of Rotterdam being an international shipping hub with goods exported to other global destinations from there.
- In 2019, China overtook the USA as Scotland's main non-EU export destination for the first time since comparable records began in 2013, led by a resurgence in petroleum exports to the country, which grew almost fourfold (378%) from the previous year.
- For the first time in six years, Norway failed to rank as the top origin of Scotland's imports, overtaken by the USA and China in 2019. This was as a result of a significant fall in the value of natural gas imports.

Transport and Trade: Covid-19 Impacts

- In the first half of 2020, travel demand across Scotland was hit by the effects of the global Covid-19 pandemic and the associated lockdown. Travel patterns reduced significantly, with journey numbers falling to a fraction of their pre-crisis level.
- Air travel experienced a sharp decline as demand stalled and airlines grounded fleets
 of aircraft, resulting in significant reductions in capacity for air freight typically carried
 in the holds of passenger flights.
- Other freight transport (road, port and rail) was less impacted, however, surveys conducted by the Road Haulage Association in Spring 2020⁸ and CBI Scotland, as

⁵ DfT port freight annual statistics, 2019

⁶ Civil Aviation Authority Annual Statistics, 2019 and Highlands and Islands Airport Limited Statistics, 2019

⁷ In 2019, road freight totalled 136.6 million, tonnes, port freight totalled 66.8 million tonnes and air freight totalled 58,914 tonnes.

⁸ Summary of survey responses on the impact of Covid-19 on the Haulage Industry, May 2020, RHA https://www.rha.uk.net/getmedia/a34d7f94-1bfc-43b3-89d8-b9fe793172d1/RHA018_Survey_A4_v1.pdf.aspx

well as a report from the independent Advisory Group established by the Scottish Government to advise on Scotland's economic recovery in the wake of the COVID-19 pandemic suggest that the recovery for these and many other industries are inextricably tied to the economic recovery, which the Bank of England, the OECD and IMF suggest is going to be slow for the UK, taking into consideration other headwinds such as the end of the UK's transition period with the EU.

• Data⁹ for the first half of 2020 show that Scotland's international goods exports were estimated at £13 billion, 23% less than the same period in 2019. International goods imports were valued at £9.8 billion in the first half of 2020. This was down 19% compared with the same period in 2019.

⁹ HMRC Regional Trade Statistics (RTS), Q2 2020

Introduction

This report provides a summary of Scotland's key imports and exports of goods, how they are transported to, from and within Scotland, and an overview of some of Scotland's key trade gateways and partners.

This edition provides updates to data and looks in more detail at Scotland's main transport gateways and networks. Rail freight, which was not extensively explored in the previous publication, is included in more detail in this edition. Updated maps, graphs, and tables are used to highlight the monetary value, tonnage, origins and destinations of Scotland's imports, exports and freight, while illustrating the change in relative importance of goods to the Scottish economy, over time.

This edition contains the following updated sections:

- Trade This edition uses data from HMRC's Regional Trade Statistics (RTS) and Overseas Trade Statistics (OTS) for Scotland for the calendar year 2019 and comments on changes from the previous year and the series back to 2013¹⁰. It highlights Scotland's top imports and exports of goods, and their origins / destinations.
- Freight Port (air and sea) freight by good type is an addition that we have for this
 edition, as well as a more detailed exploration of rail freight. On top of this, this edition
 will contain information on how freight is carried both to and from Scotland by the
 various modes, along with more detail on the countries this freight moves to and from,
 which may differ from the countries highlighted in the trade sections.
- Impacts of Covid-19 Analysis of data from the first half of 2020 showing the impact of Covid-19 on trade and freight movements, with a particular focus on the impact on transport links.
- Transport Links This edition provides greater insight into important transport hubs for Scottish businesses, such as airports, sea ports and logistics terminals, as well as more information on the potential logistics of goods travelling between Scotland and key overseas trade destinations.

Data is available at a Scottish level¹¹ from a variety of sources, however some of the Department for Transport (DfT) and Office of Road and Rail (ORR) datasets cannot be disaggregated to a Scottish level, and therefore gaps in data over time do occur. The report also identifies Scotland's most significant trade markets alongside their key transport gateways and corridors, helping to inform the necessary policy tools to ensure Scotland's transport network supports its international trade ambitions.

¹⁰ HMRC RTS methodology is such that comparable data is only available for Scotland post-2013.

¹¹ Data is available at a more disaggregated level in weight (tonnes), but only at a broader UK level. For such data see Trade Map.

Scotland's Trade

HMRC Regional Trade Statistics (RTS) allow for an up to date assessment of trade, disaggregated at the Scottish level. As the RTS deal solely with trade in goods¹² and not services, it also allows for more realistic analysis of the transport of said trade, as services are less likely to 'travel'. Furthermore, the data is for international trade only and excludes any trade between regions or countries within UK. Although data is currently available up to Q2 2020, – which will be analysed in the context of Covid-19 and the associated global 'lockdown' – in order to allow for full year comparisons most of the data referred to in this section will cover up to the end of the calendar year 2019.

In 2019, Scotland's international trade (imports and exports) in goods was valued at over £57.3 billion. This represents 0% growth compared to 2018, thereby marking the first full calendar year without growth since 2013. This flat growth in trade was driven by a fall in imports over the year, with values down £1.8 billion (7.3%) compared to 2018 levels. Over a quarter of all trade was in 'petroleum, petroleum related goods and related materials'. Scotland's top trade partners in 2019 were the same as the previous year, although China returned as one of Scotland's top 5 export destinations; the Republic of Ireland fell to 6th. For the first time since 2013, Norway failed to be the top country of origin for Scottish goods imports, falling to third, with the USA and China claiming the top and second spots.

Comparing Scotland with the other countries of the UK, 49% of all Scottish goods exports went to EU countries in 2019. More than half of both Wales' and Northern Ireland's exports were destined for the EU in 2019 (60% and 59% respectively), while 48% of English exports were destined for the bloc. On the imports side, Scotland's EU imports account for just over 41% of total goods imports. Northern Ireland's imports from EU countries as a share of total imports was nearly 66% in 2019; England's corresponding figure was 56% in 2019, while Wales imported less than 38% from EU countries over the same period.

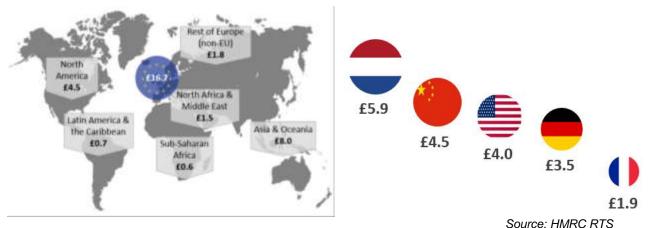
Trade in goods is a vital part of the Scottish economy, supporting jobs domestically and maintaining the market for Scottish goods overseas. Data from the start of 2020 have shown that across the world, trade has felt the impact of Covid-19 through reduced global demand coupled with large scale reductions in supply chain activity as companies, businesses and individuals were required to shut up shop. For the first quarter of 2020, all UK nations experienced a fall in exports, with Scotland and Wales experiencing the largest falls (both 2.7%) compared to England (2.3%) and Northern Ireland (1.9%). Similarly, demand for imports also fell over the year, with Scottish imports down the most of the four UK nations: 10.9% lower than Q1 2019.

Scottish goods exports have increased each year since 2015, however, future data for 2020 are likely to show the first decline in exports in half a decade as a result of the global pandemic and the associated policy interventions around the world to manage the virus. Scottish exports' contribution to economic growth measured in gross domestic product (GDP) has remained broadly unchanged over the past decade but, with a slowdown across the global economy, there remains a degree of uncertainty around the magnitude and timing of the recovery of global demand and thereby the scale of exports' contribution to the Scottish economy in the near future.

¹² HMRC Regional Trade Statistics, Methodology, see https://www.uktradeinfo.com/Statistics/RTS/

Exports

Figure 1: Destinations and Values of Scotland's Exports and Top 5 Export countries (£ billions), 2019

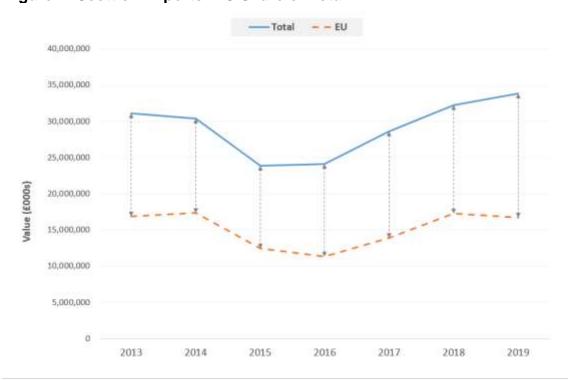


educe. Timil to Title

In 2019, international goods exports from Scotland totalled £33.8 billion. This was an increase of 5% compared to 2018. Of this total, non-EU partner countries accounted for 51%, an increase from 46.5% the previous year, while exports to EU member states fell, now accounting for just under half of all goods exports (£16.7 billion).

Since 2013, the proportion of Scottish goods exports to EU countries has been broadly unchanged, although the total amount has increased. At its peak in 2014, 57% of all Scottish goods exports went to EU member countries. The gaps between the lines below show the amount of goods exports travelling to non-EU member countries has increased.

Figure 2: Scottish Exports: EU Share of Total



Source: HMRC RTS

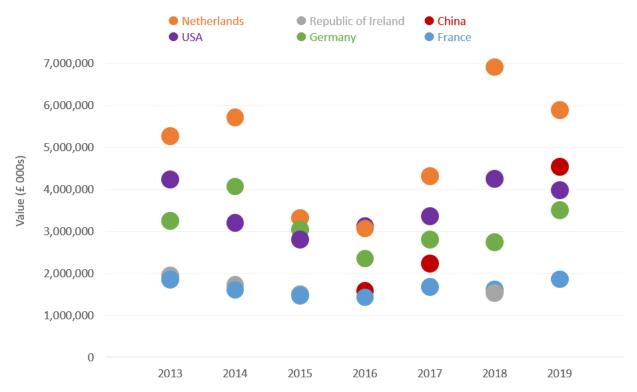
Key Markets

Scotland's top 5 export partners in 2019 were:

Netherlands	China	USA	Germany	France
£5.9	£4.5	£4.0	£3.5	£1.9
billion	billion	billion	billion	billion

Over the past six years, Scotland's top 5 have evolved as shown in the figure below.

Figure 3: Top 5 Scottish Goods Export Destinations over time, 2013-2019



Source: HMRC RTS

The Netherlands remains Scotland's largest export partner, and has been for the past three years. Its dominance as Scotland's main export partner can be explained in part by the Dutch port of Rotterdam being an important international shipping hub (the largest port in Europe and 11th largest worldwide). Rotterdam acts as a 'mid-point' for many goods travelling across northern Europe as well as being transhipped to other parts of the world, with the final destinations not often not routinely collected. This 'Rotterdam effect' to some extent, artificially boosts the value of exports to the Netherlands.

China returned as one of Scotland's top 5 export partners in 2019. Furthermore, China overtook the USA as Scotland's number one non-EU export destination in 2019 – the first time since comparable records began in 2013. China has now featured in Scotland's top 5 exporting partners for three of the past four years, however in 2018, the Republic of

Ireland returned to the top 5, as exports of petroleum fuels to China more than halved compared to 2017, pushing China to 6th.

Exports through Scottish Ports

UK trade data for Scottish ports (air and sea) is used to provide an estimate of the value of trade through Scottish ports. The data¹³ only cover non-EU countries – this is because the customs information, which is used for port level data, is not recorded for goods being traded within the European Single Market, therefore HMRC have no data on this trade. Furthermore, a large proportion of Scottish freight bound for EU countries will travel by road via England and the Channel crossings, rather than directly from Scottish ports. In 2019, the value of non-EU Scottish exports was £10.3 billion¹⁴.

As mentioned above, total non-EU exports from Scotland according to RTS data was valued at £17.1 billion in 2019. This would imply that around 60% of the value of all Scottish exports of goods to non-EU countries travelled through Scottish ports in 2019. This is interesting considering, as the report highlights later, port freight in volume (tonnes) terms account for much less than half of all Scottish freight.

Figure 4: Non-EU Trade in Goods at Scottish Ports



Source: HMRC OTS

¹³ Overseas Trade Statistics (OTS) – UK Trade data for Scottish Ports, HMRC

¹⁴ This data comes from HMRC's overseas trade statistics (OTS), which is where the regional trade statistics (RTS) are derived and is therefore comparable. The OTS also provide a useful sense of magnitude in terms of export values by mode.

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Moreover, the OTS data is a monthly series so can provide a picture of the impact that Covid-19 has had on export activity through Scottish ports. Looking at data since March 2020 and comparing them to their corresponding months in 2019, show that the value of non-EU exports through Scottish ports was down 49%, the largest fall coming in April where values were down from £991 million in 2019 to £417 million in 2020 – a fall of 58%.

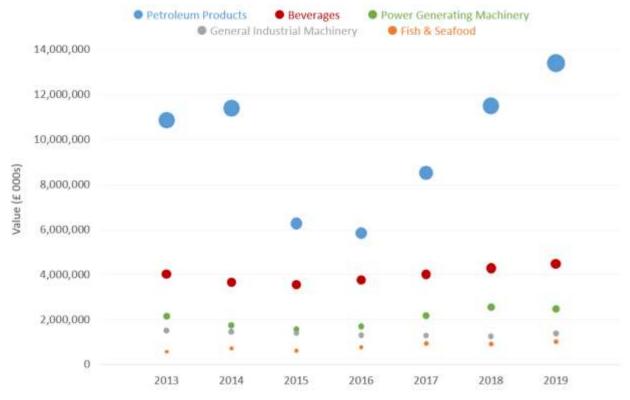
Key Goods

Scotland's top 5 goods export categories¹⁵ in 2019 were:

Petroleum Products	Beverages	Power Generating Machinery	General Industrial Machinery	Fish & Seafood
£13.4	£4.5	£2.5	£1.4	£1.0
billion	billion	billion	billion	billion

The above goods travel by a combination of modes (road, rail, sea and air) before reaching their final destinations, with bulkier goods more likely to travel by road, rail and sea. The figure below shows the importance of each good over time, in terms of value, with the size of each dot also representing the value.

Figure 5: Top 5 Scottish Goods Exports by value, 2019



Source: HMRC RTS

The 'petroleum, petroleum products and related materials' commodity group includes a selection of refined fuels (oils and chemical fuels) which travel in different ways. Scottish oil exports are typically shipped out of dedicated oil terminals at Forth Ports, to a variety of locations. As mentioned above, China is a key recipient of oil exports, and in 2019 there was a significant recovery in oil exports compared to the fall made the previous

¹⁵ Based on the fourth revised version of the United Nations Standard International Trade Classification (SITC) at the two-digit level.

year, with exports of 'petroleum, petroleum products and related materials' growing by more than 378%. Despite global oil prices falling significantly in 2016 resulting in Scottish petroleum exports nearly halving, the sector has rebounded with export values now exceeding those seen prior to the oil price crash.

Scottish beverage exports increased by 4.6% compared to 2018, the vast majority of this being Scotch whisky exports. The United States is Scotland's largest beverage export market, nearly three times larger than the next largest market, France. The USA accounted for 23.8% of all Scottish beverage exports in 2019 while expansion in Asia & Oceania has been particularly strong – growing 35% since 2013. However, the European Union remains the top regional market for Scottish beverage exports, valued at around £1.4 billion in 2019.

Over 70% of all Scottish food and beverage exports are in Scotch whisky. It is the world's number one internationally traded spirit¹⁶, with 42 bottles of Scotch whisky shipped every second to around 180 global markets, totalling more than 1.3 billion bottles each year. According to the Scotch Whisky Association, more than 10,000 people are directly employed in the industry in Scotland; there are currently 133 operating Scotch whisky distilleries around the country. The export data above refer to HMRC's Regional Trade Statistics and often understate Scotland's drink exports. For example, Scotch whisky exports from the UK were valued at £4.9 billion in 2019¹⁷ (HMRC OTS), higher than the reported Scottish drink exports above.

Machinery exports (power generating and general industrial) from Scotland have a few key markets. In 2019, Scotland's top markets for power generating machinery were USA, United Arab Emirates (UAE), Singapore and Hong Kong. Combined, these four countries accounted for 45% of all power generating exports. Power generating machinery exports were valued at £2.5 billion, approximately two thirds of all exports within the wider 'machinery & transport equipment' category. General industrial machinery exports primarily went to the USA, Norway and Germany, similar to last year. 2019 saw a slight rebound in the trend away from machinery exports to the EU and back towards south Asia with exports to China, Hong Kong, Singapore and South Korea increasing compared to 2018 levels, while exports to Germany, the Netherlands and Spain all fell over the same period.

Scottish seafood exports have increased by over 75% since 2013, the fastest growing export goods category of the top 5 mentioned above, and were valued at £1.0 billion in 2019. Scotland's fishing industry is the largest of all the UK nations.

In 2019, Scottish vessels landed 393,000 tonnes of sea fish and shellfish, with a gross value of £582 million¹⁸. About 62% of this was landed in Scotland, with nearly 38% landed abroad (by tonnage - excluding rUK).

Fishing is a major activity in Scottish ports, which is unsurprising given Scotland's location amongst some of the most productive fishing grounds in the world. Landings at the three Scottish districts of Peterhead, Shetland and Fraserburgh account for just under 75% of all landings into Scotland by tonnage, and 59% of the total value of the Scottish landings.

¹⁶ Scotch Whisky Association, Facts and Figures , January-December 2019, https://www.scotch-whisky.org.uk/insights/facts-figures/

¹⁷ HMRC OTS Data, Scotch Whisky Association, https://www.scotch-whisky.org.uk/newsroom/scotch-whisky-exports-surge-amidst-backdrop-of-tariff-uncertainty/

¹⁸ Scottish Sea Fisheries Statistics 2019, https://www.gov.scot/publications/scottish-sea-fisheries-statistics-2019/

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In 2019, Scottish vessels landed 148,338 tonnes of sea fish and shellfish abroad, worth £123.6 million. The tonnage landed abroad fell by 7%, while the real terms value of landings abroad remained consistent with 2018¹⁹. Norway is by far the largest destination for Scottish vessels' landings abroad, accounting for 51% by tonnage of all Scottish vessels' landings abroad.

The volatile nature of oil and petroleum based products as a commodity and the impact that world events have on its price, demand and supply, means that as an export good it can be highly unpredictable. The global Covid-19 pandemic has seen international oil prices deteriorate at a scale not seen since the 2008 financial crisis. As of October 2020, global stock markets remain highly sensitive to Covid-19 pandemic developments and implications for the economic outlook with markets showing increased optimism amid easing of lockdown measures across countries and the subsequent gradual recovery in demand. Brent crude oil prices have risen gradually since May to around \$42 per barrel (taken on 20th October 2020), after falling to its lowest point since mid-1999 at the end of April (\$16 per barrel). Scottish oil production in the North Sea is relatively small in comparison to more oil rich nations - such as members of the Organisation of Petroleum Exporting Countries (OPEC) - therefore any reduction in global demand is likely to heavily influence Scottish export values. The other key exports, as shown above, have been relatively stable since 2013, the only commodity in decline being 'power generating machinery and materials'.

¹⁹ ibid

Imports

Figure 6: Countries of Origin and Values of Scotland's Imports, and Top 5 Import Countries (£ billions), 2019



Source: HMRC RTS

Scotland's total international goods imports were valued at £23.5 billion in 2019. This represented a fall of 7.3% compared to 2018. Due to the growth seen in exports, overall trade in 2019 remaining stable (0% growth). The combination of these two factors means that Scotland's trade surplus in goods increased over the year.

Compared to 2018, Scotland's imports from EU countries fell by 3.2%, while imports from non-EU countries fell by 10.0% over the same period. As a result, trade from non-EU countries accounted for 58% of Scotland's goods imports by value, down by 1.8 percentage points from the previous year.

Key Markets

In 2019, 42% of goods imported into Scotland were from the EU (£9.9 billion). The top 5 countries from which Scotland imports has remained unchanged over the past 5 years, albeit the ranking of countries has changed from year to year. Norway has led Scotlish imports every year between 2013 and 2018, however in 2019, the USA moved to Scotland's number one importing partner, with Norway falling to third behind China. As highlighted above, Scotland's leading sources for imports are:

USA £2.9	China £2.8	Norway £2.4	Netherlands £2.1	Germany £1.9

As mentioned earlier, Norway had previously been Scotland's top import trading partner country largely due to the amount of 'gas, natural & manufactured' imported via pipeline. Natural gas imports reached a peak in 2010 and since then import levels have declined, remaining broadly level in recent years. However, in 2019 there was a significant shift with imports falling by more than half compared to the previous year, as pipeline imports fell sharply owing to a three-fold increase in imports of Liquefied Natural Gas (LNG). This was the result of increased diversification of supply from other countries and global

oversupply driving down prices²⁰. Moreover, the latest Digest of United Kingdom Energy Statistics (DUKES) report a 0.7% fall in total gas demand (at a UK level) between 2018 and 2019, driven by milder weather conditions. So while the data show a large fall in imports from Norway (in value terms), the combination of the fall in the price of gas, the diversification to other sources, and the small fall in demand provides some idea as to why this has been the case.

This is further emphasised when analysing HMRC net mass data which show that between 2017 and 2018, the volume (net mass) of gas imported fell by 18.3% but the value increased by 10.8%. However, a 24.5% fall in volumes between 2018 and 2019 was accompanied by a 55% fall in value, suggesting the fall in trade was influenced more by the price of the commodity than Scotland's reduction in the amount imported.

Imports through Scottish Ports

As noted in the previous section, OTS data is available to provide an estimate of the value of non-EU trade through Scottish ports. In 2019, these non-EU imports through Scottish ports were valued at £10.0 billion. HMRC RTS data showed that over the same period, total non-EU imports were valued at £13.7 billion, so this signals a large share of Scottish non-EU imports coming in through the ports - nearly three quarters.

Looking at more recent OTS data up to August 2020, shows the impact that global events have had on Scottish demand for overseas goods. Over the period March-August 2020, non-EU imports through Scottish ports fell by 40% (£2.0 billion) compared to the same period in 2019. While this impact was not as severe as the fall in export value, it shows a similarly strong decline in trade activity during the first few months of the pandemic, showing that global events had a strong adverse impact on both inbound and outbound trade. The monthly data shows the largest fall in May 2020, with values down 45% compared to May 2019.

See figure 4 above for monthly trend since January 2019.

Key Goods

Between 2013 and 2018, Scotland's main import goods remained in the same broad categories; these were 'mineral fuels, lubricants & related materials' and 'machinery and transport equipment'. In 2019, 'other transport equipment' fell out of Scotland's top 5 imported goods for the first time since 2013 and was replaced by 'general industrial machinery', which is in the same broad commodity category. Scotland's top 5 import categories were:

Office & ADP Machinery

£2.9

Power Generating Machinery

£2.2

Gas, Natural & Manufactured

£1.6

Petroleum Products

£1.3 billion

General Industrial Machinery

£1.1 billion

²⁰ Digest of United Kingdom Energy Statistics (DUKES) 2020, Chapter 4 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904794/ DUKES_2020_Chapter_4.pdf

The figure below shows the importance of each good over time, in terms of value, with the size of each dot also representing the value.

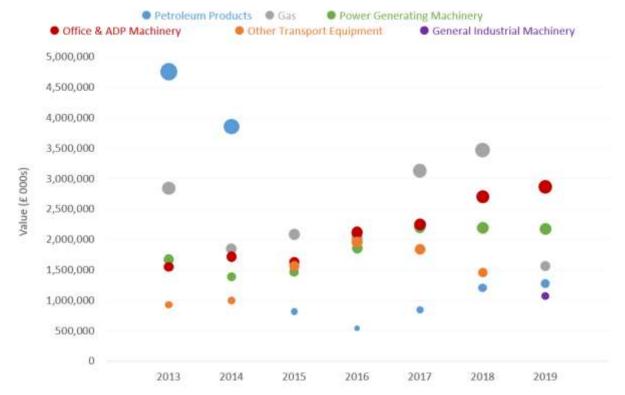


Figure 7: Top 5 Scottish Goods Imports, 2019

Linking the top five import goods with the top five import origins shows that Scotland imported most of its office and automatic data processing (ADP) machinery from China, and general industrial and power generating machinery from USA.

As mentioned earlier, Scottish goods imports declined in 2019. This fall was driven largely by the large falls in gas imports. Three out of the top five import commodities experienced growth compared to 2018. Looking at 'other transport equipment' - which was overtaken by 'general industrial machinery' for fifth place – compared to 2018, the value of exports fell by 35%. Petroleum products declined sharply between 2013 and 2016, falling by 89%. Since then, imports have grown year on year to just under £1.3 billion by 2019.

Looking at transport, road vehicle imports into Scotland come primarily from the Netherlands, France and Belgium. In 2019, the combined value of road vehicle imports from these three countries was £246 million – 55% of total Scottish road vehicle imports that year. Overall, the value of road vehicle imports increased by 12% in 2019, making it five years of consecutive growth.

Trade and Covid-19

Global supply chains are a central feature of the world economy. As most countries entered Covid-19 related lockdowns, concerns about both the present and the future of global supply chains came to the fore. In the present, global supply chains are widely believed to transmit the crisis across countries both physically and economically²¹. The future is expected to bring about at least some "re-shoring" of supply chains, while some research suggests that re-shoring of global supply chains does not in general make countries more resilient to pandemic-induced contractions in labour supply. This is because eliminating reliance on foreign inputs increases reliance on the domestic inputs, which are also subject to lockdowns.²²

In February 2020, when China became the first country to implement lockdown measures anywhere in the world, the supply shock immediately hit European and American companies. The staggered shutdown and re-opening of manufacturing hubs around the world multiplied supply chain issues²³. This was felt in the UK, especially through the race to procure adequate supplies of personal protective equipment (PPE) that ensued, as medical equipment, PPE, and pharmaceuticals were added to some countries' export ban lists thereby negatively impacting the ability of firms and governments around the world to ensure the safety of essential workers. This called into question the level of dependence that businesses had on imports. Any protectionist policies that come in the wake of the pandemic may create an even more uncertain future as the UK edges towards the conclusion of its transition period with the European Union.

Data from the early days of Covid-19 in the UK and the associated lockdown show that the UK felt the force of the pandemic through trade channels almost immediately. The 2nd wave of the ONS' Business Impacts Survey, which covered the first two weeks of lockdown, showed that around 20% of firms reported that their importing and exporting was affected by Covid-19 over that period. By the end of May this figure had risen to 52% for exports and 45% for imports.

While there is no disputing the significant impact that Covid-19 has had on trade across Scotland and the world, this has not been an isolated phenomenon. Global trade has faced a number of headwinds through 2020 which would have had an adverse impact, particularly for Scotland. For example, in October 2019, the US imposed tariffs on single malt whisky. Since that time, total Scotch whisky exports were valued at £311 million in the first six months of 2020, down £176 million (-36.1%) on the same period in 2019. Single malt Scotch whisky exports to the United States accounted for 37% of total Scotch whisky exports, down £52 million (-31.2%) on the same period in 2019. Furthermore, single malt Scotch whisky exports decreased by 36.7% from Q2 2019 to Q2 2020, compared to 25.5% in Q1.

Additionally, RTS data for the period January to June 2020, show Scotland's goods trade was estimated at £13 billion; this is 22% (£3.8 billion) lower than the same period in 2019. The fall is likely due to large decreases in UK exports of the following goods which are key to Scotlish trade; whisky (down 31%), salmon (down 33%), oil (down 30%) and gas

²¹ Baldwin, R, and R Freeman (2020), "Supply chain contagion waves: Thinking ahead on manufacturing 'contagion and reinfection' from the Covid concussion", VoxEU.org, 1 April 2020.

²² Bonadio, B., Huo, Z., Levchenko, A., and Pandalai-Nayar, N., (2020), "Global Supply Chains in the Pandemic", CEPR Discussion Paper 14766.

²³ Javorcik, B., (2020), "Global supply chains will not be the same in the post-COVID-19 world", Chapter 8 in R Baldwin and S Evenett (eds.), "COVID-19 and Trade Policy: Why Turning Inward Won't Work", a VoxEU.org eBook, CEPR Press.

(down 52%). Scotland accounts for a large proportion of these UK goods exports. Scotland has a much more concentrated exports market than the UK as a whole, with the top 5 commodities accounting for nearly two-thirds of all goods exports, compared to the UK's top 5 which account for around 38%.

One potential impact of the crisis which may persist in the economy for some time is a change in the distribution of (perceived) uncertainty. Covid-19 may turn out be an anomalous event, but it highlights that pandemic events are more likely to happen in a globalised, interconnected world. Moreover, by its disruptive nature, the crisis has and will continue to draw attention to other types of shocks. Foreign exchange markets were particularly volatile in the first few months of 2020, creating heightened levels of uncertainty for business who trade overseas. Some of these impacts undoubtedly will have been as a result of the immediate trade shocks following significantly reduced global demand. Some will have been second round effects as listed companies' business activity diminished, hitting portfolio investments also. Exchange rate movements are likely to remain volatile in coming months as countries around the world readjust and government policies supporting economic activity begin to unwind.

Moreover, in the case of the UK and Scotland, the sterling exchange rate has been volatile since January. The Bank of England May 2020 Monetary Policy Report noted that while risk sentiment has since improved and the demand for dollars has abated, allowing sterling to recover, there are some UK-specific factors affecting sterling. Although a weak sterling should help exports, all else being equal, Brexit-related uncertainty is continuing to weigh on UK assets relative to foreign assets. Trade negotiations with the EU continue and the transitional arrangements currently in place are due to expire at the end of 2020, presenting the potential for downside risks to how the future of the economy and consequently demand for goods may play out²⁴.

All in all, it is evident that global supply chains have transmitted the economic effects of domestic lockdowns across borders. However, that does not mean that the presence of global supply chains in and of itself has exacerbated the downturn. The level to which Scotland can insulate itself from pandemics of the future will depend upon the extent to which plans to impose a more or less severe 'lockdown' differ from that of its immediate trading partners²⁵.

²⁵ Bonadio (2020)

²⁴ Bank of England, Monetary Policy Report, May 2020

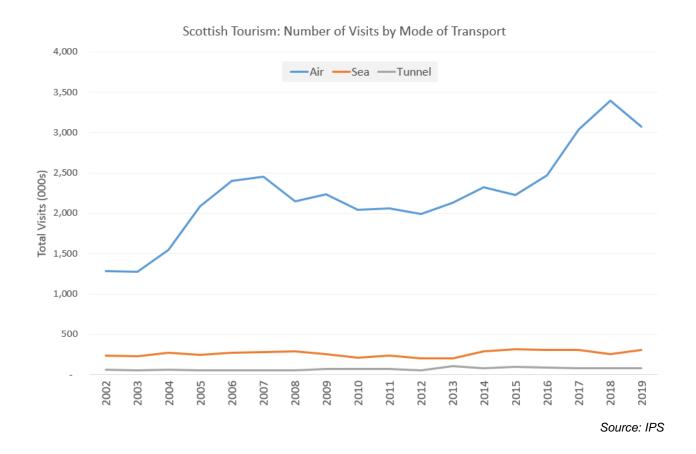
Tourism

The International Passenger Survey (IPS)²⁶ produces estimates of overseas visitors to the UK, with disaggregated data available for Scotland. As a result of the global Covid-19 pandemic, many of our economic indicators for Scotland have had to move to online or telephone surveys due to the introduction of physical distancing. As the IPS could not effectively be moved to an online or telephone basis, it was postponed indefinitely as the crisis ensued. Nevertheless, data from the survey up to 2019 continue to show that overseas visitors typically come from countries with which Scotland has strong trade links.

In 2019, 46.4% of visits to Scotland came from one of the six countries in either Scotland's top five importers or exporters (China, France, Germany, Netherlands, Norway and USA), and spent a combined total of £1.4 billion – 53.2% of all visitor spend in 2019.

Travel by plane is by far the most popular mode of transport for international visitors to Scotland. Since 2002, the number of visitors travelling to Scotland by air has more than doubled (increasing by nearly 140%) as both other modes have held broadly constant over the period. This is shown in the chart below.

Figure 8: Scottish Tourism: Number of Visits to Scotland by Mode of Transport



²⁶ Visitor data collected by the IPS do not include rUK visitor holidays, but do include rUK citizens that are resident overseas. Further information on methodology can be found here.

Over time, the pattern of tourist countries of origin has changed. The only constant throughout the 16 years to 2018 has been the USA remaining the top country of origin for visitors to Scotland. In 2002, a large proportion of tourists to Scotland came from outwith the EU, with USA, Canada and Australia all in Scotland's top 5 sources of tourists. By 2006, Australia and Canada had both fallen out of this top 5.

By 2019, Scotland's top 5 included 3 EU countries, following the increase in the number of visitors from China in 2019.

Top 5 Origin Countries for Tourist Visits to Scotland 700.0 600.0 500.0 Visitor Numbers (000s) 400.0 300.0 200.0 100.0 0.0 Germany Germany China France JSA USA 2002 2019

Figure 9: Top 5 Countries of origin for tourist visits to Scotland over time

Tourists in Scotland spent an average of £734 per visit in 2019, with the average duration for stays being around 7 nights. The longest stays came from visitors from the USA, Germany and Australia, who also consequently tended to spend the most. While tourism is a largely important sector for Scotland, exports of tourism services are not captured in the figures quoted in this paper, due to the focus on movement and transport.

Source: Visit Britain (IPS)

Transporting Scotland's Freight

Scotland's transport network supported over £180 billion worth of trade with the rest of the UK, Europe and across the world in 2019²⁷. This represents 0% growth compared to 2018, driven by a fall in imports. The movement of goods to and from Scotland in 2019 was impacted by a range of global headwinds, not least the uncertainty associated with the UK's exit from the European Union impacting on trade and business investment, thereby materially changing the shape and pattern of trade growth.

Heading into 2020, these were compounded by the global Covid-19 pandemic which created new challenges for Scottish trade and the movement of goods around the country. The spread of Covid-19 across continents and international policies to delay and reduce its spread (travel restrictions, quarantines, physical distancing) is impacting global economic activity through the disruption to economic output, global supply chains, the movement of people, and weaker demand. One consequence of this is that data collection and generation has become much more timely and granular, thereby allowing for more detailed analysis of the impacts of the pandemic and subsequent 'lockdown' measures on the Scottish transport network and trade.

Early signals from Scotland's business sector in the first three months following 'lockdown' measures being imposed, showed that air freight costs increased dramatically and to date still remain significantly higher than pre-Covid 19 levels. Covid-19 distancing rules and public behaviour led to a significant fall in demand for transport services - such as ferry operations - rather than higher prices, and impacted the ability to get goods off of Scottish islands. This was particularly troublesome given the high proportion of perishable food items exported from the isles. Road freight appeared not to have been affected as significantly as other road traffic, which is encouraging given that this is the main route for exports to Scotland's biggest market, rUK, and also a key mode for exports to the EU. However, there continues to be some anecdotal evidence of challenges in not being able to fill Lorries both ways (i.e. operating below capacity on north-bound journeys, thus putting pressure on prices).

The combination of timetable reductions, capacity restrictions and reduced demand, resulted in domestic, rUK and overseas markets being significantly affected. Air freight is an important mode for the movement of Scottish goods and with the collapse in the number of flights at the start of the pandemic, the knock-on effect was on the prices faced by Scottish goods producers. With cargo typically carried in the hold of passenger aircraft, the sharp decline in passenger demand, followed swiftly by the fall in the number of flights meant businesses had to charter their own flights at significantly higher costs.

While larger companies are likely to have freight costs tied into longer term contracts, smaller exporting firms and hauliers would have felt the impact of the reductions more heavily. Shipping supply reduced to try to match falling demand and avoid over-supply, with upward pressure on prices (especially for smaller carriers) and a reduction in the number of routes adding complexity to exporting. For example, Scotch whisky exporters, a key commodity for the Scottish economy, are largely protected by two-year contracts and were able to ride out the first difficult month with non-perishable goods.

²⁷ Scottish Government National Accounts data show that there was over £180 billion worth of trade in goods and services in Scotland in 2019. While it is unlikely that all of this would have "travelled", we assume that trade was supported by the transport system in terms of the movement of goods, or people to provide services.

Despite these recent setbacks, Scottish goods continue to be well established in global markets, with Scottish businesses trading with over 105 countries across nearly 100 different industries and sectors²⁸. The remainder of this chapter will examine Scotland's key transport gateways and networks – Scotland's airports, ports, roads and railways.

Key Transport Gateways and Networks

Transport in Scotland primarily consists of five modes – active travel, road, rail, sea and air – all of which are key to the movement of goods and people. While the nature of the Scottish economy has shifted over recent decades, the transport network remains vital for much of what Scotland is well known for when it comes to goods. Whisky and seafood are two commodities of great importance to the Scottish brand overseas. These industries, as well as many others rely on a well-connected transport system to export their goods to overseas markets.

Approximately 202.4 million tonnes (road, port and air) of freight was lifted in Scotland in 2019. The large share of this was carried on Scottish roads with a final destination in Scotland. In 2019, an estimated 135.6 million tonnes of goods were transported on Scottish roads by UK HGVs. Roughly 83% (96 million tonnes) of goods originating in Scotland, also ended their journey in Scotland, while 16% were destined for other UK destinations (not including Scotland), 95% of which had a final destination in England, the North West being the most popular destination. It is thought less than 1% of road freight originating in Scotland had an international destination. However, there is currently no definitive source of data for the total market for Scottish road freight abroad²⁹, particularly if the HGV does not go directly to its final destination or delivery point.

Although on a downward trend for the past two decades, port freight showed a slight increase in 2019, growing by 2.1% compared to the previous year. Contrastingly, air freight witnessed a decline over the same period, as freight into the top three airports fell by 7% compared to 2018. Rail freight data has only been collected separately for Scotland as a whole since 2018 – historically, rail freight data was collated only at a GB wide level – and as such the series does not allow for broad trends to be analyzed. Furthermore, rail freight data is compiled over the financial year and therefore not comparable with calendar year statistics produced for the other freight modes. For this reason rail freight volumes are unable to be included in the above total. Nevertheless, over the financial year 2019/20, rail freight carried in Scotland totaled 4.3 million tonnes³⁰, a fall of 3.7% from the previous financial year 2018/19.

The following chapter provides further information on freight carried by the key modes and the location of the key hubs in Scotland.

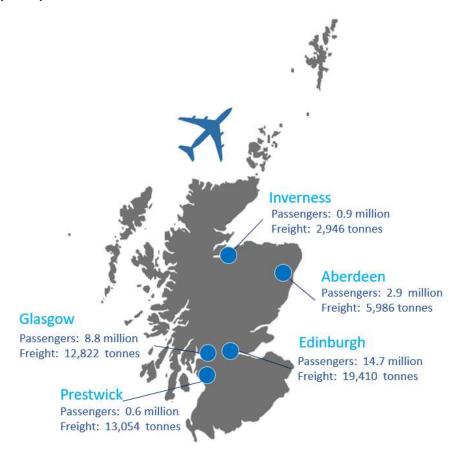
²⁸ Using the 2-digit standard international trade classifications (SITC), there are 98 commodity groups.

²⁹ See HMRC RTS methodology for details on how country of export/import is determined. Data are collected from tax records which do not include logistics of movement but rather the domicile of the company or business.

³⁰ Network Rail, Rail Freight Statistics, Rail Delivery Group (RDG), March 2020

Air Connectivity

Figure 10: Scotland's Main Airports with Passenger Numbers and Freight Carried (2019)



Source: Civil Aviation Authority (CAA) and Highland & Islands Airports Limited (HIAL)

The figure above shows Scotland's five main airports by freight (total lifted, both directions) and passenger numbers in 2019³¹. That year, freight carried by air in Scotland totalled 58,914 tonnes. Air freight makes up a tiny share of total freight lifted in Scotland, however, goods being transported by air tend to be of a higher value, less bulky and more time sensitive than those transported by sea.

Although Scotland's airports are primarily used for passenger journeys, air freight remains important to Scotland's trade market. Scottish air freight volumes fell in 2019 by around 5% from the previous year, reversing slightly the general upward trend since reaching a low of 45,000 tonnes in 2011. As Scottish companies require the timely movement of certain types of goods, it is likely that the air freight industry will continue to be important to Scotland's export industry and therefore a crucial part of Scotland's wider transport network.

The chart below (Figure 11) shows how air freight volumes have changed over time by airport. From a recent peak in 2006, they had fallen by over 45% by 2011, with the largest

³¹ Civil Aviation Authority (CAA) Airport Data, 2019, https://www.caa.co.uk/Data-and-analysis/UK-aviation-market/Airports/Datasets/UK-Airport-data/Airport-data-2019/

fall coming between 2007 and 2008. This can be partly explained by the global financial crisis and its impact on demand for Scottish goods in overseas markets, thereby weighing on Scottish economic performance. Freight volumes have steadily increased since 2011. Scotland's top airport for both freight and passenger numbers is Edinburgh Airport, which continues to be the UK's 6th busiest airport.

Air Freight by Airport 100,000 Edinburgh ■ Glasgow ■ Glasgow Prestwick ■ Aberdeen Inverness Other 90,000 80,000 70,000 60,000 50,000 40,000 30,000 20,000 10,000 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Source: CAA and HIAL

Figure 11: Tonnage of Air Freight Handled by Scottish Airport - 2019

*Other Airports includes Barra, Benbecula, Campbeltown, Dundee, Islay, Kirkwall, Lerwick (Tingwall), Scatsta, Stornoway, Sumburgh, Tiree, Unst, and Wick John O'Groats.

In Scotland, air freight typically travels in dedicated cargo planes with the occasional load travelling in the hold of passenger aircraft, scheduled for flight to the exporting destination. In 2019, roughly 70% of all air freight from Scottish airports was lifted in dedicated cargo planes. The figure below shows how this mix was split by Scotland's five major freight airports.

As highlighted earlier, air freight makes up a very small proportion of total freight lifted in Scotland. Data show a stronger propensity for freight out of Edinburgh to be on cargo planes, specifically for the movement of goods, while freight out of Glasgow is more likely to travel in the hold of passenger aircraft.

22,500
20,000
17,500
15,000
10,000
7,500
5,000
2,500

Figure 12: Freight lifted at Scottish airports by aircraft type - 2019

Prestwick

Source: CAA and HIAL

Glasgow

Inverness

Non-EU Air Freight by Airport

Edinburgh

HMRC OTS data provides information on the movements of goods from Scottish ports to non-EU countries. Non-EU air freight from Scottish airports in 2019 was valued at approximately £7.2 billion (imports and exports). The majority of which (60%) was imports.

Aherdeen

As mentioned before, due to the lack of customs checks for EU trade, HMRC do not collect data on these trades. The following section will look in more detail at some of the trade from Scotland's airports; where the goods travel to, and what goods types are key for each of the Scottish airports analysed. One commodity grouping which is extremely valuable for air freight both to and from a number of Scottish airports is 'Turbojets, turbopropellers and other gas turbines, so references to this commodity will use the abbreviation TTG.

Aberdeen Airport

In 2019, non-EU goods trade from Aberdeen airport was valued at £937 million. Of this total, roughly 72% was imports. North America was the largest import and export region with imports valued at over £305 million and exports at £88 million.

Figure 13: Value of non-EU Air Freight Handled by Aberdeen Airport - 2019

Non-EU goods exports from Aberdeen Airport were mainly made up of 'Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof', the vast majority of which (78%) were bound for the USA. Within this category, the large share of the exports were in 'TTG'.

North Africa

Caribbean

Edinburgh Airport

In 2019, non-EU goods trade from Edinburgh airport was valued at £215 million. Of this total, roughly 69% was made up of exports. As the figure below shows, North America and Asia & Oceania were the regions with the highest export value from Edinburgh Airport. The export value of these two regions (£65 million and £42 million respectively) accounted for over 72% of all non-EU goods exports from Edinburgh Airport in 2019.

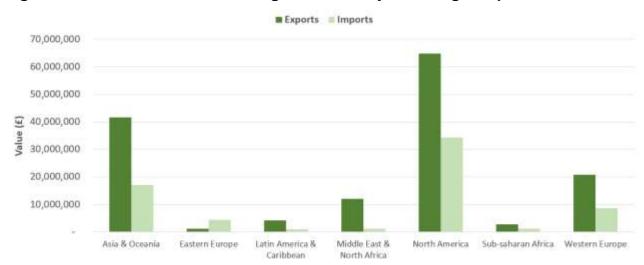


Figure 14: Value of non-EU Air Freight Handled by Edinburgh Airport - 2019

Non-EU goods exports from Edinburgh Airport were mainly made up of 'Organic chemicals', the vast majority of which (91%) were bound for the USA. In terms of imports through the airport, 'photosensitive semiconductor devices' from the USA were a valuable commodity to come to Scotland through Edinburgh in 2019, valued at £8.8 million and a selection of 'Optical, photographic, cinematographic, measuring, checking, precision,

medical or surgical instruments and apparatus' which were valued at £13.5 million from countries such as the USA, Belarus, Norway and India.

Glasgow Airport

In 2019, non-EU goods trade from Glasgow Airport was valued at £3.1 billion. Of this total, roughly 54% was made up of imports. Asia & Oceania was the highest valued region for non-EU goods exports from Glasgow airport; the majority of which was TTG exports to Singapore, and chemical products exports to China and Japan.

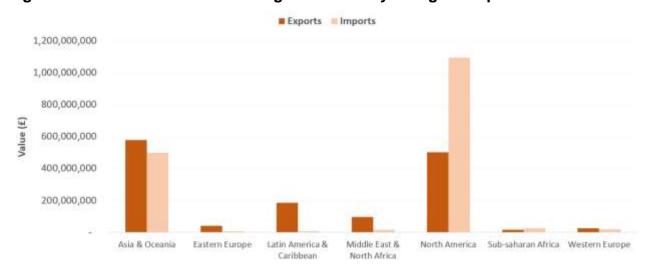


Figure 15: Value of non-EU Air Freight Handled by Glasgow Airport - 2019

Valuable non-EU goods exports from Glasgow Airport include 'TTG', 'Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus', 'Electrical machinery and equipment, sound recorders and reproducers, television image and sound recorders and reproducers', and 'Miscellaneous chemical products'. These four categories accounted for roughly 35% of all non-EU goods exports from the airport in 2019.

Glasgow Prestwick Airport

In 2019, non-EU goods trade from Prestwick Airport was valued at £2.5 billion. Of this total, roughly 59% was made up of imports. The most valuable import region for the airport was North America, dominated by 'TTG' imports from the United States. Similar to the other Glasgow airport, Prestwick airports most valuable non-EU good export region was Asia & Oceania, led by exports of 'TTG' to China and Hong Kong.

Exports Imports 1,000,000,000 900,000,000 800,000,000 700,000,000 600,000,000 500,000,000 400,000,000 300,000,000 200,000,000 100,000,000 Latin America & Asia & Oceania Eastern Europe Middle Fast & North America Sub-saharan Africa Western Europe Caribbean North Africa

Figure 16: Value of non-EU Air Freight Handled by Prestwick Airport - 2019

Two commodity groups that are valuable exports from Prestwick Airport are 'Aircraft and spacecraft' and Arm and ammunition'. Similar to Glasgow and Aberdeen, exports of 'Nuclear reactors, boilers, machinery and mechanical appliances' to the USA also make up a large share of the export value from the airport, the vast majority of which were 'TTG'.

Inverness (incl. Wick) Airport

In 2019, non-EU goods trade from Inverness (incl. Wick) Airport was valued at £416 million. Of this total, over 90% (£388 million) was made up of imports. The most valuable import region for the airport was Asia & Oceania, led by the dominance of Singapore. Singapore accounted for over half (56%) of all non-EU goods imports into the airports. On the export side, these were exclusively between either Western Europe of North America. Imports from Norway made up the bulk of imports, accounting for 77% of all non-EU goods exports from the airports.

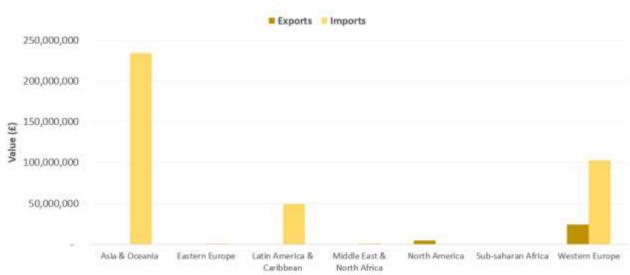


Figure 17: Value of non-EU Air Freight Handled by Inverness (incl. Wick) Airport – 2019

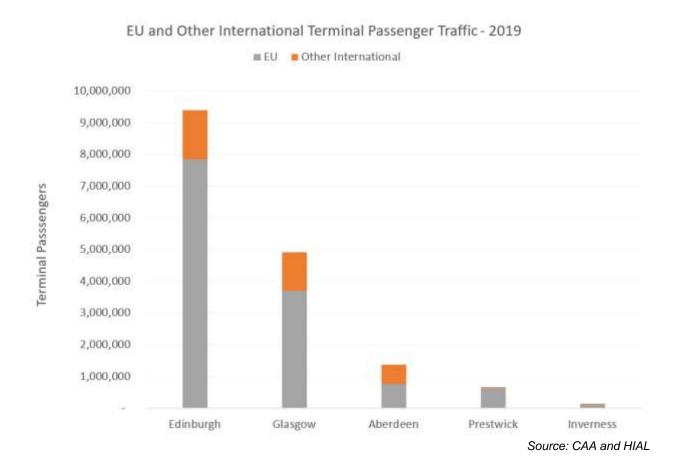
The commodity groups of most value to exports from the airports were 'Articles of Iron and Steel' and 'Wood and articles of wood'. Exports of tubes, pipes and hollow profiles of iron or steel to Norway, made up approximately a third of all exports from the airports. In terms of imports, 'Fish, crustaceans, molluscs, and other aquatic invertebrates' and 'Floating or submersible drilling or production platforms' were the most valuable imports goods, valued at £82 million and £219 million respectively. The platforms came exclusively from Singapore and lion share of the seafood – Atlantic salmon – came from the Faroe Islands and was valued at £68 million.

Air Passengers

In 2019, there were 28.9 million air terminal passengers travelling from all Scottish airports, 0.6 million (1.9%) less than the previous year. Passenger numbers have increased by 6.4 million (28%) in the last decade.

The CAA publish data on the movement of international terminal passengers. The chart below shows the breakdown of international travel between EU and other international terminal passengers for Scotland's five busiest airports.

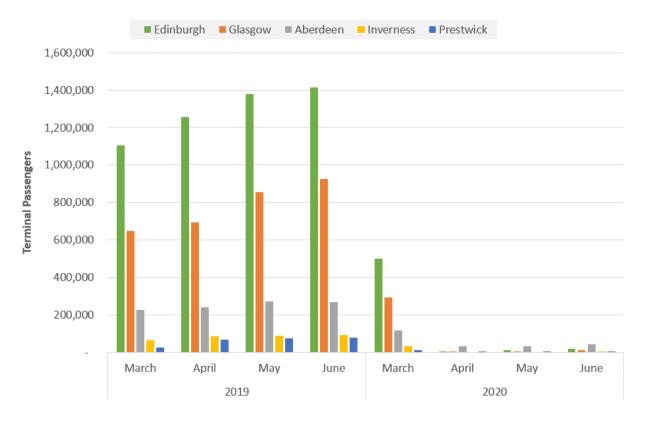
Figure 18: EU and Other International Passengers by Scottish Airport – 2019



Of the international flights made in 2019, the majority of terminal passengers were bound for the EU. The number of EU bound passengers fell slightly from 2018 levels for Aberdeen and Prestwick airports, while Edinburgh, Glasgow and Inverness saw their number of EU bound terminal passengers increase over the year.

More recent data for the start of 2020 shows how much of an impact the pandemic had on travel from Scotland's main airports. Terminal passengers at Scotland's 5 main airports for passenger numbers over the four months to June 2020 compared to the same period in 2019 fell significantly. This can be seen in the chart below.

Figure 19: Terminal Passengers at Scotland's 5 main airports – March-June 2019 and March-June 2020



Source: CAA and HIAL

Port Connectivity

Scottish ports are fundamental to the Scottish economy. They play a unique role in providing a base for trade and employment. They also provide the landside gateways for vital industries such as offshore energy, fishing and cruise sectors. They handle a wide range of cargo, with an array of dry bulk, liquid bulk and other cargo goods entering and leaving the country through ports every day.

A third of Scotland's total freight (excluding rail and pipeline) was handled by Scotland's sea ports in 2019. Latest data³² show that foreign and domestic sea port freight traffic across all ports in Scotland totalled 66.8 million tonnes in 2019, as shown in Figure 20. Forth and Clyde Ports combined handled over half (51%) of this freight. The volume of sea freight rose by 2.1% compared to 2018, however as shown below, there is still a strong downward trend over the past two decades. Since its peak at the turn of the millennium, Scottish port volumes have almost halved (fallen by 49%)³³.

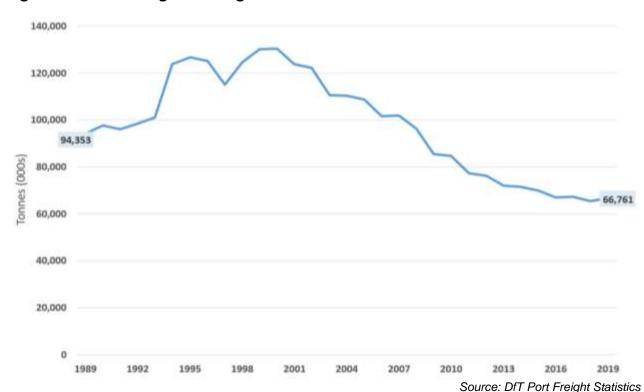


Figure 20: Total Freight Tonnage time series – All Scottish Sea Ports

33 ibid

³² https://www.gov.uk/government/statistics/port-freight-annual-statistics-2019

Scottish Major Port Sea Freight

Total Scottish major port freight accounted for 95% of all port freight lifted in 2019, unchanged from the previous year, despite 2% growth in the volume of freight lifted.

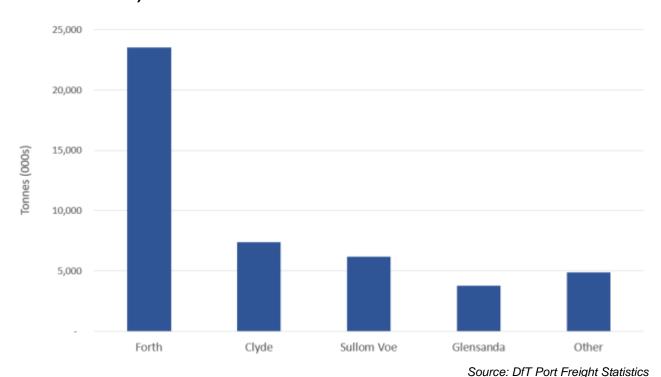
In 2019, foreign freight traffic at Scotland's major ports accounted for 72% of total freight traffic, with domestic traffic making up the rest. Of this 45.4 million tonnes of foreign traffic, nearly three quarters was outbound (33.4 million tonnes).

Over the past two decades since the turn of the millennium, total freight traffic at the major ports has declined. Comparing latest data (2019) with the year 2000, total freight traffic has halved, falling from 127 million tonnes to 63 million tonnes.

The 11 major ports connect to over 100 destinations worldwide, including ports in the UK, mainland Europe, and further afield in Asia, South America and elsewhere. The majority of goods handled by Scottish sea ports are outbound (export goods). The main types³⁴ of foreign traffic through the major ports in 2019 were oil products (including crude oil) and other dry bulk.

In 2019, foreign traffic³⁵ through the major ports (imports and exports) totalled 45.4 million tonnes. The split between imports and exports was roughly a quarter and three quarters respectively. Of the foreign traffic, the Forth³⁶ and Clyde ports combined accounted for 68% (30.9 million tonnes) of all foreign traffic through major ports in 2019. This is shown in Figure 15.

Figure 21: Foreign freight traffic through Scotland's Major Ports (Inwards and Outwards - 2019)³⁷



³⁴ DfT Port Freight statistics: 2019, Table PORT0302

³⁵ DfT statistics class foreign traffic as traffic with a destination outside of Scotland, therefore rUK ports, the Channel Islands and the Isle of Man are classed as foreign ports.

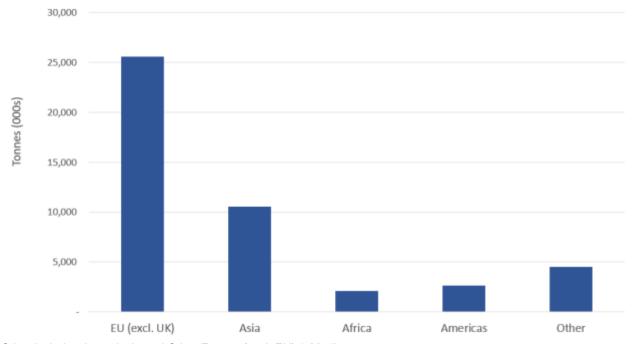
³⁶ Includes Rosyth, Braefoot Bay, Burntisland, Grangemouth, Hound Point, Kirkcaldy, Leith and Methil.

³⁷ DfT Port Freight Statistics: 2019, Table PORT0302

In 2019, the majority of exports handled by Scotland's major ports were destined for EU countries. Outward traffic from Scottish major ports to EU countries totalled 20.8 million tonnes in 2019, 62% of total international sea freight. The EU also accounted for 56% of foreign traffic of all types of cargo in both directions (to and from Scotland).

Although the USA is a major export partner for Scotland, being in Scotland's top 3 export destinations by value for each of the past 7 years, in terms of tonnage, the goods moved to the US via port freight shipping represent just 2.6% of 2019's international export total.

Figure 22: Foreign freight traffic carried by Scotland's Major Ports by Country Group, 2018



*Other includes Australasia and Other Europe (excl. EU) & Mediterranean

Source: DfT Port Statistics

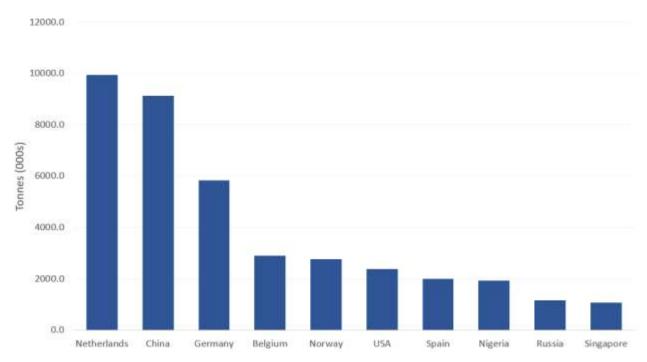
Outside of the EU, Scotland's main sea freight partners in 2019 were China, Norway and the USA - predominantly due to crude oil shipments in each case – with most goods leaving from Clyde and Forth ports. Combined, these three countries alone accounted for over 40% of all crude oil traffic at major Scottish ports in 2019 at 12.2 million tonnes.

Figure 17 shows Scotland's top 10 sea freight trading countries (excl. rUK) for total (inwards and outwards) freight traffic. Although the split in terms of countries is in favour of non-EU, in terms of tonnage the split is roughly 50/50.

The most popular destination for foreign port traffic in 2019 was the Netherlands, with nearly half (9.9 million tonnes) of all EU traffic destined for the country. Furthermore, Germany and Belgium were also significant freight partners, receiving 5.8 million and 2.9 million tonnes respectively in 2019.

The largest non-EU market for Scottish port freight was China. As mentioned above, this was dominated by outbound crude oil cargo from Forth Ports, totalling over 9 million tonnes.

Figure 23: Scotland's Top 10 Port Freight Trade Partners (Inwards and Outwards), 2018



Source: DfT Port Statistics

The countries included in the figure above are based on direct journeys to or from Scottish ports. This therefore excludes cargo or freight travelling to or from Scotland via the Channel ports.

In terms of goods, the vast majority (82%) of freight moved by Scottish ports in 2019 fell within one of the following five cargo categories;

- Crude oil (29.1 million tonnes),
- Other dry bulk (8.9 million tonnes),
- Oil products (7.5 million tonnes),
- Road goods vehicles with or without accompanying trailers (3.2 million tonnes) and,
- Liquefied gas (2.9 million tonnes).

In addition to this, traffic for the five categories above was largely in the outbound direction, highlighting the concentration of outbound traffic from Scotland's major sea ports and furthermore, the importance of oil exports for Scotland.

Road Connectivity

As has previously been highlighted, approximately 67% of freight in Scotland is carried by road (135.6 million tonnes). The vast majority of this (71% or 96 million tonnes) remains in Scotland. In total, only 14% of freight journeys originating on Scottish roads left Scotland for another UK destination, 95% of which had a final destination in England (See Table 1 below).

Table 1 Quantity of road freight lifted or arriving in Scotland (million tonnes)38, 2019

	Scotland- Scotland	Scotland - rUK	Scotland - non UK	Total
Tonnage Lifted	96	19	0.4	
		rUK-Scotland	Non UK - Scotland	135.6
Tonnage Lifted		20	0.2	
Share of total tonnage (%)	70.8	28.8	0.4	100.0

Source: DfT Road Freight Statistics

The volume of Scottish road freight either bound for or coming from non-UK destinations is a small proportion of this total figure at approximately 0.4% or less than 1 million tonnes. The vast majority of this international freight was exports, with less than 200,000 tonnes of goods entering Scotland (imports) from non-UK countries in 2019, 99% of which came from destinations in the EU.

International Road Freight Traffic

In 2019, the estimated volume of traffic on Scotland's roads was around 48 billion vehicle kilometres, 1% more than 2018³⁹. Of this total distance, 22% was covered by goods vehicles (light or heavy), accounting for over 10.6 billion vehicle kilometres over the year.

Given the small number of UK HGVs carrying Scottish goods outwith the UK⁴⁰, the proportion of freight moved by these HGVs was naturally also very low. In 2019, of the 14.6 billion tonne kilometres travelled by UK HGVs originating in Scotland, only 241 million tonne kilometres were destined for locations outwith the UK, roughly 1.6%.

This is also the case for inward freight traffic from destinations outwith the UK. Of the 15.7 billion tonne kilometres travelled by HGVs with destinations in Scotland, only 125 million tonne kilometres were travelled by UK HGVs originating outwith the UK, roughly 0.8%.

Although Scottish level data is difficult to estimate for goods moved by road freight from outwith the UK, there are two key goods types which have sample sizes large enough to provide reliable estimates: 'Food & Drink' and 'Machinery & Equipment'. These two good

³⁸ DfT Road Freight Statistics: 2019, DfT, Table RFS0122

³⁹ DfT Road Traffic Statistics 2019, Regions, Scotland, ONS Code: S92000003

⁴⁰ The 'outwith the UK' figures include an element of double counting as figures include both the domestic and international legs of the journey.

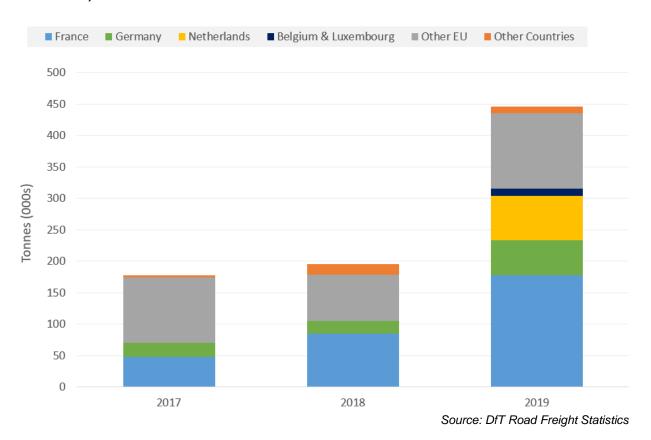
types feature in Scotland's top 5 exporting goods with a combined value in excess of £4.7 billion, so it is not unreasonable to suggest that a proportion of Scotland's exports of food & drink and machinery & equipment travel to overseas markets via the road network.

The chart below shows some of the destinations of Scottish outbound freight in 2019. Due to the small volume of freight and sample sizes, data is not available for a lot of countries to provide an accurate estimate, therefore the chart below shows those with a significantly large enough sample size for comparison and individual reporting with the rest aggregated together.

The countries where data is available (i.e. the sample size is sufficiently robust) include countries which feature in Scotland's top trading partners in terms of imports and exports, within a reasonable distance for a HGV driver to travel, so mainly European Countries (EU and non-EU).

The tonnage increased significantly in 2019 compared to growth seen between 2017 and 2018. So much so that Belgium, Luxembourg and the Netherlands had sufficient sample sizes for volumes to be estimated for these destinations, without grouping them in 'Other EU'. For this reason, if comparing across years, the grey section in 2017 and 2018 is comparable with the grey, dark blue and yellow section in 2019.

Figure 24: Road Freight – Goods Leaving Scotland by UK HGVs for non-UK destinations, 2017-19



The majority of these HGVs are likely to drive to the Eurotunnel and Channel Ports to enter continental Europe, although there are alternative routes, such as ferries to the Netherlands from England's east coast. Latest data shows that in 2019, there were an

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estimated 2.4 million road haulage vehicle crossings between Dover and Calais⁴¹. This is down on the previous year and the second fall since 2011. Using this estimate as a proxy, Channel Port crossings by Scottish Lorries accounted for less than 0.5% of total crossings in 2019. Although this suggests that total Scottish freight travelling to / from Dover is small, this is a key gateway for Scottish traders to mainland Europe.

⁴¹ Dover Ports Statistics, 2019

Rail Connectivity

To date, Scotland's railway network⁴² consists of 360 stations supporting over 2,400 services each weekday (at full service). The network also contains a number of freight terminals with links further afield to the rest of Great Britain via the east and west coast. Scottish rail routes are used primarily for passenger travel, with 102 million⁴³ journeys being made between April 2018 and March 2019. This was the first year that Scotland has not recorded growth in total journeys since 2002/03, when passenger journeys fell by 2% on the previous financial year. Journeys between Scotland and other regions of GB grew by 3.2% compared to the previous financial year, up to 10 million. Of these, over half (55%) were to either the North West of England or London. This growth was unable to outweigh the slight fall in domestic rail travel in 2018/19 (0.3%) which resulted in the overall flat growth over the period. Scotland's busiest stations for passenger travel continue to be Glasgow Central, Edinburgh Waverley and Glasgow Queen Street.

Rail freight continues to be important to the business and individuals within Scotland. A wide range of products including Scotch whisky (and other major branded spirits), seafood, luxury textiles, seed potatoes, supermarket supplies and high street brands move by rail. Key Scottish exports such as whisky, shortbread and bottled water are also major users of rail. In Scotland, total freight lifted between April 2019 and March 2020 was 4.3 million tonnes, a fall of 3.7% (167,000 tonnes) compared to the previous financial year.

Rail freight is crucial to the economy with one in four sea containers arriving at UK ports being carried inland by rail⁴⁴. Rail freight competes with road freight and has the potential to deliver significant additional benefits if it were to increase its market share of inland transportation. Moving goods by rail rather than road reduces carbon emissions (a tonne of rail freight emits up to 76% less CO2 emissions than a tonne of road freight) thus benefitting the environment. A single freight train can remove up to 76 heavy goods vehicles (HGVs) from the roads which also cuts down congestion and improves safety⁴⁵.

Rail freight totals in Scotland have only recently been collected and as such the series of data does not go back beyond 2018. However, analysis by the Office of Road and Rail shows the number of tonnes lifted per train has increased by over 89% between 2003/04 and 2013/14⁴⁶. The commodity mix has also dramatically changed since the turn of the millennium. While rail freight used to rely heavily on coal – in the early 2000s coal made up around 50% of the freight mix carried by rail – rail freight now transports mainly containers and construction material (which is nearly entirely made up of cement). These demand shifts have required rail freight operators to adapt; where they were previously carrying low-value, bulky goods on under-utilised railway sections, they increasingly transport fast-moving, manufactured consumer goods or construction materials on highly-used, passenger-dominated railway sections.

⁴² Table 7.15, STS, No. 38, 2019 edition

⁴³ ORR Regional Rail Usage, https://dataportal.orr.gov.uk/statistics/usage/regional-rail-usage/

⁴⁴ Rail Freight Group, http://www.rfg.org.uk/rail-freight/facts-figures/

⁴⁵ Rail Delivery Group, https://www.raildeliverygroup.com/files/Publications/2019-05_rail_freight_delivering_for_britain.pdf

Scotland's rail freight network carried freight around 4.3 million tonnes between April 2019 and March 2020. This commodity mix included construction materials, intermodal, petroleum products and metals, amongst others. This is shown below in figure 25.

■ 2018/19 ■ 2019/20 2,500,000 2,000,000 1,500,000 1,000,000 500,000 0 Metals Construction Industrial Maritime Other Petroleum Product Materials Intermodal Minerals Intermodal Automotive

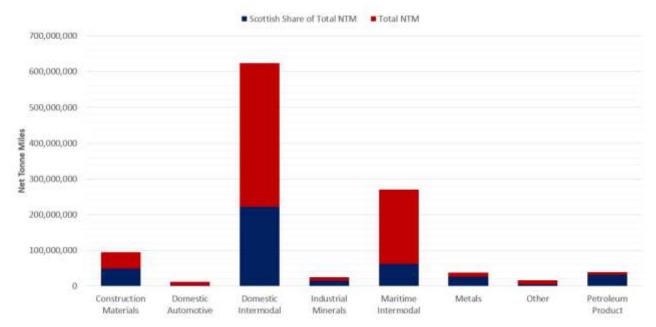
Figure 25: Scottish Rail Freight by Commodity Type – Tonnes

Source: Network Rail

The figure above shows that intermodal freight (domestic and maritime) make up the bulk of the freight lifted on Scotland's railways. In terms of distance travelled, in 2019/20 Scottish rail freight totalled over 1.1 billion net tonne miles, with roughly 37% of this distance travelled domestically within Scotland.

The figure below shows the share of the distance travelled by Scottish freight, which was made in Scotland. The data show that domestic & maritime intermodal, and domestic automotive freight traffic were the commodity groups with most mileage travelled outside of Scotland (36%, 23% and 20% respectively), compared to petroleum product where over 80% of the net tonne miles were accumulated within Scotland.

Figure 26: Scottish Rail Freight by Commodity Type – Scottish share of distance travelled in 2019/20



Source: Network Rail

Scotland's main rail freight terminals are across the central belt. Going from east to west these are in Grangemouth, Mossend (Eurocentral), Coatbridge, Deanside (Hillington) and Elderslie. Freight services along these routes are provided by different Freight Operating Companies (FOCs) and are a vital gateway for many Scottish goods imports and exports.

Transport and Covid-19

The Covid-19 pandemic had a large and unprecedented impact on transport in Scotland and around the world. For example, Scottish patronage on public transport fell by 75% during the first two weeks of the first national lockdown, resulting in significant loss of revenue for many public transport operators. Alongside this, air traffic at Scottish airports in the week up to 13th April was down around 95% compared to the same week in 2019. Data showed the number of scheduled flights departing Scottish airports fell around 95% to around 15-30 per day compared to March/April 2019. Furthermore, data from the CAA⁴⁷ show that this trend continued further into the year, with summer 2020 (June-August) air passenger numbers from Scotland's two largest airports Glasgow and Edinburgh showing a fall of 91% and 89% respectively, compared to the same three months in 2019.

Heavy goods vehicle (HGV) traffic data for Scottish trunk roads taken at the start of April 2020 showed traffic demand levels not seen since the early 1960s. Despite the easing of transport restrictions over recent months, on-going requirements for physical distancing, changing working patterns and the impact on passenger confidence means that demand for transport is unlikely to return quickly to pre-Covid levels. Although it is expected that some recovery in passenger volumes will return, the rate of that recovery over the next two years remains unclear.

Surveys taken by the Road Haulage Association and Logistics UK from the week commencing 30th March showed falls in demand approaching 50% for road hauliers, resulting in over 60% of staff being furloughed in April. However, while the pandemic and the associated lockdown had a significant impact on discretionary travel as well as commuting, its impact on freight transport and the movement of goods was relatively less severe. ONS' Business Impact survey from the start of June included a question on the use of logistics services to distribute goods or services, within the UK. Roughly a third of businesses reported having used logistics services, with 86% of businesses that used logistics services able to meet all distribution demands. Few sectors across the UK economy identified any immediate issues with accessing road haulage services and few indicated that they expected demand will not reach pre-COVID levels for some time.

For rail freight, Covid related activity resulted in traffic increases between the East Midlands and Scotland. All routes are now slowly picking up although freight operating companies across Scotland forecast that intermodal traffic could be depressed for around the next 12 months. Having said that, all of the routes mentioned in the previous chapter remain operational and none were discontinued or paused as a result of the pandemic.

The nature of the transport industry – being largely a derived demand – means that the pace of the recovery of the wider Scottish and global economy will be a significant contributing factor to the pace at which demand returns to some semblance of normalcy. The extent to which these two phenomenon move in tandem will depend on the lasting impact that the pandemic has had on behaviour. While some industry professionals expect that the future will be very different from the recent past, travel data in many countries now out of lockdown have shown traffic volumes back up to pre-COVID levels amidst a large boom in demand for overseas travel. Travel in Scotland continues to be popular and very necessary, however the modes employed for the movement of people and goods have changed and how they will ultimately shape up remains uncertain.

⁴⁷ Civil Aviation Authority (CAA) Airport Data, 2020 - Table 09

Transport Links to Key Trade Destinations



This chapter provides an update on the key trade destinations highlighted in chapter 3. It also provides a brief overview of how transport to each country has changed over time. Scotland's top five trading partners (imports and exports) have remained broadly unchanged since 2013. The inclusion and exclusion of some countries has been dictated to some extent by the volatility of some of the top export goods that Scotland trades, the main one being petroleum products, which can be very erratic depending on the prevalent global economic landscape at any one time.

The Covid-19 pandemic called into question the level of interconnectedness of global economies. Scotland too shares a strong level of interconnectedness with other economies around the world.

The information below describes the situation in normal times with regards to transport links, scheduled flights and sailings. The global pandemic will no doubt influence how these transport links materialise in the future, with limited capacity, reduced demand and the on-going need to monitor safe physical distancing wherever possible. It is still too early to say how long-lasting the initial shocks of the pandemic will be, but it is clear that much of the return to some relative normality will be dependent on the condition of not only the Scottish economy, but also overseas economies who have strong demand for Scottish goods.

Scotland's strategy for growing exports as published in *A Trading Nation* pinpointed a number of priority markets where immediate opportunities to trade in multiple sectors exist. As mentioned earlier, Scotland's top trading partners countries and goods traded have remained broadly similar since 2013. In order to provide a different perspective, this chapter will look into some of the countries mentioned in *A Trading Nation* which don't feature in Scotland's top five importing or exporting destinations but are one of Scotland's identified priority markets. Many of the countries will be recipients of key export commodities such as beverages (whisky),

fish, petroleum related products and power generating machinery. These goods are vital to the development of Scotland's Growth Sectors⁴⁸. Similar categories of goods are also imported by Scotland along with gas and telecommunications & office equipment. An overview of the key commodity categories that Scotland trades in is included in Table 2 in the Annex. Details of the transportation of these goods to and from the aforementioned countries is discussed below.

Europe

Three of Scotland's top five goods export destinations are EU nations; the Netherlands, France and Germany. Two of these also feature in Scotland's top five sources of goods imports, the Netherlands and Germany. The EU is a key trading partner with Scotland. The largest commodity group for goods exported to and imported from these countries in terms of value is machinery and transport equipment. The EU was also the top global region for Scotch whisky exports, valued at £1.48 billion in 2019, 30% of all global Scotch whisky exports⁴⁹.

As highlighted in Chapter 3, freight to and from mainland Europe can be carried in a number of different ways. Some perishable goods are transported via the trunk road network in Scotland and England to the Channel Tunnel, Channel ferry terminals or airports. Less time sensitive perishables may be transported on freight vessels from Scotland's ports or transported to North Sea ferry service terminals in Newcastle and Hull which offer overnight ferry services to continental Europe.

At the moment there are no direct rail freight services from Scotland to mainland Europe, although non-perishable freight can be carried by rail to hubs in England for transfer to European destinations. However, there is a route linking Scotland and continental Europe in the opposite direction. GB Railfreight currently carries bulk wagons of clay slurry from Antwerp, Netherlands through the Channel Tunnel direct to Irvine, Scotland once a week.

Belgium

By scale, Belgium's goods trade with Scotland in 2019 would rank them 11th of all countries and 8th of EU countries, just below Spain. Scotland's largest commodity import from Belgium is plastic. Almost 20% of all goods imports from Belgium were in this commodity group (SIC 57 & 58). Scotland currently runs a goods trade deficit with Belgium, meaning that the value of imports exceeds that of exports. The Scottish goods export of most importance to the Belgian market is petroleum products, accounting for 28% of all Scottish exports to the country in 2019.

Direct transport links between Scotland and Belgium are few however, freight links via rail are available from south of the Scottish border. Links to England are numerous. The port of Zeebrugge for instance is only 92 miles southeast of Felixstowe in England. Scotland also currently operates regular direct flights from Edinburgh and Glasgow into the Belgian capital of Brussels.

⁴⁸ Scotland's economic strategy identifies six sectors where Scotland has a distinct comparative advantage which are; food and drink, creative industries, sustainable tourisms, energy, financial and business services, and life sciences.

⁴⁹ Scotch Whisky Exports Analysis, 2019

Denmark

At present, Denmark makes up a small proportion of Scottish overseas goods trade. In 2019, £557 million of goods was traded with Denmark, just over 1% of total Scottish goods trade (imports and exports), however the goods came mainly from two commodity groups, energy (for exports) and machinery and transport (for imports). Nearly 45% of all Scottish imports from Denmark in 2019 were either in machinery or transport equipment, while over a third of all exports to the country were of petroleum products.

Transport links to Denmark include direct flights from Glasgow, Edinburgh and Aberdeen into one of four Danish airports – Copenhagen, Billund, Aalborg and Esbjerg. While there are no regular direct sailings from Scotland to any Danish ports, given the nature of the goods imported from Denmark, some of these goods are likely to travel via sea.

France

France is the second largest importer of Scotch whisky in terms of value, importing £432 million worth in 2019. In terms of volume however, France is the largest export destination for Scotch whisky, with over 173 million 70cl bottles being shipped to the country in 2019. Scotland ran a trade surplus with France in 2019, exporting twice as much as it imported from the country.

Another key commodity exported to France is fish and seafood. Over £435 million worth of fish, crustaceans, molluscs and other aquaculture was exported to France in 2019. This would have likely travelled from various ports in Northern Scotland by HGV down to the Channel. The main wholesale market for Scotland's seafood on the European mainline is Boulogne sur Mer located close to Calais in Northern France. This is accessible via the Dover Channel crossing. Scottish freight vehicles can travel to the Channel in a day, so this corridor is of vital importance to trade with France and the rest of Europe.

When it comes to imports, 8% of Scottish imports from France were road vehicles. Scotland's primary links for trade with France are via road and port. HGVs carry goods down to Dover where they transfer to France. Scotland has a number of air links with France, with direct flights to 12 different French airports available from one of Scotland's top 3 passenger airports (Aberdeen, Edinburgh and Glasgow).

Germany

Scottish trade with Germany saw a large increase in 2019, owing largely to significant growth in the value of petroleum and petroleum products exports. Compared to 2018, exports of this commodity grew 74%, making it by far the most important export good to Germany.

An important Scottish export to Germany is beverages, worth £147 million in 2019. While Germany is the UK's largest trade market, this is not the same for Scotland, with Germany accounting for 10% of all Scottish trade in goods (imports and exports) in 2019. Having said that, transport links between Scotland and Germany are vital for

Scottish trade, with Germany being the largest economy in Europe, and one of the strongest economies in the world.

In terms of road transport, Germany was one of the few countries where Scottish road freight data could be accurately disaggregated, albeit still a small proportion of total road freight in 2019. Road freight travelling from Scotland to any of the countries in continental Europe, will either go via Harwich-Hoek van Holland, the Dover to Calais ferry crossing, or through the Channel Tunnel.

Sea links between Scotland and Germany usually involve either chartered ships carrying special goods into one of Germany's many Northwest ports (the three largest ports are Bremen, Hamburg and Wilhelmshaven) or shipping to ports in France or the Netherlands before a modal shift to road or rail for the remainder of the journey.

Scotland has direct flight links to 11 German airports, creating an opportunity for air freight to reach the country should Scottish exporters wish to do so.

Italy

Similar to Denmark and Belgium, Scotland currently runs a trade deficit with Italy, importing £734 million worth of goods in 2019, compared to exports valued at £692 million. Petroleum goods exports are of vital importance to the Italian market, making up nearly 20% of total goods exports. As far as broad trade categories go, machinery and transport equipment top the list when it comes to Scottish-Italian trade.

Transport links between Scotland and Italy are available through the vast majority of modes however, due to the location of Italian ports, it is highly uneconomical for goods to be shipped from Scottish ports to Italian ports, instead goods for transport, as is the case with most Scottish goods going to continental Europe, will make use of road freight, crossing into Europe via the Channel.

Scottish air links with Italy include flights from Edinburgh and the two Glasgow airports into 10 different airports in Italy. These regular direct flights can take people and goods into any one of the capital of Milan's airports, Turin and Bologna in the north, or Rome in the south.

The Netherlands

As highlighted earlier, the Netherlands is Scotland's number one export destination (£5.9 billion in 2019), largely as a result of the dominance of the Dutch port of Rotterdam. The port acts as an international shipping hub with containerised goods shipped on to other destinations from there. Due to the method in which this containerised trade data is collected, it is sometimes difficult to ascertain the final destination of goods which pass through Rotterdam.

The main import goods from the Netherlands are office machines and telecommunication materials – likely originating from Asia. Having said that, the key exports to the Netherlands from Scotland include petroleum products – which are less likely to be affected by the Rotterdam effect – medicinal & pharmaceutical

products, and beverages, with these three good categories accounting for 90% of total Scottish exports to the Netherlands in 2019.

Freight is typically carried by chartered vessels originating from Scottish ports or by road to ports on the east coast of England. Some of the freight bound for the Netherlands is also carried by road via the Channel ports. While there are no regular scheduled sailings between the Netherlands and Scotland, the overnight ship between Newcastle and Amsterdam is an option for passengers and for HGVs.

Glasgow and Edinburgh airports operate regular passenger flights to Amsterdam, Eindhoven and Rotterdam.

Norway

For six of the past seven years, Norway has consistently been Scotland's number one import partner country, driven almost entirely by the value and volume of natural gas imports via pipeline and sea ports, emphasizing both countries' close involvement in North Sea oil and gas production and exploration. In 2019, this changed. The value of natural gas imports from Norway in 2019 fell by 55% compared to the previous year. Analysis earlier in the paper explained that this fall in value was largely due to fall in the price of gas, the diversification to other sources, and a fall in global and domestic demand for the commodity.

Large machinery items and transport equipment form a significant portion of Scottish exports to Norway. Some of these larger high value items travel in cargo planes bound for Norway, while other smaller items are able to travel in the hold of passenger flights. This is similar to seafood which is traded with Norway, with an increasing amount being transported via commercial and passenger aviation.

Freight ferries travel twice weekly from Immingham on England's east coast to Norway with road links from Scotland to Immingham via the A1(M) and A180(M). In terms of passenger flights, Scottish travellers can fly to a range of Norwegian airports (Bergen, Haugesund, Oslo or Stavenger) from Aberdeen, Glasgow, Edinburgh, Kirkwall or Sumburgh, with flights into the Norwegian capital, Oslo, leaving from Scotland almost daily.

Poland

In terms of overall trade (imports and exports), Poland ranks 9th of Scotland's top trading partner countries, dominated by Scottish imports from the country. Scotland imported in excess of £880 million worth of goods from Poland, while exports totalled £485 million in 2019. This trade deficit is largely as a result of imports of office and data processing machines – the value of which (£577 million) alone outweighs total exports to the country.

Transport links to Poland include the option of chartered freight vessels from Scotland to the Port of Kołobrzeg on the Baltic Sea. In addition, Scotland runs direct

air services from Glasgow, Edinburgh and Prestwick to eight⁵⁰ different Polish airports, providing necessary options for Scottish goods producers who wish to export via air freight.

Republic of Ireland and Northern Ireland

The Republic of Ireland is Scotland's third largest EU trading partner country, owing largely to the proximity of the country. Scotland traded £1.8 billion worth of goods with the Republic (imports and exports) accounting for 3.1% of Scotland's total trade in goods in 2019. Data for trade with the Republic of Ireland is likely to be underestimated as a large amount of the trade will travel via Northern Ireland however, regional trade data are not available for intra-UK trade and any overall UK figures and are not easily disaggregated at a Scottish level. As such, some of the goods transported to Northern Ireland will have a final destination in the Republic, similar to how some goods transported to England and the Netherlands have a destination further afield. Having said that, Scotland runs a strong trade surplus with the Irish Republic, with export goods valued at more than double imports.

Natural gas is the most important commodity with exports valued at nearly £380 million in 2019. Food and live animals is valued as the largest commodity group in terms of imports, making up more than a third of Scottish imports from the island.

The main freight corridor between Scotland and the island of Ireland is via ferry services which operate from Cairnryan and Loch Ryan. There are a total of 13 daily sailings to Larne or the Port of Belfast, with an estimated 400,000 freight units carried on this corridor (around 1,200 per day). Two main trunk roads link the port with the central belt (A77) and England (A75). The two roads are estimated to carry a combined total of £67 million worth of goods per day⁵¹.

Air links are also numerous, with Aberdeen, Edinburgh and Glasgow operating regular flights to a variety of destinations in both Northern Ireland and the Republic (Belfast, Derry, Donegal, Dublin, Cork, Knock and Shannon).

Switzerland

Switzerland is the smallest of the identified priority markets cited above, trading £318 million worth of goods with Scotland in 2019. Nearly half of all imports from the country were in non-ferrous metals - aluminium, copper, lead, nickel, tin, titanium and zinc, and alloys such as brass (£72 million), making it the most important trading commodity between the two countries. Scottish exports to Switzerland fall mainly in one of three areas, non-ferrous metals, power generating machinery and other transport equipment. These three combined accounted for a third of total Scottish exports to Switzerland in 2019.

With the country being landlocked, transport links are limited to road, rail and air. Scotland's two main airports currently operate direct services to Geneva and Zurich.

⁵⁰ Airports include Bydgoszcz, Gdansk, Katowice, Krakow, Poznan, Warsaw Chopin, Warsaw Modlin and Wroclaw.

⁵¹ A75-A77 Freight Corridor, Scotland Travel Study report, March 2018

Sweden

Scottish trade with Sweden is driven largely by exports of petroleum products. The trade surplus that exists between Scotland and Sweden has been prevalent for 6 of the last 7 years, only 2017 when this failed to be the case. In each of these years Petroleum products has been the top commodity traded with Sweden, with exports of the good totalling £1.3 billion since 2013. Having said that, Sweden is small in terms of Scotland's trading partners and ranks 16th out of all countries.

Scotland imported £73 million worth of seafood from Sweden in 2019, making it the most valuable imported good from Sweden. Overall, food & live animals as well as transport vehicles

The location of Sweden to the East of Scotland, and given the nature of the exports, means that a large proportion of these goods will be transported via tanker on ships bound for Swedish ports. In terms of options for freight movements, Scotland flies directly to Stockholm – Arlanda and Skavsta – and Gothenburg airports from Edinburgh, creating an opportunity for freight to move in the hold of passenger planes.

Spain

In 2019, Scotland traded nearly £1.3 billion worth of goods with Spain. Two thirds of this was exports to the country – thereby reversing the trade deficit of the previous year – largely consisting of petroleum and petroleum products and beverages. Although the country would just make it into Scotland's top ten trading partners in 2019, in terms of tourism, Spain is the number one overseas destination for Scotlish tourists. In 2019, Scotlish tourists made over 2.5 million trips to Spain and its surrounding islands.

As noted earlier in the report, Spain has been Scotland's number one tourist destination for the last decade. Scottish airports fly to 20 destinations in Spain and the Canary Islands. In 2019, over 2.65 million passengers boarded a flight bound for a Spanish airport, a slight decrease on the previous year of 2.77 million.

Further afield

While the ports in mainland Europe are vital for Scottish trade, Scottish businesses regularly transport goods even further overseas, with chartered aircraft and ships travelling to Africa, South America and Asia, carrying a variety of goods.

Canada

Scottish trade with Canada is small by comparison to the USA; Canadian trade accounted for 1% of total Scottish goods trade in 2019. Scottish beverages are a key export commodity to the Canadian market, with beverage exports valued at £118 million in 2019 - 3% of total Scottish beverage exports. Today, Canada is one of Scotland's largest inward investors, with around 50 Canadian businesses supporting 6000 jobs in the Scottish economy.

In 2017, Macsween's of Edinburgh reconfigured its haggis recipe to meet Canadian food standards. Since then, the company has exported more than eight tonnes of haggis to Canada, shifting £25,000 worth in January alone, to meet the demand from Burns suppers.

Transport links with Canada include direct flights from Glasgow and Edinburgh Airports to Halifax and Toronto. Despite the vast expanse of around 3000 miles of Atlantic Ocean separating the two countries, ocean shipping between Scotland and Canada remains a viable option for businesses looking to move goods between the countries. Scotland exports diagnostic and laboratory reagents to Canada from Glasgow airport, valued at £25 million and accounting for over half of all air freight exports to the country.

USA

The USA was Scotland's number one non-EU trading partner for six consecutive years until 2019 when they were overtaken by China. The USA is a key market for Scottish goods exports, not least beverages. The Scotch Whisky Association noted in their whisky analysis for 2019, published in February 2020, that The United States is Scotland's single largest overseas market for Scotch whisky, accounting for £1.07 billion in Scotch whisky exports in 2019. This represents a 2.8% increase from 2018 and accounts for over 22% of all Scotch whisky exports. Scottish ports such as Clyde and Aberdeen regularly ship office and automatic data processing (ADP), power generating and other transport machinery to the USA.

In addition to the importance of USA as a key export market for Scottish goods, Scotland import a large amount of machinery from the USA. In 2019, 58% of all Scottish imports from the country were in machinery or transport equipment – being valued at £1.7 billion.

Over the last decade a number of scheduled passenger flights have been introduced from Glasgow and Edinburgh airports to the United States. Scheduled airlines now fly Boston, Chicago O'Hare, New York JFK, New York Newark, Orlando, Philadelphia and Washington DC. Air freight between Scotland and the USA, predominantly leave from / arrive into Glasgow or Prestwick airport. The main goods include TTG and medical equipment.

In addition to these air links, a number of chartered ships leave regularly from Scotland to the USA. Scotland ships goods including agriculture bulk goods and forestry goods from the Clyde ports to the USA regularly. Aberdeen Harbour handles machinery and equipment goods imports from the US, and ships oil related goods back.

China

Owing to a strong rebound in petroleum exports to the country, China not only returned to Scotland's top five exporting destinations, but also overtook the USA as Scotland's number one non-EU export destination in 2019. China continues to be a key market for Scottish petroleum goods, primarily oil related products.

HMRC RTS show that Scotland exported in excess of £3.9 billion of petroleum related products to China in 2019. This figure represented a 378% increase on the

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previous year, and more than outweighed the fall experienced between 2017 and 2018. The vast majority of these petroleum goods travel via tanker to China and are likely to be loaded onto ships from various ports around the UK, especially Forth Ports off of Scotland's East Coast. Moreover, Scotland exports other goods including steel and power generating equipment to China from the Forth and Clyde ports. Scotland no longer operates direct passenger flights to China. However, Scotland imports medical equipment from China into Glasgow airport and exports a great deal of TTG from Glasgow Prestwick Airport to China.

Scotland's transport links with China not only promote trade with Chinese businesses, but provide Scottish exporters access to additional markets in and around South East Asia. Therefore, this is a vital gateway into other emerging and developing market economies for Scottish goods.

Annex: Top Scottish Trading Commodities by Value – 2017 - 2019

2017		2018		2019	
Commodity	£ 000s	Commodity	£ 000s	Commodity	£ 000s
33 - Petroleum, petroleum products & related materials	9,380,742	33 - Petroleum, petroleum products & related materials	12,710,378	33 - Petroleum, petroleum products & related materials	14,681,204
11 – Beverages	4,541,124	11 - Beverages	4,851,449	11 - Beverages	5,048,348
71 - Power generating machinery & equipment	4,380,145	71 - Power generating machinery & equipment	4,751,250	71 - Power generating machinery & equipment	4,653,658
34 - Gas, natural & manufactured	3,559,295	34 - Gas, natural & manufactured	4,073,103	75 - Office machines & adp machines	3,176,883
79 - Other transport equipment	2,999,358	75 - Office machines & adp machines	3,114,538	74 - General industrial machinery & equipment	2,457,481
75 - Office machines & adp machines	2,647,187	79 - Other transport equipment	2,320,973	34 - Gas, natural & manufactured	2,024,647
74 - General industrial machinery & equipment	2,191,140	74 - General industrial machinery & equipment	2,210,681	77 - Electrical machinery, apparatus & appliances	1,707,007
77 - Electrical machinery, apparatus & appliances	1,759,966	77 - Electrical machinery, apparatus & appliances	1,789,839	79 - Other transport equipment	1,665,548
89 - Miscellaneous manufactured articles n.e.s.	1,439,853	89 - Miscellaneous manufactured articles n.e.s.	1,466,360	87 - Professional, scientific & controlling ins & app n.e.s.	1,352,916
87 - Professional, scientific & controlling ins & app n.e.s.	1,375,223	84 - Articles of apparel & clothing accessories	1,371,721	84 - Articles of apparel & clothing accessories	1,308,876



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