
Contents

	Page
<i>Summary of Results</i>	2
<i>Introduction/Background</i>	3
<i>Definitions</i>	4
<i>Methodology</i>	5
1. Scotland's Global Connections	6-20
1.1 <i>The Pattern of Scotland's Overseas Economic Relationships</i>	9-10
- <i>UK/Scottish-Owned Companies</i>	11-12
- <i>Overseas-Owned Companies</i>	13
1.2 <i>The Strength of Global Connections</i>	13
- <i>Export patterns</i>	14-15
1.3 <i>Value of Global Trade to the Scottish Economy</i>	16
1.4 <i>Value of Scottish Companies of Global Connections Beyond Direct Exporting</i>	17
1.5 <i>Evolving Prospects for Trading Relationships</i>	17-19
1.6 <i>Currency Patterns in Scotland's Global Trade</i>	20
2. Scotland's Export Performance	21-45
2.1 <i>Manufacturing Sector</i>	24-31
- <i>SME/Large Company Exports</i>	32-34
2.2 <i>Services Sector</i>	35-41
- <i>SME/Large Company Exports</i>	42
2.3 <i>Primary Sector</i>	43-45
3. Destination of Scotland's Export	46-58
3.1 <i>Manufacturing Sector</i>	46-52
3.2 <i>Services Sector</i>	53-56
3.3 <i>UK Export Markets</i>	57
3.4 <i>Intra UK and Export Sales</i>	58
4. Scotland's Exports by Region	59-64
4.1 <i>Manufacturing Industry Breakdown</i>	59-62
4.2 <i>Services Industry Breakdown for Glasgow and Lothian</i>	63
4.3 <i>Destination of Regional Exports</i>	64

GLOBAL CONNECTIONS SURVEY

2001/2002

Summary of Survey Results

Scotland's Global Connections

Scottish firms are primarily targeting the EU and North America when entering new markets through methods other than direct exporting. The USA represents the single most important destination, independent of the mode of entry.

Large companies are tending to extend their presence in other markets through joint ventures, subsidiaries and overseas manufacturing. SMEs prefer strategic alliances and franchising.

More than 80% of Scottish-based companies undertake R&D activities. However, UK-owned companies, led by the SME sector in particular, are much more able to engage in R&D than overseas-owned firms in Scotland, and they spend a much larger share of their costs on such activity.

Survey respondents indicate that overseas-owned companies in Scotland account for 79% of Scotland's export value.

US-owned firms have the largest overseas presence in Scotland, in numbers of companies and in terms of employment. The aggregate presence of European companies does not reach half the total level of employment of US firms.

Domestic companies source 51% of their inputs from Scotland, and 22% from outwith the UK. Overseas-owned companies in Scotland source 15% of inputs from Scotland and 54% outwith the UK.

Overall, responses indicated that 12% of total exports from Scotland were invoiced in euro. An 18% proportion of the value of Scottish exports to the EU was invoiced in euro, with 32% invoiced in sterling and 48% invoiced in US dollars. Excluding the electronics sectors, 22% of exports were invoiced in euro, with 45% to the EU invoiced in euro.

Scottish Export Performance

The value of Scotland's exports as a whole fell by 7.1% in 2001* to stand at £27.5 billion.

Manufactured exports lost 11.4% in value to stand at £17.6 billion. Scotland now takes a 10.1% share of UK manufactured exports, down from 11.7% in the preceding year.

Exports of Scottish services, however, rose by 13.1% in 2001. At a value of £3.2 billion, Scottish services exports have climbed to 4.3% of the UK total.

Exports from Scotland's primary sector fell to £6.7 billion, down by 3.2%. Primary exports, excluding oil and gas, declined by 6.2% to stand at £230.7m.

In the manufacturing sector, of the 23 SIC Divisions where export activity was measured, 8 industries recorded an increase in exports in 2001, while 15 recorded a decline. Electronics sectors together lost 15.5% in export value. The electronics share of all manufactured exports is down from 57.3% to 54.8%.

Within the services sector, high levels of growth have been reported by the oil and gas services and banking sectors.

Destination of Exports

The USA became Scotland's top export market for the first time since 1987. It was the top market for both manufactured goods and services. France and Germany took second and third places respectively.

The share of Scottish exports destined for the European Union fell from 61% to 55%. Falling exports from the electronics industry account for most of this decline.

* Please refer to the point made in paragraph 1 on page 4 on definition of timing

Introduction

This report outlines the findings of Scotland's Global Connections Survey 2001/02. The Scottish Council for Development and Industry study was commissioned by Scottish Enterprise and Highlands and Islands Enterprise. It has been undertaken jointly by the SCDI and the University of Glasgow. The report is intended to assist in the future development of plans to implement the Global Connections Strategy, which was published in 2001, and to provide appropriate benchmarks for measuring progress in the engagement of Scottish business in international markets.

Background

SCDI has been estimating the value of Scottish exports since the 1960s in its Survey of Scottish Sales and Exports. As an independent organisation, the findings of its annual research in this field have been available to Government, academia and industry to assist policy-makers in understanding long-term trends in Scotland's international trading performance. It is the only independent organisation producing such comprehensive statistics on this aspect of Scottish economic activity, encompassing all sectors of manufacturing, services and primary industries.

SCDI has collaborated in this project with the University of Glasgow, whose Department of Economics hosts a team of International Trade specialists led by Professors Anton Muscatelli and Ian Wooton.

The conclusions of this report are based on information received from the 1,707 businesses and organisations throughout Scotland which responded to the survey. In addition, sectoral information on a number of services sectors and primary industries was requested from a range of trade and professional associations. These are denoted on page 66.

The survey report takes a two-part approach. Section 1, entitled "Scotland's Global Connections", represents a collation of responses to those questions in the survey which have been asked for the first time. These encompass such issues as the forms of overseas relationships of companies operating in Scotland, both UK and overseas-owned; the financial autonomy and the research and development capability of companies based in Scotland; future prospects for trading relationships; and the currency patterns in Scotland's global trade. In this section, the conclusions are based on the specific data supplied by survey respondents to each question, as it is not possible here to draw valid wider statistics for the whole Scottish economy. The responses are, however, indicative and provide a useful first snapshot of the nature and extent of global connections.

From Section 2 onward, export performance data is weighted to account for the whole economy. Based on the corresponding data from SCDI's own surveys for previous years, it is possible here to identify longer-term trends in Scottish export performance. However, direct comparisons with official export statistics are not possible because of methodological differences described more fully later.

Definitions

Companies surveyed were asked to state the value and destination of their exports during the calendar year 2001. However, not all respondents were able to do so and a number supplied figures for exports during the financial year (2001/2002). The majority of financial years specified ended on 31st March 2002. **For this reason, although the estimates presented in this study are shown as 2001 values, direct comparisons cannot be made with other Scottish economic statistics and UK export statistics covering 2001/02 because they are in fact an amalgam of calendar year and financial year values.**

Manufacturing

The definition of manufacturing is based on the 1992 Standard Industrial Classification (SIC), as produced by National Statistics.

The whisky industry was not incorporated directly in the survey process, to avoid duplicating the research carried out by the Scotch Whisky Association (SWA). Unless otherwise stated, the data contained in this report includes the whisky industry statistics produced by the SWA.

Services

The definition of the service sector is largely based on input/output classifications. The common characteristic of companies operating within the service sector is the intangible nature of their output. In practice, the distinction between manufacturing and services companies is becoming increasingly blurred in many instances, with increasing opportunities for manufacturers to sell professional expertise or “know-how”. This would include areas such as design, build and project management activity. However, for the purposes of the survey the recording of services exports applies to those companies for which this is the principal activity.

The activity of call centres is not listed as a separate category, but is included in the appropriate client sector as call centres represent a method of service delivery, rather than a specific service sector.

Primary

The definition of the primary sector is based on the 1992 SIC Classification and the study also includes the activities of the water utilities and electricity generators. The measurement is of unprocessed products. Any subsequent processing activity is considered to render the product in question a manufactured product.

A large proportion of primary sector exports is made up of oil and gas transfers. Oil hydrocarbons from the Northern UKCS area, brought onshore and then transferred to UK and export markets from Scottish terminals, are measured. Data is compiled from the four oil terminals transferring from the Northern and Central UKCS, which had their initial landfall in Scotland. The four terminals are Sullom Voe in Shetland and Hound Point in the Forth Estuary operated by BP, and Nigg in Ross-shire and Flotta in Orkney, both operated by Talisman Energy. Gas hydrocarbons from the Northern UKCS area, brought onshore in Scotland and then transferred via the gas grid infrastructure to export markets are also measured separately. The overseas data is based on transfers from Scotland’s gas interconnector to Ireland from Moffat and an associated offtake to Northern Ireland.

Global Connections

In the questionnaire companies were asked if they had any overseas relationships. They were given a number of options to choose from and the following definitions were given for clarification:

- | | | |
|------------------------------|---|--|
| <i>Joint Venture</i> | = | formal, legally contracted and jointly owned venture |
| <i>Strategic Alliance</i> | = | less formal relationship, aiming to expand business through mutual strengths and expertise; may include joint marketing of products/services |
| <i>Representative Office</i> | = | may be sales/marketing office or location for providing a full range of services. |

Methodology

Manufacturing

All manufacturing companies in Scotland registered as exporters in the SCDI's "Scottish Production Industries Register" (SPIR) were asked to complete a questionnaire about their exports. In addition, several hundred companies known to SCDI, but whose status as exporters was not clear, were also contacted. A number of the Local Enterprise Companies (LECs) and Export Partnerships (EPs) sponsoring the regional surveys also assisted by providing lists of companies in their particular areas. Using the employment information contained in SPIR and in the responses, and from a telephone survey on the exporting status of non-respondents, it was possible to estimate the overall employment in all exporting companies in Scotland. This was done industry by industry (at 2-digit SIC Division level) and separately for large companies and SMEs.

The employment figures of respondents which were active exporters were then used to derive the survey coverage rates. These were in turn used to gross up the export values declared by respondents to estimate exports for all exporters in Scotland. The grossing-up procedure was carried out at 2-digit SIC Division level, separately for large companies and SMEs. The separate estimates were then added together to provide the figures shown in Table 18 on page 26 of this report.

Services

In the case of the service sector, figures are grossed up based on Scottish input-output estimates of exports, and year-on-year growth rates are applied. In addition, the data is supplemented by additional information from professional bodies.

Primary

The primary sector remains distinct from the other sectors surveyed, in that it is a combination of direct survey and desk research. In some sub-sectors it brings together source data and evidence from various organisations including government departments, agencies and trade organisations whilst in others the data is the result of direct survey work.

1. Scotland's Global Connections

This survey of Scotland's Global Connections seeks to explore the current position of Scottish business in its global connectedness, and the impact of global trading relationships on the Scottish economy.

Some Context

The end of the Second World War was a turning point for the international economy. In an attempt to foster peace through mutual economic interdependence, global institutions were established to encourage the growth of trading relations between countries. Central to this was the General Agreement on Tariffs and Trade which later evolved into the World Trade Organisation (WTO). This agency has had remarkable success in brokering international agreements to liberalise domestic markets and open them up to imports. Average tariffs amongst industrial countries (that account for the majority of world trade) have fallen from around 40% at the end of the war to less than 5% today.

As barriers to trade have been lowered over the past half century, the volume of world trade has risen at a rate exceeding the rate of growth of world income.¹ This means that traded goods have taken up an ever increasing share of both a nation's production and its consumption. The effects of multilateral trade liberalisation under the auspices of the WTO are reinforced for Scotland and the UK by its membership of the EU. As part of this latter organisation, Scotland enjoys free trade with a very substantial proportion of continental Europe. Efforts continue within the European Commission to dismantle barriers between national markets in order to establish a single European market for goods and services.

It has long been recognised that such developments can bring about substantial changes to a nation's production structure, reflecting international differences in costs of production. Confronted by an increasingly competitive international trading environment, Scottish firms have had to adapt to become more efficient, specialising in the industries in which they have a comparative advantage and relying upon imports for other goods.

Comparative advantage is not a static concept and the continuing evolution of the global economy has brought about further developments of the structure of production and trade. In particular, and partly as a result of the liberalisation of international trade, there has been a dramatic increase in the levels of foreign direct investment (FDI). This FDI can arise for several reasons and take the form of new, greenfield investment or be the result of mergers and acquisitions (M&A) activity. While it is not a recent phenomenon (Scotland being host to US FDI in the late 19th century with Singer Sewing Machine Company's factory in Clydebank), the growth of FDI in recent decades is without parallel, outstripping the rate of growth of international trade.² The surge in FDI growth, accelerated rapidly in 1999 and 2000, but seems to have been dramatically halted in 2001, with total inflows to the OECD countries falling from \$1270 billion in 2000 to a mere \$566 billion in 2001. This is the lowest level seen since 1998³.

¹ Between 1985 and 1997, global nominal GDP grew at an annual rate of 7.2% while nominal imports grew at a rate of 9.2%.

² Between 1985 and 1997, worldwide nominal inflows of FDI grew at 17.6%.

³ These data are reported in OECD (2002). Please note that 2001 data are estimated.

1. Scotland's Global Connections

The decline in FDI may be attributed to a variety of factors. One important factor has been the decline in M&A activity following the end of the stock market boom which arguably involved a degree of over-investment. This brought about a sudden fall in the size (as well as the number) of acquisitions. In addition, there was a slow-down in privatisations, one area where FDI was strong, particularly in telecommunications. Indeed, by some standards, the huge boom of FDI in 1999 and 2000 might well be seen as the exception rather than the norm. However, whilst the global fall in FDI has been 56% between 2000 and 2001, the UK seems to have suffered particularly, with an 85% fall from \$255 bn in 2000 to \$39.5 bn in 2001, only 20% of 1998 levels. The only other country which has been as badly affected has been Sweden, and to a lesser extent Germany and Belgium. However, in all these countries the magnitude of FDI in 2001 is not totally out of line with levels before 1999, as is the case with the UK. In contrast FDI to some countries like the US, Japan, France and Italy has fallen by far less. Scotland's performance over the last year has to be viewed in this international and UK context.

If FDI might well have arisen as a substitute for trade in past times, over time it begun to assume a more complementary nature. Indeed, much of global trade is accounted for by activities of multinational enterprises (MNEs), both in terms of their share of the market for final products but also the large volume of intra-firm trade that takes place (the latter category being estimated by UNCTAD to account for between one quarter and one third of global trade).

It is important to note that FDI is a two-way process: the biggest outward investor, the US, is also the biggest recipient of FDI. If one calculates the total stock of FDI in the last decade, the US has actually been the biggest net recipient of FDI amongst the OECD economies (with net inflows of \$242 bn, more than Mexico, Ireland, and Poland), whilst the biggest outward investor has been the UK (with \$390bn, just ahead of Japan, followed by France).

MNE investment is generally concentrated in industrialised countries (both as source and destination) and within particular industries. It mainly occurs in industries characterised by a large share of professional and technical workers, production of technically complex or differentiated goods, and having high levels of research and development (R&D). In Europe, the principal industries to receive FDI are the chemical, petroleum-related, and office machinery industries, with a boom in 1999-2000 in the telecommunications sector. Scotland has been an important beneficiary of this type of investment, particularly from the US. More recently, there has been an increasing trend of MNE FDI in developing countries which may negatively affect some traditional Scottish industries, as production of labour-intensive stages of manufacture is moved to developing countries.

1. *Scotland's Global Connections*

Within Europe (EU15), some 55% of FDI arises from other EU countries, a further 10% from other European countries, while the US accounts for 24%, and Asia only 4% (mainly from Japan).⁴ FDI is particularly concentrated in manufacturing in Europe. There are wide differences across Europe in terms of the shares of foreign industry to trade. The most extreme example of a dominant foreign presence in domestic industry is Ireland where, for example, foreign subsidiaries accounted for 83.9% of manufacturing exports in 1997. While detailed data on inward European FDI are not generally available, it is indicative of the importance of FDI for employment that US subsidiaries (almost one quarter of total FDI in the EU) accounts for 7% of EU employment in manufacturing. But even in the USA, the share of manufacturing production (in terms of turnover)⁵ produced by foreign-owned subsidiaries has risen from 31% in 1991 to 42% in 1998, well above the UK, where it rose from 11.2% in 1991 to 11.8% in 1998. In contrast, in countries like Germany and Italy the percentage of foreign-owned manufacturing is still about 77.5%., and in France and Canada it is about 9-10%.

The Global Connections Survey looks at the international ownership of firms in Scotland, both examining the nature of the international links of Scottish and UK-owned firms and at the ownership of Scottish plants of foreign companies, which allows us to produce some initial comparisons, at least for manufacturing. In trying to capture the future trends of FDI strategies, respondents were asked about plans to enter new markets over the next five years. The answers illustrate a measure of complementarity between FDI and exports as well as a confirmation of EU and North America as the most important outward markets. However, Asia attracts an increasing interest as the time horizon increases.

What are the benefits to host countries of inward FDI? The direct employment benefits of FDI are immediately obvious, and strongest when they provide employment to the previously unemployed. What is less obvious are the spillovers from FDI on the domestic economy. These can take the form of additional demand for existing service industries, may induce new suppliers to become established, or result in technological spillovers such that an indigenous domestic industry might emerge. It is sometimes feared that these 'backward linkages' to the local economy might be weak, and that foreign-owned inward investors might rely largely on inputs sourced abroad. Once again, this is addressed in the Global Connections Survey where we find that a substantial proportion of all inputs of foreign-owned establishments are sourced locally. Comparisons with other countries are difficult because of lack of comparable data, but such casual data as exists from Ireland suggests that Scotland does benefit as much, if not more, from backward linkages.

A frequently heard accusation against FDI is the claimed lack of investment in R&D. This is also addressed in the survey, which also compares R&D by UK and overseas-owned firms.

The innovation of a common currency in Europe will have profound implications for firms in the eurozone. What is less obvious are the implications for firms outside the common currency area. The survey asks firms about the invoicing currencies that they use. The euro is in its infancy, but it already is an important currency for Scottish firms. The continued inclusion of this question in the survey will show the evolution of the euro and its developing role for Scottish firms.

References

Barba Navaretti, Giorgio., Jan I. Haaland, and Anthony Venables (2002), *Multinational Corporations and Global Production Networks: The Implications for Trade Policy*. Report prepared for European Commission Directorate General for Trade. London: Centre for Economic Policy Research.

OECD (2002), "Trends and Recent Developments in Foreign Direct Investments", *OECD International Investment Perspectives* No. 1. Available at <http://www.oecd.org/pdf/M00031000/M00031885.pdf>

⁴ These data are reproduced from Barba Navaretti, Haaland, and Venables (2002).

⁵ These data are reported from OECD (2002).

1.1 The Pattern of Scotland's Overseas Economic Relationships

In a world economy that is becoming more and more integrated, exports are no longer the only, or even necessarily the most important, type of linkage between economies. Indeed, in some cases exports may decrease when domestic companies decide to locate production plants in foreign markets. Similarly, imports may decrease if foreign producers set up plants in the domestic country to serve the local market. In these cases within-company trade flows may arise. Indeed, internationalisation is a two-way process in which Scottish companies can play a role both as receivers or initiators. The outward flows of goods, services and knowledge originating in Scotland are as important as the analogous flows entering Scotland.

A first step in understanding the pattern of Scotland's overseas relationships is to determine the nationality of Scottish establishments, as location does not necessarily imply ownership. In order to shed light on this issue, Table 1 provides a snapshot of the ownership of Scottish based business activities by reporting the number of companies and their total level of employment by country of ownership. Foreign ownership of Scottish companies is a relevant phenomenon since it accounts for more than a third of the total level of employment of the respondents. The United States is the dominant foreign presence in Scotland, both in terms of number of companies and the overall employment of Scottish workers. There are more American firms operating in Scotland than companies from the entire EU. Further, the US firms account for more employment than all of the EU companies combined.

Table 1 Ownership of Scottish-based Companies

Q – Please give the name of your holding/parent company and the country where located.

All Sectors	Companies	Employment	Average Employment	Share of Total (%)
Asia	21	6,330	301	3.1
EU	83	20,259	244	9.9
West Europe, non EU	20	3,975	199	2.0
North America	122	42,052	345	20.6
Other	6	311	52	0.2
Total non-UK	252	72,927	289	35.8
United Kingdom	1,455	130,719*	90	64.2
Grand Total	1,707	203,646	119	100.0
Manufacturing				
Asia	16	5,560	348	4.1
EU	69	12,132	176	8.9
Western Europe, non EU	18	3,906	217	2.9
North America	108	40,614	376	29.9
Other	3	192	64	0.1
Total non UK	214	62,404	292	45.9
United Kingdom	957	73,610**	77	54.1
Grand Total	1,171	136,014	116	100.0
* based on 1363 companies that reported employment				
** based on 910 companies that reported employment				

1.1 The Pattern of Scotland's Overseas Economic Relationships

The first part of Table 1 includes all the respondents to the questionnaire. However, the discussion in this section of the report will focus on *manufacturing* activities except where otherwise indicated. There are two main reasons for this choice. First, the analysis of overseas relationships and their complementarity or substitutability with exports flows implicitly refers to manufactured goods. The location of primary activities is basically determined by the availability of natural resources and cannot easily be moved geographically, while flows of services are not necessarily registered as exports in the national accounts. Secondly, most of the data for the primary sector are derived from secondary sources, that do not provide data analogous to responses to the survey questionnaire. Our focus on manufacturing also reflects the fact that only a small fraction of foreign-owned companies (in the survey, 15.1% of companies accounting for 14.4% of employment) engage in non-manufacturing activities. Consequently, the second part of Table 1 reports the results for manufacturing companies only.

When we restrict our focus to the manufacturing sector, the United States again has the largest presence in Scotland both in terms of companies and especially in terms of employment (more than 60% of total employment in foreign owned companies). Interestingly, the aggregate presence of European companies does not even reach half the total level of employment of American firms. Japanese companies represent the second largest concentration for a single country. The reasons behind individual companies establishing international connections are likely to be quite varied, but it will be interesting to determine whether there are differences in the investment behaviour based on the location of the parent company.

The general observation arrived at by various studies, that foreign-owned companies are larger than domestic ones in terms of employment, is confirmed for Scotland as well. From Table 1, it appears that the average foreign-owned manufacturing company has close to 300 employees while an average UK-owned manufacturer employs fewer than 100 workers⁶. The economics literature offers various explanations for this result. These are basically based on the various aspects of comparative advantage that a foreign company must have in order to be in a position to be present in countries other than its own. Economies of scale are an important element of the argument and this calls for relatively larger-sized investments. Another common result found in similar studies is that exporters are, on average, bigger than non-exporters and the standard explanation is based on the necessary (sunk) costs involved in export activities, which require larger turnovers (as proxied by employment) in order to be affordable. This is true across UK-owned companies while the difference is quite smaller and statistically insignificant for foreign-owned companies since only four of these are non-exporters.

⁶ This holds also for the whole sample of companies and not just for the manufacturing sector (see Table 1)

***UK/Scottish
Owned
Companies***

From the perspective of a UK-owned company, the relevant question in an ever-increasing integrated economy is to what extent, and in which mode, it should be present in international markets. In this regard, 72.1% of the UK-owned manufacturing companies operating in Scotland had some export activities (see Section 3 for details on the destination markets and the relative importance of various industrial sectors) for the reported period.

On top of this traditional channel, Table 2 illustrates other forms of presence in the international markets. Looking at geographic areas, EU countries and North America (i.e., Canada and United States) are the most targeted destinations. Asia is also significant, while Latin America does not seem to attract much attention. The United States represents the single most important destination, independent of the mode of entry. A comparison with Table 1 reveals a close match in the geographic areas and indeed the scarce presence of UK companies in Latin America mirrors the absolute absence of Latin American companies in Scotland. When considering the different modes of entry, it appears that there are substantial differences in the size of the companies involved in the various forms. It does not come as a surprise that large companies decide to have overseas manufacturing plants while small companies prefer franchising and strategic alliances. Joint ventures and subsidiaries are also the choice of large companies. Moreover, a company can enter different foreign markets using different strategies. When analysing the mix of operations carried out by UK firms, it appears that the strongest positive association occurs between licensing agreements and strategic alliances, as if they complement each other. To a lesser extent, joint ventures present some complementarity with licensing agreements and representative offices. On the other hand, the decision to have operations in franchising abroad does not seem to be correlated with the other possible forms of intervention.

Table 2: Overseas presence of UK owned Scottish manufacturing companies

Q - If your company is UK or Scottish-owned and has any overseas operations, please define the type of operation and the key locations.

*See definitions on page 4

	Franchise	Licensing Agreements	Strategic Alliance*	Subsidiary	Rep. Office*	Overseas Manuf.	Joint Venture*	Total
Africa		4	11	2	3	1	6	27
Asia		7	21	6	27	22	12	95
EU	2	14	31	24	61	19	12	163
West Europe, non EU		3	5	3	4	8	1	24
Middle East		1	6	1	8		3	19
North America	3	11	26	26	40	17	2	125
Australasia		2	5	2	10	4	1	24
Eastern Europe	1	1	1	1	6	4		14
Latin America		2	2	1	4	2	2	6
Other		3	3	3	7	1		17
Total	6	48	111	69	170	78	39	521
Average Employment	82	150	79	184	156	208	201	
Top Markets:								
United States	2	9	23	23	33	15	2	107
France		1	5	6	16	4	1	33
Germany		1	6	6	10	4	2	29
China		2	2	2	2	12	4	24
Australia		1	4	1	9	4	1	20
Netherlands		2	6	3	4	4	1	20
Italy		2	3	2	9	1	2	19
Canada	1	2	3	3	7	2		18
Japan			6		11		1	18
Ireland	1	1		3	5	3	2	15
Spain	1	2	4	1	5		2	15
South Africa		4	4	1	1	1	2	13
Sweden		3	3		3		2	11
Total	5	30	69	51	115	50	22	342
% of total represented by top markets	83	63	62	74	68	64	56	66

Overseas-Owned Companies

Table 3 is the equivalent of Table 2 when looking at the presence in Scotland of foreign-owned companies. In this case, subsidiaries and overseas plants are the preferred mode of entry. The average level of employment is very large, with the exception of representative offices that are, as expected, much smaller in size.

Table 3 Form of presence of Overseas Owned Manufacturing Companies

Q – If your company is not UK-owned, please describe the relationship between your Scottish Company and the owner company.

	Subsidiary	Overseas Manuf. Plant	Licensing Agreement*	Repres. Office*	Joint Venture*	Other
United States	46	27	4	2		2
EU	37	15		1	2	
<i>Austria</i>	2	1			1	
<i>Belgium</i>	2					
<i>Denmark</i>	4	3				
<i>Finland</i>	1	2				
<i>France</i>	8	2				
<i>Germany</i>	7	2				
<i>Greece</i>	2					
<i>Ireland</i>	1	1				
<i>Italy</i>	2					
<i>Netherlands</i>	4	4		1	1	
<i>Sweden</i>	4					
West Europe, non EU	10	4				
Japan	2	5				
Other	1	1		1		1
Total	96	4	4	2	3	

Number of respondents to question: 133 (some companies ticked more than one choice)

* In the questionnaire, the following definitions were given for clarification:
 Joint Venture = formal, legally contracted and jointly owned venture
 Strategic Alliance = less formal relationship, aiming to expand businesses through mutual strengths and expertise; may include joint marketing of products/services.
 Representative Office = may be sales/marketing office or location for providing a full range of services

1.2 The Strength of Scotland's Global Connections

Ownership and mode of entry of foreign owned companies is an important starting point to analyse the degree of internationalisation of the Scottish economy. It is crucial to assess the export patterns of foreign companies to understand their location choice. In other words, do they locate in Scotland to serve the UK market or as a base for Europe? Or, do they come to Scotland for its comparative advantages but then export to their domestic market?

Exports Patterns

Table 4 presents the export patterns of overseas and UK owned companies. One striking feature is the important role of overseas owned companies for Scotland's export performance, as they account for almost 80% of the total manufacturing exports. Their flows are also more geographically concentrated since their top four destination markets together receive more than 50% of their total exports. Table 5 shows the percentage of exports to the country of ownership. A large variation is evident and it can reflect the motives behind the decision to locate in Scotland. There are two principal reasons for a multinational enterprise to establish production facilities in a foreign location.

Table 4 Exports patterns of Scottish based manufacturing companies by ownership

Total exports:	79% from foreign owned companies		
	21% from UK owned companies		
	all companies		
	United States		13.5%
	Germany		13.0%
	Netherlands		12.6%
	France		9.9%
	Italy		5.2%
	Japan		2.8%
	UK-owned		Overseas-owned
	United States	12.6%	Netherlands 14.8%
	France	7.4%	Germany 14.7%
	Germany	6.6%	United States 13.7%
	Brunei	5.4%	France 10.5%
	Italy	4.2%	Italy 5.4%
	Netherlands	4.1%	Japan 3.2%

Table 5 Exports from overseas-owned companies destined for country of ownership

	Percentage of exports to country of ownership
Sweden	44%
Netherlands	42%
Italy	27%
Germany	25%
Switzerland	22%
Norway	20%
Belgium	19%
South Korea	17%
United States	14%
Denmark	11%

The first arises from traditional elements of comparative advantage, where the foreign plant can produce a good or intermediate input more cheaply than factories in the firm's home country. Consequently, the output of such a plant is likely to be directed towards exporting to the home country of the firms, either to provide a component into production there or to be sold to consumers in that country. A firm that sets up this type of manufacturing unit would be referred to as a "vertical multinational."

Exports Patterns

The second mode of operation for a foreign company is to establish a production facility in Scotland to produce goods that may also be in production in the home country. Given Scotland's proximity to the huge European market, it may be cheaper to serve the European market from a Scottish factory than from the home country, as this will reduce the transport costs and avoid the trade taxes (tariffs) that foreign-produced goods would be subject to. Such a firm would be referred to as a "horizontal multinational" and its exports would be generally destined for sales in the markets of third countries rather than the firm's home market.

In looking at the decision to export, Table 6 shows that Scottish-based companies are no exception to the evidence found in economics literature which argues that foreign-owned firms export larger percentages of their total sales and that, in general, large firms export more than small ones.

*Table 6 Percentage of exports as share of total sales of
Scottish based manufacturing companies*

	Companies	% exports
All companies	559	37
<i>Small companies (emp<250)</i>	470	37
<i>Large companies</i>	73	47
Overseas-owned	121	53
<i>Small companies (emp<250)</i>	39	56
<i>Large companies</i>	82	52
UK-owned	438	33
<i>Small companies (emp<250)</i>	388	33
<i>Large companies</i>	34	36

Note: total sales is given by the sum of exports and total UK sales.

1.3 Value of Global Trade to the Scottish Economy

The description in the previous sections of the internationalisation of the Scottish economy falls short of quantifying how well rooted this process is in the local economy. Table 7 is an attempt to rectify this by looking at the backward linkages of foreign-owned companies and how they compare with those of UK firms. The table considers the origins of the firms' inputs into the production process. Overall, the results indicate substantial import flows of intermediate goods. Domestic companies source a little more than half the value of their inputs from Scotland and just less than 22% from the rest of the world. The percentages for foreign-owned companies are the reverse, with more than 54% of inputs being imported from the rest of the world.

Table 7 Backward linkages of Scottish based manufacturing companies

Q - Please provide the value of your company purchases sourced from Scotland, Rest of UK or Rest of World.

Sources of intermediate inputs	UK-owned % of total	Foreign-owned % of total
Scotland	51%	15%
Rest of UK	28%	31%
Rest of World	22%	54%

This characteristic is further reflected in Table 8, which shows the percentages of imports from overseas affiliates of the Scottish firms. There are dramatic differences between domestic- and foreign-owned companies in this respect, with foreign-owned firms sourcing substantially more from overseas affiliates than is the case for UK-owned firms. These flows probably reflect the presence in Scotland of vertically integrated foreign-owned companies. It is, however, clear that, even for foreign-owned companies, the impact on domestic suppliers is still considerable, as a large number locally source up to 50% of their intermediate inputs. This suggests that the backward linkages between foreign-owned companies and the Scottish economy are reasonably strong in providing spillovers for domestic firms.

Table 8 Backward linkages of Scottish based manufacturing companies

Q - What percentage of your purchases from Rest of World comes from overseas affiliates?

Percentage from overseas affiliates	UK-owned		Foreign-owned	
	% of total	% of emp	% of total	% of emp
zero	80.1	62.1	32.4	21.9
up to 10%	9.5	19.4	20.6	19.2
up to 25%	3.7	4.5	11.8	12.7
up to 50%	3.4	5.1	10.8	25.2
up to 90%	2.0	1.7	14.7	12.0
up to 100%	1.4	7.2	9.8	8.9

**1.4 Value to
Scottish
Companies of
Global
Connections
Beyond Direct
Exporting**

From the 173 answers obtained some general conclusions can be drawn, if only in terms of relative importance of the various global connections.¹ Table 9 reports average percentages calculated on the affirmative answers. It can be seen that global connections can represent a quite large percentage of the turnover, and that there are important connections other than those explicitly mentioned in the questionnaire. However it is gauged that many respondents citing ‘other’ connections were actually referring to relationships with agents and distributors, rather than a presence in the market.

Table 9 Percentage of turnover derived by overseas relationships for UK-owned manufacturing companies

Q - If your company is Scottish-owned, please estimate the percentage of your turnover derived from overseas relationships.*

Overseas Relationship	% of turnover
Franchise	36
Licensing	25
Representative Office**	35
Subsidiary	29
Joint Venture**	26
Overseas Manufacturing	34
Collaborative Research	50
Strategic Alliance**	38
Other	54

* For example, of those companies responding which had an overseas relationship in the form of a franchise, the average share of turnover derived from the franchise operations is 36% of turnover.

** In the questionnaire, the following definitions were given for clarification:

Joint Venture = formal, legally contracted and jointly owned venture

Strategic Alliance = less formal relationship, aiming to expand businesses through mutual strengths and expertise; may include joint marketing of products/services.

Representative Office = may be sales/marketing office or location for providing a full range of services

**1.5 Evolving
Prospects for
Trading
Relationships**

Expressions of intentions by companies are useful indicators of future trends. In particular, plans to enter new markets can indicate the dynamics at work in the Scottish economy. Table 10 details the plans to enter new markets, tabulated by time horizon and mode of entry. Geographically, EU countries and North America are the focus of interest. Over the medium run, Asia represents another important destination market. In terms of the form of entry, exports seem to represent the immediate answer to the decision to enter new markets. However, as the time horizon becomes longer, other forms of global presence become increasingly important. In all, these data show the evolving nature of global connections and the role that the Scottish based companies intend to play in the near future. Internationalisation is a two-way process in which Scottish companies can play a role as receivers or initiators. Table 10 gives a snapshot of Scotland as an initiator while Table 1 portrays Scotland as the receiver of this process.

¹ It would be statistically inappropriate to apply these percentages to total turnover to quantify the impact.

Table 10 Plans for future activities in new markets for Scottish based companies

Q - Please list markets you are planning to enter, and specify the timescale and method.

	Within 1 year										
	Strat. Alliance*	Export	Franchise	Joint Venture*	Licensing	Overs. Manuf.	Rep. Office*	Coll. Research	Subsidiary	Other	Total
*See definitions on page 4											
Africa	2	5	0	0	0	0	0	0	0	0	7
Asia	2	9	0	1	4	1	2	2	0	0	21
East Europe and Form. Soviet countries	4	1	0	1	0	0	0	3	0	0	9
EU	6	58	1	5	10	0	2	4	1	11	98
West Europe, non EU	0	5	0	1	1	0	0	1	0	1	9
Middle East	1	4	0	0	1	0	1	0	0	0	7
North America	6	23	0	3	4	1	3	2	0	2	44
Australasia	0	8	0	3	0	1	1	0	0	0	13
South America	1	4	0	0	1	0	1	0	0	0	7
Total	22	117	1	14	21	3	10	12	1	14	215
	1-2 years										
Africa	0	1	1	1	1	0	0	0	0	0	4
Asia	6	9	0	2	5	0	0	3	0	2	27
East Europe and Form. Soviet countries	2	0	0	4	3	0	0	0	0	0	9
EU	15	23	0	6	12	5	0	1	1	2	65
West Europe, non EU	3	0	0	0	0	0	0	1	0	0	4
Middle East	0	1	0	0	0	0	0	0	0	0	1
North America	8	10	0	2	2	1	4	1	0	1	29
Australasia	3	4	0	1	1	1	2	0	0	0	12
South America	2	0	0	0	1	0	0	0	0	0	3
Total	39	48	1	16	25	7	6	6	1	5	154
	2-5 years										
Africa	0	0	1	0	0	0	0	0	0	0	1
Asia	3	2	0	1	3	1	0	2	0	2	14
East Europe and Form. Soviet countries	0	2	0	0	0	0	0	0	0	1	3
EU	9	13	1	2	0	0	0	1	2	0	28
West Europe, non EU	3	1	0	1	0	0	0	1	0	0	6
Middle East	0	0	0	0	0	3	0	0	0	0	3
North America	4	5	0	1	0	0	3	0	0	0	13
Australasia	0	1	1	1	0	0	1	0	0	0	4
South America	2	0	0	1	0	0	0	0	0	0	3
Total	21	24	3	7	3	4	4	4	2	3	75

Table 10 Plans for future activities in new markets for Scottish based companies

Q - Please list markets you are planning to enter, and specify the timescale and method.

	Within 1 year										
	Strat. Alliance*	Export	Franchise	Joint Venture*	Licensing	Over. Manuf.	Rep. Office*	Coll. Research	Subsidiary	Other	Total
*See definitions on page 4											
Africa	2	5	0	0	0	0	0	0	0	0	7
Asia	2	9	0	1	4	1	2	2	0	0	21
East Europe and Form. Soviet countries	4	1	0	1	0	0	0	3	0	0	9
EU	6	58	1	5	10	0	2	4	1	11	98
West Europe, non EU	0	5	0	1	1	0	0	1	0	1	9
Middle East	1	4	0	0	1	0	1	0	0	0	7
North America	6	23	0	3	4	1	3	2	0	2	44
Australasia	0	8	0	3	0	1	1	0	0	0	13
South America	1	4	0	0	1	0	1	0	0	0	7
Total	22	117	1	14	21	3	10	12	1	14	215
	1-2 years										
Africa	0	1	1	1	1	0	0	0	0	0	4
Asia	6	9	0	2	5	0	0	3	0	2	27
East Europe and Form. Soviet countries	2	0	0	4	3	0	0	0	0	0	9
EU	15	23	0	6	12	5	0	1	1	2	65
West Europe, non EU	3	0	0	0	0	0	0	1	0	0	4
Middle East	0	1	0	0	0	0	0	0	0	0	1
North America	8	10	0	2	2	1	4	1	0	1	29
Australasia	3	4	0	1	1	1	2	0	0	0	12
South America	2	0	0	0	1	0	0	0	0	0	3
Total	39	48	1	16	25	7	6	6	1	5	154
	2-5 years										
Africa	0	0	1	0	0	0	0	0	0	0	1
Asia	3	2	0	1	3	1	0	2	0	2	14
East Europe and Form. Soviet countries	0	2	0	0	0	0	0	0	0	1	3
EU	9	13	1	2	0	0	0	1	2	0	28
West Europe, non EU	3	1	0	1	0	0	0	1	0	0	6
Middle East	0	0	0	0	0	3	0	0	0	0	3
North America	4	5	0	1	0	0	3	0	0	0	13
Australasia	0	1	1	1	0	0	1	0	0	0	4
South America	2	0	0	1	0	0	0	0	0	0	3
Total	21	24	3	7	3	4	4	4	2	3	75

**1.5 Evolving
Prospects for
Trading
Relationships**

Table 11 describes the top 20 markets in which current exporters plan to increase their activity, whereas Table 12 shows the responses from companies wishing to export to new markets for the first time.

*Table 11 Top 20 Markets of Interest
Number of Responses for Each Market by Period*

		Within 1 Year	1-2 Years	2-5 Years	Total	% Resp
(1)	United States	137	41	17	195	27%
(2)	France	95	29	12	136	19%
(3)	Germany	84	28	11	123	17%
(4)	Netherlands	61	10	6	77	11%
(5)	Ireland	55	11	8	74	10%
(6)	Spain	45	20	8	73	10%
(7)	Italy	46	15	5	66	9%
(8)	Canada	40	13	6	59	8%
(9)	Japan	39	15	4	58	8%
(10)	Australia	39	13	5	57	8%
(11)	Norway	39	9	5	53	7%
(12)	Sweden	34	8	3	45	6%
(13=)	China	26	10	6	42	6%
(13=)	Denmark	29	11	2	42	6%
(15)	Belgium	36	4	1	41	6%
(16)	Russian Federation	24	6	3	33	5%
(17)	Switzerland	23	3	2	28	4%
(18)	Finland	19	3		22	3%
(19=)	South Africa	15	5	1	21	3%
(19=)	South Korea	18	3		21	3%

*Table 12 Top 20 New Markets of Interest
Number of Responses for Each Market by Period*

		Within 1 Year	1-2 Years	2-5 Years	Total	% Resp
(1)	United States	17	8	2	27	24%
(2)	Ireland	15	4	3	22	20%
(3)	Germany	9	2	3	14	13%
(4)	Netherlands	8	2	2	12	11%
(5)	France	7	4		11	10%
(6)	Canada	6	2	2	10	9%
(7)	Italy	3	2	3	8	7%
(8)	Australia	5	2		7	6%
(9)	Spain	2	3	1	6	5%
(10=)	Belgium	4	1		5	5%
(10=)	Japan	2	2	1	5	5%
(12)	New Zealand	2	1	1	4	4%
(13=)	China	2	1		3	3%
(13=)	Norway	2		1	3	3%
(13=)	Singapore		3		3	3%
(16=)	Arab Emirates	1	1		2	2%
(16=)	Denmark	1	1		2	2%
(16=)	Portugal	1		1	2	2%
(16=)	Russian Federation	1		1	2	2%
(16=)	South Africa	2			2	2%

1.6 Currency

Patterns in Scotland's Global Trade

The euro became reality from 1st January 2002. Given the current domestic debate about its potential adoption, it is important to assess its current importance for Scottish exporters. In order to avoid picking up ideological bias in their perceptions of the single currency, respondents were simply asked to specify the currency used in the invoicing of exports. Table 13 details the results. Overall, 14% of total exports from Scotland are invoiced in euro with huge variations across countries and regions. The percentages by geographic areas match expectations, with the US dollar being dominant in most of the world outside of Europe. It is interesting to note, however, the importance of the euro for East European and Russian countries, despite their not being part of the currency area.

*Table 13 Exports Currencies
(based on exports with assigned currencies)*

Q - Please detail the typical currency used in your invoices for countries to which you export.

Geographic markets	% euro	% pound	% dollar	% other
North America	0.6	12.8	84.5	2.1
Latin America	0.9	32.7	63.8	2.6
EU	18.0	31.8	48.2	2.0
West Europe, non EU	2.6	27.8	66.3	3.2
Eastern Europe	13.0	18.6	67.6	0.8
Africa	13.0	35.0	51.3	0.8
Middle East	2.5	38.3	58.4	0.9
Asia	0.5	39.6	56.4	3.5
Australasia	0.1	52.4	18.7	28.8 (Australian dollar)
Other	0.2	36.2	63.7	0.0
Total	11.7	30.7	55.5	2.2

(Excluding the Electronics sectors, 22% of total exports were invoiced in euro. 45% of exports to the EU were invoiced in euro, 31% in sterling and 42% in dollars.)

Top Export Markets	% euro	% pound	% dollar	% other
USA	0.7	14.5	84.7	0.0
France	16.8	28.2	54.5	0.5
Germany	29.9	20.0	49.3	0.8
Netherlands	8.1	16.1	75.3	0.5
Italy	11.5	41.9	44.2	2.4
Spain	40.1	49.2	8.5	2.2
Japan	2.1	45.0	21.5	31.4
Sweden	6.2	43.4	31.4	19.0
Switzerland	3.8	36.6	57.9	1.7
Belgium	32.2	59.2	8.3	0.3

The top countries by invoices in euro are shown in the lower part of the table. There are two points worth noting. First the US dollar still remains an important invoicing currency, even for exports to the EU. It will be interesting to see if there is a trend towards invoicing in euros in years to come as the new currency becomes established. Second, many Scottish-based exporters still invoice in pounds Sterling.

2. *Scotland's Export Performance*

Tables 14 and 15 highlight the overall performance of Scottish exports in the last three years expressed in both current and constant (1995) prices, based on the Office for National Statistics price deflator for Export Trade in Goods on a Balance of Payments Basis. Table 16 shows Scotland's share of total UK exports. **It is important to stress that although the data for individual years has been compiled on a comparative basis and therefore the resultant trends over time can be relied on, direct comparisons cannot be made to other Scottish economic statistics or to UK export statistics. This is because the data for each year in this survey contains an amalgam of calendar and financial year values, unlike the official export statistics which restrict coverage to calendar years.**

	1999	2000	2001	2000-2001 % Change
Scottish Manufactured Exports*	19,891	19,863	17,606	-11.4%
Scottish Service Sector Exports*	3,007	2,869	3,244	13.1%
Scottish Primary Sector Exports	5,542	6,910	6,690	-3.2%
Total Scottish Exports	28,440	29,642	27,540	-7.1%

	1999	2000	2001	2000-2001 % Change
Scottish Manufactured Exports	22,225	21,381	18,911	-11.6%
Scottish Service Sector Exports	3,358	3,089	3,485	12.8%
Scottish Primary Sector Exports	6,192	7,438	7,186	-3.4%
Total Scottish Exports	31,775	31,908	29,582	-7.3%

	1999	2000	2001
Scottish Manufactured Exports	12.8%	11.7%	10.1%
Scottish Service Sector Exports	4.3%	3.7%	4.3%
<i>The nature of the Primary Sector makes it difficult to calculate an exact share of UK totals, although available information does suggest that Scotland's Primary exports account for between 40% and 50% of the UK Total, due in large part to the value of Oil & Gas exports.</i>			

*There have been revisions to the historical data in the light of new information.

Scottish Export Performance

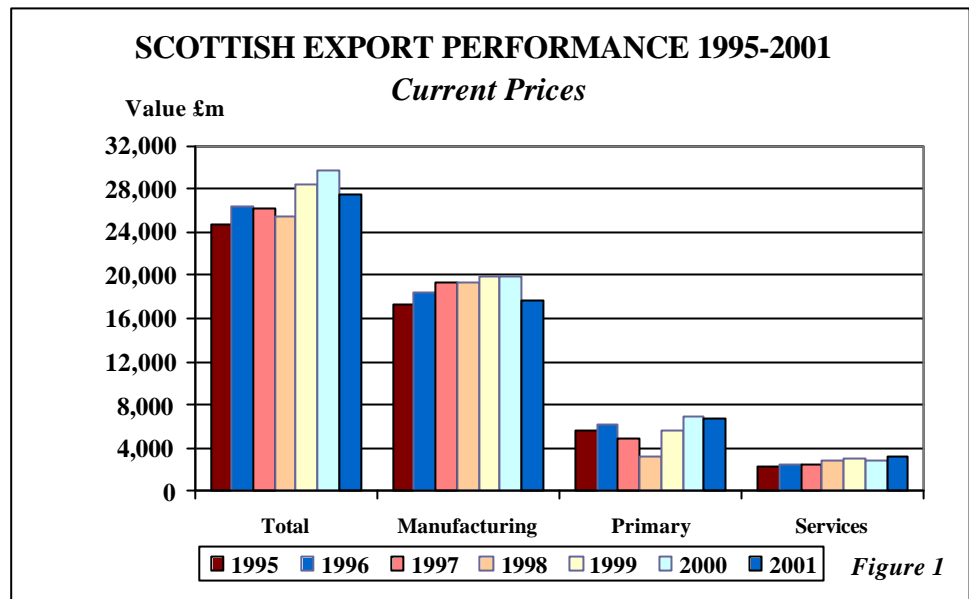
Scotland's exports for 2001 reached £27,540m in current prices. The figures show falling sales in both manufacturing and primary sectors, and overall represent a decrease of 7.1% when compared to the 2000 value.

2. *Scotland's Export Performance*

Scotland's share of UK manufactured exports fell to 10.1% in 2001, indicating an acute weakening of a previously healthy position. This is the lowest percentage share of UK exports recorded for a number of years. Scotland's past success in exporting has traditionally been attributable to the manufacturing sector, and therefore the severity of the decline in 2001 has a substantial impact on the overall picture. Exports from the services sector, on the other hand, have reported strong growth of 13.1% during the year. Certainly, this is growth from a relatively low baseline. However, it means that Scotland's share of UK services exports has risen to 4.3%, recapturing the position last held in 1999. World Trade Organisation rankings suggest that the UK has maintained its position as the world's second largest exporter of commercial services, after the United States, with an 11.1% share of the global trade. It has been reported in previous editions of the Scottish Survey of Sales and Exports that the UK is the prime market for Scottish service providers, and that exports of services are therefore comparatively low. However, there is potential to grow export markets in a wide range of services, and the strong performance recorded by a number of sectors in 2001 gives cause for optimism. Primary exports are thought to account for some 40%-50% of total UK exports, due in large part to the value of oil and gas exports.

2. Scotland's Export Performance

Figure 1 illustrates Scotland's export performance by category, and in total, for the past seven years.



Global Trade in 2001

The reported decline in Scottish exports in 2001 must be seen in context. In a global context the value of world merchandise exports in 2001 decreased by 4%, according to the World Trade Organisation. This represents the first decline in more than a decade, following a near 13% rise in the preceding year, and highlights in dramatic fashion the severity and speed of the global downturn. The value of merchandise exports fell to \$5.98 trillion as a consequence.

A number of factors contributed to this outcome. The simultaneous decline in economic activity in the major developed markets, the deteriorating investment in the information and communication technology sectors, and the sharp corrections experienced in all major stock market indices – particularly in the wake of global uncertainty caused by the events of 11 September – were key components. The puncture of the IT bubble was perhaps the principal factor, causing a steep fall in world exports of office and telecommunications equipment which contracted by almost 14%.

According to the World Trade Organisation, North America recorded the highest decrease among the world's regional trading blocs in merchandise export and import volume (by 5% and 3.5% respectively). Asia's export decline was second only to that of North America, while its imports decreased in line with the global average. Imports into Western Europe contracted by 3%, faster than the decline of 1% in its exports.

Meanwhile, the marginal decline in world exports of commercial services in 2001 was the first recorded since 1983.

In all, 2001 proved to be a difficult and disappointing year for global trade.

Scottish Sales to the UK

It is worth emphasising at this juncture that Scotland's sales to the rest of the UK, Scotland's largest market, are not included in the export figures. An attempt to put the dimensions of Scotland's domestic sales into context is given later in this report (see page 58).

2.1 Manufacturing Industry Export Performance

Table 17 shows the overall performance of Scottish Manufactured Exports in the last three years expressed in both current and constant (1995) prices, based on the Office for National Statistics price deflator for Export Trade in Goods on a Balance of Payments basis.

	1999	2000	2001
Scottish Manufactured Exports* (£m current prices)	19,891	19,863	17,606
(% change on previous year)	3.2%	-0.1%	-11.4%
Scottish Manufactured Exports (£m constant (1995) prices)	22,225	21,381	18,911
(% change from previous year)	4.1%	-3.8%	-11.6%
UK Manufactured Exports (£m current prices)	155,663	170,094	173,339
(% change on previous year)	-0.5%	+9.3%	+1.9%
UK Manufactured Exports (£m constant (1995) prices)	173,780	183,094	186,186
(% change from previous year)	+0.3%	+5.4%	+1.7%
Scottish share of UK manufactured exports	12.8%	11.7%	10.1%

*There have been revisions to the historical data in the light of new information.

The latest figures show that overseas sales of manufactured goods from Scotland, in current prices, fell to £17,606m in 2001, a decrease of 11.4% on the £19,863m recorded for 2000. The equivalent UK figures show a 1.9% increase in the value of manufactured exports over the same period, at current prices. As a result, the Scottish share of UK manufactured exports stands at 10.1%, compared to the 11.7% recorded for 2000. The disproportionate dependence of the Scottish economy on the electronics sector was highlighted in the last survey, and in 2001 it has been equally apparent that this remains an integral factor in the relative shift in the balance of manufacturing exports between Scotland and the UK. This is supported by Scottish GDP output statistics. The overall result is that Scotland's share of UK exports is at its lowest point for a number of years.

2.1 Manufacturing Industry Export Performance

Figure 2 illustrates the growth trend of Scotland's manufactured exports over a ten year period in current and constant (1995) prices. This illustrates a strong acceleration of exports in the early 1990s, followed by decelerating growth, a brief period of stagnation and, ultimately, a sharp decline in 2001. The trend which these figures denote is a stark illustration of the challenges facing Scotland as a developed economy, seeking to remain competitive in a fast-moving and increasingly open global environment. For Scottish manufacturers, now frequently struggling to compete internationally on price, an emphasis on higher value products and non-price factors such as design and development, flexibility and agility, niche expertise and leading-edge knowledge, are key to succeeding in global markets cost.



2.1 Manufacturing Industry Export Performance

Table 18 shows total Scottish manufactured exports subdivided into exports from the 23 Standard Industrial Classification Divisions.

Table 18 Scottish Manufactured Exports (£m Current Prices) - (1999-2001)

INDUSTRY (1992 SIC DIVISION)	1999	2000	2001
(15) Whisky	2,001.6	2,156.3	2,295.1
Gin/Vodka	-	140.0	140.0
Manufacture of Other Food Products and Beverages	401.8	404.4	415.1
(16) Manufacture of Tobacco Products	-	-	-
(17) Manufacture of Textiles	258.8	241.2	224.2
(18) Manufacture of Wearing Apparel; Dressing and Dyeing of Fur	112.3	87.4	66.6
(19) Tanning and Dressing of Leather; Manufacture of Luggage, Handbags, Saddlery, Harness and Footwear	73.4	82.0	68.6
(20) Manufacture of Wood and Wood Products	34.2	31.9	30.5
(21) Manufacture of Pulp, Paper and Paper Product	358.0	447.1	366.4
(22) Publishing, Printing and Reproduction of Recorded Media	74.8	77.3	51.8
(23) Manufacture of Coke, Refined Petroleum Products and Nuclear Fuel	356.6	358.2	292.1
(24) Manufacture of Chemicals and Chemical Products	1,881.9	1,721.8	1,416.7
(25) Manufacture of Rubber and Plastic Products	316.2	313.7	323.7
(26) Manufacture of other Non-Metallic Mineral Products	140.7	130.2	119.3
(27) Manufacture of Basic Metals	157.9	137.6	120.4
(28) Manufacture of Fabricated Metal Products, except Machinery and Equipment	360.8	311.9	315.4
(29) Manufacture of Machinery and Equipment nec	854.1	860.1	884.8
(30) Manufacture of Office Machinery	7,164.8	6,899.5	5,803.8
(31) Manufacture of Electrical Machinery and Apparatus nec	376.8	404.2	380.8
(32) Manufacture of Radio, Television, and Communication Equipment and Apparatus	4,017.3	3,951.8	3,179.7
(33) Manufacture of Medical, Precision and Optical Instruments, Watches and Clocks	161.0	135.9	261.1
(34) Manufacture of Motor Vehicles, Trailers and Semi-Trailers	90.4	69.5	80.6
(35) Manufacture of Other Transport Equipment	610.6	803.5	661.9
(36) Manufacture of Furniture; Manufacturing nec	79.6	78.3	88.4
(37) Recycling	7.8	18.8	18.6
ALL MANUFACTURING INDUSTRIES*	19,891.4m	19,862.6m	17,605.6m

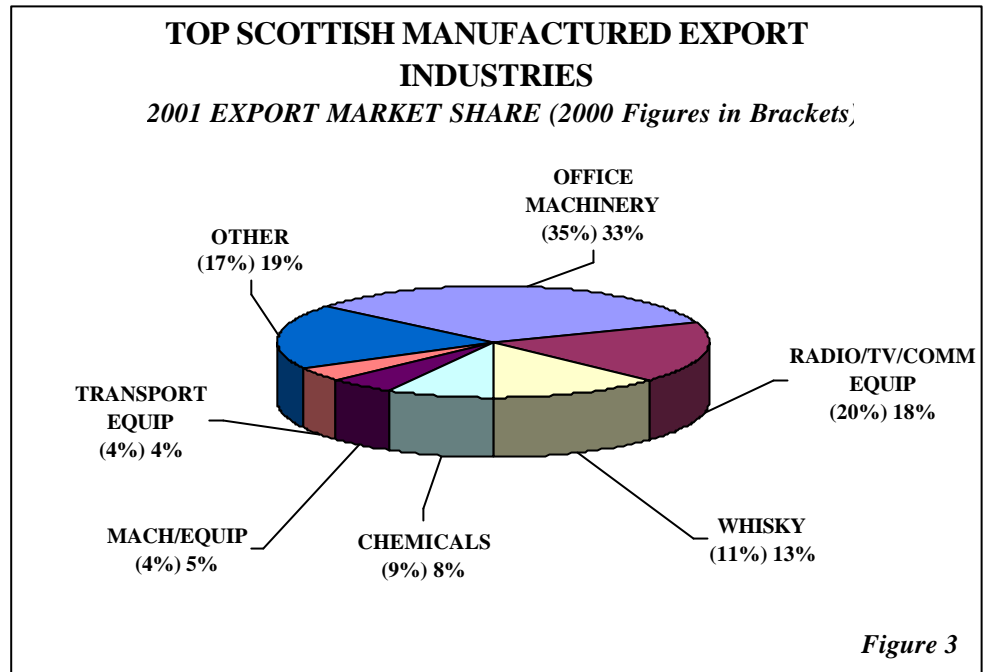
*There have been revisions to the historical data in the light of new information.

The overall downturn of 11.4% in manufactured exports is reflected in the performance of a wide range of individual industries, with 15 out of 23 sectors reporting a decline during the year and only eight sectors reporting an increase.

Nevertheless, the dominance of a small number of key industries noted in previous reports remains intact. The top four sectors – Office Machinery, Radio/TV/Communications, whisky and Chemicals – account for 72% of total export value.

2.1 Manufacturing Industry Export Performance

Figure 3 illustrates the relative shares of Scotland's top exporting industries.



Electronics

The Office Machinery sector has been the dominant exporting industry for some years, reflecting Scotland's outstanding past success in attracting multinational investors to set up manufacturing facilities and consequently becoming a leading centre of European electronics manufacturing. The electronics industry has employed thousands of people in Scotland, principally serving markets throughout Europe. Over this period the industry, which largely comprises personal computers and workstations, notebooks, printers and peripherals, has become a high volume, low product life-cycle sector, dependent on thriving demand from business and personal consumers for updated products and ever-expanding use of technology. Unfortunately, 2001 has been a significant year for the sector in witnessing the tide of the market turn. A rapid downturn in global markets necessitated an extensive international restructuring of major players in the sector and a severe contraction in investment plans.

The export survey for 2000 anticipated that the changing climate in this sector would become apparent in the following year's figures, and this has proved to be the case. Exports during the year fell by 15.9% to £5.8bn, representing over £1bn lost in Scottish export sales. As a result, the share of total manufactured exports accounted for by this sector has fallen from 34.7% to 33.1%. This is not at all surprising, in the context of falling world exports in the industry, estimated by the WTO to be down 14% for the year.

2.1 Manufacturing Industry Export Performance

Electronics (Cont'd)

A decline in export activity has also been recorded in 2001 for the Radio/TV/Communications Equipment sector, which includes manufacturers of mobile phones, printed circuit boards, semiconductors, televisions and VCRs. Indeed, the downturn in this sector – at 19.5% - is the largest reported by any of the manufacturing sectors. In particular, the evidence of diminishing demand for replacement products in the domestic and overseas mobile phone markets came home to roost during 2001. In Scotland, this was felt most keenly with the final closure of Motorola's Bathgate plant, which had been a major global exporter. The phenomenon of the mobile phone market has taken only a few years to reach a level of near-saturation, evidenced by Taiwan's claim to have the world's highest ranking in cellular phone penetration at 100.7% - a 14-fold growth over four years*. The next stage of growth in the industry is set to develop from the introduction of new products to the market, such as image-transmitting products, which will rely on high levels of innovation and differentiation. Displacement in consumer electronics, such as the movement from VCRs to DVDs, will also be a driver in the industry. The decision of the Taiwanese investor Chunghwa Picture Tubes to close its Lanarkshire operation is a further blow to the export prospects of the sector, having been established as the company's base for the European marketplace.

The mobility of investment in the electronics sectors is likely to remain a concern for Scotland, with a number of emerging markets proving to be attractive alternative investment locations for large-scale operations. In the European marketplace Scotland, along with other parts of the UK and Ireland, is already experiencing increasing competition from markets in Central and Eastern Europe, such as Hungary and the Czech Republic. Policy-makers in Scotland have acknowledged that the scale of such investments available to Scotland is already more limited, and that future activity is expected to rely on higher-value, knowledge-intensive operations.

Taking the electronics industry as a whole, defined as SIC Divisions 30, 31, 32 and 33, overseas sales fell by 15.5% during 2001, to a level of £9,625m. This represents a 54.8% share of all manufactured exports, down from 57.3% in the preceding year. As such, the electronics sector remains vital to Scottish exports. A wide range of Scottish companies, established in the local supply chain which has coalesced around the presence of multinational OEMs, are now established exporters in their own right. For these companies, it will be paramount that they continue to focus on innovative and higher value products, and that they forge appropriate and sustainable global relationships as insurance against the vagaries of unprecedented mobility in the investment climate and in global markets.

**Ministry of Transportation and Communications Statistics, Taiwan*

2.1 Manufacturing Industry Export Performance

Whisky/Food and Drink

The Scotch whisky and Food and Beverage sectors reported a welcome increase in exporting success for the year.

Exports of whisky, Scotland's third top export sector, climbed 6.4% to a value of £2,295m. This represents a sustained improvement in performance since 1998, and is all the more encouraging in the face of fragile economic climates in many key markets across the globe. The European Union represents whisky's principal trading area, with Spain now its top world market by value and France in third position. However, the Single European Market is still inconsistent in working towards fair and harmonised treatment of whisky with regard to other alcoholic drinks.

Discriminatory treatment remains a key barrier to maximising the industry's export potential, despite its worldwide brand recognition and its ongoing success as a key export earner for Scotland. This can take various forms from the levying of differential rates of duty to import quotas and restrictions on selling. High duties on Scotch and low duties on locally-produced spirits are experienced in such markets as Brazil, Korea and Chile. However, recent successful negotiations with Chile should result in taxes being harmonised in stages by March 2003.

The removal of discriminatory practices can have a significant impact on export values, and this has been witnessed in Korea, Japan and Taiwan where the opening up of the markets has resulted in their positioning as fourth, fifth and tenth export markets respectively in the global rankings. The removal of protectionist taxation in Switzerland in 1999 resulted in a 50% cut in duty on Scotch and other imported spirits. Limited success in India last year reduced a 700% tariff to a figure close to 400%, nevertheless still thought to be in breach of World Trade Organisation rules.

While barriers to free and fair trade remain, the industry is unable to maximise the potential of emerging markets with enormous potential. India, China and Russia are foremost amongst these and, while the percentage of the population with purchasing power in these economies is currently modest, the long-term potential of the markets is significant.

The United States remains the second market by export value, but Scotch whisky's share of the US market has been declining. The challenge for the industry in many developed markets is to respond to changing consumer preferences and to stimulate the product's appeal amongst a new cohort of consumers, particularly the younger generation.

The employment created by the industry in many of Scotland's more remote and fragile communities, and its purchases within Scotland, make it one of the manufacturing sectors most firmly embedded in the Scottish economy and a key export earner. Whisky is Scotland's number one export industry in a number of markets around the world.

Exports of Food and other Beverages climbed 2.7% in 2001, representing modest but sustained expansion over the last three years. This is a welcome signal in view of the numerous crises in the food industry over recent years, from the prolonged aftermath of BSE and the beef ban to the foot and mouth outbreak in 2001. The success of Scotland's food industry is closely intertwined with its reputation for a clean environment, high quality and integrity. It is reassuring that the outbreak of FMD, which in Scotland was largely confined to the Dumfries and Galloway region, has not apparently resulted in more severe damage to Scottish food exports. However, the legacy of the beef ban in the 1990's has certainly taken time from which to recover. Indeed, it is only recently that the French Government has finally lifted its ban on British beef, despite being in contravention of EU law up to that point. With France being the foremost market for Scottish food exports, the impact of such events is not to be underestimated.

2.1 Manufacturing Industry Export Performance

Whisky/Food and Drink (Cont'd)

The risk of damaging health scares, whether justified or not, can be detrimental to the reputation of Scottish exporters. Scotland has enjoyed a high and increasing reputation for its fish and seafood in some of the most discerning consumer markets in the world. France, Spain and Belgium are highly important markets for such Scottish produce. A wide range of species fished in Scottish waters are exported around the world, as far afield as Asia and Latin America. Scottish wild and farmed salmon has become a major exporter, sustaining jobs in many remote Scottish communities. It is to be hoped that current debates about striking the balance between the environment and the industry will reach constructive conclusions and will not jeopardise the hard-earned reputation and potential of Scotland's exports in this arena. Meanwhile, the future livelihood of Scotland's fishing fleet is unclear as a result of current EU negotiations, and must be cause for concern when many manufacturing companies around Scotland's coastline have built their exporting success on the processing of primary produce from adjacent fishing grounds.

Other sectors which continue to enjoy export success include soups and preserves, biscuits and confectionery, specialist cheeses, specialist beers and ales, soft drinks and mineral waters.

Chemicals

The chemicals sector remains the fourth largest exporter, although export sales from the industry fell for the second successive year, this time by 17.7% to a level of £1,416.7m. The sector incorporates a wide range of activities from petrochemicals, agri-chemicals and industrial gases to pharmaceuticals, paints, coatings and photographic film. This diversity has been mirrored by a range of findings reported by survey respondents. For some manufacturers, export sales have continued to witness substantial growth while others have experienced a sharp downturn contributing to job losses and downsizing. The announcement of plans by Alcan Chemicals to close their Burntisland plant in 2002 is a further signal of changing fortunes in some parts of this industry.

Machinery and Equipment

A marginal upturn of 2.9% in exports from the Machinery and Equipment sector is to be welcomed, in the context of declining sales from many other sectors. The value of exports from the sector reached £884.8m, placing it firmly in fifth place amongst the top industries. In view of the continuing pressures on engineering manufacturing industry, it is heartening to record that many companies in the sector have been able to maintain market share in the face of severe international competition as well as the ongoing problems of the investment climate and skills shortages at home. Strong demand from the global energy, water and environmental sectors has sustained activity in this industry, which includes a wide range of engineering interests including those manufacturers supplying the oil and gas sector. A trend noted in previous reports is that many companies in the sector are now equally active in supplying know-how and project management expertise as in the supply of manufactured plant and equipment. In reporting the results of this survey, the limitations of the SIC classifications means that companies are coded according to their principal product or service, whereas many may in fact be involved in supply of both manufacturing and services. Export markets for companies in these fields are truly global, including many lesser known markets in Asia, Africa, Latin America and the Middle East.

2.1 Manufacturing Industry Export Performance

Paper and Paper products

This sector reported one of the most impressive export growth rates in 2000 at 24.9%. It is disappointing, therefore, to report a significant reversal of fortunes in the industry for 2001 with exports falling by 18.0% to a value of £366.4m. The industry comprises a number of major employers across Grampian, Fife, Forth Valley and Ayrshire. The year 2001 saw the closure of Donside Paper Company in Aberdeen, while other individual mills around the country were closed as a result of company rationalisation plans. The high cost of raw materials has been problematic for the industry in recent years, and many companies in Scotland are concentrating their efforts on higher-value niche products, such as the highest quality coated, speciality and security papers. As such, companies are extending the opportunities for export business in a wide range of markets across Europe, Asia, the Middle East and Latin America.

Other sectors

Exports from the textiles and clothing sectors have continued to fall, in line with the experience of recent years. In particular, the apparel sector has recorded a near halving of exports over two years, highlighting the challenges facing the industry from global competition. This period has seen intensive restructuring in the ownership and composition of the Scottish sector, which has involved some painful downsizing and job cuts. The final closure of the Levi Strauss plant, for example, was indicative of the loss in 2001 of previously substantial export business. Chinese cashmere manufacturers continue to pose an increasingly competitive threat, with easy access to raw materials and ability to produce higher-quality garments than previously but with significantly lower labour costs. It is widely acknowledged, however, that the future of the Scottish sector lies in strong brands, design and quality which can compete at the highest levels of international luxury consumer goods markets. In this respect, there have been promising developments by Scottish manufacturers, both individually and collectively. For example, the Scottish Cashmere Club, representing key manufacturers in the cashmere knitwear industry, has worked successfully to gain recognition and business in markets such as Korea, through imaginative targeting of younger, affluent consumers. Other well known companies have succeeded in reinventing the design, image and perception of their products to attract enhanced profile and new customers.

Exports from the Medical, Precision and Optical Engineering sector showed strong growth during the year, largely accounted for by outstanding performance by one or two key companies in the sector.

In the Other Transport sector, which includes aerospace and shipbuilding interests, a sizeable decline in exports was recorded. However, exports from this sector are notoriously volatile year on year and are largely dependent on unique contract projects which may be reported in one accounting year or spread over a number of financial years.

SME and Large Manufacturing Companies

The statistics in Table 19 were derived by estimating separately for small and medium sized enterprises (SMEs) (i.e. those with up to 249 employees) and large companies (250 plus employees), based on Scottish employment only. This enables the relative contributions of small and large companies to be assessed. It should be noted that the figures in Table 19 for Other Food Products and Beverages exclude whisky. This is because, as mentioned in the introduction to the survey, whisky statistics used in this report are sourced from the Scotch Whisky Association. An employment breakdown is not provided by the SWA. However, it can be assumed that the majority of whisky exports would be generated by companies employing more than 250 staff.

Table 19 Relative Contributions of SME and Large Companies - 2001

INDUSTRY (1992 SIC DIVISION)		SME Company Exports £m	Large Company Exports £m
(15)	Manufacture of Other Food Products and Beverages	332.2	82.9
(16)	Manufacture of Tobacco Products	-	-
(17)	Manufacture of Textiles	143.5	80.7
(18)	Manufacture of Wearing Apparel; Dressing and Dyeing of Fur	40.6	26.0
(19)	Tanning and Dressing of Leather; Manufacture of Luggage, Handbags, Saddlery, Harness and Footwear	68.6	0
(20)	Manufacture of Wood and Wood Products	26.3	4.2
(21)	Manufacture of Pulp, Paper and Paper Products	126.8	239.6
(22)	Publishing, Printing and Reproduction of Recorded Media	32.7	19.1
(23)	Manufacture of Coke, Refined Petroleum Products and Nuclear Fuel	88.7	203.4
(24)	Manufacture of Chemicals and Chemical Products	406.7	1,010.0
(25)	Manufacture of Rubber and Plastic Products	80.9	242.8
(26)	Manufacture of other Non-Metallic Mineral Products	99.0	20.3
(27)	Manufacture of Basic Metals	116.3	4.1
(28)	Manufacture of Fabricated Metal Products, except Machinery and Equipment	218.7	96.7
(29)	Manufacture of Machinery and Equipment nec	337.7	547.1
(30)	Manufacture of Office Machinery	35.3	5,768.5
(31)	Manufacture of Electrical Machinery and Apparatus nec	114.9	265.9
(32)	Manufacture of Radio, Television, and Communication Equipment and Apparatus	172.5	3,007.2
(33)	Manufacture of Medical, Precision and Optical Instruments, Watches and Clocks	138.6	122.5
(34)	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	13.6	67.0
(35)	Manufacture of Other Transport Equipment	43.4	618.5
(36)	Manufacture of Furniture; Manufacturing nec	61.2	27.2
(37)	Recycling	18.6	0
Total of above (as % of all exports)		2,716.8 17.9	12,453.7 82.1

Notes: (1) An SME is defined as having 249 or fewer employees and is based on Scottish employment only.
(2) The figures for Food products and beverages exclude whisky, gin and vodka
(3) N.B. Whisky/Gin/Vodka exports for 2001 were £2,435.1m

SME and Large Manufacturing Companies

Figure 4 illustrates the export breakdown by industry sector within the SME company category for 2001 exports.

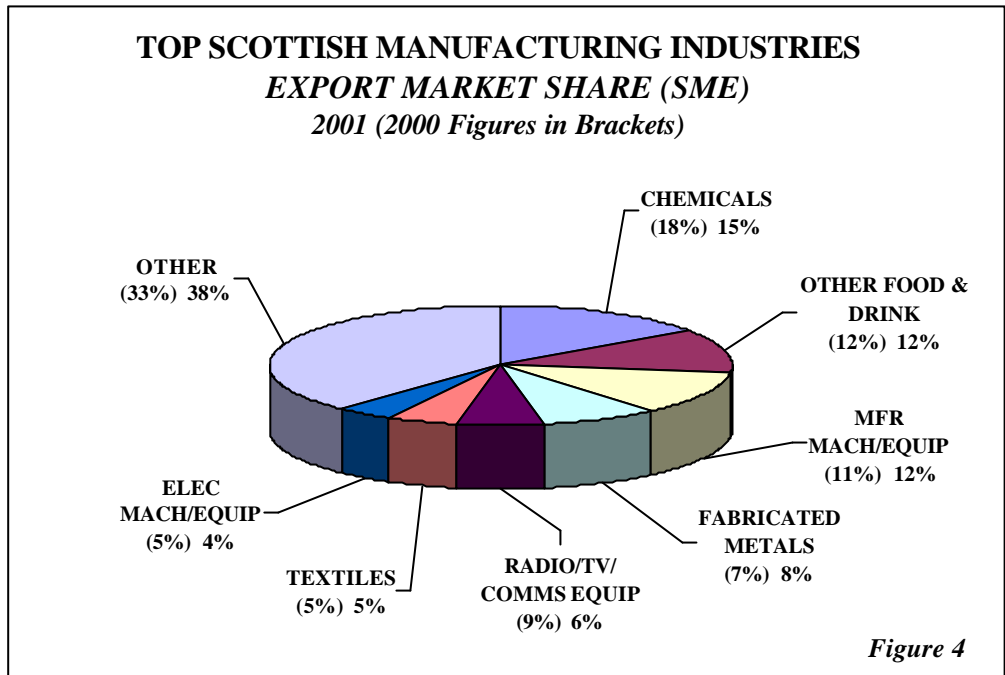


Figure 4

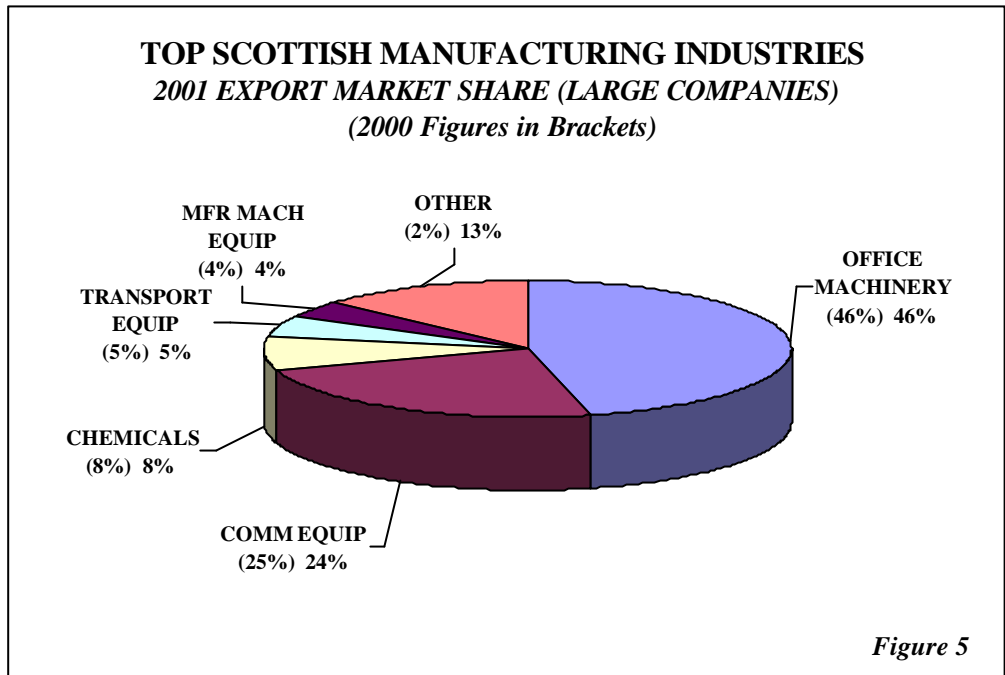
Once again, the largest share of exports from the SME sector comes from the Chemicals industry, although its share has dropped from 18% to 15% between 2000 and 2001. The overall fall in exports of Chemicals during 2001 was not solely attributable to large companies as was the case in 2000. Exports from SMEs in this industry have fallen from £489.7m in 2000 to stand at £406.7m. The total share of food and drink exports from SMEs remains at 12% however exports rose by 4.6% during the year. In addition, the Machinery and Equipment, Fabricated Metals and Textiles sectors also experienced growth in their share of total SME exports during the period.

The growth above is in contrast to the downturn experienced by the Radio/TV/Communications equipment sector which has dropped from 9% to 6% following a decline in exports from SMEs from £231.5m to stand at £172.5m in 2001. The Electrical Equipment sector has continued its decline to stand at 4%, compared to 5% in 2000 and 6% in 1999.

Figure 4 illustrates the sectoral diversity of SME exports in comparison to the large category. Seven industries make up 62% of total exports compared to five in the large category that account for 87% of the total.

SME and Large Manufacturing Companies

Figure 5 illustrates the export breakdown by industry sector within the large company category.



Large companies have experienced a drop in overseas sales from £14,875.1m in 2000 to £12,453.7m in 2001, a decrease of 16.3%. As a result, the overall share taken by large companies has fallen from 85% to 82% over the period. Assuming exports of Scotch whisky, gin and vodka derive from companies employing over 250, the figure for 2001 would rise to £14,888.8m and would account for 85% of the total. This compares to a total in 2001 of £17,171.4m, representing 86% of the total.

In contrast to the SME category, only a small number of industries make up a large proportion of large company exports. Office Machinery and Radio/TV/ Communications Equipment make up 70% of total exports from large companies. In other sectors, Chemicals, Machinery and Equipment and Transport have all retained their share at 8% , 4% and 5% respectively.

In the large category, of the 21 SIC division where export activity is measurable, three sectors increased and 18 decreased. The performance of SMEs was better with 11 of the measurable SIC Divisions showing an increase and 11 showing a decline.

2.2 Service Sector Export Performance

Table 20 shows the overall estimates of Scottish service exports during the last three years, expressed in both current and constant (1995) prices. The Office for National Statistics price deflator for export of services was used to convert current prices to constant prices. There have been minor revisions to the historic data in the light of new information.

SCDI has been estimating the value of exports from the service sector since 1993. During this time the research has expanded in an attempt to capture all export activity from the Scottish service sector. Export activity is defined as services supplied to overseas markets from a company's domestic base. There are many examples of Scottish companies which have expanded internationally by acquiring subsidiary companies abroad. In these situations the overseas companies are autonomous companies providing services from the market in which they operate and their output is not considered as an export, as there is no export of services from Scotland to the overseas marketplace. These issues are addressed in the Global Connections section of this report.

Table 20 shows that service sector exports rose by 13.1% in 2001. At the same time, UK exports of services fell by a marginal 1.3% during the year. As a result, the Scottish share of UK services exports has risen from 3.7% in 2000 to 4.3% for the year surveyed.

	1999	2000	2001
Scottish Service Sector Exports (£m current prices)	3,007	2,869	3,244
(% change from previous year)	+3.4%	-4.6%	+13.1%
Scottish Service Sector Exports (£m constant (1995) prices)	3,358	3,089	3,485
(% change from previous year)	+4.2%	-8.0%	+12.8%
UK Service Sector Exports (£m current prices)	70,443	77,199	76,225
(% change from previous year)	+8.8%	+9.6%	-1.3%
UK Service Sector Exports (£m constant (1995) prices)	78,619	83,099	81,874
(% change from previous year)	+9.6	+5.7%	-1.5%
Scottish share of UK Service Sector Exports	4.3%	3.7%	4.3%

2.2 Service Sector Export Performance

Figure 6 illustrates the service sector's export totals since 1995. Following a decline in 2000, exports have recovered to exceed the level recorded in 1999.



Table 21 lists service sector exports by five main groupings within services: professional, education and training, recreation, transport and financial services. Four of the five sectors noted have recorded increased activity, with only recreational services (largely comprising tourism) reporting a downturn.

Table 21 Scottish Service Sector Exports by industrial grouping 1999 - 2001

	1999 £m	2000 £m	2001 £m
Professional Services	1,496.8	1,344.3	1,556.0
Education and Training	207.2	264.7	298.3
Recreational Services	863.5	803.5	770.7
Transport Services	32.3	32.7	37.1
Financial Services	407.7	424.2	582.1
Total	3,007.5	2,869.4	3,244.2

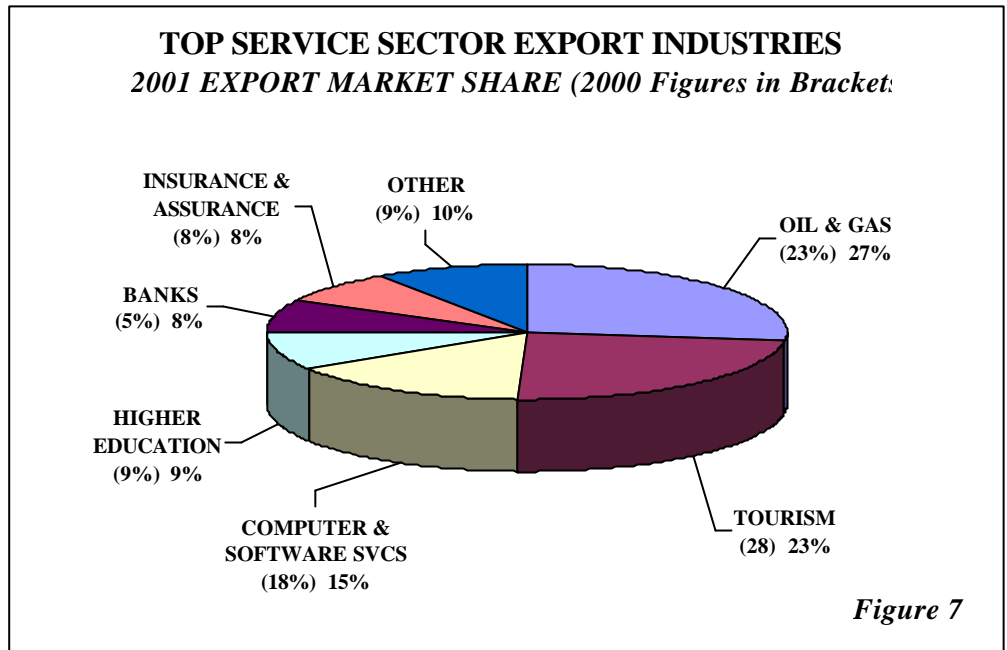
As in previous years, exports from the professional services grouping remains by far the greatest exporter from the service sector, accounting for 47.9% of the total. This reflects in the main a large upturn in activity from the oil and gas services sector.

2.2 Service Sector Export Performance

Table 22 lists a detailed breakdown of exports within professional services, education and training, recreational services, transport services and financial services, while Figure 7 illustrates the relative share taken by the top exporting sectors.

<i>Table 22 Scottish Service Sector Exports by Industrial Sector 1999 - 2001</i>			
	1999	2000	2001
	£m	£m	£m
<u>Professional Services</u>			
Accountants	16.2	16.3	15.8
Advertising	6.9	0.4	0.4
Architects	1.8	2.0	3.2
Chartered Surveyors	2.5	3.2	4.3
Commercial Research and Development	84.2	87.7	88.6
Computer and Software Services	381.5	520.1	497.6
Consulting Engineers	6.7	7.1	10.3
Design Services	2.6	1.5	2.2
Energy	1.7	3.4	8.2
Lawyers	9.7	10.5	10.3
Oil and Gas	958.8	668.2	884.7
Other Business Services	24.2	23.9	30.4
<u>Education and Training</u>			
Commercial Training	4.9	6.5	8.6
Further Education	6.6	7.0	8.2
Higher Education	195.7	251.2	281.5
<u>Recreational Services</u>			
Catering	5.7	9.6	12.7
Film, TV and Music Production	12.4	1.7	0.8
Performing Arts	0.4	0.2	0.2
Tourism	845.0	792.0	757.0
<u>Transport Services</u>			
Transport	26.7	27.8	32.4
Ship Management	5.6	4.9	4.7
<u>Financial Services</u>			
Banks	130.7	149.0	267.1
Auxiliary to Banking	3.3	4.5	3.0
Insurance/Assurance	228.6	217.6	251.0
Other Financial Institutions	45.1	53.1	61.0
Total Service Sector Exports	3,007.5	2,869.4	3,244.2

**2.2 Service Sector
Export
Performance**



Professional Services

Exports from the professional services grouping have increased by 15.7% over the year, rising to a level of £1,556m.

Oil and Gas Services

Within this category, the major contributor is the oil and gas services sector. Following a downturn recorded in 2000, this sector has now reported a substantial improvement of 32.4% in export sales. The cyclical nature of oil and gas as a global industry has led over past years to volatility in the activity of Scottish companies in this arena. However, it is clear that Scottish suppliers of services are very well positioned to generate business from developing oil markets around the world. In the same way that suppliers of equipment have developed leading-edge products and technologies resulting from a rich vein of experience in the challenging conditions of the North Sea, so suppliers of services have been able to develop niche expertise which can turn them into global players. The highly-tuned knowledge which has supported and contributed to the successful exploration of North Sea operations is welcomed in such markets as West Africa, the Transcaucasus, South East Asia, Latin America and the Indian sub-continent, in contributing to a more rapid and efficient exploitation of those regions' natural resources.

Computer and Software Services

This sector has been one of the star performers in exports of services over recent years. In 2001, however, a modest downturn of 4.3% was reported, reducing exports to a value of £497.6m. Many of the companies in this sphere offer leading-edge services in creative industries, such as the provision of digital/multimedia, niche software development, IT training solutions, video games development and e-commerce consultancy. As such, the sector offers one of the brightest prospects for developing Scotland's position as a knowledge-based economy. It is not altogether surprising that such services were less in demand in 2001, taking into account the severe global downturn in the information technology and telecommunications industries. It is likely that a recovery in these sectors, and in the global economy generally, will lead to a strong resumption of demand for providers of such services in the key markets of North America, Europe and Asia. In the

meantime, however, the harsh investment climate at home and overseas caused significant difficulties for many companies in this field during 2001.

2.2 Service Sector Export Performance

Commercial Research and Development

The survey this year has incorporated healthcare services into the broader commercial research and development category. It had been gauged that the boundaries between the two groups were becoming increasingly artificial with a considerable degree of overlap in the activities of companies in both spheres, particularly in such areas as biotechnology. The combined category is the third largest supplier of professional services, increasing export sales marginally in 2001 by 1% to a value of £88.6m. The sector has developed a key role to play in Scotland's evolving status as a knowledge-driven economy, with the value of exports increasing by 22.5% over the last three years. The figures underscore Scotland's strengthening reputation in the life sciences sectors as well as a range of other fields of laboratory research and development which Scottish companies can provide to global clients. Such services are aimed at clients in the fields of drug discovery and development, biotech and pharmaceutical testing, diagnostics, pre-clinical trials and the like. The range of target markets to which Scottish-based companies can supply such expertise is broadening over time, but would typically include the United States, Canada, Europe, Japan, Korea and Taiwan. Companies in this sector are frequently developing strategic links with other commercial enterprises and with academic institutions in order to increase the portfolio of international opportunities available and to share the risks and rewards. Attracting investment into the sector can still be regarded as a long-term venture in some cases, and the opportunity to collaborate globally can be a significant boost to the scale of activity and to shortening of timescales. The objective of commercialising the research base in Scottish Universities and other institutions remains a key policy objective. Scotland's excellence in the sciences and technology creates the platform for developing new generations of spin-out companies which, if sufficiently leading-edge in products and approach, can become global players in a relatively short timescale.

Other Professional Services

The remaining sectors within the professional services category are smaller in comparison. Nevertheless, the majority have experienced growth in 2001. Consulting engineers, energy services and other business services categories have reported a healthy rise in export activity, with modest improvements recorded by chartered surveyors and design services. Accountants and lawyers have experienced marginal decreases in activity during the year.

Education and Training

Exports from education and training have risen from £264.7m to £298.3m in 2001, a substantial increase of 12.7%. This follows an increase of 27.8% in the preceding year. The sector now accounts for 9.2% of total services exports. Research into the value of education and training exports to the UK economy estimates that the sector generates around £7 billion per annum.

Higher Education

The highest figures are reported by the higher education sector with overseas sales valued at £281.5m, representing an upturn of 12.1% during the year and accounting for 94.4% of the whole sector. The largest proportion of income within this sector is derived from overseas students, with the remainder coming from overseas contracts, research grants, on-line/distance learning and other services. The attraction of overseas students, particularly at postgraduate level, is an important source of revenue and international reputation for Scottish universities. Science, engineering, medicine and business school courses in Scotland are significant targets for international marketing. However, this is a highly prized arena with strong international competition from other English-language environments such as the United States, Canada, Australia and the rest of the UK.

2.2 Service Sector Export Performance

Higher Education (Cont'd)

The international provision of tertiary education is a high-growth business, with the cream of students from emerging markets such as China and Central and Eastern Europe adding to a global population with a thirst for knowledge and teaching of a proven calibre. While exports from Scotland are not growing to match international rates, consistent growth has been experienced over the last five years and looks set to continue.

Further Education and Commercial Training

Although smaller in value, exports from both further education and commercial training sectors continue to rise steadily. A 17% increase was reported by further education, while the commercial training sector rose by a substantial 32.3% to a value of £8.6m.

Recreational Services

Tourism

Exports from recreational services have fallen for the third successive year, recording a 4.1% decline in 2001 to stand at £770.7m. In order to avoid duplicating the annual research carried out by VisitScotland, tourism businesses are not incorporated directly in the survey process but their figures are sourced from VisitScotland. Tourism exports are reported in the survey on the basis of domestic sales to overseas visitors. Tourism accounts for almost the entirety of recreational services exports at 98.2% of the total. It comes as no surprise that exports from Scotland's tourist industry declined once again over the period from £792.0m to £757.0m. Throughout 2001, the ongoing challenges facing tourism were already widely acknowledged. The devastating effects of the UK foot and mouth disease crisis in early 2001 were watched by television viewers around the world, adding to an already difficult climate for the industry. High fuel costs, poor perceptions of the public transport network, a high sterling exchange rate, and ongoing evaluation of cost versus quality in accommodation and services, added to the uphill struggle in attracting overseas visitors. This was before the unprecedented events of 11 September, which affected the travel and tourism industry more than any other in the immediate aftermath.

Film TV and Music Production

A further downturn is noted this year in exports from film, TV and music production. The sector has dipped below the £1m mark, since reaching a peak of £12.4m in 1999. As has been noted in previous reports, exports in this industry can be variable as the scheduling of productions and location choices ultimately lie outwith the control of Scottish agencies. While Scotland continues to market itself assertively for future international opportunities, a large number of UK production companies have delivered film and television projects which are the principal source for sustaining the Scottish industry. As a result growth opportunities remain for this sector whether through exporting or through trade with the rest of the UK. Meanwhile, a range of small independent music companies, whose activities encompass representation of artists, through to licensing and publishing of both traditional and contemporary music, are active in overseas markets. The principal target markets for these companies are the United States, Canada, Australia, New Zealand and Japan.

**2.2 Service Sector
Export
Performance**

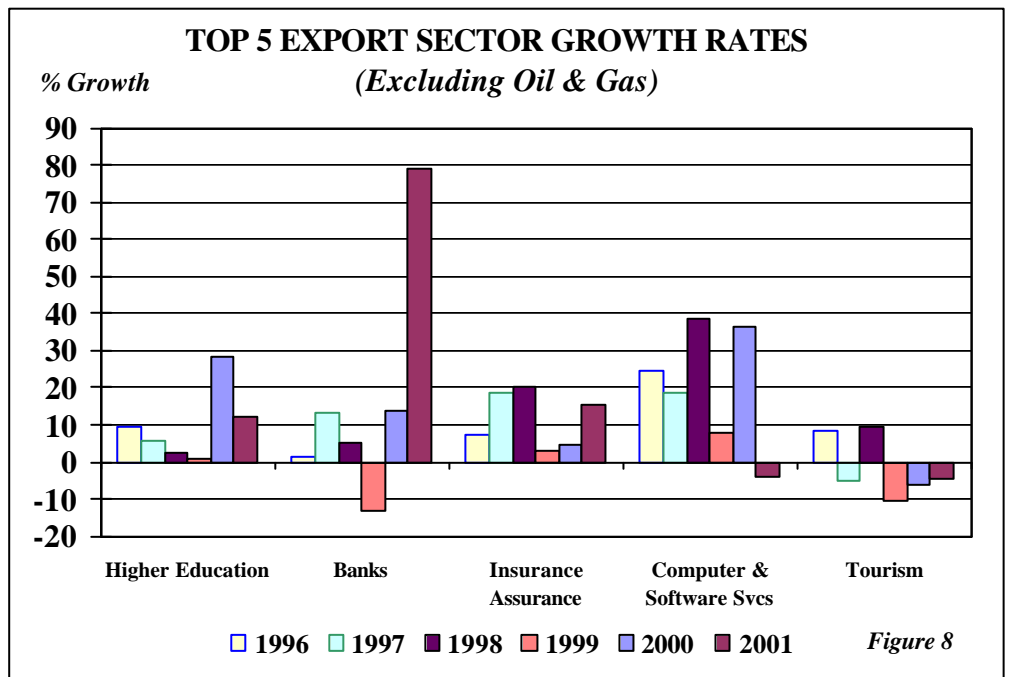
Financial Services

The financial services sector is one of Scotland’s largest and most significant employers and is furthermore an important contributor to Scotland’s export sales. Results in 2001 confirm this, with the sector now accounting for 17.9% of total service exports, growing from £424.2m to £582.1m in 2001. The growth during the year has largely been fuelled by sales from the banks, according to figures supplied by the banking sector. The international reach of the major Scottish banks has noticeably extended in recent years, through successful policies of acquisition and strategic alliances in North America and Europe. This has also led to greater profitability from overseas activity. The enhanced operation of two major UK banks now headquartered in Scotland has added to the scale of activity.

In addition to the significant increase in overseas sales by the banks, it is encouraging to see higher export activity reported by the insurance/assurance sector and by other financial institutions (largely comprising fund management firms) despite the market conditions. 2001 was generally perceived as an intensely difficult period, with global stock markets enduring punishing pressure throughout much of the year. The aftermath of 11 September had a major impact on the global insurance sector, and it remains to be seen whether the effect of that crisis will materialise in the figures for 2002.

The definitions of exporting activity in this sector can be difficult to determine. For the purposes of this survey, exports from banking are defined as the interest, net fee and commission income accrued by the banks. For insurance/assurance the “effective income” is used as a benchmark measure applied to long term insurance/assurance business. Effective income is calculated as new annual premiums plus 10% of single premiums, and sales to overseas customers have been calculated on this basis for the insurance/assurance sector export estimates. The estimates for other financial institutions exports consist of fees for investment management and commission income, and for the auxiliary to banking sector (mainly stockbroking firms) fee income.

Figure 8 shows the percentage change in some of the top exporting sectors.



SME and Large Service Sector Companies

The service sector is significantly greater in size than the manufacturing sector in terms of the number of businesses and the employment it accounts for, but also has a greater proportion of small firms. The responses to the survey range from self-employed individuals to major businesses with employment in the thousands.

The responses to the 2001 survey were classified into SME and large companies. The results of this analysis are listed in Table 23 below.

Table 23 Scottish Service Sector Exports SME Breakdown (2000 – 2001)

Company Sizeband	Value of Service Sector Exports (£m)		Proportion of Service Sector Exports	
	2000	2001	2000	2001
SME (0-249 employees)	1,647.0	1,444.5	57.4%	44.5%
Professional Services	788.6	638.9	58.7%	41.1%
Education and Training	10.6	9.9	4.0%	3.3%
Recreational Services	790.3	755.6	98.4%	98.0%
Transport Services	32.7	37.1	100%	100%
Financial Services	24.8	3.0	5.8%	0.5
Large (employees > 249)	1,222.3	1,799.7	42.6%	55.5%
Professional Services	555.7	917.1	41.3%	58.9%
Education and Training	254.1	288.4	96.0%	96.7%
Recreational Services	13.1	15.1	1.6%	2.0%
Transport Services	0	0	0%	0%
Financial Services	399.4	579.1	94.2%	99.5%

Within each sector there are variations in terms of the proportion of exports that can be attributed to SME or large companies. Sectors including insurance & assurance, banks, and higher education can in general be attributed to large companies, whereas in sectors such as tourism, commercial training and commercial R&D the majority of exports are attributable to SMEs.

Table 23 shows that the increase in export activity within the service sector has derived primarily from the large company category, which increased from £1,222.3m in 2000 to stand at £1,799.7m in 2001. This increase is primarily due to growth within the banking sector and in the oil & gas Industry, the latter increase being in contrast to the drop witnessed over 2000. In terms of the proportion taken by SMEs, this has dropped over the period from 57.4% to 44.5%, whereas the proportion taken by large companies has grown from 42.6% to 55.5%.

2.3 Primary Sector Export Performance

Table 24 identifies primary exports by sector over the last three years recorded. Minor revisions have been made to the historic data in the light of new information.

SCDI has been estimating the value of exports from Scotland's primary sector over the past seven years, with figures stretching back to 1995. The definition of the primary sector is based on the 1992 Standard Industrial Classification and the study also includes the activities of the water utilities and electricity generators. The measurement is of unprocessed products, usually at the first point of sale. Once the product has entered a plant for further processing it is considered a manufactured product. Nevertheless, it is important to emphasise the significance of primary producers in providing the feedstock for much of Scottish-based manufacturing.

*Table 24 Scottish Primary Sector Exports and Transfers to Overseas Markets 1999-2001
(£'000 current prices)*

	1999 (£'000)	2000 (£'000)	2001 (£'000)
<u>Agriculture</u>			
SIC 01			
Livestock + Products	34,018	30,244	13,379
Cereals	23,463	1,595	4,125
Potatoes	10,497	4,983	7,586
TOTAL	67,978	36,822	25,090
<u>Fisheries</u>			
SIC 05			
Seafish	62,279	68,983	85,031
Shellfish	1,153	897	881
Salmon	119,132	128,388	114,863
TOTAL	182,564	198,268	200,775
<u>Forestry*</u>			
SIC 02			
<u>Minerals</u>			
SIC 10/13			
Mines	2,031	1,787	788
Quarries	6,450	9,090	4,083
TOTAL	8,481	10,877	4,871
<u>Oil And Gas</u>			
SIC 11			
Oil Hydrocarbons	5,209,086	6,521,456	6,266,869
Gas Hydrocarbons	73,968	142,686	191,983
TOTAL	5,283,054	6,664,142	6,458,852
TOTAL	5,542,077	6,910,109	6,689,589
TOTAL (Excl Oil & Gas)	259,023	245,967	230,737

* No exports have been recorded from the Forestry sector

Total exports for 2001, including oil and gas, are valued at £6,689.6m, a marginal decline of 3.2% on the figure recorded for 2000. In large part, this is attributable to a 3.9% downturn in sales of oil hydrocarbons outwith the UK. In a sector which sees a high degree of volatility, largely led by the periodic fluctuations in global oil prices, this is not overly surprising. Exports of gas hydrocarbons, on the other hand, increased by a sizeable 34.5% to a new level of £191.9m.

2.3 Primary Sector Export Performance

The 2000 figure for oil hydrocarbons was the highest recorded since 1995, reflecting a substantial upturn in investment and activity in the Scottish sector and a return to export growth. While the figures for 2001 record a fall, the situation remained relatively healthy in comparison to the very difficult climate experienced in the late 1990s. Whether the outlook for the sector will remain as positive over the next year is questionable. In addition to an uncertain geopolitical outlook internationally, the industry is projecting an adverse impact from the Chancellor of the Exchequer's Budget announcement in April 2002 which seeks to adjust the North Sea fiscal regime unfavourably.

Without the effect of the oil and gas sectors, the contribution of primary industries to Scotland's exports is relatively modest at a total of £230.7m. This represents a decrease of 6.2% for these sectors over the corresponding period in 2000. Fisheries remains the top exporting sub-sector, with agriculture and minerals reporting a downward trend for the year. Exports from the forestry sector are sufficiently negligible to go unrecorded, although there is thought to be future export potential in this sector.

The year remained a precarious time for the agriculture sector, showing a further decline in the downward trend recorded since 1999. A major slide was experienced in exports of livestock, the main contributor to the sector. The impact of the foot and mouth crisis on the UK national herd is evident. This emerged in Scotland in February 2001 and, while successfully contained to one region, the situation caused a prolonged suspension of the movement of stock and severe disruption to the possibilities of any export activity during the year. At the same time, commodity prices across the whole live animal sector remained low, causing continued depression of farm incomes. On a more positive note, exports of potatoes, arable crops and cereals improved over the year surveyed.

In the fisheries sector, exports of seafish increased 23.4% to reach £85.0m, while shellfish sales fell only marginally. The depletion of North Sea and other fish stocks is now a more contentious issue than ever. While the decommissioning regime continues, already reducing the capacity of the Scottish fleet, proposals by the European Commission to conserve all white fish stocks, and particularly cod, have been greeted with dismay by the Scottish fishing community. The twin objective is to protect the ecological balance, whilst at the same time securing the long term survival of an industry which supports significant numbers of Scottish jobs including, as mentioned elsewhere in the report, many in the food processing sector. In addition to Scotland's domestic processing capacity, there are also substantial direct landings by Scottish vessels in other markets.

The export market for aquacultured fish and shellfish has been of growing significance in recent years with the Scottish brand securing a quality reputation in lucrative consumer markets, principally in Europe but also in North America and Asia. Salmon exports recorded a 10.5% decline in 2001, the first evidence of a downturn since 1996. Prices rose to a record level in 2000, proving to reach a peak that year and dropping in 2001. The downturn perhaps also reflects the ongoing pressure on the industry. Much of the fish farming community is located in some of the most economically fragile areas of Scotland. Restructuring of the industry has brought about an increasing level of consolidation and new ownership. International competition from Norway, Chile and Canada poses the threat of erosion of market share, in some cases as a consequence of dubious pricing policies. Finally, the environmental issues surrounding the aquaculture sector are heightening awareness of what is at stake in an industry which is key to sustaining employment in many remote Scottish communities.

Exports from the salmon sector during the year were mainly destined for France (49%), Spain (15%), the United States (15%), Germany (10%) and Belgium (4%). The European Union is the largest market for Scotland's primary exports in each of the fisheries, agriculture and mining/quarrying sub-sectors.

Primary Sector UKCS Transfers

2.3 Primary Sector Export Performance

Petroleum hydrocarbons from the Northern UKCS area, brought onshore and subsequently transferred to UK and export markets from Scottish terminals in 2001 were valued at £7,390m (exports £6,267m, UK £1,123m). This compares with £8,074m in 2000 (exports £6,521m, UK £1,553m). This data is compiled from the four oil terminals transferring from the Northern and Central UKCS, which have their initial landfall in Scotland. The four terminals are Sullom Voe in Shetland and Hound Point in the Forth Estuary operated by BP, and Nigg in Ross-shire and Flotta in Orkney, both operated by Talisman Energy.

Gas hydrocarbons from the Northern UKCS area, brought onshore in Scotland and then transferred via the gas grid infrastructure to UK and export markets in 2001 were valued at £1,917m (exports £192m, UK £1,725m). This compares with £1,661m in 2000 (exports £143m, UK £1,519m). The UK figures are calculated using data from the UK Gas National Transmission System operated by Transco. Overseas data is based on transfers from Scotland's gas Interconnector to Ireland.

3.1 Destination of Manufactured Exports

Section 2 looked at the value of Scotland's exports by industry sector. Section 3 now concentrates on the destination of these exports.

The destination of Scotland's manufactured exports analysed by geographic region is given in Table 25 and Figure 9.

Table 25 Destination of Scottish Manufactured Exports by Geographic Region (£m Current Prices) (1999 – 2001)

	1999		2000		2001	
	Value	%	Value	%	Value	%
European Union	12,411	62%	12,045	61%	9,673	55%
North America	2,326	12%	2,697	13%	2,980	17%
Asia Pacific (excl. Japan)	1,172	6%	1,541	8%	1,358	8%
Western Europe (excl. EU)	1,221	6%	1,009	5%	909	5%
Japan	475	2%	688	3%	667	4%
Middle East	817	4%	601	3%	627	3%
Latin America	503	3%	443	2%	499	3%
Africa	373	2%	325	2%	399	2%
Eastern Europe	465	2%	392	2%	383	2%
Australasia	128	1%	123	1%	110	1%

NB Western Europe (excl. EU) consists of Iceland, Liechtenstein, Malta, Norway and Switzerland.

TOP SCOTTISH MANUFACTURED EXPORT MARKETS IN 2001
BY GEOGRAPHIC REGION (2000 Figures in Brackets)

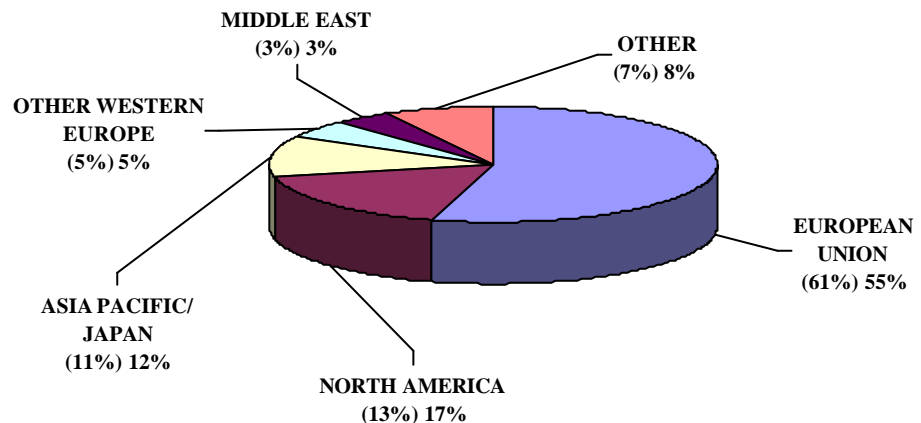


Figure 9

The principal trading area for Scotland's manufactured exports remains the European Union. However, as noted earlier in this report, declining sales in 2001 from some of the largest manufacturing sectors resulted in an overall downturn in sales to most European markets. The value of exports to the EU fell by a sizeable 19.7% for the year, dipping below the £10 billion mark for the first time since the last enlargement of the EU. Consequently, the share of Scottish exports destined for the EU has fallen from 61% in 2000 to 55%. Sales to other Western European markets also declined by 9.9%, although the regional share of total exports remained the same at 5%. Exports to Central and Eastern Europe witnessed very little movement, and have not risen above a 2% share over the last four years.

3.1 Destination of Manufactured Exports

In contrast to the depressed state of Scottish exports to Europe, a 10.5% rise in sales to North America was identified. This means that North America now accounts for 17% of Scotland's exports, up from 13% in the preceding year.

Exports to the Asia Pacific region remained above the £2 billion mark for the second successive year, although recording a slight decline. Sales to the Middle East, Latin America and Africa all rose marginally, but not enough to increase their percentage share of the total.

3.1 Destination of Manufactured Exports

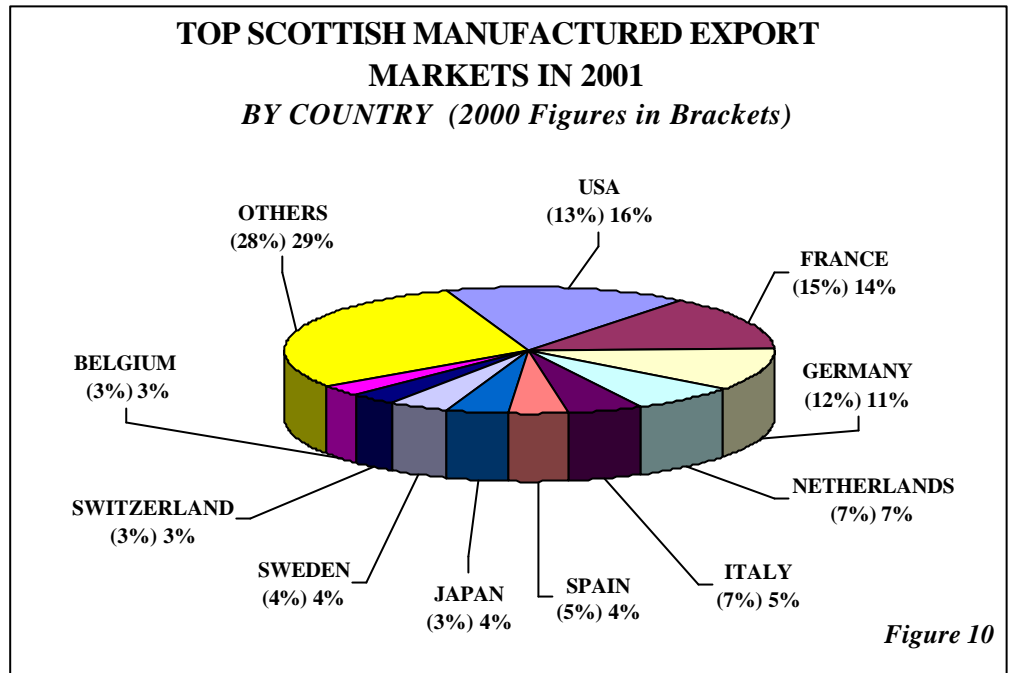
Table 26 and Figure 10 examine this in more depth. Table 26 shows the top 40 destinations of Scottish manufactured exports in 2001, along with comparable figures for 1999 and 2000, where available. Figure 10 illustrates the major country markets. For the first time since 1987, the United States has overtaken France and Germany as Scotland's top market.

Table 26 Top 40 Markets for Scottish Manufactured Exports (£m Current Prices) (1999-2001)

COUNTRY	1999	2000	2001
USA	2,088 (3)	2,490 (2)	2,824 (1)
FRANCE	3,386 (1)	3,056 (1)	2,407 (2)
GERMANY	2,250 (2)	2,431 (3)	1,965 (3)
NETHERLANDS	1,488 (4)	1,333 (5)	1,282 (4)
ITALY	1,432 (5)	1,475 (4)	915 (5)
SPAIN	904 (7)	952 (6)	746 (6)
JAPAN	475 (11)	688 (8)	667 (7)
SWEDEN	932 (6)	897 (7)	636 (8)
SWITZERLAND	637 (8)	599 (10)	512 (9)
BELGIUM	593 (9)	679 (9)	506 (10)
NORWAY	569 (10)	386 (11)	381 (11)
IRELAND	329 (13)	328 (13)	373 (12)
DENMARK	360 (12)	335 (12)	296 (13)
SOUTH KOREA	141 (22)	199 (18)	210 (14)
BRUNEI	*	231 (15)	209 (15)
HONG KONG	261 (17)	216 (16)	204 (16)
SINGAPORE	277 (=15)	249 (14)	202 (17)
UNITED ARAB EMIRATES	107 (27)	83 (33)	195 (18)
FINLAND	204 (19)	190 (19)	165 (19)
CANADA	238 (18)	207 (17)	156 (20)
MALAYSIA	106 (28)	112 (27)	150 (21)
GREECE	120 (25)	114 (=25)	139 (22)
ISRAEL	147 (21)	171 (20)	135 (23)
CHINA	74 (=32)	125 (24)	131 (24)
SOUTH AFRICA	154 (20)	129 (23)	127 (25)
PORTUGAL	277 (=15)	139 (22)	125 (26)
VENEZUELA	67 (36)	87 (32)	118 (27)
AUSTRIA	132 (24)	114 (=25)	113 (28)
POLAND	133 (23)	108 (29)	102 (29)
AUSTRALIA	112 (26)	107 (30)	97 (30)
TAIWAN	94 (30)	110 (28)	92 (31)
TURKEY	313 (14)	155 (21)	88 (32)
NIGERIA	*	*	86 (33)
MEXICO	42 (40)	60 (36)	82 (34)
RUSSIA	99 (29)	64 (35)	75 (=35)
CZECH REPUBLIC	52 (39)	91 (31)	75 (=35)
THAILAND	54 (37)	72 (34)	59 (37)
BRAZIL	74 (=32)	58 (37)	57 (38)
IRAN	*	*	49 (39)
EGYPT	*	51 (38)	47 (40)

* Not a Top 40 market for the specified year.

3.1 Destination of Manufactured Exports



The United States

The United States has taken pole position as Scotland's top market in 2001. Manufactured exports increased by 13.4% to a value of £2,824m. The robust economic growth enjoyed by the United States up until 2000 showed rapid signs of deceleration in 2001. However, this has not been as damaging to Scottish exports as had been feared by many. The US remains the world's largest importer. It is also the principal export market for the UK, accounting for 15.4% of total UK exports in 2001, and the largest market in the world for UK investment.

Perhaps the most significant difference between Scottish sales to the US and to the European Union is that exports from the electronics industries, while important, are not nearly so dominant. With sales spread over a wider range of industries, it is evident that the rapid reversal of fortunes experienced in many European markets has been avoided. The top sector by value was Radio/TV/Communications at £871.8m. Higher sales here are attributed to significantly higher exports reported by two or three large companies in specialist industry, rather than consumer electronics, fields. More generally, 2001 was the first in the history of the US cellular industry that sales of wireless handsets and infrastructure declined due to low consumer demand. While Motorola Inc still took the largest share of its domestic market, its revenues fell by 20% indicating the severity of the downturn in the global communications market.

Also significant were sales of Office Machinery at £476.8m, whisky at £343.3m, Transport Equipment at £274.3m and Chemicals at £207.5m. The US remains the largest market for Textiles at £41.4m, while some £18.7m of Food and Beverages exports was achieved.

3.1 Destination of Manufactured Exports

France

In 2001 France relinquished the top position it has enjoyed since 1993, slipping to second place in the rankings. For the second successive year, sales to France have fallen. In 2001, this represented a fall of 21.2% in the value of exports to £2,406.5m.

In large part, this has been driven by declining exports to the French market from the Office Machinery sector, which fell from £1.7 billion to £1.27 billion during the period. Nevertheless, France remains by far the largest export market for this industry in terms of Scottish exports, and indeed the French office equipment market grew by 7.5% in 2001 to a value of €6 billion, with photocopiers accounting for 47% of the market.

The second largest sector was Radio/TV/Communications equipment. This again showed a sharp decline over the preceding year. The French market for cellular and wireless communication systems has grown by 19.2% in volume to reach 37.3 million units, with further substantial growth forecast through to 2006. However, the market is currently dominated by multinationals not operating in Scotland. Nokia leads the field with a near 30% share of the total market.

France has traditionally been a significant market for Scotch whisky, despite the keen competition from wines and other spirits such as cognac. In 2001, France remained as third largest market for whisky at a value of £236.2m, climbing from £202.1m in 2000. France is easily the largest market for Scottish food and beverages, accounting for over £85m of sales across a wide range of products from smoked salmon to cheeses and preserves.

Germany

Germany remains a significant market in third place, although Scottish exports to the German market fell by 19.2%, equating to a loss of almost exactly half a billion pounds. Germany is the UK's second largest market, accounting for 12.5% of UK exports compared with 11% of Scottish exports. As with France, the relative weakness of the German economy in 2001 was an undoubted contributor to the fall in sales. However, with 82 million consumers Germany is still the world's third largest economy.

While overall Scottish exports from the Office Machinery sector fell rapidly in 2001, they remain twice as large to France as to Germany, with values of £1,273m and £600m respectively. To some degree, this accounts for France's elevated position in the top 40 table. In the Radio/TV/Communications sector, however, the picture is reversed with Germany showing significantly higher sales. Germany is the largest telecommunications market in Europe, both in terms of manufacturing and imports of equipment, and is still growing. Growth in this sector is driven by ongoing privatisation, deregulation and increased competition.

Exports from the Chemicals, Paper, Machinery and Equipment and Textiles sectors were next in order of importance. Germany is the third largest market for Scottish Food and Beverages, having been replaced in second position by Spain.

3.1 Destination of Manufactured Exports

General Overview

As illustrated in Figure 9, the EU now accounts for 55% of Scottish exports. Within that share, the twelve countries which currently constitute the Eurozone amount to £8,740m or 49.6% of Scottish exports. Exports to the Netherlands, Italy, Spain, Belgium, Finland and Portugal have all fallen, with sales to Austria static. Only Ireland and Greece have seen an upturn in sales. The other EU member non-participants in the single currency, Sweden and Denmark, also recorded a decline. GDP growth in many of the European markets was sluggish in 2001.

Sales from Scotland to Central and Eastern Europe have not yet recorded any upward trend. Indeed, exports to the three key Central European markets – Poland, Hungary and the Czech Republic – have fallen in each case. Certainly, the economic climate has been relatively weak or variable in these countries during the year. Changing patterns are, however evident in the scale of foreign direct investment going into the many of the markets concerned. The Czech Republic and Hungary are now leading recipients of major multinational investments from the electronics, automotive and other sectors. A proportion of this investment mirrors the kind of projects Scotland would have attracted in the past. Scottish manufacturers in the supply chain are already becoming alert to this transition, with some having established a presence in these markets to be close to their customer base. It can be expected that trading opportunities will increase significantly with the region, as has been the case following each of the earlier enlargements of the EU. Meanwhile, exports to the Russian Federation have climbed to £75m.

Amongst the Asian markets, Japan has moved up to seventh position in the top 10 and continues to be Scotland's largest market in the Far East by some distance. Many commentators have written off Japan in view of its persisting economic troubles and the faltering pace of reform in deregulation of markets, banking and structure of major industrial corporates. Despite these challenges, which have been at the top of the agenda for the last decade, Japan is still the world's second largest economy and offers serious export opportunities for a wide range of Scottish companies. Office Machinery, whisky, Radio/TV/Communications, Food and Beverages and Textiles are the main contributors to sales in the Japanese market. In these sectors, Japan is a consistent market for high quality, top of the range and niche products.

Exports to Korea continue to climb significantly, exceeding the £200m level for the first time. The easing of duties on Scotch whisky in the late 1990s has resulted in a rapid rise in exports, which rose from £141m to £169m in 2001. This now places Korea as the fourth largest global market for whisky. It is also a growing market for a number of other industries including Food and Beverages, Chemicals, Machinery and Equipment and Transport Equipment. Sales of textiles are also important, and Korea has become a target market for Scottish manufacturers of luxury cashmere knitwear.

China continues to climb the top 40 league of Scottish export markets, now ranked 24th with exports valued at £131m. China is one of the fastest growing markets in the world offering potentially huge trade and investment opportunities. Scotland's share of this business is still relatively low, as UK direct exports in 2001 were £1,737m, a rise of 17.3% and the highest level ever recorded. The UK, nevertheless, is significantly behind the market share of competitors such as Germany and France.

3.1 Destination of Manufactured Exports

General Overview (Cont'd)

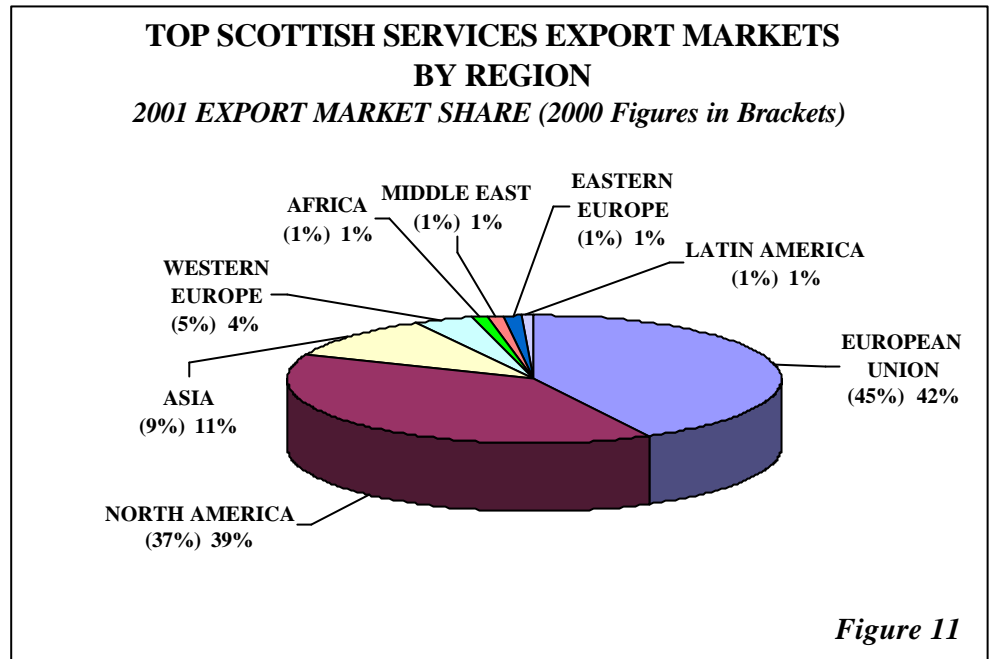
The largest Scottish exporter to China is the Radio/TV/Communications sector. Telecommunications is a booming sector, with over 140m mobile phone subscribers already registered, growing by an estimated further 4m per month. Manufacturing investment in the PRC has expanded at a dramatic rate, and China is now becoming a major supplier in most manufacturing sectors. Scottish exports in the Machinery and Equipment and Fabricated Metals sectors are the next in importance, and the upskilling of the mass manufacturing sector in China is no doubt responsible for this. There are indications that offshore sub-contract manufacture in the market is growing, and helping to sustain the competitive position of overseas-owned companies. For Scottish SMEs the emphasis on local manufacturing and investment may have been a barrier to penetrating the market in the past, but the signs of increased activity are emerging. China was admitted to the World Trade Organisation, as was Taiwan, in December 2001. This is expected to create further growth potential.

In the Middle East, a large upturn in sales to the United Arab Emirates has been recorded. This stems principally from the Office Machinery, Machinery and Equipment and Electrical Machinery sectors. This is likely to be serving the further development requirements of companies in the oil sector in Abu Dhabi and other Emirates, as well as the growing significance of the UAE – particularly Dubai - as a regional centre for international businesses in financial, IT and leisure spheres. The UAE is also an important entrepot centre for onward trade to neighbouring markets in Central Asia, the Middle East, the Indian sub-continent and Africa. Some £22m of Scotch whisky was absorbed by the UAE in 2001, another indication of its significance as a strategic crossroads for international business. Israel recorded a slight downturn in exports, but continues to be a good market for electronics-related goods with its own reputation for innovative technology companies. Turkey has experienced a major slide down the table, resulting in a virtual halving of exports to £88m. This appears to be the result of a second successive year of contracting sales from the electronics sectors, combined with the legacy of the recent Turkish economic crisis.

A number of markets in Latin America, Africa and Western Asia are more prominent in this year's results. Increased levels of activity in oil-related industries can be expected to account for the rising values in exports to Venezuela, Mexico, Nigeria and Iran.

3.2 Destination of Service Sector Exports

Service sector organisations were also asked to provide a breakdown of the destination of their exports. However, it is less straightforward to provide detailed information for services, as some of the sectoral information is provided by secondary sources such as trade and professional associations. Figure 11 provides a regional breakdown of export destinations, while Figure 12 and Table 27 (overleaf) illustrate the top ten country markets.



The European Union retains its position as the most significant destination for exports of services, although it now accounts for 42% of the total compared to 45% in 2000. In contrast, North America has recorded a continued increase in the proportion of total exports, from 37% in 2000 to 39% in 2001.

3.2 Destination of Service Sector Exports

Table 27 Top 10 Markets for Scottish Service Sector Exports (£m Current Prices) (2000-2001)

COUNTRY	2000		2001	
	Value of Exports	Proportion of Exports	Value of Exports	Proportion of Exports
USA	783.3	27.3%	998.3	30.8%
Germany	252.5	8.8%	280.1	8.6%
Ireland	220.9	7.7%	246.3	7.6%
Australia	114.8	4.0%	223.1	6.9%
Canada	327.1	11.4%	264.4	8.1%
Netherlands	103.3	3.6%	150.5	4.6%
Spain	117.7	4.1%	139.2	4.3%
Sweden	40.2	1.4%	121.4	3.7%
Italy	189.4	6.6%	152.7	4.7%
France	160.7	5.6%	134.2	4.1%
Others	559.5	19.5%	534.0	16.6%
Total Service Sector Exports	2,869.4	100%	3,244.2	100%

TOP SCOTTISH SERVICES EXPORT MARKETS BY COUNTRY

2001 EXPORT MARKET SHARE (2000 Figures in Brackets)

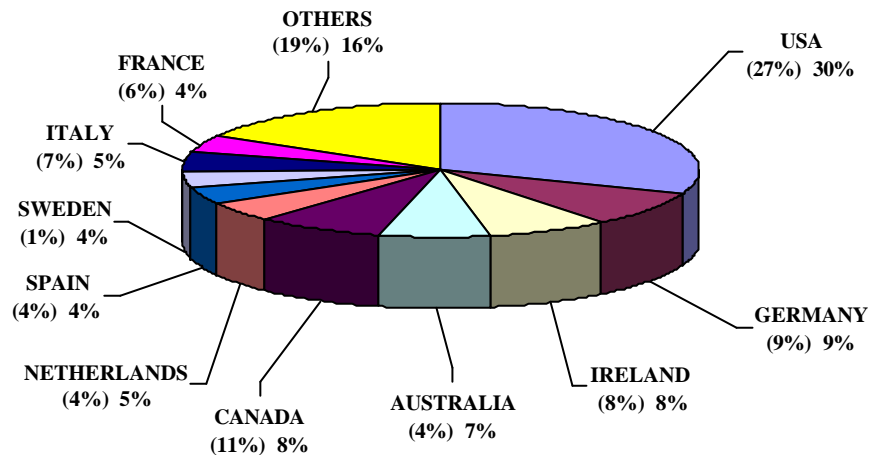


Figure 12

The United States

The United States has retained, and strengthened, its position as Scotland's largest market for sales of services by a considerable degree. Following a marginal downturn in 2000, exports to the United States have increased by over £200m to a current value of £998.3m. This increases the American share of Scottish services sales to 30.8%, up from 27.3%. As noted in previous surveys, exports of services to the USA encompass a more diverse range of sectors and in more significant measure than is the case with any other single market. These range from financial services and oil and gas services to commercial research and development, computer and software services, transport services and tourism.

3.2 Destination of Service Sector Exports

The United States (Cont'd)

The United States is the world's largest consumer and importer of commercial services, with the UK ranking as second largest global exporter. For Scottish and other English-speaking businesses the lack of language barriers is a distinct advantage in the delivery of services. The size and openness of the US market (which can be regarded in itself as a series of regional/geographic markets from East to West) is particularly attractive, with fewer barriers to entry than in many other developed markets. Much of this stems from its history as a market-oriented enterprise culture open to innovative ideas and pioneering technologies. The United States is also one of the most important global financial centres which, despite the fragile investment climate experienced throughout much of 2001, continues to act as a powerful magnet for financial services providers.

The Tourism sector has always been the most significant sector for Scottish service exports to the US. VisitScotland figures report that, perhaps surprisingly, sales to the American market actually increased in 2001 from £189m to £236m. This represented not only a higher figure in real terms, but also a higher share of Scottish tourism exports. The popular theory might perceive that the events of 11 September cast a deep shadow over the tourism sector, however VisitScotland report that much of the year recorded excellent results for the US, particularly in the months of June and July. After September, visiting of family and friends increased and discounted flights supported a degree of travel, although this was lower than would normally be anticipated for the autumn months.

After tourism, sectoral exports in order of value came from financial services, commercial research and development, transport and computer services. Local acquisitions by Scottish banks have strengthened their position in the US market, while it continues to offer a key portfolio of clients for the fund management business, despite a relatively bruising investment climate. Around 41% of the overseas assets of UK insurance companies are also to be found in the United States. A concerted effort has been made in recent years to identify and pursue opportunities for the Scottish biotechnology sector in the US, which was the original driver behind the emergence and consolidation of this industry. This is reaping dividends as the commercial research and development sector, incorporating biotechnology, healthcare and other R+D sectors, continues to account for an increasing level of export sales to the US.

Europe

The European Union provides the main source of sales of Scottish services, taking a 42% share of the global total. Seven of the top ten markets are EU members. Key contributors continue to be tourism (which outweighs all others), financial services, commercial research and development, computer and software services and higher education. In other Western European markets outwith the EU, oil and gas services (especially to Norway) and financial services are the leading sectors.

In 2001 Germany regained its position as the second largest market for services with £280.1m of sales, an 8.6% share. Germany is a target market for the tourism sector and remains second in order of revenues, although dropping slightly in 2001 to a level of £57m. Germany's Federal Government has made biotechnology one of its key sectoral priorities, and currently has well over 300 biotech companies. Many of these are small, newly established companies likely to seek alliances with complementary or specialist partners, or larger firms able to inject investment funds. Scottish firms recorded a range of exports in the healthcare sector in 2001, with further exports coming from consulting engineers and transport services.

3.2 Destination of Service Sector Exports

Europe (Cont'd)

Ireland has climbed to third position for services exports. Tourism reported £45m of exports to the Irish market. The popularity of budget airline services between Scotland and Ireland has become a significant driver for the sector, as well as the Seacat and ferry links from Dumfries and Galloway and Ayrshire. It will be interesting to see the future impact of other direct passenger services to continental Europe, with the introduction of the Superfast ro-ro ferry from Rosyth to Zeebrugge in May 2002 and a projected increase in air services offered by budget carriers to further keynote European destinations. Meanwhile, Ireland also received sizeable exports from fund management services, reflecting the status of Dublin's international financial services centre.

In France, support for biotechnology has continued to grow since the mid-1990s, when government unveiled programmes to stimulate the creation of new biotech companies and to accelerate technology transfer out from publicly funded research institutes. France is also a major market for healthcare and pharmaceuticals, with its population of 58m being Europe's largest per capita consumer of pharmaceutical products. Opportunities for further interaction between Scottish and French interests would appear to be available, although the level of current reported activity is modest.

The continuing modernisation of the economies of Central and Eastern Europe in preparation for expected EU accession in 2004 offers ongoing opportunities for a range of business services from accountancy and project management consultancy to environmental management and retail services.

General

Canada has fallen to fifth position in the table, taking an 8.1% share instead of the 11.4% reported in 2000. This results largely from declining tourism revenues. However, financial services, particularly insurance/assurance, remain important. Australia was Scotland's second largest source of tourism revenues in 2001, in equal place with Germany, and projecting the market to fourth position overall. As with the United States, the common language and cultural links with these markets has a positive effect on the ability and willingness of Scottish services providers to explore potential business.

Apart from Australia, none of the Asia Pacific markets appears in the top ten, although the region accounts for 10.8% of the global total. However, commercial research and development business, especially in biotech, is doing increasing business with Japan, Korea and Taiwan. Asia also remains an important source of revenue for the higher and further education sectors with Malaysia, Singapore, China and India all providing business to Scottish institutions. Commercial training, for example to the oil and gas industry, is also delivering export potential in diverse markets from Australia to the Gulf States and Central Asian republics such as Azerbaijan and Kazakhstan. Many service providers perceive China as an increasingly important market for the future, however there will need to be further liberalisation in a number of sectors before the potential can be realised.

3.3 UK Export Markets

Table 28 shows the UK's top export markets in 2001 for the manufacturing and service sectors combined. As with previous years' surveys, the majority of the UK's top export markets listed below appear in either Scotland's manufacturing or service sector top markets in Tables 26 and 27, although the relative positions and share of totals do differ.

The USA remains the top market for UK exports of manufactured goods and services. It is also the top market for Scotland in both sectors, representing 18.3% of total exports. As with the UK as a whole, Germany also appears as the second top market for service sector exports, but third for manufactured goods. Together, exports from both sectors account for 10.8% of the Scottish total. Whereas France emerges as the third top market for UK exports, it is the second top market for manufactured goods, and only makes it to 10th position in the rankings for Service sector exports from Scotland.

Table 28 - UK's Top 20 Export Markets in 2001

COUNTRY	Value £m	% of Total UK Exports
(1) USA	29,600	15.4
(2) Germany	23,987	12.5
(3) France	19,529	10.2
(4) Netherlands	14,807	7.7
(5) Ireland	14,027	7.3
(6) Belgium/Luxembourg	10,042	5.2
(7) Italy	8,525	4.4
(8) Spain	8,485	4.4
(9) Sweden	4,010	2.1
(10) Japan	3,744	2.0
(11) Switzerland	3,587	1.9
(12) Canada	3,242	1.7
(13) Hong Kong	2,721	1.4
(14) Australia	2,344	1.2
(15) Denmark	2,302	1.2
(16) Norway	1,864	1.0
(17) India	1,800	0.9
(18) China	1,737	0.9
(19) Finland	1,633	0.9
(20) Singapore	1,614	0.8

Source: Business Monitor, July 2002

3.4 Intra UK and Export Sales

Previous SCDI annual surveys have asked respondents to detail the level of business they carry out in the domestic UK market. Companies are asked to provide details of their sales within Scotland, to the rest of the United Kingdom and to the UK Continental Shelf (Offshore Oil and Gas industry). Figure 13 below has been included to put the dimensions of Scotland's domestic sales into context with export activity.

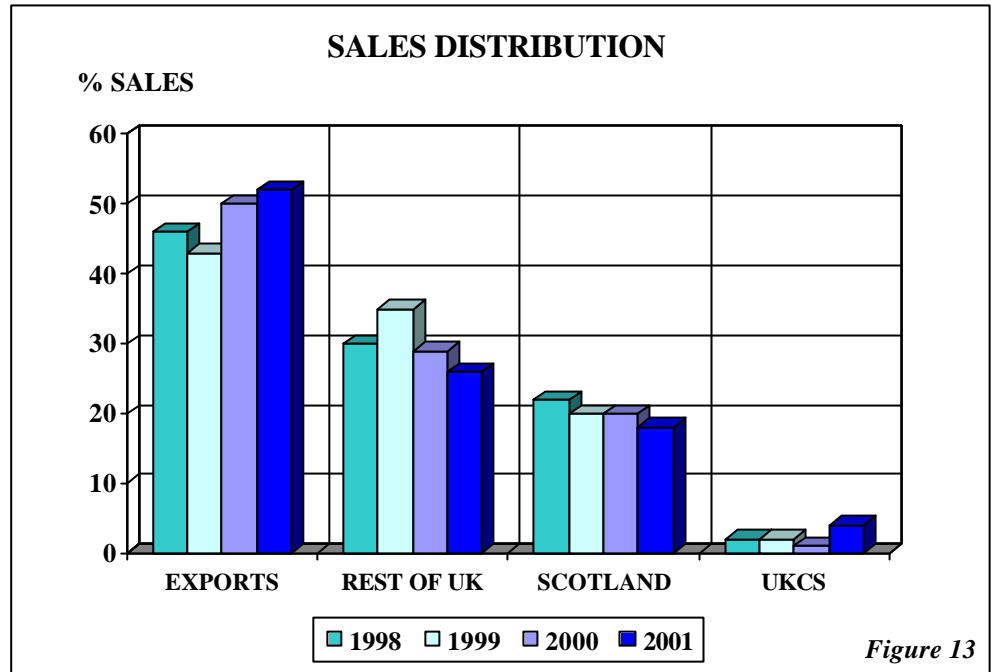


Figure 13

It should be borne in mind that the above data is based on the results of the survey which, given its exporting constitution, is influenced strongly by responses from current exporters.

In 2001, export sales further increased its share of the total, now representing over 50%. A rise was also recorded in sales to the Offshore Oil and Gas sector (UKCS). This means the Scotland and the Rest of the UK take a lesser share than in 2000, representing 18% and 26% respectively.

If all Scottish companies (exporters and non-exporters alike) were to be surveyed, it is realistic to assume that domestic sales would account for a much higher proportion of total sales. A significant factor which should be accounted for in any international comparisons is that cross-border sales to England, Wales and Northern Ireland are not denoted as "exports" from Scotland. However, in the case of the Republic of Ireland, for example, sales to all parts of the UK would be classified as exports.

4.1 Manufacturing Industry Breakdown by Region

Table 29 describes the regional composition of Scotland's manufactured exports in 2001, with figures assigned to the Highlands and Islands as one entity and by Local Enterprise Company area for the rest of Scotland. The statistics show the relative positions of each area as a source of Scottish export activity. The ranking order has not changed substantively over the course of the 2000-2001 period. However, the figures do highlight some important changes in the proportion of exports derived from particular areas.

*Table 29 Manufactured Exports by LEC
(2000-2001)*

LEC	2000		2001	
	Value of Exports	Proportion of Scottish Total	Value of Exports	Proportion of Scottish Total
Renfrewshire	5,343.6	26.9%	4,300.2	24.6%
Lothian	3,540.1	17.8%	3,105.4	17.8%
Ayrshire	2,173.5	10.9%	1,910.6	10.9%
Lanarkshire	1,973.0	9.9%	1,897.7	10.9%
Highlands & Islands	1,099.2	5.5%	1,360.6	7.8%
Fife	1,097.1	5.5%	1,014.0	5.8%
Forth Valley	1,173.2	5.9%	854.3	4.9%
Tayside	850.9	4.3%	826.1	4.7%
Glasgow	780.3	3.9%	779.7	4.5%
Grampian	845.3	4.3%	739.7	4.2%
Dunbartonshire	496.1	2.5%	373.2	2.1%
Borders	201.1	1.0%	156.1	0.9%
Dumfries & Galloway	149.1	0.8%	147.9	0.8%
Total (excl Gin/vodka)	19,862.6		17,465.5	

Renfrewshire delivers the highest proportion of manufactured exports in Scotland, largely based on the presence of major electronics companies in the area. The national survey has reported a significant downturn in exports from this sector, and this is reflected in the 2001 figures for Renfrewshire, which show its share dropping from 26.9% of the total to 24.6%. As a result, just over £1 billion in total export value was lost from the Renfrewshire economy during 2001. Together, Renfrewshire, Lothian, Ayrshire and Lanarkshire alone account for 64.2% of Scotland's manufacturing exports.

The electronics sectors (as defined by SIC codes 30-33) are substantial exporters from a number of regions, and in 2001 the figures attributed to principal areas were: Renfrewshire (£3,913m), Lothian (£2,493m), Lanarkshire (£1,462m), Ayrshire (£779m), Tayside (£375m) and Fife (£271m). The predominant effect of electronics on Scotland's export patterns is noted earlier in this survey. This is all the more true in those regions with a high "Silicon Glen" presence. Without the impact of this industry, local export patterns would be significantly different. **A detailed breakdown of exports by SIC classification in each local area can be found at Appendix A.**

4.1 Manufacturing Industry Breakdown by Region

When discounting the electronics-dependent nature of export activity in the areas mentioned above, the composition of local exports appears radically different. Sectors accounting for more than £50m of exports would read as follows:

Table 30 Top Sectors by LEC Area in 2001 (Excluding Electronics)

Ayrshire	Transport equipment	£338m
	Machinery & equipment	£89m
Borders	Textiles	£80m
Dumfries & Galloway	Rubber & plastics	£99m
Dunbartonshire	Chemicals	£95m
Fife	Chemicals	£171m
	Pulp, paper & paper products	£68m
	Fabricated metals	£64m
Forth Valley	Chemicals	£411m
	Coke, refined petroleum products	£203m
	Motor vehicles	£51m
Glasgow	Transport equipment	£167m
	Machinery & equipment	£153m
Grampian	Machinery & equipment	£273m
	Pulp, paper & paper products	£139m
	Food & beverages (excl whisky)	£102m
Highlands & Islands	Food & beverages (excl whisky)	£134m
	Coke, refined petroleum products	£78m
Lanarkshire	Machinery & equipment	£128m
	Transport equipment	£112m
Lothian	Chemicals	£100m
	Fabricated Metals	£63m
Renfrewshire	Chemicals	£201m
	Leather products	£63m
Tayside	Chemicals	£110m
	Rubber & Plastics	£99m
	Machinery & equipment	£95m
	Textiles	£50m

Whisky exports are not included in the above table, as they are calculated in a different fashion and derived from a different source. However, those regions with significant exports of whisky would be, in order of value: Highlands and Islands, Grampian, Fife, Lothian, Ayrshire and Dunbartonshire.

4.1 Manufacturing Industry Breakdown by Region

The typical contribution of large companies versus SMEs in the various manufacturing sectors is described in Section 2 of this report. Large company exporters in particular localities are clearly important to regional economies, with a larger scale of operations and their potential catalytic role in developing a critical mass of smaller suppliers around them. These smaller suppliers can ultimately have valuable export potential in their own right. Such clusters of activity are evident in every Scottish region, whether promulgated through concerted action or developing through natural evolution.

In proportionate terms those regions which have improved their share of Scotland's exports in 2001 are Lanarkshire, Highlands & Islands, Glasgow, Fife, Tayside and Ayrshire. Lothian and Dumfries & Galloway have remained the same. The largest decreases in share were recorded by Renfrewshire, Forth Valley and Dunbartonshire, with Grampian and the Borders also showing a marginal decline.

Appendix A reveals that a number of regions are highly dependent on one or two industries. An obvious example is the importance of the chemicals and petrochemicals industries in Forth Valley, centred around Grangemouth. The lower export figures reported by the Chemicals sector in 2001 are mostly responsible for the downturn in Forth Valley exports this year. Similarly, the traditional importance of the Textiles sector in the Borders is understood. While the industry has undergone some often painful restructuring in recent years, it still remains by far the dominant exporting sector for the local economy.

**4.1 Manufacturing
Industry
Breakdown by
Region**

Some key regional exporters by industry sector, by order of value and by percentage share of the Scottish industry total, are:

Table 31 Share of Top Sectors by LEC Area 2001

Food & Beverages	SIC 15	Highlands & Islands	30%
		Grampian	24%
Textiles	SIC 17	Borders	36%
		Tayside	22%
		Highlands & Islands	8%
Clothing/Apparel	SIC 18	Glasgow	41%
		Renfrewshire	39%
Paper	SIC 21	Grampian	38%
		Fife	18%
		Ayrshire	12%
		Borders	11%
		Highlands & Islands	9%
		Lothian	4%
		Forth Valley	4%
Chemicals	SIC 24	Forth Valley	29%
		Ayrshire	20%
		Renfrewshire	14%
		Fife	12%
		Tayside	8%
		Lothian	7%
		Dunbartonshire	7%
Rubber & Plastics	SIC 25	Dumfries & Galloway	31%
		Tayside	31%
		Lanarkshire	9%
		Fife	6%
		Dunbartonshire	5%
Machinery & Equipment	SIC 29	Grampian	31%
		Glasgow	17%
		Lanarkshire	14%
		Tayside	11%
		Ayrshire	10%
Office Machinery	SIC 30	Renfrewshire	65%
		Lothian	14%
		Ayrshire	11%
		Tayside	5%
Radio/TV/Comms Equipment	SIC 32	Lothian	51%
		Lanarkshire	31%
Transport Equipment	SIC 34&35	Ayrshire	45%
		Glasgow	34%
		Lanarkshire	18%
		Forth Valley	6%

4.2 Services Industry Breakdown by Region

It is acknowledged that some regional economies are likely to be significant in terms of exports from the services sectors. It is generally more problematic to disaggregate these exports at a local level. This is partly due to the historic paucity of information on exporting employment in services, and also because the production of the service in itself may be centralised while selling points could be dispersed over a wider area. Financial and banking services provide a clear example: portfolio management and loan decisions are likely to be carried out at an organisation's headquarters, independently of the branch where the service is sold/purchased. It is generally difficult, therefore, to assign unambiguously the geographic location of the provision of services. As a pilot exercise, this study has investigated services exports from Lothian and Glasgow, estimated to be the largest service economies, and the results are examined below.

Table 32 Scottish Service Sector Exports Glasgow and Lothian Breakdown

	Value of Service Sector Exports (£m)	
	Glasgow	Lothian
Professional Services	190.8	348.9
Education and Training	110.1	102.3
Recreational Services	147.2	248.7
Transport Services	18.6	9.1
Financial Services*	38.5	183.1
Total	556.8	892.1

*Excludes any area breakdown of the Scotland-wide figure for Banks of £267.1m.

The table above represents a breakdown of service sector exports between Glasgow and Lothian.

In the professional services sector, Glasgow and Lothian account for 34.6% of total exports. Exports from computer services dominate in Glasgow and Lothian however significant exports from the healthcare and commercial research & development sectors also emanate from these regions.

Glasgow and Lothian account for over 71.1% of total exports in the education and training sector. The dominant sector is higher education, highlighting the number of excellent educational institutions within these regions that offer foreign students a wide variety of courses at graduate and postgraduate level.

Tourism dominates the recreational service category and combined, Lothian and Glasgow account for 51.4% of total exports from recreational services. The marketing of Glasgow and Edinburgh as short term breaks along with increasing competitiveness in air travel and hotel accommodation has benefited these regions. Although 2001 was a difficult year for tourism, Glasgow and Lothian have weathered the storm well and will look to continue to strengthen their dominance in this category in the coming years.

The Insurance sector has witnessed growth of 15.3% between 2000 and 2001. Lothian is a significant contributor to this growth as can be seen above in the dominance of Lothian in the financial services sector. Lothian has established itself in recent times as a centre of financial excellence and the value in the table above reflects this position.

4.3 Destination of Regional Exports

The most significant export destinations for each Scottish region are illustrated in Appendix B. In view of the frequent dominance of specific large companies in some regions, it can be misleading to attribute export values to individual markets at such a level of the economy. It can also expose the commercial position of individual exporters, which is likely to exceed the bounds of commercial confidentiality. For these reasons, regional export performance by overseas market is not disclosed by value. For policy-makers and providers of business support services, it is probably more useful to be aware of the numbers of local exporters selling to, or indicating potential interest in, specific markets in order to design programmes relevant to a larger nucleus of client companies. Appendix B indicates the numbers of respondents in each region confirming their status as current exporters to the markets concerned.

Unsurprisingly, the United States, France and Germany are ranked as the top three markets overall. The United States is the top market for all but four regions. The exceptions are Forth Valley (where Germany, France and the Netherlands are cited ahead of the USA), Highlands & Islands (France), Lanarkshire (Germany and France), and Renfrewshire (Ireland, France and the Netherlands).

Recognising Export Achievement

The data generated by the survey also provides the basis for a series of prestigious annual export awards presented by SCDI, which this year were sponsored by Scottish Development International in association with British Airways and The Royal Bank of Scotland plc.

Congratulations are extended to the following companies which responded to the survey and were presented with Awards by HRH The Duke of York, at SCDI's Annual Gala Dinner and Awards, staged at the Edinburgh International Conference Centre on 29 November 2002.

Export Award – Manufacturing	Inverness Medical Limited, Inverness
Export Award – Niche Market	Murgitroyd & Company Ltd, Glasgow
Export Award – Knowledge Business	Q-One Biotech, Glasgow
SDI Award for Exports	Merpro Limited, Montrose
Royal Bank of Scotland Award for Excellence in Exporting	Kyndal Spirits, Edinburgh
Special Award for Exporting	Cosmo Products Ltd, Eskbank
SCDI's President's Award	John Wood Group Plc, Aberdeen

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Scottish Screen
The Gin & Vodka Association of Great Britain
The Scottish Executive
VisitScotland

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British Geological Survey
British Potato Council
British Wool Marketing Board
Department of Environment, Transport and the Regions
Forestry Commission
HM Customs & Excise
Meat and Livestock Commission
National Farmers Union Scotland
PH Energy Analysis Ltd
Quality Meat Scotland
Scottish Executive Rural Affairs Department
Scottish Quality Salmon
Seafish Industry Authority
Timber Growers Association

Finally, thanks also go to the companies which responded to the survey. Without this level of support, the survey would not achieve its authoritative position in Scottish economic statistics.

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