

Trade in Services report

July 2026

Acknowledgements

This report was written in partnership with Prosper and the Centre for Inclusive Trade Policy. The Fraser of Allander Institute (FAI) also thanks:

Senior Research Fellow Minako Morita-Jaeger, of the University of Sussex Business School, for providing analysis to underpin global trends within services sectors.

Professor Anirudh Shingal, of the S.P. Jain Institute of Management & Research, for providing analysis of global services trade restrictiveness.

Extracts of their analysis are included in this report. Complete analysis will be published in detail in annexes to this report.

Disclaimer

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

The report was commissioned in August 2025 by the Scottish Government.

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

EXECUTIVE SUMMARY: Cross-Cutting Themes in Scotland's Trade in Services	4
Importance of services trade to Scotland	4
The nature of services trade and market access.....	5
Non-tariff barriers and regulatory fragmentation	6
Business responses and adjustment mechanisms	8
Scotland's position within the UK services landscape	8
Implications for Scottish export opportunities	9
Scottish service sector trade data and measurement considerations	10
Supplementary Indicators to assess the growth of services sector exports	14
Purpose of this research	15
1.1 Objectives of this research	16
1.2 Scotland's policy levers in addressing services trade barriers	18
1.3 Strategic Priorities and Market Context	18
1.4 Sectors in this report.....	19
Financial Services.....	20
2.1 Sectoral Composition & Overview.....	20
2.2 Current and future global regulatory and non-tariff issues in the Financial Sector	25
2.3 Summary from Financial Services Roundtable	28
2.4 SWOT Analysis: Financial Services	29
2.5 Roundtable Feedback and Policy Considerations.....	31
2.6 Case Study: Financial Services Sector	32
Professional & Business Services	33
3.1 Sectoral Composition & Overview.....	33
3.2 Current and future global regulatory and non-tariff issues in the PBS Sector	37
3.3 Professional & business services roundtable summary	41
3.4 SWOT Analysis: Professional and Business Services Sector.....	42
3.5 Roundtable Feedback and Policy Considerations.....	46
3.6 Case Study: Accountancy Firms in Scotland at the whims and fancies of negotiation appetite of EU bodies	47
Science & Research	49
4.1 Sectoral Composition & Overview.....	49
4.2 Current and future global regulatory and non-tariff issues in the Sciences Sector	52
4.3 Science and Research Roundtable Summary	53
4.4 SWOT analysis: Science and Research Service.....	54
4.5 Roundtable Feedback and Policy Considerations.....	57
4.6 Case Study: Life Sciences Sector and the circumnavigation of different regulatory regimes on different continents	58

Creative Industries.....	60
5.1 Sectoral Composition & Overview.....	60
5.2 Current and future global regulatory and non-tariff issues in the Creative Sector	64
5.3 Creative industries roundtable summary	66
5.4 SWOT analysis: Creative Industries	68
5.5 Roundtable Feedback and Policy Considerations.....	71
5.6 Case Study: Lived Experience of a Scottish Creative Services Firm	73
Digital & Technology Services	75
6.1 Sectoral Composition & Overview.....	75
6.2 Current and future global regulatory and non-tariff issues in the Digital Sector	79
6.3 Digital and technology services roundtable summary	81
6.4 SWOT analysis: Digital and technology services	82
6.5 Roundtable Feedback and Policy Considerations.....	85
Energy Related Services	87
7.1 Sectoral Composition	87
7.2 Current and future global regulatory and non-tariff issues in the Energy Sector (oil and gas, renewables, and engineering-led supply chains).....	91
7.3 Energy Services Sector Roundtable Summary	94
7.4 SWOT analysis: Energy Related Services	96
7.5 Roundtable Feedback and Policy Considerations.....	99
7.6 Case study: Offshore energy engineering services	100
Conclusion and Cross-Sector Policy Implications	101
8.1 Conclusion.....	101
8.2 Policy Recommendations	101

EXECUTIVE SUMMARY: Cross-Cutting Themes in Scotland’s Trade in Services

This chapter draws together the key themes emerging from the sectoral analysis presented later in this report. While each sector operates within distinct regulatory and commercial environments, evidence from roundtables, case studies and supporting data points to a consistent set of factors shaping how services are traded, how barriers arise, and how firms respond in practice. These cross-cutting themes provide a framework for interpreting sectoral findings and understanding Scotland’s position within UK and global services trade.

Importance of services trade to Scotland

Services trade plays a central role in the Scottish economy, supporting high-value employment, productivity and international competitiveness across a wide range of sectors. While there are numerous methodological challenges associated with service sector exports data, official data indicates that the nominal value of total service exports stood at approximately £16bn in 2023, which is roughly double the value in 2008. Scottish inflation adjusted international service sector exports increased by 8 per cent in 2023 (relative to 2018) and nearly 41 per cent of all international exports originate from service sector businesses. Key service sector exports underpin high value employment and evidence suggests that these jobs tend to pay significantly more, in line with the higher productivity levels. The sectors examined in this report—including financial services, professional and business services, science and research, digital technologies and energy-related services are structurally knowledge-intensive and increasingly integrated into global markets and value chains.

Table E.1: Selected Scottish service sector exports, 2023

Service Sector	Total Nominal Service Sector Exports (2023, £m)
Professional, scientific & technical	4,615
Financial & Insurance	2,565
Wholesale, retail & vehicle repair	2,190
Information & communication	1,970
Education	1,425
Administrative & support service	1,095
Transportation & Storage	1,060

Source: ESS

The selection of service sectors that have been the focus of this report has been shaped heavily from a trade policy lens. Although higher education and tourism are significant contributors to Scotland's services exports, they are not priority sectors within a trade barrier reduction strategy. Dynamics in these sectors is driven primarily by visa policy, migration policy, global demand conditions, exchange rates and reputation rather than by regulatory market access barriers that can be addressed through trade negotiations or mutual recognition agreements. As a result, the scope for trade policy to materially alter outcomes is limited and hence scarce policy resources may be better allocated on regulated service sectors where targeted intervention can generate measurable gains.

It's also worth noting that while sectors such as tourism and education receive significant attention, these are largely **final-demand services** consumed directly by end users and are therefore more exposed to cyclical shocks, as demonstrated during the pandemic. By contrast, many of the sectors examined in this report provide **intermediate services** that act as inputs into wider production processes. These activities tend to be more embedded in global value chains, are typically more resilient, and support specialisation and the development of sectoral clusters.

Scotland's strong higher education base, combined with a skilled workforce and established sectoral capabilities, positions the economy well to capture a greater share of global services trade. In particular, the ability to generate, apply and commercialise knowledge intensive services provides a foundation for sustained export growth.

Unlike goods, services are delivered through multiple channels, including cross-border supply, commercial presence and the temporary movement of personnel. As a result, services trade is closely linked to firm capabilities, regulatory conditions and the ability to operate across jurisdictions. This makes services trade both economically significant and particularly sensitive to non-tariff barriers and institutional arrangements in destination markets.

A defining feature of the Scottish services economy is its high degree of integration with the rest of the UK. Businesses consistently report that they do not distinguish between Scotland and the rest of the UK as separate markets, reflecting shared regulatory, legal and institutional frameworks. At the same time, international services exports remain critical for accessing external demand, diversifying markets and supporting economic resilience.

All this highlights the importance of understanding not only the scale of services exports, but also the conditions under which they occur, particularly the role of non-tariff barriers, firm behaviour and sector-specific capabilities in shaping trade outcomes.

The nature of services trade and market access

A consistent finding across sectors is that services trade is shaped by the interaction between delivery modes, regulatory conditions and firm level relationships. Services are rarely delivered through a single channel. Instead, firms typically combine cross-border supply, commercial presence and the temporary movement of personnel when operating in international markets.

Unlike goods trade, services transactions are often ongoing and relationship-driven. Market access is therefore determined not only by formal regulatory requirements, but also by commercial practices and client expectations. Evidence from firm engagement highlights that so-called “soft” barriers such as requirements for local presence, familiarity with domestic standards and preferences for locally embedded delivery can be as significant as formal restrictions.

These features mean that barriers to services trade do not simply limit whether trade occurs, but shape how firms organise and scale their international activities. In practice, firms adjust delivery models, establish a local presence, or form partnerships to meet regulatory and commercial requirements in destination markets.

Emerging technologies, including artificial intelligence, are beginning to reshape how services are delivered across borders. While these developments have the potential to expand the range of services that can be traded remotely, they also introduce new considerations around data governance, regulation and market access. It’s also clear that while evidence and economic literature is lacking due to the rapid development and evolution of the technology – it introduces both risks as well as opportunities across service sectors.

Non-tariff barriers and regulatory fragmentation

Across all sectors examined, non-tariff barriers represent the most significant constraints on services trade. These barriers operate latently and are embedded within domestic regulatory and institutional frameworks in partner markets.

Common barriers include recognition of professional qualifications, licensing and authorisation requirements, restrictions on short-term mobility, requirements for local establishment, divergence in standards and certification regimes, and data-related regulations. Firms also highlighted the role of public sector procurement practices and client driven requirements in shaping access to markets.

These barriers tend to increase fixed costs, introduce uncertainty and restrict available modes of supply. Rather than acting as explicit prohibitions, they require businesses to adapt their models and incur additional compliance costs or completely restructure delivery.

Table E.2: Delivery Modes and Barriers in Services Trade

Dimension	Digitally deliverable services	Mobility-dependent services	Regulation-intensive services
Typical sectors	Tech, digital, some professional services	Consulting, engineering, creative	Legal, finance, life sciences
How exports occur	Remote / cross-border delivery	Temporary presence in market	Compliance with local rules
Key barriers	Data rules, platform access	Visas, travel restrictions	Licensing, certification
Most affected firms	SMEs scaling digitally	SMEs and mid-sized firms	Mid-sized and large firms
Market sensitivity	Lower (global reach)	Medium (travel-dependent)	High (market-specific rules)

While the distinction between hard and soft barriers is analytically useful, soft barriers are inherently more difficult to observe and measure. Unlike formal regulatory restrictions, they arise through commercial practices, client preferences and market norms. As a result, they are best explored through firm level evidence, including structured industry surveys, regular ongoing roundtable engagement and case studies that capture how businesses experience these constraints in practice.

Evidence from firm engagement suggests that soft barriers can, in some cases, be as binding as formal regulatory constraints. While hard barriers increase compliance requirements in a transparent and often quantifiable way, soft barriers can influence market access indirectly by shaping client expectations, procurement practices and delivery models. This makes them more difficult to measure, but not necessarily less significant. In particular, requirements for local presence, familiarity with domestic standards and established in-market relationships can impose costs and constraints comparable to formal licensing or authorisation requirements.

Assessing the relative importance of hard and soft barriers therefore requires a combination of approaches. Quantitative indicators, such as services trade restrictiveness indices, can provide insight into formal barriers, while firm-level surveys and case studies are better suited to capturing the impact of softer constraints. Developing more systematic metrics in this area remains a priority for future research, particularly in understanding how these barriers affect firm behaviour, investment decisions and the location of service delivery.

Business responses and adjustment mechanisms

Businesses across all sectors reported similar responses to the constraints outlined above. These responses reflect the need to adapt delivery models and organisational structures in order to maintain access to international markets.

In practice, firms tend to adjust in three main ways. First, many establish a commercial presence in key markets, either through subsidiaries or local offices, to meet regulatory requirements and client expectations. Second, firms form partnerships with locally established businesses, allowing them to navigate regulatory environments and access networks more effectively. Third, firms adapt their delivery models, including hiring locally rather than relying on cross-border provision, or modifying services to meet jurisdiction-specific standards.

In some cases, firms reported choosing not to enter certain markets, or scaling back activity where barriers were considered too costly or complex. In others, firms absorbed additional costs in order to retain market access, particularly in strategically important or high-value markets.

These responses highlight that non-tariff barriers do not simply restrict trade, but reshape how and where economic activity takes place. Adjustments in business structure, investment decisions and location of service delivery can affect productivity, the distribution of value added and the extent to which economic activity remains anchored in Scotland.

Many of these adjustments are not directly observable in trade statistics, reinforcing the importance of firm level evidence in understanding how barriers operate in practice.

Scotland's position within the UK services landscape

A consistent finding across all sectors is the high degree of integration between Scotland and the rest of the UK. Firms do not treat Scotland and the rest of the UK as distinct markets, reflecting shared regulatory, legal and institutional frameworks. This integration provides access to a large domestic market and reduces internal barriers to trade.

At the same time, this high level of integration can mask important differences in the composition of the Scottish and wider UK services economies. While the UK is internationally competitive across a broad range of service activities, Scotland's strengths are more concentrated in specific sectors and sub-sectors, particularly those linked to knowledge-intensive and specialised services.

This has important implications for how Scottish firms participate in international services trade. Rather than competing across the full range of service activities, firms are more likely to compete on specialised expertise, sector-specific capabilities and the delivery of high-value services within defined market segments.

As a result, Scotland's international services trade is closely linked to its role within wider UK and global value chains. Scottish firms often contribute specialised services as part of larger projects

or integrated supply chains, rather than operating as standalone providers across all markets. **For policymakers, the key point here is the importance of aligning export strategies with areas of comparative strength, rather than attempting to replicate the broader services profile of the UK as a whole.**

Implications for Scottish export opportunities

The importance of destination markets is evident across all sectors examined in this report. Scottish services exports remain concentrated in a relatively small number of mature markets, particularly the rest of the UK, the European Union and the United States. These markets offer scale, established demand and strong commercial linkages, but are also characterised by regulatory complexity and, in some cases, increasing divergence in standards, mobility requirements and compliance frameworks.

At the same time, emerging markets, including India, China and the Gulf states, present growing demand for knowledge-intensive services in areas such as financial services, engineering, digital technologies and research. However, these markets are often associated with evolving regulatory environments, less predictable market access conditions and a greater reliance on local presence or partnerships. This creates a different set of challenges for Scottish firms, particularly in navigating regulatory frameworks and establishing credibility in new markets.

Evidence across sectors suggests that export opportunities are shaped not only by underlying demand, but by the interaction between destination market characteristics, non-tariff barriers and firm capabilities. In particular, the ability to navigate regulatory requirements, adapt delivery models and maintain commercial relationships plays a central role in determining where and how firms can compete.

Opportunities are most evident where services can be delivered across borders with limited reliance on sustained local presence, or where regulatory and client requirements can be met through existing capabilities. This includes digitally deliverable services, as well as project-based and collaborative models that allow firms to operate internationally while retaining a Scottish base.

At the same time, greater alignment, mutual recognition and structured regulatory engagement can reduce barriers and support more seamless participation in international markets. This is particularly important where Scottish firms contribute specialised services within wider value chains and international projects.

Table E.3: Core and Growth Markets by Sector

Sector	Core markets	Growth markets	Export potential (nature of opportunity)
Financial Services	Rest of UK, EU, United States	Middle East, Asia-Pacific (including Singapore and South Korea)	Asset management, insurance, pensions and fintech services, including investment-linked activity
Professional & Business Services	Rest of UK, EU, United States	Middle East, Asia (including India), North America	Consulting, legal, accounting, architecture and project-based advisory services
Science & Research	EU, United States	Asia-Pacific (including India) , global markets	Contract research, international collaboration and innovation-led services
Digital & Technology	Rest of UK, EU, United States	Asia, Middle East, North America	Software, data services and scalable digital solutions across sectors
Energy-related Services	Rest of UK, EU, United States	Middle East, Asia, Africa	Engineering, offshore energy, renewables and project delivery services
Creative Industries	EU, United States	Global markets via digital channels	Screen, digital content, cultural exports and creative services

Scottish service sector trade data and measurement considerations

Services trade is inherently more difficult to measure than goods trade, reflecting its intangible nature, the range of delivery modes involved and the role of commercial presence and intra-firm activity.

As a result, observed trade flows may not fully capture underlying changes in market access or competitiveness. Non-tariff barriers often affect how services are delivered rather than whether trade takes place. Firms may respond by establishing a presence in overseas markets, restructuring delivery models or choosing not to enter certain markets altogether. These adjustments are not always reflected in aggregate trade data.

This means that the absence of observable changes in trade flows does not imply the absence of binding constraints. Business-level evidence is therefore essential in interpreting trends in services exports.



Nowcasting is used to provide indicative estimates of recent export performance, helping to bridge the gap between the latest available data and current economic conditions. While these estimates improve timeliness, they do not fully capture structural changes in delivery models or market access conditions and should be interpreted alongside firm-level evidence.

The analysis also highlights a number of important data gaps and areas for further research. Current statistics are primarily based on recorded cross-border transactions and do not fully capture the range of ways in which services are traded and embedded within wider economic activity. In particular, there is limited visibility on services that are bundled with, or embodied in, the export of goods, sometimes referred to as Mode 5 services. These activities are increasingly relevant in sectors such as engineering, energy and advanced manufacturing, where services are delivered as part of integrated projects or long-term contracts.

There are also gaps in capturing firm-level delivery models, including the extent to which services are provided through overseas commercial presence, intra-firm activity or partnerships with local firms. These modes of delivery can significantly affect how and where economic value is created but are not always reflected in trade statistics.

Addressing these gaps would support a more comprehensive understanding of Scotland's services trade. Areas for further research include improved measurement of services embodied in goods trade, greater use of firm-level and administrative data to capture delivery models, and enhanced granularity in sector-level statistics to reflect the role of Scottish firms within UK and global value chains.

Box E.1: Nowcasting Export Statistics Scotland

Nowcasting work was undertaken as part of the Trade in Services Research project to fill the gap between the latest official publication (covering up to 2023) and the present (2025). The goal is to provide timely insights into Scotland's export performance by sector during periods where official data is unavailable. Currently, the next publication of Export Statistics Scotland, covering 2024 and 2025, is scheduled for 2027.

This box presents an overview of the final results in table E.4 of the FAI's nowcasts with the full and historical Exports Statistics Scotland series, currently available from 2008 to 2023, in growth rates. Further details of methodology, suitability of predictor datasets, robustness of models, and the Excel data sheets can be found in the Trade in Services Nowcasting Report, published adjacent to the Trade in Services Report.

Two external datasets were selected as potential predictors of sector-level Scottish exports, for service-based sectors:

1. **Quarterly National Accounts Scotland (QNAS)** – Scottish GVA by industry (2008 Q1–2025 Q2)
2. **ONS UK Trade in Services** – UK service-product export data (2008 Q1–2025 Q2)

These datasets were regressed, in growth rates, with ESS values for each sector from 2008, 2010, and 2016 onwards. Mean Squared Errors of back testing these regression models in the 2021 – 2023 period were then calculated to select the most appropriate model for nowcasting the 2023 – 2025 period. The nowcasted figures presented in the attached table are calculated from the best of the six regression models.

ONS Subnational Trade data and HMRC trade data are also under consideration as predictors for exports from goods-based sectors. However, this is currently an area for future research.

QNAS was most useful for nowcasting sectors where the relationship between Scottish exports and Scottish sectoral GVA was strong (i.e., where exports compose a large portion of the sector's GVA). Meanwhile the ONS data was most useful for nowcasting sectors which are well integrated with their UK counterparts.

Starting models from 2008, 2010, and 2016 onwards reflects the impact of the Global Financial Crisis and Brexit on the exporting behaviour of the sector. This became particularly relevant where the reaction of sector to the Covid-19 pandemic mirrored vs differed from its experience during the Financial Crisis.

These nowcasts are not unquestionable predictions of Scotland's exports, rather they aim to provide estimates of which level Scotland's exports might be at until official statistics are published in 2027. An area for further research could develop a more detailed and robust methodology for nowcasting Scottish exports.

Table E.4: Export Statistics Scotland Nowcasts, (£m)

Year	2018	2019	2020	2021	2022	2023	2024	2025
Total Services (SIC 45-99)	12225	13050	10900	11635	15160	15565	17335	19169
Professional, scientific & technical (SIC 69-75)	3395	3770	3520	3620	3965	4615	4961	5679
Financial & insurance (SIC 64-66)	2320	2705	1915	1960	2590	2565	2861	3101
Wholesale, retail & vehicle repair (SIC 45-47)	2120	1960	1630	1975	2650	2190	2153	2182
Information & communication (SIC 58-63)	1350	1550	1325	1370	1965	1970	2203	2223
Education (SIC 85)	810	940	965	1020	1295	1425	1606	1724
Administrative & support service (SIC 77-82)	685	830	600	630	815	1095	1132	1213
Transportation & storage (SIC 49-53)	955	765	635	720	1185	1060	1264	1375
Accommodation & food service (SIC 55-56)	350	245	115	150	385	340	388	433
Other services (SIC 86-99)	145	205	125	140	220	190	222	299
Real estate (SIC 68)	95	80	70	55	95	105	113	142
Total Manufacturing (SIC 10-33)	17680	17690	14435	15830	20060	18565	19621	19413
Total Utilities, Construction, & Primary Industries (SIC 05-39)	2550	2540	2350	2465	2765	3535	3996	4300
Agriculture, forestry, & fishing (SIC 01-03)	650	695	685	660	685	715	770	837
Mining & Quarrying (SIC 05-09)	1510	1495	1405	1330	1425	1725	1578	1301
Construction (SIC 41-43)	145	135	155	180	405	920	977	989
Utilities (SIC 35-39)	245	220	110	295	255	180	188	206

Source: Export Statistics Scotland, FAI Calculations

Supplementary Indicators to assess the growth of services sector exports

Supplementary indicators of services export growth should move beyond headline export values and focus on whether Scotland's services base is broadening, deepening, and becoming more resilient over time. This includes measures of scale and participation, such as the number and share of Scottish firms exporting services, average export value per exporter, repeat-exporter and survival rates, and SME participation in international markets. Market reach and diversification indicators, including the number of destination markets served, reliance on the top three or five markets, concentration metrics, and exposure to faster growing economies helps assess vulnerabilities to shocks and over dependence on a narrow set of trading partners.

Given the importance of non-goods channels, modes of supply indicators are essential, capturing cross-border digital delivery (Mode 1), overseas commercial presence through affiliate revenues and foreign subsidiaries (Mode 3), and short-term business mobility and project-based postings (Mode 4), which are particularly relevant for professional, financial, digital, and energy-related services. Value-added and productivity measures—such as domestic value added embodied in services exports, services export intensity relative to Scottish GVA, exporter productivity and wage premia, and the share of knowledge-intensive services—provide insight into the quality and sustainability of growth. Finally, trade cost and barrier indicators act as leading signals of future performance and include sector level scores from the OECD Services Trade Restrictiveness Index, evidence on professional qualification recognition and licensing delays, survey-based reporting of regulatory or mobility constraints, and compliance costs faced by firms abroad.

Taken together, these indicators support a shift in focus from “how much Scotland exports” to how many firms export, how diversified they are, how they deliver services internationally, and what frictions are holding back further growth.

Purpose of this research

Trade in services plays an increasingly important role in Scotland as well as global economy, supporting high value employment, productivity, and international competitiveness across a wide range of activities. Scotland exports services through multiple and often less well understood channels, including cross-border delivery, commercial presence, and the temporary movement of people, making services trade both economically significant and highly sensitive to regulatory and institutional arrangements in partner markets.

Traditionally focus on trade has been narrowly defined on goods trade barriers which tend to be easier to quantify and can be deciphered from tariff rate quotas and headline tariff rates. However, notwithstanding the latest tariff uncertainty, the general trend globally has been a declining tariff environment as goods trade as well as supply chains have become more integrated. When it comes to services trade, it's the non-tariff barriers that have emerged as a central constraint. In contrast to goods trade, where barriers often arise at the border, non-tariff barriers affecting services trade typically operate behind the border or within domestic regulatory frameworks. These include, but are not limited to licensing and authorisation requirements, recognition of professional qualifications, restrictions on establishment or legal form, data and digital regulations, public procurement rules, and regulatory discretion in the application of standards.

In examining non-tariff barriers to services trade, this report will also distinguish between hard barriers and soft barriers. Hard barriers refer to formal, codified restrictions embedded in laws, regulations, or administrative procedures, such as licensing requirements, authorisation regimes, restrictions on establishment, data localisation rules or limits on recognition of professional qualifications and mobility of professionals.

Soft barriers by contrast, arise from market practices, commercial requirements or customer driven conditions that are not formally mandated by regulation but nonetheless shape market access in practice. These may include client or prime-contractor requirements for local presence, familiarity with domestic standards, liability arrangements, language or cultural expectations or “soft” nudges by customers to conduct business and economic activity in the jurisdiction where customer is located. While such barriers may not constitute legal restrictions, Scottish firms have consistently reported that they can have similar effects as formal barriers, particularly in services trade where trust, reputation, and ongoing client relationships play a central role.

A key insight¹ from this work is that the economic impact of services trade barriers cannot be fully understood by focusing exclusively on formal restrictions. While hard barriers are often the focus of trade policy analysis and official measurement frameworks, firms engaged in services trade

¹Later in the report, we will see that these soft barriers affect some sectors more than others. Soft barriers can also lead to relocation of service activity away from Scotland/UK to jurisdiction where customers are based leading to permanent loss of export potential and relevant productivity and employment benefits. These soft barriers are unlikely to show up in data because they vary across sectors and firm size – larger firms may have the resources and not see these barriers as “barriers”.

frequently emphasised soft, customer driven barriers as equally significant constraints on market access and scaling. These soft barriers are inherently more difficult to observe, quantify, or track over time. Capturing firm perspectives is therefore essential to understand how these barriers operate in practice and how they interact with formal regulatory frameworks.

The effects of these barriers are often indirect but material. Non-tariff barriers to services trade tends to lead to permanent rise in fixed costs, restrict permissible modes of supply, and perhaps most importantly introduces uncertainty around market access. This contrasts with tariffs affecting goods trade which have the effect of increasing variable costs in a transparent way. As a result, the impact of these NTBs is not always visible in aggregate trade statistics, but can strongly influence firm behaviour, investment decisions, and the ability of Scottish services exporters to enter, operate in, or scale within international markets.

1.1 Objectives of this research

The Scottish Government commissioned this work to develop an evidence-based assessment of non-tariff barriers affecting Scotland's services trade, with a focus on identifying which barriers are most binding across key service sector activities, how they affect different modes of supply, and what implications they have for policy within the current institutional and devolution context. The aim in this work is not to provide an exhaustive catalogue of regulatory differences, but to prioritise barriers according to their economic significance and policy relevance. This work also tries to identify strengths, and weaknesses alongside opportunities and threats for services trade which will predominantly be identified using feedback gathered at the business roundtables as they remain best placed to assess on-the-ground realities in Scotland, as well as overseas.

A secondary objective of this piece of work was to understand the quality and limitations of services trade data. Services trade is inherently more difficult to measure than goods trade reflecting its intangible nature, diversity of delivery modes, and the role of intra-firm activity as well as commercial presence. While official statistics provide essential insights into aggregate trends, they may not always capture changes in market access conditions, regulatory frictions, or emerging forms of services delivery. Firm perspectives therefore offer a valuable lens through which to assess whether existing data, in its current form, adequately reflects the underlying economic realities and where gaps or ambiguities may exist.

This analysis draws on mixed-methods evidence² base. It included structured roundtable discussions with firms, trade bodies and stakeholders engaged in services trade, targeted case studies that illustrate on-the-ground firm level impacts, a review of relevant academic and policy literature, and a supporting data exercise intended to provide contextual and forward-looking signals of services trade performance. The structure of the report is as follows – in the subsequent

² We would like to mention the contribution of Prof. Anirudh Shingal at The Centre for Inclusive Trade Policy for assisting us with a global overview of service sector barriers. We would also like to mention the contribution of Minako Morita Jaeger at the Centre for Inclusive Trade Policy as well for her contribution on key UK sectors and the global environment businesses find themselves in.

section we will provide sector profiles of key services trade in key³ service sectors of Scottish economy. The sector profiles provide an analytical overview of export performance, employment statistics, and approximate productivity measures. The profiles also capture key export destinations, as well as recent trends in restrictiveness/liberalisation in key markets.

Accompanying each

Accompanying each sector profile is our own primary research⁴ that was conducted via organised roundtables that were held across Scotland where we engaged with businesses, trade bodies, and other relevant stakeholders to get a better understanding of day-to-day trade barriers that Scottish businesses encounter while exporting. This primary research is meant to complement other analytical work and assess where the trade data, in its current shape and form reflects the underlying on the ground realities businesses operate in. Primary research from the roundtables has also allowed us to provide recommendations from both trade policy, as well as trade support perspective. Each roundtable summary also includes a SWOT analysis that showcases strengths of the sector, the weaknesses, opportunities as well as threats. Following the roundtables, we were also in position to list case studies that showcases individual firms and businesses and showcase how significant the trade barriers when it comes to day-to-day operations.

Box 1.1: Services trade data

The limitations of services trade data have important implications for policy interpretation. Changes in trade values may reflect shifts in delivery mode, firm structure, or commercial presence rather than changes in underlying competitiveness or market access. Similarly, the absence of observable trade declines does not imply the absence of binding barriers, particularly where firms respond by restructuring activity or refraining from entry altogether. Firm level evidence is therefore essential to complement official statistics. Throughout this report, qualitative insights from roundtables are used to interpret trade data and identify barriers that may not be visible in aggregate measures.

It's also worth noting that Scotland also reports services "exports" to the rest of UK . However, the feedback received from our roundtables⁵ was that firms make no business distinction between inter-firm activities with UK or even intra-firm activities between Scotland and rest of UK. All the sectors noted that they do not see business activity in Scotland distinct from that in UK.

This has important ramifications and perhaps suggests that exports to rest of UK should be seen from the lens of market integration as opposed to market competitiveness.

³ These "key" sectors were agreed to be in scope before embarking on this work. While the global sectors do not map directly one to one, they are useful to showcase the broader service sector trade environment globally.

⁴ The primary research was organised by Prosper and engaged members to get the maximum relevant insights. Roundtables were organised in Aberdeen, Edinburgh, and Glasgow and online to get the largest possible evidence base.

⁵ This feedback was unanimous and served as a cross-cutting theme across all sectors of the Scottish economy. Businesses don't see "services", or even goods moving between Scotland and rest of UK as export.

1.2 Scotland's policy levers in addressing services trade barriers

This report does not intend to capture an exhaustive list of services trade barriers. Instead, it focuses on identifying which non-tariff barriers are most economically significant for Scottish services exporters which operate across multiple sectors and where policy action can mitigate their impact within the current institutional context. The emphasis is therefore on prioritisation.

The global overview is also essential because it showcases the trends affecting services trade, and any trade policy discussion that affects Scottish services exporters finds the trade environment the new reality of business in 2025.

Although trade agreements and formal market access commitments are largely reserved, Scotland retains important levers that shape how services trade barriers affect firms in practice. These include engagement with professional regulators and accreditation bodies⁶, the design of enterprise support and advisory services, the facilitation of consortia and partnerships to overcome scale and procurement barriers, and the systematic collection of firm level evidence to inform UK level negotiations.

In addition, devolved responsibilities for skills, education, and elements of digital and data policy influence firms' readiness to navigate regulatory requirements overseas. These delivery focused levers are particularly important for services trade, where barriers often operate behind the border and interact with firm capabilities rather than manifesting as explicit prohibitions. The analysis that follows therefore places emphasis not only on identifying barriers, but on understanding where devolved action can most effectively reduce their practical impact.

The next section of this report begins with key sector profiles, primary research from our roundtable discussions with key stakeholders as well as case studies that are meant to highlight how service sector barriers play out daily across Scotland.

1.3 Strategic Priorities and Market Context

Across financial services, professional and business services, and science and research, several cross-sector priorities are already evident. In today's core markets, particularly the European Union and the United States, short term mobility, mutual recognition of professional qualifications, and regulatory divergence remain the most consistently binding constraints on Scottish exporters. At the same time, high growth markets in Asia, the Middle East, and parts of North America are generating expanding demand for knowledge intensive services but are characterised by evolving regulatory regimes – albeit in an embryonic stage, developing digital governance frameworks, and evolving localisation pressures. This creates an opportunistic narrow window for Scottish and UK professional bodies, regulators, and policymakers to move from what has been traditionally a reactive adjustment approach to proactive engagement through

⁶ As we will see, regulators and accreditation bodies are the key interface where service sector barrier arise and will be at the heart of potential solutions addressing these barriers. This again is a cross-cutting theme across all sectors.

structured regulatory dialogue, standards development, and accreditation cooperation that can pre-empt future barriers. Achieving this requires a coordinated approach that combines trade policy, including influence over market access negotiations and regulatory cooperation, with trade promotion and capability building that help firms navigate complex environments and convert access into commercial success. The analysis that follows examines these themes in sector specific detail and identifies where devolved and reserved levers can most effectively strengthen Scotland's position in both established and emerging markets.

1.4 Sectors in this report

The sectors of focus in this report have come out of discussion with Scottish Government officials and the Steering Group.

The sectors are:

- Financial Services
- Professional and Business Services
- Science and Research
- Creative Industries
- Digital and Technology
- Energy

Our selection of service sectors that have been the focus of this report has been shaped heavily from a trade policy lens. Although higher education and tourism are significant contributors to Scotland's services exports, they are not priority sectors within a trade barrier reduction strategy. Dynamics in these sectors is driven primarily by visa policy, migration policy, global demand conditions, exchange rates and reputation rather than by regulatory market access barriers that can be addressed through trade negotiations or mutual recognition agreements. As a result, the scope for trade policy to materially alter outcomes is limited and hence scarce policy resources may be better allocated on regulated service sectors where targeted intervention can generate measurable gains.



Financial Services

2.1 Sectoral Composition & Overview

- Gross Value Added (GVA) 2022: £14.3bn which constitutes 8.6% of the Scottish Economy. By Comparison, the UK FS Sector was worth £200.3bn in 2022, which is 8.8% of the UK economy.
- Employment 2024: 89,000 workers which is 3.3% of Scotland's workforce. In 2022, employment was 87,000 workers which implies a productivity of £164,896.60 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £4.5bn representing 31.3% of the Financial Services sector's total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £8.4bn representing 58.3% of the Financial Services sector's total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland 2022: £12.9bn representing 89.6% of the Financial Services sector's total Gross Value Added in Scotland.

Source: Scottish National Accounts, UK National Accounts, BRES

Financial Services encompasses businesses engaged in activities such as insurance, pensions, asset management, and fintech. For the quantitative data analysis element, this sector includes firms classified under the Standard Industrial Classification (SIC) codes:

- 64 – Financial Services
- 65 – Insurance & Pensions
- 66 – Auxiliary Financial Services

A closer analysis of the Scottish financial services sector reveals that while there are interlinkages, the underlying composition of Scotland's FS sector differs from that of the UK.

In Scotland, 27.5% of the sector's GVA comes from insurance and pension activity, compared to 20.9% in the UK, which emphasises that Scotland's FS sector faces challenges which are distinct

from its UK counterpart. This composition reflects Scotland's historic strengths in life insurance, asset servicing, and long-term savings rather than investment banking or trading activities⁷.

58.3% of Scotland's FS GVA is also destined within the rest of UK, suggesting considerable integration with the wider UK sector.

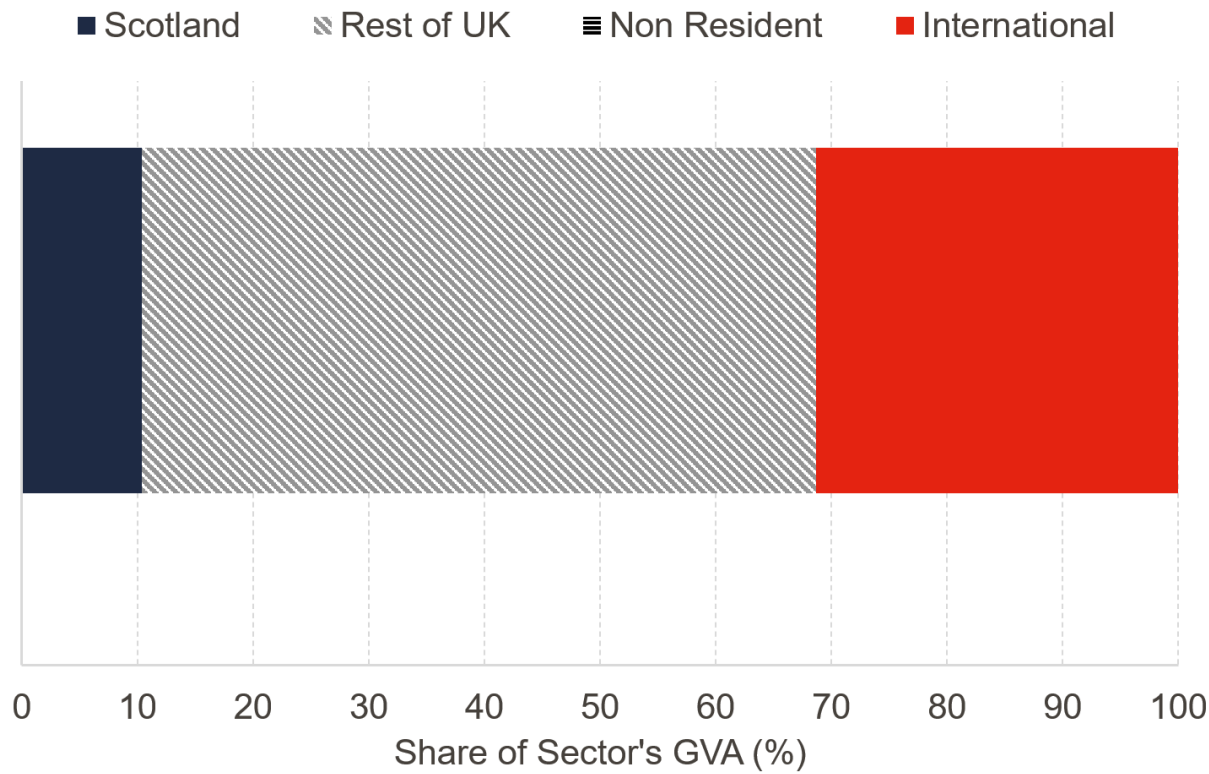
Growth in the value of Scotland's international FS exports has historically outpaced growth in the sector's GVA prior to the pandemic, averaging 6.6% annual growth in exports, compared to 5.8% for the sector overall.

Exports to the rest of the UK have average 5.4% annual growth, similar to the overall sector which again highlights the level of integration between the Scottish and wider UK sector within financial services.

In recent years, the value of Scottish financial services was negatively impacted by the pandemic. Both the sector's value and the value of international exports appear to have recovered, surpassing 2019 levels by 2022.

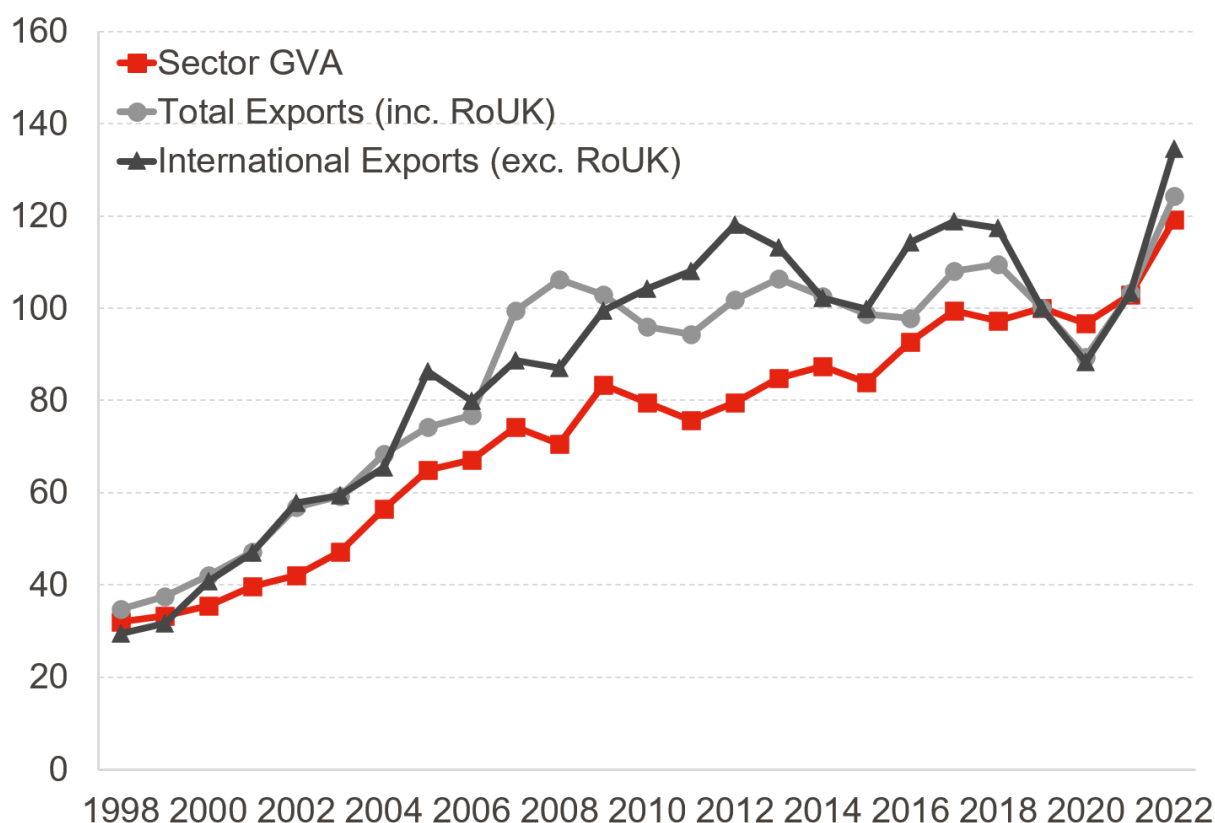
⁷ These activities are more London centred and have been affected differently by trading barriers. Media focus on "City" tends to focus disproportionately on wholesale and investment banking and not the pensions and insurance industry. <https://www.ft.com/content/8d9aca04-5675-4d38-bf22-1fcb2f1a862b>. This shows that "financial services" is not a monolith and while there have been no winners due to Brexit, some sub-sectors and businesses have fared better than others.

Chart 2.1: Financial Services Export Destinations, 2022



Source: Scottish National Accounts

Chart 2.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

Table 2.1a: Financial Services Top 10 Export Destinations by Market Share (UK), 2024

Market	Share of UK Exports
European Union	35%
United States	28%
Switzerland	4%
Hong Kong	3%
Canada	3%
Japan	2%
Singapore	2%
Australia	2%
Taiwan	2%
China	2%
Top 10 Total	82%

Source: OECD, CITP Research

Table 2.1b: Insurance Services Top 10 Export Destinations by Market Share (UK), 2024

Market	Share of UK Exports
United States	41%
European Union	17%
Australia	7%
Japan	2%
Switzerland	2%
Norway	1%
South Africa	1%
Singapore	1%
Mexico	1%
China	1%
Top 10 Total	74%

Source: OECD, CITP Research

The UK's financial services exports are highly concentrated, within the top 10 destination markets for financial and insurance services, the European Union and United States dominate the top 10. However, their roles differ: the EU is the leading destination for financial services whilst the US leads in exports for insurance services.

Over the past decade, the UK financial services sector has operated in an increasingly liberalised trade environment, with the UK being a less restrictive market than the average EU and OECD economy.

The shift towards greater global openness reflects the UK's post Brexit reality. While the EU enables free trade within its borders, it is relatively restrictive to external economies – particularly in services. By leaving the EU, the UK has increased barriers with the EU while easing access to other global markets. The net result is improved access to less valuable markets.

Remaining⁸ barriers to trade in services largely arise from restrictions on the movement of people. These include visa requirements, recognition of qualifications, and limits on temporary business travel. The UK FS sector faces challenges in establishing foreign operations, particularly with its largest trading partners, in the U.S. and the EU.

⁸ Firms have established EU based subsidiaries to maintain service access, complying with local regulations. (for example solvency II).

Table 2.2: Services Trade Restrictiveness Index, Top UK FS Trading Partners, 2015 & 2024

Economy	Financial Services		Insurance Services	
	2015	2024	2015	2024
Australia	1.90	1.75	1.85	1.74
Canada	1.88	1.88	1.87	1.87
China	3.62	3.02	4.22	3.11
European Union	1.53	1.64	1.46	1.49
Japan	1.69	1.64	1.13	1.10
Mexico	3.57	3.58	2.40	2.45
Norway	2.51	2.52	2.81	2.90
Singapore	2.47	2.63	1.84	1.85
South Africa	2.42	2.58	2.02	1.48
Switzerland	2.56	2.61	1.88	1.91
United Kingdom	1.51	1.26	1.17	1.14
United States	2.01	2.01	2.76	2.76
OECD Avg.	1.81	1.87	1.64	1.66
Non-OECD Avg.	3.14	3.17	3.30	3.12

* Score of 0 = Completely Open | Score of 10 = Completely Restricted

Source: OECD, CITP Research

2.2 Current and future global regulatory and non-tariff issues in the Financial Sector

We analyse the global trend of regulatory and non-tariff barriers in the financial sector including insurance, pensions, asset management, and fintech.

2.2.1 Global regulatory and non-tariff landscape

The global regulatory landscape in financial services is characterised by growing divergence, acceleration of technological change, and increasing compliance burdens.

First, global financial regulation is becoming more fragmented due to geopolitical tensions, varying policy priorities, and inconsistent regulatory reforms across jurisdictions. OECD analysis shows that only 30% of OECD countries systematically assess the cross-border effects of new regulations—leading to unintended market-access barriers for foreign financial institutions.⁹ Governments’ geostrategic approach and political change are producing diverging supervisory approaches, especially around digital assets, data localisation, and consumer protection.¹⁰ These means that firms face duplicative regulatory costs when entering new jurisdictions. Also, increased regulatory fragmentation undermines passporting, equivalence, and mutual recognition arrangements.

⁹ [OECD Regulatory Policy Outlook 2025](#).

¹⁰ [EY 2025 Global financial services regulatory outlook](#)

Second, digitalisation-covering fintech, payments, artificial intelligence, open banking, and digital assets- is transforming financial markets faster than regulatory systems can adapt.

For example, BIS/World Bank research highlights how fintech creates new market structures with unbundling and rebundling of services, network effects, and novel risks requiring updated regulatory perimeters.¹¹ Comparative regulatory studies show uneven fintech regulation across countries, causing jurisdictional asymmetry and market access barriers for cross-border providers.¹² Regulators are adopting experimental frameworks to keep pace with innovation, but this leads to inconsistent global standards.¹³ Furthermore, advances in data-access technologies (APIs, DLT, cloud) require new governance models to embed regulatory objectives without compromising data protection.¹⁴

Third, increasingly stringent prudential, conduct, and operational regulations are expanding the compliance burden for financial services providers. For example, stringent prudential rules, such as capital requirements, external monitoring, and restrictions on permitted activities, can reduce profitability while improving risk management.¹⁵ Also growing supervisory focusing on liquidity, operational resilience, governance, and AI risk is raising compliance and risk-management costs.¹⁶

Altogether, the global landscape is set to feature higher regulatory divergence, more opaque non-tariff barriers, and increasing compliance intensity, demanding greater international coordination to prevent market fragmentation and support safe, competitive financial innovation.

2.2.2 Sub-sector mapping

Insurance: The global insurance sector faces growing regulatory fragmentation as jurisdictions introduce divergent prudential, operational-resilience, and ESG-reporting requirements, creating significant barriers for cross-border providers. Increasingly stringent rules on governance and consumer protection are spreading unevenly across markets, adding complexity for insurers operating internationally. At the same time, sustainability-related regulations, such as transition-planning obligations, are becoming more prominent, yet remain far from harmonised. Sustainability disclosure and due-diligence requirements differ widely between regions, raising

¹¹ [BIS Papers | Fintech & transformation fo finacial services.](#)

¹² Vijayagopal, P., Jain, B., & Ayinippully Viswanathan, S. (2024). Regulations and Fintech: A Comparative Study of the Developed and Developing Countries. *Journal of Risk and Financial Management*, 17(8), 324. <https://doi.org/10.3390/jrfm17080324>

¹³ [World Bank | Regulatory Sandboxes](#)

¹⁴ McNulty, D., Miglionico, A., and Milne, A. (2023). Data Access Technologies and the 'New Governance' Techniques of Financial Regulation, *Journal of Financial Regulation*, Volume 9, Issue a2, October 2023, Pages 225–248, [DOI | Data Access Technologies](#)

¹⁵ Nayak, R. (2021). Banking regulations: do they matter for performance?. *J Bank Regul* 22, 261–274 (2021). [DOI | Banking Regulations](#)

¹⁶ [EY | Financial Services Regulatory Outlook](#)

compliance burdens for insurers seeking international scale. These regulatory divergences function as non-tariff barriers (NTBs) by imposing extensive behind-the-border procedural requirements, further amplified by data-localisation and digital-governance rules that complicate the handling of sensitive claims and customer data.¹⁷

Pensions: Pension systems confront mounting regulatory barriers driven by inconsistent supervisory practices, investment-governance rules, and the global divergence of ESG (Environmental, Social, and Governance) frameworks. Increasing fragmentation across prudential and conduct standards, which also affect pension entities embedded in the broader financial-services ecosystem. The private sector analyses that divergent¹⁸ sustainability-disclosure regimes, such as varying climate-risk metrics and taxonomy-aligned reporting, further complicate cross-border pension operations. Also, how sustainability rules are evolving along different regional trajectories is creating additional reporting burdens for pension funds operating internationally. These regulatory inconsistencies operate as NTBs by imposing high compliance and administrative costs, particularly where risk-reporting, governance, and transparency requirements differ widely.¹⁹

Asset Management: Asset managers face a complex regulatory landscape shaped by diverging prudential rules, consumer-protection requirements, and reporting standards across countries. The private sector's regulatory assessments highlight that scrutiny on liquidity risk management, operational resilience, and governance obligations is rising and increasingly diverge. Also, ESG obligations, such as sustainability taxonomies, stewardship expectations, and disclosure frameworks, differ substantially across markets. Namely, sustainability rules are becoming more complex and fragmented, raising reporting and compliance barriers for asset managers that operate globally.²⁰

Fintech: Fintech faces the most pronounced regulatory asymmetry of all sub-sectors due to varying national approaches to digital-asset regulation, AI governance, open-banking frameworks, and innovation supervision. A comparative study of fintech regulation across the US, UK, and India finds sharply uneven regulatory maturity, leading to inconsistent operating environments and significant barriers to international expansion. The World Bank's global review of regulatory sandboxes further shows that countries differ markedly in how they support and regulate fintech innovation, resulting in unpredictable cross-border conditions and accelerating regulatory

¹⁷ [EY | Financial Services Regulatory Outlook](#); and [Baker McKenzie | Financial Institutions](#)

¹⁸ For example, asset managers as well as insurers face a risk where an investment is considered “green” in UK but not elsewhere. This has a much bigger focus on Scotland due to greater focus on insurance and pension funds.

¹⁹ [EY | Financial Services Regulatory Outlook](#); and [Baker McKenzie | Financial Institutions](#)

²⁰ [EY | Financial Services Regulatory Outlook](#); and [Baker McKenzie | Financial Institutions](#)

divergence. These differences translate into significant NTBs, especially through data-localisation rules, cybersecurity requirements, and incompatible technical standards.²¹

Table 2.3: Regulatory and Non-Tariff Barriers by sector

Sector	Regulatory Barriers	Non-Tariff Barriers (NTBs)
Insurance	Diverging prudential & sustainability rules	Licensing, operational, data-localisation and compliance requirements
Pensions	Fragmented supervisory, reporting, and ESG obligations	High compliance costs due to divergent NTMs; sustainability reporting barriers
Asset Management	Divergent prudential, transparency, and consumer-protection requirements	Regulatory hurdles restricting cross-border activity; ESG disclosure divergence
Fintech	Uneven regulatory frameworks, differing sandboxes, divergent rules for AI & digital assets	Data localisation, digital-standards divergence, high compliance/NTM burdens

2.3 Summary from Financial Services Roundtable

This roundtable consisted of senior leaders from Scotland’s financial services industry, including a major bank, insurers, leading trade associations as well as representatives from the fintech sector. Participants agreed that Scotland remains a competitive European financial centre with established strengths in asset management, insurance and pensions as well as growing capabilities in data-driven finance and fintech. The sector makes an important economic contribution in Scotland (estimated at close to £15 billion GVA in 2024, around a tenth of national output) and benefits from a strong skills pipeline and comparatively lower operating costs than several peer locations.

Sales remain heavily concentrated in the rest of the UK rather than diversified across EU and non-EU markets. These structural frictions and market concentrations have contributed to weaker international services performance in recent years. However, participants were notably less concerned about the impact of Brexit on the sector compared to all the other roundtables.

Notwithstanding these headwinds, the overall outlook is positive if policy and support levers are aligned. Roundtable participants emphasised on the practical priorities, including easing short-notice staff mobility, improving mutual recognition of professional qualifications, reducing duplicative compliance, securing scale-up finance for export-oriented fintechs and presenting a clearer, more consistent international proposition for Scotland’s offer on the global scene.

²¹ Vijayagopal, P., Jain, B., & Ayinippully Viswanathan, S. (2024). Regulations and Fintech: A Comparative Study of the Developed and Developing Countries. *Journal of Risk and Financial Management*, 17(8), 324. [DOI | Regulations and Fintech](#); [World Bank | Regulatory Sandboxes](#);

2.4 SWOT Analysis: Financial Services

2.4.1 Strengths

Core Institutional Anchors

- Edinburgh and Glasgow host globally significant activity in investment management, insurance and pensions, and banking and custodial services.
- The sectors performs an enabling function for trade across other sectors.

International Footprint

- The sector has strong linkages with key markets such as United States and the European Union.
- While not in the underlying economic data, primary research indicates that firms have reported increased engagement in Middle Eastern hubs such as Dubai and Saudi Arabia.
- Long standing links in Asia Pacific, especially Hong Kong retain commercial value.

Regulatory and Legal Credibility

- A mature and predictable regulatory framework supports investment and innovation.
- Labour costs remain competitive relative to both London and New York. This was confirmed as a strength in the roundtables as well.
- Legal certainty, access to English law, as well as London helps position Scotland as a key competitive financial centre.

2.4.2 Weaknesses

Export Concentration and Structural Dependence

- Heavy reliance on rest of UK as a primary export destination. Therefore, does not provide the diversification benefits that may come with export activity due to strongly correlated business cycles.
- Limited direct international client relationships for some firms.
- Dependence on London based capabilities and branding.

Talent Competitiveness Pressures

- Income tax differentials with the rest of UK have been exerting upwards pressure on compensation. This is especially acute for early stage fintechs who chose Scotland due to its overall lower cost environment.
- Visa costs, administrative burden, and mobility frictions can constrain access to global specialists.
- Salary adjustments to offset tax differentials have led to reduced investment capacity elsewhere, which was a sentiment echoed by several participants at the roundtable.

Scale Up Constraints

- Uneven access to scale-up capital for fintech firms.
- Duplicated compliance, onboarding, and licensing costs in new markets slow internationalisation.
- Smaller firms struggle to convert technical capability into overseas mandates at pace.

2.4.3 Opportunities

- Sustainable finance and ESG leadership, especially to European clients and customers.
- Strong global demand for environmental, social and governance investment strategies. This is especially true from European customers seen keen on ESG strategies.
- Existing Scottish strengths in asset management and responsible finance provide a platform for export growth.

Regulatory cooperation and market access

- Enhanced EU and third-country regulatory cooperation could reduce cost to serve and reopen channels for growth.
- UK free trade negotiations offer space for structured regulatory dialogue, even where financial services are not core chapters. Fintech expansion into high-growth markets
- **Strong demand in the Middle East and Turkey for digital financial solutions even though the growing nature of activity means this is not clear from economic and trade data.**
- Regulatory autonomy following Brexit may allow targeted innovation frameworks that strengthen competitiveness – especially for incorporation of AI within the fintech ecosystem.
- Opportunity to position Scotland as a specialised, innovation-driven financial centre distinct from London.

2.4.4 Threats

- Rising global protectionism and trend towards localisation in banking and insurance.
- Geopolitical uncertainty in other sectors can dampen financial services trade. For example, trade finance is highly correlated to overall trade levels.
- Immigration and mobility constraints reduce access to talent.
- Regulatory divergence between UK and EU have led to a new regime in complexity levels.
- Competitive repositioning by other global financial centres.

2.5 Roundtable Feedback and Policy Considerations

2.5.1 UK Government Reserved Policy Matters

- Encourage the re-establishment of structured UK–EU regulatory cooperation in financial services, including dialogue on wholesale markets, supervisory cooperation and transparent equivalence processes, in order to reduce duplicative authorisations and regulatory uncertainty.
- Advocate for mutual recognition or streamlined approval pathways for professional qualifications in financial services occupations, including investment advisers, actuaries and auditors, prioritising markets where Scottish firms have commercial presence.
- Support improvements to business mobility arrangements, including short-term business visas and streamlined intra-company transfers for regulated financial roles.
- Encourage the UK Government to maintain EU data adequacy and to strengthen cross-border data transfer provisions in future trade agreements.
- Promote the inclusion of regulatory dialogue mechanisms and digital financial services provisions within new free trade agreements, including expedited licensing approaches for firms subject to strong home state supervision.

2.5.2 Scottish Government Devolved Policy Matters

- Review the interaction between the Scottish personal tax regime and international talent attraction and retention in high-value financial services roles.
- Assess the impact of visa costs and mobility frictions on internationally active firms and consider targeted support mechanisms where appropriate.
- Strengthen export diversification by incentivising firms to build direct overseas client relationships beyond the rest of the UK, with a focus on the United States, Middle East and selected Asia-Pacific markets.
- Improve access to scale up finance for high growth fintech firms seeking to internationalise and seek new markets.
- Provide practical compliance and market entry advisory support to reduce duplicated onboarding and regulatory costs in priority markets.
- Ensure that Scottish trade promotion activity is closely aligned with UK wide branding and embassy support to avoid duplication and fragmented positioning overseas.

2.5.3 Joint Scotland–UK Delivery Mechanisms

- Establish a formal Scotland–DBT financial services working group to align export priorities, share sector intelligence and inform UK trade negotiations at an early stage.
- Develop a jointly agreed priority market framework for financial services exports, aligning trade promotion, regulatory dialogue and mobility objectives.
- Strengthen engagement between Scottish sector representatives and UK regulators in international supervisory dialogues to ensure cluster specific intelligence informs market access discussions.

2.6 Case Study: Financial Services Sector

A Scotland headquartered investment management firm with a long-standing EU client base historically exported portfolio management and investment advisory services directly from the UK, relying on EU passporting rights to serve institutional and high net worth clients across multiple member states. These services were delivered primarily on a cross-border basis, with core investment decision making, risk oversight, and client servicing located in Scotland.

Following the loss of EU passporting rights and the absence of a comprehensive and durable UK–EU equivalence framework for investment services, EU supervisors required regulated activities servicing EU clients to be conducted through an EU authorised entity with sufficient local “substance”. A UK licence alone was *no longer sufficient* to onboard *new* EU clients, renew mandates, or *materially change existing contractual arrangements*.

To preserve access to EU markets, the firm established ²²a regulated subsidiary within the EU-27. This required duplicating governance, compliance, and risk functions previously performed in Scotland, repapering EU client contracts under EU law, and restructuring operating models so that portfolio management could be delegated back to the UK only under tightly controlled conditions.

These changes imposed significant fixed costs, incurred simply to retain existing export revenue rather than to expand market share.

The barrier did not take the form of a tariff or explicit restriction on trade but operated through regulatory market access requirements that effectively shifted service delivery from what was previously a cross-border supply to local commercial presence. While the firm continued to employ investment professionals in Scotland, client-facing, regulatory, and oversight roles increasingly sat outside the UK. For smaller Scottish financial services firms without the resources or scale to establish EU entities, **similar** constraints resulted in curtailment of EU market participation or complete withdrawal. Moreover, the headcount in new personnel growth is now expected to be outside of UK.

Market access remains technically available, but only through costly organisational restructuring that weakens Scotland’s position as a direct exporter of high value financial services.

²² This is another example of service trade barriers, the firm noted that that business has continued but only after making the necessary investments and incurring. The firm also noted that any trade data may not show the extent of trade growth not materialised due to barriers



Professional & Business Services

3.1 Sectoral Composition & Overview

- Gross Value Added (GVA) 2022: £6.2bn which constitutes 3.7% of the Scottish Economy. By comparison, the UK PBS Sector was worth £140.1bn in 2022, which is 6.2% of the UK economy.
- Employment 2024: 137,000 workers which is 5.2% of Scotland's workforce. In 2022, employment was 138,000 workers which implies a productivity of £44,869.90 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £1.4bn representing 22.3% of the PBS sector's total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £3.5bn representing 56.4% of the PBS sector's total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland) 2022: £4.9bn representing 79.0% of the PBS sector's total Gross Value Added in Scotland.

Source: Scottish National Accounts, UK National Accounts, BRES

Professional Business Services encompasses firms in consulting, accounting, tax, legal, advertising, and architecture. For the quantitative data analysis element, this sector includes firms classified under the Standard Industrial Classification (SIC) codes:

- 69.1 – Legal
- 69.2 – Accounting, Auditing, & Tax Consultancy
- 70 – Head Offices & Management Consultancy
- 74 – Other Professional Services
- 83 – Business Support Services

The PBS sector in Scotland is again well integrated with its UK counterpart, albeit structured slightly differently²³.

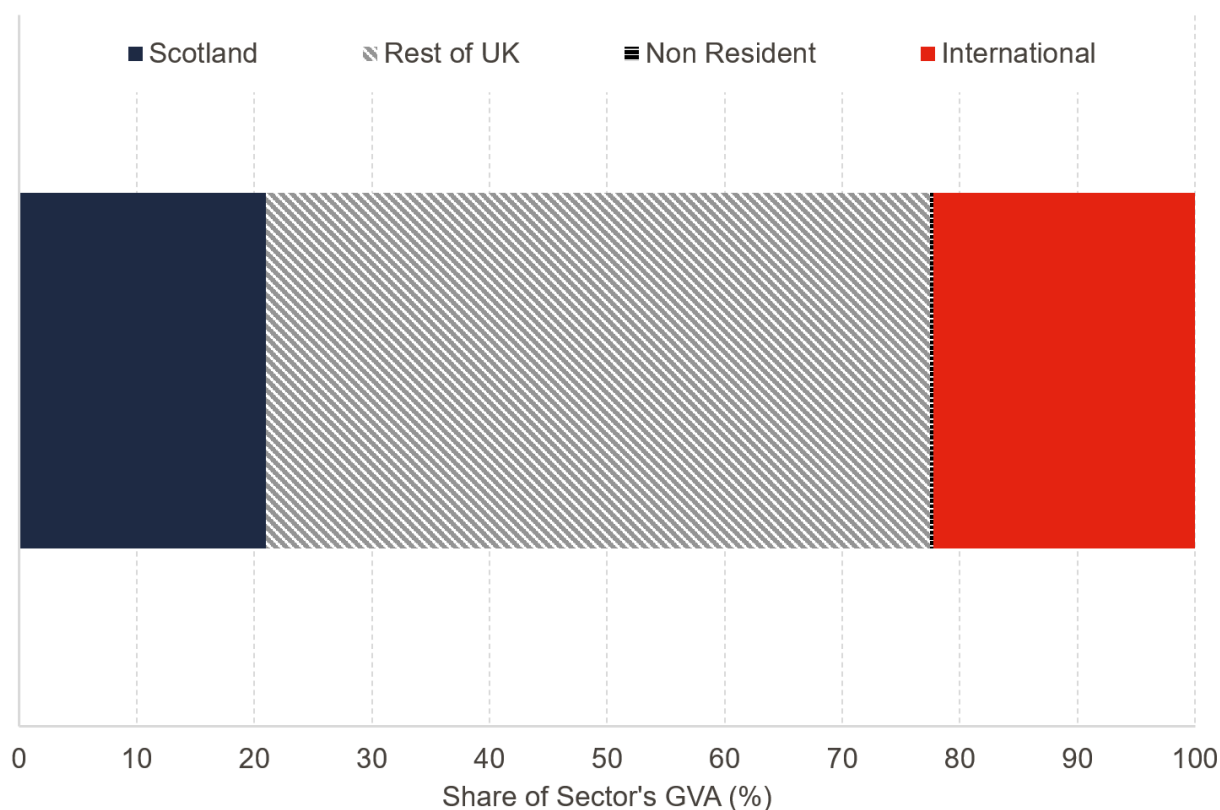
²³ A feedback received from our roundtables was that PBS activity in Scotland relies more on relatively smaller firms relative to London. London based firms, by their virtue of their sizes are therefore better placed mitigate PBS barriers,

Legal and Accounting, audit, & tax consultancy services constitute 48.2% of GVA in the UK sector, but only 38.3% in Scotland.

These two areas have higher productivity than other areas in PBS, which may explain why the Scottish PBS sector is proportionally smaller than the UK wide sector.

With 56.4% of PBS GVA exported to the Rest of the UK, this also indicates a high degree of integration with the UK sector. However, uniqueness in the Scottish Legal system will make some parts of the sector more distinct from its UK counterpart than others.

Chart 3.1: Professional & Businesses Services Export Destinations, 2022



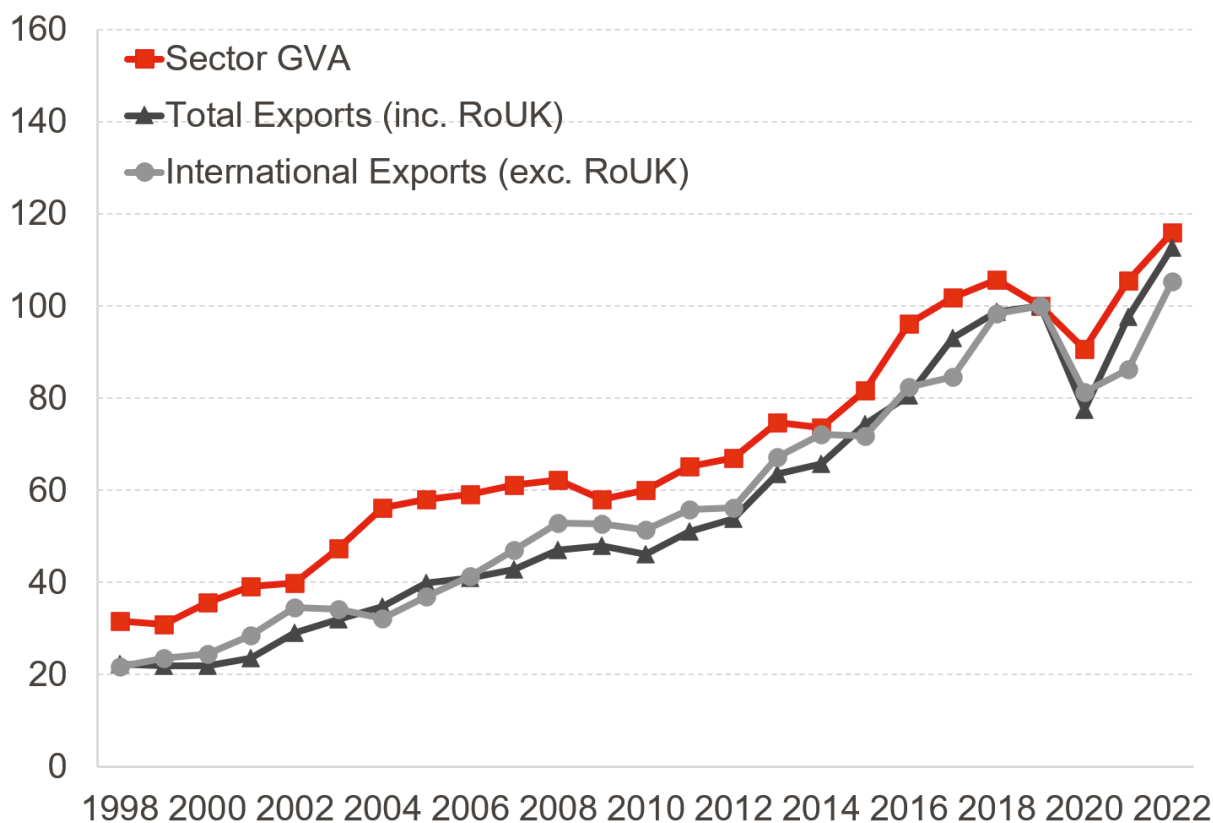
Source: Scottish National Accounts

The value of PBS international exports typically outpaced the growth of the sector overall before the pandemic, averaging 7.8% and 5.9% annual growth respectively.

Growth in the value of exports to the Rest of the UK averages 7.7% annually in the pre-pandemic period. Again, underscoring the integration of the sector with its UK counterpart in influencing its growth rate.

During the pandemic, the value of the sector and its international exports declined. However, domestic and international exports were more affected by the pandemic than the sector overall. By 2022, the value of the sector and its exports had recovered from the pandemic having surpassed 2019 levels.

Chart 3.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

Table 3.1a: Professional & Management Market

Market	Share of UK Exports
United States	43%
European Union	33%
Switzerland	4%
Australia	2%
Singapore	1%
Japan	1%
Saudi Arabia	1%
Norway	1%
India	1%
South Korea	< 1%
Top 10 Total	87%

Source: OECD, CIP Research

Table 3.1b: Technical & Trade Related

Market	Share of UK Exports
European Union	40%
United States	21%
Saudi Arabia	5%
Switzerland	4%
Norway	3%
Australia	2%
Singapore	2%
Canada	2%
Brazil	2%
Japan	2%
Top 10 Total	84%

Source: OECD, CIP Research

Table 3.1c: Other Business Services

Market	Share of UK Exports
European Union	37%
United States	33%
Switzerland	5%
Saudi Arabia	3%
Australia	2%
Norway	2%
Singapore	2%
Japan	2%
Canada	1%
Brazil	1%
Top 10 Total	87%

Source: OECD, CIP Research

Exports from the UK's PBS sector are highly concentrated within the top 10 destination markets for professional services, which the European Union and United States dominate.

Over the past decade, the UK PBS trading environment has generally liberalised, positioning the UK as a more open market compared to the EU and the OECD average.

This reflects a broader trend of global openness in the UK's post-Brexit reality. While the EU maintains free trade internally, it remains relatively restrictive toward external partners, particularly for service-based sectors.

Being outside the EU, UK professional services now face higher barriers when trading with the EU despite improved access to non-EU markets. The net result is greater access to individually less valuable markets.

Despite this liberalisation, certain domestic barriers remain, primarily related to licensing, qualifications, and operational transparency. Among the UK's largest trading partners, the US and EU, the most significant restrictions involve temporary movement of service providers and entry of foreign firm.

Table 3.2: Services Trade Restrictiveness Index, Top UK PBS Trading Partners, 2015 & 2024

Economy	Professional Services	
	2015	2024
Australia	1.74	1.62
Brazil	3.34	2.99
Canada	2.12	2.12
European Union	3.03	2.82
India	8.14	8.14
Japan	3.34	3.31
Norway	2.45	2.46
Singapore	2.44	2.56
Switzerland	2.81	2.90
South Korea	7.76	7.62
United Kingdom	1.93	1.85
United States	1.76	1.73
OECD Avg.	3.00	2.87
Non-OECD Avg.	4.38	4.42

* Score of 0 = Completely Open | Score of 10 = Completely Restricted

Source: OECD, CITP Research

3.2 Current and future global regulatory and non-tariff issues in the PBS Sector

3.2.1 Global regulatory and non-tariff landscape

Across Professional and the Business Services, the dominant non-tariff barriers (NTBs) are behind-the-border regulations: licensing and authorization regimes; foreign equity and legal-form limits; nationality/residency requirements; restrictions on the movement of people (Mode 4); and regulatory transparency deficits (e.g., opaque rulemaking, limited notice-and-comment). These measures are systemically captured in the OECD Services Trade Restrictiveness Index (STRI) show high relative restrictiveness for several professional services compared to many networks or digitally deliverable sectors.²⁴

Specifically, legal and accounting services stand out. The OECD STRI papers report average restrictiveness near 0.30–0.31, with country ranges up to 0.73 in legal and 1.00 in accounting/audit in the first vintage, driven by market entry limits (equity caps, legal-form), movement of people barriers, and discriminatory licensing. Later annual updates maintain that professional services remain among the more regulated sectors, with persistent fragmentation across jurisdictions. Likewise, the World Bank–WTO Services Trade Policy Database (STPD) confirmed similar policy levers -licensing, equity limits, nationality requirements, and data/operational restrictions as outstanding barriers.²⁵

²⁴ [OECD | STRI](#); and [OECD | STRI Update](#)

²⁵ [WTO | STRI and Database](#); and [World Bank | STRI Database](#)

Future regulatory and non-tariff issues in the Professional and Business Services sector are notably complex. **First**, gradual and selective liberalisation are going on but there is persistent fragmentation. For example, where liberalisation occurs, it often focuses on clarifying licensing, updating ownership/legal-form rules, and modernising transparency, but cross-border and mobility frictions endure. The UNCTAD urges “best-fit regulations” with better coordination among domestic regulators and negotiators to balance openness and national policy goals.²⁶

Second, digitalisation, data, and AI governance are becoming de facto NTBs. Professional services are rapidly embedding AI and digital workflows (document review, drafting, analytics). Private-sector outlooks show AI adoption is accelerating but intersects with rising data privacy, cross-border data flow limits, model governance, and professional liability. These create new compliance layers that function as NTBs for digital delivery or shared services across borders.²⁷

Third, mobility and recognition are persistent barriers. According to the World Bank–WTO STPD/STRI documents, continuing visa/labour-market tests, residency rules, and practice-rights limits fall into this category. This implies that mobility will remain a binding NTB unless trade agreements deepen MRAs and introduce transparent, time-bound licensing.

Fourth, heightened enforcement and ethics/compliance expectations is recognised as rising regulatory barriers. For instance, private-sector risk reports for accounting/audit show record fines in some jurisdictions and intensifying scrutiny of culture, audit quality, and ethics, with implications for cross-border assurance and advisory mandates. This raises costs and complexity for professional and business services providers and can deter market entry or limit service scope for foreign affiliates.²⁸ More stringent supervisory expectations have increased formal compliance requirements, while firms have simultaneously adopted more conservative risk and governance practices in response to heightened scrutiny and reputational risk. As a result, the effective burden faced by firms often exceeds the requirements set out in regulation alone.

3.2.2 Sub sector mapping

Consulting: Consulting services face comparatively lighter formal licensing obligations than legal or accounting professions, yet they encounter significant NTBs via local business licensing, commercial-presence requirements, visa and labour-market tests for consultants, and procurement preferences favouring domestic firms. These barriers are captured in the OECD’s STRI dimensions on movement of people and regulatory transparency, which consistently show frictions in cross-border consulting due to opaque procedures and temporary-entry restrictions. The World Bank–WTO STPD/STRI further documents constraints around licensing processes,

²⁶ [UNCTAD | Services, trade and development](#); and [OECD | STRI Update](#)

²⁶ [WTO | STRI and Database](#); and [UNCTAD | Services, trade and development](#)

²⁷ [Thompson Reuters | Future of Professionals](#); [KPMG Ten Key Regulatory Challenges of 2024](#); and [PNC | Professional Services Challenges](#)

²⁸ [Thompson Reuters | Future of Professionals](#); [KPMG Ten Key Regulatory Challenges of 2024](#); and [PNC | Professional Services Challenges](#)

foreign equity rules, and data-handling requirements. The WB-WTO STPD/STRI also confirms that consulting, especially digital or analytics-driven one, must navigate varied domestic rules across jurisdictions. Looking ahead, industry analyses predict that consulting firms will face rising NTBs linked to AI governance, ESG (Environmental, Social and Governance) documentation, and data-transfer compliance, as regulatory scrutiny around algorithmic transparency and digital-workflow controls accelerates. This is reinforced by private-sector regulatory-intensity assessments, which highlight a tightening compliance environment affecting advisory and knowledge-intensive service providers globally.²⁹

Accountancy & Tax: Accountancy and tax services remain among the most highly regulated professional services worldwide. The OECD STRI consistently reports elevated³⁰ restrictiveness due to ownership and legal-form limits, nationality or residency requirements, and extensive licensing and fit-and-proper criteria that restrict foreign entry. The STRI findings highlight accounting and auditing services reaching restrictiveness scores as high as 1.00 in certain jurisdictions, emphasising the dominance of market-entry barriers and cross-border practice limitations. Future regulatory intensity is expected to rise. Some private-sector risk reports show record enforcement fines, tightened ethical and audit-quality oversight, and increased scrutiny of firm culture and governance, all of which elevate compliance burdens and act as deterrents to foreign service providers.³¹ For UK and more specifically Scottish firms, these barriers are tangible and can largely be addressed by empowering the regulatory bodies to establish the relationship with peers in other countries that allows equivalence regimes that allows individuals and firms to market their services and ply their trade. Roundtable participants highlighted that these challenges are particularly relevant in key markets such as the European Union, where the absence of comprehensive equivalence arrangements has increased the need for local authorisation and presence. Participants also noted that in other markets, including parts of Asia and the Middle East, evolving regulatory frameworks and limited recognition pathways can create similar barriers, reinforcing the importance of early regulatory engagement and relationship-building.

- **Advertising & Marketing Services:** Advertising services face fewer formal licensing requirements but operate within a dense web of regulatory and NTB constraints, including content standards, consumer-protection rules, media-ownership limitations, and increasingly stringent data privacy and ad-tech
- regulations. The OECD's STRI policy-trend analysis notes that digital-trade restrictions, especially those related to cross-border data flows and telecom/digital governance, are rising contributors to services trade barriers—particularly relevant for advertising firms reliant on digital targeting, analytics, and remote campaign delivery.³²

²⁹ [OECD | STRI](#); and [WB Services Trade Restrictions Database](#); [Thompson Reuters | Future of Professionals](#); KPMG [KPMG | Professional Services Update](#)

³⁰ This feedback was echoed by the accountancy firms in our roundtables

³¹ [Thompson Reuters | Future of Professionals](#); [Professional Services Industry Update Spring 2025](#); and [PNC | Professional Services Challenges](#)

³² It should be noted that Advertising is not a standalone profession in the OECD STRI, but we understand that it is covered indirectly through Digital Trade, Telecommunications, and cross-cutting professional-services restrictions.

- **Architecture:** Architecture and related design/engineering services face pronounced licensing and professional-registration requirements, including protected titles, site-supervision obligations, and residency or local-presence conditions for signing off on designs according to the OECD STRI. The lack of mutual recognition agreements³³ (MRAs) for qualifications across many jurisdictions further amplifies barriers, limiting firms' ability to deliver cross-border design or construction-related services even when digitally enabled.³⁴

³³ For example. UK architects can no longer work in EU and are seen as “third country” professionals. Bilateral and cooperation agreements do exist but are not a substitute for the automatic regime that existed before.

³⁴ [OECD | STRI: Construction, Architecture and Engineering Services](#)

Table 3.3: Sub-sector regulatory and non-tariff barriers

Type of Measure	Consulting	Accountancy & Tax	Legal Services	Advertising & Marketing	Architecture
Market entry & establishment rules	Local business registration; commercial presence requirements	Ownership & legal form restrictions	Foreign practice prohibitions; restrictions on law-firm structures	Media ownership rules	Requirements for authorised practice entities
Licensing & professional qualification requirement	Business licensing sector certifications	Mandatory national licensing: exams	Bar admission: nationality criteria	Compliance with advertising codes	Protected titles: statutory licensure
Recognition of foreign qualification	Limited mechanisms	Strict recognition processes	Strict/non-recognition for domestic law	Not qualification-based	Strict qualifications recognition
Movement of people controls	Visa & labour market tests	Visa/residency requirements	Residency/visa requirements	Routine work-permit rules	Vis/residency for site work
Cross-border data & digital trade rules	Data localisation, analytics constraints	Data-governance obligations	Confidentiality and professional secrecy rules	Ad-tech consent and data rules	Project-data retention and workflow requirements
Regulatory transparency & procedures	Opaque procurement/licensing	Complex disciplinary/licensing procedures	Complex admission & disciplinary structures	Multiple advertising/digital codes	Fragmented building/code regulations
Competition, procurement & market conduct rules	Domestic-supplier preferences	Tendering rules for audits	Restrictions on solicitations; procurement rules	Domestic-content preferences	Technical specifications and supplier lists
Ethics liability & enforcement framework	Professional-liability norms	Ethics & audit-quality enforcement	Professional-ethics codes	Liability for misleading content	Liability for safety/code compliance

3.3 Professional & business services roundtable summary

This roundtable convened representatives of Scotland’s legal, accountancy and accreditation communities to explore how professional and business services (PBS) firms engage in international markets, the non-tariff barriers (NTBs) and frictions they face, and the policy levers that could enhance export growth. Discussion covered major markets (US, EU and the Middle East), mobility and practice rights, mutual recognition of professional qualifications (MRPQ), data transfer and storage, accreditation recognition, ownership and investment constraints in the legal sector, and the role of Scottish and UK Government trade promotion.

Key participant messages were: (i) mobility often matters more than formal qualification recognition for legal services, yet frictions at the border (notably in the US) and gaps in EU short-term mobility provisions reduce competitiveness; (ii) the loss of automatic MRPQ

post-Brexit is particularly salient for accountancy, risking exclusion from new EU-standard service lines (e.g. sustainability assurance); (iii) cross-border data governance is operationally challenging; (iv) UK accreditation outcomes lack mutual recognition in the EU, driving duplication; and (v) a multilateral PBS forum, convened by Scottish Government, and bringing together professional bodies in law, accountancy, tax advisory, etc. (and potentially disciplines covered in other roundtables such as engineering) would assist coordinating trade promotion for PBS and also in other policy areas.

3.4 SWOT Analysis: Professional and Business Services Sector

3.4.1 Strengths

Reputation and Standards

- Legal and accountancy services in Scotland operate both as standalone exports and as enabling services for other sectors, particularly energy.
- Accreditation by UK professional bodies, including ICAS and ACCA, functions as a strong international market signal.

International Linkages

- Established commercial links with the United States, European Union and increasingly Middle East, particularly the UAE and Saudi Arabia.
- Experience coordinating multi-jurisdictional mandates from a Scottish base, particularly in energy disputes and arbitration. International linkages that began with energy has allowed businesses to transcend beyond energy into other sectors which showcases the need for a foundational sector that allows professional and business services to thrive.
- Access to the wider UK market, especially London, enhances credibility and scale. For many firms, the value proposition combines Scottish expertise with UK market integration.

Enabling Role in Trade

- Accountancy and legal services provide advisory support for market entry, compliance and structuring across other exporting sectors.
- Recent consolidation and overseas investment in mid-sized firms may enhance international exposure and referral networks.

3.4.2 Weaknesses

Mobility Constraints

- Increased scrutiny at US borders, for even routine visits and gaps in EU short term mobility arrangements have reduced Scotland's attractiveness as a base for leading cross border work.

- Lawyers were not included in the list of professions eligible for certain short-term business activities under the UK–EU Trade and Cooperation Agreement. Evidence from the roundtable also suggests inadequate understanding within a sector on what is and isn't permissible activity currently under the TCA agreements.

Loss of Automatic Recognition

- Post Brexit loss of automatic mutual recognition of professional qualifications has increased administrative burden, particularly for accountancy.
- Maintaining equivalence with evolving EU standards, including in sustainability assurance, is resource intensive.

Data and Regulatory Complexity

- Divergent cross border data transfer and storage rules create delays in onboarding and project execution.
- Multi jurisdictional matters require reconciliation of conflicting data regimes, documentation of compliance and, in some cases, mid-project system adjustments.
- Rapid regulatory change in digital and AI governance adds further operational friction.

Capital and Coordination Gaps

- More restrictive ownership and investment rules in Scotland compared to England and Wales may limit access to growth capital in legal services.
- Absence of a dedicated Scottish Government multilateral PBS forum weakens coordinated trade promotion.
- Perceived opacity in engagement with UK trade negotiations limits effective devolved input.

3.4.3 Opportunities

Geographic Deepening

- Middle East markets, particularly the UAE and Saudi Arabia, offer pipeline opportunities linked to long-standing energy and related services relationships. Given that these markets are nascent, there is a narrow window to pre-empt future trade barriers as they develop by fostering cooperation among regulatory bodies.
- The United States remains a core referral source, with sectoral clusters such as energy generating cross border mandates.
- Nordic markets continue to generate energy and disputes related work.

Scotland as a Delivery Hub

- Positioning Scotland as a cost-effective hub for multi-jurisdictional project management.

- Leveraging specialist energy expertise, competitive cost base relative to London and reliable UK law capabilities. Forty per cent of all commercial law and financial transactions utilise English law.
- Coordinating international mandates from Scotland without requiring extensive overseas physical presence.

Standards Led Differentiation

- Emerging global focus on AI governance and data standards creates scope for differentiation in data heavy services such as discovery, investigations and managed legal services.
- Demonstrating strong data governance can shorten buyer due diligence and strengthen bids.

Trade Agreement Leverage

- Recent trade agreements with Australia and New Zealand, and CPTPP participation, contain provisions that may reduce frictions around recognition and conformity assessment.
- Targeted guidance could increase firm level awareness and utilisation of these provisions.

Policy Windows

- Formal review of the UK–EU Trade and Cooperation Agreement in 2026 offers an opportunity to improve short-term mobility. This is the biggest barrier for Scottish service exporters.
- Regulatory developments in India regarding international legal practice signal potential medium-term openings.
- Reinvigorated Scottish branding in Brussels and stronger coordination mechanisms could enhance visibility and strategic positioning.

3.4.4 Threats

Post-Brexit Reputational Shift

- Scotland and the wider UK are increasingly perceived as outside the EU ecosystem. This perception matters even in the presence of no specific regulatory frictions.
- Work previously coordinated from Scotland is being rerouted to EEA jurisdictions such as Iceland, Norway or Switzerland.
- Reduced perception as a gateway to the EU weakens Scotland's role in multi jurisdictional project management.

Recognition and Accreditation Risks

- UK accreditation outcomes are not automatically recognised in the EU, creating duplicate processes for clients selling into the single market.
- Additional time and cost weaken Scotland-based advisers' competitiveness.

Talent Pipeline Pressures

- While not strictly in the realm of trade policy, proposed reduction in graduate visa duration from 24 to 18 months risks making qualification pathways for international students unworkable creating a longer term ceiling on the growth potential of service sector providers.
- Reduced access to international trainees and specialists threatens firms' ability to scale cross-border mandates from Scotland.

Competitive Realignment

- EEA aligned jurisdictions may continue to capture work linked to regulatory alignment advantages.
- Further divergence between UK and EU regulatory standards may increase friction and further erode Scotland's hub positioning.

3.5 Roundtable Feedback and Policy Considerations

3.5.1 Trade Policy: Reserved to the UK Government, with a Scottish Government Advocacy Role

- Encourage the UK Government to add lawyers to the relevant short-term business visitor list when the UK–EU Trade and Cooperation Agreement is formally reviewed in 2026, to facilitate temporary market access for legal services providers.
- Prioritise mutual recognition of professional qualifications with the EU and priority third countries, working jointly with the UK Government to prevent regulatory divergence between professional bodies and to support secondments, capability development and cross-border practice.
- Safeguard the UK’s public interest accreditation model in future trade negotiations, particularly with the United States, and pursue mutual recognition of conformity assessment with key trading partners to reduce duplicate accreditation costs faced by Scottish exporters.
- Sustain structured regulatory dialogue with international partners on artificial intelligence and data governance and publish practical guidance to reduce compliance burdens for Scotland based firms handling cross border data.
- While not completely in the trade policy realm, encourage the UK Government to stabilise international talent routes for export-facing firms by reconsidering the proposed reduction in graduate visa duration from 24 months to 18 months, recognising the sector’s reliance on international trainees and specialists. Future growth in services trade cannot happen if skilled talent cannot remain in Scotland.

3.5.2. Trade Support: Within Devolved Competence and Joint Delivery with UK Partners

The Scottish Government and Scottish Enterprise can act directly to strengthen coordination, reduce frictions and enhance export readiness.

- Establish a Scottish professional and business services forum, mirroring the UK Professional and Business Services Council, to coordinate professional bodies and intermediaries, align international messaging and plan joint export promotion. This recommendation was unanimously endorsed by participants at the roundtable.
- Rebuild a Scotland branded European convening platform following the closure of Scotland Europa, for example through the development of a Scotland House style presence in Brussels, to restore visibility, stakeholder access and network positioning for exporters.

- Develop a services mobility toolkit covering the EU and the United States, clearly setting out permissible short term activities, documentation requirements and practical guidance to reduce border-related risks. This is particularly important for legal services, where reputational and compliance risks are heightened.
- Establish a data transfers helpdesk providing decision trees, model clauses and practical support for legal discovery, managed services and other data intensive cross border work.
- In partnership with the Department for Business and Trade, raise awareness of recognition and conformity assessment provisions available under recent trade agreements, including those with Australia, New Zealand and CPTPP partners, and provide guidance on practical utilisation.
- Improve coordination of trade promotion activity with the Department for Business and Trade by aligning UK wide campaigns with a clear Scottish identity, providing longer lead times for trade missions, offering upfront support for eligible SMEs and ensuring structured follow-up to convert interest into contracts.
- Address measurement gaps by launching a services exporter panel comprising rotating professional and business services firms to capture quarterly data on export pipelines, contract wins, frictions and time-to-contract. This evidence should inform both trade policy advocacy and trade promotion design.

3.6 Case Study: Accountancy Firms in Scotland at the whims and fancies of negotiation appetite of EU bodies

A Scotland based accounting firm historically exported audit, assurance, tax, and advisory services to EU clients on a cross-border basis, supporting multinational groups, cross-border transactions, and regulatory compliance. Prior to Brexit, UK professional qualifications were recognised across the EU **under mandatory** mutual recognition frameworks, allowing UK-qualified accountants to practise, sign off, and temporarily operate in EU member states with minimal additional authorisation. **Cooperation between professional bodies was required by law, not negotiated case by case.**

UK professional qualifications were treated as third-country credentials, with recognition determined nationally by EU member states and, in practice, by domestic accounting bodies. Cooperation between UK and EU professional bodies has become discretionary rather than automatic. In several jurisdictions, UK qualified accountants can no longer sign off audits, issue statutory opinions, or provide reserved services without local requalification, registration with national professional bodies, or formal collaboration with EU qualified practitioners.

This shift has created a structural coordination problem. Scottish accounting firms seeking to continue serving EU clients now depend on cooperation from EU professional bodies to recognise qualifications or permit joint working arrangements. However, EU bodies have limited incentives to facilitate this. Granting recognition to UK qualified accountants increased competition within

domestic markets, dilutes professional rents, and offers few reciprocal benefits. As a result, recognition processes remain slow, fragmented, and uneven across jurisdictions with no obligation on EU bodies to prioritise market access for UK professionals.

In response, the firm has altered its operating model. UK based accountants continue to provide technical analysis and advisory input, but final opinions, statutory sign-offs, and regulated outputs increasingly had to be delivered by EU qualified accountants. This has been achieved through local partnerships, subcontracting arrangements, or the establishment of EU based teams. These changes have raised coordination costs, reduced the share of value added delivered from Scotland, and weakened the firm's ability to export services **directly** on a cross-border basis.

The barrier did not operate through an explicit prohibition on trade. Instead, it arose from the interaction of professional regulation, national discretion, and asymmetric incentives between UK and EU professional bodies. While cross-border accounting services remained technically possible³⁵, they require additional layers of local involvement that shifted activity and authority into EU markets.

This case illustrates how, in 2026, the loss of mandatory professional recognition and the absence of incentives for EU professional bodies to cooperate function as non-tariff barriers to Scottish accounting services exports. Market access depends not only on regulatory compliance, but on discretionary cooperation by domestic gatekeepers whose incentives favour localisation over cross-border provision, reducing Scotland's role as a direct exporter of professional expertise.

³⁵ At these roundtables, it was also mentioned that the availability of short term business travel has not translated into meaningful access for professional services as the rules limit the nature of activities that can be performed.



Science & Research

4.1 Sectoral Composition & Overview

- Gross Value Added (GVA) 2022: £1.1bn which constitutes 0.6% of Scotland's Economy. By comparison, the GVA of UK S&R services was £20.4bn in 2022, which is 0.9% of the UK Economy
- Employment 2024: 15,000 workers which is 0.6% of Scotland's workforce. In 2022, employment was 18,000 workers which implies a productivity of £58,998.47 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £562m representing 52.9% of the Science & Research sector's total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £329m representing 31.0% of the Science & Research sector's total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland) 2022: £895m representing 84.3% of the Science & Research sector's total Gross Value Added in Scotland.

Source: Scottish National Accounts, UK National Accounts, BRES

The science & research sector includes science led businesses engaged in R&D, life sciences, or intellectual property that deliver services or expertise overseas. For the purpose of data analysis, this sector encompasses firm classified under SIC 72 (scientific research and development).

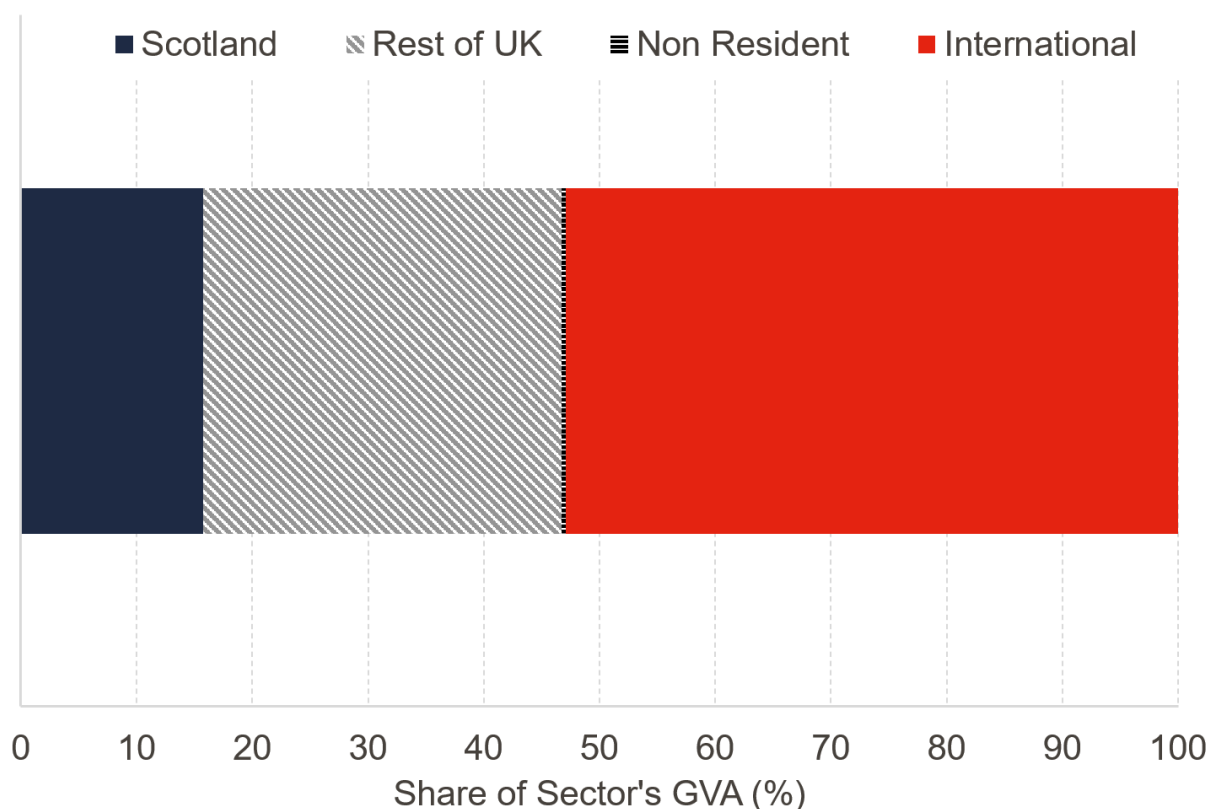
Scotland's Science & Research Sector is relatively similar to its UK counterpart, despite evidence of distinction.

The Scottish sector exports just under one third (31.0%) of its GVA to the Rest of the UK. Meanwhile, 52.9% is exported internationally.

Therefore, whilst a considerable quantity of GVA is destined for the rest of the UK, international exports are far more valuable, indicating the sector is distinct from, rather than highly integrated with, its UK counterpart.

The Scottish sector also contributes a slightly smaller proportion to Scotland's economy, 0.6% of GVA, compared to the UK sector's 0.9%.

Chart 4.1: Science & Research Export Destinations, 2022



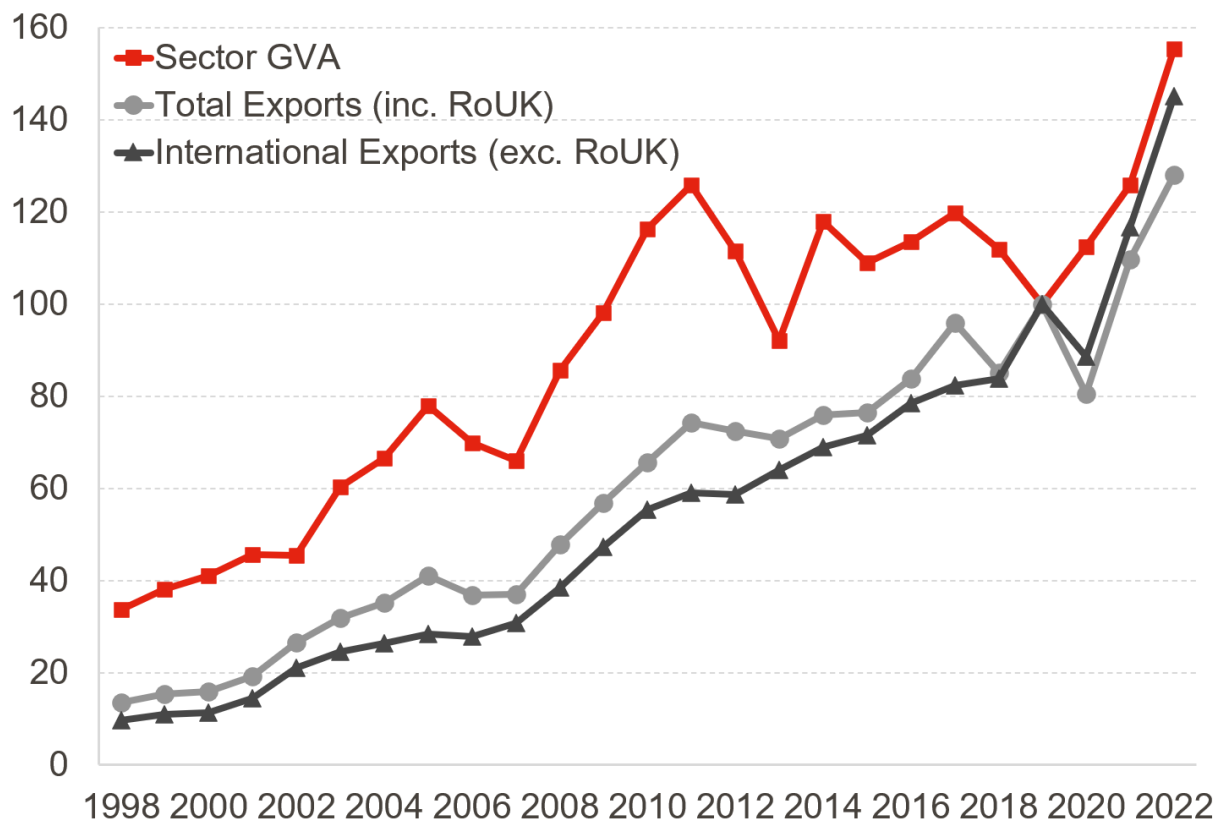
Source: Scottish National Accounts

Growth in the value of international science & research exports has typically outpaced growth in the value of the sector, averaging annual growth rates of 12.2% and 6.2%, respectively, prior to the pandemic.

Exports to the rest of the UK grew at an average annual rate of 9.5% before the pandemic. Although greater than the Scottish sector overall, this is slightly less than the growth in international exports which further underpins the distinction of the Scottish sector from its UK counterpart.

The value of the sector and its exports were significantly impacted during the pandemic. However, the sector overall appears to have been impacted more considerably in the years immediately preceding the pandemic, suggesting Brexit was a more notable event. By 2021, the sector has recovered to pre-pandemic levels.

Chart 4.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

Table 4.1: Top 10 Export Destinations by Market Share (UK), 2024

Research & Development	
Market	Share of UK Exports
United States	46.0%
European Union	40.0%
Switzerland	7.0%
Japan	2.0%
China	1.0%
Singapore	1.0%
Australia	0.3%
Norway	0.1%
Israel	0.1%
India	0.1%
Top 10 Total	98.0%

Source: OECD, CITP Research

The UK's S&R exports are extremely concentrated within the top 10 market destinations; with the European Union and United States dominating the top 10, similar to what has been observed in other sectors.

Additionally, 17% of global S&R exports originate in the UK – the highest share of any individual economy in the world – which matches with the Scottish sector's considerable export intensity.

Whilst data on trade restrictiveness for S&R specifically is not available, over the past decade the UK trade environment has generally operated in an increasingly liberalised trade environment, with the UK being a less restrictive market than the EU and the average OECD economy.

This shift reflects greater global openness in the UK's post-Brexit reality. Whilst the EU enables free trade within its borders, it is relatively restrictive to external economies – especially in services.

Being outside the EU, the UK's services must deal with increased barriers with the EU despite more access to non-EU global markets. The net result is improved access to individually less valuable markets.

Despite this liberalisation, certain barriers still exist in the UK, primarily related to licensing, qualifications, and operational transparency. With the UK's largest trading partners – the US and EU – temporary movement of service providers and entry of foreign firms are the most prominent barrier.

4.2 Current and future global regulatory and non-tariff issues in the Sciences Sector

4.2.1 Global regulatory and non-tariff landscape

Scientific and life-science industries operate under some of the most complex regulatory ecosystems globally due to their dependence on clinical safety, public-health safeguards, IP-based innovation, and data-intensive research methods.

International-organisation research finds that trade in high-technology, R&D, and life-science sectors is shaped primarily by non-tariff measures (NTMs) such as: regulatory approvals. licensing & testing requirements, standards & conformity assessment, clinical data rules. IP protection and enforcement, bio-security controls. restrictions on biological samples, and data-governance rules around genomic and health information

UNCTAD stresses that in knowledge-intensive sectors, NTMs -especially technical regulations (TBTs) and sanitary/phytosanitary (SPS) measures- are the main determinants of market access. This is particularly acute in pharmaceuticals, medical devices, and biotechnology, where safety-driven regulation acts as both a legitimate public-policy tool and a practical trade barrier.³⁶

³⁶ [UNCTAD | Non-tariff Measures Data](#)

UN/ESCAP adds that a new generation of NTMs tied to data policy increasingly affect clinical trials, genomic research, AI-for-drug-discovery, and cross-border scientific collaboration. These include data localisation, approval requirements for transferring sensitive biological/health data, and compliance regimes for digital research infrastructure.³⁷

In short, across international evidence, the global science-led R&D and life-sciences sectors face the most intense and structurally embedded NTBs of any industry group. These barriers arise not from tariffs but from safety, ethical, data, IP, and regulatory-alignment requirements that differ widely across jurisdictions. International-organisation research suggests that the main policy challenge for life-science industries is navigating divergent national rulebooks, while the main opportunity is international cooperation on standards, mutual recognition, and interoperable data-governance regimes.

4.3 Science and Research Roundtable Summary

This roundtable gathered senior leaders from firms and trade associations based in Scotland providing science and research services, taking in disciplines including life sciences, pharmaceutical services, life sciences, optics, cell and gene therapy, animal health, space and innovation.

Participants agreed with official data that show the US and EU make up overwhelmingly the bulk of Scottish exports of science and research services but noted that future potential growth will likely come from demand in India, China and Saudi Arabia.

That being the case, most participants voiced trade barriers concerns regarding access to the US and EU markets. For example, the absence of an EU–UK mutual recognition agreement for batch testing/release, complicated EU release requirements, complex Qualified Person (QP) arrangements and different rules on laboratory practices between the US and the OECD add costs to Scottish exporters.

While not strictly speaking trade related, participants also noted that the domestic operating environment strongly influences export capacity: the group cited limited NHS adoption of innovative devices/digital health, diminished early-stage support for quality/regulatory capability and infrastructure/skills gaps slow scale-up and weaken Scotland’s position as an export platform as the current domestic procurement policies don’t encourage domestic champions that can build on a strong domestic track record overseas.

³⁷ [ESCAP | Next generation non-tariff measures](#)

4.4 SWOT analysis: Science and Research Service

4.4.1 Strengths

Scale and Quality Signal

- Scotland represents approximately 31 percent of the UK's CRO and CDMO capability, providing critical mass and clustering effects.
- For US sponsors, who account for roughly half to two-thirds of sales for several firms, Scotland functions as a reliability signal: strong data integrity, auditability and quality systems reduce perceived regulatory risk.
- Advanced therapy and sterile biologics capabilities operating under MHRA oversight provide a distinctive clinical-phase attraction point.

Standards and Governance Influence

- The UK's institutional architecture, including engagement through the Regulatory Horizons Council and the British Standards Institution, positions Scotland close to emerging rule-making frontiers.
- Influence over standards in areas such as in silico methods and AI allows Scottish providers to anticipate validation requirements and convert regulatory insight into export-ready processes and data packages.

Research and Innovation Base

- Strong university research ecosystem with internationally credible pre-clinical human tissue networks and specialist virology and efficacy/safety expertise.
- Established capabilities in animal health, agritech and aquaculture, particularly in pre-farm-gate innovation aligned with global sustainability demand.
- Coherent value proposition centred on low risk, high compliance and scientific depth.

4.4.2 Weaknesses

Absence of EU–UK Mutual Recognition

- No mutual recognition agreement for pharmaceutical batch testing and release forces duplicative EU-based processes and Qualified Person workarounds.
- Additional cost and delay are compounded by perception risk, as sponsors question EU market access pathways. This feedback was universally echoed at roundtables.

GLP Divergence with the United States

- Divergence in Good Laboratory Practice implementation increases relative compliance burden for Scottish labs.

- Sponsors sensitive to cost and speed may retain pre-clinical work in the US, even where Scottish capability is technically strong.

Domestic Adoption Constraints

- Limited NHS uptake of innovative devices and digital health solutions weakens local reference-building. While this is strictly speaking more domestic procurement than trade policy, a demonstratable domestic track record can serve as a foundation for overseas success.
- Reduced early stage regulatory and **quality support** for spin outs lengthens time to export readiness. This sector, due to its needs has structurally long timelines, and quality support that can reduce timelines is a competitive advantage for a Scottish firm.

Capacity and Skills Gaps

- Documented shortages in engineers and regulatory professionals.
- Lab and manufacturing capacity constraints in Scotland have been known to limit scaling response by firms.

4.4.3 Opportunities

Clinical Trials Reform

- Delivery of the 150-day clinical trial approval target under MHRA reform could reposition the UK as a fast, predictable R&D base.
- Mutual recognition pilots with regulators such as Switzerland, Australia, Canada and Singapore could lower entry barriers for multi country programmes.
- Streamlined pathways for rare diseases and decentralised manufacturing create competitive differentiation.

Standards Led Equivalence

- Greater use of internationally recognised standards can provide functional regulatory equivalence without awaiting legislative change.

Geographic Diversification

- India represents a medium-term opportunity following the SLA–ABLE memorandum, especially if procurement and regulatory navigation support is provided.
- China's discovery and licensing environment is more active than in previous years, creating demand for specialist services.
- Continued expansion potential in animal health, agritech and aquaculture exports.

Strategic Positioning

- Consolidating Scotland's role as a high compliance, clinical-phase and advanced therapy specialist platform for global sponsors.

- Leveraging standards leadership and regulatory credibility as a core export narrative.

4.4.4 Threats

Persistent EU UK Recognition Gap

- Continued absence of a mutual recognition agreement may eventually lead to EU sponsors to bypass UK testing and release entirely.
- Maintaining parallel QP arrangements is commercially fragile and unlikely to provide sustainable advantage.
- While not in the data, businesses in the roundtable noted growing risk of gradual hollowing out of EU facing teams.

US Reshoring Pressures

- Growing expectation that commercial scale manufacturing occur in the US constrains export of higher value production stages. This is another example where manufacturing and services are not as detached as they may seem in economic data.
- Costly technology transfer processes can discourage sponsors from initiating early stage trials in Scotland.

Regulatory Divergence in Devices and Digital Health

- Misalignment between UKCA and CE marking systems may encourage FDA-first strategies that deprioritise the UK and EU.
- Reduced local approvals weaken downstream trial and services demand.

Spin-Out and Infrastructure Risks

- IP and equity negotiation challenges in university spinouts risk relocation of promising firms at an earlier stage serving as a ceiling on growth potential.
- Infrastructure bottlenecks and limited later stage finance may drive high-growth firms abroad. This has been well documented as a risk, and was also acknowledged in the business roundtables.
- Sustained under investment in manufacturing and lab capacity would compound long-term erosion. Roundtables echoed the importance of a manufacturing foundation that keeps the services “sticky” to the economy.

4.5 Roundtable Feedback and Policy Considerations

4.5.1 Trade Policy and Regulatory Alignment: Reserved to the UK Government, with a Strong Scottish Advocacy Role

- Make a UK–EU mutual recognition agreement for pharmaceuticals a top priority in negotiations with Brussels, including mutual recognition of Good Manufacturing Practice batch testing and release, to eliminate duplicate testing and reduce time-to-market.
- Work with international partners, particularly the United States, to address divergence in pre-clinical Good Laboratory Practice frameworks, recognising that misalignment creates friction for Scottish-based providers operating across OECD jurisdictions.
- Undertake reforms to MHRA clinical trials processes, focusing on delivering the 150-day approvals target, progressing mutual recognition pilots with third countries such as Switzerland, Australia, Canada and Singapore, and streamlining pathways for rare diseases and decentralised manufacturing. The objective should be to position the UK as a fast, predictable base for multi-country programmes.
- Support greater regulatory alignment in medical devices and digital health by mitigating duplication between UK and EU certification systems and ensuring that UK acceptance pathways remain clear and time-efficient for exporters.
- Empower accreditation bodies proactively, both in the UK and in future growth markets, to *support early regulatory harmonisation*. This should be treated as long-term infrastructure investment that enables future export growth rather than reactive adjustment after divergence occurs.
- Promote the use of international standards as a complement to formal regulation by working with the British Standards Institution and international standard-setting bodies to develop frameworks that provide credible equivalence and facilitate cross-border recognition.

4.5.2 Trade Support and Market Development

Actions for the Scottish Government and Scottish Enterprise, in Partnership with DBT and FCDO

- Position Contract Research Organisations and Contract Development and Manufacturing Organisations as a national export proposition, building a unified narrative around Scotland's regulatory excellence, advanced therapy testing capabilities and sterile biologics expertise. Promotion should focus primarily on the United States and the European Union as these are the key markets.
- Shift towards market-making trade missions in priority markets, particularly the US and EU, with *at least six months' preparation, upfront financial support* for participating firms and

structured 12–18 month follow-up to convert meetings into signed contracts. This recommendation was endorsed unanimously at the business roundtables.

- Develop route to market playbooks offering practical guidance on FDA first strategies, EU notified body navigation, Qualified Person release workarounds and GLP and GMP expectations. These should include template agreements and curated lists of trusted partners to reduce entry friction.
- Rebuild early-stage regulatory and quality capability support for start-ups, scale-ups and university spinouts through targeted grants, vouchers and mentoring. Early regulatory preparedness reduces later revalidation costs and accelerates export readiness.
- **Prioritise India as a medium-term growth market** by operationalising the 2025 Memorandum of Understanding between ABLE and the Scottish Lifesciences Association. Trade support should focus on procurement processes, regulatory navigation and pipeline development.
- Enhance sector intelligence and awareness regarding growth potential in China and the Middle East for research and scientific services, ensuring firms understand regulatory pathways and buyer dynamics before market entry.

Anchor domestic adoption of Scottish-produced science and research services by establishing selective NHS early-adopter pathways, particularly in high-impact cell and gene therapies and digital health. Early domestic validation strengthens export credibility and provides reference customers.

4.5.3 Notes on terminology (as used by participants)

- CRO – Contract Research Organisation
- CDMO – Contract Development & Manufacturing Organisation
- GLP – Good Laboratory Practice (pre-clinical)
- GMP – Good Manufacturing Practice
- GCP – Good Clinical Practice
- QP – Qualified Person (batch release).

4.6 Case Study: Life Sciences Sector and the circumnavigation of different regulatory regimes on different continents

A Scottish/UK based life sciences firm reported that it has progressed lead assets into late-stage clinical trials and manufacturing scale-up continues to access European and US markets *but* operates within a significantly more complex regulatory and commercial environment than at earlier stages of development. As products move into Phase III trials and pre-commercial manufacturing, the firm faces parallel regulatory engagement with UK, EU, and US authorities, requiring separate and often duplicate inspections, quality documentation, and validation processes for clinical supply and commercial readiness with limited to no opportunities for

mutual reliance. For EU market access, the firm must undertake additional conformity assessment, batch testing (for every single batch), and ongoing pharmacovigilance arrangements through EU-based entities, while in the US the scale and cost of FDA engagement, combined with heightened liability and assurance requirements, materially shapes decisions on where manufacturing and quality oversight are located. These fixed regulatory and compliance costs increase sharply with scale, leading the firm to concentrate investment in a small number of facilities and products, often favouring locations that offer regulatory proximity, established supply chains, or access to larger end-markets.

In practice, this has resulted in some elements of late-stage manufacturing, quality management, or commercial batch release being undertaken outside Scotland, even where earlier-stage development was domestically anchored. Although the firm retains high value research and some manufacturing activity in Scotland, the need to de-risk market access and manage regulatory timelines has lengthened time to market, raised capital requirements, and reduced flexibility in scaling production domestically, with implications for the extent to which Scotland captures downstream manufacturing, productivity gains, and spillover benefits as therapies move from development into commercialisation within the wider United Kingdom.



Creative Industries

5.1 Sectoral Composition & Overview

- Gross Value Added (GVA) 2022: £1.0bn which constitutes 0.6% of the Scottish Economy. By Comparison, the UK Creative Sector was worth £54.7bn in 2022, which is 2.4% of the UK economy.
- Employment 2024: 17,300 workers which is 0.6% of Scotland's workforce. In 2022, employment was 20,400 workers which implies a productivity of £50,925.10 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £313m which is 30.1% of the Creative Industries sector's total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £342m which is 33.0% of the Creative Industries sector's total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland) 2022: £739m which is 71.1% of the Creative Industries sector's total Gross Value Added in Scotland. This includes non-resident spending (i.e. tourism) as well as international and domestic trade.

Source: Scottish National Accounts, UK National Accounts, BRES

The creative sector includes businesses involved in film, TV, music, performing & visual arts, and advertising & marketing. Video game developers also self-selected into the qualitative elements of this sector. However, the rigidity of SIC codes mean they classified as Digital & Tech for quantitative elements. Data analysis of this sector encompasses firms under the following SIC codes:

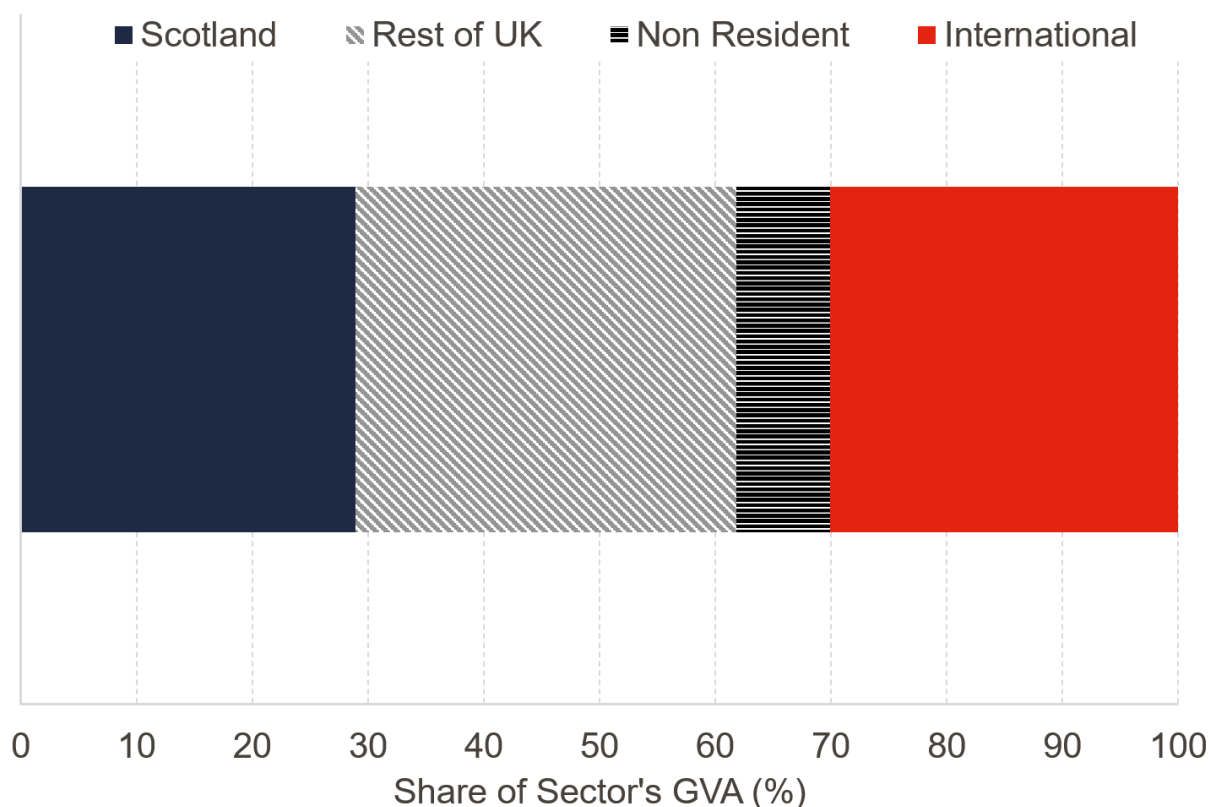
- 59/60 – Film, Audio, and Broadcasting
- 73 – Advertising and Market Research
- 90 – Creative, Arts, and Entertainment

Scotland's Creative Sector is very different to its UK counterpart. Advertising & Market research composes 34.9% of the sector's GVA in Scotland, compared to 43.4% at the UK level.

Creative arts and entertainment activities are approximately 10 percentage points larger in Scotland than the UK.

The Scottish sector is proportionally smaller than the UK, and only 33.0% of GVA is exported to the Rest of the UK. This indicates a degree of distinctiveness present in the Scottish sector, separating it from the UK sector. Tourism (i.e., other) also comprising a notable amount of creative GVA in Scotland.

Chart 5.1: Creative Industries Export Destinations, 2022



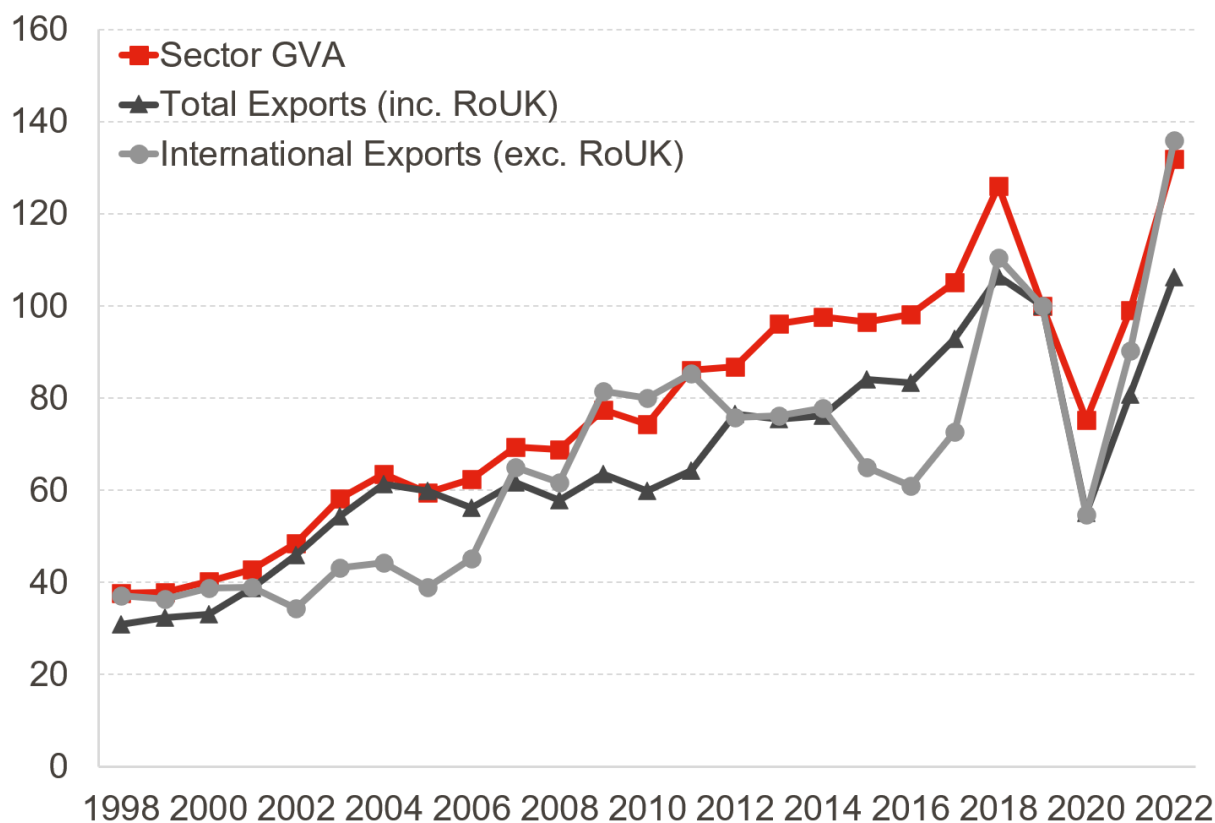
Source: Scottish National Accounts

Growth in the value of international creative exports slightly outperformed growth in the sector's value prior to the pandemic (average of 6.2% and 5.2% average annual growth respectively).

Exports to the rest of the UK grew at an average rate of 6.1% annually before the pandemic. In conjunction with the sector's relatively low proportion of exports to the rest of the UK, this does suggest growth in the Scottish sector having been strongly influenced by the UK sector.

During the pandemic the value of the creative sector and its international exports declined significantly. By 2022, the value of both had recovered, surpassing 2019 values. This is despite the value of exports to the Rest of the UK still lagging behind pre-pandemic levels, further underscoring the distinctiveness between the Scottish and UK sectors.

Chart 5.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

Table 5.1: Top 10 Export Destinations by Market Share (UK), 2024

Audio Visual Services	
Market	Share of UK Exports
United States	47%
European Union	34%
Australia	5%
Switzerland	3%
Turkey	2%
Canada	1%
Saudi Arabia	1%
Japan	1%
Norway	1%
Hong Kong	1%
Top 10 Total	94%

Source: OECD, CIPR Research

Exports from the UK's Creatives sector are highly concentrated within the top 10 destination markets for audio services; the European Union and United States dominate the top 10.

Over the past decade, the UK's Creatives Services trading environment has generally liberalised, positioning the UK as a more open market compared to the EU and the OECD average.

This reflects a broader trend of global openness in the UK's post-Brexit reality. While the EU maintains free trade internally, it is relatively restrictive toward external partners, particularly for service-based sectors.

Being outside the EU, UK Creative Services now face higher barriers with the EU despite greater access to non-EU markets. The net result is improved access to individually less valuable markets, offsetting some of the challenges posed by newly faced EU restrictions.

Despite this liberalisation, certain domestic barriers remain, primarily related to licensing, qualifications, and operational transparency. Among the UK's largest trading partners, the US and EU, the most significant restrictions involve temporary movement of service providers and the entry of foreign firms.

Table 5.2: Services Trade Restrictiveness Index, Top UK *Creatives* Trading Partners, 2015 & 2024

Economy	Audio Visual Services	
	2015	2024
Australia	1.87	1.63
Canada	2.26	2.26
European Union	1.62	1.76
Japan	1.39	1.39
Norway	2.03	2.14
Switzerland	2.52	2.76
Turkey	2.75	3.01
United Kingdom	1.38	1.47
United States	1.22	1.21
OECD Avg.	1.87	1.96
Non-OECD Avg.	3.16	3.13

* Score of 0 = Completely Open | Score of 10 = Completely Restricted

Source: OECD, CITP Research

5.2 Current and future global regulatory and non-tariff issues in the Creative Sector

5.2.1 Global regulatory and non-tariff landscape

UNCTAD defines the creative economy as an evolving concept built on creativity, ideas, IP, knowledge, and technology, covering industries from advertising and film to music, games, fashion, software and visual arts.³⁸

UNCTAD positions the creative economy as one of the most dynamic and fastest-growing sectors globally, but also one of the most exposed to fragmented regulation and non-tariff barriers. Because the Creative Sector depends on intellectual property, digital platforms, and cross-border digital delivery, the regulatory landscape is shaped by: intangible trade (services rather than goods), rapid technological change (AI, streaming, digital platforms), uneven data, weak measurement systems (especially in developing countries), and wide variation in national oversight systems and absent or partial national strategies (UNCTAD's 36 country survey).³⁹

Non-tariff measures relevant to the creative sector can be broadly categorised into the three types:

- (a) Technical and regulatory barriers, such as content classification, censorship, media licensing; broadcasting and audiovisual quotas; and standards for digital services and platforms
- (b) Intellectual Property–related non-tariff measures or lack of enforcement (copyright, rights management, digital licensing)
- (c) Different types of digital trade and data regulations

Digitalization and AI are emerging regulatory pressure points as both expand and complicate global creative trade. For example, market concentration in digital creative sectors (streaming, audiovisual platforms, app stores) can become a non-tariff barrier for smaller creators, limiting visibility and bargaining power.⁴⁰ Also, regulation has not kept pace with digital, platform based, AI driven creative markets. This regulatory lag creates friction, inequity, and new non-tariff barriers. This suggests that future global governance must integrate IP, digital trade, AI, competition policy, and cultural policy.

³⁸ [UNCTAD | Trade and the creative economy](#)

³⁹ [UNCTAD | Creative Economy Outlook](#). As for UNCTAD's 36 country survey, see Annex

II in p116.

⁴⁰ [ITRC | Creative Economy Outlook](#)

5.2.2 Subsector mapping

We summarise measures that are identified as non-tariff barriers in the creative subsector by foreign providers in the key reports and programmes.⁴¹

Film & TV:

- Co production rules — states often impose local partnership requirements; these function as market entry non-tariff barriers.
- Censorship / content approval systems — regulatory procedures act as technical or administrative barriers to distribution.
- Local content quotas — imposed by broadcast or streaming regulators; act as quantitative restrictions.
- Foreign ownership limits — restrictions on media ownership affecting investment and distribution.
- Licensing & classification requirements — a form of regulatory NTMs identified in general NTM literature.

Music:

- Performance and neighbouring rights enforcement — uneven IP regimes function as regulatory barriers.
- Licensing for distribution and streaming — administrative requirements analogous to import licensing.
- Digital platform regulations — data, platform operation, geoblocking and censorship rules affect global distribution.

Gaming/Interactive Media:

- Game classification & ratings requirements — mandatory regulatory approvals function like technical standards non-tariff barriers.
- Content approval regimes (e.g., politically or culturally sensitive rules).
- Cross border data transfer restrictions — critically affect online games
- Licensing for online operations

Performing Arts (theatre, dance, live music)

- Work permit licensing — procedural NTMs hindering international touring.

⁴¹ UNCTAD Creative Economy Programme, USTR National Trade Estimate Report on Foreign Trade Barriers 2025 and World Bank NTM analysis.

- Visa & mobility restrictions — administrative procedures equivalent to NTBs; barriers to service exports.
- Restrictions on foreign promoters/production entities — forms of licensing and ownership NTBs.

Advertising / Marketing

- Cross border data flow restrictions — affecting digital advertising and audience targeting.
- Standards for digital ads.
- Content regulations / advertising codes — administrative approval requirements that function as non-tariff barriers.
- Foreign ownership or agency licensing requirements

Table 5.3: Major type of non-tariff barriers by subsector

Subsector	Type of measures
Film/TV	co-production rules, censorship, local-content quotas, foreign-ownership limits
Music	performance rights, distribution licensing, digital-platform restrictions
Gaming	classification rules, data-transfer restrictions, content-approval systems
Performing Arts	visa and mobility barriers, service-provider licensing
Advertising/Marketing	cross-border data rules, standards for digital ads

Source: CITP Research

Since UK creative industries are highly services- and IP-intensive, we observe that the type of non-tariff barriers encountered abroad are predominantly regulatory and administrative. These include content approval/censorship, licensing & classification, local-content quotas, foreign-ownership limits, cross-border data restrictions, IP enforcement gaps, visas/work permits, and customs/export permits.

5.3 Creative industries roundtable summary

This roundtable brought together leaders from across Scotland's creative industries, including architectural and design services, marketing and advertising, the arts, the videogames sector and business development executives for cultural partnerships with higher education. Participants discussed what enables (and inhibits) exporting from Scotland in practice, ranging from specific non-tariff barriers in the EU to the everyday frictions faced by SMEs and freelancers when accessing trade support, managing payment risk, and navigating cultural expectations in overseas markets.



Many third-country markets are, on paper, open to Scottish creative services, but firms' capacity to export is often constrained by: post-Brexit issues; missing or slow-moving trade support which is not sufficiently attuned to the needs of firms in the creative industries; intensifying risks around IP and AI; and domestic factors such as the cashflow challenges faced by freelancers.

5.4 SWOT analysis: Creative Industries

5.4.1 Strengths

Soft Power and Global Brand

- Internationally renowned festivals, including those in Edinburgh and major music and cultural events across Scotland, act as export platforms by attracting global audiences and enabling touring and international partnerships. In roundtables, businesses noted that a lot of precursors to actual trade happens at these cultural events.
- Scotland's cultural visibility reinforces brand recognition and demand for creative outputs overseas.

Diaspora and International Networks

- The global Scottish diaspora strengthens soft power and facilitates export opportunities.
- The GlobalScot network provides market-specific intelligence and trusted connections that support overseas market entry.

Talent and Higher Education Base

- Internationalised higher education networks support cross-border collaboration and reputation building.
- Strong pipeline of creative talent attracts both overseas clients and inward investment.

Regional Clusters and Intellectual Property

- Glasgow, Dundee and Edinburgh serve as hubs for videogames and digital creativity.
- Globally recognised intellectual property, including major titles developed in Scotland, enhances international visibility.
- Creative clusters generate spillovers through innovation, design capability and cross-sector collaboration.

5.4.2 Weaknesses

SME Dominated Structure

- The sector is heavily composed of SMEs, micro-businesses and freelancers with limited administrative and financial capacity to pursue export opportunities. This theme cropped up regularly in roundtables where business lamented inability to access export opportunities due to limited financial capacity despite high willingness.
- Exporting entails navigating regulatory frameworks, compliance requirements and long payment cycles that strain limited resources.

Structural Misalignment in Trade Support Design

- Trade support models focused on high growth firms are not always suited to creative enterprises, where growth pathways differ from traditional scale up models.
- Sole traders and small studios risk falling outside administrative eligibility criteria despite export potential.

Measurement and Classification Gaps

- Outdated statistical classifications obscure the sector's economic contribution to Scotland.
- Misclassification of videogames and architecture reduces visibility in official data and weakens evidence-based policymaking as well as allocation of potential trade support. For example, video game development sits at the intersection of digital and creative sectors, combining software development with intellectual property creation.
- Under-measurement of supply chain and place based spillovers limits strategic planning.

Acute nature of Cashflow and Payment Risk for individual operators and SMEs

- High exposure to delayed or non-payment in certain export markets. Businesses in roundtables had experienced payment troubles creating a palpable sense of risk aversion to access new markets.
- Upfront project financing requirements create liquidity pressures that most SMEs can find daunting.
- Export insurance mechanisms are often slow or administratively burdensome for small firms.

Inconsistent Trade Support Delivery

- Variable quality and timing of trade missions and sector-specific guidance reduces effectiveness.
- Late notice and limited follow up undermine conversion of introductions into contracts.

5.4.3 Opportunities

Re-engagement with Europe

- A UK–EU reset presents potential for re-engagement with European cultural and funding frameworks.
- Re-joining Creative Europe or developing equivalent partnerships could restore co-production networks and reputational positioning.

Targeted Export Missions

- Designing sector-specific missions around major trade shows, such as the Game Developers Conference, could yield higher returns.
- Greater emphasis on structured post-mission follow-up could improve contract conversion rates.
- Focused targeting of markets such as Japan offers potential for high-value partnerships.

Cluster Led Export Strategy

- Aligning regional strengths, including videogames in Dundee and festivals in Edinburgh, with national export strategy.
- Leveraging regional partners such as local enterprise groups and chambers of commerce to extend reach and build trust.
- Peer networks can act as effective dissemination channels for trade support, especially given the people centric nature of this sector.

AI as Productivity Enhancer

- In marketing and advertising, AI can expand production capacity, enhance international reach and improve cost competitiveness for small teams.
- Adoption of AI tools can allow Scottish firms to compete in global markets more efficiently.

5.4.4 Threats

Post-Brexit Regulatory Frictions

- Loss of automatic mutual recognition of professional qualifications creates barriers for architects operating in the EU. This theme of mutual recognition transcends sectors.
- Insurance and compliance requirements in EU public tenders impose additional costs.
- Visa thresholds limit recruitment of international talent necessary to sustain export delivery.

Market Access Constraints in China

- Restrictions on access to the Chinese videogames market constrain growth prospects.
- Reliance on local Chinese intermediaries increases intellectual property risks. Businesses are forced to choose between either ignoring the growth story of Chinese market or face property theft risks that can lead to diminished market share globally.

Artificial Intelligence Displacement

- Clients shifting to AI generated content has the potential of reducing demand for traditional creative services.

- Entry level roles face displacement risk. This may not show up in economic data but effectively dampen longer term growth prospects.
- Use of scraped creative content to train AI systems raises intellectual property concerns.

Financial Fragility

- Continued exposure to payment risk and insufficient export finance tools could limit willingness to pursue higher-risk markets.
- Weak domestic support mechanisms may increase relocation incentives for high-potential firms.

5.5 Roundtable Feedback and Policy Considerations

5.5.1 Reserved to the UK Government, with a Scottish Government Advocacy Role

The Scottish Government can work proactively with the UK Government to address structural barriers affecting Scotland's creative exports. Below we list trade policy focused recommendations based on economic data as well as evidence collected from roundtables:

- Secure mutual recognition of professional qualifications for architects with the European Union, restoring more predictable access to EU markets for architectural and design services. Maintain stable and predictable cross border data transfer arrangements, preserving data adequacy decisions and strengthening provisions on data flows in future trade agreements.
- Resolve insurance equivalence barriers that impede cross-border tendering, including requirements in certain EU jurisdictions for locally registered insurance arrangements. While not uniformly raised across all sectors, this reflects the project-based and regulated nature of these services rather than the absence of similar constraints elsewhere.
- Ease mobility and touring restrictions for artists and creators, particularly in the EU, to facilitate short-term performances, exhibitions and collaborative projects.
- Review and reduce salary thresholds for talent visas that currently constrain Scotland-based creative firms' ability to recruit international staff necessary to deliver export contracts.
- Strengthen international market access for videogames, particularly in China, by advocating for predictable publication routes and drawing lessons from other countries' trade engagement to reduce regulatory opacity and intellectual property risk.
- Protect intellectual property in the context of artificial intelligence by promoting an opt-in consent model for use of creative works in AI training, ensuring transparent remuneration mechanisms, and embedding strong IP protections within trade dialogues, including safeguards against compelled disclosure of proprietary assets.

5.5.2 Trade Support: Actions for the Scottish Government and Scottish Enterprise, in Partnership with UK Bodies

Given the sector's structure and export profile, trade support must be tailored keeping SMEs, micro-businesses and freelancers in mind.

- Encourage UK re-engagement with Creative Europe, or equivalent partnership arrangements, to restore networks, co-production opportunities and reputational positioning.
- For SE, reintroduce an account-manager model within trade support services to ensure that **creative SMEs receive commercially focused, timely advice aligned to transaction cycles rather than policy timelines.**
- Strengthen payment-risk mitigation tools by working with UK Export Finance and relevant bodies to streamline trade credit insurance and export finance processes. **Mechanisms should allow pre-approval or rapid activation aligned with contracting deadlines.**
- Design trade missions and export showcases with at least six months' lead time, upfront grant support rather than purely retrospective reimbursement, and structured follow-up over 12–18 months to convert introductions into contracts.
- Restore and expand Scotland's presence at major international videogames conferences, including the Game Developers Conference, with a particular emphasis on engagement in the United States.
- Leverage Scotland's own festivals, including those in Edinburgh and events such as Celtic Connections, as export platforms to showcase Scottish creative capability to visiting international buyers.
- **Invest in locally engaged expertise** in priority overseas markets and **continue to mobilise the GlobalScot network to provide market intelligence and connections.**
- Improve signposting by creating a clear, single-entry portal for creative SMEs and micro-businesses seeking trade support. Provide clear guidance and practical support for firms navigating data governance and localisation requirements in key markets, particularly where regulatory frameworks are evolving
- **Increase sector specificity in guidance and online portals, ensuring sub-sector content, including videogames, architecture and design, is easily accessible and practically oriented.**
- Work in partnership with regional and local business networks, including enterprise agencies, chambers of commerce and place-based organisations, to extend the reach of trade support.

- Provide practical market-entry training covering cultural norms, payments practices and partnership models, alongside template agreements to support firms establishing a local presence where required.
- Modernise official measurement of the creative industries by updating classification systems to accurately capture videogames, architecture and related sub-sectors. Improved data will enable more evidence-based policy design and strengthen the sector's visibility within export strategy.

5.6 Case Study: Lived Experience of a Scottish Creative⁴² Services Firm

A typical Scottish creative services SME, employs around 10–25 staff and generates a significant share of its turnover from international clients, continues to export successfully but within a more constrained operating environment than in previous years. International work remains project based and highly reliant on the temporary movement of people, particularly for audiovisual production, music touring, and brand led creative services, yet decisions on whether to pursue opportunities are now shaped at an early stage by uncertainty around short-term work permissions, visa processing times, social security coordination, and the administrative burden associated with operating across multiple jurisdictions. As a result, the firm has become more selective in its international engagement, focusing on a small number of familiar markets where regulatory requirements are well understood. To manage rising fixed costs associated with immigration advice, local tax or payroll representation, and jurisdiction specific contracting, the firm has adjusted its delivery model by deploying smaller Scottish teams overseas, making greater use of local freelancers and intermediaries, and relying more heavily on remote delivery for non-core functions. Although international revenues have remained broadly stable, this adaptation has reduced flexibility, increased overheads, and constrained the firm's ability to undertake smaller commissions or early-stage creative work, with knock-on effects for the development of new talent and formats. In some cases, maintaining access to international clients has required the use of partners or co-production structures that shift elements of contracting or intellectual property ownership outside Scotland, implying that while exports may persist on paper, the share of creative value and longer-term spillovers retained within Scotland and the wider United Kingdom may be lower than under previous operating conditions.

⁴² Creative industries, by their very nature are people centric and hence suffer disproportionately from mobility restrictions. Stakeholders in roundtables also mentioned that the data on this sector suffers from misspecification, and the support from relevant agencies does not exist as it is not considered in line with focus on “industrial strategy”.

Summary Table 5.4: Creative Industries Market Access Comparison

Country	Market Size & Growth	Key Drivers	Policy & Support	Barriers / Challenges	Regulatory Barriers (Examples)
China	Largest global exporter of creative goods; creative industries contribute significantly to GDP	Expanding middle class, rising disposable income, strong government investment	Strong state-led policies, subsidies, infrastructure investment	Regulatory complexity, IP protection concerns, censorship issues	- Strict censorship laws limiting creative content - Weak enforcement of intellectual property rights; widespread piracy - Complicated licensing and approval processes for foreign media - “First-to-file” trademark/IP system leading to bad-faith registrations
India	Creative economy valued at ~\$30B (2024), employing 8% of workforce; exports \$121B (2019)	Large talent pool, digital innovation, AR/VR & animation growth, “Orange Economy” push by the government	Emerging national frameworks, design education expansion, “Create in India” initiatives	Fragmented governance (16 ministries, 28 states), weak IP enforcement	- Fragmented governance: 16 ministries and 28 states oversee creative industries - Weak IP enforcement and high levels of piracy - Proposed AI content labeling rules seen as overreach - Lack of a unified national creative industries policy
Brazil	Contributes ~3.6% of GDP (2023), ~\$43B annually; strong job creation	Cultural diversity, digital platforms, public programs (Lei Rouanet, Cultura Viva)	Government incentives, IP strengthening, BRICS co-production opportunities	High informality, regional concentration (Rio & São Paulo), economic volatility	- Complex bureaucracy and duplicative regulations - High tariffs and unpredictable tax burdens - Regional concentration of creative industries (Rio & São Paulo), limiting national access - Weak enforcement of artist and cultural professional protections
Saudi Arabia	Current value ~\$20B, projected to reach \$48B by 2030	Vision 2030 diversification, \$155B cultural investment, rapid growth in entertainment	Strong government backing, global partnerships, major cultural investment programs	Conservative cultural norms, evolving IP frameworks, reliance on state-led initiatives	- Strict media rules restricting online expression (e.g., bans on “divisive content”) - Localization and performance requirements for foreign firms - Evolving IP frameworks with gaps in enforcement - Heavy state oversight of cultural and entertainment content



Digital & Technology Services

6.1 Sectoral Composition & Overview

- Gross Value Added (GVA) 2022: £5.7bn which constitutes 3.4% of the Scottish Economy. By Comparison, the UK D&T Sector was worth £104.7bn in 2022, which is 4.6% of the UK economy.
- Employment 2024: 60,000 workers which is 2.2% of Scotland's workforce. In 2022, employment was 68,000 workers which implies a productivity of £84,080.19 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £1.7bn representing 29.6% of the Digital & Tech. sector's total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £2.9bn representing 51.3% of the Digital & Tech. sector's total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland) 2022: £4.7bn representing 82.35% of the Digital & Tech. sector's total Gross Value Added in Scotland.

Source: Scottish National Accounts, UK National Accounts, BRES

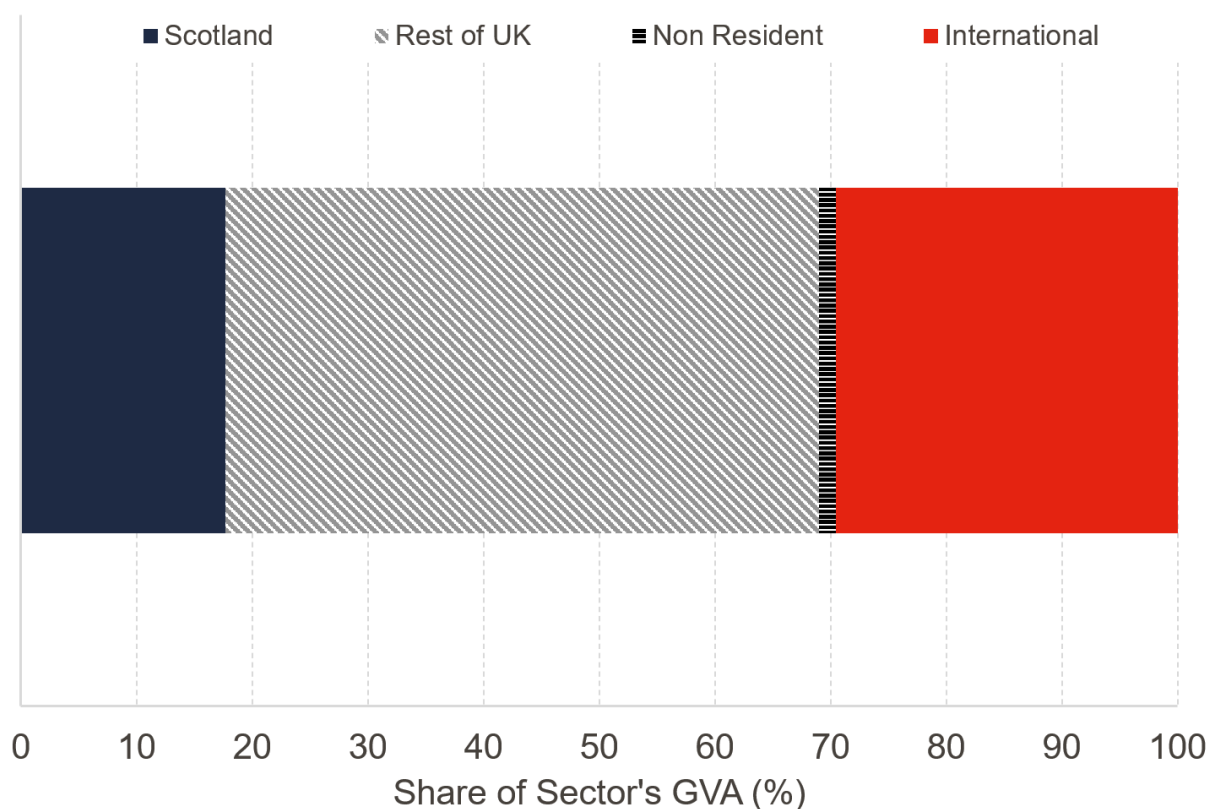
Digital & Tech encompasses businesses providing IT services, software, cyber security, system design, and AI solution. For the quantitative data analysis elements of this analysis, this sector includes firms classified under the Standard Industrial Classifications (SIC) codes. Due to the rigidity of SIC codes, the quantitative elements of this sector includes video game development, classified as software development:

- 61 – Telecommunications
- 62 – Computer Services
- 63 – Information Services

The composition of the D&T sector differs from Scotland and the UK. Telecommunications and computer services compose a higher proportion of the Scottish sector, with information services composing 5.4% to the UK's 9.6%.

Whilst the sector is also proportionally small in Scotland, 51.3% of its GVA is exported to the rest of the UK, indicating a considerable degree of integration between the two.

Chart 6.1: Digital and Technology Export Destinations, 2022



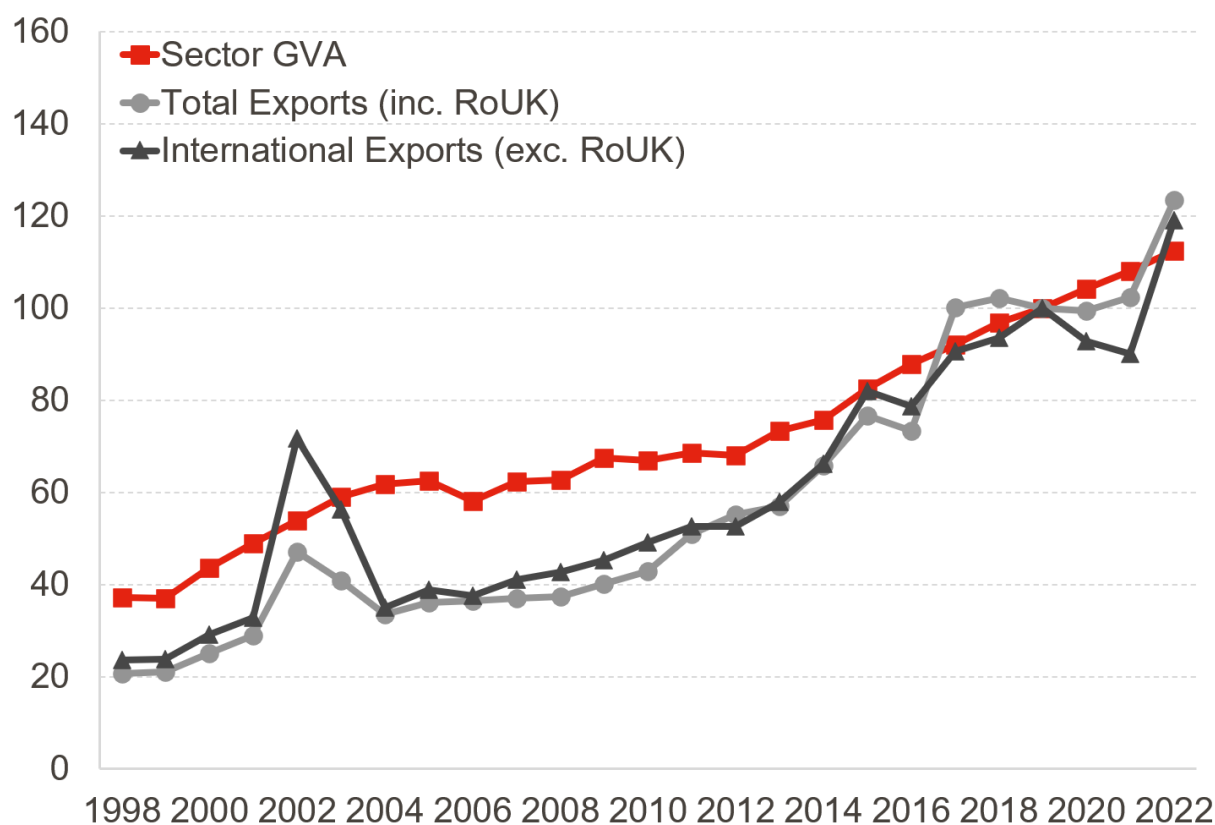
Source: Scottish National Accounts

Growth in the value of Scotland's international D&T exports averaged 9.8% annually prior to the pandemic outpacing the sector's overall average annual growth of 5.0% during the same period.

Exports to the rest of the UK grew at an average annual rate of 9.3% before the pandemic, which was also higher than the sector's overall growth rate, reconciled with differences in sectoral composition this indicates growth in Scotland's D&T sector has been strongly influenced by growth in the UK-wide sector.

During the pandemic the value of the sector's international exports declined, whilst the overall sector value remained largely unaffected. By 2022, the value of both international exports and the sector as a whole had surpassed their 2019 levels.

Chart 6.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

Table 6.1a: Computer Related Services Top 10 Exports by Market Share (UK), 2024

Market	Share of UK Exports
European Union	51%
United States	25%
Switzerland	3%
Australia	3%
Japan	2%
Canada	1%
Norway	1%
Singapore	1%
South Africa	1%
Hong Kong	1%
Top 10 Total	87%

Source: OECD, CIP Research

Table 6.1b: Information Services Top 10 Export Destinations by Market Share (UK), 2024

Market	Share of UK Exports
European Union	33%
United States	33%
Switzerland	5%
China	3%
Australia	3%
Singapore	3%
Japan	3%
Canada	3%
Hong Kong	2%
India	1%
Top 10 Total	88%

Source: OECD, CITP Research

Exports from the UK's D&T sector are highly concentrated within the top 10 destination markets for computer and information services; the European Union and United States dominate the top 10. However, their roles differ: the EU is the leading destination for computer services whilst the EU and US jointly lead in exports for information services.

Over the past decade, the D&T services trading environment, in the UK, has generally liberalised: with the UK being a more open market than the EU and the average OECD economy.

This reflects greater global openness in the UK's post-Brexit reality. Whilst the EU enables free trade within its borders, it is relatively restrictive to external partners – especially in services.

Being outside the EU, the UK's D&T services must deal with increased barriers with the EU despite more access to non-EU global markets. The net result is improved access to individually less valuable markets.

Despite this liberalisation, certain barriers still exist in the UK, primarily related to licensing, qualifications, and operational transparency.

In the UK's largest trading partners – the US and EU – temporary movement of service providers and entry of foreign firms are the most prominent barriers.

Table 6.2: Services Trade Restrictiveness Index, Top UK D&T Trading Partners, 2015 & 2024

Computer & Information Services			
Economy		2015	2024
Australia		1.75	1.50
Canada		1.68	1.68
China		3.25	2.73
European Union		1.65	1.79
India		1.48	1.54
Japan		0.71	0.71
Norway		2.02	2.17
Singapore		1.76	2.07
United Kingdom		1.30	1.15
United States		1.37	1.37
South Africa		1.12	1.57
Switzerland		2.30	2.42
OECD Avg.		1.74	1.85
Non-OECD Avg.		2.31	2.32

* Score of 0 = Completely Open | Score of 10 = Completely Restricted

Source: OECD, CITP Research

6.2 Current and future global regulatory and non-tariff issues in the Digital Sector

6.2.1 Global regulatory and non-tariff landscape

Over the past decade, digital trade has shifted from “light touch” to rules driven by data governance regimes, platform regulation, and security centric compliance. OECD analyses that countries’ domestic rules affecting digital trade have become more restrictive and fragmented, especially in areas critical to IT services and software (communications infrastructure, data connectivity, identity, and cybersecurity). As can be seen from Figure 1, digital trade regulations differ across regions. The restrictiveness in African countries is higher than other regions while the restrictiveness in Asia Pacific is rising over the past decade.

The OECD’s Digital Services Trade Restrictiveness Index (DSTRI) quantifies these frictions and finds that meaningful regulatory reform can have large trade effects (their modelling shows a 0.05 point decrease in DSTRI could raise total trade by ~72.5%).⁴³ The KPMG “Ten Key Regulatory Challenges of 2025” report underlines regulatory divergence, trusted AI/system assurance, and cyber-resilience as top compliance priorities firms must build for (governance, controls, third-party assurance).⁴⁴ These help explain why firms experience rising compliance costs and

⁴³ [OECD | Digital trade regulatory environment](#)

⁴⁴ [KPMG | Regulatory challenges](#)

divergent rulebooks across markets. OECD highlights the importance of international regulatory co-operation to reduce fragmentation.

We can categorise cross-cutting non-tariff barriers in the Digital &Tech sector into four groups. First, data-flow and localisation mandates remain the most structurally significant, raising integration and compliance costs for IT services, software, AI training and cloud deployment, with OECD evidence showing that digital-trade restrictiveness is high and growing across data-connectivity and privacy-related policies. Second, cybersecurity testing, certification schemes, and incident-reporting regimes are identified as increasingly functioning like licensing barriers for cross-border digital service delivery. Third, platform-governance obligations, including content moderation, ranking transparency, interoperability, and ad-tech rules, further shape market access by changing how software, cloud and AI solutions reach users. Fourth, AI assurance and compliance frameworks add additional procedural and documentation burdens around transparency, safety, and governance, particularly for high-risk applications. AI assurance and compliance frameworks introduce additional requirements at the level of service design and delivery, including documentation, transparency and governance obligations for higher-risk applications. This differs from broader data governance requirements, as it relates not only to how data is managed but also to how AI-enabled services are developed, assessed and deployed. As technology evolves, there remains the potential of great government regulation in this space in public interest, bifurcated regulatory regimes across various jurisdictions.

6.2.2 Subsector mapping

IT services: IT services face a distinctive cluster of regulatory and non-tariff barriers that shape how providers can deliver cross-border support, cloud-enabled services, and managed operations. The most significant friction point is data-flow and localisation mandates, which the OECD identifies as a major source of growing digital-trade restrictiveness across economies, particularly in rules governing data connectivity and cross-border transfers. These restrictions increase operational costs for IT service providers who rely on distributed systems, offshore service centres, or remote administration models. Beyond localisation, IT services are constrained by licensing and certification requirements, particularly in telecom-adjacent or security-sensitive areas. Additional frictions arise from expanding cybersecurity and operational-resilience obligations. Finally, the UK's new services-first trade strategy, as interpreted by techUK, seeks to improve cross-border digital-services access and strengthen data-flow commitments, but also introduces new economic-security tools that could reshape market access depending on how they are applied.⁴⁵

Software: The software sector, covering SaaS, enterprise applications, cloud-delivered tools, and digital platforms, faces a dense set of regulatory and non-tariff barriers that increasingly shape market access and architecture choices. The most pervasive constraint is the growing restrictiveness of data-connectivity and data-governance rules, which the OECD identifies as core

⁴⁵ [techUK | Trade Strategy](#) and [OECD | Digital trade regulatory environment](#).

drivers of digital-trade barriers in its Digital Services Trade Restrictiveness Index; these rules affect how software providers manage hosting, data residency, cross-border transfers, and cloud failover. For software vendors operating multi-tenant cloud services, such restrictions often force fragmented infrastructure deployments, raising operational costs and complicating regulatory compliance across jurisdictions. Platform-governance obligations / app-store rules represent a second major non-tariff barrier. There is a persistent rise in regulatory fragmentation around platform-mediated digital services.⁴⁶

Cybersecurity: Cybersecurity solutions face a tight web of regulatory and non-tariff barriers that function like licensing hurdles across borders: governments increasingly require security testing, encryption reviews, certification and incident-reporting, which the American Action Forum identifies as de-facto NTBs for exporting security tools and managed detection services, especially when requirements are duplicative or opaque.⁴⁷ These obligations collide with cross-border data-flow limits on logs and telemetry that are essential for threat detection and global SOC operations. At the same time, regulatory divergence in cyber-resilience frameworks is intensifying. KPMG flags duplicative frameworks across jurisdictions drive cost.⁴⁸

AI Solutions: AI solutions encounter an especially dense set of regulatory and non-tariff barriers because they sit at the intersection of data governance, algorithmic accountability, and platform-mediated distribution. At the core are AI assurance and documentation requirements including transparency, bias testing, risk classification, and conformity assessments. KPMG identifies as major regulatory pressures, adding substantial pre-market compliance costs for developers and deployers of machine-learning and generative-AI systems. These obligations become even heavier when combined with cross-border data-flow restrictions, as OECD evidence shows that limitations on data connectivity significantly impede digitally delivered services. TechUK backs cross-border flows and services-first deals, while calling for proportionate security tools, which is important for scaling UK AI offerings abroad.⁴⁹

6.3 Digital and technology services roundtable summary

This roundtable convened senior leaders from firms providing a range of digital and technology services, including digital content management, digital health and online brand protection, as well as a leading trade association with over 1000 members in the sector.

The discussion focused on how Scotland could enhance its strengths in digital and technology services and become a more attractive location from which to export, through a combination of trade policy that opens access to key markets, efficient trade support and a domestic policy and operating environment that supports exporters.

⁴⁶ [OECD | Digital trade regulatory environment](#)

⁴⁷ [AFF Insight | Non-tariff Digital Trade Barriers](#)

⁴⁸ [KPMG | Regulatory challenges](#)

⁴⁹ [techUK | Trade Strategy](#)

6.4 SWOT analysis: Digital and technology services

6.4.1 Strengths

Cloud-Native Export Model

- Strong specialisation in cloud-based services, including platform as a service and content management systems, reduces dependence on physical infrastructure.
- Distribution through global marketplaces such as Microsoft Azure and Amazon Web Services lowers barriers to entry and allows firms to serve international clients by leveraging distributed data centre networks.
- Ability to route services between data centres provides flexibility in navigating certain regulatory and technical trade barriers.

Research and Talent Base

- Universities provide a strong research and development foundation and international talent pipeline.
- Skilled workforce positioned between high-cost US tech hubs and lower cost global competitors, combining quality and relative affordability.
- Innovation led ecosystem supported by research intensity and international collaboration.

Natural Infrastructure Advantages

- Climate, land availability and water resources create potential advantages for data centre development although electricity pricing limits the benefits from this natural infrastructure.

6.4.2 Weaknesses

Weak Domestic Anchor

- Firms can operate from almost any global location, reducing structural incentives to remain in Scotland.
- Limited domestic customer base, particularly within the public sector, weakens revenue stability and investor confidence.
- Public procurement processes described as complex, slow and costly, deterring SME participation and reducing the sector's ability to secure "first customer" validation that foreign customers want.

Public Procurement Frictions

- Lengthy procurement cycles increase uncertainty and financing risk.
- Investors are hesitant where revenue streams depend on government contracts subject to delay.

- Missed opportunity for NHS and local authorities to act as early adopters and reference customers.

Fragmented Trade Support

- Export support perceived as dispersed across multiple platforms, creating administrative burden for SMEs.
- Trade missions sometimes offered at short notice with upfront costs, limiting participation.
- Inconsistent coordination between Scottish and UK-level initiatives.

Energy and Grid Constraints

- High electricity prices and constrained grid capacity reduce attractiveness for data centre investment.
- Energy supply competitiveness increasingly critical for AI-driven services.
- Policy constraints, including limitations on nuclear energy development, may limit long-term competitiveness in energy-intensive digital exports.

6.4.3 Opportunities

Horizon Europe Reassociation

- Reassociation offers renewed opportunities for research collaboration and innovation-led service development.
- Potential to restore momentum in international R&D partnerships in upcoming funding cycles.

Procurement Reform and Proof of Concept Models

- International examples, such as Singapore, demonstrate the value of time limited proof of concept procurement models that enable SMEs to become suppliers.
- Adoption of similar mechanisms in Scotland could accelerate revenue generation and de-risk overseas expansion.
- More effective use of approved supplier frameworks and reduced re-tendering could lower transaction costs for firms.

Standards and Digital Governance

- Opportunity to advocate for international alignment on digital standards, paperless trade and recognition of e-signatures to reduce contracting frictions.
- Potential to position Scotland as a trusted, standards-aligned digital services jurisdiction.

Strategic Positioning

- Leveraging Scotland’s research intensity, moderate cost base and cloud-native capability to position as an export platform for high-value AI and digital services.
- Strengthening global presence through **coordinated** participation in major international technology conferences.

6.4.4 Threats

The sector faces regulatory, geopolitical and structural risks that may erode competitiveness.

Brexit-Related Divergence

- Continued regulatory divergence from the EU increases compliance burden for firms exporting to the single market. Economic and trade data does not show foregone trade due to byzantine barriers that smaller firms simply cannot navigate.
- Dual trademark registration and regulatory duplication increase cost and complexity.
- Uncertainty regarding research collaboration and regulatory alignment has dampened innovation momentum, especially from European investors and funders.

Data Localisation and Digital Protectionism

- Data localisation requirements in markets such as India impose additional compliance costs, require local data residency and increase operational complexity.
- Environmental implications of in market hosting in carbon intensive jurisdictions may undermine sustainability credentials.

Source Code and IP Risks

- Requirements in certain jurisdictions to disclose source code or register algorithms create intellectual property risks.
- Insufficient protection in trade agreement deters market entry.
- Risk of proprietary technologies being exposed to foreign competitors.

Opaque Regulatory Environments

- Non transparent standards approval processes and inconsistent enforcement in some markets create operational uncertainty.
- Barriers such as local language filings, notarisation requirements and platform-specific compliance obligations increase cost and delay.

Global Competition for Data Infrastructure

- Other jurisdictions with lower energy costs and more supportive infrastructure policies may attract export-oriented firms away from Scotland.

- Reshoring pressures and digital sovereignty trends may reduce openness to cross-border service provision.

6.5 Roundtable Feedback and Policy Considerations

6.5.1 Trade Policy: Reserved to the UK Government, with a Scottish Government Advocacy Role

The Scottish Government should work closely with the Department for Business and Trade to ensure that digital trade priorities reflect the needs of Scotland-based firms.

- Advocate for strong digital trade provisions in future trade agreements that safeguard free cross-border data flows. Agreements should seek to limit or remove data-localisation requirements and resist provisions requiring disclosure of source code or proprietary algorithms as a condition of market access.
- As part of the 2026 review of the UK–EU Trade and Cooperation Agreement, encourage the UK Government to stabilise and future-proof data flows between the UK and EU, maintaining legal certainty for firms operating across both markets. More specifically, while the TCA commits both sides to allow data flows in principle, it does not grant full free data movement on its own. The EU adequacy decision for UK includes a sunset clause and hence goes through a constant cycle of review and re-adoption which does raise the risk of policy risk every few years leading to uncertainty itself being a barrier.

6.5.2 Trade Support and Market Enablement: Actions for the Scottish Government, in Partnership with DBT

Export growth in digital services depends on reducing practical regulatory friction and strengthening commercial follow-through.

- Provide bespoke market-entry guidance for jurisdictions where regulatory frameworks are opaque or discriminatory toward foreign service providers, with an initial focus on India and South Korea. Advice should cover operational risks, compliance strategies and mitigation options.
- Support firms and research institutions in leveraging the UK's reassociation with Horizon Europe, including practical guidance on accessing EU research funding and forming cross-border consortia.
- Work with the Department for Business and Trade to streamline and consolidate trade support materials, reducing duplication and ensuring a coherent offer to Scottish firms.
- Design SME-focused trade missions with at least six months' preparation time, upfront grants to support participation and structured post-mission follow-up programmes to convert buyer engagement into contracts.

- Strengthen on-the-ground expertise in priority markets through locally engaged staff and systematic use of the GlobalScot network to provide intelligence and commercial connections.
- Increase Scotland's presence at major international technology conferences and trade shows, supporting greater participation by Scottish firms in global showcase events.

Domestic Competitiveness and Procurement

- Reform public procurement practices to enable Scottish digital and technology providers to access public sector contracts more easily. Creating stronger domestic reference customers will support firms to scale from Scotland and enhance their credibility in international markets.



Energy Related Services

7.1 Sectoral Composition

- Gross Value Added (GVA) 2022: £4.8bn which constitutes 2.9% of the Scottish Economy. By Comparison, the UK ERS Sector was worth £26.0bn in 2022, which is 1.1% of the UK economy.
- Employment 2024: 60,000 workers which is 2.2% of Scotland's workforce. In 2022, employment was 67,000 workers which implies a productivity of £72,294.83 per worker in 2022.
- International Trade (Destination outside the UK) 2022: £2.8bn representing 58.5% Energy Services total Gross Value Added in Scotland.
- Domestic Trade (Destination in Rest of the UK) 2022: £4.1bn representing 84.6% Energy Services total Gross Value Added in Scotland.
- Total Exports (Destination not in Scotland) 2022: £6.9bn representing 143.4% Energy Services total Gross Value Added in Scotland.

Source: Scottish National Accounts, UK National Accounts, BRES

Energy-related services encompass firms across oil and gas, renewables, and engineering-led supply chains. For data analysis, this includes businesses under SIC 71 (Architecture & Engineering). Although this approach is not ideal, it is a necessary consequence of the SIC system's rigidity. In practice, engineering firms in Scotland are heavily oriented toward servicing the energy sector, meaning SIC 71 provides a proxy for companies most likely to be supplying energy-related services.

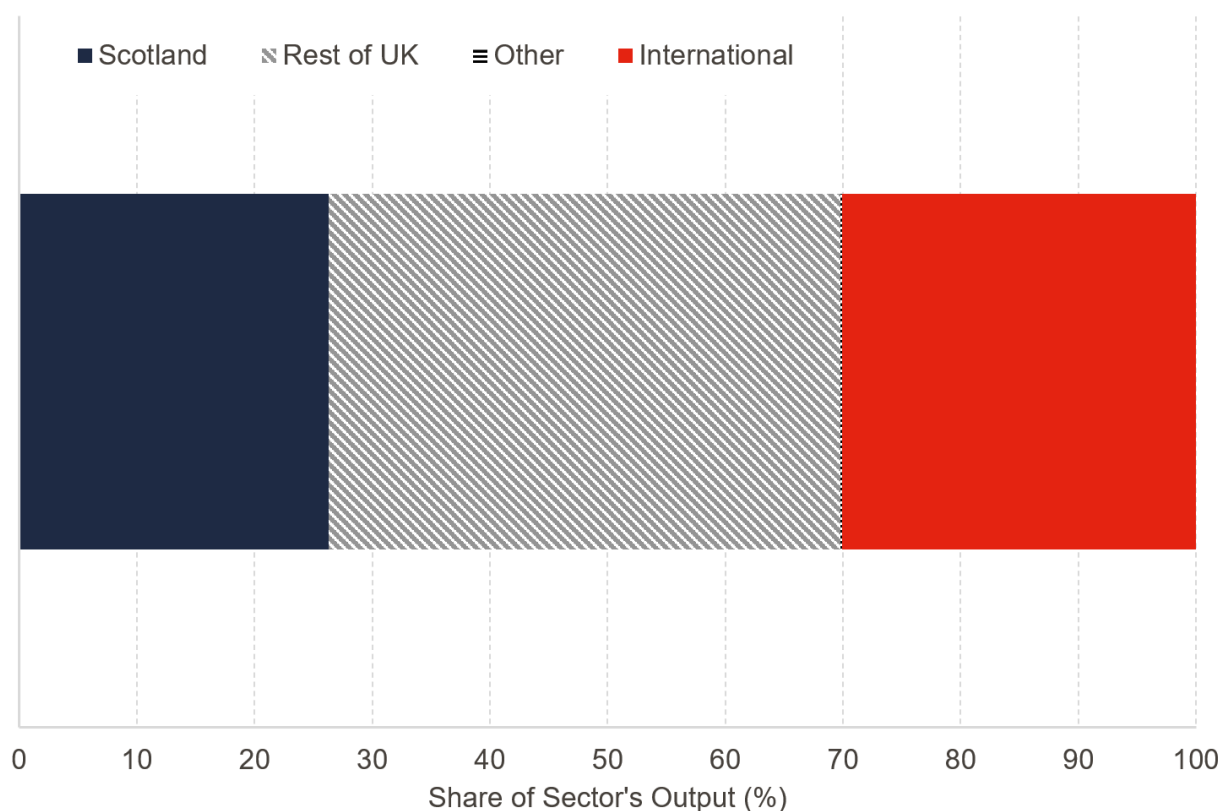
The classification of the UK Continental Shelf as "offshore" also affects the data. Economic statistics for some parts of this sector are reported as greater than the value of the sector's GVA, due to a substantial share of activity being generated within the offshore component of the Scottish economy.

The composition of the ERS sector in Scotland, compared to its UK counterpart can be difficult to understand. The sector is proportionally larger in Scotland than in the UK, contributing 2.9% and

1.1% to each economy, re-spectively. This is unsurprising given the prevalence of North Sea Oil based in Scotland.

58.5% of the sector's GVA is exported internationally, with this equating to approximately a third of sector's output.

Chart 7.1: Energy Related Services Export Destinations, 2022



Source: Scottish National Accounts

Growth in the value of ERS exports has typically outpaced growth in the value of the sector overall, averaging 6.9% annual growth to the sector's 2.1% pre-pandemic.

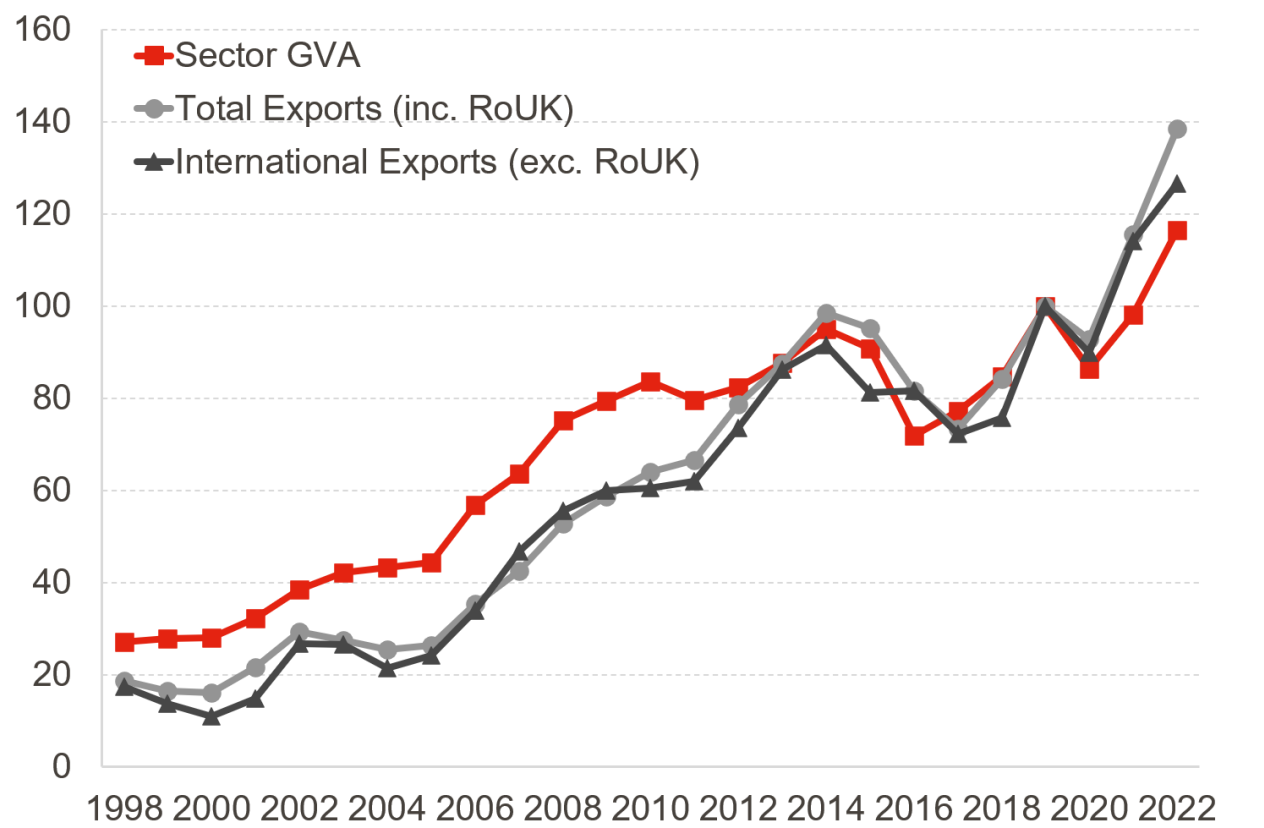
Exports to the Rest of the UK grew at an average annual rate of 6.2%. Although this is similar to the international sector, it does not speak to the distinction of the Scottish sector from the wider UK sector, as much of this growth will be linked to activities on the Continental Shelf.

The impact of the 2014 oil crisis on the sector and export values is apparent. During the pandemic the value of the sector and exports declined, recovering in 2021 and far surpassing their 2019 levels by 2022.

We know high value energy services don't show up cleanly in trade statistics as these services are often provided through overseas commercial presence or as part of integrated infrastructure projects rather than as standalone cross-border transactions. As a result, their value may be captured in the host country, embedded within goods trade, or recorded through investment and

income flows rather than services exports. In the absence of clean data⁵⁰, we produce a conceptual framework of what “energy related services” look like, with the caveat that some of these services may also be counted in other sectors, such as finance and insurance.

Chart 7.2: Comparative Growth of Sector and Export Value, 1998 - 2022 (GVA Index 2019 = 100)



Source: Scottish National Accounts

⁵⁰ For example, OECD Trade in Value Added (Tiva) report in 2023 reports that approximately 40% of Norway’s “mining and quarrying” exports are service value added (engineering, finance, trade etc.). In general, a higher services value add share implies more of the export value comes from knowledge intensive activities and the country is capturing a greater proportion of the value chain.

Chart 7.2 shows the sector, and its exports, have rebounded from the pandemic – surpassing 2019 levels in 2022. Unfortunately, official statistics lag reality and are currently only available up to 2022. This research, and roundtable discussion, aims to bridge this gap in data by providing insight into post-pandemic dynamics.

The energy services sector is export intensive, with exports to international markets composing 58.3% of the sector’s GVA.

It’s important to note total exports (including “exports” from Scotland to the Rest of the UK) can be misleading. It’s not uncommon for export intensive sectors to include a large volume of intermediate inputs, which don’t count toward the sector’s GVA. Technically, Scotland “exports” a large volume of intermediates to the Continental Shelf – i.e., the Rest of the UK – where North Sea Oil operations are based. These offshore activities inflate total exports to be more valuable than the sector itself.

When focussing solely on international exports, it’s clear energy-related services are genuinely export-intensive, with much of their activity shaped by global markets.

Table 7.1: Mapping of Service Categories to Energy Exports

Service Category	How It Links to Energy Exports
Engineering & Technical Consultancy	FEED studies, design, and project management for offshore wind, hydrogen, and oil & gas projects
Offshore Support & Subsea Services	Installation, inspection, subsea design, and maintenance for offshore fields and export cables
Operations, Maintenance & Decommissioning	Export of O&M expertise for offshore platforms, wind turbines, and grid infrastructure
Environmental, Geotechnical & Survey Services	Environmental impact assessment, seabed mapping, and safety certification
Energy Systems, Digital & Software Services	Smart grid, SCADA, AI-based asset management, and data analytics for energy systems
Financial, Legal & Professional Services	Legal structuring, insurance, and project finance for overseas energy developments
Construction & Installation Abroad	EPC services for transmission, ports, and offshore infrastructure
Education, Training & Workforce Development	Export of skills, training, and certification for energy workforce
Research, Testing & Certification	R&D, testing, and certification for turbines, materials, and energy systems
Policy, Consulting & Cluster Development	Advisory on net-zero transition, cluster strategies, and energy policy

7.2 Current and future global regulatory and non-tariff issues in the Energy Sector (oil and gas, renewables, and engineering-led supply chains)

7.2.1 Global regulatory and non-tariff landscape

The energy sector now operates in a world of tightening climate policy, intensifying geopolitics, and increasingly fragmented trade rules. Regulatory barriers are growing more complex across oil and gas, renewables, and engineering-led services, while non-tariff measures – from local content quotas to technical standards – shape who can participate and at what cost.

Four types of non-tariff measures shaping all subsectors are identified from the papers and articles produced by the international organisations, research institutes and academia.⁵¹

The **first type** is local content/quota regimes that mandate domestic sourcing⁵² for equipment, services, and labour. This type increases project cost and complexity; encourages JV structures and local manufacturing.

The **second type** is technical barriers to trade (TBT) such as market-specific standards, certification, and conformity assessment. Product redesigns and duplicated testing increase costs and especially disadvantages SMEs.

The **third type** is sustainability and disclosure rules including mandatory climate risk, taxonomy alignment, and supply-chain due diligence (human rights, biodiversity). These result in higher reporting costs and legal exposure; necessary for access to green finance.

The **fourth category** is customs, licensing, and state aid controls including export/import licenses, industrial subsidies oversight, and preference schemes. These create variable access and timing and competitive asymmetries across jurisdictions.

By 2030, the global energy sector will be defined by a dual trajectory of tightening compliance and selective streamlining. Environmental regulation is set to become more stringent, with methane abatement obligations, lifecycle emissions accounting, and biodiversity safeguards becoming standard practice, raising costs but also driving innovation in monitoring and verification. At the same time, industrial policy is expected to intensify, with governments expanding local content rules, export controls, and subsidy competition to secure supply chains, leading to greater fragmentation and reshoring of production.

Yet, alongside these pressures, some jurisdictions are moving to accelerate permitting and grid modernization through one-stop shops and statutory time limits, creating competitive advantages for faster deployment of renewables. Standards and disclosure frameworks will partly converge—particularly around safety, cybersecurity, and climate finance—while bifurcation persists in strategic technologies, forcing firms to design for multi-standard markets. Overall, the energy economy will be more regulated, localized,

⁵¹ UNEP Copenhagen Climate Centre: [ESC Network | Regulatory Barriers for Energy](#); UNCTAD | [Trade in renewable energy](#); OECD | [Oil and Gas Industry in Net Zero](#); Oxford Academic | [Offshore Oil and Gas infrastructure](#); World Bank | [Regulatory Indicators for Sustainable Energy](#); World Bank | [Enabling FDI](#); TESS | [Trade Barriers and Clean Energy Deployment](#); WEF | [global energy transition challenges](#) and Energy Transition Commission | [Securing clean energy technology](#)

⁵² In our energy roundtables, firms reported setting up local offices in other countries such as Norway and Canada due to national, sub-national regulations.

and disclosure-driven, with success hinging on the ability to comply quickly, diversify supply chains, and secure critical inputs.⁵³

7.2.2 Subsector mapping

Regulatory barriers (licensing, IP enforcement, fragmented governance, localization rules) and non-tariff barriers (trade costs, standards, bureaucracy, supply chain bottlenecks) are consistently identified as the main obstacles to scaling oil & gas transitions, renewable deployment, and engineering-led supply chains.

Oil and gas sector: The oil and gas sector is entering a period of stricter environmental regulation combined with growing geopolitical fragmentation. Governments are tightening methane measurement and abatement rules, expanding disclosure requirements across Scope 1, 2, and 3 emissions, and imposing more rigorous permitting and decommissioning obligations, all of which raise compliance costs and demand advanced monitoring technologies. At the same time, sanctions, export controls, and foreign investment screening are reshaping global trade flows, while local content and procurement rules are increasingly used to protect domestic industries. These overlapping pressures mean that operators face higher capital intensity, longer project timelines, and reduced access to international technology and finance, with smaller⁵⁴ firms particularly disadvantaged. The result is a sector where regulatory compliance and geopolitical risk management are now as central to competitiveness as production efficiency.⁵⁵

Renewables: The renewable energy sector is expanding rapidly but continues to face significant barriers that slow deployment. Lengthy and complex permitting processes, often involving land-use, biodiversity, and community consultations, create bottlenecks that delay projects, particularly in wind and solar. Grid interconnection challenges add further uncertainty, with long queues, evolving grid codes, and curtailment risks increasing financing costs and discouraging investment. At the same time, diverging technical standards and certification requirements for equipment such as turbines, batteries, and inverters act as non-tariff barriers, forcing companies to redesign products for different markets. Industrial policy competition is also intensifying, with governments introducing subsidies, tax credits, and local content rules while deploying trade measures such as anti-dumping actions and carbon border adjustments.

⁵³ See for example, OECD The Oil and Gas Industry in Net Zero Transitions (2023); World Bank – RISE: Regulatory Indicators for Sustainable Energy; and IEA Energy Technology Perspectives 2023; and OECD/CEER Reducing Regulatory Barriers to the Renewable Energy Transition.

⁵⁴ This theme of exodus of smaller firms away from UK/Scotland was echoed in our energy roundtable discussion by market participants.

⁵⁵ [OECD | Oil and Gas in Net Zero](#); and Herrera Anchustegui, I. and Tsherning, R. (2024). Offshore oil and gas infrastructure electrification and offshore wind: a legal exploration, *The Journal of World Energy Law & Business*, Volume 17, Issue 1, February 2024, Pages 35–53, [Oxford Academic | Offshore oil and gas infrastructure](#)

Together, these dynamics mean that while renewables are central to the energy transition, their growth trajectory is shaped as much by regulatory and non-tariff barriers⁵⁶ as by technological innovation.⁵⁷

Engineering-led supply chains and services: Engineering-led supply chains and services are increasingly constrained by regulatory and non-tariff barriers that affect standards, data management, and workforce mobility. Professional services often face limited mutual recognition of engineering credentials, requiring project-specific licensing and compliance with stringent health, safety, and quality assurance rules, which raise transaction costs and delay project delivery. Procurement systems add further complexity, with extensive vendor prequalification, ESG due diligence, and anti-corruption requirements that disproportionately burden smaller firms. At the same time, data localization laws, industrial cybersecurity standards, and export controls on advanced engineering tools restrict the use of cloud-based collaboration and remote operations, while conformity assessments and product testing requirements slow the movement of equipment across borders. Together, these constraints create a landscape where engineering services must invest heavily in compliance infrastructure and local partnerships to remain competitive in global energy supply chains.⁵⁸

7.3 Energy Services Sector Roundtable Summary

This roundtable convened senior leaders from firms across the energy and engineering sector, including major consultancies, offshore developers, specialist contractors, logistical services, as well as leading membership organisations. Scotland's energy and engineering services firms report strong, exportable capabilities built on decades of expertise from North Sea operations, with recognised centres of excellence routinely supporting projects overseas. Participants described a growing international footprint, but face increasing headwinds including regulatory checks, duplicated conformity processes, uneven recognition of professional qualifications and restrictions on short-term mobility for engineers. These issues add cost, slow delivery and, in some cases, push work to EU-based subsidiaries. Market entry in many jurisdictions now requires a local presence (such as through a subsidiary, joint venture or acquisition) because procurement rules favouring local content. While effective, this can dilute value captured in Scotland without complementary policy and support.

⁵⁶ For example, offshore energy projects in Nova Scotia typically require firms to demonstrate domestic presence, local staffing, and engagement with local supply chains. While overseas firms are not formally excluded, these requirements raise fixed costs and shift activity toward local establishment.

⁵⁷ [World Bank | Enabling FDI](#); [World Bank | Regulatory Indicators for Sustainable Energy](#); [UNCTAD | Trade in renewable energy](#); and [ESC Network | Regulatory Barriers for Energy](#).

⁵⁸ [WEF | Barrier to energy sector growth](#); [ETC - Better, Faster, Cleaner: Securing clean energy supply chains](#); [UK renewables deployment supply chain readiness study | Baringa](#); and [AFF | Tariffs, Trade, and Transition](#)

Domestic factors, including taxation, regulation and skills shortages, which limit the ability of the sector to access international opportunities were a consistent theme. Participants agreed that, while exporting is a sensible avenue for firms to explore, a bigger problem has been an “exodus” of talent and capability moving overseas. Companies are offshoring routine tasks to lower-cost locations, which may be commercially sensible in the short term but risks weakening the pipeline of future senior specialists unless higher-value design, controls and project management roles are anchored in Scotland and supported by education and training.

Finally, exporters described the support landscape as fragmented and asked for a simpler, sector-literate “single front door”, more in-market specialists and a reliable domestic project pipeline to train and retain teams between international contracts.

7.4 SWOT analysis: Energy Related Services

7.4.1 Strengths

Mature Capability Base

- Extensive expertise across offshore engineering, advisory and project management services. Long track record that is respected in international markets.
- Deep experience gained in the complex and high-risk environment of the North Sea, creating globally transferable technical competence.
- Ability to mobilise multinational and multidisciplinary teams for complex international assignments.

International Reputation and Market Reach

- Established reputation in key export markets including Norway, the United States, West Africa, Malaysia and the Gulf.
- Longstanding international relationships and repeat client networks.
- Strong credibility in high integrity, safety critical and technically challenging environments.

Knowledge and Institutional Ecosystem

- Close links between industry and universities reinforce innovation, training and problem-solving capacity.
- Concentration of specialist skills in engineering, project delivery and regulatory compliance.

7.4.2 Weaknesses

Participants identified structural and policy-related constraints affecting competitiveness and anchoring.

Post-Brexit Frictions

- Increased administrative burden and reputational challenges in servicing EU markets.
- Shift of some activity to EU based subsidiaries, particularly in the Netherlands, to maintain ease of access.
- Perception risk limiting contract opportunities despite formal market access remaining open.

Skills Pipeline Pressures

- Skills gaps across multiple levels, combined with a growing tendency to offshore routine work. Services work is highly mobile.
- Reduced domestic training ground as North Sea oil and gas activity contracts.
- Risk of weakening the long term specialist talent pipeline if higher value functions are not retained domestically.

Fragmented Trade Support

- Perceived inconsistency and limited sector specific knowledge within trade support agencies.
- Short tenure of agency staff limiting relationship depth with industry.
- Difficulty measuring embedded services value within multinational or goods led contracts, complicating targeted support.

7.4.3 Opportunities

Cross System Energy Integration

- Overlaps between oil and gas, offshore wind (fixed and floating), hydrogen and CCUS create transferable demand for engineering and project services.
- Supply chain firms can pivot across energy technologies with appropriate support on standards, accreditation and market access.

Cluster Repurposing and Innovation

- Regional clusters such as the Project Acorn CCUS cluster and initiatives around Grangemouth provide assets and skills that can be redeployed in the energy transition.
- Strong record in innovation offers scope to capture value in emerging low-carbon systems.

International Collaboration Models

- Firms are leveraging centres of excellence and upskilling Scottish based teams for growth markets such as West Africa and Malaysia.
- Potential to anchor higher value functions domestically while servicing global demand.

Standards and Accreditation Enablement

- With coordinated support on conformity assessment and professional recognition, Scottish expertise could convert more effectively into sustained export revenues.

7.4.4 Threats

Domestic Policy and Investment Climate

- Perceived unfavourable taxation and licensing regime affecting oil and gas investment.
- Global renewables headwinds combined with domestic policy uncertainty creating an “un-investable” perception of the North Sea.
- Risk of firm relocation overseas, resulting in permanent erosion of skills and capability.

Loss of Domestic Anchor

- Export capacity depends on a reliable stream of domestic work to justify remaining in Scotland.
- Scotland is not a low-cost base. Without domestic demand, firms may relocate to more competitive jurisdictions.
- Weak domestic manufacturing base compared to peers such as Norway and Denmark limits engineering ecosystem resilience.

Policy Misalignment

- Divergence between UK and Scottish policy positions on energy creates uncertainty.
- UK policy restricting overseas support for fossil fuel related activities may disadvantage firms whose expertise spans both legacy and renewable systems.

Local Content and Market Access Pressures

- Increasing prevalence of local content requirements abroad incentivises overseas relocation or establishment of subsidiaries.
- Risk of long-term capability leakage if high-value activity shifts permanently.

Non-Tariff Barriers

- Duplicated testing and certification across jurisdictions increase costs and delay project delivery.
- Uneven recognition of professional qualifications complicates staff deployment.

- Mobility restrictions for short-term travel reduce responsiveness and competitiveness.
- Firms incur additional overhead through pre-positioning equipment and establishing local entities to manage compliance.

7.5 Roundtable Feedback and Policy Considerations

7.5.1 Reserved to the UK Government, with a Scottish Government Advocacy Role

- Pursue mutual recognition agreements globally that remove duplicated testing and certification requirements for equipment and services used in offshore wind, hydrogen and CCUS projects. Reducing regulatory duplication would lower costs and accelerate project delivery in international markets.
- Introduce more flexible short-stay business mobility arrangements globally and ensure recognition of relevant engineering and technical qualifications. Short notice deployment of project teams for installation, commissioning, operations and maintenance is critical to securing overseas contracts.
- Improve the timeliness and granularity of services export statistics to better reflect embedded Scottish value in multinational energy projects. More accurate data would support targeted policy design and strengthen the evidence base for sector-specific support.
- Ensure that domestic regulatory, fiscal and taxation regimes are internationally competitive and supportive of export growth, attracting inward investment while protecting domestic supply chains and employment.

7.5.2 Trade Support and Market Enablement : Actions for the Scottish Government and Scottish Enterprise , in Partnership with UK Bodies

- Establish a clear “single front door” for trade support by rationalising Scottish Enterprise and partner offers into a coherent pathway with named account leads, sector-specialist advice and escalation routes for live market access barriers.
- Expand in market expertise and buyer access in priority geographies for offshore engineering and energy services. Support should include curated buyer introductions, forward looking procurement calendars and structured delegation programmes aligned to project pipelines.
- Provide specialist support on standards and accreditation by working with the UK Accreditation Service and industry bodies to map priority international standards, fast track conformity assessment routes and systematically capture firm-level barriers to inform ongoing mutual recognition negotiations.

- Support firms navigating localisation requirements by offering advisory services on joint ventures, acquisitions and local entity establishment where local content rules make domestic presence the most viable route to market. This is especially important for emerging and upcoming markets.
- Present a clear and unified cross government position on trade support for firms with legacy oil and gas activities alongside expanding renewable portfolios. As the energy system transitions, exporters operating across both legacy and low-carbon markets should receive consistent support for international engagement, including participation in trade missions and sector roadshows.

7.6 Case study: Offshore energy engineering services

A Scottish offshore energy engineering consultancy exports specialist services to international offshore wind and subsea projects, including front-end engineering design, subsea and cable-route analysis, installation methodology, and ongoing asset integrity support. The firm does not manufacture or supply equipment; its exports consist entirely of engineering expertise, modelling, and project support delivered digitally from Scotland and, where necessary, through short periods of on-site engagement. While demand for this expertise remains strong, the firm faces a range of non-tariff barriers that affect its ability to deliver services efficiently and at scale. In several markets, engineering documentation associated with offshore developments must be validated or signed by locally licensed professionals, with UK chartered status not accepted on a stand-alone basis. In practice, this requires Scottish engineers to route work through local partners, increasing costs and introducing duplication despite the underlying technical work being undertaken in Scotland. Project delivery also depends on short-term mobility of engineers for offshore surveys, installation readiness reviews, and discussions with clients and regulators. Immigration frameworks often struggle to accommodate this pattern of work, with business-visitor provisions narrowly defined and offshore site presence sometimes treated as local employment, leading to delays and uncertainty around compliance. Although the services themselves can be delivered remotely, developers and regulators frequently expect a visible local footprint as part of project governance and compliance, creating pressure to establish in-country entities or joint ventures even where no formal requirement exists. The increasing reliance on digital tools and data adds a further layer of complexity: restrictions on cross-border transfer of seabed, geotechnical, and asset data, alongside requirements to use locally approved IT systems, raise costs and reduce the efficiency of cross-border collaboration. Finally, procurement practices in public or quasi-public offshore projects often favour bundled delivery models and local presence, with qualification criteria and evaluation frameworks that disadvantage stand-alone engineering consultancies. Individually, none of these constraints is prohibitive, but together they shape how, and through whom, Scottish offshore engineering services reach international markets, limiting direct exports and reducing the visibility of services trade in a sector where Scotland has clear and established strengths.

Conclusion and Cross-Sector Policy Implications

8.1 Conclusion

Our analysis reinforces that Scotland's services-export challenge is no longer of capability or demand, but primarily of market access, regulatory frictions, and institutional alignment.

Across professional and business services, life sciences, technology, creative industries and energy-related services, firms consistently report that post EU exit trade barriers are not episodic or transitional but structural, cumulative, and firm-specific. These barriers manifest less through headline tariffs and more through recognition regimes, mobility constraints, data governance, procurement eligibility, and duplicated compliance costs. For many Scottish firms, particularly SMEs and scale-ups, the issue is not the absence of overseas opportunity but the rising fixed cost of converting opportunity into revenue or making the difficult decision to leave Scotland to conduct economic activity.

Also, current statistical frameworks has the potential of overstating Scotland's international services competitiveness by conflating domestic UK trade with true export capacity. While intra-UK services flows are economically meaningful and helpful to determine the level of sectoral integration, they do not substitute for international market access when firms face actual constraints in the EU, North America, or fast-growing third markets that came up in our roundtable meetings. As a result, headline services export performance can appear resilient even as firm-level international engagement becomes narrower, more concentrated, and more risk-averse.

The evidence suggests that left unaddressed, these frictions will bias Scotland's services economy towards domestically anchored, lower growth activity, undermining ambitions around productivity, export diversification, and the scaling of high value services. The policy response therefore needs to combine the right level of resource allocation towards export promotion as well as reducing the effective cost of exporting services. A focus on former without the latter will fail to capture the true potential of Scottish service sectors.

Export promotion is equivalent to building more on ramps to a motorway, while services trade barriers determine whether the motorway itself is congested, fragmented, or intermittently closed. Adding on ramps without fixing the road simply increases frustration and wasted effort. Growth comes from capacity and flow as well as access point

8.2 Policy Recommendations

First, Scottish trade policy should place regulatory access and recognition at the centre of services strategy. This includes systematically identifying priority professions, subsectors and service activities where mutual recognition, equivalence, or regulatory

cooperation would deliver the highest marginal gains for Scottish firms. Rather than broad-based agreements, the evidence points to the value of narrow, sector specific accords that reduce duplicative licensing, auditing, or professional accreditation requirements.

From our roundtable discussions, it became clear that regulatory access and recognition cannot happen without engagement from regulatory bodies. To that extent, both Scottish as well as UK Government should seek to empower the regulatory bodies in the nations as bilateral and multilateral convergence and cooperation agreements can only take place by support of the actual “on the ground” regulatory body. While governments across the world control trade policy, it is the regulators that control market access in services.

It’s also important for regulatory bodies in Scotland, and UK to develop relationships with counterparts in growth markets proactively. This should be seen akin to physical infrastructure. Government trade policy, by its design, tends to be reactive and seeks to address trade barriers after they appear. However, many growth markets mentioned at the roundtables are just getting started in their economic journey which provides a window of opportunity where UK based regulatory and industry bodies can develop meaningful⁵⁹ relationships with their counterparts to ensure that trade barriers don’t appear at the first place.

Second, professional mobility constraints require targeted mitigation. Short term business mobility rules, visa thresholds, and occupational eligibility lists increasingly shape whether services exports are commercially possible. Scotland should intensify efforts to influence UK level mobility negotiations while simultaneously developing practical firm level support, such as shared compliance services, advisory hubs, and pooled legal resources that lower the cost of navigating fragmented regimes. Our evidence also suggests that firms don’t have same understanding of mobility requirements, activity that can or cannot be conducted and hence natural risk aversion which prevents service activity from taking place, or extra incurring of compliance costs when none were theoretically required.

Third, the focus of trade support should be reoriented from promotion to problem solving. Firms consistently report that market intelligence and trade missions while useful need to go hand in hand with assistance with regulatory interpretation, data localisation rules, procurement eligibility, and contract enforceability. This argues for deeper integration between trade teams, regulators, and sector bodies, with a focus on resolving concrete barriers faced by exporting firms rather than a singular focus on increasing the volume of promotional activity. Evidence from our roundtables again shows that there is a need for “all hands on the deck” approach – including Scottish Enterprise as well as UK Export Finance as expanding footprint overseas is ultimately a financial decision that is fraught with risks during best of times.

⁵⁹ This can also take place through time limited pilot projects to conduct ex post evaluation.

Fourth, Scotland's services trade evidence base needs refinement. Distinguishing clearly between domestic UK services flows and international exports is essential for policy credibility and prioritisation. Developing supplementary indicators that track firm level international exposure, regulatory costs, and market entry success rates would provide a more accurate picture of Scotland's external competitiveness and help target interventions where they are most effective.

Finally, services trade policy should be more explicitly linked to Scotland's wider economic objectives. Net-zero ambitions, life sciences scale up, and digital transformation including adoption of artificial intelligence all depend on the ability of Scottish firms to export complex services alongside goods and intellectual property. Addressing services trade barriers is therefore not a peripheral trade issue, but a core condition for delivering productivity growth, inward investment leverage, and long-term economic resilience. The roundtables were clear that immigration policy, electricity prices, success of manufacturing are not separate elements and are all needed to flourish for a flourishing services sector. While these elements go beyond traditional trade policy, they are a necessary condition for a services sector to truly flourish and remain resilient through economic cycles.

To conclude, Scotland's services sector remains internationally capable but increasingly constrained. A shift from generic export encouragement to targeted barrier reduction, regulatory engagement, and evidence led prioritisation will be critical if services are to play the role envisaged in Scotland's future growth and trade strategy.



© Crown copyright 2026



Copyright images © FAIR Ltd

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at **www.gov.scot**

Any enquiries regarding this publication should be sent to us at

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-80775-341-2 (web only)

Published by The Scottish Government, July 2026

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1761426 (07/26)

W W W . g o v . s c o t