Scottish Economic Bulletin

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Economic Review

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Summary

- The UK economy grew by 0.4 per cent in the final quarter of 1997, the slowest rate of growth since 1995 Q2. In 1997 as a whole, GDP is estimated to have grown by 3.2 per cent. The Treasury anticipate that GDP will slow this year, as domestic demand growth slows in response to the rises in interest rates and the tightening fiscal stance, and as net trade exerts a negative influence on growth.
- Underlying inflation fell to 2.5 per cent in January 1998. The Monetary Policy Committee's latest central projection for inflation, published in February, is for underlying inflation to fall slightly over the next year or so before rising to just above the target of 2½ per cent by the end of the two-year forecasting horizon.
- The Index of Production and Construction for Scotland (excluding oil and gas) rose by 6.0 per cent over the year to 1997 Q3 as increases were recorded in manufacturing (7.4 per cent), construction (1.8 per cent), electricity, gas and water supply (5.7 per cent) and mining and quarrying (3.3 per cent). The UK Index (excluding oil and gas) rose by 2.0 per cent over the same period.
- ILO unemployment (not seasonally adjusted) in Scotland fell by 32,000 in the year to Autumn (September to November) 1997 to 185,000 or 7.4 per cent of the workforce. Claimant count unemployment (seasonally adjusted) in Scotland fell throughout 1997 but rose slightly in January 1998 to 141,100 or 5.8 per cent of the workforce - the first rise since April 1996. However, latest available data on employment suggest more substantial growth in employment in Scotland. This article includes a discussion of the factors influencing the future size of the Scottish labour force.
- The Scottish Council Development and Industry estimate that the value of Scottish manufactured exports rose by 6.4 per cent in 1996 to 18.42 billion. For the first time since 1988, UK manufactured exports growth outpaced that of Scotland. Four sectors - Office Machinery, Radio/TV/Communication Equipment, Whisky and Chemicals - continued to dominate Scottish manufactured exports in 1996, accounting for 75 per cent of the total.
- The independent forecasters expect a deceleration in Scottish GDP growth this year to around 2 per cent. Prospects for 1999 are less clear. All independent forecasters anticipate some growth in employment to 1999. A fall in the average claimant unemployment rate is forecast for this year. However, given current unemployment rates, some increase in unemployment is implied. There is less consensus of view in 1999.

The UK Economy

Output and Demand

The UK economy is approaching its seventh year of expansion. The estimate of gross domestic product (GDP) for the fourth quarter of 1997 shows a rise of 0.4 per cent. This was the slowest rate of growth since 1995 Q2 and compares with growth of 0.9 per cent in the third quarter. In 1997 as a whole, GDP is estimated to have grown by 3.2 per cent.

Chart 1 shows the quarterly growth profile of GDP since 1990 Q1, together with the growth in the manufacturing and service sectors. Although overall growth slowed in the final quarter, the rate of growth in the service sector accelerated slightly, to 1.1 per cent. Meanwhile, output in the production industries fell by 1.1 per cent and across all main sectors and, as shown in the Chart, by 0.4 per cent in the manufacturing sector. This reflects a consistent feature of the post recessionary period, in which the service sector has been more buoyant, expanding by 22.5 per cent since the trough of 1992 Q1. By contrast, the production industries have had a much weaker growth profile with output in manufacturing only 11.2 per cent

higher than 1991 Q3. These latest data appear to confirm that while domestic demand remained fairly solid, the strength of sterling may now be having a significant impact on output in the manufacturing sector. There appears to be mounting evidence to support this view, both from latest trade data (discussed below) and business survey evidence.

CHART 1 HERE

Data for the fourth quarter of 1997 confirmed that domestic demand continued to play a strong role in overall growth, rising by 1.3 per cent, buoyed by strong growth in consumption and a return to growth in fixed investment.

Over the past year or so consumers' expenditure has been growing at an annualised rate in excess of 4 per cent. This has been financed by strong growth of real personal disposable income - 3.4 per cent in the year to 1997 Q3 - and the rapid growth in wealth. The windfall payments from the flotation of building societies and insurance companies accelerated growth in the second and third quarters. 34½ billion was paid out - equivalent to around 7 per cent of (nominal) consumers' expenditure in 1996. Treasury estimates, using Bank of England survey evidence, suggest that around 10 per cent (3½ billion) of the windfall capital represented additional spend in 1997, boosting growth in consumers' expenditure by ¾ of a percentage point. Latest data on retail sales - a major component of consumers' expenditure - show a rise of 1.8 per cent in January 1998. In the 3 months to January, the volume of sales was 1.6 per cent higher than the previous 3 months and 5.7 per cent higher than a year earlier.

Fixed investment rose by 0.8 per cent in the final quarter of the year, following a slight fall of 0.2 per cent in the third quarter. In 1997 as a whole, fixed investment is estimated to have increased by 2.7 per cent. More detailed information is available to the third quarter.[2]

Despite falling by 4.4 per cent in the third quarter (due in large part to a decline in vehicles, ships and aircraft investment), manufacturing investment remained almost 20 per cent higher than a year earlier. However, other industries[3] - accounting for around ¾ of total investment - have been weaker, falling by 0.2 per cent in 1997 Q3 and 2.5 per cent in the year. Private sector investment has had a stronger growth profile than public sector investment over the recovery, growing by 25 per cent since the trough in 1992 Q4 and, despite falling by 2.5 per cent in 1997 Q3, the level remained 6.2 per cent higher than a year earlier. Public sector investment (comprising general government and public corporation investment) rose strongly in 1997 Q3 but was over 15 per cent down on levels a year previously.

Trade data for the fourth quarter are currently incomplete. Although sterling is around 25 per cent higher than 18 months ago, exports have been resilient, rising through much of 1997, as in 1996. Exports in 1997 Q3 were still 9.1 per cent higher than a year previously, but the 0.8 per cent growth in the third quarter followed much stronger growth of 2.1 per cent and 3.3 per cent in the first and second quarters of the year. More recent data reveal that, in the 3 months to November, the volume of exports (excluding oil and erratics) fell by 1.3 per cent, compared with the previous 3 months.

Less surprisingly, with sterling's appreciation and strong consumer demand, imports have increased. Growth was particularly strong in the second quarter - 1.7 per cent - with further growth of 0.6 per cent in the third quarter, 9.0 per cent higher than 1996 Q3. The volume of imports (excluding oil and erratics) rose by 2.0 per cent in the 3 months to November. Over this period, the UK's balance on trade in goods and services was 1.9 billion in deficit, a deterioration of 1.8 billion on the previous 3 months,[4] suggesting that the trend in the UK trade balance is widening. Hence, while net trade had a negligible impact on GDP growth in 1997 Q3, available data suggest that it exerted a downward influence in the fourth quarter.

Prices

As shown in Chart 2, since 1992 underlying inflation (as measured by the 12-month increase in the Retail Prices Index (RPI), excluding mortgage interest payments) has averaged around 3 per cent. Despite downward pressure from the appreciation of sterling since August 1996, underlying inflation did not fall back in 1997 and, with the exception of April and May, remained above the Government's target rate of 2½ per cent, as it had been since the end of 1994.

CHART 2 HERE

However, latest figures for January 1998 reveal that headline inflation (the 12-month increase in the all items RPI) fell by 0.3 percentage points to 3.3 per cent. Underlying inflation also fell, by 0.2 percentage points, to 2.5 per cent. Stripping out both mortgage interest and indirect taxes such as excise duties and council tax,[5] inflation fell to 1.9 per cent, the lowest rate on this measure in almost 3 years. The fall in the underlying rate was due to reductions in food prices and from sales for clothing, footwear and household goods.

The appreciation of sterling has led to lower import and export prices which, in November 1997, were 4.6 per cent and 5.1 per cent below a year earlier respectively. Producer input prices have also fallen sharply - by 9.7 per cent in the year to January 1998. Meanwhile, producer output inflation (excluding food, beverages, tobacco and petroleum) has been fairly stable since the beginning of 1997, increasing by 0.5 per cent in the year to January 1998.

Concerns about inflation have been fuelled by latest data on growth in underlying earnings which has edged up since October from 4¼ per cent to 4¾ per cent in December. With high levels of skills shortages reported and continued falls in UK unemployment on both the ILO and claimant count measures, this is further evidence of labour market tightening. Ultimately some pressure will be eased with the predicted slowdown in growth but the question is whether this will happen quickly enough to ease inflationary pressures.

After the election the Chancellor announced that the Bank of England would have operational responsibility for setting interest rates to achieve the Government's target for underlying inflation of 2½ per cent. The Monetary Policy Committee (MPC) now meets monthly to determine interest rates. As shown in Chart 2, each of the 3 meetings from June resulted in a ¼ per cent increase in base rates to reach 7 per cent in August. Base rates were increased by a further ¼ per cent after the November meeting. In each of the three meetings since then, the MPC has voted to leave interest rates unchanged. Despite rises in base rates, long term rates (10 year gilt yields) - determined largely by the expected path of future short (base) rates - have continued to fall since the last peak of 7.6 per cent in April 1997 and, as also shown in Chart 2, are currently around 6 per cent.

Prospects and Forecasts

The Treasury's latest forecasts of the UK economy were published in the November 1997 Pre-Budget Report. Forecasts for 1998 and 1999 are summarised in Table 1, which also gives the latest (February) average projections of 45 independent forecasts made in the last 3 months and monitored by the Treasury.

With marginally stronger growth since the July Budget, GDP was forecast to grow by 3½ per cent in 1997, compared to the Budget forecast of 3¼ per cent (as described above, the outturn is estimated to be 3.2 per cent). Thereafter, GDP is expected to slow to more sustainable rates, as domestic demand growth slows in response to the rises in interest rates since May and the tightening fiscal stance, and as net trade exerts a negative influence on growth. In order to bring down inflation to its target, it is likely that GDP growth will need to slow below its trend rate through this year and the first half of 1999. GDP is projected to grow by 2¼ to 2¾ per cent in 1998, 1½ to 2 per cent in 1999 and 2¼ to 2¾ per cent in 2000. The average of the independent forecasts are at the bottom of this range for 1998 and at the top of the range in 1999.

Treasury projections for GDP growth and its components are presented as ranges for 1998 and beyond. These ranges are intended to give an indication of how differing degrees of supply side improvement offer the prospect of a more favourable path for the economy over the next few years. The extent to which the economy evolves along a path closer to the upper end of the range will depend partly on the success of Government policies such as the New Deal for the unemployed and action on skills shortages. However, it will also depend on other factors affecting wage determination which are in the hands of the private sector.

Table 1: Forecasts of the UK economy, 1998 and 1999

	% change on a year earlier unless otherwise stated			
	1998		**1999**	
	Treasury	**Independent forecasters (February 1998)**	**Treasury**	**Independent forecasters (February 1998)**
GDP growth	2¼-2¾	2.3	1½-2	2.0
Consumer spending	3½-3¾	3.4	1½-2	2.2
Fixed investment	6-6¼	4.9	2¼-2¾	3.5
Exports	5-5¼	3.8	5¼-5¾	4.8
RPI excluding MIPs [1]	3	2.7	2½	2.7
Current Account (bn)	-7¼	-6.2	-7¾	-7.1
PSBR (bn) [2]	4.5	3.3	-	3.6

Source: HM Treasury

Notes:
1. Fourth quarter
2. Financial years

Prospects for consumption depend on both the growth of incomes and the amount of income which is spent. Growth in consumer spending is forecast to decelerate as the savings ratio falls more slowly than in 1997 and income growth begins to slow. It is projected to grow by 3½ to 3¾ per cent in 1998 and by 1½ to 2 per cent in 1999. The independent forecasters agree that consumption will slow in 1999 but remain above 2 per cent.

On investment, general government investment is expected to stabilise due to additional capital spending as part of the local authority Capital Receipts Initiative. Business investment is expected to continue to grow but more slowly as firms respond to the high exchange rate and tighter monetary policy. Overall, fixed investment is forecast to rise by 6 to 6¼ per cent this year before slowing further to 2¼ to 2¾ per cent in 1999.

The stronger than expected growth in export markets and resilience in export volumes to the strength of sterling led to a slight upward revision in the Treasury's 1997 forecast of growth in exports. After growth of around 7½ per cent in 1997, export volumes of goods and services are expected to grow by between 5 and 5¾ per cent both this year and next. Slower domestic demand is anticipated to slow the pace of growth in imports. After a small surplus in 1997, the current account is expected to move into deficit this year, reflecting both an increase in the deficit on goods and services and a smaller surplus on net investment income. Deficits of around ¾ to 1 per cent of GDP are projected over the short term.

PSBR projections are generally little changed since the July Budget. The outturn for 1996-97 was 22½ billion (3 per cent of GDP) and a further sharp fall to 9½ billion (1¼ per cent of GDP) is anticipated for the current financial year, around 1½ billion lower than the Budget forecast. The forecast for 1997-98 includes the 2.6 billion of receipts from the windfall tax and 0.2 billion of Welfare to Work spending[6]. The PSBR is expected to fall further in 1998-99 to 4.5 billion (½ per cent of GDP).

With the effect of lower input prices on retail prices expected to weaken and above trend growth in demand, the Treasury expect underlying inflation to rise to 3 per cent by the final quarter of this year. However, the below trend GDP growth anticipated thereafter will begin to exert downward pressure on inflation. This is judged to be sufficient to achieve the 2½ per cent target by the end of 1999. However, the average of the independent forecasts is less optimistic for 1999 with underlying inflation of 2.7 per cent in 1999 Q4 predicted.

The Bank of England's February 1998 Inflation Report provides the MPC's latest short term forecasts for inflation. Underlying inflation is forecast to fall slightly over the next year or so before rising to just above the target of 2½ per cent by the end of the two-year forecasting horizon. The current projection embodies a slightly higher growth profile for inflation over the next 2 years than in the previous report published in November, due in large part to the less than anticipated effect of the appreciation of sterling on retail prices. The Bank concede that the balance of risks is on the upside with the main risks the possibility of a more rapid fall in the exchange rate than that implied by interest rate differentials, past rapid money growth and, in particular, pressures in the labour market. The downside risk to inflation stems mainly from a larger fall in output and demand than the Bank's central projection.

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[1]John Rigg is Senior Economic Adviser in The Scottish Office Education and Industry Department. Fiona Robertson is an Economic Adviser. The Economic Review is based on data available up to 23 February 1998.
[2]This is based on initial estimates for the third quarter in which fixed investment was reported to have fallen by 0.5 per cent.
[3]Other industries' excludes manufacturing, mining and quarrying and electricity, gas and water supply.
[4]This was due to an increase of 1.7 billion in the deficit on trade in goods (from 2.4 billion to 4.1 billion) and a decrease of 0.1 billion in the surplus on trade in services (from 2.4 billion to 2.3 billion) .
[5]More specifically, this series (known as RPIY) excludes council tax, VAT, excise duties, vehicle excise

duty and premium insurance tax as well as mortgage interest payments.
[6]Without these receipts the PSBR would be about 12 billion in 1997-98.

VAT Registrations and Deregistrations in Scotland and the UK

Angela M Campbell[1]

Summary

- This article presents data on the stock of VAT-based businesses, registrations and deregistrations for Scotland and the UK for the period 1980-96. It discusses the coverage of the data and certain discontinuities in the series.
- The total number of VAT-registered businesses in Scotland increased in each year from 1980 until 1991, with particularly strong growth in the stock in the period 1988-90. The early 1990s were a more difficult period in terms of the VAT stock, with net falls each year between 1992 and 1995.
- A similar pattern emerges at the UK level. However, UK growth was stronger than Scottish growth during the 1980s, and the decline in the stock began a year earlier in the UK, in 1991.
- At a sectoral level, the retail sector has seen a long-term decline in the stock of VAT-registered businesses in both Scotland and the UK. The sectors which grew most strongly in Scotland over the period 1994-96 were finance, business services and public administration. Over the earlier period, finance and other services also grew strongly.

Introduction

VAT-based data[2] are often used as indicators of trends in the business stock. This is because, apart from certain sectoral exclusions, the information is comprehensive for businesses with a turnover in excess of the minimum registration threshold (49,000 from 1 December 1997). It covers different types of legal form, such as sole trader or partnership, as well as individual firms. It is also available over a reasonably long time period and at a spatially disaggregated level. Its main drawback for this purpose is that it excludes the smallest businesses which are not required to register, unless they choose to. Estimates from the SME Statistics Unit at DTI suggest that, at start-1996, 43 per cent of all UK enterprises were registered for VAT.

Although VAT registrations and deregistrations are used to proxy business births and deaths respectively, it is important to note that registrations and deregistrations are not synonymous with business births and deaths. In particular, registrations will include businesses which have been trading for some time and have just crossed the threshold, and will exclude new start-ups which are below the threshold. Deregistrations will occur because turnover falls below the threshold, and for other reasons such as a change of ownership, or change of legal status, as well as when a trader unambiguously goes out of business. During 1995, only 55 per cent of businesses in Scotland which deregistered did so because they ceased trading. 18 per cent deregistered due to a change in legal status, 17 per cent did so because their turnover dropped below the threshold, and the remaining 10 per cent did so for other reasons[3].

VAT-based Data for Scotland

VAT-based data for Scotland are available annually from 1980, but there are discontinuities at 1991 and 1993. Large increases in the threshold in 1991 and 1993 mean that estimates for 1980-91, 1992-93 and 1994-96 are not entirely comparable. Furthermore, the estimates for 1980-93 count VAT reporting units while figures for 1994-96 count whole VAT registered enterprises. An enterprise is a legal unit, person, or group of people producing goods or services under their own control and with their own legal identity. A branch or office of a larger organisation is not in itself an enterprise. There may be more than one VAT unit within an enterprise. Thus the enterprise corresponds more closely to the concept of the "firm"

or "business". A further discontinuity when examining industrial sectors is that for 1980-93 the estimates are broken down by VAT Trade Classification (VTC) while for 1994-96 they are broken down according to the 1992 Standard Industrial Classification (SIC92). Finally, the earlier data are available for the old local authority areas while the 1994-96 data are available for Scottish unitary authorities.

Table 1 sets out the data for Scotland for the period 1980-96, with the discontinuities indicated.

TABLE 1 HERE

Although the figures are not entirely comparable over the whole period, it is reasonable to look at the net change in any particular year and the relationship between registrations, deregistrations and initial stock. Table 1 shows that the total number of VAT registered businesses in Scotland increased in each year from 1980 until 1991. The rate of change increased in the period 1988-90, as a result of an increase in the registration rate coupled with a constant deregistration rate. The table also indicates that the first half of the 1990s was a more difficult period for the business sector than the 1980s. In 1991, the rate of increase in the stock of VAT-registered businesses fell sharply, as a result of a fall in new registrations, combined with a lesser increase in deregistrations. This was followed by reductions in the total stock[4] in each year between 1992 and 1995, as deregistrations rose to a peak of 13,600 in 1993 while registrations fell.

The stock of VAT-registered businesses appears to have been more closely linked to the business cycle during the late 1980s and early 1990s than in the early 1980s, when the VAT stock continued to increase during a much deeper recession. However, the VAT stock has turned around more slowly than GDP during the recent upturn as shown in Chart 1.

CHART 1 HERE

In this context it is useful to consider the industrial breakdown of the VAT stock and of registrations and deregistrations. The analysis is complicated by the change from VTC to SIC 92. Nevertheless, some interesting points emerge. Table 2 looks at the more recent period, 1994-96, where SIC92 is the basis of the industry breakdown, while Table 3 looks at the earlier period using the VTC.

TABLE 2 HERE

TABLE 3 HERE

The retail sector has seen an inexorable decline in the stock of VAT-registered businesses. This is the only sector to have seen a decline in every year. This reflects the move from small retail outlets to larger ones, and the trend towards large out-of-town shopping centres. During the early 1980s, the only other sector which experienced a declining VAT stock was transport. In contrast, most sectors experienced falls in the VAT stock in several years between 1991 and 1996. During the 1991-1993 period, finance and other services continued to grow significantly and the wholesale sector also held up well until 1993. During the 1994-1996 period, the financial intermediation, business services and public administration sectors remained buoyant. The largest falls occurred in wholesale, retail and repairs. Manufacturing and construction also fell.

It is difficult, on the basis of these tables, to argue that the more service-related nature of the 1990s recession was responsible for the overall trend in the VAT stock. Many of the sectors which held up well were in the service sector, while non-service sectors suffered. Among the service sectors, wholesale, retail and repairs was the most badly affected. Table 4 looks at the service sector as a whole compared with the rest of the economy and illustrates the comparable strength of the service sector over both the 1980s and 1990s.

TABLE 4 HERE

VAT-based Data for the UK

A similar picture emerges at UK level, although the decline in the stock begins a year earlier in 1991. Table 5 provides the UK data and Tables 6 and 7 provide an industrial breakdown for the UK.

TABLE 5 HERE

TABLE 6 HERE

TABLE 7 HERE

As in Scotland, the retail sector has witnessed significant decline in terms of the VAT stock. The pattern across the other

sectors is also broadly similar, although the catering sector appeared to suffer an earlier downturn at UK level than in Scotland, and the extent of the decline in the VAT stock in the construction sector has been more pronounced at UK level. The finance sector in Scotland has also seen stronger growth in most years.

Scotland/UK Comparisons

Net Changes in the Stock of Companies

To compare Scotland with the UK as a whole, it is useful to look at the net change as a percentage of the initial stock as shown in Table 8.

TABLE 8 HERE

This illustrates a well-known feature of the business stock in Scotland: that it failed to grow as rapidly during the 1980s as the UK stock of businesses did[5]. Between 1980 and 1990, the stock of VAT-registered units rose by 27 per cent in the UK but by only 19 per cent in Scotland. Since 1990, however, Scotland's relative position appears to have improved. The downturn in the stock of businesses did not start until a year later than in the UK and was less pronounced in the years 1992, 1993 and 1994. However in 1995 and 1996 the UK has again performed relatively better than Scotland.

Shift-share Analysis

A simple shift-share analysis highlights the differences in sectoral growth in Scotland and the UK. Because of the data discontinuities and the change in industrial classification, the analysis was carried out for the period 1980-92, providing an overview of the 1980s, and for the most recent period, 1994-96. The percentage change in each UK sector was applied to the Scottish stock in the base year. The results are shown in Tables 9 and 10.

TABLE 9 HERE

TABLE 10 HERE

This analysis confirms that, over the more recent period, the Scottish VAT stock has been more robust than the UK stock. The total stock would have been 509 or 4 per cent lower, had each sector experienced the same rate of growth as the UK sector. It also highlights those sectors where growth was slower than in the UK as a whole - manufacturing, wholesale and retail, transport and business services. Sectors which performed more strongly than their UK counterparts were public administration, finance, and education and health.

Over the earlier period, in aggregate, the reverse is true - the total Scottish VAT stock would have been more than 7,000 higher had each sector grown at the same rate as its UK counterpart. Finance, catering, agriculture and production performed relatively better in Scotland.

Unitary Authorities Data

The VAT-based data are also available by unitary authority within Scotland. Annex 1 gives the stock of enterprises, registrations and deregistrations by SIC92 for 1994-96 for each unitary authority. Prior to this, data are available for the old local authority regions by VTC.

Survival Rates of Businesses

Table 11 shows survival rates' of VAT-registered businesses in Scotland. These show the proportion of businesses remaining registered for VAT at 6-monthly periods after their initial registration. Looking at survival after 12 months, survival rates were higher in the late 1980s, though there are signs that recent survival rates are improving.

TABLE 11 HERE

Table 12 shows the same information for the UK. Survival rates of Scottish VAT-registered businesses are in most cases better than for the UK as a whole. This may be related to the sectoral mix. As with births and deaths of businesses, caution must be used when considering these survival rates as proxies for the economy as a whole. These estimates are likely to over-estimate true survival rates because they exclude the very smallest businesses (those not registered for VAT) with the lowest survival rates.

TABLE 12 HERE

Conclusion

The VAT-based data provide a useful guide to movements in the stock of businesses and to the pattern of start-ups and closures across the UK and between sectors. Although registrations and deregistrations are not synonymous with business births and deaths, when taken together with other sources of information on business start-ups, failures and stock of businesses, the VAT data act as a valuable indicator of trends in business activity.

Annex 1

TABLE a1 HERE

TABLE a2 HERE

TABLE a3 HERE

TABLE a4 HERE

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[1]Angela Campbell is an Economic Adviser in The Scottish Office Education and Industry Department.
[2]VAT-based data are produced by the Department for Trade and Industry's (DTI) Small and Medium Sized Enterprises (SME) Statistics Unit. The estimates are based on VAT data held by the Office for National Statistics on the Inter Departmental Business Register (IDBR). The VAT data are in turn derived from HM Customs and Excise records.
[3]Source: DTI SME Statistics Unit.
[4]As indicated by the negative net change figures. It is not appropriate to compare the initial stock figures due to the discontinuities.
[5]See, for instance, "New Firm Formation in the British Counties and the Regions of Scotland", B Ashcroft and J Love, Scottish Economic Bulletin, No 49, Summer 1994.

Changes in the Location and Size Structure of the Scottish Fishing Fleet, 1986-96

Bob Henderson[1]

Summary

- The purpose of this article is to provide a brief profile of the Scottish fishing fleet and to highlight the principal changes which have taken place in the size structure and location of its vessels over the past decade.
- The Scottish fishing fleet has been separating into two sectors, composed of large vessels of 25+ metres in length and small boats of under 10 metres. Both these sectors have increased in number, the latter by 46 per cent since 1986, whereas the number of medium sized vessels has fallen by 20 per cent.
- These changes appear to have occurred in response to three main pressures: regulatory factors; financial considerations; and a policy to decommission fishing vessels.
- Small boats are the most numerous, medium vessels represent the largest sector in terms of aggregate power and large vessels dominate the tonnage figures.
- Although the total tonnage of both small and medium vessels has changed since 1986, the average tonnage per vessel has remained relatively constant whereas that of large vessels has risen dramatically. This situation has been stimulated by the policy of requiring fishing vessel licences to be aggregated whenever a larger capacity vessel is being introduced into the fleet. This has led to licences from two or more smaller vessels being combined in order to introduce new and larger super trawlers'.
- Average power (kilowatts) per vessel has increased since 1986 by between 2-3 per cent per annum for each of the three length class categories. However, there is some evidence to suggest that in recent years the recorded power figures, particularly for the largest vessels, have become less reliable. They are lower than might have been expected on the basis of the amount of tonnage in this sector and previous power/tonnage statistical relationships.
- Data difficulties make any interpretation of changes before 1993 in the locations where vessels have been based very difficult, particularly for the under 10m fleet. Since 1993, however, a consistent time series by district has been devised. Although small boats are widely distributed around the coast there is a particular concentration into the Highlands and Islands, where such vessels target stocks of shellfish, mostly using creels. Registered ownership of large vessels is heavily concentrated in just three areas - the Grampian ports, Shetland Isles and Troon, in the district of Ayr.
- The three main types of fishing method are each dominated by a different size of vessel. Most shellfish boats are small, being under 10m; the majority of demersal vessels are between 10m-25m; and the pelagic fleet consists entirely of large vessels in excess of 25m in length.

Introduction

This article considers changes in the port location and size structure, as measured by vessel numbers, length, power and tonnage, of the Scottish fishing fleet in the period between 1986 and 1996.

Data Sources and Problems

The data on vessel numbers, length class, base district, tonnage and power are taken from the annual Scottish Sea Fisheries Statistics and the Scottish Fishing Fleet Statistical Tables[2]. The summary tables cover all active vessels based in Scotland. Only by plotting the figures for each year has it been possible to identify discontinuities and hence potential problems with the time series. Prior to 1993, when all vessels under 10 metres (m) in length required a licence to fish for the first time, the statistical coverage of this sector of the fishing fleet was not comprehensive and could vary from district to district as well as from year to year for any given district. The recorded number of boats depended very much on the local knowledge of the Fishery Officer, especially in the remoter districts covering long coastlines. This makes it difficult to distinguish genuine changes in vessel numbers from statistical ones either for the under 10m fleet on its own or the fleet as a whole. The sudden increase in the number of vessels recorded in 1993, for instance, simply reflected the rush by all owners of vessels under 10m to show that they qualified for, and should be granted, a fishing licence. This led to the inclusion in the Statistical Tables of about 400 extra boats in the under 10m fleet.

There were also major changes to the data in the 1995 Scottish Fishing Fleet Statistical Tables. A new data series for vessel length was introduced, using metres rather than feet, and the concept of "overall length" replaced "registered length". The former definition generally records vessels as being longer than the latter[3]. Figures for previous years have been reworked to produce a consistent time series back to 1986 for most of the Tables in this article.

Unfortunately, this has not been possible for those Tables covering the location and length class of fishing vessels by district. Consequently this data series is not compatible with any of the other series. However, unpublished data have been used to produce a consistent time series by district from 1993, based on metres and overall length. For the purposes of this article all the time series cover the same period, 1986-96, but the Tables and text draw attention to the main discontinuities in the figures.

It is also important to note that the location of a vessel is allocated to a base district, which is defined as the area in which the majority of the owners live and which includes the Scottish Fishery Office responsible for the issue of licences for that vessel[4]. This district is not necessarily the same as the one which the vessel operates out of for most of the year so the base district shows the location of ownership rather than of operations.

Changes in the Number and Length Class of Vessels

As shown in Table 1, between 1986 and 1992 the number of fishing boats recorded in the Scottish Fleet Statistics increased by 14 per cent, from 2,183 to 2,482 vessels. In 1993 there was suddenly an increase of 17 per cent (413 vessels) in the number of vessels recorded. However, this is largely a statistical quirk caused by the inclusion in that year of all those under 10 metre vessels which, for various reasons, had previously been omitted from the register prior to the introduction of compulsory licensing. The pre- and post-1993 figures for the under 10m fleet are, therefore, not comparable and the apparent increase of 38 per cent in the number of vessels in 1993 is spurious. There are also strong reasons for suspecting that the trends in both the under 10m sector, and for overall vessel numbers, are misleading prior to 1993 as a result of annual fluctuations in the coverage of the Fleet Register; this is discussed later. Since 1993 the number of vessels has decreased by 3 per cent.

Table 1: The Scottish Fishing Fleet by Length Class, 1986-96

Length class	Number of vessels											Average annual percentage change 1986-96
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	
Under 10m	878	910	947	1,027	988	1,013	1,135	1,562	1,703	1,583	1,660	3.8
10<15m	385	412	444	467	472	463	445	438	430	397	365	-0.4
15<20m	434	439	438	424	406	398	396	379	356	331	305	-3.4
20<25m	338	336	331	328	323	315	307	300	289	279	260	-2.6
10<25m	1,157	1,187	1,213	1,219	1,201	1,176	1,148	1,117	1,075	1,007	930	-2.1
25<30m	86	98	105	108	110	109	114	118	120	121	132	4.5
30<35	26	26	24	20	22	25	27	30	28	23	22	-1.0
35+m	36	42	45	50	47	52	58	68	68	58	62	6.1
Over 25m	148	166	174	178	179	186	199	216	216	202	216	4.0

Total	2,183	2,263	2,334	2,424	2,368	2,375	2,482	2,895	2,994	2,792	2,806	1.1

To facilitate the analysis and to avoid having too many size categories, vessels have been grouped in subsequent Tables into three length classes: under 10 metres (about 30 feet), 10-24.9 metres (about 30-79.9 feet) and 25 metres and over (about 80 feet and over). These groupings are taken to represent small, medium and large vessels. The rationale for using these three length categories is made clear in Table 1, which shows that there were marked differences between them in terms of trends in vessel numbers. Over the 1986-96 period as a whole, there appears to have been an increase in the number of vessels in the length classes below 10m. In contrast, all three classes between 10-25m experienced a decline in vessel numbers whereas two of the three length classes above 25m saw an increase. Overall, growth in the 25+m fleet averaged 4 per cent per annum (pa).

Despite the data problems, it does appear possible to identify some general trends. The fleet seems to be dividing increasingly into two segments, composed of large and small vessels. The number of medium sized vessels has declined by 20 per cent since 1986, with the rate of contraction accelerating in the last three years to an average of -5.9 per cent pa. The large vessel sector has averaged 4.0 per cent pa growth since 1986, with a 46 per cent increase in the number of boats. Trends in the small vessel sector are much harder to interpret due to the data inconsistencies. Our best estimate is that the number of small boats was relatively static up until 1993 but since then there has been an increase of about 2 per cent pa.

These trends seem to have occurred for three main reasons. First, the under 10m vessels continue to be less heavily regulated than the rest of the fleet and so those owners who have wanted to avoid the increasingly stringent management regime being applied elsewhere have had an incentive to move from the smaller end of the medium sized sector into the under 10m sector. Most under 10m boats target shellfish species that are not subject to quota, whilst those that catch species with a quota are not affected by the track record regime that applies to larger vessels. Second, when licences are aggregated there is no capacity penalty for single licence transfers to under 10m vessels. Third, vessels under 12m long have been excluded from the detailed and expensive safety regulations that apply to larger vessels, although a simplified Safety Code is now being considered for the under 12m fleet. These factors have helped to retain vessels in the small vessel sector of the fleet although they are having an impact on vessel design. In order to stay within the small length class category boats are becoming beamier and deeper in a bid to increase their fishing capacity.

The second factor is more directly related to financial considerations. Economies of scale have favoured investment in larger capacity vessels, which can work ever more powerful gear, target a wider range of species and carry more fish. A length of 25m is a critical threshold because vessels in excess of this are required to meet even more exacting safety standards as well as more stringent manning conditions in terms of the number of deck officers and the level of their certificates. Generally instead of one ticketed' crew member there have to be two. In addition, these vessels are to be subjected to satellite monitoring. As a result of meeting these various requirements, the Fishing Vessel Regulations allow such vessels to operate in a greater range of weather and sea conditions, thereby making it possible for them to stay at sea for longer and to fish over a far wider area of water. The growing interest in deep water fisheries off the west coast of Scotland, as quotas have reduced the fishing opportunities in the North Sea, has provided an additional incentive to invest in these larger vessels.

The introduction of licence aggregation penalties has meant that a larger capacity vessel can only be introduced into the fleet by combining the licences from two or more smaller vessels. This results in one large vessel being substituted for two or more smaller sized ones. Initially, in 1990, the combined capacity of such existing vessels, measured in Vessel Capacity Units (VCUs), had to be equivalent to 110 per cent of the new vessel. This figure was increased to 120 per cent in 1992 and to 130 per cent in December 1994 when involving three or more vessels. The only constraint on the aggregation of under 10m vessel licences is that they must not result in a VCU total in excess of 100 units. The VCUs are calculated from the physical size of the boat and the power of the engine. Since the size of the new vessel is likely to be determined by operational requirements the only factor which can be altered to reduce the declared number of its VCUs, and hence the number of extra VCUs which have to be purchased before it can obtain a licence, is the power of the engine. This provides a strong incentive for owners to minimise the declared power of the engines on any new boats being brought into the fleet.

A third factor is that, in order to reduce over-capacity in the fishing fleet and to meet targets laid down by the European Union, it has been government policy to pay fishermen to decommission their vessels. Given the relatively greater administrative and/or financial attractions of the small and large vessel sectors, most decommissioned vessels have been in one of the medium sized length classes. Decommissioning has, therefore, speeded up the fleet restructuring process and helps to explain the increased rate of decline in the number of medium sized vessels since 1993.

Table 1 shows that, in 1996, about 59 per cent of the fleet consisted of small boat (under 10m), 33 per cent were medium sized vessels and 8 per cent were large vessels of over 25m. The number of vessels in each length class decreases as length

class increases. The exception is the very largest size category of 35+m vessels. This has more boats than the 30-35m length class but such a situation is hardly surprising since there is no upper limit to the size of vessels in the largest category.

The large boats represent only 8 per cent of the fleet but account for 62 per cent of the total tonnage and 38 per cent of the power, although there are reasons for thinking that the latter may have been under-stated. Conversely the small vessels contribute only 5 per cent to overall tonnage and 15 per cent to power. The respective figures for the medium sized vessels are 32 per cent of the tonnage and 47 per cent of the power. Hence small boats are the largest sector in terms of vessel numbers, medium vessels are the largest in terms of power and the large vessels dominate the tonnage figures.

Changes in the Location of Vessels by Length Class

Table 2 shows the number of vessels by district between 1986 and 1996. Table 2A in Annex 1 provides this information by length of vessel.

Table 2: The Number of Vessels by District, 1986-96

District	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Eyemouth	144	147	151	129	133	128	132	159	147	135	124
Pittenweem	128	132	117	130	129	124	117	117	118	104	102
Arbroath	85	79	87	86	83	85	85	105	97	88	77
Aberdeen	54	50	53	54	50	49	50	75	69	64	56
Peterhead	149	147	153	148	143	150	147	176	167	163	174
Fraserburgh	151	162	169	166	173	160	158	189	197	292	281
Macduff	116	114	100	93	95	103	101	123	117	..	..
Buckie	105	117	116	115	107	100	95	110	99	166	163
Lossiemouth	107	111	119	121	105	94	90	103	93	..	..
Wick	101	103	99	88	91	87	85	120	138	138	136
Orkney	101	102	103	84	103	102	108	145	197	196	199
Shetland	128	136	124	126	91	89	96	157	197	207	217
Stornoway	177	194	210	291	306	298	367	339	393	356	364
Kinlochbervie	11	11	12	14	15	15	17	21	22	23	22
Lochinver	17	23	25	30	31	27	27	29	34	34	31
Ullapool	50	57	59	57	51	53	61	67	69	68	59
Mallaig	170	181	210	232	219	234	257	283	250	241	259
Oban	111	117	125	137	139	140	150	159	159	166	167
Campbeltown	142	144	174	202	184	189	190	198	218	180	194
Ayr	136	136	128	121	120	148	149	220	213	171	181
Total	2,183	2,263	2,334	2,424	2,368	2,375	2,482	2,895	2,994	2,792	2,806

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[1]Bob Henderson is an Economic Adviser in The Scottish Office Agriculture, Environment and Fisheries Department.
[2]Both are produced by The Scottish Office Agriculture, Environment and Fisheries Department.
[3]The official definition of registered length is the length from the foreside of the foremost fixed permanent structure to the foreside of the rudder at the point where it passes out of the hull' with the overall length being from the foreside of the foremost fixed permanent structure to the afterside of the aftermost fixed permanent structure'. Hence the difference between the two is the length from the rudder

stock to the stern of the vessel.

[4]It tends to be the case that the skipper and crew all live within the same Fishery Office district and it is therefore easy to determine which office should administer the licence. If the skipper and crew live in different districts then it is usually the skipper's address which determines the district that will administer the vessel. In the case of vessel owning companies, these tend to have registered offices in fishing ports. If this is not the case then the boat is usually administered from the Fishery Office closest to the port at which it lands.

[5]The LQ is obtained by dividing the former figure by the latter. A figure greater than 1.0 indicates that a district has an above average share of its locally owned vessels in that particular length class. Conversely, a LQ of less than 1.0 indicates an under-representation of locally owned vessels in that length class. The further away that the LQ is from a figure of 1.0 the greater the relative over or under-representation of a length class in a particular area. The table, therefore shows the extent to which ownership of different vessel length classes is concentrated into particular districts.

[6]Annex 2 provides a glossary of technical terms.

The Scottish Economy: Official Statistics for the New Millennium[1]

John Rigg, Jill Alexander and Ann Thomson[2]

Summary

- This article outlines a strategy for the future provision of official statistics on the Scottish economy. It describes the current work in progress within the Scottish Office on expanding the range of statistics and sets out the proposals for future development.
- The work of Scottish Office economists and statisticians is summarised. In addition to measuring and analysing trends in the Scottish economy, the former are principally concerned with the promotion of economic efficiency in the allocation of resources and securing value for money in public expenditure programmes. Scottish Office statisticians work to a rigorous Code of Practice and both groups are guided by the professional standards that apply across all UK Government Departments.
- The programme of development work on Scottish economic statistics is being conducted on the basis of the Scottish Parliament's allocated function of the economic development of Scotland.
- Development is currently taking place in 3 broad areas: economic statistics, business statistics and labour market statistics. The programme of work includes the derivation of a quarterly series of Scottish GDP, an official index of Scottish manufactured exports, the feasibility of producing an annual estimate of Gross National Income and the consolidation of the Scottish business database.
- The Scottish Office conducts an extensive programme of liaison within the Government Statistical Service and with data users. Under the Scottish Parliament, the technical and practical issues surrounding this liaison are likely to remain at least as important as they are now.
- The article has been prepared as a contribution to an open and constructive debate on this important area of the future Scottish Parliament's work. Constructive feedback is invited.

Introduction

This article describes the background and context for considering a future strategy for the provision of official Scottish economic statistics. It does so with particular reference to the establishment of a Scottish Parliament, which will create new demands for information on the Scottish economy and its linkages and contrasts with the rest of the UK[3].

The article sets out some general background information on the role of economists and statisticians in the Scottish Office. These groups are members of the Government Economic Service (GES) and the Government Statistical Service (GSS), respectively, and are guided by the professional standards that apply across all UK Government Departments. The published role and aims of the Scottish Office Statistical Services are also given[4].

The article then discusses the strengths and limitations of the current portfolio of Scottish economic statistics. The process of continual review of the economic data is outlined and it is seen that the expected requirements of the Scottish Parliament now constitute one of the key factors underpinning the review process. This is followed by a description of the 3 broad areas (economic statistics, labour market statistics, business statistics) in which developments are currently taking place within the Scottish Office. Finally, reference is made to the lessons for the future provision of economic statistics in Scotland that can be derived from the procedures and priorities currently adopted in other regions and countries.

The Role of Economists and Statisticians

Economic Advice in the Scottish Office

It is important to note that economists and statisticians in the economics divisions of the Scottish Office do not only measure and analyse the performance of the Scottish economy as a whole. Indeed, the macro-economic context constitutes a relatively small (though important) part of the overall economists' responsibilities.

Economists work in four of the five departments of the Scottish Office, although the scope of their work is not restricted or closely defined by departmental boundaries. The principal aim of their work is to promote economic efficiency in the allocation of resources and to secure value for money in public expenditure programmes. Organisationally they are located in specialist divisions within the Agriculture, Environment and Fisheries Department; the Industry Group of the Education and Industry Department; the Economic Infrastructure Group of the Development Department; and the Management Executive of The National Health Service. Each of those divisions is headed by a Senior Economic Adviser. Economists work closely with administrative colleagues at all levels and with professional staff from other disciplines in shaping advice to Ministers and senior officials on a wide range of policy areas including agriculture, health, transport, local government finance, local and regional economic development, environment and energy, training, tourism, housing and regeneration. Most of their work is based on the application of micro-economic principles - for example, in connection with the development and application of investment appraisal methods, policy impact assessment, design of delivery mechanisms, and regulatory and pricing issues.

The work of the Scottish Office economists is supplemented in several ways. First, Non- Departmental Public Bodies working under delegated authority will often conduct their own analysis of expenditure and take decisions based on this. Second, the department's economists liaise closely with those in other departments, including HM Treasury, in order to ensure the consistency of advice across government on common and cross-cutting issues. For example, the Scottish Office economists contributed directly to the revision of the "Green Book", which provides the central guidance applicable across government on the conduct of investment appraisals and policy evaluations[5]. Third, it is normal to consider published academic research when developing advice and, where necessary, additional work is commissioned from universities and specialist economic consultancy firms. Often, this commissioned work is carried out in association with other public bodies in a further effort to promote cohesion and consistency in the provision of advice.

Where possible, the economists place their work in the public domain by, for example, placing articles in the Scottish Economic Bulletin or the Scottish Office Economic Research Paper series. Papers are also presented to conferences and seminars in an attempt to share information and to stimulate wider debate. Inevitably, however, much of the economic advice is given in confidence to Ministers as an integral part of overall policy advice.

The future organisational arrangements for the provision of economic advice is not speculated on here. Following the creation of the Scottish Executive, as with other civil servants currently in the Scottish Office, the economists and statisticians will remain part of the Home Civil Service and will support the work of Ministers accountable to the Scottish Parliament.

Scottish Office Statistical Services

The general role of the Statistical Services within the Scottish Office is clearly stated in all of the Office's statistical publications:

- To collect and analyse statistics on most aspects of Scottish life;
- To provide statistics and statistical advice to Scottish Office Ministers and civil servants;
- To make statistics available to Parliament and the public.

The aims of the Scottish Office Statistical Service are also given:

- To provide a timely and cost-effective statistical service;
- To maintain the integrity and validity of the statistics, by ensuring that they are accurate and not presented in any way which is misleading;
- To improve the quality and relevance of the statistics, taking account of the needs and priorities of users;

- To minimise the burden on suppliers.

It should be emphasised that the quality control requirements for Scottish Office statistics - as in the provision of all GSS data - are demanding. Government statisticians work to a rigorous Code of Practice[6] and data and analysis are provided subject to a Statistical Quality Checklist[7].

Current Activities

The Existing Responsibilities and Review of Procedures

Within the administrative structure of the Scottish Office, the lead on the measurement and analysis of the Scottish economy is taken by the Economics Advice and Statistics (EAS) Division of the Education and Industry Department (EID). EAS is responsible for the presentation of economic data to Scottish Office Ministers and officials and to other users outwith Government, including the general public.

The statistical outputs of EAS are kept under continual review and assessed against a number of relevant tests:

- Are the economic data relevant, especially for Ministers and Scottish Office officials?
- Are the resources available for measuring the Scottish economy being allocated in the most appropriate way?
- Is there a risk that the available statistical resources are being spread too thinly?
- Could the presentation of economic data be made more user-friendly?
- Could the liaison function (with the GSS/ONS) be undertaken more efficiently (see next section)?
- Are the consultation arrangements working effectively, enabling full account to be taken of the needs of users and the views of producers?
- Is there an overall coherence to the EAS statistical responsibilities?
- How might the future requirements for economic data change?

This review process ensures that there is a dynamic focus to the Division's statistical interests, the impetus of which is now largely driven by 4 factors:

- EAS's own perception of where the coverage of Scottish economic data could be improved;
- The requirements of Ministers and officials and of other users;
- The wider changes within the GSS and the ONS ; and
- The expected requirements of the Scottish Parliament.

The Economics Advice and Statistics Division's Liaison Role with GSS/ONS and with Data Users

The Division also liaises with statisticians in other government departments - especially the ONS - on technical issues and on matters affecting the Scottish Office[8].

This constitutes a vital and resource-intensive part of the Division's work - albeit one which is little seen by the outside world - and it is appropriate to draw a wider attention to it.

On the one side, there is our relationship within the GSS. There are 3 facets to this. First, there is the liaison on survey design and coverage which, at present, is a major issue for the Scottish Office. At the ONS's instigation, several of the current UK business and labour market data collection systems have recently been or are currently under review and this has implications for the derivation of regional (including Scottish) estimates. An example is the new Annual Business Inquiry, which will replace the Annual Employment Survey, the Annual Census of Production and the annual Distributive and Service Inquiries. In addition, the ONS has recently led a wide-ranging public consultation exercise on the future presentation and dissemination of UK and regional labour market statistics. Throughout these reviews of data collection and presentation, the EAS presence within the structure of the relevant GSS sub-groups has been essential, given the obvious Scottish Office interests. This is particularly important because the availability of relevant and detailed labour

market information will undoubtedly be a major requirement of the Scottish Parliament (see below). Moreover, such information is also an essential input to the production of other Scottish economic data series, including the proposed quarterly GDP series.

The second aspect of the GSS relationship concerns the obligation on the Scottish Office to match the broader statistical developments that are taking place at both the UK and international levels. These include:

- A methodological review of EAS's quarterly Index of Production and Construction;
- The re-basing of economic indices (including the Index and the GDP series) from 1990 to 1995 prices, including the re-estimation of appropriate base-year weights; and
- The adoption of the new European Standards of National Accounts (known as ESA95), which will require significant changes in the measurement of capital expenditure and GDP, including the incorporation in the latter of an estimate of the "black" economy.

Although these issues are essentially of a technical nature, they cannot be ignored, as they affect the estimation of our own series (including the Index, GDP and the Input-Output tables) and they have obvious implications for the use of statistical resources.

Third, there is the formal relationship between the Scottish Office and the GSS. Non-statutory agreements are being drawn up between the Scottish Office (and related departments) and other government departments to establish how they would work together on matters of common interest after the establishment of the Scottish Parliament. The relevant agreement on statistics will provide the framework by which departments will continue to consult on statistical issues, exchange information required for statistical purposes, provide advance notification, conduct joint working, and generate harmonised and high quality statistics at the GB/UK level, as well as for the constituent countries. Within the Scottish Office, the lead on this is being taken by the Chief Statistician, with contributions on economic statistics from EAS. The Division's statisticians are also contributing to the specific GSS committees examining the implications of Government policies (including devolution) for the collection, processing, analysis and dissemination of economic data.

The other side of the Division's statistical liaison role is with the users/customers of data, including other Scottish Office divisions, Scottish Enterprise, Highland and Islands Enterprise, local enterprise companies, Unitary Authorities, COSLA, academics, businesses, consultants and the general public. The general principle is to ensure that the data requirements of Scottish users are taken into account, when reviews of economic data are conducted by ONS or others. In practical terms, in recent months, this has applied to decisions taken (or about to be taken) on:

- The coverage and presentation of unemployment and other labour market statistics, including the greater weight to be given to the measures available from the Labour Force Survey;
- The boundaries of the new NUTS areas (to be used in assessing the future eligibility of local areas for European Structural Funds);
- The new travel-to-work areas (TTWAs), which take account of the commuting patterns revealed in the 1991 Census of Population;
- The derivation of historical data for the Unitary Authorities;
- Contributing to the Scottish Office's preparation for the 2001 Census of Population, the lead on which is being undertaken by GRO (Scotland);
- The recommendations of the Osmotherly Report on survey holidays.

In summary, the EAS Division's liaison function within the GSS and with data users is extensive. Under the Scottish Parliament, the technical and practical issues surrounding this liaison are likely to remain at least as important as they are now.

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[1]This article is based on a paper presented to a Scottish Economic Society conference on "Economic

Policymaking for a Scottish Parliament" at the Management Centre, Stirling University, 13 February 1998.

[2]Dr John Rigg is Senior Economic Adviser in The Scottish Office Education and Industry Department. Jill Alexander and Ann Thomson are Statisticians in SOEID.

[3]There are, of course, a number of other factors - in addition to devolution - which are currently affecting the required coverage and presentation of economic data, ranging from the government commitment to enhance the integrity of official statistics through to the need for developing international harmonisation of data. These issues are not discussed at length here. The paper also does not address other broad areas in which there may be an increased demand for statistical outputs as a result of devolution. These include cross-cutting social issues such as poverty/deprivation and issues relating to the relative cost of public service provision in Scotland and the rest of the UK.

[4]The Scottish Office Statistical Services cover a broad range of areas, in addition to those specifically relating to the Scottish economy. These areas, which are not discussed here, include education, social work, transport, health and criminal justice.

[5]Appraisal and Evaluation in Central Government: Treasury Guidance, HM Treasury, The Stationery Office, 1997.

[6]Official Statistics: Code of Practice, GSS, April 1995.

[7]Statistical Quality Checklist, GSS, 1997.

[8]EAS is also responsible for EID's liaison with the Survey Control Unit (SCU) of the ONS for surveys of Scottish industry (except transport), including those conducted by Scottish Enterprise, Highlands and Islands Enterprise and the Scottish Tourist Board. The SCU's objectives are: to ensure that the surveys are necessary, will meet the intended objectives and do not duplicate other sources; to ensure that the likely burdens on respondents are taken into account; to ensure that information about proposals to introduce or extend statistical surveys, including compliance cost assessments, are drawn to the attention of the Ministers responsible; and to ensure that the minimum technical and professional standards for conducting the surveys are met.

Charts and Statistics

Index

In tables where figures have been rounded independently, totals may differ from the sum of constituent items.

The following symbols are used in the Tables:

.. not available
- nil or less than half the final digit shown
* figures cannot be shown owing to the risk of disclosing information about individual enterprises.

Scottish Economic Indicators

CHART 1 HERE

CHART 2 HERE

CHART 3 HERE

CHART 4 HERE

CHART 5 HERE

CHART 6 HERE

Population and Labour Market

2.1 Civilian workforce in employment; employees in employment: seasonally adjusted Scotland: September 1985-Septen

		Civilian workforce in employment (not seasonally adjusted)				Employees in employment (seasonally adjusted)					
		Total civilian workforce in employment	**Employees in employment**	**Self-Employed**	**Govt Training**	**Total employees in employment**	**Males**	**Females**	**Agriculture, hunting, forestry and fishing**	**Production and Construction**	
										Total	**Manufactu**
1985	Sept	2,104	1,907	173	24	1,900	1,038	863	37	591	403
	Dec	2,085	1,891	173	21	1,890	1,031	859	33	585	398
1986	March	2,063	1,868	174	22	1,879	1,025	855	33	578	395
	June	2,078	1,879	174	24	1,876	1,021	855	32	570	390
	Sept	2,082	1,876	178	28	1,869	1,012	857	31	565	387
	Dec	2,072	1,863	182	27	1,861	1,005	856	32	559	384
1987	March	2,066	1,850	186	30	1,861	1,002	859	33	555	380
	June	2,093	1,879	181	34	1,877	1,009	868	32	559	383
	Sept	2,104	1,881	183	40	1,874	1,004	871	30	556	379
	Dec	2,120	1,896	186	37	1,894	1,013	881	30	557	380
1988	March	2,125	1,897	189	40	1,907	1,018	889	30	560	381
	June	2,159	1,921	197	41	1,919	1,021	897	30	561	382
	Sept	2,185	1,941	201	43	1,936	1,022	915	30	561	385
	Dec	2,197	1,944	206	47	1,940	1,015	925	30	564	387
1989	March	2,215	1,947	211	57	1,957	1,021	936	30	565	387
	June	2,238	1,957	222	59	1,956	1,021	935	30	562	379
	Sept	2,248	1,968	222	58	1,963	1,029	934	30	561	375
	Dec	2,254	1,975	223	56	1,971	1,032	939	30	560	374
1990	March	2,248	1,966	224	59	1,976	1,035	942	30	560	372
	June	2,253	1,988	208	56	1,987	1,037	949	31	560	372
	Sept	2,260	2,000	206	55	1,995	1,040	955	30	560	375
	Dec	2,265	2,006	203	56	2,002	1,043	959	29	555	371
1991	March	2,247	1,992	201	54	2,004	1,043	961	29	543	363
	June	2,268	1,998	224	46	1,996	1,032	964	29	532	356
	Sept	2,270	2,004	221	45	1,999	1,029	970	28	531	353
	Dec	2,276	2,011	219	46	2,007	1,036	971	31	527	348
1992	March	2,274	2,009	217	48	2,022	1,038	983	32	529	348
	June	2,269	2,012	216	41	2,009	1,033	976	32	523	341
	Sept	2,248	1,993	216	39	1,986	1,018	968	33	508	332

	Dec	2,227	1,972	216	39	1,968	1,002	966	35	496	321
1993	March	2,198	1,942	217	39	1,957	989	968	36	487	321
	June	2,215	1,964	218	33	1,961	993	968	37	482	321
	Sept	2,226	1,974	220	32	1,965	995	970	37	479	316
	Dec	2,239	1,971	236	31	1,968	994	974	37	480	314
1994	March	2,215	1,951	231	33	1,967	988	979	37	477	308
	June	2,240	1,983	225	33	1,980	991	989	39	483	313
	Sept	2,244	1,994	219	31	1,984	985	998	39	479	314
	Dec	2,242	1,981	230	30	1,978	983	995	39	477	315
1995	March	2,227	1,968	227	31	1,985	987	998	39	472	314
	June	2,252	1,988	235	29	1,986	980	1,006	39	470	317
	Sept	2,263	1,999	236	28	1,986	978	1,008	38	474	317
	Dec	2,256	1,993	235	29	1,991	984	1,007	37	473	317
1996	March	2,205	1,958	219	27	1,975	972	1,003	35	471	317
	June	2,226	1,981	225	20	1,980	976	1,004	33	467	314
	Sept	2,254	2,001	228	26	1,987	981	1,006	32	466	314
	Dec	2,240	1,987	227	25	1,986	968	1,019	32	457	312
1997	March	2,221	1,973	222	27	1,992	976	1,016	31	459	312
	June	2,252	1,996	231	25	1,994	981	1,013	31	467	313
	Sept	2,277	2,007	247	24	1,993	974	1,018	32	457	309

Source: Office for National Statistics, quarterly employment estimates
The Scottish Office Education and Industry Department

2.2 Total population (1); civilian labour force aged 16 and over (2) Scotland: 1984-2001 (3)

	Population			Civilian Labour Force(4)		
	Total	**Males**	**Females**	**Total**	**Males**	**Females**
1984	5,145.6	2,481.7	2,663.9	2,432	1,440	992
1985	5,136.9	2,479.0	2,657.9	2,462	1,438	1,024
1986	5,123.0	2,474.2	2,648.8	2,434	1,420	1,014
1987	5,112.6	2,469.8	2,642.8	2,453	1,422	1,031
1988	5,093.4	2,461.2	2,632.2	2,465	1,419	1,046
1989	5,096.6	2,462.6	2,634.0	2,500	1,424	1,076
1990	5,102.2	2,466.0	2,636.2	2,500	1,427	1,073
1991	5,107.0	2,469.5	2,637.5	2,499	1,409	1,090
1992	5,111.2	2,472.8	2,638.4	2,540	1,424	1,116
1993	5,120.2	2,478.5	2,641.7	2,480	1,390	1,090
1994	5,132.4	2,486.2	2,646.2	2,519	1,399	1,120
1995	5,136.6	2,489.2	2,647.4	2,520	1,394	1,125
1996	5,128.0	2,485.8	2,642.2	2,527	1,394	1,132
1997	5,123.3	2,485.4	2,637.9	2,531	1,393	1,138
1998	5,117.9	2,484.5	2,633.4	2,534	1,391	1,143
1999	5,114.0	2,484.4	2,629.6	2,534	1,388	1,146
2000	5,110.1	2,484.3	2,625.8	2,531	1,382	1,149
2001	5,106.1	2,484.2	2,621.9	2,528	1,376	1,152

Source: General Register Office for Scotland
Office for National Statistics

(1) Estimates for years 1984-1996; 1996 based projections for years 1994-2001 (prepared by the Government Actuary's Depart
(2) The civilian labour force comprises people aged 16 or over who are either in civilian employment or unemployed on the IL
Estimates for years 1984-1994: 1992-based projections for years 1995-2001.
(3) At June each year.
(4) ILO/OECD definitions.

Output

3.1 Gross Domestic Product by type of income and by industry at factor cost (1) Scotland: 1986-1996

million (current prices)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996(p)
GDP at factor cost	**27,263**	**29,785**	**32,975**	**36,253**	**40,231**	**42,231**	**44,589**	**46,840**	**49,720**	**52,518**	**54,430**
By type of income											
Income from employment	18,752	19,991	21,999	24,252	27,269	29,235	30,589	31,441	32,533	33,772	34,323
Income from self-employment and Gross	6,768	8,028	9,043	9,646	10,100	9,229	9,900	11,099	12,783	14,381	14,944
Trading profits	212	399	532	621	505	183	320	229	299	471	-197
Less stock appreciation											
Rent	1,955	2,165	2,466	2,976	3,366	3,951	4,420	4,528	4,704	4,837	4,961
By industry											
Agriculture, hunting, forestry and fishing	920	1,018	984	1,163	1,204	1,169	1,384	1,326	1,431	1,627	1,642
Mining, quarrying incl oil and gas extraction	625	528	605	612	748	1,048	1,077	1,173	1,231	1,247	1,220
Manufacturing	387	7,115	7,780	8,367	9,153	8,466	8,878	9,279	10,031	11,611	12,103
Electricity, Gas, Water	687	730	810	872	910	1,134	1,236	1,469	1,607	1,681	1,828
Construction	1,922	2,135	2,465	2,770	3,147	2,959	3,134	2,965	3,172	3,246	3,282
Distribution, hotels and catering: repairs	3,801	3,990	4,461	4,809	5,451	6,014	6,305	6,533	7,030	7,155	7,237
Transport, storage and communication	2,435	2,697	3,087	3,244	3,410	3,577	3,665	3,751	4,021	4,088	4,181
Financial and business services, etc	4,939	5,448	5,911	6,816	7,689	8,291	9,157	9,897	10,624	10,613	10,780
Public administration and defence	2,148	2,327	2,514	2,690	2,979	3,170	3,261	3,522	3,528	3,562	3,709
Education, social work and health service	3,164	3,513	3,998	4,900	5,514	6,217	6,524	6,787	7,439	7,925	8,250
Other services	1,226	1,305	1,462	1,441	1,577	1,629	1,743	1,917	1,994	2,068	2,160
Adjustment for financial services	-991	-1,020	-1,102	-1,430	-1,551	-1,442	-1,775	-1,777	-2,387	-2,307	-1,962
% share of UK less continental shelf	8.5	8.5	8.4	8.3	8.5	8.6	8.7	8.7	8.7	8.8	8.6
Per head, UK	5,324	5,826	6,473	7,113	7,885	8,269	8,724	9,148	9,688	10,224	10,614
Per head, UK less continental shelf=100	94.6	94.6	93.8	93.8	96.1	97.5	98.9	98.6	99.1	100.2	99.1

(1) Factor cost excludes taxes on expenditure, such as VAT, but includes subsidies.

3.2 Gross Domestic Product (output-based) by industry at constant factor cost (1) Scotland: 1983-1995; UK: 1983-1996

1990=100

SIC92	Gross Domestic Product	Gross Domestic Product less oil and gas	Agriculture hunting, forestry and fishing	Production and Construction	Services			
					Total	Distribution hotels and repairs	Transport, storage and Communication	Other Services
			A+B	C to F	G to O	G+H	I	J to Q
1990 Weights	1,000	986	30	356	613	135	85	393
Scotland								
1983	83.8	83.8	80.4	86.6	82.3	76.5	86.2	83.5
1984	87.0	86.9	88.7	89.5	85.4	80.0	89.2	86.4
1985	89.5	89.3	87.2	91.8	88.1	82.9	92.1	89.0
1986	89.8	89.8	93.1	89.4	89.9	84.5	92.7	91.1
1987	91.6	91.7	92.3	88.9	93.1	87.8	98.2	93.9
1988	95.4	95.5	92.7	94.0	96.3	95.4	98.8	96.0
1989	97.9	97.9	96.7	96.3	98.8	100.3	101.1	97.8
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	100.2	100.2	102.0	99.0	100.9	98.3	99.1	102.2
1992	101.7	101.6	103.0	100.7	102.2	100.6	99.8	103.2
1993	104.0	104.0	97.0	103.8	104.5	105.9	101.2	104.8
1994	106.3	106.3	103.4	106.5	106.4	109.7	103.5	105.8
1995	108.6	108.8	106.2	110.1	107.9	109.7	105.0	107.9
UK Weight	1,000	953	19	350	631	143	84	405
United Kingdom(2)								
1983	80.1	79.5	83.3	..	79.6	74.1	73.8	82.8
1984	82.4	80.9	100.6	..	82.6	77.8	77.4	85.4
1985	85.3	84.2	95.3	..	85.1	81.0	80.6	87.6
1986	88.3	87.8	95.5	87.2	88.6	85.5	84.0	90.7
1987	92.5	91.9	93.5	91.9	92.7	91.8	89.9	93.7
1988	97.0	96.8	92.1	97.0	97.2	97.8	94.6	97.5
1989	99.4	99.4	96.7	99.7	99.2	101.2	99.2	98.5
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	97.9	97.8	103.8	95.7	98.9	96.0	97.2	100.3
1992	97.4	97.1	107.7	95.1	98.4	95.1	99.1	99.5
1993	99.6	99.1	99.1	96.7	101.2	99.8	102.6	101.5
1994	104.0	103.1	98.5	101.6	105.6	103.8	110.9	105.1
1995	106.7	105.9	97.1	103.3	108.9	105.6	118.2	108.2
1996	109.5	108.5	95.5	104.4	112.8	108.9	123.9	111.8

(1) Factor cost excludes taxes on expenditure, such as VAT, but includes subsidies.
(2) The UK index figures for total GDP and GDP excluding oil and gas are not output based, but take account of other information based on incomes and expenditure.

3.3 Index of industrial production and construction: summary (seasonally adjusted) Scotland: 1986-1996; q3 1990-q3 1997

Production and Construction

		Total Production and Construction	Total less extraction of oil and gas	Production				Construction
				Total Production	Mining and Quarrying	Electricity, gas and water supply	Manufacturing	
1992 SIC		C,D,E,F	C,D,E,F-C1.11	C,D,E	C	E	D	F
Index Weight		1,000	961	776	49	66	661	224
1986		89.4	89.3	90.2	92.9	89.0	90.1	86.7
1987		88.9	88.9	89.9	88.2	91.5	89.9	85.2
1988		94.0	94.2	95.4	90.9	95.8	95.6	89.4
1989		96.3	96.4	97.6	94.2	93.1	98.3	92.0
1990		100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991		99.0	98.7	98.6	106.1	105.3	97.3	100.5
1992		100.7	100.4	99.1	108.6	106.3	97.6	106.3
1993		103.8	103.6	102.0	105.9	107.7	101.1	110.0
1994		106.5	106.5	106.8	104.4	109.2	106.7	105.4
1995		110.0	110.6	110.0	94.1	116.8	110.5	110.2
1996		114.1	114.7	115.5	97.7	120.8	116.3	109.2
1990	Q3	98.9	98.8	98.6	101.6	103.9	97.8	99.8
	Q4	99.2	99.0	98.7	101.8	101.0	98.2	101.0
1991	Q1	98.7	98.5	99.0	104.3	105.8	97.9	97.8
	Q2	99.2	99.0	98.1	105.1	106.1	96.8	102.7
	Q3	99.0	98.7	98.9	108.3	102.4	97.8	99.5
	Q4	99.1	98.7	98.2	106.8	106.8	96.7	102.1
1992	Q1	99.7	99.4	97.8	110.0	105.7	96.1	106.2
	Q2	99.7	99.4	98.6	110.1	104.7	97.1	103.7
	Q3	101.7	101.4	99.6	106.9	107.6	98.3	108.8
	Q4	101.7	101.4	100.3	107.5	107.1	99.0	106.6
1993	Q1	101.2	100.9	99.7	107.0	109.1	98.2	106.5
	Q2	103.2	103.0	100.7	104.3	105.2	99.9	112.0
	Q3	105.0	104.9	103.0	105.2	107.5	102.4	112.0
	Q4	105.6	105.5	104.5	107.2	108.8	103.9	109.4
1994	Q1	107.0	107.0	106.3	104.4	107.1	106.3	109.7
	Q2	106.0	105.9	106.0	105.0	110.6	105.6	106.0
	Q3	106.3	106.2	107.1	105.3	109.5	107.0	103.4
	Q4	106.7	106.7	107.8	103.1	109.5	108.0	102.7
1995	Q1	107.8	108.1	108.5	95.3	113.0	109.1	105.1
	Q2	109.8	110.4	109.8	92.1	116.8	110.4	109.7
	Q3	110.8	111.5	110.4	94.1	117.0	110.9	112.3
	Q4	111.9	112.5	111.3	94.8	120.1	111.6	113.9
1996	Q1	112.1	112.7	112.6	98.1	120.8	112.8	110.4
	Q2	112.5	113.1	114.3	98.7	118.9	115.1	106.3

	Q3	114.5	115.2	116.3	97.3	121.1	117.3	108.1
	Q4	117.2	117.9	118.6	96.6	122.4	119.9	112.0
1997	Q1	118.0	118.8	119.4	101.4	122.4	120.5	113.0
	Q2	120.9	121.8	123.4	102.9	128.1	124.4	112.3
	Q3	121.4	122.4	124.9	101.1	135.4	125.6	109.4
% change Q3 97 on Q2 97		0.4	0.5	1.2	-1.8	5.7	0.9	-2.5
Latest 4 quarters on previous 4 quarters		5.9	6.0	7.0	3.3	5.7	7.4	1.8

3.4 Index of industrial production and construction: market sector of production industries; construction (seasonally adjusted)
Scotland: 1986-1996; q3 1990-q3 1997

1990=100

		Market Sector of Production industries			Construction						
1992 SIC		**Consumer goods**	**Investment goods**	**Intermediate goods**	**Total Construction**	**Public**		**Private**		**Repair and maintenance**	
						New housing	**Other new work**	**New housing**	**Other new work**	**Housing**	**Other work**
Index Weight		**205**	**209**	**363**	**224**	**7**	**41**	**33**	**55**	**50**	**38**
1986		96.3	88.0	88.0	86.7	116.6	106.7	81.4	64.3	89.7	91.8
1987		98.7	84.5	88.1	85.2	156.9	92.1	70.7	63.2	95.8	93.9
1988		100.6	92.7	93.9	89.4	139.6	88.7	65.2	80.8	103.0	95.7
1989		98.2	97.5	97.2	92.0	109.1	95.0	78.4	83.0	101.9	97.0
1990		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991		95.2	101.0	99.0	100.5	95.1	116.1	93.7	102.9	90.5	100.3
1992		95.9	103.6	98.2	106.3	126.6	142.1	81.1	115.7	86.9	97.4
1993		94.7	111.1	100.8	110.0	147.4	143.0	91.3	117.8	86.5	102.5
1994		94.3	120.2	106.2	105.4	174.5	109.2	106.6	108.2	92.0	100.6
1995		95.7	127.8	107.8	110.2	177.3	107.7	91.5	133.3	90.3	109.3
1996		95.3	143.5	110.7	109.2	174.4	111.0	95.7	133.4	88.4	98.7
1990	Q3	97.7	98.7	99.0	99.8	92.0	103.9	93.6	101.6	98.1	101.9
	Q4	98.7	97.4	99.3	101.0	89.5	103.4	117.9	94.9	95.3	101.9
1991	Q1	97.5	98.7	100.0	97.8	85.4	105.2	96.0	103.6	87.3	99.2
	Q2	92.5	100.2	100.1	102.7	89.4	114.8	108.6	107.0	87.6	100.9
	Q3	96.1	101.8	98.7	99.5	96.7	112.6	91.9	98.2	94.2	101.0
	Q4	94.8	103.2	97.2	102.1	108.9	131.8	78.5	102.7	93.1	99.9
1992	Q1	94.1	100.0	98.6	106.2	114.8	141.9	83.0	108.2	92.1	101.7
	Q2	96.4	103.1	97.2	103.7	120.1	139.1	79.3	112.5	83.8	96.8
	Q3	97.0	104.3	98.4	108.8	132.1	142.1	86.2	122.2	87.0	96.9
	Q4	96.1	107.2	98.6	106.6	139.2	145.3	75.9	119.9	84.9	93.9
1993	Q1	93.4	109.3	97.7	106.5	133.8	155.1	79.5	108.0	84.4	98.7

	Q2	93.8	109.4	99.5	112.0	148.8	150.5	83.3	125.8	86.2	102.2
	Q3	93.9	112.5	102.6	112.0	147.9	147.4	97.3	116.9	84.4	108.3
	Q4	97.6	113.3	103.3	109.4	159.2	119.1	105.2	120.5	91.1	100.7
1994	Q1	95.6	117.5	105.8	109.7	178.9	109.6	111.9	122.7	94.1	96.1
	Q2	93.5	119.5	105.3	106.0	177.1	106.0	110.8	107.3	92.6	103.5
	Q3	94.1	122.1	105.9	103.4	182.4	104.6	103.7	104.8	90.7	100.9
	Q4	93.9	121.6	107.7	102.7	159.5	116.8	99.8	98.1	90.4	101.6
1995	Q1	93.8	122.7	108.7	105.1	166.0	104.0	95.2	116.5	91.5	104.4
	Q2	97.6	125.8	107.5	109.7	173.8	118.5	93.0	120.0	91.3	111.4
	Q3	96.0	129.5	107.5	112.3	186.2	108.8	89.0	141.3	90.4	108.8
	Q4	95.5	133.2	107.6	113.9	183.1	99.2	88.7	155.4	87.9	112.4
1996	Q1	96.7	136.4	107.8	110.4	184.2	116.7	91.4	130.8	85.1	109.5
	Q2	95.6	140.4	110.0	106.3	179.7	104.5	91.0	133.5	87.6	92.5
	Q3	94.9	146.2	111.3	108.1	163.9	108.6	95.2	132.9	90.5	95.3
	Q4	94.3	151.2	113.6	112.0	169.9	114.2	105.4	136.3	90.3	97.5
1997	Q1	95.2	153.2	113.7	113.0	148.7	109.0	99.5	149.5	92.9	96.1
	Q2	95.3	160.4	117.9	112.3	129.8	94.0	104.9	158.6	90.3	97.3
	Q3	98.0	159.0	120.3	109.4	119.9	94.3	102.9	152.3	85.3	99.5
% change Q3 97 on Q2 97		2.9	-0.9	2.1	-2.5	-7.0	0.4	-1.9	-4.0	-5.5	2.3
Latest 4 quarters on previous 4 quarters		0.0	12.2	6.6	1.8	-20.8	-3.9	12.3	8.9	2.2	-4.7

Investment and Construction

4.1 Gross Domestic Fixed Capital Formation (GDFCF) for selected industries(1) Scotland: 1992-1995

million

	1992	1993	1994	1995
Gross Domestic Fixed Capital Formation for selected industries	4,607	4,591	4,773	5,186
Agriculture, forestry and fishing	130	134	97	104
Energy, mining and water	905	661	473	563
Manufacturing	1,082	1,028	1,137	1,433
Transport and communication	639	739	813	779
Dwellings	1,851	2,029	2,253	2,307

Source: Office for National Statistics, Regional Accounts

(1) GDFCF is defined as expenditure by industry on fixed tangible assets which will give service over a number of years for example buildings, machinery, vehicles and plants.

4.2 Scottish Production Database: net capital expenditure in manufacturing industries (1) Scotland and Scotland as % of UK: 1993-1995 (3)

SIC 1992 Industry Group			Net capital expenditure (2)					
			million			per head		
Sub-Section	**Division**		**1993**	**1994**	**1995**	**1993**	**1994**	**1995**
		Manufacturing Industries	1,093.4	1,250.5	1,645.6	3,245	3,756	5,075
DA	15/16	Food, Drink & Tobacco	226.3	239.8	283.9	3,453	3,734	4,893
DB	17	Textiles	28.7	26.6	28.2	1,285	1,215	1,324
	18	Clothing	9.9	18.5	18.4	575	1,035	1,004
DC	19	Leather	3.1	3.5	2.4	1,888	2,290	2,475
DD	20	Wood	36.6	25.8	23.0	4,676	3,099	2,955
DE	21	Pulp & paper	44.9	60.4	75.7	3,575	4,607	6,505
	22	Printing & Publishing	58.2	61.7	56.1	2,937	3,194	3,304
DF	23	Coke, Petroleum & Nuclear	*	*	*	*	*	*
DG	24	Chemicals & Man-made Fibres	132.6	122.2	157.3	7,996	7,509	10,089
DH	25	Rubber & Plastics	45.8	46.5	69.8	3,094	3,351	4,619
DI	26	Other Non-Metallic Minerals	*	*	*	*	*	*
DJ	27	Basic Metals	14.3	9.9	7.5	2,309	1,822	1,375
	28	Metal Products	25.0	38.9	44.2	887	1,536	1,673
DK	29	Mechanical Engineering	57.2	51.9	32.8	2,073	1,983	1,174
DL	30	Office Machinery	66.7	152.0	114.2	4,947	10,265	7,145
	31	Electrical Equipment nes	26.5	21.9	19.0	2,207	2,038	1,772
	32	Radio & TV Equipment	173.2	223.5	538.9	10,857	12,848	28,055

	33	Medical, Precision, Optical etc	20.6	29.3	43.2	1,801	2,441	3,796
DM	34	Motor Vehicles	8.6	6.6	7.1	2,275	1,804	1,620
	35	Other Transport Equipment	28.2	25.1	20.6	1,375	1,313	1,214
DN	36/37	Other Manufacturing & Recycling	9.4	14.0	23.6	1,169	1,389	2,797
Scotland as percentage of the UK								
		Manufacturing Industries	8.7	9.1	9.8	107.6	116.3	127.3
DA	15/16	Food, Drink & Tobacco	9.8	10.8	12.0	83.1	92.7	107.4
DB	17/18	Textiles & Clothing	10.0	9.8	10.2	92.8	88.8	96.2
DC	19	Leather	5.9	5.5	4.1	203.7	206.8	225.0
DD	20	Wood	27.0	20.6	16.3	254.3	195.7	156.6
DE	21/22	Pulp, Paper, Publishing & Printing	7.0	7.1	6.8	92.7	100.1	104.3
DF	23	Coke, Petroleum & Nuclear	*	*	*	*	*	*
DG	24	Chemicals & Man-made Fibres	7.2	6.5	6.9	116.9	106.4	122.7
DH	25	Rubber & Plastics	6.0	6.2	7.7	93.1	104.1	120.2
DI	26	Other Non-Metallic Minerals	*	*	*	*	*	*
DJ	27/28	Basic Metals & Metal Products	4.6	4.5	4.1	67.9	75.7	67.6
DK	29	Mechanical Engineering	8.2	6.1	3.2	115.7	91.0	45.9
DL	30-33	Electrical & Optical Engineering	20.1	24.4	30.6	195.6	234.6	277.0
DM	34/35	Transport Equipment	2.9	2.1	1.2	49.8	37.5	22.9
DN	36/37	Other Manufacturing & Recycling	3.7	4.4	6.2	85.5	93.2	144.5

Source: Scottish Production Database: The Scottish Office Education and Industry Department
Annual Census of Production, Monthly Sales Inquiry, Office for National Statistics

(1) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census of Production.
(2) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery. Capital expenditure in respect of establishments where production had not commenced before the end of the year is included.
(3) 1995 data for Scotland are provisional.

4.3 Registration of cars; construction orders; housing starts Scotland: q4 1984-q3 1997

	New registrations of cars, seasonally adjusted thousands	**Construction orders seasonally adjusted, 1990 prices(1) million**					**Housing starts thousands**		
		Public		**Private**			**Private(2)**	**Housing Associations**	**Public**
		New housing	**Other new work**	**New housing**	**Industrial**	**Commercial**			
1984 Q4	35.3	-	-	-	-	-	2.7	0.5	0.6
1985 Q1	36.4	-	-	-	-	-	3.5	0.5	0.6
Q2	34.6	-	-	-	-	-	3.6	0.4	0.4
Q3	37.4	-	-	-	-	-	3.9	0.3	0.7
Q4	36.3	-	-	-	-	-	3.2	0.3	0.6
1986 Q1	36.5	11	133	75	51	84	3.6	0.4	0.6
Q2	38.2	33	107	84	30	46	3.6	0.3	0.6
Q3	36.1	23	103	64	33	51	3.9	0.3	0.7
Q4	36.9	25	127	76	45	58	3.4	0.4	0.7

1987	Q1	37.4	26	92	64	41	93	3.3	0.6	1.0
	Q2	36.8	29	117	63	41	93	3.9	0.5	0.5
	Q3	39.8	43	183	80	36	100	3.2	0.5	0.6
	Q4	40.4	18	145	42	36	106	2.7	0.5	0.8
1988	Q1	40.3	27	140	46	41	62	3.8	0.6	0.8
	Q2	41.1	16	132	52	38	125	4.0	0.4	0.7
	Q3	44.0	17	140	64	45	116	3.6	0.3	0.6
	Q4	39.4	22	99	93	54	130	3.6	0.8	0.4
1989	Q1	44.2	32	168	130	49	240	4.3	0.9	0.5
	Q2	45.8	29	141	128	67	186	5.1	0.6	0.4
	Q3	45.0	36	104	140	68	135	4.2	1.0	0.4
	Q4	40.6	37	180	161	46	150	4.4	0.2	0.6
1990	Q1	43.6	17	108	143	57	111	4.5	0.9	0.8
	Q2	42.6	18	129	168	62	150	4.8	0.2	0.4
	Q3	38.3	20	170	143	73	126	4.1	0.3	0.2
	Q4	35.7	33	113	168	86	176	3.1	0.7	0.3
1991	Q1	33.5	25	132	169	55	141	4.8	2.0	0.4
	Q2	30.3	42	171	131	76	118	4.0	0.5	0.2
	Q3	31.3	25	120	114	53	177	3.2	0.5	0.2
	Q4	32.1	29	194	128	62	121	3.8	0.5	0.2
1992	Q1	30.5	46	192	107	72	167	3.5	0.9	0.2
	Q2	32.8	35	195	104	59	149	4.2	0.5	0.1
	Q3	31.2	44	234	118	60	128	3.9	1.0	0.1
	Q4	35.2	35	200	97	75	151	3.0	0.7	0.1
1993	Q1	34.3	55	187	104	79	150	3.9	2.4	0.2
	Q2	35.7	38	157	129	88	121	4.9	0.6	0.0
	Q3	38.7	59	187	136	57	164	4.0	0.6	0.2
	Q4	37.2	73	156	143	69	157	4.0	1.4	0.1
1994	Q1	38.7	37	156	143	48	130	4.0	2.5	0.2
	Q2	35.3	45	152	177	63	112	5.4	0.6	0.2
	Q3	35.6	36	172	144	102	202	5.4	0.8	0.1
	Q4	33.6	43	142	140	83	155	4.3	1.0	0.1
1995	Q1	35.8	39	172	147	192	134	4.5	2.7	0.1
	Q2	35.1	68	168	119	89	152	4.1	0.8	0.1
	Q3	36.8	45	170	133	110	111	4.8	0.9	0.2
	Q4	36.8	29	185	104	72	154	3.6	1.1	0.0
1996	Q1	36.1	58	178	109	50	265	4.8	2.5	0.0
	Q2	39.0	32	158	96	74	306	3.6	0.9	0.0
	Q3	38.5	41	100	128	110	131	4.1	0.4	0.0
	Q4	40.2	32	145	172	139	156	3.3	0.9	0.0
1997	Q1	40.9	42	148	135	64	221	4.9	1.8	0.0
	Q2	45.0	29	148	140	177	152	..	..	..
	Q3	44.9	29	140	135	65	126	..	..	..

Source: The Scottish Office Education and Industry Department
The Scottish Office Development Department
Department for the Environment, Transport and the Regions

(1) There are a large number of revisions in this series due to refinements in methodology.
(2) Figures from 1995 include estimates due to outstanding returns.

Business Section

5.1 Companies registered and dissolved in Scotland: 1987-88-1996-97

Thousands

Fiscal Year	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
On register at start of period	50.9	53.9	57.3	60.4	61.8	62.3	61.8	61.4	62.4	64.1
New companies incorporated	6.3	6.9	7.0	6.8	6.5	6.1	6.4	7.1	7.5	9.3
Dissolved	3.4	3.6	4.0	5.5	6.1	6.7	6.9	6.1	5.9	5.3
Restored to the registers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On register at end of period	53.9	57.3	60.4	61.8	62.3	61.8	61.4	62.4	64.1	68.2
Of which:										
in Liquidation	3.0	3.1	3.5	4.0	3.8	4.1	3.6	3.5	3.3	3.2
in course of removal	6.1	4.9	5.6	4.2	4.9	4.0	3.6	3.6	3.2	3.3
Effective numbers on register at end of period	44.8	49.3	51.3	53.6	53.6	53.8	54.2	55.3	57.6	61.7

Source: Department of Trade and Industry Annual Report to Parliament, presented pursuant to the Companies Act 1985 Section 729. Published by HMSO.

5.2 Enterprises registered for VAT at start of year, Industrial sectors, Scotland(1): 1994-1997

1992 SIC	1994	1995	1996	1997
Agriculture, forestry & fishing	21,010	20,555	20,480	20,450
Mining, energy and water supply	320	300	295	300
Manufacturing	9,395	9,205	9,025	8,990
Construction	13,900	13,385	13,060	12,820
Wholesaling and retailing	30,690	29,580	28,485	27,960
Hotels & restaurants	10,715	10,600	10,380	10,240
Transport & Communications	4,845	4,795	4,855	4,885
Financial intermediation	735	815	815	815
Real estate, renting and business activities	18,430	18,975	19,565	20,610
Public administration etc	8,440	8,985	9,425	9,640
Education, health & social work	1,345	1,410	1,395	1,415
Total	119,825	118,610	117,785	118,125

Source: DTI, Small Firms Statistics Unit
(1) This table is based on VAT data held by ONS on the Inter Departmental Business Register (IDBR). The VAT data are in turn derived from HM Customs and Excise Records.

Oil and Gas

6.1 UK sector of the northern North Sea Oil fields in production: 1975-1996

million tonnes

Field	Operator	Discovery Date	Reserve estimate(1)	Oil production(3)						Cumulative total from 1975
				Total from 1975 to end 1991	1992	1993	1994	1995	1996	
Alba	Chevron	1984	50.7	-	-	-	2.3	3.8	3.8	9.9
Alwyn N	Total Oil Marine	1975	29.0	15.3	3.6	2.9	1.9	1.3	0.9	26.0
Andrew	BP	1974	15.8	-	-	-	-	-	0.8	0.8
Angus	Amerada Hess	1987	1.4	-	1.2	0.2	-	-	-	1.4
Arbroath	Amoco	1969	17.9	2.6	1.7	1.6	1.5	1.7	1.4	10.5
Argyll	Hamilton Bros	1971	9.7	9.7	0.2	0.0	0.0	-	-	9.9
Arkwright	Amoco	1996	-	-	-	-	-	-	0.1	0.1
Auk	Shell	1971	17.1	11.8	0.4	0.4	0.5	0.6	0.4	14.1
Balmoral	Sun Oil	1975	13.3	8.1	1.3	1.0	0.8	0.6	0.4	12.3
Banff	Conoco	1996	..	-	-	-	-	-	0.3	0.3
Beatrice	Britoil	1976	20.9	16.6	0.7	0.6	0.5	0.5	0.4	19.4
Beinn	Marathon	1987	3.0	-	-	0.1	0.2	0.4	0.4	1.1
Beryl	Mobil	1972	204.1	65.9	5.1	4.6	4.2	4.4	4.2	88.4
Birch	Lasmo	1985	4.0	-	-	-	-	0.3	1.0	1.3
Blair	Sun Oil Britain	1983	0.1	0.1	-	0.0	0.0	0.0	0.0	0.1
Blenheim	Arco	1990	2.2	-	-	-	-	1.1	0.8	1.9
Brae Central	Marathon	1976	9.0	1.4	0.8	0.6	0.5	0.5	0.4	4.1
Brae East	Marathon	1980	37.3	-	-	-	2.6	3.3	2.7	8.7
Brae North	Marathon	1975	21.0	10.1	1.8	1.1	1.0	0.5	0.4	14.9
Brae South	Marathon	1972	40.0	27.9	0.6	0.5	0.5	0.5	0.5	30.5
Brent	Shell	1971	270.2	180.4	10.8	10.9	9.5	9.0	9.3	229.9
Brimmond	Shell	1996	..	-	-	-	-	-	-	-
Bruce	BP	1974	23.0	-	-	0.9	2.0	1.7	1.7	6.4
Buchan	BP	1974	16.0	11.3	0.6	0.5	0.6	0.5	0.5	14.1
Chanter	E E Caledonia	1985	0.7	-	-	0.2	0.1	0.1	0.1	0.5
Claymore	E E Caledonia	1974	76.9	49.5	2.1	2.4	2.2	2.3	2.1	60.8
Clyde	BP	1978	17.5	9.4	1.2	1.0	0.8	0.8	0.6	13.8
Columba B	Chevron	1996	..	-	-	-	-	-	0.1	0.1
Columba D	Chevron	1976	-	-	-	-	0.1	0.3	0.7	1.1
Cormorant										

Cormorant N	Shell	1974	63.1	33.5	1.4	1.7	2.1	2.1	1.4	42.2
Cormorant S	Shell	1972	29.2	16.7	1.0	0.7	1.0	0.8	0.9	21.1
Crawford	Hamilton Bros	1975	0.5	0.5	-	-	0.0	0.0	-	0.5
Cyrus	BP	1979	4.4	0.3	0.1	-	0.0	0.0	0.2	0.8
Deveron	Britoil	1972	2.2	1.7	0.1	0.1	0.0	0.1	-	2.0
Don	Britoil	1976	2.0	0.3	0.2	0.2	0.2	0.2	0.1	1.6
Donan	BP	1987	2.1	-	0.3	0.5	0.4	0.4	0.3	1.8
Douglas	Hamilton	1990	11.6	-	-	-	-	-	0.7	0.7
Dunbar	Total	1973	16.3	-	-	-	0.0	1.8	2.2	4.0
Duncan	Hamilton Bros	1981	2.5	2.2	-	-	0.0	0.0	-	2.2
Dunlin	Shell	1973	55.0	40.9	1.3	1.1	1.0	1.0	0.7	46.1
Eider	Shell	1976	15.3	5.6	1.6	1.5	1.2	0.9	0.8	11.7
Ellon	Total	1972	6.5	-	-	-	0.0	0.1	0.1	0.2
Emerald	Midland & Scottish Energy	1981	2.4	-	0.4	0.9	0.6	0.4	-	2.3
Everest	Amoco	1982	4.6	-	-	0.1	0.2	0.3	0.3	0.9
Fergus	Amerada Hess	1996	-	-	-	-	-	-	0.2	0.2
Fife	Amerada Hess	1991	7.1	-	-	-	-	0.7	1.6	2.3
Forties	BP	1970	334.0	282.3	7.6	5.8	6.0	5.4	5.1	312.4
Frigg (UK)	Total	1972	72.5	-	-	5.8	-	0.0	-	5.8
Fulmar	Shell	1975	74.3	58.6	4.0	2.6	2.0	1.2	1.0	69.5
Gannet A	Shell	1978	8.1	-	-	-	0.5	1.0	1.3	2.9
Gannet B	Shell	1979	3.1	-	-	0.1	0.1	0.2	-	0.4
Gannet C	Shell	1982	8.8	-	-	1.3	1.4	1.6	1.6	5.9
Gannet D	Shell	1987	5.3	-	-	0.3	0.3	0.4	0.4	1.4
Glamis	Sun Oil Britain	1982	2.3	1.3	0.2	0.2	0.3	0.2	-	2.2
Gryphon	Kerr-McGee	1987	14.7	-	-	0.2	1.7	2.2	1.9	6.0
Guillemot A'	Shell	1979	6.2	-	-	-	-	-	0.2	0.2
Hamish	Amerada Hess	1988	0.5	0.1	0.1	0.0	0.0	0.0	0.1	0.4
Harding	BP	1988	26.50bcm (gas)	-	-	-	-	-	1.9	1.9
Heather	Unocal	1973	14.2	12.4	0.4	0.4	0.3	0.3	0.2	14.2
Highlander	Texaco	1976	10.4	7.0	0.5	0.4	0.1	0.3	0.2	8.9
Hudson	Amerada Hess	1987	12.0	-	-	0.8	1.5	1.8	1.5	5.5
Hutton	Conoco	1973	25.3	18.3	1.1	1.1	1.2	1.2	0.9	23.9
Hutton NW	Amoco	1975	15.9	13.6	0.5	0.5	0.3	0.3	0.3	15.6
Innes	Hamilton Bros	1983	0.7	0.7	-	0.0	0.0	0.0	-	0.7
Ivanhoe	Amerada Hess	1975	8.2	2.8	1.2	1.3	0.8	0.6	0.5	7.4
Joanne	Phillips	1981	13.0bcm (gas)	-	-	-	-	0.0	0.3	0.3
Judy	Phillips	1985	8.9	-	-	-	-	0.0	0.1	0.1
Kittiwake	Shell	1981	8.7	1.5	1.3	1.4	1.5	1.4	1.0	8.1
Lennox	Hamilton	1992	7.6	-	-	-	-	-	0.1	0.1

Leven	BP	1981	1.0	-	0.1	0.2	0.1	0.1	0.5	0.6
Linnhe	Mobil	1988	0.2	0.1	-	-	-	0.0	-	0.1
Lomond	Amoco	1972	1.6	-	-	0.1	0.2	0.2	0.1	0.5
Lyell	Conoco	1975	4.4	-	-	0.5	0.7	0.4	0.4	2.1
Machar	BP	1975	10.3	-	-	-	0.6	0.8	0.4	1.9
Magnus	BP	1974	106.3	51.4	6.7	6.7	6.8	5.4	4.5	81.5
Magnus S	BP	1996	0.2	-	-	-	-	-	0.2	0.2
Maureen	Phillips	1973	28.6	24.9	1.2	0.9	0.8	0.5	0.4	28.7
Medwin	BP	1989	0.1	-	-	-	0.1	0.1	-	0.1
Miller	BP	1983	39.2	-	2.8	5.7	6.4	6.4	6.4	27.7
Moira	Phillips	1988	0.6	0.1	0.1	0.1	0.1	0.1	-	0.5
Montrose	Amoco	1971	12.8	10.6	0.1	0.1	0.2	0.1	0.1	11.2
Murchison (UK)	Conoco	1975	46.0	30.3	1.3	0.9	0.6	0.6	0.6	34.4
Nelson	Shell	1988	64.1	-	-	-	5.1	6.6	6.8	18.6
Ness	Mobil	1986	5.4	2.6	0.3	0.3	0.2	0.1	-	3.6
Nevis	Mobil	1996	..	-	-	-	-	-	0.2	0.2
Ninian	Chevron	1974	157.0	124.9	3.3	3.3	3.2	2.8	2.4	140.0
Osprey	Shell	1974	13.2	-	1.4	1.6	1.2	1.4	1.2	8.0
Pelican	Shell	1996	1.5	-	-	-	-	-	1.5	1.5
Petronella	Texaco	1975	5.1	2.3	0.5	0.5	0.4	0.3	0.1	4.1
Piper	E E Caledonia	1973	135.5	111.2	-	2.6	3.8	4.0	3.1	124.7
Rob Roy	Amerada Hess	1984	13.2	4.2	1.7	1.7	1.9	1.4	1.0	12.1
Saltire	E E Caledonia	1988	12.0	-	-	0.7	1.8	1.8	1.8	6.1
Scapa	E E Caledonia	1975	14.5	5.4	1.4	1.3	1.2	0.8	0.9	11.1
Schooner	Shell	1996	17.50bcm(gas)	-	-	-	-	-	-	-
Scott	Amerada Hess	1984	69.0	-	-	1.5	8.0	8.8	7.0	25.4
Staffa	Lasmo	1985	0.5	-	0.3	0.1	0.1	0.0	-	0.5
Statfjord (UK)	Statoil	1975	522.0	46.3	3.2	3.8	4.5	3.5	3.3	64.7
Stirling	Sun Oil Britain	1980	0.2	0.0	0.0	0.0	0.0	0.1	-	0.1
Strathspey	Texaco	1975	11.2	-	-	-	1.4	1.7	1.8	4.9
Tartan	Texaco	1975	14.0	10.0	0.4	0.3	0.6	0.5	0.5	12.3
Teal	Shell	1989	4.8	-	-	-	-	-	-	-
Telford	Amerada Hess	1996	..	-	-	-	-	-	0.1	0.1
Tern	Shell	1975	42.0	5.1	3.6	3.3	3.7	3.3	2.8	21.8
Thelma	AGIP	1996	..	-	-	-	-	-	0.2	0.2
Thistle	Britoil	1973	55.4	47.8	1.0	0.9	0.7	0.7	0.5	51.6
Tiffany	AGIP	1977	14.3	-	-	0.2	1.8	2.0	1.7	5.6
Toni	AGIP	1979	5.3	-	-	-	0.6	1.5	1.0	3.1
TOTAL			3178.8	1397.6	84.8	95.8	113.6	117.0	113.6	1926.6

Source: Department of Trade and Industry

(1) Operator's estimate of proven recoverable reserves (million tonnes).
(2) Figures are rounded to the nearest 100,000 tonnes. This has created some discrepancies between individual annual field

figures and cumulative totals.
(3) Total reserves of field is 185bcm, of which 39.18% is located in the UK sector.
(4) The data has been limited to 1996 as updated production figures are not available until May/June.

Assistance to Industry and Employment

7.1 Expenditure on regional preferential assistance to industry (1) Scotland: 1989/90-1996/97

million

	Fiscal Year							
	1989/90	**1990/91**	**1991/92**	**1992/93**	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Scottish Development Agency Acts/Scottish Enterprise								
Land and factory building	23.5	28.1	23.9	10.3	22.5	30.6	17.3	30.5
Industrial Development								
Regional Selective Assistance (2)	40.6	68.2	63.7	59.2	69.0	77.1	70.1	72.3
Regional Development Grant	59.4	42.0	12.2	8.9	2.8	0.4	0.0	0.2
Regional Enterprise Grant (3)	1.5	2.8	2.7	2.8	2.7	2.1	3.0	2.4
Highlands and Islands Enterprise (4)								
Grants	11.6	10.5	12.3	13.6	14.0	14.4	15.9	12.9
Property	7.2	7.6	8.0	6.9	9.4	9.9	11.1	9.9
Total gross expenditure	143.8	159.2	122.8	101.7	120.4	134.5	117.4	128.2

Source: The Scottish Office Education and Industry Department

(1) Expenditure in Assisted Areas only.
(2) Assistance provided under the Industrial Development Act 1982 and its predecessors
(3) Regional Enterprise Grant (REG) consists of 2 schemes - Regional Investment Grant and Regional Innovation Grant. Both schemes commenced on 1 April 1988.
(4) HIE loans and equity are classed as non-preferential as these are deemed to be similar to non-preferential assistance outside the HIE area.

7.2 Regional Selective Assistance (1): Summary of offers and expenditure Scotland and Great Britain: 1989/90-1996/97

	Fiscal Year							
	1989/90	**1990/91**	**1991/92**	**1992/93**	**1993/94**	**1994/95**	**1995/96**	**1996/97**
RSA(2)								
New and revised offers accepted:								million
Scotland	76.0	173.0	52.2	71.8	124.2	113.2	93.6	152.0
Great Britain	262.7	339.7	207.9	224.0	337.0	310.0	313.0	422.8
Forecast associated employment(3):								thousands
Scotland	13.8	21.2	8.3	11.4	17.0	16.2	12.6	17.0
Great Britain	55.9	54.4	40.8	41.5	59.6	60.0	59.8	72.6
Expenditure:								million
Scotland	40.6	68.2	63.7	59.2	69.0	77.1	70.1	72.3
Great Britain	176.6	187.5	193.1	189.1	215.2	247.2	237.0	217.4
RDG2								

New and revised approvals made:								million
	Scotland	48.6	0.1	-	-	-	-	-	-
	Great Britain	76.8	2.0	0.2	-	-	-	-	-
Forecast associated employment(3):								thousands
	Scotland	8.9	0.0	-	-	-	-	-	-
	Great Britain	16.3	0.6	-	-	-	-	-	-
Expenditure:								million
	Scotland	48.8	33.0	7.1	5.6	0.6	0.0	0.0	0.2
	Great Britain	162.6	110.8	47.3	19.3	7.8	0.4	0.6	-
REG(4)								
Offers accepted:								million
	Scotland	4.1	4.5	3.6	3.7	2.8	3.8	3.8	1.3
	Great Britain	18.2	17.4	13.9	15.8	18.2	22.4	22.2	17.8
Expenditure:								million
	Scotland	1.5	2.8	2.7	2.8	2.7	2.1	3.0	2.4
	Great Britain	8.2	12.7	11.4	9.7	12.5	15.2	18.9	17.0

Source: The Scottish Office Education and Industry Department

(1) Regional Selective Assistance (RSA) under section 7 of the Industrial Development Act 1982, revised Regional Development Grant (RDG2) and Regional Enterprise Grant (REG) schemes.
(2) Figures for RSA relate to initial acceptance dates. Figures also include that proportion of in-plant training grant subsequently claimed back from the European Social Fund.
(3) Includes new and safeguarded employment.
(4) REG scheme is not necessarily job related so job figures are excluded.

7.3 Regional Selective Assistance: value of offers accepted and forecast employment Scotland: 1994/95-1996/97

1992 SIC Industry Class Groupings	**Value of offers (m)**			**Associated New and Safeguarded Jobs**		
	1994-95	**1995-96**	**1996-97**	**1994-95**	**1995-96**	**1996-97**
ALL INDUSTRIES TOTAL	113.2	93.6	152.0	16,190	12,650	16,990
Manufacturing Total	94.4	87.4	146.8	12,100	11,270	15,470
Food, Drink & Tobacco (15-16)	7.0	9.0	3.1	860	1,720	780
Textiles (17-18)	8.7	8.4	2.6	1,680	1,210	460
Leather Products (19)	0.0	0.3	0.7	0	170	50
Wood Products (20)	1.2	1.4	1.8	250	220	150
Paper, Printing & Publishing (21-22)	1.7	3.6	2.0	240	480	270
Chemicals & Man-made Fibres (24)	5.6	6.1	20.4	600	480	1,580
Rubber & Plastic Products (25)	2.2	4.8	2.4	270	710	450
Other Non-metallic Mineral Products (26)	1.3	0.9	2.8	230	100	280
Metals & Metal Products (27-28)	3.4	6.0	4.6	490	640	920
Machinery & Equipment nes (29)	5.4	7.2	5.8	910	810	740
Electrical & Optical Equipment (30-33)	50.9	34.6	91.4	5,480	3,910	8,950
Transport Equipment (34-35)	4.9	1.5	8.7	660	340	780
Other Manufacturing nes (36-37)	2.0	3.5	0.4	420	490	60
Other Industries Total	18.8	6.2	5.1	4,090	1,380	1,520

Agriculture, Hunting & Forestry (01-02)	-	-	-	-	-	-
Mining & Quarrying (10-14)	0.6	-	-	70	-	-
Electricity, Gas & Water Supply (40-41)	0.4	-	-	90	-	-
Construction (45)	0.2	0.1	0.5	50	30	60
Wholesale & Retail Trades (50-52)	0.3	0.7	0.7	60	160	150
Hotels & Restaurants (55)	0.2	-	-	30	-	-
Transport, Storage & Communication (60-64)	0.2	0.6	0.6	40	200	290
Financial Intermediation (65-67)	5.3	1.9	0.0	1,810	390	-
Real Estate, Renting & Business Services (70-74)	9.8	2.7	3.3	1,750	590	1,000
Education (80)	0.0	0.0	-	10	10	-
Health & Social Work (85)	1.8	-	0.0	190	-	10
Other Community, Social & Personal Services (90-93)	-	0.1	0.0	-	10	10

Source: The Scottish Office Education and Industry Department

Personal/Household Income and Expenditure

8.1 Personal Income and Personal Disposable Income Scotland: 1987-1995

million

	1987	1988	1989	1990	1991	1992	1993	1994	1995(p)
Total Personal Income(1)	31,112	33,607	37,239	41,914	44,800	48,735	50,502	51,564	53,922
Income from employment	19,991	21,999	24,211	27,091	29,122	30,536	31,462	32,421	32,892
Income from self-employment	3,066	3,355	3,907	4,550	4,513	4,575	4,873	5,076	5,604
Rent, dividends and net interest	2,660	2,883	3,501	4,202	4,262	5,081	5,058	4,804	5,771
Social security benefits	5,168	5,137	5,375	5,814	6,636	8,265	8,809	8,947	9,324
Other income	226	233	246	256	267	278	299	316	330
% share of UK	8.7	8.4	8.4	8.6	8.7	8.9	8.8	8.6	8.5
Per head,	6,086	6,597	7,307	8,214	8,772	9,535	9,863	10,047	10,498
Per head, United Kingdom=100	96.6	94.3	94.9	97.5	98.1	100.9	100.3	98.3	97.2
Total Personal Disposable Income(2)(3)	25,022	26,969	29,358	33,297	35,956	39,561	41,066	41,578	43,224
as a percentage of personal income	80.4	80.2	78.8	79.4	80.3	81.2	81.3	80.6	80.2
% share of UK	8.8	8.5	8.4	8.8	8.9	9.1	9.0	8.7	8.6
Per head,	4,895	5,294	5,760	6,526	7,041	7,740	8,020	8,101	8,415
Per head, United Kingdom=100	97.6	95.0	94.0	99.4	100.2	103.2	101.9	99.5	98.2

Source: Office for National Statistics, Regional Accounts

(1) Personal Income is defined to be the income of the personal sector ie households, individuals living in hostels and other institutions, unincorporated businesses such as farms, the funds of pension and life assurance schemes, private trusts and all non-profit making bodies such as universities and charities.
(2) Personal disposable income is defined as personal income less taxes on income, social security contributions, community charge and current transfers from personal income.
(3) The introduction of the community charge in April 1989 in Scotland (and in April 1990 in England and Wales) introduced a discontinuity in the estimates of personal disposable income as community charge, and subsequently council tax payments are deducted from estimates of personal income.

8.2 Household Income and Household Disposable Income Scotland: 1987-1995

million

	1987	1988	1989	1990	1991	1992	1993	1994	1995(p)
Total Household Income (1)	29,560	31,573	35,306	40,313	42,998	46,849	47,950	48,459	50,542
Wages & Salaries	17,415	19,247	21,244	23,933	25,572	26,810	27,509	28,294	28,896
Income from self-employment	2,553	2,823	3,142	3,624	3,660	3,801	4,176	4,433	4,821
Income from investments	1,991	1,838	2,674	3,688	3,186	3,295	2,474	2,069	2,615
Occupational & state pensions	4,183	4,276	4,676	5,314	6,252	7,169	7,743	7,787	8,154
Social Security benefits	2,416	2,359	2,418	2,575	3,004	3,799	4,087	4,147	4,297
Other income	1,003	1,027	1,153	1,179	1,324	1,974	1,962	1,729	1,759
% share of UK	8.7	8.4	8.4	8.6	8.6	8.8	8.8	8.6	8.4
Per head,	5,782	6,198	6,927	7,901	8,419	9,166	9,365	9,442	9,840
Per head, United Kingdom=100	96.7	94.2	94.3	96.5	97.0	100.1	99.7	97.3	96.3
Total Household Disposable income (2)	24,069	25,796	28,618	33,177	35,824	39,280	40,511	40,469	42,614
as a percentage of household income	81.4	81.7	81.1	82.3	83.3	83.8	84.5	83.5	84.3
% share of UK	8.8	8.5	8.4	8.7	8.8	9.0	8.9	8.6	8.4
Per head,	4,708	5,064	5,615	6,502	7,015	7,685	7,912	7,885	8,296
Per head, United Kingdom=100	97.8	95.7	94.7	98.2	99.1	102.1	101.3	98.2	98.6

Source: Office for National Statistics, Regional Accounts

(1) Household Income is defined to be the income of the household sector ie individuals living in households and in institutions.
(2) Household disposable income is defined as household income less payment of tax, National Insurance and contributions to life assurance and pension schemes.

Areas of Scotland

The new Unitary Authorities in Scotland came into effect from April 1996. Where available, data are presented for these areas; otherwise data are given for the former Scottish regions. In these tables Eilean Siar is an abbreviation for Comhairle nan Eilean Siar, formerly the Western Isles Council.

9.1 Total Population Scottish Unitary Authority Areas: 1981, 1991, 1993, 1996

	Population(1) thousands						**Percentage change in Population**		
				1996					
	1981	**1991**	**1993**	**Persons**	**Males**	**Females**	**1981-1991**	**1991-1993**	**1991-1996**
Scotland	5,180.2	5,107.0	5,120.2	5,128.0	2,485.8	2,642.2	-1.4	0.3	0.4
Aberdeen City	212.5	215.0	218.2	217.3	106.2	111.1	1.2	1.5	1.1
Aberdeenshire	188.9	216.5	223.6	227.4	113.0	114.4	14.6	3.3	5.1
Angus	105.6	108.7	111.1	110.8	54.0	56.7	2.9	2.3	1.9
Argyll & Bute	90.9	93.7	91.0	90.8	44.6	46.3	3.0	-2.9	-3.0
Clackmannanshire	48.2	48.4	48.7	48.8	23.8	25.0	0.4	0.5	0.8
Dumfries & Galloway	145.5	147.7	147.9	147.6	71.7	75.9	1.5	0.1	-0.1
Dundee City	169.6	156.2	153.6	150.3	71.7	78.5	-7.9	-1.7	-3.8
East Ayrshire	127.4	124.3	123.8	122.4	59.1	63.2	-2.4	-0.4	-1.6
East Dunbartonshire	109.7	110.6	110.2	110.8	54.1	56.6	0.9	-0.4	0.1
East Lothian	80.7	84.9	85.6	88.1	42.8	45.3	5.2	0.8	3.8
East Renfrewshire	80.2	86.1	87.0	88.1	42.6	45.5	7.2	1.1	2.3
Edinburgh, City of	446.0	439.5	441.6	448.9	216.7	232.1	-1.5	0.5	2.1
Eilean Siar	31.5	29.4	29.4	28.9	14.3	14.6	-6.8	0.0	-1.8
Falkirk	145.1	143.1	142.6	143.0	69.5	73.6	-1.4	-0.4	-0.1
Fife	341.6	349.4	351.2	349.3	169.2	180.1	2.3	0.5	0.0
Glasgow City	712.4	631.7	624.9	616.4	294.2	322.2	-11.3	-1.1	-2.4
Highland	194.9	204.1	206.9	208.7	102.4	106.3	4.7	1.4	2.3
Inverclyde	101.2	91.6	90.0	87.1	41.7	45.4	-9.5	-1.7	-4.9
Midlothian	83.6	80.2	79.9	80.0	39.4	40.6	-4.0	-0.4	-0.2
Moray	83.5	84.2	86.3	86.5	42.9	43.6	0.8	2.4	2.8
North Ayrshire	137.3	139.1	139.0	139.5	67.2	72.4	1.3	0.0	0.3
North Lanarkshire	341.7	328.9	326.8	325.9	158.3	167.6	-3.8	-0.6	-0.9
Orkney Islands	19.2	19.6	19.8	19.8	9.8	10.0	2.0	1.0	1.2
Perthshire & Kinross	121.9	127.6	130.5	132.6	63.9	68.6	4.7	2.3	3.9
Renfrewshire	185.1	176.8	176.8	178.6	86.2	92.3	-4.5	0.0	1.0
Scottish Borders	101.3	104.1	105.3	106.1	51.1	55.0	2.8	1.2	1.9
Shetland Islands	26.3	22.5	22.8	23.0	11.7	11.3	-14.4	1.3	2.1
South Ayrshire	113.2	113.6	114.0	114.6	54.8	59.8	0.3	0.4	1.0
South Lanarkshire	310.0	304.4	306.1	307.5	148.7	158.7	-1.8	0.6	1.0

Stirling	80.3	81.5	81.6	82.8	39.9	42.8	1.5	0.2	1.6
West Dunbartonshire	105.8	97.6	97.4	95.8	45.8	50.0	-7.7	-0.3	-1.9
West Lothian	139.2	146.3	146.7	150.8	74.2	76.6	5.1	0.3	3.1

Source: General Register Office for Scotland

(1) June of each year

9.2 Employees in employment(1) by industry Scottish Unitary Authority Areas: September 1996

Thousands

	Employees in employment				
	Total(2)	**Agric, forestry, & fishing, energy and water supply(2)**	**Manufacturing**	**Construction**	**Services**
1992 SIC	**A to O**	**A,B,C,E**	**D**	**F**	**G to O**
Scotland (2)	1,994.9	75.0	314.0	112.5	1,493.4
Aberdeen City	151.9	17.0	14.9	12.7	107.3
Aberdeenshire	74.9	2.8	12.1	8.2	51.9
Angus	33.0	0.4	6.8	1.6	24.1
Argyll & Bute	29.9	1.2	1.9	1.5	25.3
Clackmannanshire	13.0	1.0	3.4	0.8	7.7
Dumfries and Galloway	47.3	2.1	9.4	2.9	32.9
Dundee City	67.9	..	12.2	3.1	52.0
East Ayrshire	36.5	0.9	8.8	2.3	24.4
East Dunbartonshire	22.4	..	3.0	1.6	17.6
East Lothian	21.2	1.2	3.4	1.6	15.0
East Renfrewshire	14.7	..	2.6	1.2	10.8
Edinburgh City of	256.3	3.1	21.4	8.7	223.0
Eilean Siar	8.6	..	0.7	0.7	6.7
Falkirk	48.5	0.6	11.7	2.7	33.6
Fife	118.0	2.3	25.7	4.9	85.1
Glasgow City	309.4	5.3	31.1	15.1	257.9
Highland	77.5	2.6	7.9	4.9	62.0
Inverclyde	32.2	..	7.1	1.2	23.9
Midlothian	20.6	0.9	3.5	1.4	14.8
Moray	28.3	0.6	5.8	1.6	20.4
North Ayrshire	39.3	..	10.9	2.0	25.6
North Lanarkshire	98.7	1.8	27.0	6.1	63.8
Orkney Islands	6.6	..	0.6	0.6	5.0
Perthshire & Kinross	45.7	2.0	3.5	2.6	37.6
Renfrewshire	72.8	..	13.8	4.9	53.6
Scottish Borders	35.9	0.9	9.8	1.9	23.2
Shetland Islands	10.6	1.2	0.9	0.7	7.8
South Ayrshire	40.4	..	7.9	1.7	30.5
South Lanarkshire	93.7	2.3	20.5	6.1	64.8
Stirling	35.2	..	3.0	1.9	29.4

West Dunbartonshire	25.7	..		5.2	1.3	19.0
West Lothian	57.9	0.3		17.6	3.8	36.2

Source: Office for National Statistics, Annual Employment Survey 1996

(1) Excludes those in private domestic service, the self-employed and members of HM Forces.
(2) Unitary Authority level figures do not include data from the Agricultural Census. Therefore UA figures will sum to a value less than the Scotland total.

9.3 Claimant unemployment by sex Scottish Unitary Authority Areas: 1997 (1)

	Unemployment: numbers (2) (thousands)			**Unemployment rates:(3) (per cent)**		
	Males	**Females**	**Total**	**Males**	**Females**	**Total**
Scotland	123.5	36.0	159.6	9.4	3.2	6.5
Aberdeen City	3.3	1.0	4.4	3.1	1.4	2.4
Aberdeenshire	2.2	0.9	3.1	5.5	2.2	3.8
Angus	2.3	0.9	3.2	11.7	5.2	8.6
Argyll and Bute	2.1	0.7	2.7	8.8	3.6	6.5
Clackmannanshire	1.3	0.4	1.6	10.8	4.4	8.2
Dumfries and Galloway	3.3	1.1	4.4	9.0	3.5	6.5
Dundee City	5.3	1.5	6.8	12.6	3.5	8.0
East Ayrshire	3.8	1.0	4.8	14.4	4.8	10.0
East Dunbartonshire	1.7	0.6	2.3	12.0	4.0	8.0
East Lothian	1.5	0.4	1.8	6.0	2.3	4.4
East Renfrewshire	1.2	0.4	1.6	10.8	4.2	7.6
Edinburgh, City of	10.0	2.9	12.9	6.9	2.1	4.5
Eilean Siar	1.0	0.3	1.3	12.9	4.4	9.2
Falkirk	3.4	1.0	4.4	9.3	3.8	7.0
Fife	8.8	2.7	11.5	10.3	4.2	7.6
Glasgow City	23.2	5.9	29.1	12.3	3.3	8.0
Highland	5.7	1.8	7.5	10.9	3.9	7.6
Inverclyde	2.0	0.5	2.5	11.1	3.1	7.3
Midlothian	1.3	0.3	1.6	9.9	2.9	6.7
Moray	1.6	0.6	2.1	8.0	3.5	5.9
North Ayrshire	3.9	1.3	5.2	13.5	5.3	9.8
North Lanarkshire	8.8	2.4	11.2	12.2	4.5	9.0
Orkney Islands	0.3	0.1	0.4	5.0	2.6	4.0
Perthshire & Kinross	2.2	0.7	3.0	7.3	2.9	5.3
Renfrewshire	4.4	1.2	5.7	8.0	3.0	5.9
Scottish Borders	1.3	0.4	1.8	5.3	2.1	3.8
Shetland Islands	0.3	0.1	0.4	4.6	1.8	3.4
South Ayrshire	2.8	0.9	3.8	9.9	3.7	7.0
South Lanarkshire	6.8	1.9	8.7	10.3	3.4	7.2
Stirling	1.7	0.5	2.2	8.3	2.2	5.1
West Dunbartonshire	3.4	0.8	4.2	15.1	4.5	10.5
West Lothian	2.8	0.8	3.5	8.4	2.7	5.8

Source: Office for National Statistics

(1) Annual average.
(2) The claimant count consists of those people who are claiming unemployment-related benefits at Employment Service local offices and who have declared that they are unemployed, capable of, available for and actively seeking work during the week in which their claim is made.
(3) These unemployment rates are calculated by expressing the numbers of claimant unemployed as percentages of the estimated total workforce (the sum of employment, the unemployed, the self-employed, HM Armed Forces and participants on work-related government training programmes) at mid year.

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		Published
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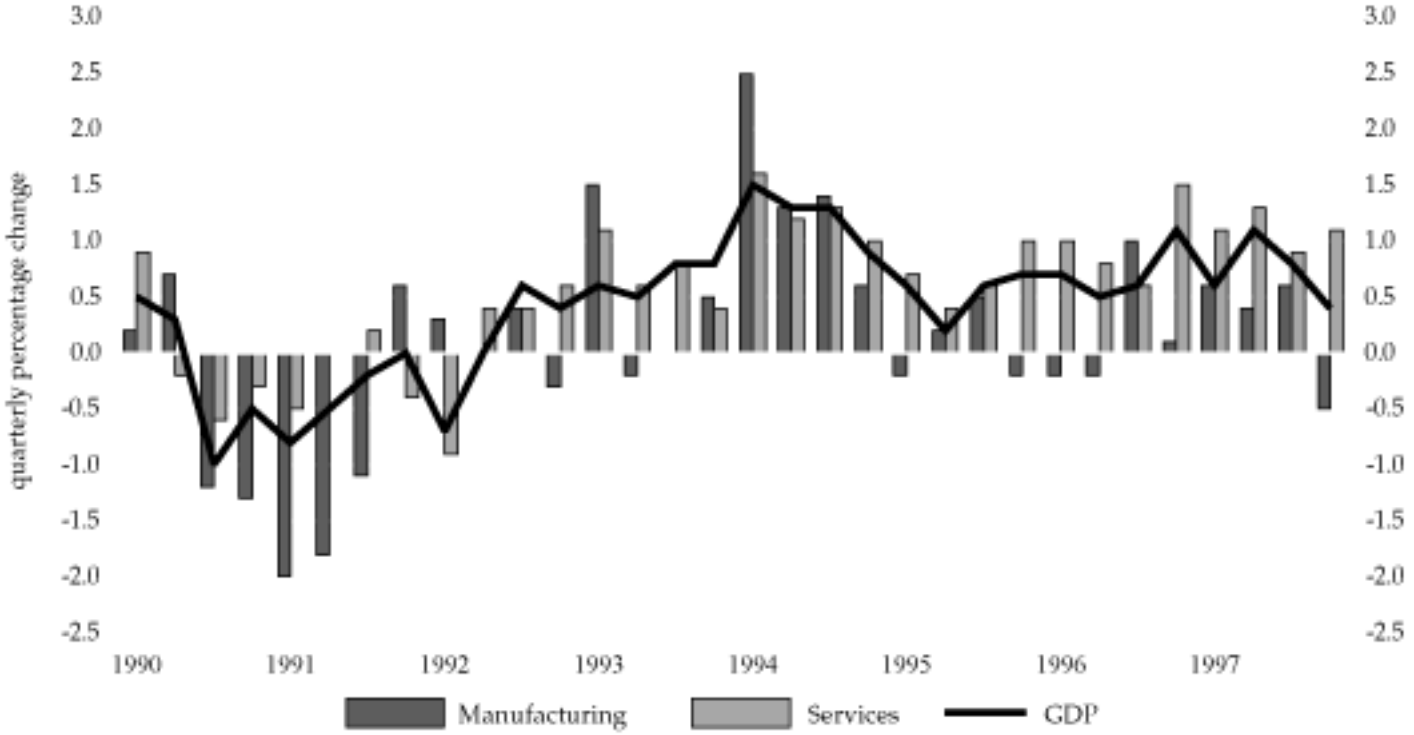
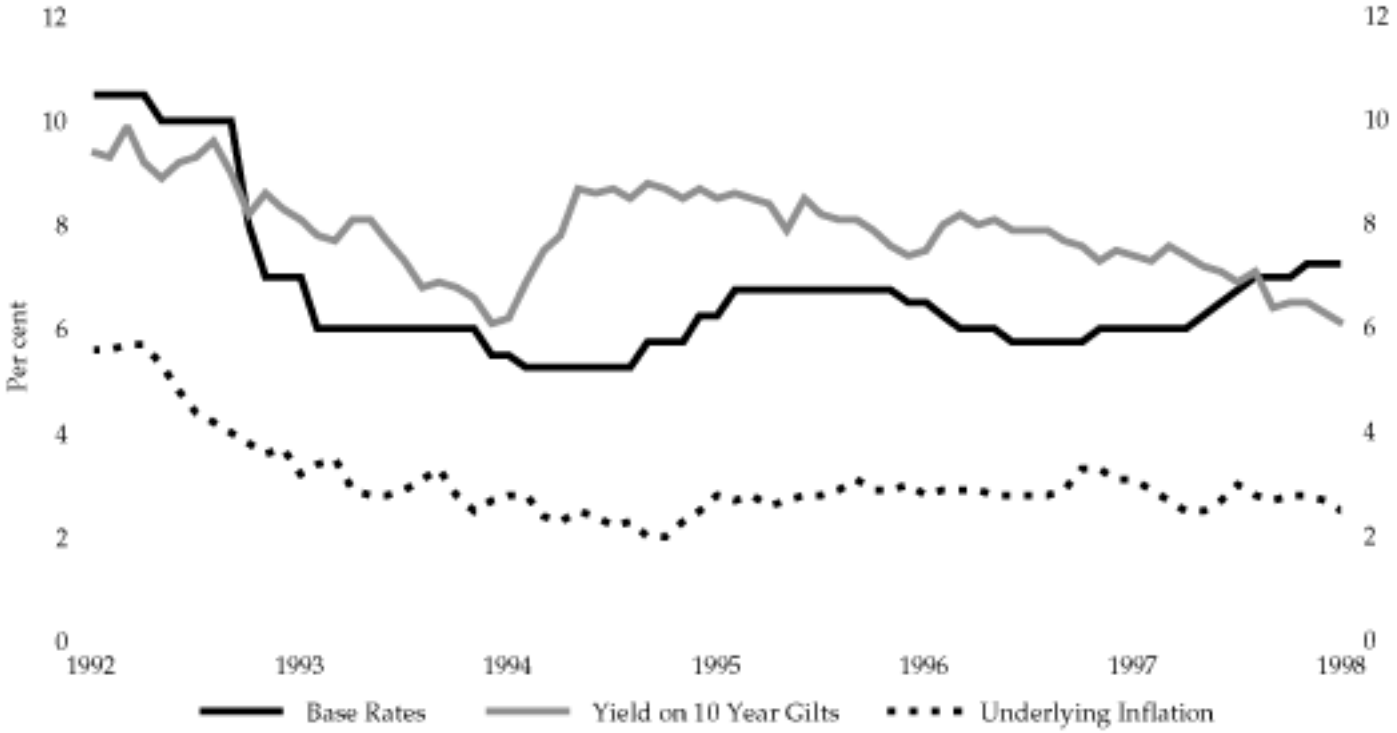
Chart 1:Output Growth in the UK 1990 Q1 - 1997 Q4



Source: Office for National Statistics

Chart 2: Interest Rates and Inflation January 1992 - January 1998



Source: Office for National Statistics, Bank of England

The Scottish Economy

Gross Domestic Product

Provisional estimates of GDP (income measure) for each UK Government Office Region/country are now available for 1996 with the publication of the Regional Accounts.[7] Estimates for 1995 were also made available at county/former Scottish region level.

Scottish GDP in 1996 was 54.43 billion, 8.6 per cent of UK GDP. GDP per head was 10,614, 99.1 per cent of the UK average. This was the fourth highest of the 12 UK Government Office Regions/countries - below only London, South East and Eastern - for the fifth successive year.

GDP per head in Scotland relative to the UK increased strongly between 1989 and 1992, reflecting the stronger performance of the Scottish economy in the 1990-1992 UK recession. Since 1992, GDP per head has fluctuated around 99 per cent of UK GDP per head, reaching a peak of 100.2 per cent in 1995.

Table 2 shows GDP per head in the former Scottish regions in 1995.[8] It is instructive to look at trends and, accordingly, Table 2 also provides data for 1989. GDP per head was well above the UK average in both Grampian (133 per cent) and Lothian (124 per cent) in 1995. Although Grampian showed the smallest increase in GDP per head over the 1993-1995 period (and fell slightly relative to the UK), the level of GDP per head was third only to London and Berkshire across the UK, followed by Lothian. All other Scottish regions were below the UK average and GDP per head in the Highlands and Islands and in Fife was amongst the lowest in the UK.

Table 2: GDP in the Scottish Regions, 1989 and 1995

	GDP per head 1995 ()	**GDP per head, 1990=100**	
		1989	**1995**
Borders	9,003	80.1	88.3
Central	9,265	89.1	90.8
Dumfries and Galloway	9,555	86.4	93.7
Fife	8,314	84.0	81.5
Grampian	13,566	119.4	133.0
Highlands and Islands	8,298	80.4	81.4
Lothian	12,656	111.4	124.1
Strathclyde	9,483	87.9	93.0
Tayside	9,611	88.8	94.2
Scotland	**10,244**	**93.8**	**100.2**
UK	10,199	100.0	100.0

Source: Office for National Statistics

The improvement in Scottish GDP per head, relative to the UK, from 1989 has been evident across most Scottish regions. Lothian, Borders and Grampian have seen particularly marked improvements and only Fife had a lower relative level of GDP per head in 1995 than in 1989. Relative GDP per head in the Highlands and Islands has increased slightly but levels have fallen since the peak (of 88.8 per cent) in 1991.

Index of Production and Construction

The Scottish Office Education and Industry Department's quarterly Index of Production and Construction rose by 0.4 per cent in 1997 Q3. Excluding oil and gas, the Index rose by 0.5 per cent. At a broad sectoral level, output rose in manufacturing (0.9 per cent) and in electricity, gas and water supply (5.7 per cent), offset by falling output in construction (2.5 per cent) and mining and quarrying (1.8 per cent). The UK index (less oil and gas) rose by 0.7 per cent in 1997 Q3.

An indication of the underlying trend in industrial output is obtained by comparing the last 4 quarters for which data are available (to 1997 Q3) with the previous 4 quarters (to 1996 Q3). Excluding oil and gas, the Index rose by 6.0 per cent over this period, as increases were recorded in manufacturing (7.4 per cent), construction (1.8 per cent), electricity, gas and water supply (5.7 per cent) and mining and quarrying (3.3 per cent). By comparison, the UK Index (less oil and gas) rose by 2.0 per cent over the same period.

Since 1990, manufacturing output has increased by 25.6 per cent. Growth in UK manufacturing has been much more sluggish than in Scotland, growing by only 5.1 per cent over the same period. The influence of the electrical and instrument engineering sector (EIE) on Scottish manufacturing has been discussed in past editions of the Scottish Economic Bulletin and by outside commentators. Excluding EIE, manufacturing output in Scotland has declined by 7.7 per cent since 1990. UK manufacturing excluding EIE has increased by 1.8 per cent.

In the year to 1997 Q3, the EIE sector continued to grow strongly - by 18.4 per cent. However, growth was also evident in 6 of the other 10 manufacturing sectors over the period. This is the continuation of a trend over the last year in which growth in the manufacturing sector has become more broadly based. Indeed as Chart 3 shows, manufacturing output excluding EIE has been increasing year-on-year in each quarter since 1996 Q4, a trend not seen since 1990 Q3. In the year to 1997 Q3, manufacturing output excluding EIE grew by 1.4 per cent, only slightly below the 1.5 per cent growth in the UK as a whole.

CHART 3 HERE

Exports

The manufacturing sector accounts for most of Scotland's external trade with the rest of the world. Estimates from the 1994 Input-Output Tables[9]9 indicate that around three quarters of trade is in manufacturing. The Scottish Council Development and Industry (SCDI) annual survey of Scottish Manufactured Exports for 1996 was published in December 1997. In current prices, the value of Scottish manufactured exports[10] was estimated to have risen by 6.4 per cent in 1996 to 18.42 billion. This represents a slower rate of growth than in recent years (20.3 per cent in 1995 and 24.8 per cent in 1994) and can be compared with growth of 8.9 per cent in UK manufactured exports (to 155.18 billion) in 1996. For the first time since 1988, UK manufactured exports growth outpaced that of Scotland and Scotland's share of UK exports fell marginally from 12.1 per cent in 1995 to 11.9 per cent in 1996.

As shown in Table 3, four sectors - Office Machinery, Radio/TV/Communication Equipment, Whisky and Chemicals - continued to dominate Scottish manufactured exports in 1996, accounting for 75 per cent of the total. The electronics sector[11] had a more mixed export performance in 1996 than in recent years. Exports grew by 6.9 per cent to 10.21 billion (55.5 per cent of total manufactured exports). This compares with growth of over 42 per cent in 1995. Exports from the Office Machinery sector - the largest exporting sector - rose by 14.3 per cent in 1996 to 6.83 billion (37.1 per cent of total manufactured exports). While this rate of growth was considerably lower than in 1995, the sector still contributed over 77 per cent to the total growth in manufactured exports in 1996. Exports from the other major element of Scotland's electronics industry - the Radio/TV/Communication Equipment sector - declined by 7.3 per cent to 3.00 billion.

Table 3: Top Exporting Sectors in Scotland, 1996

Sector (SIC92)	Value at current prices (£ million)	Per cent of Total	Nominal increase in value 1995-96: per cent	Contribution to total export growth: per cent
Office Machinery	6,825.0	37.1	14.3	77.5
Radio, Television & Communication	3,003.8	16.3	-7.3	-21.6
Equipment and Apparatus Whisky	2,278.1	12.4	0.1	0.1
Chemicals and Chemical Products	1,706.4	9.3	9.2	13.1
Machinery and Equipment nec	802.2	4.4	18.4	11.4
Other Food Products & Beverages	446.0	2.4	-10.7	-4.8

Fabricated Metal Products except Machinery and Equipment	411.1	2.2	37.3	10.2
Pulp, Paper and Paper Products	387.0	2.1	-2.0	-0.7
Coke, Refined Petroleum Products and Nuclear Fuel	332.0	1.8	69.6	12.4
Other Transport Equipment	326.8	1.8	-22.4	-8.6
Other sectors	1,896.2	10.3	6.8	11.1
All Manufacturing Industries	**18,414.6**	**100.0**	**6.3**	**100.0**

Source: Scottish Council Development and Industry

Note: 1. Under SIC 92 Whisky is normally incorporated in the Food Products & Beverages sector.

Exports from the whisky sector increased only marginally in 1996, up by 0.1 per cent to 2.28 billion (12.4 per cent of total manufactured exports). The Chemicals and Chemical Products sector experienced a further rise in exports in 1996, of 9.2 per cent to 1.71 billion (9.3 per cent of total manufactured exports). This follows growth of 9.0 per cent in 1995. An additional 19 industry sectors together represented 25 per cent of total manufactured exports in 1996. Export growth was recorded in 14 sectors.

Overall the latest figures record a positive - and better than expected - performance by Scottish manufacturing in export markets during 1996. The SCDI quarterly index based on a selected panel survey of large exporters had provisionally estimated a fall of 6.8 per cent in manufactured exports. The rapid growth rates of recent years have slowed but export levels in most sectors continue to rise. Initial estimates from the SCDI quarterly index for 1997 suggest further growth of 12.0 per cent to 20.61 billion.

Exports by Destination

As shown in Table 4, the EU remained Scotland's main trading area in 1996 with a 58 per cent share of Scotland's exports. However, exports grew more modestly - by 2.9 per cent - in 1996. Six of the top ten individual country markets were in the EU, the others being the USA, Japan, Switzerland and Norway. The latest survey results confirm France as Scotland's largest export market for the fourth successive year, despite a drop in the actual value of exports of 5.4 per cent to 2.80 billion. (15.2 per cent of total Scottish manufactured exports).

Table 4: Destination of Scottish Exports in 1996

	Value (million, current prices)	**Per cent of total**	**Nominal percentage growth in 1996**	**Contribution to overall growth: per cent**
European Union	10,756	58.4	2.9	27.5
North America	2,318	12.6	36.8	56.8
Other Asia Pacific	1,556	8.4	-14.2	-23.5
EFTA	1,072	5.8	16.4	13.7
Japan	812	4.4	6.3	4.4
Middle East	513	2.8	23.3	8.8
Latin America	510	2.8	4.5	2.0
Eastern Europe	396	2.2	53.5	12.6
Africa	311	1.7	-0.6	-0.2
Australasia	171	0.9	-11.9	-2.1

Source: Scottish Council Development and Industry

Exports to the USA rose by 38.3 per cent in 1996 to 2.22 billion. The USA was responsible for nearly 50 per cent of the increase in total Scottish exports and overtook Germany as the second largest market. There was a strong upturn in sales across the Office Machinery, Radio/TV/Communication Equipment, Coke/Petroleum and Chemicals sectors; the strength of the US economy a causal factor. North America displaced Other Asia Pacific as Scotland's second largest trading area.

Exports to Japan continued to increase and remained the 7th largest country market for Scottish goods. Total exports to the Other Asia Pacific countries fell by 14.2 per cent in 1996, compared with strong growth of 30.9 per cent in 1995. However, this was almost entirely due to a large drop in exports to Malaysia; there were significant rises in exports to Hong Kong, Singapore and Taiwan. Elsewhere, exports to most other regions showed significant growth with sales to Eastern Europe up 53.5 per cent and exports to the Middle East up 23.3 per cent. Growth in sales were also recorded to the EFTA countries, while exports to Latin America continued to grow modestly. There was a marginal decline in sales to Africa following last year's significant increase, while exports to Australasia continued to decline.

The Sterling Exchange Rate and Exports

Inevitably, the strength of sterling has put pressure on Scottish exports. As one would expect, the exposure to exchange rate movements varies by sector in Scotland. This is illustrated in Table 5 which shows, at the broad sectoral level, the proportion of total domestic (i.e. Scottish) output dependent on exports outwith the UK (i.e. to the rest of the world, ROW) and the import content of that output from the same source. The table also shows the corresponding proportions for Scotland's trade with the rest of the UK (RUK).

Table 5: The External Orientation of Scottish Industry, 1994

Industry	**Proportion of domestic output dependent on :**		**Components of gross domestic output**	
	Exports to RUK	**Exports to ROW**	**Imports from RUK**	**Imports from ROW**
Agriculture, Forestry and Fishing	19.7	12.9	7.4	1.4
Mining and Quarrying	41.0	29.1	18.9	6.8
Energy and Water Supply	6.4	1.0	7.8	7.7
Manufacturing	26.7	41.8	18.8	18.2
Construction	6.0	0.0	17.7	3.9
Transport and Communication	20.0	8.4	8.9	2.5
Distribution and Catering	14.1	0.0	5.7	1.0
Financial and Business Services	12.3	5.8	10.8	1.9
Other Services	4.1	2.7	4.1	1.2
Whole Economy	**16.5**	**16.3**	**12.0**	**7.3**

Source: The Scottish Office

The manufacturing sector is clearly the most sensitive to the effects of exchange rate changes: over 40 per cent of output is exported to ROW and almost 20 per cent of inputs are imported from ROW. Within the sector (though not shown in the table), 2 industries - drink and electrical and instrument engineering - export more than two thirds of their output to ROW, while chemicals and electrical and instrument engineering also import more than a third of inputs. By contrast, the output of the service sector is much more dependent on the home market, relying less on exports to generate value added. The gross output of the service sector also embodies a lower import content.

For manufacturing, available evidence from the SCDI for 1997 suggests that the strength of sterling is causing difficulties in terms of reduced margins and some job losses. However, as described above, it appears that it has not yet impacted upon the level of export sales, only profitability.

Business survey evidence in Scotland does point to an adverse impact on exports resulting from sterling's strength but results are far from conclusive. The Scottish Chambers' Business Survey reported a decline in export orders and sales in 1997 Q4, as in Q3 and results from Scottish Engineering also revealed that export orders declined for the third successive

quarter, falling in all sectors of the industry. By contrast, the CBI Industrial Trends Survey reported a return to growth in export orders and deliveries also increased significantly in the fourth quarter. However, optimism regarding export prospects fell markedly and, as one might expect, respondents continued to believe that prices would be the most important constraint on export orders over the coming months.

One particular area in which the exchange rate may have been expected to affect activity levels is travel and tourism both to and from overseas. International Passenger Survey (IPS) evidence for the 12 months to November 1997 shows that the number of visitors to the UK rose by 3 per cent, compared with the year to November 1996. The number of visits from North America increased by 14 per cent, while the number of visits from Western Europe was broadly static. Visits from Other Areas rose by 4 per cent. The total number of UK residents' visits abroad during the 12 months ending November 1997 rose by 11 per cent compared with a year earlier. Visits to Western Europe increased by 12 per cent, while visits to North America and Other Areas increased by 2 per cent and 10 per cent respectively. Overseas earnings rose by 2 per cent in current prices in the year to November and expenditure by UK residents rose by 6 per cent. This resulted in an increase in the deficit on the travel account of the balance of payments from 3.8 billion to 4.6 billion over the period.

The change in the composition of the tourism market appears to be consistent with the larger rise in sterling against the main European currencies over the last 18 months and has implications for Scotland. North America, Germany and France all account for higher proportions of overseas visits to Scotland than to the UK as a whole. However, a complicating factor is that US and French visitors tend to have a high propensity for travelling as part of a package holiday, paid for in advance with prices based on an exchange rate determined possibly months before the holiday is taken. Consequently, the impact of changes in exchange rates on visits from US and French residents may be delayed. By contrast, the principal types of Dutch and German holidaymakers to Scotland tend to travel independently and to holiday on an ad hoc basis at relatively short notice. The impact of the strength of sterling on these groups is likely to have been demonstrated relatively quickly.

Some IPS data for Scotland are available to the third quarter of 1997. The total number of overnight visits from overseas tourists was broadly unchanged in the first 3 quarters of the year, compared with the same period in 1996. However, the total from Western Europe fell by 6 per cent and overnight visits from North America were broadly unchanged. By contrast, visits from Other Areas rose by 12 per cent. Evidence for Scotland from the United Kingdom Tourism Survey, covering the first 3 quarters of 1997, reported a 3 per cent fall in the number of tourist trips to Scotland by UK residents compared with the same period in 1996. This compares with growth rates of around 15 per cent in each of the previous 2 years. The value of these trips increased by 7 per cent in current prices, broadly equal to growth in the UK over the same period but lower than growth in 1995 and 1996.

Labour Market

Unemployment

There are 2 main sources of unemployment data. An estimate of unemployment under the International Labour Office definition - ILO unemployment - is provided by the Labour Force Survey (LFS), a quarterly sample survey of households. The second measure of unemployment - the claimant count - is based on records of those claiming Jobseeker's Allowance and National Insurance Credits at Employment Service Offices. The Office for National Statistics announced on 3 February that (from April) its assessment of the labour market would give more weight than previously to the LFS, which is conducted according to internationally agreed definitions drawn up by the ILO.

ILO unemployment (not seasonally adjusted) in Scotland fell by 32,000 in the year to Autumn (September to November) 1997 to 185,000. The rate of unemployment fell by 1.4 percentage points to 7.4 per cent of the workforce. ILO unemployment in the UK fell by 379,000 in the year to Autumn 1997 to 1,919,000 or 6.6 per cent, 0.8 percentage points below the Scottish rate. Unemployment fell in every Government Office Region (GOR) of the UK. Four GORs - Merseyside, North East, London and Northern Ireland - have higher ILO unemployment rates than Scotland.

Claimant count unemployment (seasonally adjusted) in Scotland fell throughout 1997 but rose by 1,200 in January 1998 to 141,100, the first rise since April 1996. The rate of unemployment rose by 0.1 percentage point to 5.8 per cent of the workforce, 0.8 percentage points above the UK rate. Of the UK GORs, Merseyside, North East, and Northern Ireland have higher unemployment rates than Scotland, while London has the same rate.

The claimant count measure of unemployment in Scotland remains significantly lower than the ILO measure. The difference between the ILO measure and the claimant count measure[12] in Autumn 1997 was 42,000, a rise of 7,000 on Autumn 1996.

In the July 1997 Budget, the Government set out a New Deal to help young people, the long term unemployed, lone parents

and the disabled move from Welfare to Work. The New Deal for young claimants (aged 18-24) who have been unemployed for 6 months or more was launched in 12 "pathfinder" areas of the UK (including Tayside) in January and the programme will be launched nationally from April. The New Deal for long term unemployed adults (those aged 25 and over who have been unemployed for more than 2 years) will be launched in June.[13]

Table 6 summarises the eligibility for the New Deal for these two groups in January 1998. It can be seen that, in Scotland there were 11,300 youth unemployed of over 6 months duration and 17,100 aged 25 and over who had been unemployed for 2 years or more in January 1998 (7.4 per cent and 11.3 per cent of total claimant unemployed, respectively). The total number in these 2 groups has fallen significantly over the last year - by 17,800 (38.5 per cent).

Table 6: Claiment Count Unemployment for New Deal Target Groups

	Youth (18-24) Unemployment, over 6 months duration			**Adult (25+) Unemployment, over 2 years duration**		
	January 1997	**January 1998**	**Percentage change**	**January 1997**	**January 1998**	**Percentage change**
Scotland	18,100	11,300	-37.7	28,100	17,100	-39.1
Per cent of claimant count	9.8	7.4	..	15.2	11.3	..
UK	198,300	118,400	-40.3	357,000	216,300	-39.4
Scotland as a percentage of the UK	9.1	9.5	..	7.9	7.9	..

Source: Office for National Statistics

Note: 1. Percentages calculated with reference to unrounded figures.

Employment

There are two main official sources of quarterly employment data: the Workforce in Employment series, which is a survey of employers, and the Labour Force Survey.

An increase of 43,000 in total employment (not seasonally adjusted) in Scotland was recorded by the LFS over the year to Autumn 1997 to reach a new (Autumn) peak of 2,305,000. This was due to increases of 24,000 in the number of employees, 14,000 in the number of self-employed and 5,000 in the number of people either on government supported training and employment programmes or who were unpaid family workers. Given the fall of 32,000 in the level of ILO unemployment, the number of people classed as economically active increased by 10,000 in the year to Autumn 1997. Increases in total employment were evident in most UK GORs, falling only in the North East, Merseyside and Wales. In the UK as a whole, total employment increased by 456,000.

An increase of 23,000 in the civilian workforce (not seasonally adjusted) was recorded by the Workforce in Employment series over the year to September 1997 to reach a new peak of 2,277,000, (7,000 higher than the 1991 peak and 202,000 above the trough in 1983). This comprised increases of 19,000 in the number of self-employed and 6,000 in the number of employees (comprising increases across the service sector (14,000) and decreases in manufacturing (5,000) and other sectors (3,000)) over the year, partly offset by a fall of 2,000 in the number on work-related government training programmes. Increases in the civilian workforce were evident in all GB regions, except East Anglia and Yorkshire and Humberside. In Great Britain as a whole, the civilian workforce increased by 349,000.

The growth in the number of employees has been due to the increase in part-time employment.[14] In the year to September 1997, part-time employment rose by 32,000 (17,000 males and 15,000 females), offset by a fall of 26,000 in full-time employment (24,000 males and 2,000 females). This is a continuation of a trend over the past few years in which part-time employment has increased - in each year since 1992 (data are available from 1991) - to a level 104,000 higher (46,000 males and 58,000 females) in 1997 than 5 years earlier. By contrast, full-time employment has fallen consistently and in September 1997 was 90,000 lower than 1992 levels (86,000 males and 4,000 females).

[7]Published in Economic Trends, February 1998.
[8]GDP estimates of the Scottish regions measure the value of goods and services produced in an area; they do not measure the income of the residents in an area, as is the case for Government Office Regions/countries of the UK. There is a wide variation between areas in terms of size and population; in order to compare the economic performance of areas it is necessary to use an indicator such as GDP per head of population. Resident population is used as the denominator. The implication of using this in conjunction with the workplace-based GDP figures is that the productivity of urban areas into which workers commute will tend to be overstated by this indicator, while that of surrounding areas in which they live will be understated.
[9]Input -Output Tables and Multipliers for Scotland, 1994, The Stationery Office.
[10]It should be noted that the data presented by the SCDI for Scottish manufactured exports refer to gross output. They do not measure the level of (or changes in) the value-added component of Scottish manufactured exports (that is, the wages and profits accruing to domestic suppliers of labour and capital).
[11]Electronics is classified by the SCDI as consisting of 4 industry groupings: Office Machinery, Electrical Machinery and Apparatus nec, Radio/TV/Communication Equipment and Apparatus and Medical, Precision and Optical Instruments, Watches and Clocks.
[12]Average of September to November levels (not seasonally adjusted).
[13]The New Deal for young people provides a period of advice and guidance -'the Gateway' - to find unsubsidised jobs. Thereafter, four options will be available: a subsidised job with an employer; a place on an Environment Task Force; a job in the voluntary sector; or full-time education or training. The first 3 options involve at least one day a week training and options 2 and 3 include top-ups to existing benefits. Long term unemployed adults under the New Deal will be able to benefit from two options: a subsidised job with an employer; or opportunities to study for up to 12 months in full-time employment-related courses designed to reach an accredited qualification.
[14]Part-time employment is defined here as working less than 30 hours per week.

Table 1: VAT Registrations and Deregistrations in Scotland, 1980-1996

		Numbers			Per cent	
	Initial stock	registering	deregistering	net change	registering	deregistering
1980	100,015	10,565	9,615	950	11	10
1981	100,965	10,115	8,370	1,745	10	8
1982	102,715	10,750	9,675	1,075	10	9
1983	103,785	11,980	9,765	2,215	12	9
1984	106,000	12,000	9,790	2,210	11	9
1985	108,210	12,255	10,730	1,525	11	10
1986	109,735	13,030	11,280	1,750	12	10
1987	111,485	13,625	11,945	1,680	12	11
1988	113,165	14,990	12,700	2,290	13	11
1989	115,455	16,280	12,645	3,635	14	11
1990	119,090	16,210	12,530	3,680	14	11
1991	122,770	13,725	13,190	535	11	11
1992	119,140	12,665	13,055	-390	11	11
1993	118,755	12,600	13,600	-1,000	11	11
1994	119,825	11,345	12,560	-1,215	9	10
1995	118,610	11,195	12,020	-825	9	10
1996	117,785	11,275	10,935	340	10	9

Source: DTI SME Statistics Unit

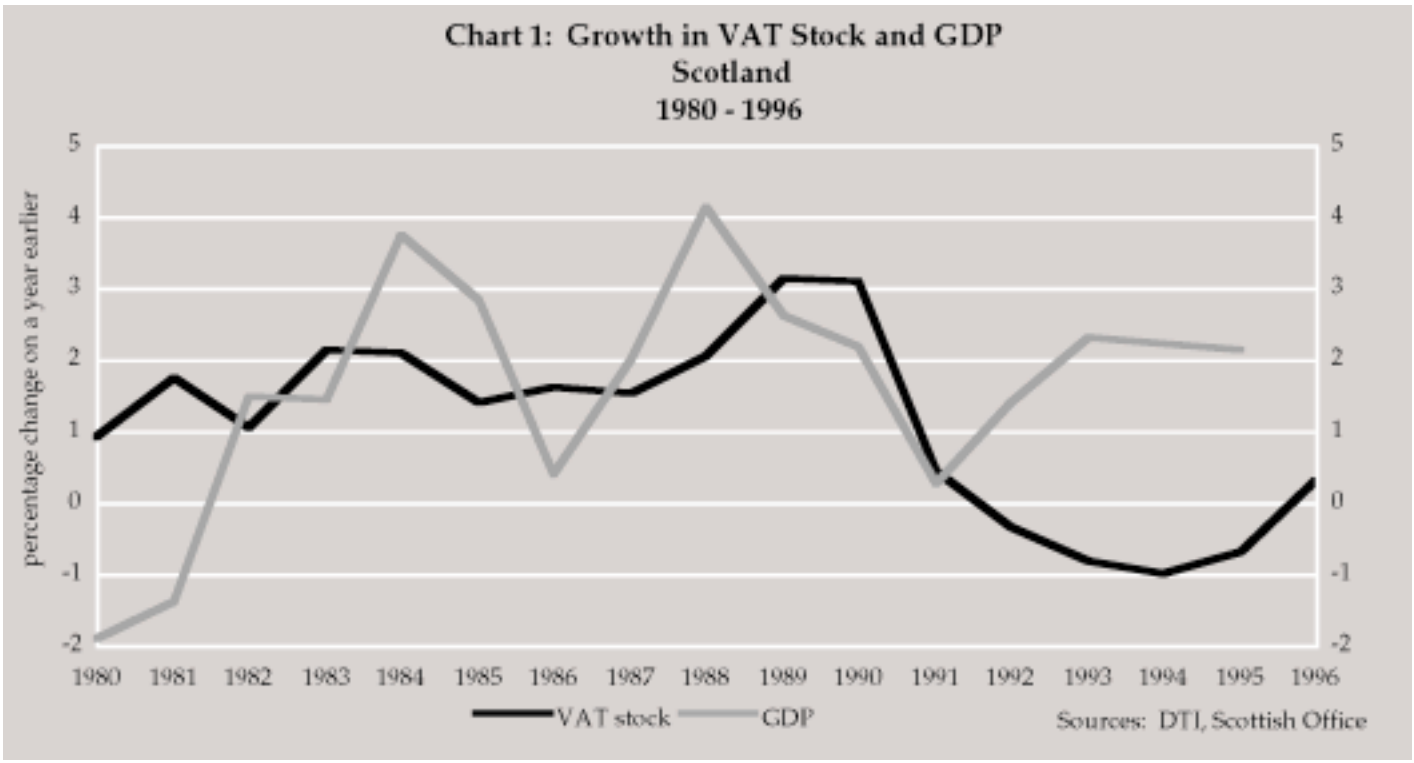


Chart 1: Growth in VAT Stock and GDP
Scotland
1980 - 1996
percentage change on a year earlier
5
4
3
2
1
0
-1
-2
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996
VAT stock
GDP
Sources: DTI, Scottish Office

Table 2: VAT Registrations and Deregistrations by Industry in Scotland, 1994-96

Industry	Stock at start 1994		1994	1995	1996	Stock at start 1997
Agriculture, forestry & fishing	21,010	a	685	710	715	20,450
		b	1,140	785	745	
		c	-2.2	-0.4	-0.1	
Mining, energy & water supply	320	a	15	25	45	300
		b	40	30	40	
		c	-7.8	-1.7	1.7	
Manufacturing	9,395	a	645	675	695	8,990
		b	835	850	730	
		c	-2.0	-1.9	-0.4	
Construction	13,900	a	1,205	1,165	1,075	12,820
		b	1,715	1,495	1,315	
		c	-3.7	-2.5	-1.8	
Wholesale, retail, repairs	30,690	a	2,650	2,535	2,655	27,960
		b	3,760	3,625	3,180	
		c	-3.6	-3.7	-1.8	
Hotels & restaurants	10,715	a	1,330	1,380	1,290	10,240
		b	1,440	1,600	1,430	
		c	-1.0	-2.1	-1.3	
Transport, storage & communication	4,845	a	450	540	500	4,885
		b	495	485	470	
		c	-0.9	1.1	0.6	
Financial intermediation	735	a	115	60	55	815
		b	40	55	55	
		c	10.2	0.6	0	
Real estate, renting & business activities	18,430	a	2,345	2,480	2,870	20,610
		b	1,820	1,890	1,825	
		c	2.8	3.1	5.3	
Public admin, defence & social security, etc	8,440	a	1,720	1,535	1,265	9,640
		b	1,175	1,095	1,050	
		c	6.5	4.9	2.3	
Education, health & social work	1,345	a	165	100	115	1,415
		b	100	115	95	
		c	4.8	-1.1	1.4	

Source: DTI SME Statistics Unit

Note: a - registrations
b - deregistrations
c - net change as percentage of stock at start of year

Table 3: VAT Registrations and Deregistrations by Industry in Scotland, 1980

Industry	Stock at start 1980		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture	21,865	a	1,005	815	865	895	835	840	875	950	1,040	1,065	970
		b	930	665	775	750	765	800	925	980	1,125	1,090	995
		c	0.3	0.7	0.4	0.7	0.3	0.2	-0.2	-0.1	-0.4	-0.1	-0.1
Production	6,385	a	680	730	785	965	960	1,025	1,045	1,140	1,165	1,050	1,145
		b	580	535	675	695	695	795	880	910	990	970	915
		c	1.6	3.0	1.6	4.0	3.8	3.1	2.2	3.0	2.2	1.0	2.5
Construction	12,305	a	1,555	1,330	1,480	1,925	1,870	1,765	1,705	1,870	2,210	2,540	2,400
		b	1,185	965	1,080	1,195	1,230	1,565	1,555	1,615	1,665	1,525	1,535
		c	3	2.9	3.1	5.4	4.5	1.3	1.0	1.7	3.5	6.4	5.1
Transport	4,055	a	440	375	390	420	450	455	455	525	655	675	650
		b	500	410	430	400	375	445	405	385	455	485	535
		c	-1.5	-0.9	-1.0	0.5	1.9	0.2	1.2	3.4	4.7	4.3	2.5
Wholesale	5,805	a	675	745	770	835	815	835	775	865	770	850	940
		b	570	550	720	685	725	735	750	765	910	835	810
		c	1.8	3.3	0.8	2.4	1.4	1.6	0.4	1.5	-2.1	0.2	2.6
Retail	22,085	a	2,350	2,355	2,310	2,450	2,455	2,420	2,595	2,500	2,710	2,585	2,470
		b	2,720	2,460	2,705	2,650	2,480	2,600	2,655	2,770	2,735	2,825	2,680
		c	-1.7	-0.5	-1.8	-0.9	-0.1	-0.9	-0.3	-1.3	-0.1	-1.2	-1.0
Finance	4,660	a	725	640	685	870	1,005	1,120	1,095	1,175	1,480	2,065	2,200
		b	375	355	415	460	505	575	655	795	790	775	875
		c	7.5	5.7	5.1	7.4	8.4	8.4	6.3	5.1	8.8	15.1	13.5
Catering	10,125	a	1,400	1,340	1,445	1,655	1,640	1,630	1,830	1,885	2,060	2,080	2,085
		b	1,280	1,135	1,265	1,395	1,440	1,525	1,655	1,800	1,910	2,000	1,935
		c	1.2	2.0	1.7	2.4	1.8	0.9	1.6	0.6	1.3	0.7	1.3
Motor trades	4,680	a	540	505	560	570	500	500	535	460	530	540	505
		b	490	440	535	495	490	510	520	515	485	460	450
		c	1.1	1.4	0.5	1.6	0.2	-0.2	0.3	-1.1	0.9	1.6	1.1
Other services	8,050	a	1,185	1,280	1,455	1,390	1,470	1,660	2,125	2,275	2,365	2,830	2,845
		b	980	855	1,070	1,040	1,090	1,180	1,275	1,415	1,625	1,685	1,800
		c	2.5	5.1	4.4	3.9	4.0	4.9	8.3	7.7	6.2	9.0	7.5

Source: DTI SM

Note: a - registrations
b - deregistrations
c - net change as percentage of stock at start of year

Table 4: Change in VAT stock in Scotland as a percentage of stock at start of period

	Service sector	Non-service sector	Total
1980-91	24.9	19.6	22.8
1992-94	0.6	-3.9	-1.2
1994-97	0.5	-4.6	-1.4

Source: Scottish Office estimates

Table 5: VAT Registrations and Deregistrations in the UK, 1980-96

		Numbers			Per cent	
	Initial stock	registering	deregistering	net change	registering	deregistering
1980	1,304,390	160,550	145,270	15,280	12	11
1981	1,319,670	154,135	122,590	31,545	12	9
1982	1,351,215	168,280	148,315	19,965	12	11
1983	1,371,175	182,550	148,080	34,470	13	11
1984	1,405,650	184,575	155,085	29,490	13	11
1985	1,435,135	184,865	166,760	18,105	13	12
1986	1,453,240	193,755	169,070	24,685	13	12
1987	1,477,930	211,795	172,580	39,215	14	12
1988	1,517,140	245,800	179,650	66,150	16	12
1989	1,583,290	258,840	181,005	77,835	16	11
1990	1,661,125	239,105	191,840	47,265	14	12
1991	1,708,395	204,565	209,845	-5,280	12	12
1992	1,628,000	187,000	226,000	-39,000	11	14
1993	1,589,000	191,000	213,000	-22,000	12	13
1994	1,629,235	168,240	188,140	-19,900	10	12
1995	1,609,335	163,960	173,230	-9,270	10	11
1996	1,600,065	168,200	156,965	11,235	11	10

Source: DTI SME Statistics Unit

Table 6: VAT Registrations and Deregistrations by Industry in the UK, 1994-96 thousands

Industry	Stock at start 1994		1994	1995	1996	Stock at start 1997
Agriculture, forestry & fishing	163.0	a	4.4	4.3	4.4	157.6
		b	7.9	5.3	5.4	
		c	-2.1	-0.6	-0.6	
Mining, energy & water supply	2.0	a	0.2	0.2	0.2	1.9
		b	0.3	0.2	0.3	
		c	-5.0	-0.5	-2.9	
Manufacturing	166.8	a	13.8	13.9	14.0	162.4
		b	16.3	15.8	14.0	
		c	-1.5	-1.2	0	
Construction	196.2	a	16.4	16.2	15.2	174.7
		b	27.2	22.5	19.5	
		c	-5.5	-3.4	-2.4	
Wholesale, retail, repairs	441.0	a	39.5	37.3	37.5	404.6
		b	55.2	51.7	43.8	
		c	-3.6	-3.4	-1.5	
Hotels & restaurants	110.5	a	15.9	15.3	15.7	105.4
		b	18.1	18.2	15.7	
		c	-2.0	-2.7	0	
Transport, storage & communication	72.5	a	8.1	8.5	8.4	72.9
		b	8.2	8.4	7.9	
		c	-0.1	0.1	0.7	
Financial intermediation	14.6	a	1.9	1.4	1.6	15.4
		b	1.0	1.5	1.6	
		c	6.2	-0.6	0	
Real estate, renting & business activities	307.6	a	43.2	46.2	51.9	353.4
		b	32.8	31.7	31.1	
		c	3.4	4.6	6.3	
Public admin, defence & social security, etc	134.3	a	22.3	19.3	17.3	142.1
		b	19.8	16.5	14.8	
		c	1.9	2.0	1.8	
Education, health & social work	20.8	a	2.6	1.6	1.9	21.0
		b	1.4	1.6	2.9	
		c	5.8	-0.1	-4.5	

Source: DTI SME Statistics Unit

Note: a - registrations
b - deregistrations
c - net change as percentage of stock at start of year

Table 7: VAT Registrations and Deregistrations by Industry in the UK, 1980-93

Industry	Stock at start 1980		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture	176.6	a	8.6	6.8	6.6	6.2	5.8	5.5	5.4	5.7	6.2	6.1	5.
		b	7.8	4.9	5.8	6.2	5.9	6.6	7.1	7.6	7.5	7.0	6.
		c	0.5	1.1	0.5	0.0	0.0	-0.6	-1.0	-1.0	-0.7	-0.5	-0.
Production	121.8	a	14.7	14.8	16.6	18.9	19.2	19.8	19.4	19.8	21.2	21.1	20.
		b	13.3	11.8	14.4	14.8	15.2	16.6	17.2	17.2	16.8	16.7	17.
		c	1.1	2.5	1.8	3.2	3.0	2.3	1.6	1.8	3.0	3.0	1.
Construction	184.5	a	25.1	21.7	24.7	30.0	29.1	26.7	29.1	34.7	44.7	47.5	38.
		b	19.8	14.9	18.4	18.5	24.0	27.3	25.3	23.9	24.6	26.5	29.
		c	2.9	3.6	3.2	5.6	2.4	-0.3	1.7	4.9	8.6	8.3	3.
Transport	58.3	a	7.4	6.8	8.0	8.3	8.2	8.4	8.8	9.9	12.0	12.4	10.
		b	7.7	6.6	7.3	7.2	7.1	7.5	7.6	7.3	7.9	8.6	10.
		c	-0.6	0.3	1.2	1.9	1.8	1.5	1.9	4.1	6.2	5.5	1.
Wholesale	95.8	a	14.5	14.8	15.6	16.6	15.8	15.7	15.1	15.1	15.8	17.5	19.
		b	10.9	9.8	12.8	13.3	14.1	15.0	15.1	14.9	15.1	14.7	16.
		c	3.8	5.0	2.7	3.0	1.6	0.6	0.0	0.2	0.6	2.5	3.
Retail	272.7	a	32.4	33.3	34.8	35.4	33.6	33.7	35.0	35.8	40.7	36.1	30.
		b	36.9	32.3	37.6	36.2	34.5	35.6	36.2	36.8	38.5	35.8	33.
		c	-1.7	0.4	-1.0	-0.3	-0.4	-0.7	-0.5	-0.4	0.9	0.1	-1.
Finance	80.0	a	10.6	9.4	10.0	11.7	14.3	15.9	16.8	17.8	23.1	30.1	28.
		b	7.4	6.5	7.9	7.7	8.0	9.2	10.2	11.4	12.0	12.7	14.
		c	3.9	3.5	2.5	4.6	6.8	6.8	6.3	5.8	9.4	13.4	9.
Catering	120.2	a	15.8	15.3	16.7	18.2	20.2	18.4	19.6	22.4	23.0	21.8	20.
		b	15.6	14.0	16.5	16.8	18.0	18.4	19.2	20.5	21.6	20.3	19.
		c	0.2	1.0	0.1	1.1	1.8	0.1	0.3	1.5	1.1	1.1	0.
Motor trades	68.3	a	9.1	8.8	9.8	9.8	9.0	9.0	8.8	9.3	10.6	10.7	9.
		b	8.6	7.1	8.8	8.6	8.7	8.7	8.4	8.0	8.0	8.0	8.
		c	0.8	2.4	1.3	1.6	0.4	0.4	0.6	1.8	3.5	3.5	1.
Other services	126.2	a	22.4	22.5	25.5	27.6	29.5	31.8	35.8	41.3	48.5	55.5	55.
		b	17.3	14.7	19.0	18.9	19.5	21.8	22.7	25.1	27.7	30.7	36.
		c	4.1	5.9	4.6	6.0	6.4	6.1	7.5	8.6	10.2	11.0	7.

Source: DTI SM

Note: a - registrations
b - deregistrations
c - net change as percentage of stock at start of year

Table 8: Net change in VAT stock as a percentage of initial stock

	Scotland	UK
1980	1.0	1.2
1981	1.7	2.4
1982	1.1	1.5
1983	2.1	2.5
1984	2.1	2.1
1985	1.4	1.3
1986	1.6	1.7
1987	1.5	2.7
1988	2.0	4.4
1989	3.2	4.9
1990	3.1	2.9
1991	0.4	-0.3
1992	-0.3	-2.4
1993	-0.8	-1.4
1994	-1.0	-1.2
1995	-0.7	-0.6
1996	0.3	0.7

Source: Scottish Office estimates

Table 9: Shift-Share Analysis, 1994-97

Industry	Actual Stock Start 1994	Actual Stock Start 1997	Implied stock using shift-share	Index: actual stock indexed on implied stock = 100
Agriculture, forestry & fishing	21,010	20,450	20,303	100.7
Mining, energy & water supply	320	300	295	101.7
Manufacturing	9,395	8,990	9,148	98.3
Construction	13,900	12,820	12,377	103.6
Wholesale, retail, repairs	30,690	27,960	28,157	99.3
Hotels, restaurants	10,715	10,240	10,220	100.2
Transport, communication	4,845	4,885	4,877	100.2
Financial Intermediation	735	815	773	105.4
Real estate, business services	18,430	20,610	21,174	97.3
Public admin, defence, etc	8,440	9,640	8,923	107.9
Education, health & social work	1,345	1,415	1,357	104.3
Total	**119,825**	**118,125**	**117,616**	**100.4**

Source: Scottish Office estimates

Table 10: Shift-Share Analysis, 1980-92

Industry	Actual Stock Start 1980	Actual Stock Start 1992	Implied stock using shift-share	Index: actual stock indexed on implied stock = 100
Agriculture	21,865	22,240	21,114	105.3
Production	6,385	8,335	8,131	102.5
Construction	12,305	17,585	18,081	97.3
Transport	4,055	4,700	5,047	93.1
Wholesale	5,805	6,715	7,622	88.1
Retail	22,085	19,690	20,725	95.0
Finance	4,660	11,865	9,681	122.6
Catering	10,125	11,930	10,918	109.3
Motor trades	4,680	5,015	5,503	91.1
Other	8,050	15,235	17,608	86.5
Total	**100,015**	**123,310**	**130,589**	**94.4**

Source: Scottish Office estimates

Table 11: Survival rates for VAT-registered businesses in Scotland

months since registration	Year of registration							
	1988	1989	1990	1991	1992	1993	1994	
6	94.2	94.0	93.2	92.7	93.3	93.1	92.9	
12	86.7	86.3	84.1	84.2	85.0	83.7	85.1	
18	78.8	78.9	78.8	75.2	76.3	76.3	75.0	76.5
24	72.1	70.8	68.2	68.7	68.7	67.4	69.6	
30	66.2	63.4	61.8	61.9	61.9	61.0		
36	60.4	58.3	55.8	56.6	56.3	56.0		
42	55.5	53.4	50.6					
48	51.6	49.5	47.0					

Source: DTI SME Statistics U

Table 12: Survival rates for VAT-registered businesses in the UK

months since registration	Year of registration							
	1988	1989	1990	1991	1992	1993	1994	1995
6	94.1	93.3	92.2	91.2	92.3	93.2	92.9	94.5
12	86.7	85.3	81.7	81.7	83.4	83.6	84.6	87.3
18	78.8	76.7	71.1	72.4	74.6	74.3	76.0	
24	71.7	67.5	63.1	64.4	67.0	66.5	69.1	
30	65.4	59.4	56.2	57.6	60.4	59.8		
36	58.9	53.4	50.4	52.0	54.8	54.8		
42	53.1	48.1	45.5					
48	48.7	43.9	41.9					

Source: DTI SME Statistics Unit

Annex 1

		All sectors		
		stock at year start	regi-strations	deregi-strations
Aberdeen City	1994	5775	625	630
	1995	5770	690	710
	1996	5750	690	610
Aberdeenshire	1994	9920	710	865
	1995	9765	675	725
	1996	9715	645	695
Angus	1994	3035	225	280
	1995	2980	195	255
	1996	2920	190	215
Argyll and Bute	1994	3400	255	320
	1995	3335	265	275
	1996	3325	240	260
Clackmannanshire	1994	790	75	95
	1995	770	80	90
	1996	760	85	75
Dumfries and Galloway	1994	5660	335	415
	1995	5575	300	395
	1996	5480	310	330
Dundee City	1994	2170	230	255
	1995	2150	215	275
	1996	2090	250	260
East Ayrshire	1994	2530	220	245
	1995	2510	225	230
	1996	2500	215	245
East Dunbartonshire	1994	1880	205	225
	1995	1860	210	225
	1996	1845	200	205
East Lothian	1994	1870	175	185
	1995	1860	170	190
	1996	1840	165	160
East Renfrewshire	1994	1610	195	240
	1995	1565	180	200
	1996	1540	165	200

Edinburgh, City of	**1994**	10150	1300	1220
	1995	10230	1230	1165
	1996	10295	1200	1070
Falkirk	**1994**	2400	260	325
	1995	2335	260	280
	1996	2315	250	230
Fife	**1994**	6520	595	705
	1995	6415	575	680
	1996	6310	590	650
Glasgow City	**1994**	11175	1455	1400
	1995	11230	1410	1555
	1996	11085	1415	1370
Highland	**1994**	8230	615	710
	1995	8135	595	610
	1996	8120	580	575

Annex 1

		All sectors		
		stock at year start	regi-strations	deregi-strations
Inverclyde	**1994**	1170	110	150
	1995	1130	105	135
	1996	1100	130	130
Midlothian	**1994**	1275	145	125
	1995	1290	125	125
	1996	1290	120	130
Moray	**1994**	2640	140	205
	1995	2580	175	210
	1996	2545	155	205
North Ayrshire	**1994**	2530	245	305
	1995	2470	230	270
	1996	2430	205	210
North Lanarkshire	**1994**	4625	535	590
	1995	4565	540	565
	1996	4545	550	515
Orkney Islands	**1994**	1525	65	105
	1995	1485	65	85
	1996	1465	65	75
Perth and Kinross	**1994**	4855	385	455
	1995	4785	365	410
	1996	4740	335	360
Renfrewshire	**1994**	2950	350	350
	1995	2950	335	350
	1996	2935	350	320
Scottish Borders	**1994**	4180	265	310
	1995	4135	270	310
	1996	4095	255	275
Shetland Islands	**1994**	1095	110	105
	1995	1100	95	65
	1996	1130	105	60
South Ayrshire	**1994**	2745	245	295
	1995	2695	230	290
	1996	2635	230	240
South Lanarkshire	**1994**	5785	565	645
	1995	5705	580	645

	1996	5640	800	560
Stirling	**1994**	2590	215	245
	1995	2555	225	220
	1996	2555	265	235
West Dunbartonshire	**1994**	1240	150	165
	1995	1225	135	155
	1996	1205	145	130
West Lothian	**1994**	2610	270	315
	1995	2565	330	285
	1996	2610	300	275
Western Isles	**1994**	900	75	80
	1995	895	115	55
	1996	955	85	65

Annex 1

		Hotels, catering		
		stock at year start	regi-strations	deregi-strations
Aberdeen City	1994	380	55	55
	1995	380	55	60
	1996	375	55	55
Aberdeenshire	1994	495	50	60
	1995	485	65	70
	1996	480	55	55
Angus	1994	285	40	40
	1995	285	25	40
	1996	270	30	35
Argyll and Bute	1994	415	45	45
	1995	410	35	45
	1996	405	35	40
Clackmannanshire	1994	85	10	15
	1995	75	10	10
	1996	70	10	5
Dumfries and Galloway	1994	485	40	45
	1995	480	40	45
	1996	475	35	50
Dundee City	1994	275	40	40
	1995	275	35	55
	1996	255	50	60
East Ayrshire	1994	210	35	35
	1995	210	30	30
	1996	215	25	30
East Dunbartonshire	1994	95	15	10
	1995	100	20	25
	1996	100	10	15
East Lothian	1994	180	30	25
	1995	180	15	25
	1996	170	20	20
East Renfrewshire	1994	90	15	15
	1995	95	20	20
	1996	95	10	15
Edinburgh, City of	1994	1055	175	170

	1995	1060	165	190
	1996	1035	135	160
Falkirk	**1994**	225	40	45
	1995	220	30	30
	1996	220	30	35
Fife	**1994**	670	60	75
	1995	660	70	75
	1996	650	95	100
Glasgow City	**1994**	1100	180	180
	1995	1095	225	255
	1996	1065	175	190
Highland	**1994**	830	75	80
	1995	825	75	90
	1996	815	75	70

Annex 1

		Hotels, catering		
		stock at year start	regi-strations	deregi-strations
Inverclyde	1994	145	20	20
	1995	140	15	15
	1996	140	20	20
Midlothian	1994	130	20	15
	1995	130	15	20
	1996	125	15	15
Moray	1994	255	20	20
	1995	250	20	25
	1996	245	20	30
North Ayrshire	1994	305	30	45
	1995	290	40	50
	1996	280	30	30
North Lanarkshire	1994	455	60	80
	1995	435	65	75
	1996	420	70	70
Orkney Islands	1994	60	*	10
	1995	50	*	5
	1996	50	5	5
Perth and Kinross	1994	465	40	45
	1995	460	35	65
	1996	430	35	60
Renfrewshire	1994	245	40	35
	1995	245	30	50
	1996	230	40	35
Scottish Borders	1994	320	35	40
	1995	315	35	40
	1996	310	35	45
Shetland Islands	1994	60	10	10
	1995	65	10	5
	1996	70	5	10
South Ayrshire	1994	320	35	40
	1995	320	35	45
	1996	310	25	50
South Lanarkshire	1994	435	55	65
	1995	420	55	65

	1996	410	45	50
Stirling	**1994**	265	25	30
	1995	260	30	30
	1996	265	35	30
West Dunbartonshire	**1994**	120	15	20
	1995	115	20	20
	1996	120	15	15
West Lothian	**1994**	220	25	30
	1995	210	45	35
	1996	220	35	35
Western Isles	**1994**	55	5	*
	1995	60	5	*
	1996	65	5	5

There are major discontinuities in the data which cause great difficulties when trying to identify meaningful trends in the location of fishing vessels around the Scottish coast. Unlike the other statistical time series used in this article, it has not been possible to convert the vessel location figures onto a consistent basis back to 1986 although, by using unpublished data, a consistent series at Fishery district level has been derived from 1993, based on metres and overall length.

Differences in coverage make any interpretation of changes in the locations where vessels have been based very difficult, particularly for the under 10m sector. Sudden breaks in trend, as revealed in Table 2, raise doubts about the accuracy of the figures. For instance, the apparent reduction in vessels with owners based in Orkney in 1989 and Shetland in 1990 or the dramatic increases shown at Stornoway in 1989 and 1992, Mallaig in 1988, Campbeltown in 1988 and in many districts in 1993 seem to be attributable largely to changes in data coverage rather than in the actual number of vessels. Closer scrutiny of the trends by length class (Annex 1, Table 2A) show that in all these instances it is the under 10m (30 feet) sector which is responsible for such fluctuations. The explanation seems to be the variable coverage of this sector in the Fleet Statistics prior to 1993. The 12 per cent increase in the overall number of under 10m vessels recorded between 1987 and 1989, for instance, can nearly all be attributed to the three districts of Stornoway, Mallaig and Campbeltown. The most obvious reason for this is improved recording of vessels in these districts rather than any actual growth in their locally owned fleets. For the period between 1986 and 1992 the safest conclusion to draw is that the number of small vessels in the Scottish fleet probably remained relatively constant.

Table 3, also in Annex 1, shows the average number of locally owned vessels in each district in two different time periods: 1986-1992 and 1993-1996. Averages have been used to smooth out the more extreme annual fluctuations in the recorded number of vessels and the time periods have been chosen on the basis of differences in data coverage. Each district's average share of the Scottish fishing fleet, by length class, for both of these periods is shown in the Table, and Table 4 uses Location Quotients (LQs) to compare this percentage with the district's share of all vessels in the Scottish fleet[5].

Table 4: The Relative Importance of Length Class by District

Base District	**Registered Length**				**Base District**	**Overall Length**			
	Average Location Quotient 1986-92					**Average Location Quotient 1993-96**			
	<10m	10<25m	25+m	Total		<10m	10<25m	25+m	Total
Eyemouth	0.74	1.21	0.27	1.00	Eyemouth	0.79	1.47	0.36	1.00
Pittenweem	1.29	0.87	-	1.00	Pittenweem	1.06	1.07	-	1.00
Arbroath	1.32	0.83	0.33	1.00	Arbroath	1.29	0.74	0.15	1.00
Aberdeen	0.80	1.02	2.81	1.00	Aberdeen	1.02	0.75	2.10	1.00
Peterhead	0.49	1.16	3.72	1.00	Peterhead	0.52	1.10	4.21	1.00
Fraserburgh	0.49	1.19	3.24	1.00	Fraserburgh	0.45	1.55	2.54	1.00
Macduff	0.15	1.43	2.84	1.00	Macduff	..	..	..	..
Buckie	0.08	1.62	0.30	1.00	Buckie	0.44	1.77	1.53	1.00
Lossiemouth	0.23	1.54	0.44	1.00	Lossiemouth	..	..	..	..
Wick	1.54	0.70	0.30	1.00	Wick	1.35	0.61	0.20	1.00
Orkney	1.27	0.81	1.36	1.00	Orkney	1.18	0.76	0.83	1.00
Shetland	1.02	0.83	3.63	1.00	Shetland	1.05	0.81	1.58	1.00
Stornoway	1.57	0.70	0.11	1.00	Stornoway	1.36	0.63	0.07	1.00
Kinlochbervie	0.76	1.21	-	1.00	Kinlochbervie	1.23	0.85	-	1.00
Lochinver	0.70	1.20	1.09	1.00	Lochinver	0.66	1.65	-	1.00
Ullapool	1.17	0.95	-	1.00	Ullapool	1.18	0.93	-	1.00
Mallaig	1.41	0.79	0.22	1.00	Mallaig	1.25	0.80	0.10	1.00

Oban	1.76	0.58	-	1.00	Oban	1.35	0.66	-	1.00
Campbeltown	1.30	0.87	-	1.00	Campbeltown	1.16	0.96	-	1.00
Ayr	0.56	1.32	1.36	1.00	Ayr	0.81	1.15	1.69	1.00
All Districts	1.00	1.00	1.00	1.00	All Districts	1.00	1.00	1.00	1.00

Table 4 shows that the districts with the consistently greatest relative dependence on the under 10m fleet have been Oban, Stornoway and Wick. Other areas that have maintained an above average representation of small boats since 1986 are Mallaig, Ullapool, Orkney, Shetland, Campbeltown, Pittenweem and Arbroath. Eight of these ten districts are located in the Highlands and Islands where such vessels target stocks of shellfish, mostly using creels.

The growth in the largest sizes of vessel (over 25m), particularly since 1990, has benefited a small number of ports. The LQs show that in 1996 the ownership of such vessels was heavily concentrated into just three areas. These were Grampian (Peterhead, Buckie, Fraserburgh, and Aberdeen districts); the Shetland Isles; and Ayr base district, which had no large boats in 1990 but 23 by 1993. This sudden increase occurred as a result of Spanish owned, but UK registered vessels, moving from ports such as Milford Haven to Troon, in Ayr district, where their agent is based. These vessels mainly target hake and anglerfish in the sea areas to the north and west of Scotland so Troon was a more convenient base.

Apart from the district of Ayr, which had no large vessels before 1991, the other areas have been the principal bases for such vessels throughout the ten year period. During this time over half the fleet of large vessels has been based in the Grampian ports. The post 1992 figures in this particular time series are not comparable in absolute terms with those for the earlier period. This is because the shift from registered to overall length led to a large jump in the number of vessels being classified as large rather than medium sized.

The districts where the vessel owners have consistently been most dependent on the declining medium size sector (10<25m) have been Buckie (including Lossiemouth), Fraserburgh (including Macduff), Lochinver and Eyemouth, followed by Peterhead and Ayr. Whereas Buckie and Lossiemouth saw the number of such locally owned vessels decline during the 1986-1992 period, both Fraserburgh and Macduff districts, which are on the same stretch of coast, experienced little change in the number of medium sized boats based at their ports. However, since 1993 the rapid contraction of this fleet sector has affected these districts as well.

Those ports that are not deep enough to berth the new generation of larger and deeper draughted boats, and which lack either locally based processors or active local fish markets, have lost out from these trends. Some of the medium and large sized vessels, with owners based in the Moray Firth ports, have been moved to Kinlochbervie on the north-west coast where they are located for much of the year. Ports such as Fraserburgh, Peterhead, Aberdeen, Troon, Lochinver and those in the Orkney and Shetland Isles, which are able to accommodate larger vessels either because of natural conditions or harbour deepening schemes, have been better placed to diversify their locally owned fleet structure. Other deeper water ports such as Kinlochbervie and Scrabster, in Wick district, which are well located for the fishing grounds have been able to attract visiting vessels and this has also allowed them to take advantage of the trend towards larger vessels.

By comparing the proportion of all vessels that use a particular fishing method with the percentage of boats within a particular length class that use the same method, it is possible to identify, on the basis of a ratio greater than 1.0, which length classes make the most use of a particular method. Table 5 shows that whilst the vast majority (90 per cent) of small boats fish by using creels, a number of other fishing methods, such as other demersal, lines and other shellfish, are also over-represented amongst the small vessel sector[6].

Table 5: Length of Vessel and Fishing Method, 1996

Main Method	**Number of Vessels**				**Percentage of Vessels by Fishing Method**			
	<10m	**10<25m**	**25+m**	**Total**	**<10m**	**10<25m**	**25+m**	**Total**
Demersal Trawl	12	325	106	443	2.7	73.4	23.9	100.0
Demersal Seine	-	87	28	115	-	75.7	24.3	100.0
Demersal Gill Nets	16	3	8	27	59.3	11.1	29.6	100.0
Lines	37	5	8	50	74.0	10.0	16.0	100.0
Beam Trawl	1	2	19	22	4.5	9.1	86.4	100.0
Other Demersal	2	-	-	2	100.0	-	-	100.0

Demersal Total	68	422	169	659	10.3	64.0	25.6	100.0
Pelagic Seine	-	-	29	29	-	-	100.0	100.0
Pelagic Trawl	-	-	16	16	-	-	100.0	100.0
Other Pelagic	-	-	-	-	-	-	-	-
Pelagic Total	-	-	45	45	-	-	100.0	100.0
Creel Fishing	1,495	145	-	1,640	91.2	8.8	-	100.0
Nephrops Trawl	48	251	-	299	16.1	83.9	-	100.0
Suction Dredge	14	104	2	120	11.7	86.7	1.7	100.0
Other Shellfish	35	8	-	43	81.4	18.6	-	100.0
Shellfish Total	1,592	508	2	2,102	75.7	24.2	0.1	100.0
Overall Total	1,660	930	216	2,806	59.2	33.1	7.7	100.0

Main Method	**Percentage of Length Class**				**Relative Importance**			
	<10m	**10<25m**	**25+m**	**Total**	**<10m**	**10<25m**	**25+m**	**Total**
Demersal Trawl	0.7	34.9	49.1	15.8	-	2.2	3.1	1.0
Demersal Seine	-	9.4	13.0	4.1	-	2.3	3.2	1.0
Demersal Gill Nets	1.0	0.3	3.7	1.0	1.0	0.3	3.8	1.0
Lines	2.2	0.5	3.7	1.8	1.3	0.3	2.1	1.0
Beam Trawl	0.1	0.2	8.8	0.8	0.1	0.3	11.2	1.0
Other Demersal	0.1	-	-	0.1	1.0	-	-	1.0
Demersal Total	4.1	45.4	78.2	23.5	0.2	1.9	3.3	1.0
Pelagic Seine	-	-	13.4	1.0	-	-	13.4	1.0
Pelagic Trawl	-	-	7.4	0.6	-	-	12.3	1.0
Other Pelagic	-	-	-	-	-	-	-	1.0
Pelagic Total	-	-	20.8	1.6	-	-	13.0	1.0
Creel Fishing	90.1	15.6	-	58.4	1.5	0.3	-	1.0
Nephrops Trawl	2.9	27.0	-	10.7	0.3	2.5	-	1.0
Suction Dredge	0.8	11.2	0.9	4.3	0.2	2.6	0.2	1.0
Other Shellfish	2.1	0.9	-	1.5	1.4	0.6	-	1.0
Shellfish Total	95.9	54.6	0.9	74.9	1.3	0.7	-	1.0
Overall Total	100.0	100.0	100.0	100.0	1.0	1.0	1.0	1.0

Amongst medium size vessels there is an above average proportion of boats that use demersal trawl and seine, nephrops trawl and suction dredge methods. In the case of the large vessel sector there is a massive over representation of beam trawlers, pelagic purse seiners and pelagic trawlers although demersal seiners, trawlers, gill netters and lines are also more numerous than expected on the basis of their share of all vessels.

It is evident from Table 5 that the three main types of fishing method are each dominated by a different size of vessel. Most (76 per cent) shellfish boats are under 10m in length; the majority (64 per cent) of demersal vessels are between 10-25m long; and the pelagic fleet consists entirely of large vessels in excess of 25m in length. Inevitably there are some exceptions amongst these broad fleet segments. Within the demersal sector, beam trawlers are generally large vessels whilst most boats that use gill nets and lines are small. The most numerous types of demersal boats are trawlers and seiners and about 75 per cent of these are in the medium length category. Within the shellfish sector most vessels that use nephrops trawl or suction dredges are medium rather than small in size.

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[1]Angela Campbell is an Economic Adviser in The Scottish Office Education and Industry Department.

[2]VAT-based data are produced by the Department for Trade and Industry's (DTI) Small and Medium Sized Enterprises (SME) Statistics Unit. The estimates are based on VAT data held by the Office for National Statistics on the Inter Departmental Business Register (IDBR). The VAT data are in turn derived from HM Customs and Excise records.
[3]Source: DTI SME Statistics Unit.
[4]As indicated by the negative net change figures. It is not appropriate to compare the initial stock figures due to the discontinuities.
[5]See, for instance, "New Firm Formation in the British Counties and the Regions of Scotland", B Ashcroft and J Love, Scottish Economic Bulletin, No 49, Summer 1994.

Table 3: Average Number and Percentage of Vessels in Each District

Base District	Registered Length			
	Average number of vessels, 1986-92			
	<10m	10<25m	25+m	Total
Eyemouth	38	99	1	138
Pittenweem	61	65	-	125
Arbroath	42	42	1	84
Aberdeen	15	31	5	51
Peterhead	27	102	20	148
Fraserburgh	30	114	19	163
Macduff	6	87	10	103
Buckie	3	103	1	108
Lossiemouth	9	97	2	107
Wick	54	39	1	93
Orkney	48	48	5	100
Shetland	43	55	15	113
Stornoway	154	108	1	263
Kinlochbervie	4	10	-	14
Lochinver	7	18	1	26
Ullapool	24	31	-	55
Mallaig	113	100	2	215
Oban	86	45	-	131
Campbeltown	85	90	-	175
Ayr	28	104	7	134
All Districts	877	1,387	83	2,347

Base District	Overall Length			
	Average number of vessels,1993-96			
	<10m	10<25m	25+m	Total
Eyemouth	63	75	4	141
Pittenweem	66	43	2	110
Arbroath	67	25	1	92
Aberdeen	38	18	10	66
Peterhead	50	67	53	170
Fraserburgh	92	201	68	360
Macduff	..	..	..	..
Buckie	58	149	26	233
Lossiemouth	..	..	..	..
Wick	102	29	2	133
Orkney	123	50	11	184
Shetland	115	57	23	195
Stornoway	279	83	2	363
Kinlochbervie	15	7	-	22
Lochinver	12	19	1	32
Ullapool	44	22	-	66
Mallaig	182	74	2	258
Oban	124	39	-	163
Campbeltown	130	68	-	198
Ayr	90	82	25	196
All Districts	1,624	1,035	213	2,872

Base District	Registered Length			
	Average percentage of vessels, 1986-92			
	<10m	10<25m	25+m	Total
Eyemouth	4.3	7.1	1.6	5.9
Pittenweem	6.9	4.7	-	5.3
Arbroath	4.8	3.0	1.2	3.6
Aberdeen	1.8	2.2	6.2	2.2
Peterhead	3.1	7.3	23.5	6.3
Fraserburgh	3.4	8.2	22.4	6.9
Macduff	0.7	6.3	12.5	4.4
Buckie	0.4	7.5	1.4	4.6
Lossiemouth	1.0	7.0	2.0	4.5
Wick	6.1	2.8	1.2	4.0

Base District	Overall Length			
	Average percentage of vessels,1993-96			
	<10m	10<25m	25+m	Total
Eyemouth	3.9	7.2	1.8	4.9
Pittenweem	4.1	4.1	0.7	3.8
Arbroath	4.1	2.4	0.5	3.2
Aberdeen	2.3	1.7	4.8	2.3
Peterhead	3.1	6.5	24.9	5.9
Fraserburgh	5.6	19.4	31.8	12.5
Macduff	..	..	..	..
Buckie	3.6	14.3	12.4	8.1
Lossiemouth	..	..	..	..
Wick	6.3	2.8	0.9	4.6

Orkney	5.4	3.5	5.8	4.3	Orkney	7.6	4.9	5.3	6.4
Shetland	4.9	4.0	17.5	4.8	Shetland	7.1	5.5	10.7	6.8
Stornoway	17.6	7.8	1.2	11.2	Stornoway	17.2	8.0	0.8	12.6
Kinlochbervie	0.4	0.7	-	0.6	Kinlochbervie	0.9	0.7	-	0.8
Lochinver	0.8	1.3	1.2	1.1	Lochinver	0.7	1.8	0.5	1.1
Ullapool	2.8	2.2	-	2.4	Ullapool	2.7	2.1	-	2.3
Mallaig	12.9	7.2	2.1	9.1	Mallaig	11.2	7.2	0.9	9.0
Oban	9.9	3.2	-	5.6	Oban	7.6	3.7	-	5.7
Campbeltown	9.7	6.5	-	7.5	Campbeltown	8.0	6.6	-	6.9
Ayr	3.2	7.5	7.8	5.7	Ayr	5.6	7.9	11.5	6.8
All Districts	100.0	100.0	100.0	100.0	All Districts	100.0	100.0	100.0	100.0

Annex 2: Glossary of Technical Terms

Fish Species

The various species of fish are divided into three main groups:

Demersal or white fish live on or near the sea bed e.g. cod, haddock, plaice.
Pelagic fish are found mainly in shoals near the surface. They have a relatively high oil content e.g. herring and mackerel.
Shellfish are invertebrate creatures with a shell and comprise molluscs e.g. scallops and mussels and crustaceans e.g. crabs and prawns. Nephrops are a type of large prawn.

Fishing Methods

The Scottish fishing fleet catches fish using a variety of methods, based on different types of gear.
Trawl. This is a large net, usually in the shape of a funnel, that is attached to the vessel by wire ropes or warps' and towed at deep levels behind special boats (trawlers).
Seine. This is a large fishing net that hangs vertically in the water by means of floats at the top and weights at the bottom.
Demersal Trawl. As the trawl net is towed over the sea floor the mouth is kept open by a combination of boards, floats and weights.
Beam Trawl. This is a bottom fishing trawl net, used mainly to catch flat fish, with the headrope attached to a beam towed along the bottom on runners at either end. The net is heavily weighted with chains on the underside and has tickler chains running in front when fishing.
Pelagic Trawl. This is a variant of trawling used to fish at intermediate depths between the surface and sea floor. The vessel's speed when towing its trawl is greater than for demersal species.
Nephrops Trawl. This is generally used by vessels in the 10-25m length group and they often use seine nets as well. If so rigged a vessel can tow 2 or more smaller type trawls (Nephrop twin/multiple trawl).
Demersal Seine. Long warps are attached to the net, one of which is initially fastened to a flagpole attached to a buoy ("dahn buoy"). The vessel moves forward paying out warp, then the net, then more warp to form a rough triangle back to the dahn. The vessel then steams ahead causing the warps to herd the fish into the path of the net, which is winched aboard.
Purse Seine. One end of the purse shaped net is attached to a buoy and the vessel then sails round the shoal paying out the net. On return to the buoy the net is closed at the foot or pursed'. This gear requires relatively heavy equipment and therefore large boats.
Gill Nets. Sheets of netting that are paid out to form a curtain in the path of on-coming fish. The net is kept vertical by floats and a heavy footrope, the fish being caught in the mesh by their gills.
Great Lines. These are long lines of thin rope with hooks attached at intervals. They are laid along the sea floor. This method is most suitable for uneven grounds where other methods may be impractical.
Creels. These are pots' that are arranged on the sea floor and used to catch shellfish such as lobsters, crabs and nephrops.
Dredge. This consists of a steel framed mouth attached to a bag of light metal chain. As the dredge is towed along the sea floor metal teeth attached to the underside rake the shellfish (bivalves such as cockles, scallops and mussels) into the dredge.

The Current Output of Scottish Economic Data

An article in the September 1997 edition of the Scottish Economic Bulletin provides a summary of the current position with respect to the availability of official Scottish economic statistics[9]. The article makes a useful distinction between labour market statistics, business statistics and economic statistics and gives the lead department, source, time period and geographical area for all the data published under the GSS banner, either by the Scottish Office or by another government department. It excludes other (non-GSS) material, such as EAS's annual Government Expenditure and Revenue in Scotland (GERS) series.

The extensive range of official data that are already available is not discussed at length here. At the Scotland level, it includes: employment, self-employment, unemployment, vacancies, earnings, VAT registrations and deregistrations, regional assistance, gross domestic product (GDP), Regional Accounts, the Index of Production and Construction, Input-Output tables, government expenditure and revenue, the electronics industry and the overseas ownership of Scottish manufacturing industry, among many others. It is relevant to note that the outputs of economic statistics from the Scottish Office are not discrete entities. Rather, there is a significant overlap between them, which enables economies of scale to be generated in the data collection and publication.

Within the current portfolio of EAS statistical outputs, 2 series should be noted in particular. The Index of Production and Construction is a quarterly index of the real output of the Scottish production and construction sectors. A total of 13 disaggregated series are published to a pre-announced schedule, with some unpublished data available in much greater detail. Although the present series run back to 1986 on a consistent basis, aggregate data are available from 1954.

The maintenance requirements for the Index are substantial, requiring close liaison with the ONS, MAFF and the Department of the Environment, Transport and the Regions (DETR) on the various primary sources as well as on a wide range of technical issues such as re-basing (in due course, from 1990 to 1995), price deflators, sampling procedures, European standards and seasonal adjustment. EAS conducts its own "top-up" survey of Scottish companies to ensure the adequate coverage of the Scottish production sectors. The Index is reported by the media and scrutinised (sometimes intensely) by academics, consultants and independent forecasters. The published data are also used by outside bodies to inform the broader research agenda on the Scottish economy.

The second major data series is the Scottish Input-Output Programme (SIOP), which is a principal source of information about the detailed structural relationships within the Scottish economy. The Input-Output Tables provide information on the pattern of purchases for (currently) 128 industry/product groups within Scotland together with the distribution of sales from those groups. The full tables also provide estimates of economic multipliers (required for economic impact analysis) as well as the social accounting matrices (covering areas such as environmental impact and the employment effects of changes in the demand for Scottish goods and services).

SIOP is the product of a substantial in-house investment and collaboration with academic experts over many years. Full tables were produced for 1979 and 1989 and a limited set of tables - the Input-Output Balances for 1992 and 1993 - were released in 1996. The 1994 Input-Output Tables were published in September 1997[10]. The current plan is to update the balances on an annual basis and to produce the full tables every fifth year.

The required inputs to SIOP are obtained from a range of ONS surveys of output, turnover and employment as well as from other government departments and Scottish Office sources (including Finance, Agriculture, Fisheries, Forestry, Education and Health). The technical requirements of SIOP are demanding and the Programme is widely used by academics and consultants. However, its key feature is, undoubtedly, its relevance in the analysis of policy issues. Within the last 2 years, Input-Output data have been analysed by EAS in providing policy advice on, inter alia: the impact of BSE; the import content of Scottish manufactured exports; the domestic content of electronics output; the economic impact of the employment and purchasing policies within the financial sector; the linkages between defence expenditure and the rest of the economy; and the sectoral impact of real increases in the duties on non-road mineral oil products. In addition, EAS has liaised with members of the Dearing and Garrick Committees on the specific issue of the skill/occupational content of Scottish imports and exports.

Although some of the current data series - including SIOP - cover the whole economy, most of EAS's detailed statistical outputs concentrate on the production industries: manufacturing, energy, mining and quarrying and the construction sector. There are good reasons for this, not least that these sectors have generally been the focus of successive governments' policy initiatives responding to the major structural changes in the Scottish economy. However, EAS is fully aware of the view that the remainder of the economy - largely, the service sector - should also be measured in more detail.

In fact, the Scottish Office does publish an annual estimate of the output measure of GDP at the broad disaggregated level (the production sectors given above, plus agriculture, distribution, transport and communication, and other services). The series, which extends back to 1963, is essential for deriving estimates of the long-run growth of the Scottish economy. Its drawback is its lack of timeliness; by the time all the information is available (from the ONS and elsewhere), there is an 18 month lag and the data have little immediate news value.

Recognising these limitations, research is currently underway within the Scottish Office to develop a more timely and regular (i.e. quarterly) estimate of Scottish GDP. Although the difficulties - both of concept and measurement - in this exercise are formidable, the results so far are promising and further work will take place in 1998. An important component of the overall series - the development of a methodology for producing a quarterly index of output for the financial intermediation sector in Scotland - was discussed in the September 1996 edition of the Scottish Economic Bulletin[11].

The lack of a quarterly GDP series represents a noticeable gap in the general knowledge about the Scottish economy. Its production would satisfy the significant demands for more up-to-date and comprehensive information. However, it is important that the normal safeguards - in terms of quality, consistency and sustainability - are firmly established in accordance with the recognised standards of both the Scottish Office Statistical Services and the GSS as a whole. Hence, the derivation of a fully detailed series, to a publishable standard, is a medium term objective: the realistic timetable is 2 years. In addition, as with the current statistical outputs, disaggregated data would only be released if the usual requirements of company confidentiality were met.

A Future Strategy

The Economic Data Requirements

The establishment of the Scottish Parliament will place new demands on the official statistical services. A starting point for addressing this issue is to be found in The Scotland Bill[12] and the preceding White Paper[13]. Schedule 5 of The Scotland Bill sets out those matters that are to be reserved functions. Among these are a number of financial and economic matters as well as other policies affecting trade and industry, including:

- Fiscal, economic and monetary policy, including the issue and circulation of money, taxes and excise duties, government borrowing and lending, control over UK public expenditure, the exchange rate and the Bank of England. (Head 1 Section 1).
- Financial services, including investment business, banking and deposit taking, collective investment schemes and insurance. (Head 1 Section 3).
- Financial markets, including listing and public offers of securities and investments, transfer of securities and insider dealing. (Head 1 Section 4).
- Regulation of anti-competitive practices and agreements; abuse of dominant position; monopolies and mergers. (Head 3 Section 3).
- The designation of Assisted Areas. (Head 3 Section 12).

By providing the schedule of reserved matters, The Scotland Bill was not required to give a detailed listing of devolved functions. However, for ease of reference, it is useful to note the relevant passages in the White Paper[14]:

- Training policy and lifelong learning, including all the training responsibilities presently exercised by the Scottish Office.
- Economic development, including the functions of Scottish Enterprise, Highlands and Islands Enterprise and the local enterprise companies.
- Financial assistance to industry, subject to common UK guidelines and consultation arrangements to be set out in a

published Concordat.

- Inward investment, including the functions of Locate in Scotland.
- Promotion of trade and exports, including the functions of Scottish Trade International.
- Promotion of tourism, including the functions of the Scottish Tourist Board.

The Scottish Administration will also have responsibility for a number of other matters affecting economic performance, including functions relating to the energy sector, the administration of European Structural Funds, and a wide range of transport matters.

In addition, the Scottish Administration will be responsible for research and statistics in relation to devolved matters. In terms of economic data, the range of statistics currently published in the Scottish Office and/or other government departments - as described above - provides empirical support for monitoring and informing the Scottish Administration's devolved responsibilities.

It is acknowledged, however, that the Scottish Parliament may wish to examine a much broader range of evidence with regard to its allocated function of the economic development of Scotland, including the support for business and industry and the training policy and programmes. It is against this background that EAS's programme of development work on Scottish economic statistics is currently being conducted.

The EAS Development Work on Official Scottish Economic Statistics

It follows that the further development of official statistics on the Scottish economy should take place in all 3 of the broad areas described in the September 1997 SEB article:

- Economic statistics: in particular, quarterly indices of constant price output by disaggregated industrial and commercial sector, including the service industries; and the full annual analysis of the Scottish economy;
- Business statistics: including, the sectoral distribution and size breakdown of Scottish companies; trends in the number of small-to-medium sized enterprises (SMEs); the employment impact of the largest companies; expenditure on R&D and innovation; allocation of Regional Selective Assistance grants by sector and locality;
- Labour market statistics: especially economic activity patterns by type of labour market participant and by local area.

EAS is already taking forward development work in all 3 areas:

- As noted, a more timely and regular estimate of Scottish GDP is being derived. Initially, this will involve the production of a quarterly version of the annual series (based on physical indicators and pro-rating several UK series) for internal purposes. However, this methodology will be developed and improved using data from the ONS's monthly and quarterly service trades inquiries, whenever feasible. In addition, the feasibility of producing 3 other series is being examined: an official quarterly index of Scottish manufactured exports, which is consistent with the corresponding series for the UK; an annual analysis of the service sector; and an annual estimate of gross national income (GNI). The last of these is likely to be a longer term project[15].
- Some gains will be made through more effective co-ordination in the presentation of the Scottish business database, much of which is already published. The introduction of a new and regular Statistical Bulletin will take matters forward. This will exploit new data sources on the corporate sector in Scotland, especially the Inter-Departmental Business Register (IDBR). The IDBR has already enabled Scottish Office officials to examine the contribution to total employment of the largest 250 private sector companies in Scotland. This research will be extended to develop the understanding of the overall corporate structure of Scotland and it will be published, subject to the normal confidentiality requirements for company data.
- Clearly, if more robust or detailed labour market survey estimates are necessary, then boosted sample sizes for Scotland will be required - for example, for the Labour Force Survey and the Annual Business Inquiry - and the costs of these are currently being assessed. These will cover both the cost to Government and the compliance costs to businesses. In addition, EAS statisticians are part of the GSS taskforce examining the implications of the new labour market policies on data requirements.

Lessons from Other Nations/Regions

There are clearly lessons for Scotland in terms of how other regions/countries order their priorities for the collection of economic data. EAS is currently pursuing this avenue of enquiry by undertaking research comparing the availability of economic data in Scotland with that in a range of European (and other) regions/states/provinces. The aim is twofold:

- To compare the published data series; and
- To consult with officials in these areas on the customers for their data (both within and outwith government), the perceived gaps in their knowledge about the local economies, and the relationship between data availability and the economic functions of the devolved government.

It is expected that the final analysis might cover at least some of the German Lander, Finland, Sweden, Austria, France, Canada, Australia and Catalonia. It is important to recognise, of course, that this group of regions/countries covers a wide range of models of devolved government, which have been derived in different circumstances within their various historical contexts. In turn, these models have different requirements of their supporting administrative infrastructures. However, by casting the net relatively widely, the aim is to draw upon the lessons of best practice elsewhere, in order that the economic data requirements of the Scottish Office - and the Scottish Parliament - continue to be given full consideration.

Resources and Timing

The resources available to EAS are fully taken up by the work described. Changes in the balance of outputs would require hard choices to be made among existing priorities, while additional data outputs would require extra resources.

A related point concerns the time lags that inevitably accompany the establishment of new economic data series. In considering what might be produced and when, account would have to be taken of the inevitable lead times. These might be 3 years from the decision to proceed through to the publication of robust data in a new series.

Feedback from Data Users

The evolution of the strategy for Scottish economic data is likely to be a continual process, both in the period prior to the Scottish Parliament being fully operational and subsequently. As noted in the introduction, this article is aimed at stimulating informed and constructive comments from the providers and users of Scottish economic data. Feedback is welcome and should be directed to:

John Rigg
Economics Advice and Statistics Division
The Scottish Office Education and Industry Department
Third Floor
Meridian Court
5 Cadogan Street
Glasgow
G2 6AT

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[9]"Sources of Official Statistics on the Scottish Economy", A Thomson, Scottish Economic Bulletin, No 55, September 1997, pp 51-61.
[10]"1994 Scottish Input-Output Tables", J Alexander and S Martin, Scottish Economic Bulletin, No 55, September 1997, pp 45-50 provides a useful introduction to the 1994 Tables.
[11]"Measuring the Output of the Scottish Financial Sector", A Campbell, Scottish Economic Bulletin, No 53, September 1996, pp 39-44.
[12]The Scotland Bill, 17 December 1997.
[13]Scotland's Parliament, The Scottish Office, Cmnd 3658, July 1997.
[14]Ibid, page 4.
[15]Gross national income (GNI) is the new term for gross national product (GNP), which will be introduced with the new European System of National Accounts (ESA95) in the 1998 UK National

Accounts Blue Book. In contrast with GNP, GNI is not a concept of value added: it is a primary income concept and is defined to be the sum of gross primary incomes receivable by resident institutional units and sectors.

Chart 1: GDP perhead and per employee

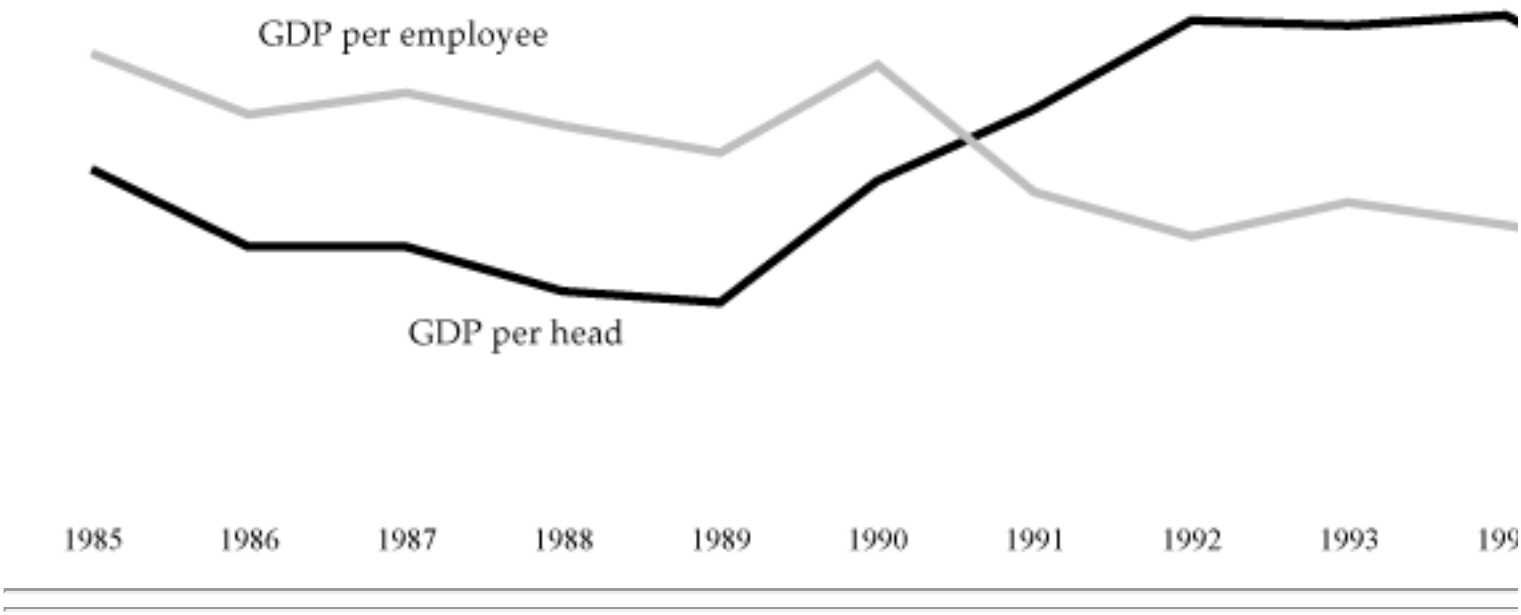
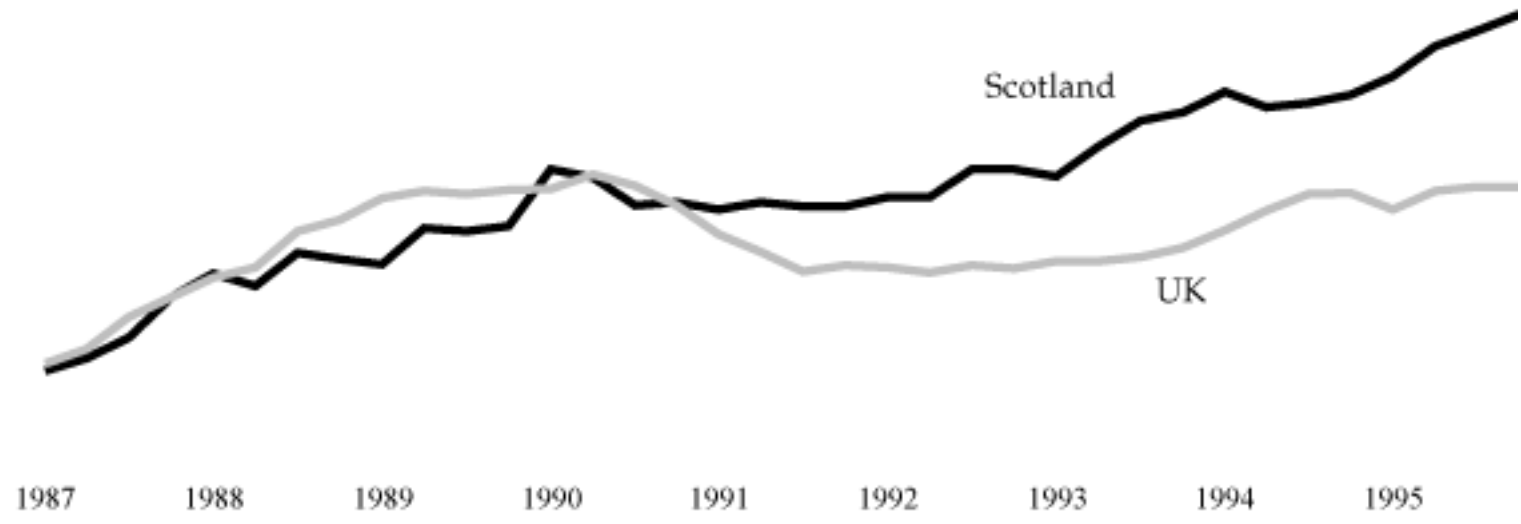


Chart 2: Personal disposable income per head

Chart 3: Index of production and construction (less oil and gas)



1987 1988 1989 1990 1991 1992 1993 1994 1995

Chart 4: Average gross weekly earnings: males and females

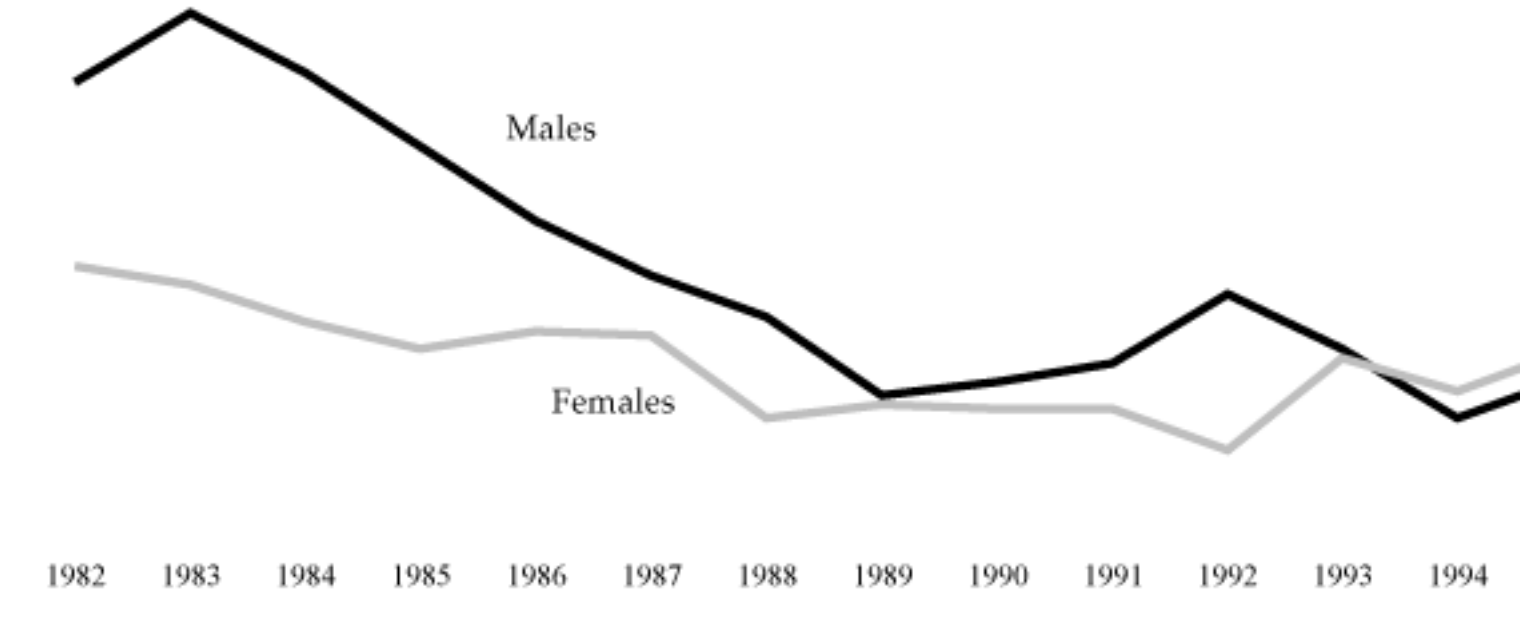


Chart 5: Self employed as per cent of total workforce in employment: at June of each year.

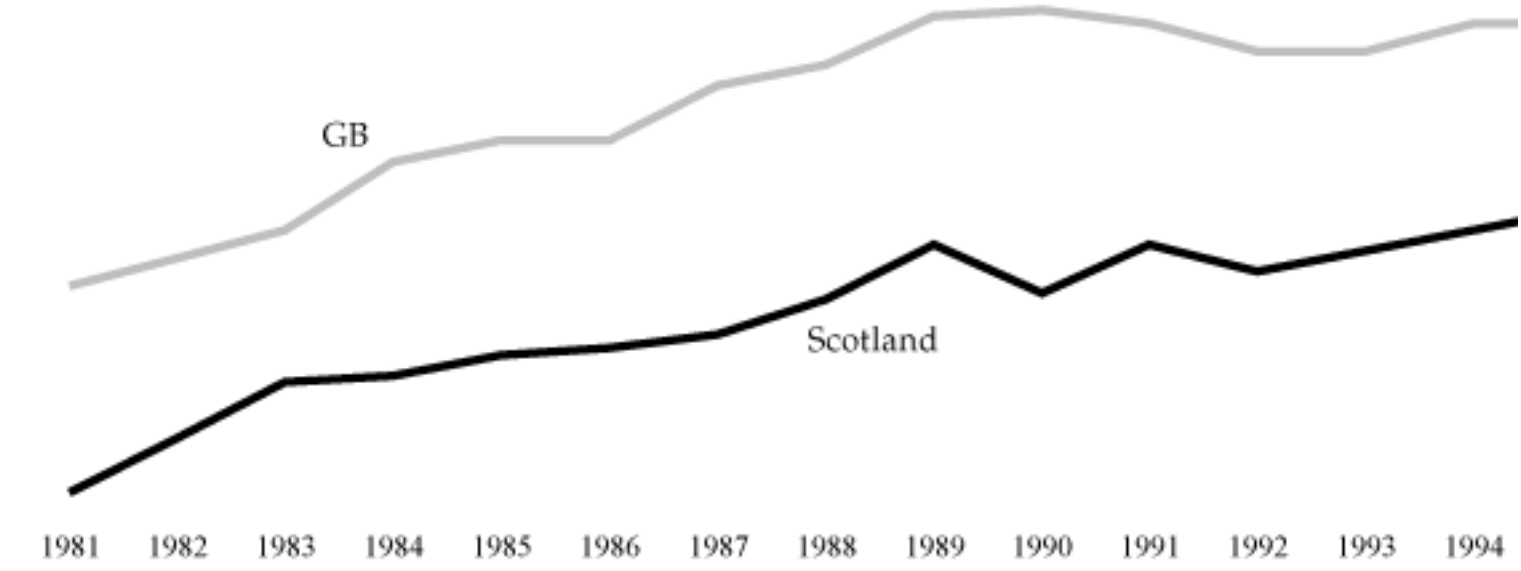
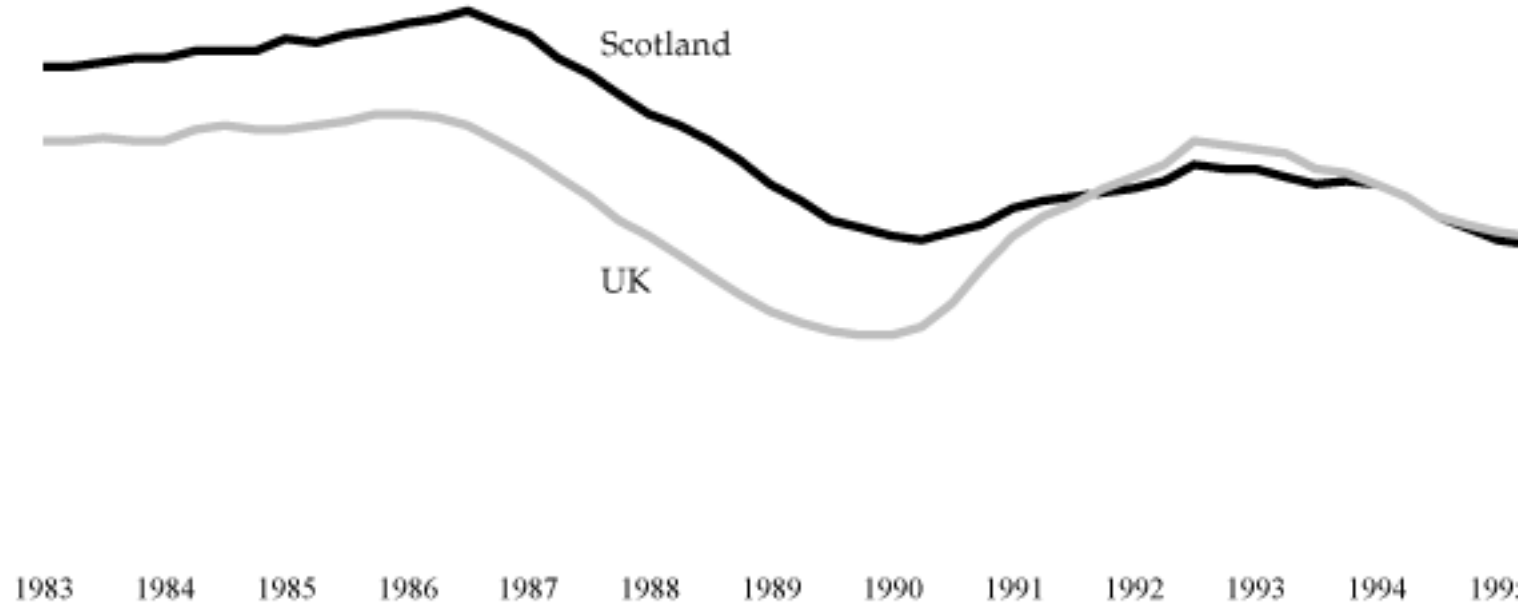


Chart 6: Claimant Unemployment rates



Population and Labour Market

2.3 Employees in employment by sex and full-time/part-time status Scotland: 1986-1997(1)

	Total employees in employment	Males(2)			Employees in en
		Full-time	Part-time		Ful
				Total	S
1986	1,879	-	-	505	3
1987	1,879	-	-	510	3
1988	1,921	-	-	526	4
1989	1,957	-	-	538	4
1990	1,988	-	-	544	4
1991	1,998	-	-	547	4
1992	2,012	948	85	552	4
1993	1,964	906	87	541	4
1994	1,983	902	88	545	4
1995	1,988	893	87	543	4
1996	1,981	871	104	542	4
1997	1,996	855	125	534	4

Source: Office for National Statistics, quarterly employment estimates

(1) June of each year.
(2) A split into full and part-time employees is not available for male employees in employment prior to September 1991.

2.4 Employees in employment by detailed industry (1) and sex Scotland: 1986-1997 (2); December 1996-September 1997

	Total employees in employment	Agriculture, forestry and fishing	Production and Construction			Services			
			Energy and water supply	Manufacturing	Construction	Distribution, hotels and catering; repairs	Transport and Communication	Finance, Real Estate renting and business activities	Publi admi defer socia
	A to Q	A,B	C,E	D	F	G,H	I	J,K	L
Total employees in employment									
1986	1,879	33	54	389	126	381	113	216	134
1987	1,879	32	50	381	126	373	114	223	135
1988	1,921	31	51	380	127	386	115	232	134
1989	1,957	30	50	377	132	406	113	245	127
1990	1,988	31	50	371	138	421	114	261	130
1991(3)	1,998	30	47	355	128	431	117	275	134
1992	2,012	32	45	341	135	434	116	281	135
1993	1,964	37	42	321	117	425	115	284	133
1994	1,983	39	40	313	129	436	115	281	136
1995	1,988	39	39	317	112	445	112	288	137
1996	1,981	32	40	314	111	458	105	275	138
1997	1,996	31	45	313	107	475	110	255	141
Latest Quarters									
Dec 1996	1,988	31	42	314	103	462	103	273	141
March 1997	1,975	31	43	310	101	461	112	255	141
June 1997	1.996	31	45	313	107	475	110	255	141
Sept 1997	2,007	34	47	311	105	482	110	256	141
Male employees in employment									
1986	1,021	28	47	265	113	162	92	109	74
1987	1,008	26	44	257	113	158	93	112	74
1988	1,021	25	44	256	114	161	93	114	75
1989	1,020	25	44	256	118	166	91	118	69
1990	1,036	26	43	252	123	176	91	129	70
1991(3)	1,032	25	41	241	113	176	91	138	75
1992	1,033	27	39	233	119	180	90	136	74
1993	993	31	37	216	101	178	87	137	70
1994	990	32	34	211	113	179	86	124	69
1995	979	31	33	221	98	175	85	121	70
1996	975	27	34	217	96	193	79	117	69
1997	980	..	..	..	..	..	..	..	..
Latest Quarters									

Dec 1996 (4)	966	..	..	..	..	..	..	..	..
March 1997	968	..	..	..	..	..	..	..	..
June 1997	980	..	..	..	..	..	..	..	..
Sept 1997	984	..	..	..	..	..	..	..	..
Female employees in employment									
1986	858	5	7	124	13	219	21	107	60
1987	871	6	7	124	13	215	21	112	61
1988	900	5	7	124	13	225	21	118	59
1989	938	5	7	121	14	240	22	126	59
1990	952	5	7	118	15	245	23	132	60
1991(3)	967	5	6	115	15	255	26	137	59
1992	979	6	6	108	16	254	27	145	61
1993	971	7	6	105	16	248	27	147	63
1994	992	7	6	102	17	257	29	157	67
1995	1,008	7	6	96	15	270	27	168	67
1996	1,006	6	6	97	16	265	26	158	69
1997	1,016	..	..	..	..	..	..	..	..
Latest Quarters									
Dec 1996 (4)	1,021	..	..	..	..	..	..	..	..
March 1997	1,007	..	..	..	..	..	..	..	..
June 1997	1,016	..	..	..	..	..	..	..	..
Sept 1997	1.023	..	..	..	..	..	..	..	..

Source: Office for National Statistics, quarterly employment estimates

(1) 1992 Standard Industrial Classification.
(2) June of each year.
(3) There is a small discontinuity from September 1991 within the service and construction industries due to improvement in th employees in the 1991 Census of Employment.
(4) Male/female & part-time/full-time splits at industry level are not available from December 1996 due to changes in survey m business.

Population and Labour Market

2.5 Claimant unemployment (1) and unfilled vacancies: seasonally adjusted Scotland: March 1987 - December 1997

		Unemployed						Unfilled
		Number (Thousands)			Rate (per cent of workforce (2))			vacancies
		Total	Males	Females	Total	Males	Females	thousands
1987	Mar	333.6	235.4	98.2	13.5	16.4	9.6	18.0
	June	325.5	230.3	95.2	13.2	16.0	9.3	18.4
	Sept	311.3	220.5	90.8	12.6	15.4	8.8	19.5
	Dec	301.3	213.3	88.0	12.2	14.9	8.6	20.4
1988	Mar	290.3	205.0	85.3	11.7	14.3	8.2	19.9
	June	278.2	197.6	80.6	11.2	13.8	7.7	19.7
	Sept	270.2	192.2	78.0	10.9	13.4	7.5	20.0
	Dec	259.4	185.4	74.0	10.5	13.0	7.1	20.2
1989	Mar	248.9	178.7	70.2	10.0	12.6	6.6	20.0
	June	233.4	168.7	64.7	9.4	11.9	6.0	21.9
	Sept	223.2	161.6	61.6	9.0	11.4	5.8	22.6
	Dec	212.2	154.0	58.2	8.5	10.8	5.4	23.2
1990	Mar	205.8	150.2	55.6	8.3	10.8	5.2	21.9
	June	200.5	146.9	53.6	8.1	10.5	5.0	22.3
	Sept	198.8	147.3	51.5	8.0	10.5	4.8	22.7
	Dec	202.7	150.7	52.0	8.2	10.8	4.8	16.4
1991	Mar	211.1	158.3	52.8	8.4	11.2	4.9	23.1
	June	221.8	166.6	55.2	8.9	11.7	5.1	17.3
	Sept	224.9	169.8	55.1	9.0	12.0	5.1	16.9
	Dec	228.6	174.0	54.6	9.1	12.3	5.0	17.1
1992	Mar	233.0	177.0	56.0	9.2	12.3	5.1	18.0
	June	236.8	180.3	56.5	9.3	12.6	5.1	19.8
	Sept	242.2	186.0	56.2	9.5	13.0	5.1	18.3
	Dec	250.7	193.4	57.3	9.9	13.5	5.2	19.2
1993	Mar	245.4	189.0	56.4	9.8	13.6	5.1	19.5
	June	245.1	189.2	55.9	9.8	13.6	5.0	17.5
	Sept	241.8	186.5	55.3	9.6	13.4	5.0	18.2
	Dec	236.1	182.8	53.3	9.4	13.2	4.8	18.8
1994	Mar	235.3	182.3	53.0	9.5	13.2	4.9	18.5
	June	231.1	179.3	51.8	9.4	13.0	4.7	20.1
	Sept	224.2	173.8	50.4	9.1	12.6	4.6	21.0
	Dec	212.6	164.4	48.2	8.6	11.9	4.4	21.4
1995	Mar	205.6	159.0	46.6	8.3	11.8	4.1	22.4

	June	198.2	153.0	45.2	8.0	11.3	4.0	23.1
	Sept	195.7	150.4	45.3	7.9	11.1	4.0	24.4
	Dec	195.6	150.9	44.7	7.9	11.2	4.0	23.7
1996	Mar	195.0	150.2	44.8	8.0	11.4	4.0	23.1
	June	196.4	150.3	46.1	8.0	11.4	4.1	24.4
	Sept	191.3	146.4	44.9	7.8	11.1	4.0	27.6
	Dec	178.7	138.3	40.4	7.3	10.5	3.6	28.2
1997	Mar	167.5	130.3	37.2	6.9	9.9	3.3	28.7
	June	160.1	123.3	36.8	6.5	9.3	3.3	30.2
	Sept	147.9	115.6	32.3	6.1	8.8	2.9	34.8
	Dec	139.9	108.2	31.7	5.7	8.2	2.8	32.3

Source: Office for National Statistics

(1) The claimant count consists of those people who are claiming unemployment-related benefits at Employment Service local offices and who have declared that they are unemployed, capable of, available for and actively seeking work during the week in which their claim is made.
(2) Workforce unemployment rates are calculated by expressing the numbers of claimant unemployed as percentages of the estimated total workforce (the sum of employees in employment, the unemployed, the self-employed, HM Armed Forces and participants on work-related government training programmes) at mid year.

2.6 Claimant unemployment by age and duration: not seasonally adjusted Scotland: October 1995-October 1997

October 1995

DURATION	**TOTAL ALL AGES**	**Age Group**							
		18 and under	**19**	**20-24**	**25-29**	**30-34**	**35-44**	**45-49**	**50-54**	**55 and over**
Males										
Under 3 months	43,772	3,236	1,846	9,768	7,325	5,624	7,543	3,149	2,683	1,918
3 months to 6 months	24,066	1,388	1,031	5,823	4,304	3,091	4,029	1,582	1,407	1,052
6 months to 1 year	25,545	1,177	1,019	5,042	4,616	3,502	4,604	1,799	1,856	1,409
Over 1 year	53,299	199	1,144	6,932	8,673	7,911	11,980	5,459	4,975	5,759
Females										
Under 3 months	16,562	2,018	935	4,275	2,488	1,599	2,382	1,194	1,004	664
3 months to 6 months	8,916	767	562	2,464	1,287	880	1,262	714	564	416
6 months to 1 year	7,754	560	421	1,472	1,227	872	1,290	675	688	545
Over 1 year	10,276	100	447	1,590	1,374	974	1,713	1,191	1,273	1,610

October 1996

DURATION	TOTAL ALL AGES	Age Group							
		18 and under	19	20-24	25-29	30-34	35-44	45-49	50-54	55 and over
Males										
Under 3 months	41,094	3,248	1,600	8,859	6,960	5,139	7,100	2,926	2,614	2,648
3 months to 6 months	24,406	1,415	944	5,619	4,281	3,203	4,099	1,714	1,534	1,597
6 months to 1 year	26,885	1,158	952	5,035	4,638	3,598	4,843	2,043	2,247	2,371
Over 1 year	48,806	212	997	6,187	7,797	7,416	11,217	5,031	4,736	5,213
Females										
Under 3 months	15,233	2,002	758	3,419	2,318	1,490	2,241	1,234	1,024	747
3 months to 6 months	8,968	783	483	2,273	1,321	855	1,322	760	662	509
6 months to 1 year	8,421	610	360	1,404	1,142	950	1,485	826	915	729
Over 1 year	9,585	102	375	1,453	1,254	955	1,601	1,164	1,243	1,438

October 1997

DURATION	TOTAL ALL AGES	Age Group							
		18 and under	19	20-24	25-29	30-34	35-44	45-49	50-54	55 and over
Males										
Under 3 months	39,048	3,241	1,572	7,969	6,588	4,889	7,044	2,753	2,621	2,371
3 months to 6 months	20,778	1,310	846	4,199	3,619	2,825	3,650	1,466	1,374	1,489
6 months to 1 year	18,439	946	730	3,118	3,242	2,570	3,590	1,462	1,413	1,368
Over 1 year	32,043	105	628	3,431	4,678	4,677	7,734	3,443	3,566	3,781
Females										
Under 3 months	13,983	2,027	796	2,917	1,970	1,255	2,100	1,098	1,064	756
3 months to 6 months	6,936	745	429	1,452	921	652	1,048	598	596	495
6 months to 1 year	4,869	442	278	801	546	420	883	457	543	499
Over 1 year	6,051	63	263	836	716	558	1,096	744	838	937

Source: Office for National Statistics

(1) The claimant count consists of those people who are claiming unemployment-related benefits at Employment Service local offices and who have declared that they are unemployed, capable of, available for and actively seeking work during the week in which their claim is made.

Population and Labour Market

2.7 Working days lost in stoppages due to industrial disputes by industry Scotland: 1995-1996

SIC 1992	1995	1996	1996 Scotland as per cent of UK
All industries and services (thousands)	71	119	9.1
Agriculture, hunting, forestry and fishing	-	-	-
Mining, quarrying, electricity, gas and water	-	2	100
Manufacturing	18	12	12.4
Construction	3	1	12.5
Wholesale and retail trade; repairs; hotels and restaurants	-	-	-
Transport, storage and communication	43	81	9.2
Finance, real estate, renting and business	3	-	-
Public administration and defence	4	12	7.6
Education	-	11	8.6
Health and social work	-	-	-
Other community, social and personal services, private households with employeees, extra territorial organisations	-	-	-
Days lost per 1,000 employees - all industries and services	**36**	**60**	**-**

Source: Office for National Statistics

Output

3.5 Index of industrial production and construction: output of manufacturing industries (seasonally adjusted)
Scotland: 1986-1996; q3 1990 - q3 1997

						Manufacturing Industries					
		Total manufacturing	Refined petroleum products and nuclear fuel	Chemicals and man-made fibres	Metals and metal products	Engineering and Allied Industries				Food, drink and tobacco industries	T f l a c
						Total	Mechanical engineering	Electrical and instrument engineering	Transport equipment		
1992 SIC		D	DF	DG	DJ	DK,DL,DM	DK	DL	DM	DA	I
Index Weight		661	24	53	81	208	49	117	42	123	4
1986		90.1	91	100	94	85	112	71	93	99	9
1987		89.9	66	100	96	82	93	77	84	99	1
1988		95.6	75	97	102	92	98	90	93	101	1
1989		98.3	93	97	99	99	100	99	98	97	9
1990		100.0	100	100	100	100	100	100	100	100	1
1991		97.3	100	96	106	97	94	103	86	95	9
1992		97.6	103	94	98	103	96	114	80	94	9
1993		101.1	102	96	84	119	97	144	76	97	9
1994		106.7	106	101	73	140	95	183	72	94	9
1995		110.5	107	96	72	151	92	205	76	95	8
1996		116.3	107	104	73	172	92	237	84	91	9
1990	Q3	97.8	92	100	97	98	97	97	103	97	9
	Q4	98.2	95	100	99	96	95	98	92	100	9
1991	Q1	97.9	109	100	102	97	93	100	92	98	9
	Q2	96.8	91	99	107	97	96	104	81	92	9
	Q3	97.8	103	93	110	97	94	104	82	97	9
	Q4	96.7	96	92	106	99	93	105	87	94	9
1992	Q1	96.1	95	92	102	98	94	106	79	93	9
	Q2	97.1	97	95	98	100	94	109	85	95	9
	Q3	98.3	110	96	98	103	97	115	76	95	9
	Q4	99.0	108	94	92	110	98	126	79	95	9
1993	Q1	98.2	84	94	85	114	95	133	81	96	8
	Q2	99.9	103	94	86	116	98	139	74	95	8
	Q3	102.4	110	95	84	122	100	148	77	96	9
	Q4	103.9	109	100	81	125	95	157	72	100	9

1994	Q1	106.3	119	106	81	133	100	168	74	93	9
	Q2	105.6	112	99	69	138	93	181	72	95	8
	Q3	107.0	87	101	70	144	95	190	71	95	9
	Q4	108.0	106	96	72	143	92	191	70	96	9
1995	Q1	109.1	116	94	73	146	90	194	76	94	9
	Q2	110.4	101	95	74	150	93	201	75	97	8
	Q3	110.9	113	94	72	154	90	210	75	96	8
	Q4	111.6	100	99	69	160	96	217	78	93	8
1996	Q1	112.8	99	97	70	163	93	223	78	97	8
	Q2	115.1	113	105	71	167	90	229	86	94	9
	Q3	117.3	108	105	73	174	91	240	87	94	8
	Q4	119.9	108	107	76	181	89	254	85	93	9
1997	Q1	120.5	103	113	74	184	90	263	75	93	8
	Q2	124.4	102	112	75	194	95	279	77	94	9
	Q3	125.6	113	117	75	193	92	281	71	96	9
% change Q3 97 on Q2 97		0.9	10.5	4.2	-0.0	-0.5	-3.5	0.7	-8.4	1.8	2
Latest 4 quarters on previous 4 quarters		7.4	1.8	10.5	6.0	13.3	-1.6	18.4	-6.2	-0.8	2

3.6 Index of industrial production and construction: summary UK: 1986-1996

			Production and Construction		
	Total Production and Construction	**Total less class CA.11**	**Total Production**	**Market Sector of Production I**	
				Consumer goods	**Investment g**
1992 SIC	C,D,E,F		C,D,E	C,D,E	
Index Weight	1,000	953	796	218	166
1986	87.2	84.8	90.1	88.1	82.0
1987	91.9	89.6	93.7	92.7	83.9
1988	97.0	95.6	98.2	98.2	91.8
1989	99.7	99.6	100.3	99.7	99.7
1990	100.0	100.0	100.0	100.0	100.0
1991	95.7	95.2	96.6	95.6	93.4
1992	95.1	94.2	97.0	97.0	91.2
1993	96.7	95.0	99.1	98.1	92.7
1994	101.6	98.7	104.4	102.3	97.5
1995	103.3	100.0	106.7	104.3	99.2
1996	104.4	100.8	107.9	105.6	101.1

3.7 Scottish Production Database: employment and gross value added in manufacturing industries (1) Scotland and Scotland as % of UK: 1993-1995 (4)

SIC 1992 Industry Group			**Employment (2)**			**Gro**
Sub-Section	**Division**		**thousands**			**mil**
			1993	**1994**	**1995**	**199**
		Manufacturing Industries	336.9	332.9	324.3	9,09
DA	15/16	Food, Drink & Tobacco	65.5	64.2	58.0	1,89
DB	17	Textiles	22.4	21.9	21.3	357
	18	Clothing	17.2	17.8	18.3	313
DC	19	Leather	1.7	1.5	1.0	31.8
DD	20	Wood	7.8	8.3	7.8	175
DE	21	Pulp & Paper	12.6	13.1	11.6	391
	22	Printing & Publishing	19.8	19.3	17.0	613
DF	23	Coke, Petroleum & Nuclear	1.9	1.7	1.9	104
DG	24	Chemicals & Man-made Fibres	16.6	16.3	15.6	594
DH	25	Rubber & Plastics	14.8	13.9	15.1	387
DI	26	Other Non-Metallic Minerals	9.5	10.1	9.8	257
DJ	27	Basic Metals	6.2	5.4	5.4	147
	28	Metal Products	28.1	25.4	26.4	642
DK	29	Mechanical Engineering	27.6	26.2	28.0	749
DL	30	Office Machinery	13.5	14.8	16.0	491
	31	Electrical Equipment nes	12.0	10.8	10.7	234
	32	Radio & TV Equipment	15.9	17.4	19.2	603
	33	Medical, Precision, Optical etc	11.5	12.0	11.4	355
DM	34	Motor Vehicles	3.8	3.6	4.4	95.8
	35	Other Transport Equipment	20.5	19.1	17.0	514

DN	36/37	Other Manufacturing & Recycling	8.0	10.1	8.4	134
Scotland as percentage of the UK						
		Manufacturing Industries	8.1	7.8	7.7	8.1
DA	15/16	Food, Drink & Tobacco	11.8	11.6	11.1	11.5
DB	17/18	Textiles & Clothing	10.7	11.0	10.6	12.0
DC	19	Leather	2.9	2.7	1.8	3.4
DD	20	Wood	10.6	10.5	10.4	13.5
DE	21/22	Pulp, Paper, Publishing & Printing	7.5	7.1	6.5	7.5
DF	23	Coke, Petroleum & Nuclear	6.3	6.0	7.0	4.4
DG	24	Chemicals & Man-made Fibres	6.1	6.1	5.6	4.7
DH	25	Rubber & Plastics	6.5	5.9	6.4	6.8
DI	26	Other Non-Metallic Minerals	6.4	6.5	6.1	7.2
DJ	27/28	Basic Metals & Metal Products	6.7	5.9	6.0	6.7
DK	29	Mechanical Engineering	7.1	6.7	7.0	8.0
DL	30-33	Electrical & Optical Engineering	10.3	10.4	11.0	12.7
DM	34/35	Transport Equipment	5.9	5.6	5.3	4.8
DN	36/37	Other Manufacturing & Recycling	4.3	4.7	4.3	3.8

(1) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the
(2) Average number employed during the year, including full and part-time employees and working proprietors. These employn
elsewhere.
(3) Where a census return covered addresses in two or more standard regions, an estimate of gross value added, attributable to e
proportionate to employment. Estimates of gross value added for each region were obtained by aggregating estimates for addres
(4) 1995 data for Scotland are provisional.

Business Section

5.3 Confederation of British Industry (CBI) Surveys of Industrial Trends (1)(2) Scotland: July 1984-January 1998

per cent

		Optimism re business situation(3)	Firms working below capacity (4)	Investment(5)		Constraints on output(6)					Volume of new orders (7)	
				Building	Plant and machinery	Orders or sales	Skilled labour	Plant capacity	Credit or finance	Material components	Total	Export
1984	July	+9	60	0	+6	83	5	16	2	7	+14	+17
	October	-2	56	-12	+10	80	6	21	4	5	+6	+6
1985	January	+10	48	-19	-1	79	7	24	3	4	+7	+9
	April	+12	56	-13	+6	82	5	16	7	14	+29	+18
	July	+7	46	-29	-13	71	10	22	2	4	+27	+16
	October	-9	51	-32	-6	75	11	14	2	3	+12	+5
1986	January	-2	56	-35	-9	89	3	18	5	5	+1	+23
	April	-5	58	-22	-1	83	8	12	4	2	-17	+14
	July	-16	49	-18	+2	85	8	10	8	9	-8	-6
	October	-14	56	-24	-18	80	12	6	3	3	-4	+14
1987	January	+11	62	-21	-11	88	11	12	5	9	+1	+11
	April	+27	59	-17	-2	64	10	18	4	9	+13	+8
	July	+9	51	+2	+17	82	7	8	9	8	+20	+14
	October	+19	45	-17	+10	64	12	13	5	5	+22	+13
1988	January	+29	34	+2	+6	57	11	26	3	12	+33	+23
	April	+2	29	-24	-41	53	7	23	2	32	+24	+10
	July	+14	34	-13	+5	51	16	28	3	16	+19	+8
	October	+1	31	-8	+3	63	15	22	1	17	+24	-
1989	January	+1	42	-8	+9	68	10	32	1	9	+15	+9
	April	-12	37	-15	-12	70	8	25	1	6	+4	+12
	July	-1	31	-9	-2	58	21	21	1	12	+14	+14
	October	-32	43	-20	-8	74	12	27	3	13	+7	+10
1990	January	-11	45	-5	-1	77	18	25	5	10	0	+8
	April	-5	44	-29	-13	75	11	23	3	11	+2	+2
	July	-3	40	-20	-4	74	18	27	1	10	-8	-23
	October	-37	44	-32	-16	71	29	20	1	8	-24	-7
1991	January	-42	52	-18	-25	88	14	19	9	7	-34	-10
	April	-19	44	-26	-32	81	18	13	5	2	-25	-8
	July	-43	71	-34	-17	87	10	13	8	5	-41	-12
	October	+10	61	-30	+2	88	10	13	9	1	-26	-12

1992	January	+34	64	-41	-21	91	6	10	4	-	-35	-22
	April	+2	55	-28	-7	89	14	11	8	2	-27	+21
	July	+3	60	-32	-8	87	9	13	8	1	-14	+10
	October	-17	71	-41	-31	96	5	6	5	2	-18	0
1993	January	-11	61	-36	-26	96	4	6	3	1	-10	+9
	April	+12	65	-13	-14	88	4	11	5	3	-8	+16
	July	+33	50	0	+9	83	4	20	6	6	+1	+10
	October	+21	36	+4	+24	82	5	24	4	4	+10	+10
1994	January	+11	43	+4	+9	71	7	23	4	12	+22	+29
	April	+3	52	-4	+11	76	6	24	3	3	+30	+38
	July	+5	54	-20	+17	78	5	25	3	4	+10	+31
	October	+8	39	-8	+10	71	14	28	2	7	+21	+28
1995	January	+8	57	-19	+17	84	11	20	4	7	+3	+1
	April	+9	28	-12	+17	63	9	32	3	9	+27	-3
	July	+14	48	+3	0	73	13	26	7	13	0	+9
	October	+6	60	+11	+39	88	19	11	0	4	+9	+8
1996	January	+8	38	-15	+1	73	8	25	3	7	+17	+11
	April	-2	49	-2	+12	78	6	28	4	7	+10	+16
	July	-2	55	+17	+26	79	12	18	5	5	-21	-14
	October	+23	50	-10	+4	83	9	19	4	4	+11	+5
1997	January	+15	47	-24	+3	80	11	20	1	16	-3	-6
	April	+14	39	-10	+24	65	7	32	10	16	+12	+6
	July	+16	29	-5	+20	72	15	17	6	2	+12	-6
	October	+10	49	-12	+1	67	16	26	7	4	-6	-26
1998	January	+14	31	-17	-10	70	13	11	1	8	+10	+9

Source: Confederation of British Industry

(1) The number of respondents is usually between 100 and 110 firms per survey. Each reply is weighted according to the proportion of manufacturing net output accounted for by the firm's industry/employment size group. The weights were last revised in October 1996.
(2) Several indicators are expressed as net balances'. The net balance' refers to the percentage of respondents answering positively (eg improved optimism) minus the percentage of respondents answering negatively (eg decreased optimism). The net balance' is strictly the percentage point difference between these 2 responses and omits the "no change" responses.
(3) Net balance of firms more (+) or less (-) optimistic about the general business situation than four months ago.
(4) Percentage of firms working below capacity.
(5) Net balance of firms intending to invest more (+) or less (-) over coming year than in past year.
(6) Percentage of firms expecting output to be limited over the next four months by constraints shown.
(7) Net balance of firms reporting that the trend over the past four months was up (+) or down (-) compared to the previous four months.

5.4 Scottish -based banks(1): balance sheet q4 1995-q2 1997

millions	**1995**	**1996**				**1997**	
	Q4	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**
Liabilities							
1. Notes outstanding	1,830	1,607	1,662	1,700	1,904	1,699	1,776
2. Sterling Deposits	66,364	68,409	69,231	68,590	70,153	73,519	74,955
3. Other currency deposits	16,433	17,400	17,469	17,741	16,921	16,403	16,769

4. Sterling and foreign currency liabilities: items in suspense and transmission, capital and other funds	11,215	11,948	12,179	12,518	12,653	13,519	13,719
5. Total liabilities (1+2+3+4)	95,842	99,364	100,540	100,549	101,630	105,140	107,219
Sterling Assets							
6. Notes and coin	2,156	1,798	1,950	1,652	1,949	1,997	1,700
7. Balances with Bank of England incl cash ratio deposits	161	162	291	247	179	322	178
8. Market loans	20,540	21,947	21,574	22,782	22,049	23,735	23,281
9. Bills	1,520	1,419	1,503	1,124	1,006	1,309	893
10. Claims under sale and repurchase agreements	-	522	277	477	1,174	1,594	2,374
11. Advances	46,776	47,520	49,300	48,177	50,602	52,248	53,764
12. Investments: British government stocks	1,665	2,066	2,066	1,964	1,924	1,408	1,125
13. Other	2,265	2,352	2,390	2,448	2,927	3,037	2,918
Other currency assets							
14. Market loans and advances	14,951	15,569	15,127	14,913	13,928	12,990	14,021
15. Bills	15	9	8	11	11	9	10
16. Investments	2,171	2,070	2,213	2,226	2,322	2,430	2,566
17. Sterling and Other currency: misc assets	3,623	3,930	3,838	4,528	3,561	4,062	4,389
Total Assets (6 to 17)	95,842	99,364	100,540	100,549	101,630	105,140	107,219
18. Acceptances	1,237	1,255	1,450	1,428	1,479	1,345	1,249
19. Eligible liabilities	46,797	47,797	49,648	48,411	50,206	52,453	51,732

(1) These data are provided by the Bank of England and relate to banks whose registered office is in Scotland. As statistics provided by the banks include the activities of all branches indistinguishably, the data will include business which these banks have with non-Scottish residents but exclude business which other banks have with Scottish residents. Thus the data do not relate to banking activity taking place exclusively in Scotland.

Oil and Gas

6.2 UK sector of the northern North Sea Fields under development

million tonnes

Field	Operator	Discovery date	Reserve estimate (1)	Planned production start date
Alison	Phillips	1986	1.19 bcm (gas)	1995
Bessemer	Amoco	1989	3.68 bcm (gas)	1995
Britannia	Conoco/Chevron	1975	72.20 bcm (gas)	1998
Callisto	Conoco	1990	2.00 bcm (gas)	1995
Carnoustie	Amoco	1980	0.10	1995
Davy	Amoco	1970	4.65 bcm (gas)	1995
Dawn	Phillips	1994	0.80 bcm (gas)	1995
Ganymede	Conoco	1987	7.00	1995
Gawain	Arco	1970	3.70 bcm (gas)	1995
Hamilton	Hamilton	1990	14.60 bcm (gas)	1996
Hamilton North	Hamilton	1991	6.70 bcm (gas)	1996
Teal Gowat	Shell	1992	1.10	1998

Source: Department of Trade and Industry

(1) Operator's estimate of proven recoverable reserves (million tonnes).

Personal/Household Income and Expenditure

8.3 Average gross weekly earnings by sex and manual/non-manual status; average hours worked (1) Scotland: 1986-1997(2)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Average gross weekly earnings of full-time employees ()												
Total	176.6	187.9	204.5	221.4	244.0	265.3	286.7	296.8	300.8	313.4	324.9	336.8
Manual	159.4	166.2	179.9	193.9	214.1	232.3	250.9	250.5	250.6	263.2	268.9	279.3
Non-manual	191.2	204.8	224.1	242.2	265.9	287.0	309.5	324.8	332.6	344.3	360.7	372.4
Males	201.3	214.6	233.3	251.2	276.4	299.5	324.6	333.0	335.6	350.7	363.6	378.0
Manual	173.0	179.7	194.9	209.9	231.7	251.1	270.6	269.7	269.5	284.5	290.9	303.3
Non-manual	238.3	256.4	280.6	300.8	327.4	349.4	378.7	392.5	400.6	413.2	434.0	449.8
Females	129.8	139.9	152.2	169.6	187.2	206.5	221.9	237.4	244.1	254.1	262.0	272.4
Manual	103.2	111.7	120.2	129.8	141.2	151.3	164.4	173.7	176.9	186.0	189.7	193.9
Non-manual	139.1	149.0	162.9	181.8	200.6	220.5	235.9	253.2	261.8	272.7	282.8	293.9
Average gross weekly earnings of full-time employees as per cent of GB												
Total	95.6	94.5	93.6	92.4	92.7	93.2	94.1	93.7	92.4	93.2	92.4	91.6
Manual	97.7	95.8	96.1	95.4	96.8	98.3	100.1	97.6	95.4	96.8	95.7	95.3
Non-manual	95.2	94.2	93.1	91.4	91.3	91.8	92.5	92.9	92.5	92.7	92.6	91.5
Males	97.0	95.8	94.9	93.2	93.5	93.9	95.4	94.2	92.7	93.6	92.9	92.5
Manual	99.2	96.9	97.2	96.4	97.7	99.2	100.9	98.3	96.0	97.7	96.5	96.5
Non-manual	97.3	96.4	95.4	93.0	92.3	93.0	94.6	93.9	93.6	93.2	93.4	93.0
Females	94.6	94.5	92.7	93.0	92.9	92.9	92.0	94.0	93.3	94.2	92.6	91.7
Manual	96.0	96.9	97.2	96.2	95.4	95.0	96.6	98.1	97.3	98.9	97.2	96.4
Non-manual	95.5	94.8	92.8	93.2	93.1	93.1	92.0	94.2	94.0	94.7	93.5	92.5
Average hours worked												
Males												
Manual	44.4	44.2	44.6	45.2	45.1	45.1	45.2	44.6	44.3	45.0	44.5	44.7
of which overtime	5.1	5.0	5.4	6.1	5.9	5.4	6.0	5.4	5.2	5.5	4.9	5.1
Non-manual	38.6	38.8	38.6	38.9	38.5	38.7	38.8	38.6	38.6	38.7	39.1	39.2
of which overtime	1.4	1.5	1.5	1.6	1.4	1.4	1.3	1.3	1.4	1.2	1.3	1.6
Females												
Manual	39.4	39.6	40.1	39.7	39.9	39.9	39.8	39.8	39.7	39.8	40.0	40.0
of which overtime	1.2	1.4	1.8	1.5	1.8	1.6	1.6	1.8	1.5	1.9	1.8	1.9
Non-manual	36.6	36.9	36.8	36.7	36.6	36.7	36.8	36.9	36.7	36.7	37.0	36.8
of which overtime	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.7	0.6	0.7	0.7

Source: Office for National Statistics, New Earnings Survey

(1) Full-time employees on adult rates whose pay for the survey period was not affected by absence.

(2) April of each year.

8.4 Consumers' expenditure (1)(2) Scotland: 1987-1995(p)

million

	1987	1988	1989	1990	1991	1992	1993	1994	1995(p)
Total Consumers' Expenditure	21,894	24,817	26,558	28,503	29,842	31,489	34,055	35,865	37,035
Food, drink and tobacco	5,612	5,971	6,277	6,586	6,969	7,258	7,517	7,788	8,127
Housing and fuel	3,537	4,042	3,974	4,205	4,711	5,155	5,583	6,091	6,328
Other	12,210	14,198	15,747	17,127	17,578	18,402	20,222	21,159	21,707
% share of UK	8.3	8.3	8.1	8.2	8.2	8.2	8.4	8.4	8.3
Per head,	4,282	4,872	5,211	5,586	5,843	6,161	6,651	6,988	7,210
Per head, UK=100	92.0	93.0	91.3	92.5	92.4	93.2	95.2	95.5	94.5

Source: Office for National Statistics, Regional Accounts

(1) Consumers' expenditure measures expenditure by households and private non-profit making bodies resident in a region.
(2) The introduction of the community charge in April 1989 in Scotland (and in April 1990 in England and Wales) introduced a discontinuity in the estimates of consumers' expenditure as community charge, and subsequently council tax payments are not included in consumers' expenditure.

Personal/Household Income and Expenditure

8.5 Average weekly household expenditure Scotland and UK: 1996/97

	Scotland		UK	
	Average	**Per cent of total**	**Average**	**Per cent of total**
Total (per household)	287.60	100	309.07	100
Housing (net)	39.28	13.7	49.10	15.9
Fuel and power	14.09	4.9	13.35	4.3
Food and non-alcoholic drinks	56.08	19.5	55.15	17.8
Alcoholic drink	12.28	4.3	12.41	4.0
Tobacco	7.84	2.7	6.07	2.0
Clothing and footwear	17.06	5.9	18.27	5.9
Household goods	24.17	8.4	26.74	8.7
Household services	14.97	5.2	16.36	5.3
Motoring expenditure	41.98	14.6	41.20	13.3
Fares and other travel costs	6.89	2.4	7.45	2.4
Personal goods and services	9.05	3.1	11.64	3.8
Leisure goods	13.55	4.7	15.17	4.9
Leisure services	28.19	9.8	33.95	11.0
Miscellaneous	2.17	0.8	2.21	0.7

Source: Office for National Statistics, Family Expenditure Survey

8.6 Pattern of household expenditure: selected items (1)(2) Scotland and UK: 1983/84-1996/97

Percentages

	Housing (net)		Fuel and power		Food and Non Alcoholic drink		Alcoholic drink		Tobacco		Clothing and footwear	
	Scotland	**UK**	**Scotland**	**UK**	**Scotland**	**UK**	**Scotland**	**UK**	**Scotland**	**UK**	**Scotland**	**UK**
1983/1984	12.0	15.9	7.0	6.4	22.0	20.8	5.3	4.8	4.1	2.9	8.4	7.2
1984/1985	13.3	16.0	6.5	6.2	21.3	20.4	5.6	4.8	3.8	2.8	8.1	7.3
1985/1986	12.9	16.6	6.5	6.0	21.0	19.9	5.6	4.7	3.8	2.6	8.1	7.5
1986/1987	13.6	16.5	6.5	5.7	20.5	19.3	5.3	4.6	3.8	2.5	8.1	7.3
1987/1988	14.3	16.8	6.1	5.4	20.2	18.9	5.2	4.6	3.5	2.3	8.3	7.1
1988/1989	16.3	17.2	5.4	4.9	19.6	18.5	4.9	4.3	3.0	2.1	8.1	6.9
1989/1990	14.6	17.9	5.3	4.6	19.9	18.3	4.8	4.1	3.0	2.0	8.0	6.6
1990/1991	15.4	18.7	4.9	4.6	19.4	18.0	4.5	4.1	2.8	2.0	7.3	6.3
1992	15.1	17.4	5.4	4.8	19.3	17.5	4.5	4.1	3.1	2.0	7.2	6.0
1993	13.4	16.2	5.1	4.8	18.8	18.1	4.6	4.3	2.9	2.0	7.2	6.3
1994/95	14.7	16.4	5.0	4.6	17.7	17.8	4.3	4.3	2.3	2.0	6.6	6.0
1995/96	15.1	16.6	4.9	4.5	19.5	18.2	4.3	3.9	2.6	2.0	6.3	5.9
1996/97	13.7	15.9	4.9	4.3	19.5	17.8	4.3	4.0	2.7	2.0	5.9	5.9

Source: Office for National Statistics Family Expenditure Survey

(1) There are discontinuities in the time-periods covered in this table. Prior to 1992, the figures are the average of 2 calendar years, the 1992 and 1993 figures are for individual calendar years, while later figures are for individual financial years.
(2) These estimates are from the Family Expenditure Survey, published annually by The Stationery Office, from which full details are available. In 1996/97, 555 households in Scotland were sampled (6,415 in the UK). The estimates are therefore subject to sampling error, and considerable care is necessary when interpreting the apparent differences in expenditure between years, and between Scotland and UK. For years prior to 1992, weighted averages over 2 years are given. The estimates for some items (eg alcohol and tobacco) reported in the survey are below those which might be expected by comparison with other sources. From 1992 imputed rent for owner occupied and rent free households are not included. For owner occupied households, mortgage interest payments are included. Housing data from 1992 will therefore be comparable to earlier years.

Areas of Scotland

9.4 Gross domestic product at factor cost (1): current prices Scottish regions: 1991, 1993, 1995

	million			per head			per head, as per cent of UK		
	1991	**1993**	**1995**	**1991**	**1993**	**1995**	**1991**	**1993**	**1995**
Scotland (2)	42,231	46,840	52,518	8,269	9,148	10,224	97.5	98.6	100.2
Borders	723	829	956	6,949	7,870	9,003	81.9	84.8	88.3
Central	2,000	2,150	2,538	7,329	7,880	9,265	86.4	84.9	90.8
Dumfries and Galloway	1,110	1,298	1,413	7,513	8,776	9,555	88.6	94.5	93.7
Fife	2,562	2,633	2,923	7,333	7,497	8,314	86.5	80.8	81.5
Grampian	6,162	6,856	7,228	11,952	12,982	13,566	140.9	139.9	133.0
Highlands and Islands	2,075	2,159	2,326	7,529	7,742	8,298	88.8	83.4	81.4
Lothian	7,237	8,570	9,677	9,637	11,367	12,656	113.6	122.5	124.1
Strathclyde	17,348	18,875	21,656	7,549	8,254	9,483	89.0	88.9	93.0
Tayside	3,014	3,470	3,802	7,678	8,781	9,611	90.5	94.6	94.2

Source: Office for National Statistics, Regional Accounts

(1) Income-based estimates. Factor cost excludes taxes on expenditure, such as VAT, but includes subsidies.
(2) Total GDP for Scotland at factor cost is available for 1996 as shown on Table 3.1.

9.5 Scottish Production Database: employment, GVA and net capital expenditure in manufacturing industries (1) Scottish regions: 1993-1995

Scottish Region	**Employment(2)** (thousands)			**Gross Value Added(3)** (million)			**Net Capital Expenditure (4)** (million)		
	1993	**1994**	**1995**	**1993**	**1994**	**1995**	**1993**	**1994**	**1995**
Scotland	336.9	332.9	324.3	9,093.2	10,676.6	11,119.6	1,093.4	1,250.5	1,645.6
Borders	9.9	10.6	10.2	199.8	223.5	240.2	22.9	19.5	19.6
Central	19.6	18.0	18.0	561.0	680.7	887.1	139.6	96.2	129.6
Dumfries and Galloway	10.6	8.9	8.6	331.5	323.1	253.2	24.9	25.2	26.1
Fife	27.3	27.8	26.1	628.3	746.2	743.9	58.4	70.8	83.9
Grampian	35.0	33.1	33.8	968.0	1,001.5	1,069.9	93.4	88.4	95.5
Highland	7.0	6.9	7.3	185.5	211.8	222.9	40.5	24.8	21.2
Lothian	47.3	47.2	45.7	1,353.1	1,674.1	2,027.5	199.1	253.4	505.7
Orkney, Shetland & Eilean Siar	2.1	2.6	2.3	45.0	61.1	46.0	3.2	5.4	4.9
Strathclyde	152.4	153.5	148.4	4,128.8	5,058.0	4,959.0	458.8	607.3	683.8
Tayside	25.6	24.4	23.7	692.1	696.6	669.9	52.6	59.5	75.3

Source: Scottish Production Database: The Scottish Office Education and Industry Department Annual Census of Production, Monthly Sales Inquiry: Office for National Statistics

(1) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census of Production.
(2) Average number employed during the year, including full and part-time employees and working proprietors. These employment figures are on a different basis from those given elsewhere.
(3) Where a census return covered addresses in two or more standard regions, an estimate of gross value added attributable to each address was made by assuming that this was proportionate to employment. Estimates of gross value added for each region were obtained by aggregating estimates for addresses located in that region.
(4) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery. Capital expenditure in respect of establishments where production had not commenced before the end of the year is included.

9.6 Enterprises registered for VAT at start of year Scottish Unitary Authority Areas: 1994, 1995, 1996, 1997

	1994	**1995**	**1996**	**1997**
Aberdeen City	5,775	5,770	5,750	5,830
Aberdeenshire	9,920	9,765	9,715	9,665
Angus	3,035	2,980	2,920	2,895
Argyll and Bute	3,400	3,335	3,325	3,305
Clackmannanshire	790	770	760	770
Dumfries and Galloway	5,660	5,575	5,480	5,460
Dundee City	2,170	2,150	2,090	2,080
East Ayrshire	2,530	2,510	2,500	2,470
East Dunbartonshire	1,880	1,860	1,845	1,840
East Lothian	1,870	1,860	1,840	1,845
East Renfrewshire	1,610	1,565	1,540	1,505
Edinburgh City of	10,150	10,230	10,295	10,425
Eilean Siar	900	895	955	975
Falkirk	2,400	2,335	2,315	2,335
Fife	6,520	6,415	6,310	6,250
Glasgow City	11,175	11,230	11,085	11,130
Highland	8,230	8,135	8,120	8,125
Inverclyde	1,170	1,130	1,100	1,100
Midlothian	1,275	1,290	1,290	1,280
Moray	2,640	2,580	2,545	2,495
North Ayrshire	2,530	2,470	2,430	2,425
North Lanarkshire	4,625	4,565	4,545	4,580
Orkney Islands	1,525	1,485	1,465	1,455
Perthshire and Kinross	4,855	4,785	4,740	4,715
Renfrewshire	2,950	2,950	2,935	2,965
Scottish Borders	4,180	4,135	4,095	4,075
Shetland Islands	1,095	1,100	1,130	1,175
South Ayrshire	2,745	2,695	2,635	2,625
South Lanarkshire	5,785	5,705	5,604	5,880
Stirling	2,590	2,555	2,555	2,585
West Dunbartonshire	1,240	1,225	1,205	1,220
West Lothian	2,610	2,565	2,610	2,635

Source:DTI, Small Firms Statistics Unit

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9.7 Household Income (1) and Household Disposable Income (2)
Scottish regions: 1994

	Household Income			Household Disposable Income		
	Total millions	**Per head**	**Per head UK=100**	**Total millions**	**Per head**	**Per head UK-=100**
Scotland	48,459	9,442	97.3	40,469	7,885	98.2
Borders	1,023	9,676	99.7	841	7,952	99.1
Central	2,464	9,012	92.9	2,027	7,414	92.4
Dumfries and Galloway	1,274	8,620	88.8	1,095	7,410	92.3
Fife	3,213	9,125	94.0	2,714	7,708	96.0
Grampian	5,656	10,621	109.4	4,648	8,728	108.7
Highlands and Islands	2,491	8,912	91.8	2,100	7,514	93.6
Lothian	7,954	10,486	108.1	6,590	8,687	108.2
Strathclyde	20,502	8,961	92.3	17,150	7,496	93.4
Tayside	3,883	9,830	101.3	3,305	8,366	104.2

Source: Office for National Statistics, Regional Accounts

(1) Household Income is defined to be the income of the household sector ie individuals living in households and in institutions.
(2) Household disposable income is defined as household income less payment of tax, National Insurance and contributions to life assurance and pension schemes.

9.8 Average gross weekly earnings of full-time employees on adult rates (1)(2)
Scottish Unitary Authority Areas 1996,1997

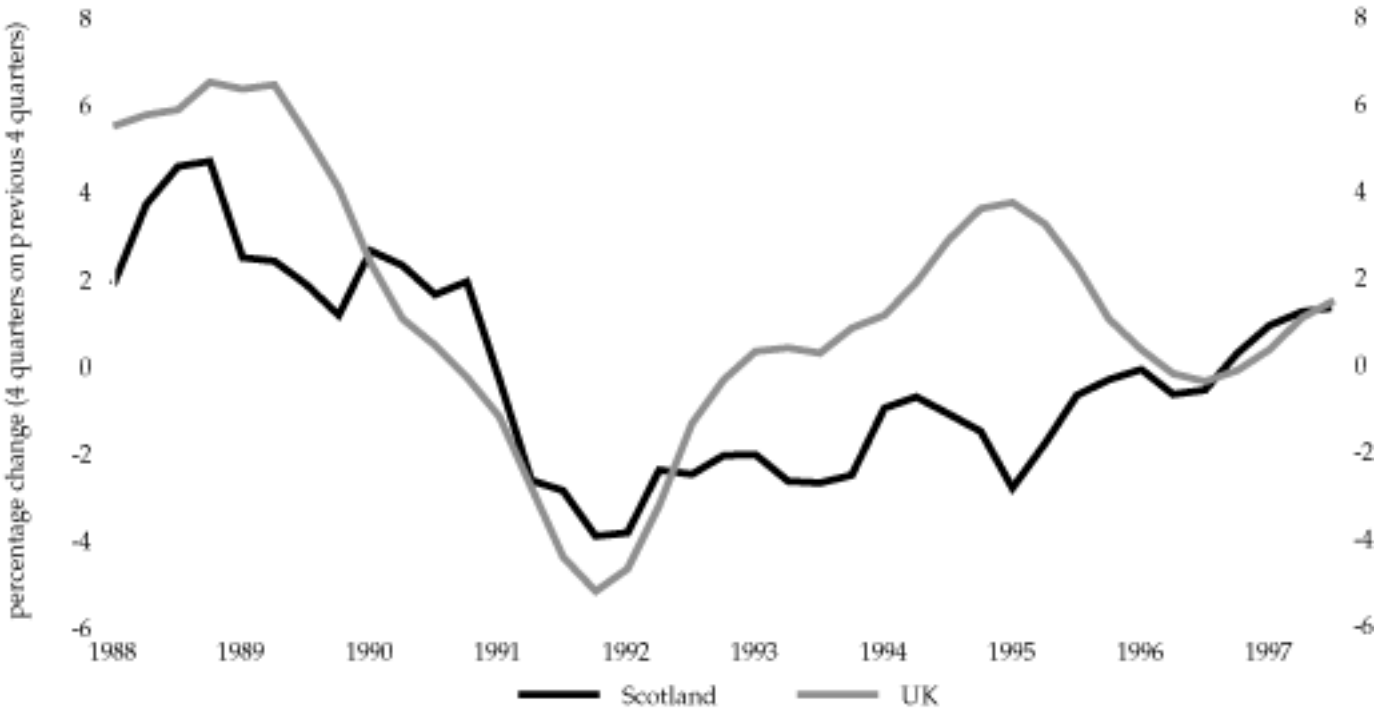
	Average Earnings ()		Average earnings as per cent of average earnings in Scotland (%)	
	1996	**1997**	**1996**	**1997**
All full-time employees				
Scotland	324.9	336.8		
Great Britain	351.5	367.6		
Aberdeen City	397.6	404.8	122.4	120.2
Aberdeenshire	307.2	330.9	94.6	98.2
Angus	292.6	320.0	90.1	95.0
Argyll and Bute	287.6	305.2	88.5	90.6
Dumfries and Galloway	282.9	300.2	87.1	89.1
Dundee City	307.3	327.4	94.6	97.2
East Ayrshire	287.5	307.6	88.5	91.3
Edinburgh City of	344.3	362.8	106.0	107.7
Falkirk	318.7	335.6	98.1	99.6
Fife	307.1	325.2	94.5	96.6

Glasgow City	325.9	341.5	100.3	101.4
Highland	285.8	296.2	88.0	87.9
Inverclyde	324.1	323.4	99.8	96.0
Moray	284.7	285.0	87.6	84.6
North Ayrshire	320.8	317.8	98.7	94.4
North Lanarkshire	322.3	336.7	99.2	100.0
Renfrewshire	334.8	336.1	103.0	99.8
Scottish Borders	302.0	303.5	93.0	90.1
South Ayrshire	339.1	346.2	104.4	102.8
South Lanarkshire	320.4	319.1	98.6	94.7
Stirling	304.7	..	93.8	..
West Lothian	318.1	335.5	97.9	99.6

Source: Office for National Statistics, New Earnings Survey

(1) Average gross weekly earnings in April, before deductions for tax and National Insurance, for those whose pay was not affected by absence.
(2) Results are published only for areas represented by at least 10 persons in the sample and where the standard error of average gross weekly earnings is 5.0 per cent or less of the average.

Chart 3: Growth in Manufacturing less Electrical and Instrument Engineering in Scotland and the UK 1988 Q1 - 1997 Q3



Source: Scottish Office

The Future Size of the Scottish Labour Force

Inevitably the future size of the Scottish labour force will be determined by two factors: the population of working age; and the participation rate.

In the medium/long term, the demographic structure of Scotland can be projected on the basis of the underlying trends in fertility and mortality rates and the net migration flows. The latest projection from the General Register Office (GRO) for Scotland is that the total population of Scotland will fall from 5.13 million in 1996 to 5.06 million in 2011. This projection represents a continuation of the post war trend of an average annual population growth close to zero - the population of Scotland in 1951 was 5.10 million - and confirms the vulnerability of Scotland to continual centripetal pressures within the context of UK and international economic development.[15] (Between 1951-96, the population of England rose by 20 per cent). Usually, in developed economies, a lack of population growth is not a healthy sign, as population increases are positively associated - as both causes and effects - with economic dynamism. However, there are factors which may mitigate against the base projections for Scotland. First, it is to be expected that the impact of IT will continue to reduce the importance of physical location in some sectors and thereby partly offset the adverse impact of geographic peripherality. In addition, it is the case with population projections that they may not be able to take full account of a major shift in the determinants of migration flows. It is feasible, for example, that one effect of devolution might be to stimulate a net inward migration of professional/managerial/ entrepreneurial talent.

Within the overall demographic profile for Scotland, it is expected that there will be a marked shift in the distribution by age. In particular, while the total cohort aged 20-59/64 is expected to remain broadly unchanged, within this group, the numbers aged 20-39 will fall by 295,000 (or 19 per cent) and those aged 40-59/64 will increase by 266,000 (also 19 per cent).[16] This will affect the supply of labour by age-group and may have an impact on relative wage levels, depending on the adjustments made to labour demand.

Labour market participation covers those in employment, self-employment, government employment and training programmes and the unemployed who are actively seeking work. The overall participation rate of those of working age in Scotland has been stable in recent years. As shown in Chart 4, data from the Labour Force Survey (LFS) for Spring (March to May) each year show the rate to have been between 77-78 per cent of those aged 16-59/64 since 1992. It is also important to note that the "all persons" rate for Scotland masks the different trends for males and females, in which the long term decline in male participation has been offset by the steady rise in the participation of females of working age. According to the LFS, the participation rates of males aged 16-64 fell from 88.0 per cent in 1984 to 82.4 per cent in 1997; for females aged 16-59, the corresponding rates were 62.9 per cent and 71.2 per cent.

CHART 4 HERE

The latest (Autumn 1997) rate of just over 77 per cent in Scotland is 1½ percentage points below the UK average and some 5 percentage points below the rates in the South East and Eastern Regions. This suggests that there is scope for the participation rate in Scotland to increase. One would normally expect the participation rate to increase in an economic upswing, as people are encouraged into the labour market when unemployment falls, and vice versa. However, the Chart shows that, while an inverse relationship between the participation rate and the rate of unemployment (under the ILO measure) held in the 1980s, this has not been the case in recent years. This may be attributable to a number of factors, including increased student numbers, rising Incapacity Benefit claims and a higher incidence of early retirement, as well as more recent changes to the administration of unemployment related benefits.

In Scotland, the employment rate (the percentage of the working population in employment) is currently 70 per cent, slightly below the UK rate of 72.5 per cent. The objective of raising the employment rate is central to the Government's strategy of reducing welfare dependency, extending opportunities and improving economic performance. As described, this can be done by increasing the effective labour supply and/or reducing the underlying rate of unemployment, and a number of policy measures are being put in place to promote employability and work incentives through tax and benefit reform.

The most recent official projections of the labour force in Scotland were published in 1995 and give the estimated change

from 1995 to 2006[17]. Although there would now be minor amendments to the underlying assumptions on population size and labour market participation, the basic features of the projections would be broadly unchanged. Scotland stands out in the projections as being the only one of the former standard planning regions/countries of the UK expected to have a reduction (albeit marginal) in the size of its labour force over this period. The decline - of 0.2 per cent - is brought about by the fall in the population of working age not being offset by a small increase in the participation rate. Across the UK as a whole, the growth in the labour force was projected to be 6 per cent; in East Anglia and the South West, the respective projections were 13 per cent and 10 per cent.

Business surveys

Otherwise positive results from the business surveys across most sectors have been somewhat overshadowed by the effect of the strong pound on the manufacturing sector (discussed above). The CBI Industrial Trends Survey of Scottish manufacturers showed a further rise in optimism in January, with a return to growth in orders and output. Growth in orders and output is expected to continue at a similar rate over the next 4 months. Capacity utilisation also improved significantly although investment intentions in plant and machinery became negative for the first time since April 1993 and investment intentions in buildings decreased further. Average unit costs fell markedly in the 4 months to January and were expected to fall further. A further downturn in domestic prices was evident in January, although at a slower rate than in October but this is expected to be temporary. Meanwhile, export prices fell and further declines were anticipated.

The Scottish Chambers' Business Survey covers a number of other sectors in addition to manufacturing. Manufacturing business confidence rose again in 1997 Q4 after falling in the third quarter and in construction optimism rose for the fifth successive quarter. Within the distribution sector, confidence fell in both wholesaling and retailing and a decrease in business optimism in the tourism and leisure sector was also reported in the final quarter. Manufacturing orders and sales rose at a slightly faster rate than in the third quarter. However, there were major differences in performance in key markets with the domestic market holding up but orders and output falling appreciably in export markets. In construction, new orders showed a further small increase, buoyed by strong growth from the private sector. Despite the fall in optimism, retail sales remained positive and in wholesaling, sales rose at a faster rate. Likewise, tourism demand continued to increase but only from domestic markets.

Employment rose for a net balance of firms across all sectors except in finance in the fourth quarter. Some easing in employment levels in the service sector is forecast for the first quarter of the year. Recruitment activity remained strong across most sectors with recruitment difficulties evident in recruiting suitably skilled labour. In contrast to the CBI, manufacturing investment intentions in plant and machinery showed a further strong increase in 1997 Q4 and respondents expect to revise these intentions up again in the first quarter. However, investment intentions in land and buildings became negative.

The December 1997 survey by Scottish Engineering reported another increase in business optimism which was evident across most sectors. Similarly, there was an overall increase in order intake. The UK market was reported to be strongly positive with total domestic orders strengthening for the fifth successive quarter and increasing in almost all sectors. However, export orders declined for the third successive quarter, falling in all sectors. Meanwhile, output rose in all sectors and sizes of company. Capital investment and training plans continued to increase across all sectors and sizes of company and staffing levels also increased. Prices continued to fall in almost all sectors of the industry.

Independent Forecasts of the Scottish Economy

GDP Growth

The latest short term projections for the UK and Scotland monitored by the Scottish Office Education and Industry Department are summarised in Table 7, which gives the forecasts for 1998 and 1999. All forecasters expect a deceleration in growth in Scotland this year, in common with the UK as a whole. Business Strategies Limited (BSL) anticipate that growth will exceed that of the UK in both years, while Cambridge Econometrics (CE) forecast slightly slower growth in Scotland. However, all forecasters agree that growth will slightly exceed 2 per cent. There is less consensus in 1999 with forecasts ranging from 1.6 to 2.5 per cent. However, with the exception of forecasts from the Fraser of Allander Institute (FAI), a slowdown in growth is anticipated.

Table 7: Independent Forecasts of GDP Growth in Scotland and the UK, 1998 and 1999

	1998		1999	
	Scotland	UK	Scotland	UK

Business Strategies Limited (October 1997)	2.3	2.0	1.8	1.6
Cambridge Econometrics (February 1998)	2.1	2.4	1.6	1.7
Fraser of Allander Institute (February 1998)	2.2	..	2.5	..

Employment

Table 8 summarises the most recent forecasts for the growth in employment in Scotland and the UK in 1998 and 1999. Both BSL and CE expect employment growth to continue in 1998 and lie within a narrow range, equating to growth of around 15,000 jobs. FAI expect a fall in employment but this is expected to be regained in 1999. BSL anticipate a fall in employment in 1999 (in common with the UK), while CE predict that growth in employment will slow in 1999.

Table 8: Independent Forecasts of Employment Growth in Scotland and the UK, 1998 and 1999

	1998		**1999**	
	Scotland	**UK**	**Scotland**	**UK**
Business Strategies Limited (October 1997)	0.6	0.5	-0.2	-0.6
Cambridge Econometrics (February 1998)	0.7	1.1	0.4	0.1
Fraser of Allander Institute (February 1998)	-0.7	..	0.8	..

Unemployment

Table 9 summarises the most recent projections of the average claimant count unemployment rates in Scotland and the UK in 1998 and 1999. CE and BSL expect a fall in the average unemployment rate this year, while FAI expect the 1997 rate to be maintained. However, given current unemployment rates in January (5.8 per cent in Scotland and 5.0 per cent in the UK), some increase in unemployment is implied by all forecasters. Only FAI expect a fall in the Scottish unemployment rate next year.

Table 9: Independent Forecasts of Claimant Unemployment Rates in Scotland and the UK, 1998 and 1999

	1998			**1999**		
	Scotland	**Rank**	**UK**	**Scotland**	**Rank**	**UK**
Business Strategies Limited (October 1997)	6.0	9	4.7	6.3	8=	5.1
Cambridge Econometrics (February 1998)	6.3	7	5.4	6.8	7=	5.7
Fraser of Allander Institute (February 1998)	6.4	..	..	5.8	..	..

Notes:
1. The rank is of the 11 UK standard statistical regions; lowest =1st.
2. The average claimant unemployment rates in Scotland and the UK in 1997 were 6.4 per cent and 5.6 per cent respectively.

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[15]It is important to note that, within the overall GRO projections, there are substantial differences by local area. For example, over the period 1996-2011, the populations of West Lothian and Aberdeenshire are projected to rise by 10 per cent and 7 per cent, respectively. By contrast, the largest population declines are expected in the areas covered by the Glasgow City, East Ayrshire and Inverclyde authorities.

[16]The structure of Scotland's population will also be characterised by falling numbers of young people (with 130,000 fewer people aged under 16 in 2011, compared with 1996) and an increased number over the formal retirement age (with 90,000 more people aged 59/64 and above). As a result, the so-called dependency ratio - defined as the ratio of persons aged under 16 or over pensionable age to those of working age - remains broadly unchanged throughout the period. The dependency ratio is 0.61 in 1996

and 0.59 in 2011. This calculation is not affected by the change in the pensionable age of women, which will rise from 60 to 65 between 2010 and 2020.

[17]"Labour Force Projections for Countries and Regions in the UK: 1995-2006", Employment Gazette (now Labour Market Trends), August 1995, pp 313-314.

Trends in Vessel Tonnage

Tonnage, like most other definitions used in Fisheries Statistics, is not a straightforward concept. The Fleet Register contains a mixture of both Gross Tonnage (GT) and Gross Registered Tonnage (GRT) although neither is clearly defined in the Merchant Shipping Acts. Tonnage is also measured in a slightly different way for vessels over and under 25m in registered length. Tonnage is a volumetric measurement of vessel capacity.

Table 6 shows that the total recorded tonnage of the vessels in the Scottish fleet increased by 26-28 per cent between 1986 and 1992, depending on whether or not there was actually any increase in the number of under 10m boats. After showing little change between 1993 and 1995 the tonnage suddenly increased by 13 per cent in 1996. The overall increase in tonnage since 1986 reflects an increase in the average size of vessel rather than in the number of vessels. Problems with the figures for the under 10m fleet mean that trends in overall vessel numbers are unclear.

Table 6: Tonnage of the Scottish Fishing Fleet by Length Class, 1986-96

Length class	**Total Tonnage**											**Annual average percentage change 1986-96**
	1986	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	
Under 10m	2,948	3,124	3,260	3,538	3,401	3,452	3,961	5,070	5,466	5,191	5,468	4.4
10<25m	39,762	40,274	40,702	40,439	39,569	39,130	38,508	38,018	36,652	35,043	32,776	-1.9
Over 25m	22,663	26,317	28,383	34,477	32,868	37,263	40,917	45,999	48,871	49,541	62,951	11.1
Total	65,373	69,715	72,345	78,454	75,838	79,845	83,386	89,087	90,989	89,775	101,195	4.3

Length class	**Annual Tonnage per Vessel**											**Annual average percentage change 1986-96**
	1986	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	
Under 10m	3.36	3.43	3.44	3.44	3.44	3.41	3.49	3.25	3.21	3.28	3.29	0.6
10<25m	34.37	33.93	33.55	33.17	32.95	33.27	33.54	34.04	34.09	34.80	35.24	0.3
Over 25m	153.13	158.54	163.12	193.69	183.62	200.34	205.61	212.96	226.25	245.25	291.44	6.9
Total	29.95	30.81	31.00	32.37	32.03	33.62	33.60	30.77	30.39	32.15	36.06	3.2

Since 1986 the average tonnage of a vessel has increased by about 3 per cent pa. However, the trends differ radically between the different vessel length classes. The under 10m sector has shown relatively little growth in average tonnage (0.6 per cent pa). In 1996, the average size was 3.3 tonnes per boat. The large reduction shown in Table 6 for 1993 seems more likely to be a statistical aberration than any genuine change. If, as seems likely, those under 10m vessels, which were incorporated into the register for the first time in 1993, were predominantly the smallest boats then their inclusion will inevitably have reduced the average tonnage from that year.

The medium sized vessels also experienced little change in average tonnage over the 1986-96 period as a whole, as a decrease of -1.1 per cent pa prior to 1991 has been offset by an increase of 1.2 per cent pa since then. In 1996, these boats each averaged 35 tonnes. It is amongst the largest vessels of 25+m where the most rapid growth in average tonnage has occurred. After 1986, the average size of the 25+m vessels grew by 6.9 per cent pa to 291 tonnes in 1996. This represented an increase of 90 per cent for the ten year period as a whole. There was a particularly dramatic jump of 27 per cent in 1996. The growth in average tonnage has been most pronounced amongst the very large vessels of over 35m. Their average size grew by 4 per cent pa up until 1993, but has accelerated by 19 per cent pa since then. This, no doubt, reflects the aggregation of licences from medium sized boats onto fewer but much larger and heavier super trawlers', although it is possible that the scale of the recent increase may have been exaggerated as a result of more vessels being measured on the

basis of GT rather than GRT. The former gives rise to higher tonnage figures.

It is apparent, therefore, that not only has the fleet been dividing into large and small vessel segments but that the former has seen a disproportionate increase in the average tonnage of its vessels, which have become both longer, wider and deeper. The smallest vessels have seen their total tonnage increase because of the growth in their recorded numbers rather than in the average size of such boats. An increase in average tonnage has been evident in the last two years. This is because the smallest vessels have to remain under 10m in length if their owners are to take advantage of the less stringent licensing conditions and this provides an incentive for them to increase capacity by investing in deeper draughted, broader and heavier boats rather than in longer ones.

Trends in Vessel Power

As vessels have increased in both length and tonnage, it might be expected that they would need to become ever more powerful in order to move them through the water, especially as the speed of many of the newer vessels is greater than that of their predecessors. Engine power is measured in kilowatts (kW).

Table 7 shows that total recorded engine power has increased by 33 per cent since 1986, although the increasing coverage of under 10m vessels prior to 1993, as well as the inclusion of all such boats in 1993, have distorted this figure upwards. If the 1993 break in series is ignored, total engine power has increased, on average, by about 2 per cent pa since 1986.

Table 7: Power (kilowatts) of the Scottish Fishing Fleet by Length Class, 1986-96

Length class	Total Power (kilowatts)											Annual average percentage change 1986-96
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	
Under 10m	24,785	27,563	29,658	34,569	33,416	35,633	41,535	63,892	68,812	64,789	69,956	7.2
10<25m	221,235	227,400	233,774	244,438	245,692	242,124	240,506	241,648	235,714	226,706	214,722	-0.3
Over 25m	97,765	114,612	123,766	132,983	132,667	141,534	154,089	170,659	170,239	157,612	174,003	6.1
Total	343,785	369,575	387,198	411,990	411,775	419,291	436,130	476,199	474,765	449,107	458,681	2.3

Length class	Average Power per Vessel (kilowatts)											Annual average percentage change 1986-96
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	
Under 10m	28.23	30.29	31.32	33.66	33.82	35.18	36.59	40.90	40.41	40.93	42.14	3.3
10<25m	191.21	191.58	192.72	200.52	204.57	205.89	209.50	216.34	219.27	225.13	230.88	1.9
Over 25m	660.57	690.43	711.30	747.10	741.16	760.94	774.32	790.09	788.14	780.26	805.57	2.0
Total	157.48	163.31	165.89	169.96	173.89	176.54	175.72	164.49	158.57	160.85	163.46	1.2

The overall figure for average power per vessel has been artificially dragged down in those years when additional under 10m boats suddenly appear in the statistics. The most obvious example of this occurred in 1993 when an extra 400 or so small boats entered the fleet register, leading to a 6.4 per cent fall in the overall average power per vessel in that year. A clear upward trend in average power per vessel is evident for all three length class groupings, ranging from 2.0 per cent pa for the medium and large vessels to 3.3 per cent pa for the small ones. These data are not without their problems. The small boat series is likely to have been distorted by the changes in coverage since 1986 whereas, for reasons explained below, the average power figures for large vessels appear to have become less reliable since 1993. In 1996, the figures for average power per vessel were 42 kW, 231 kW and 806 kW for small, medium and large vessels, respectively.

Trends in Both Vessel Power and Tonnage

Although all sectors of the fleet have seen an increase in both the average gross tonnage and power (kW) of vessels, as shown in Charts 1, 2 and 3, there are interesting differences between them. The small and medium sized vessels

experienced a faster increase in average power than in average tonnage but the converse was the case for the large vessels. The more rapid growth in kilowatts than in tonnage probably reflects the need for additional power to work the extra gear and equipment now being carried on small and medium fishing vessels. However, such an explanation might also be expected to have applied to the larger vessels. In this latter case, it seems much more likely that the way in which the power figures have been recorded is different. The discrepancy between trends in average tonnage and average power for the large vessels has increased over time. Between 1986 and 1990 average tonnage grew at a rate that was 1.5 times higher than average power but since 1992 this rate has jumped to 10 times higher.

CHART 1 HERE

CHART 2 HERE

CHART 3 HERE

The larger vessels have started to incorporate auxiliary power sources to work the increasingly varied and complex gear and electronic equipment which they carry. Since these are generally separate from the main engine driving the propeller they are not included in the declared figures for vessel power. In addition, the actual power figures can be under-recorded as a result of derating (limiting) the engine. This is a widespread practice and it is very difficult to ensure that such a reduction in power is permanently maintained. In practice, it is not difficult subsequently to change the rating of an engine simply by altering the fuel flow to the engine.

Charts 4, 5 and 6 plot the growth in both total tonnage and power and show that the growth trends for tonnage and power in the large vessel sector are very similar between 1986 and 1993. After 1993 the trends suddenly diverge. If the 1986-1993 statistical relationship between power and tonnage is projected forward, based on regression analysis, it can be used to derive expected power figures for subsequent years on the basis of the actual tonnage figures in those years. These expected power levels can be compared with the actual ones to obtain an estimate of the total level of power that appears to have been under-recorded. Up until 1993, the power level in the 25+m fleet increased, on average, by 289 kW for every 100 tonnes of increase in fleet tonnage. On the basis of the regression relationship the projected level of power in 1993 would have been 169,200 kW which is very similar to the recorded level of 170,700 kW. However, since then the projected level has exceeded the recorded level by a rapidly increasing amount. Whilst this, no doubt, reflects the growing practice of derating engines, the previous tonnage/power relationship will have been distorted to the extent that there has been a shift from GRT to GT as the basis for measuring tonnage.

CHART 4 HERE

CHART 5 HERE

CHART 6 HERE

Since power is an integral part of the VCU formula that is used to measure catching capacity this estimate suggests that VCUs are becoming a less meaningful measure of such capacity. Hence the impact of policies that seek to reduce effective catching capacity are likely to be over-stated if they continue to use VCUs as the basis for measuring their success.

Conclusion

Since 1986 there have been notable changes in the size and ownership location of vessels in the Scottish fishing fleet. It is more difficult to say anything about trends in the number of vessels because of the various data problems.

The fleet structure has become increasingly polarised into large numbers of small vessels (under 10m) and a much smaller but growing number of big vessels (25+m) that are steadily increasing in average length, tonnage and power. The medium sized vessels have shown a steady decrease in numbers. The smaller vessels work close to the shore and mostly use creels to target shellfish, whilst the largest boats target pelagic species or engage in trawling for whitefish. The changing geographical distribution of the ports at which the ownership of the fleet is based reflects these trends.

Those ports that are close to shellfish grounds, where creel fishing methods can be used by under 10m vessels, and those that provide both important markets, either for fresh fish or because of local processors, and can also accommodate the new generation of large demersal trawlers and pelagic vessels, have benefited from these trends and seen their share of the fleet ownership increase. The local availability of shellfish stocks in the Highlands and Islands explains why 71 per cent of the owners of small vessels are based in that area. In contrast, only 45 per cent of the owners of medium size and 20 per cent of the large vessels are located in the region. The ownership of the latter size of vessel has become increasingly concentrated

into the larger ports of North East Scotland, Troon and into Shetland.

There are a number of possible policy implications that arise from these trends. The increasing segregation of the fleet into small and large vessels suggests that there may be scope to build further on the differences in the management regimes applied to the small boat sector. Such vessels mostly fish close inshore, within the 12 mile limit for territorial waters, and predominantly target shellfish. This sector seems particularly well placed to experiment with ways of introducing some form of local/regional management of the stocks which they target.

There is evidence to suggest that the power figures being declared by the large vessel sector have become less reliable since 1993. Since power is an integral part of the VCU formula that is used to measure catching capacity, this suggests that VCUs are becoming a less meaningful measure of such capacity. Hence the impact of policies such as licence aggregations and decommissioning fishing boats, which seek to reduce effective catching capacity, are likely to be over-stated if they continue to use VCUs as the basis for measuring their success. This suggests that it is desirable to try and find ways of making any VCU based definition of capacity more robust.

The trends also have implications for harbour development policy. The wide spread of small shellfish boats around the coast suggests that there is a need for a large number of small but safe anchorages and basic landing facilities. In contrast the shift to ever larger vessels suggests that there is a requirement for a limited number of strategically located deep water ports to accommodate such vessels. There seems little point in investing in poorly located ports that, in the past, have depended on medium size boats to support their local infrastructure.

Annex 1

Table 2A: The Number of Vessels by District and Length Class, 1986-96

Under 10m (Under 30 feet)

District	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Eyemouth	47	48	50	29	32	31	28	67	65	57	62
Pittenweem	64	68	54	60	61	60	57	67	67	64	67
Arbroath	40	39	43	42	41	43	44	74	68	64	62
Aberdeen	11	12	14	17	17	18	19	46	38	36	32
Peterhead	33	32	30	30	23	20	20	55	51	50	43
Fraserburgh	33	35	34	34	34	20	20	56	64	74	80
Macduff	17	13	2	2	2	2	3	23	23	..	..
Buckie	5	6	5	1	2	2	2	25	25	41	40
Lossiemouth	13	12	12	12	2	5	7	24	26	..	..
Wick	61	59	58	48	51	50	49	87	105	109	106
Orkney	57	57	57	35	42	42	43	84	138	133	136
Shetland	62	62	54	54	22	23	24	87	112	117	144
Stornoway	78	88	103	173	193	189	254	249	310	268	288
Kinlochbervie	2	2	2	3	4	6	8	13	14	17	17
Lochinver	2	5	8	10	9	7	6	8	13	13	14
Ullapool	19	20	25	27	24	24	31	45	44	46	40
Mallaig	80	83	101	123	117	130	159	202	173	169	184
Oban	76	80	81	88	89	89	102	122	119	126	129
Campbeltown	53	62	83	108	91	97	103	123	145	120	130
Ayr	38	27	24	13	13	38	43	98	98	79	86
TOTAL	791	810	840	909	869	896	1,022	1,555	1,698	1,583	1,660

10<25m (30-79.9 feet)

District	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**

Arbroath	44	39	43	43	41	41	40	30	29	24	15
Aberdeen	37	32	32	32	31	26	26	19	20	18	14
Peterhead	103	100	106	96	96	108	103	69	66	63	71
Fraserburgh	101	108	116	115	122	120	116	87	87	162	141
Macduff	87	91	88	81	83	91	87	84	79	..	..
Buckie	99	109	110	113	104	97	92	80	69	107	106
Lossiemouth	94	99	107	109	102	87	81	64	52	..	..
Wick	40	43	40	39	39	36	35	31	31	27	28
Orkney	42	40	41	43	55	55	60	50	48	51	52
Shetland	55	58	55	56	54	52	57	49	60	65	53
Stornoway	98	105	106	117	112	108	112	89	82	86	73
Kinlochbervie	9	9	10	11	11	9	9	8	8	6	5
Lochinver	15	18	16	19	21	19	20	20	20	20	16
Ullapool	31	37	34	30	27	29	30	22	25	22	19
Mallaig	88	96	108	108	100	102	96	79	75	70	73
Oban	35	37	44	49	50	51	48	37	40	40	38
Campbeltown	89	82	91	94	93	92	87	75	73	60	64
Ayr	98	109	104	108	107	104	99	96	88	72	70
TOTAL	3,151	3,199	3,239	3,252	3,238	3,218	3,190	2,982	2,946	2,888	2,834

25+m (80+ feet)

District	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
Eyemouth	1	1	1	1	1	-	3	5	3	3	4
Pittenweem	-	-	-	-	-	-	-	2	2	1	1
Arbroath	1	1	1	1	1	1	1	1	-	-	-
Aberdeen	6	6	7	5	2	5	5	10	11	10	10
Peterhead	13	15	17	22	24	22	24	52	50	50	60
Fraserburgh	17	19	19	17	17	20	22	46	46	56	60
Macduff	12	10	10	10	10	10	11	16	15	..	..
Buckie	1	2	1	1	1	1	1	5	5	18	17
Lossiemouth	-	-	-	-	1	2	2	15	15	..	..
Wick	-	1	1	1	1	1	1	2	2	2	2
Orkney	2	5	5	6	6	5	5	11	11	12	11
Shetland	11	16	15	16	15	14	15	21	25	25	20
Stornoway	1	1	1	1	1	1	1	1	1	2	3
Kinlochbervie	-	-	-	-	-	-	-	-	-	-	-
Lochinver	-	-	1	1	1	1	1	1	1	1	1
Ullapool	-	-	-	-	-	-	-	-	-	-	-
Mallaig	2	2	1	1	2	2	2	2	2	2	2
Oban	-	-	-	-	-	-	-	-	-	-	-
Campbeltown	-	-	-	-	-	-	-	-	-	-	-
Ayr	-	-	-	-	-	6	7	26	27	20	25
TOTAL	67	79	80	83	83	91	101	216	216	202	216

Chart 4: Participation and Unemployment Rates in Scotland Spring 1984 - 1997

Source: Office for National Statistics

Chart 1: Average Power and Tonnage of the Under 10m Fleet 1986-1996

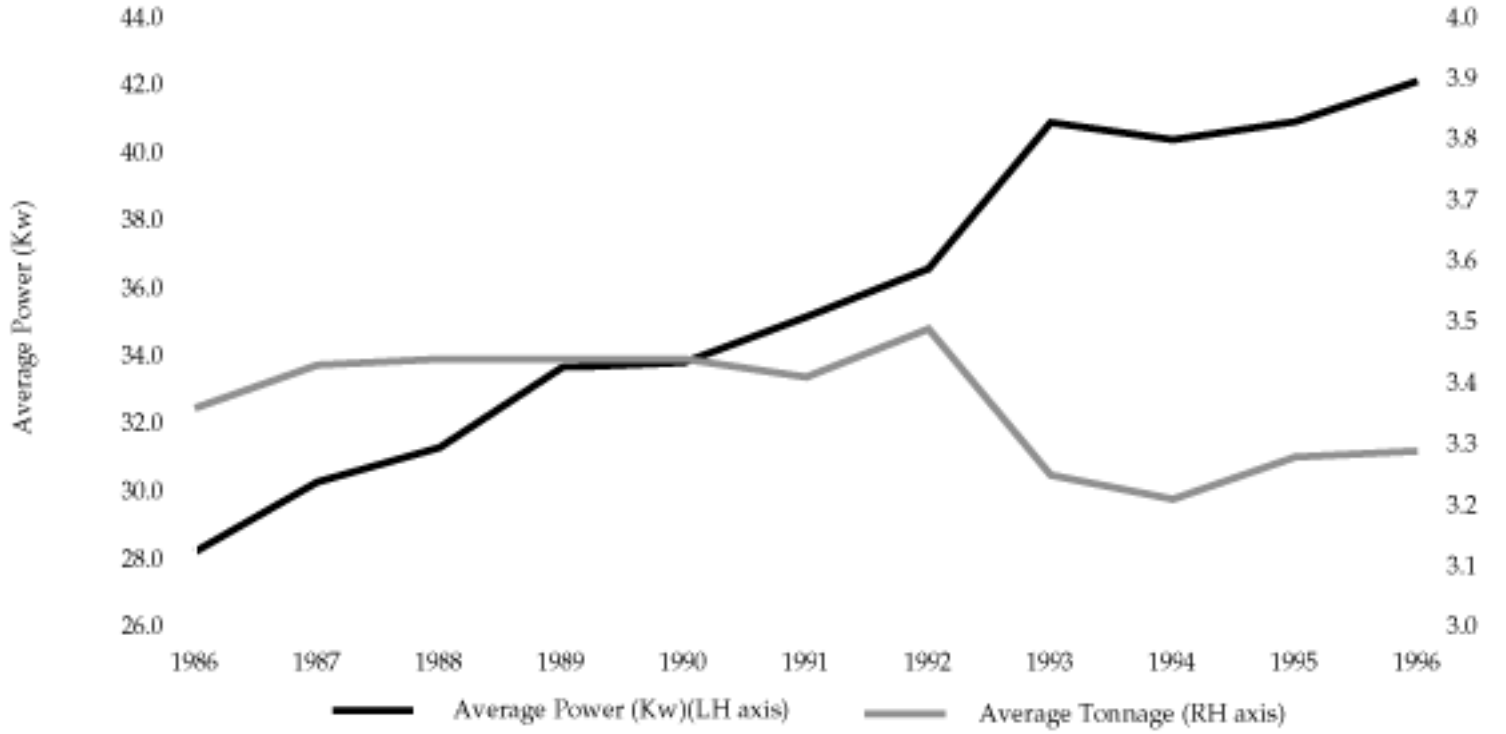

Chart 2: Average Power and Tonnage of the 10<25m Fleet 1986-1996

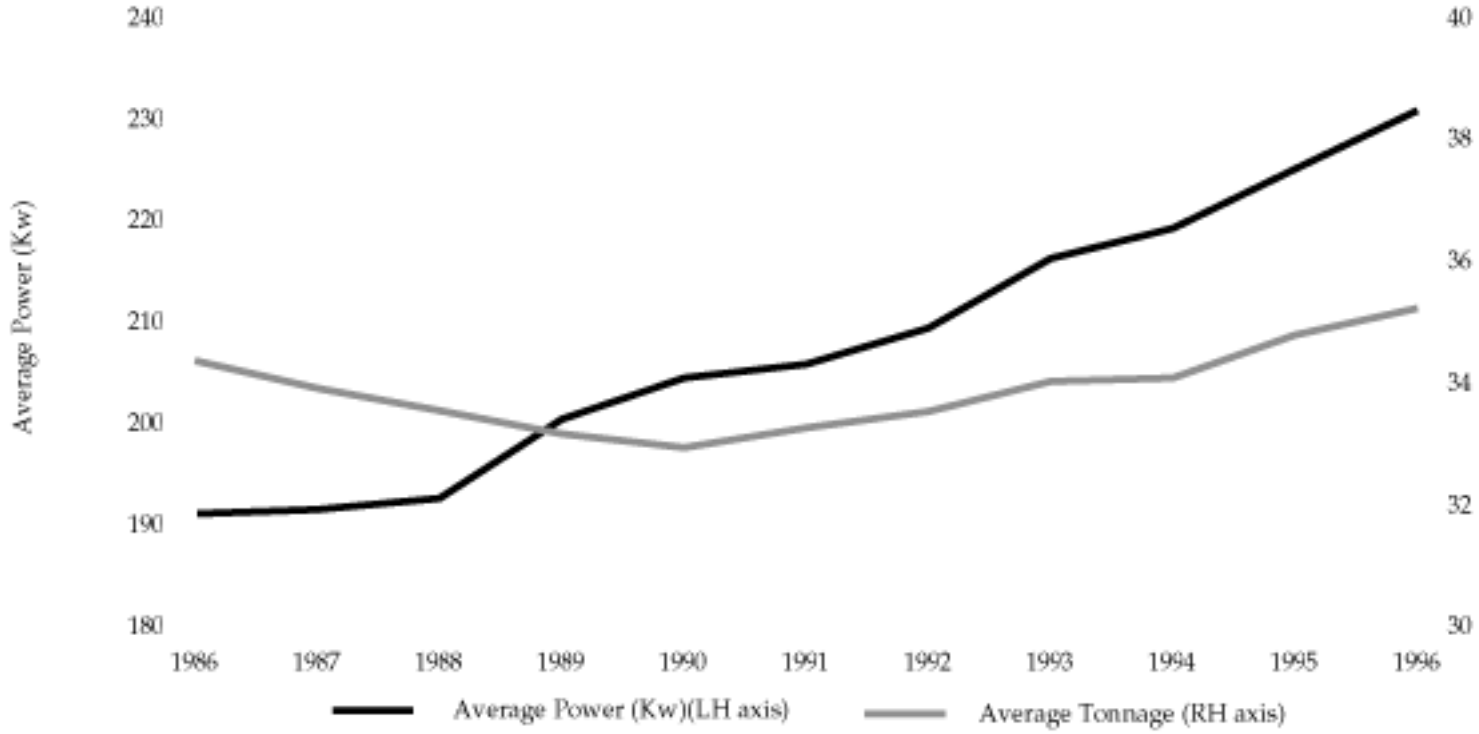

Chart 3: Average Power and Tonnage of the 25+m Fleet 1986-1996

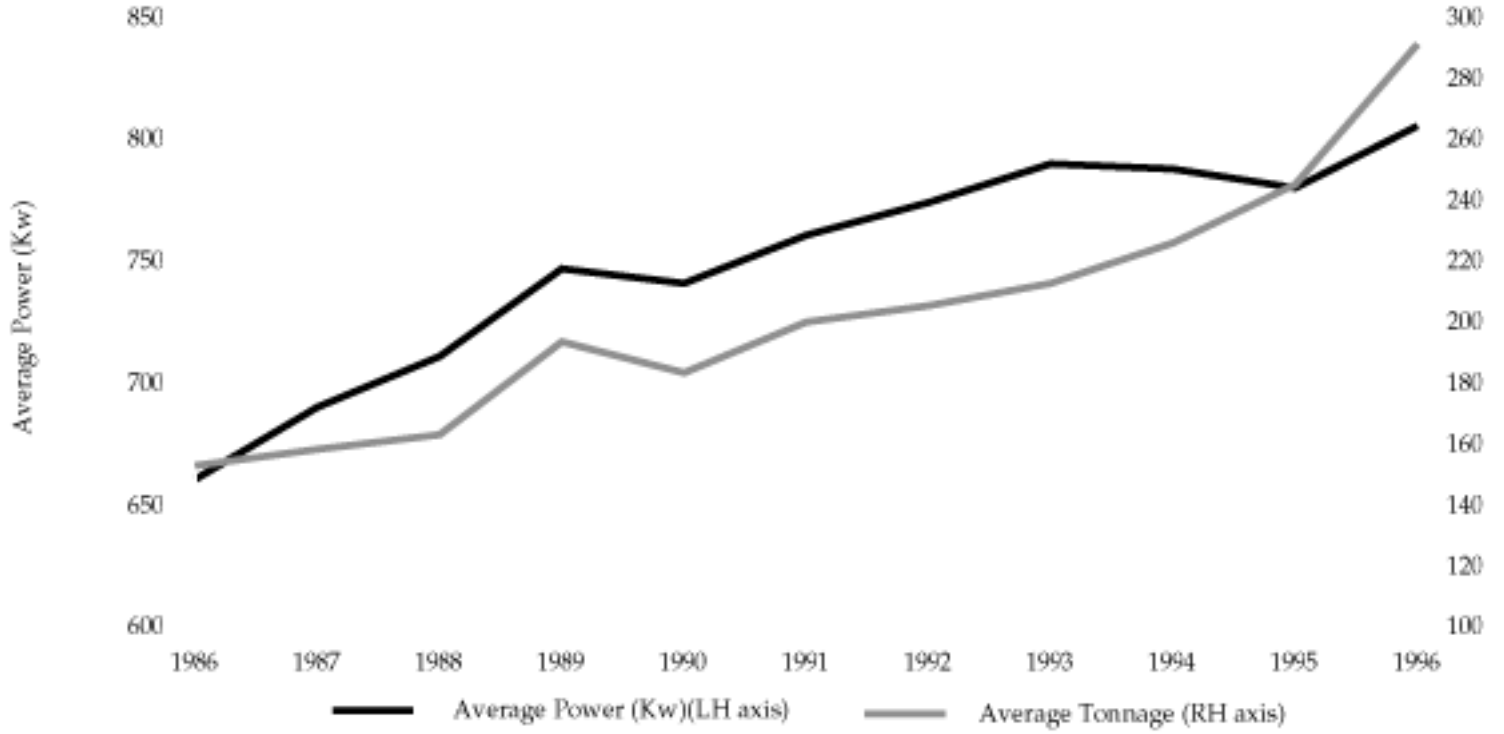

Chart 4: Total Power and Tonnage of the Under 10m Fleet 1986-1996

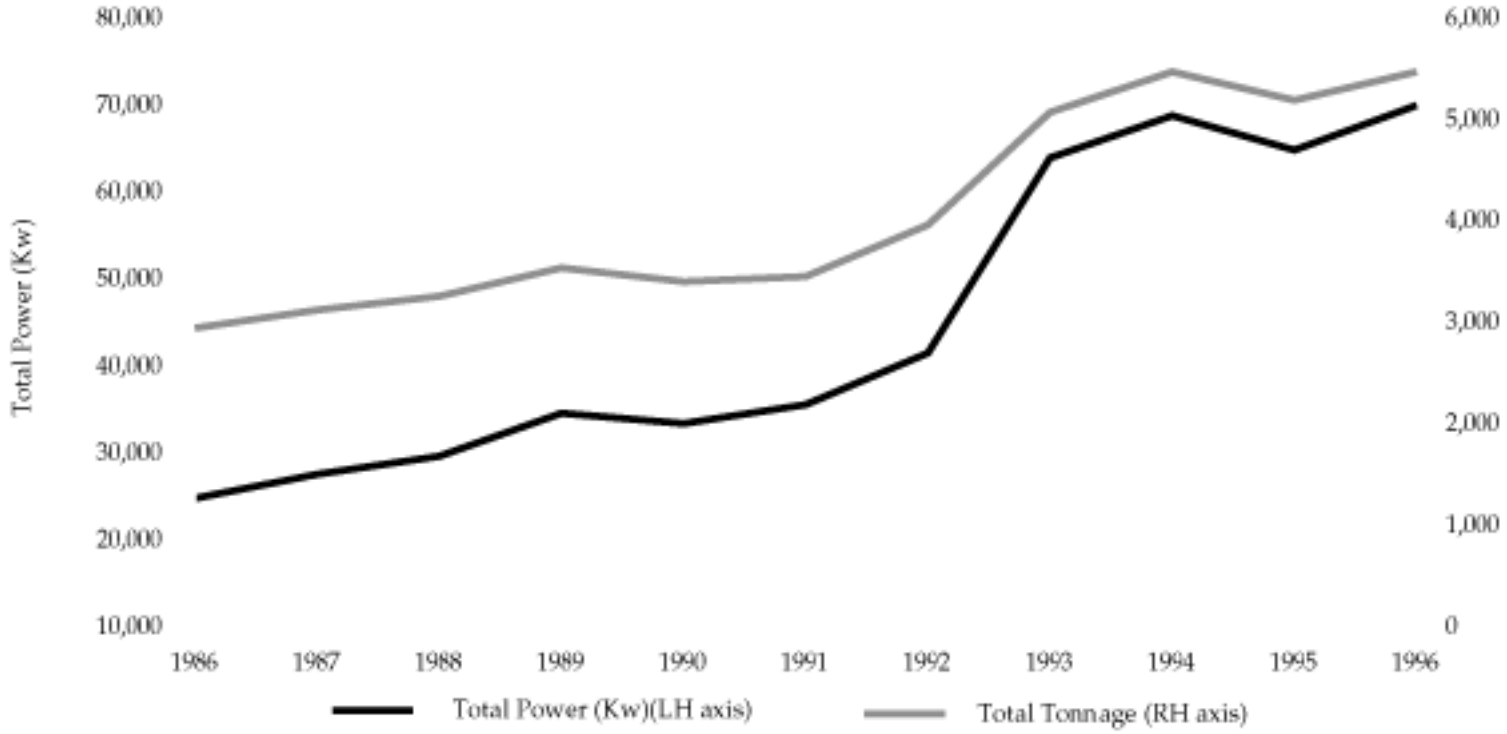

Chart 5: Total Power and Tonnage of the 10<25m Fleet 1986-1996

Chart 6: Total Power and Tonnage of the 25+m Fleet 1986-1996