

COGENT STRATEGIES INTERNATIONAL LTD



# The Economic and Social Health of the Park: Deeside Annex

2010

## The Economic and Social Health of the Cairngorms National Park: Deeside Annex

---

### **This report**

This report presents, largely in visual form, some of the economic and related characteristics of Royal Deeside. It is intended to be read alongside *The economic and social health of the Cairngorms National Park 2010*. That report was commissioned by the Cairngorms National Park Authority, with the support of Scottish Enterprise and Highlands and Islands Enterprise.

The picture presented is one of a dynamic economy, with a rapidly growing real product. It is evolving out of a dormitory position, where people lived on Deeside and worked in Aberdeen, to a more commercially self sufficient situation where there are growing service businesses serving wider markets. It has grown substantial consultancy businesses in contrast to other rural areas.

Housing and the ambience plainly indicate that people think of it as a good place to bring up a family, although it loses the majority of its young people to pursue higher education elsewhere. Only when they are beginning families themselves, in their thirties, do they move back on a net basis.

## Contents

The Economic and Social Health of the .....	2
Cairngorms National Park: Deeside Annex .....	2
This report.....	2
Contents.....	3
Figures.....	4
Tables .....	4
Geography.....	5
The people of Deeside .....	8
Age and sex.....	8
Age-migration in individual years .....	12
Population drivers.....	15
Working in Deeside .....	16
Total numbers on the rise.....	16
Services dominate sectoral employment growth.....	17
Agricultural sector: slow decline in jobs .....	19
Production industries: about 250 jobs.....	20
Retail dominates the distribution sector .....	21
Construction and real estate .....	22
Private service sector.....	23
Public services.....	24
Commuting and commuting income .....	26
The economy of Deeside .....	27
Value added structure .....	27
Real growth at a rapid rate .....	28
Distinctive sectors.....	28

## Figures

Figure 1	Map of Royal Deeside (from DMO) .....	5
Figure 2	Geography based on CAS wards .....	5
Figure 3	Geography based on 1991 wards .....	6
Figure 4	Deeside age distribution and Scottish average .....	8
Figure 5	Mid year population .....	9
Figure 6	Births, deaths and net migration .....	10
Figure 7	Migration by age .....	11
Figure 8	Migration cumulated by age .....	11
Figure 9	Single year cumulative migration charts .....	12
Figure 10	Employees in employment .....	16
Figure 11	Employees by sector .....	17
Figure 12	Forest jobs flourish then fade as rising productivity drives down farming employment	19
Figure 13	Five sectors dominate production employment .....	20
Figure 14	Distribution is three-quarters retail .....	21
Figure 15	About half the retail sector is specialised .....	21
Figure 16	An average of 900 construction employees .....	22
Figure 17	Business services job growth averages 9 per cent per year .....	23
Figure 18	– Private services - about 500 jobs .....	24
Figure 19	Public service jobs grew from 1984 to 2001 .....	24
Figure 20	Public sector dominance rose in the 1980s and 1990s .....	25
Figure 21	The Aberdeen commuting zone .....	26
Figure 22	Structure of the Deeside economy .....	27
Figure 23	Growth of real GDP .....	28
Figure 24	Salient sectors in the Deeside economy .....	29

## Tables

Table 1	Net migration by age group .....	15
Table 2	Employees by sector .....	18

## Geography

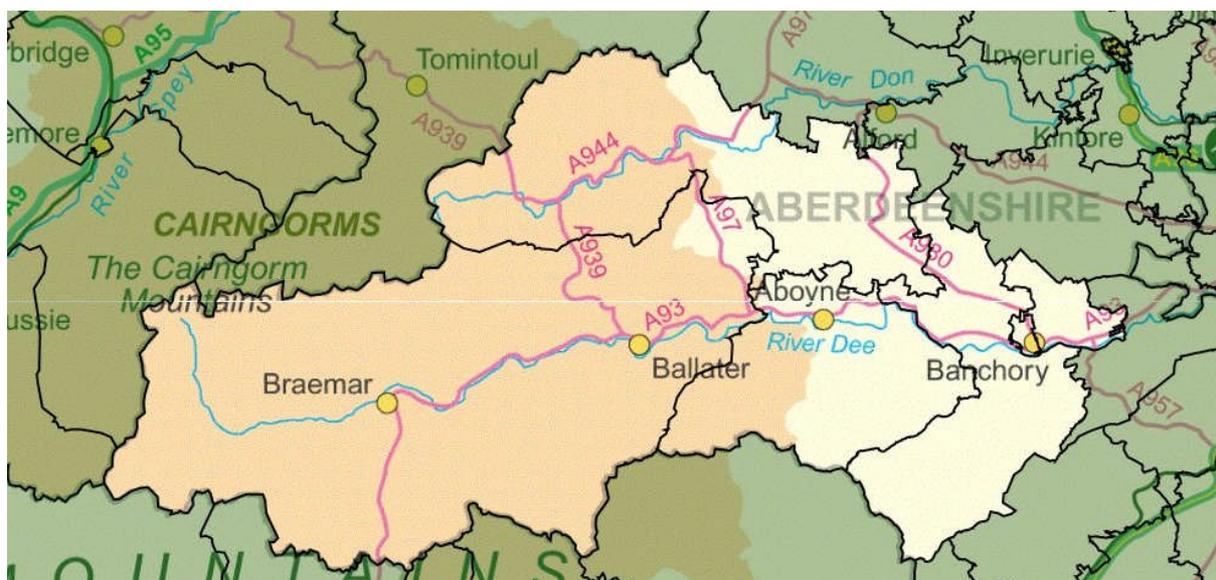
The geography as defined by the Royal Deeside Destination Management Organisation corresponds reasonably closely to the current statistical geography we have constructed for the GVA statistics:

Figure 1 Map of Royal Deeside (from DMO)



The main difference is the inclusion of upper Donside, which although not part of the former local authority district, is required if statistics to include Cromar are to be used.

Figure 2 Geography based on CAS wards



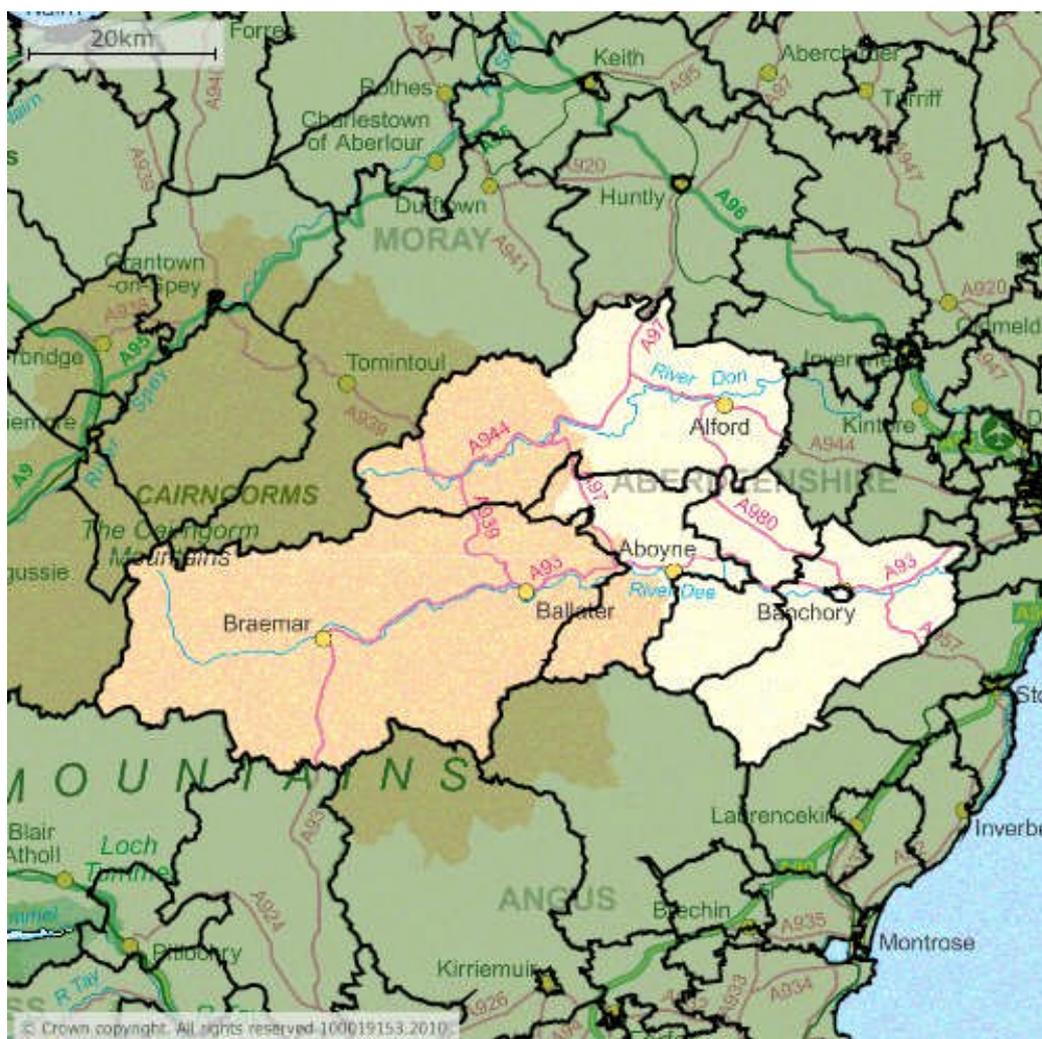
This map shows the following statistical (2003 CAS) wards and illustrates that between half and two thirds of the area covered by this report lies within the National Park boundaries:

- 02C51 : Donside and Cromar
- 02C53 : Upper Deeside
- 02C54 : Aboyne
- 02C55 : Mid Deeside
- 02C56 : Banchory West
- 02C57 : Banchory East and Crathes

These wards include the following 21 datazones: S01000315, S01000316, S01000317, S01000318, S01000322, S01000323, S01000325, S01000330, S01000331, S01000332, S01000334, S01000337, S01000338, S01000339, S01000341, S01000342, S01000343, S01000344, S01000360, S01000364, S01000384.

However, while for current data a reasonable correspondence between the DMO area and the available statistics can be created, the problem is much greater historically, despite the existence before 1996 of a local authority district 'Kincardine and Deeside'. For older data, 1991- 2003 it was necessary to use 1991 ward boundaries, with the consequence that the settlement of Alford was included.

Figure 3 Geography based on 1991 wards



These six wards are:

- o 72UE03 Aboyne and Cromar
- o 72UE04 Banchory
- o 72UE05 Feughdee
- o 72UE02 Mid Deeside
- o 72UE01 Upper Deeside
- o 72UD03 Upper Donside

Wards with the same names were used for 1984-1991 data, but we have not been able, within the resources available, to confirm whether the boundaries may have changed in detail between 1981 and 1991. The changing political geography may affect the trends shown below.

We have also used postcode data where there is no alternative, notably for long term population trends. The postcode system was, of course, developed to manage the Post Office and not for statistical purposes, so any analysis based on it must be viewed with caution. This is compounded by the fact that postcodes appear to have been misrecorded for 1991 and earlier in the National Online Manpower Information System, but we have not been able to obtain satisfactory details of this in the time available to prepare this report.

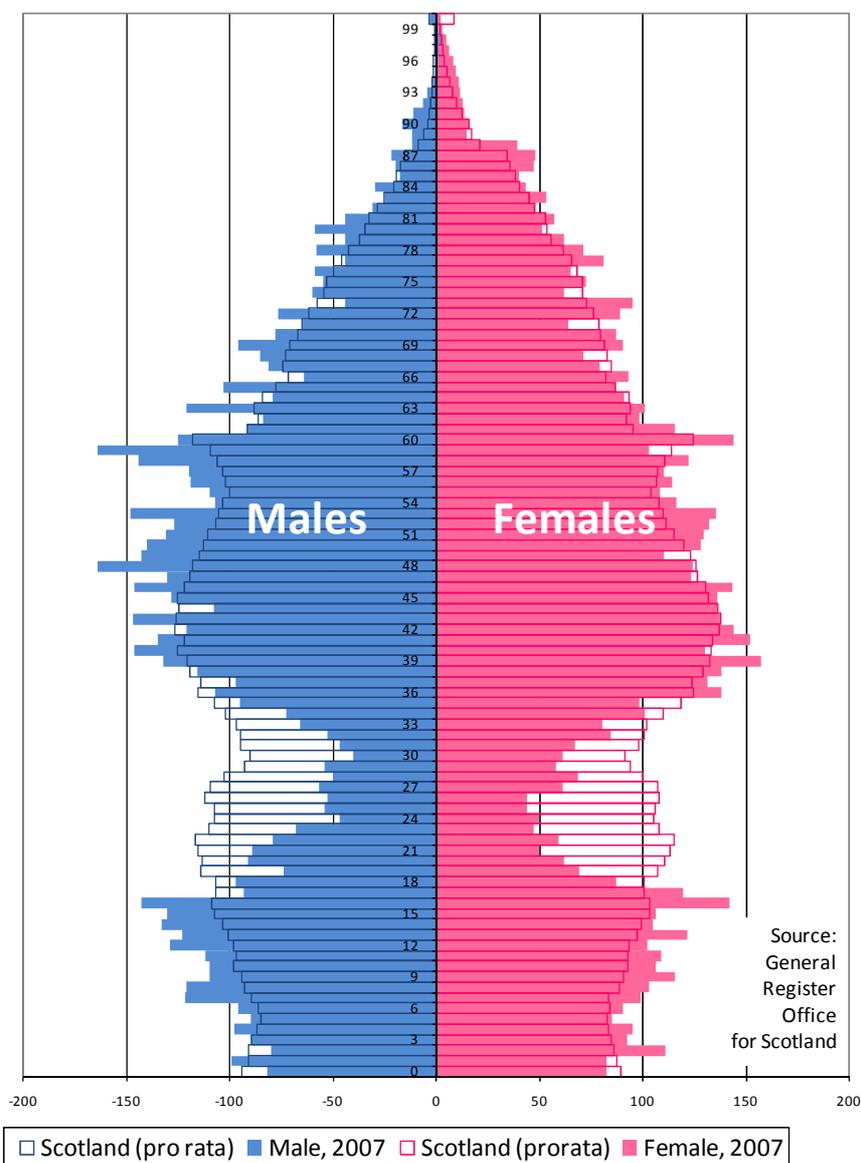
# The people of Deeside

## Age and sex

In mid 2007 16 500 people lived on Deeside and, if the forties and fifties are the prime of life, then Deeside's people are in their prime. The trace lines on the chart refer to Scotland as a whole, showing that Deeside has more children, and many more people aged from 40 to 60. It has very low numbers of people aged 15 to 40.

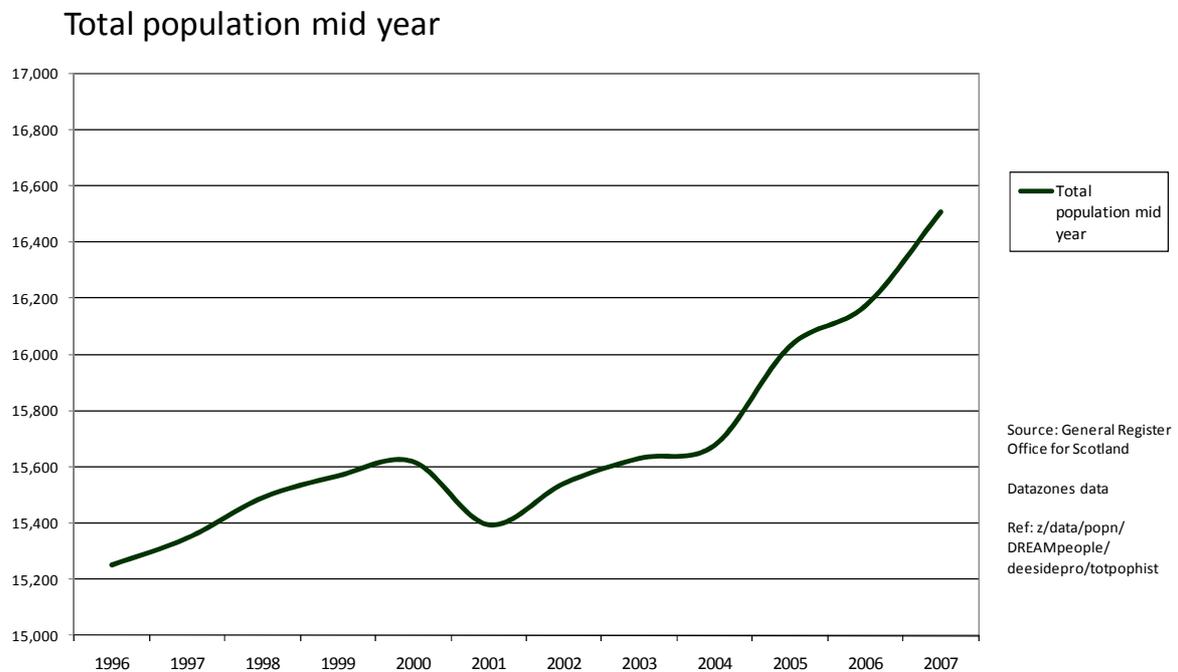
Figure 4 Deeside age distribution and Scottish average

### Age patterns of Deeside residents



Over the past decade the number of residents had been growing at an average rate of around 120 per year, or 0.7 per cent:

Figure 5 Mid year population



Longer term trends are not available on the same datazone basis, although a view can be taken based on postcode geographies:

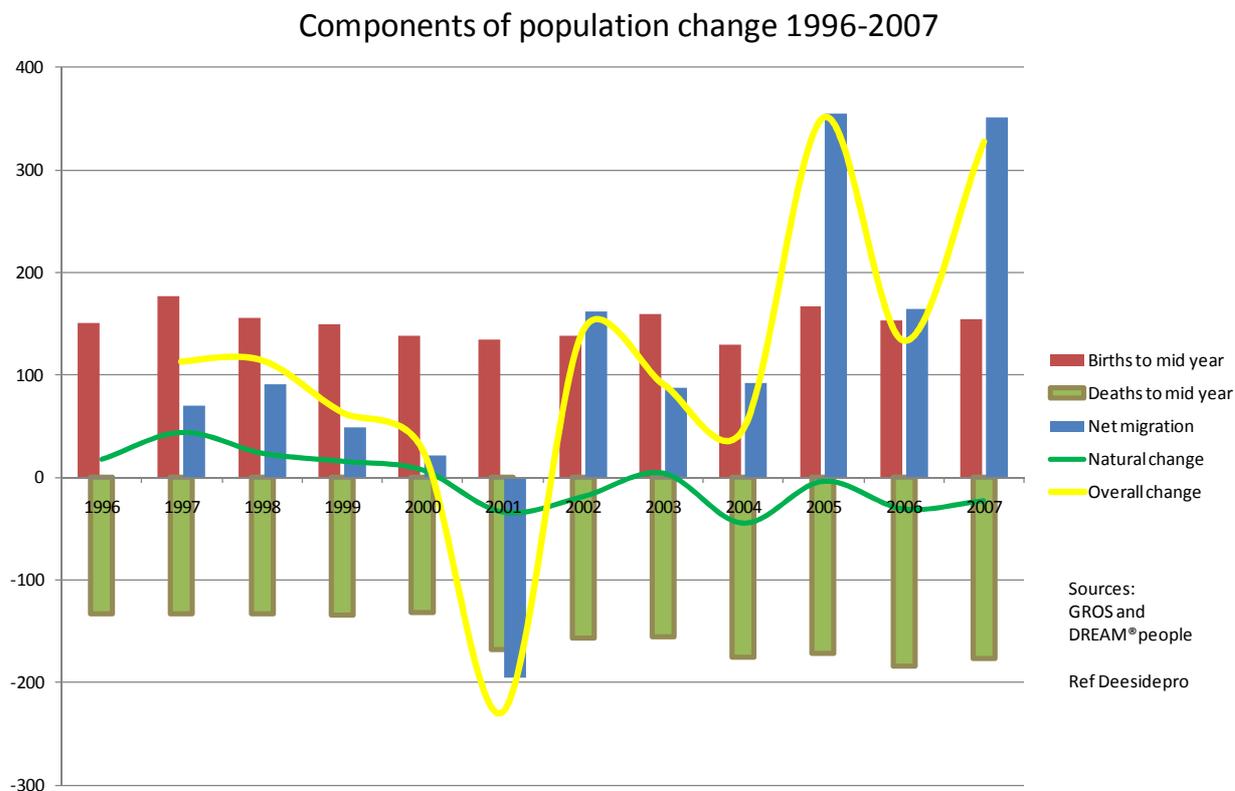
Royal Deeside	1971	1981	1991
Postcode-based population (AB31 3 part, AB 34 5, AB34 4 and AB35 5)	16 570	15 311	14 720

Source: Nomis Ref: P240 histpop

Thus it would appear that population declined quite steeply in the 1970s, despite the advent of North Sea oil which was boosting population elsewhere in Grampian. However the decline slowed in the 1980s before reversing. Records held by the Council may be able to illuminate these trends further.

Since about the turn of the century the 'natural' rate of population change has been negative, as the ageing of the population has increased the number of deaths and the lack of young adults has seriously reduced the number of births. However, there has been a rapid increase in in-migration.

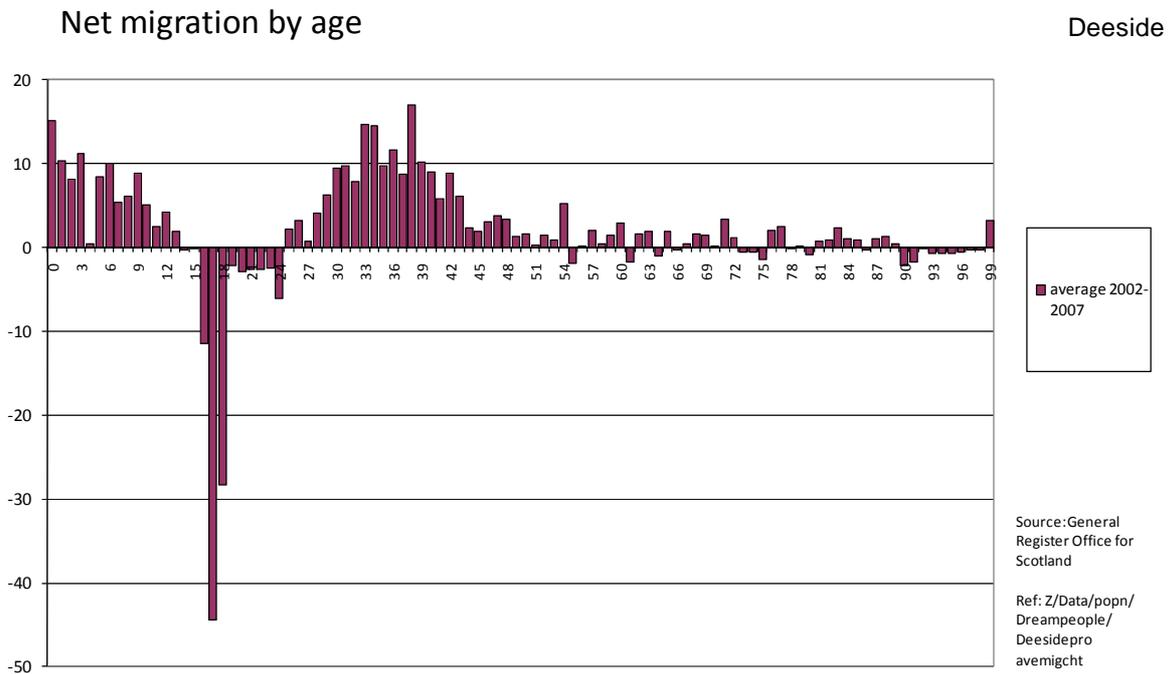
Figure 6 Births, deaths and net migration



The chart shows clearly that migration has been the most powerful transforming influence on population, and the three key years have been 2000-2001, when there was substantial out-migration, and 2004-5 and 2006-7, when there was very high in-migration.

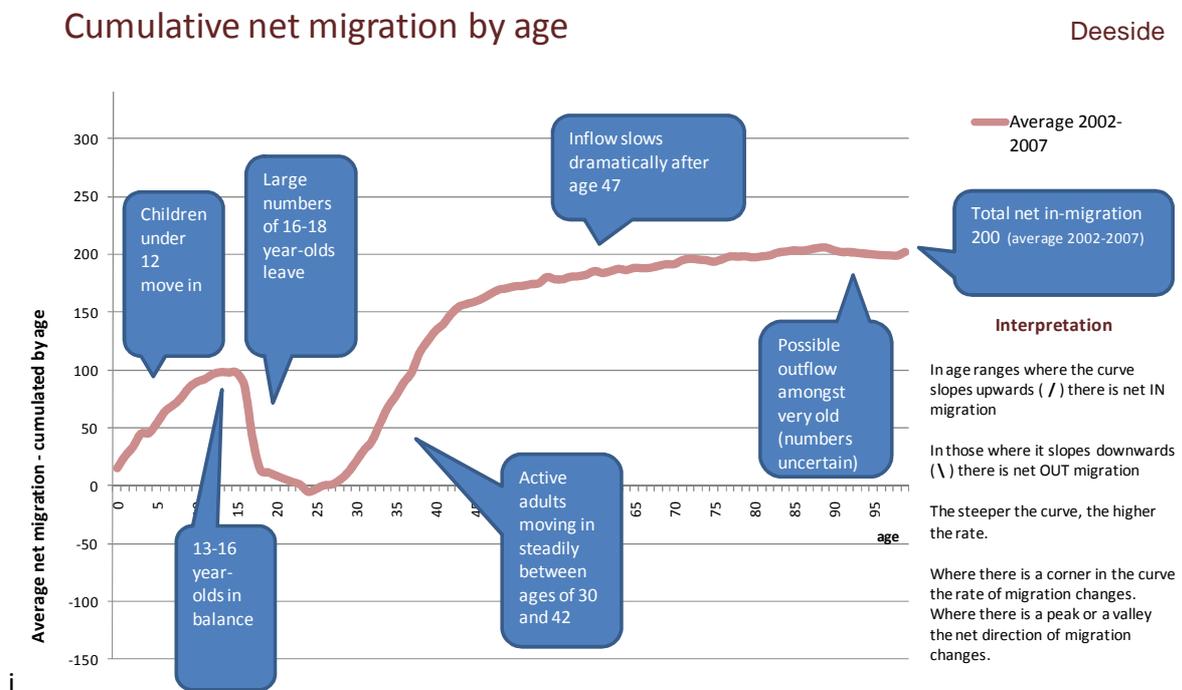
The age pattern of migration is important, with the key movements being the in-migration of families with children and the out-migration of older teenagers.

Figure 7 Migration by age



This shows itself more clearly if the flows at each age are cumulated, and from this we can make reasonable assumptions about some of the factors at work:

Figure 8 Migration cumulated by age

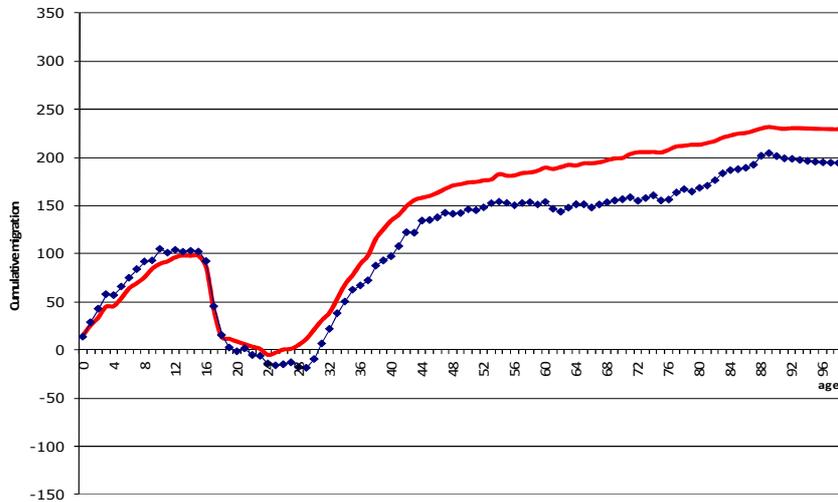


Charts similar to the above have been prepared for each year. They show that it is the ages of net inward movement that are most formative of general population trends: on the evidence, the late teenagers seem to move out in increasing numbers irrespective of specifically local factors.

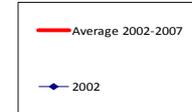
## Age-migration in individual years

Figure 9 Single year cumulative migration charts

### Cumulative net migration by age



Deeside



**Interpretation**

In age ranges where the curve slopes upwards ( / ) there is net IN migration

In those where it slopes downwards ( \ ) there is net OUT migration

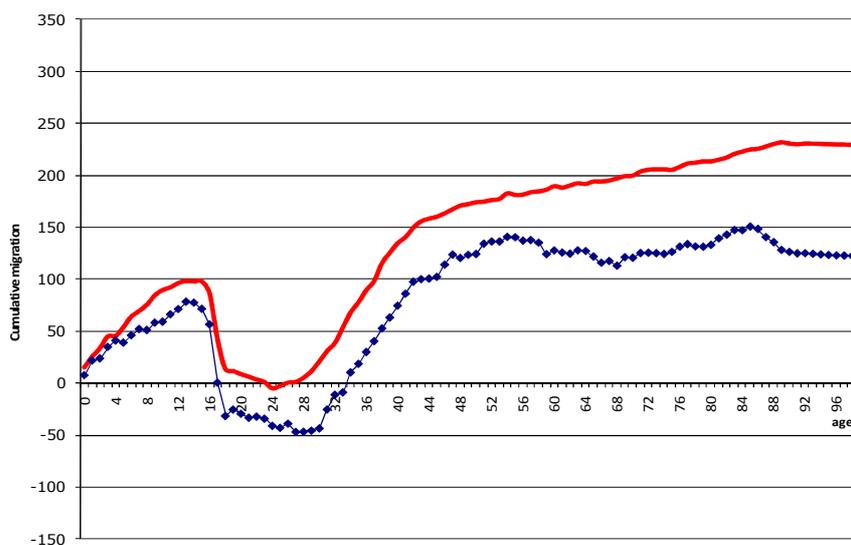
The steeper the curve, the higher the rate.

Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

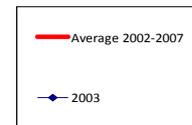
Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/Cairngormpro/cummig2

### Cumulative net migration by age



Deeside



**Interpretation**

In age ranges where the curve slopes upwards ( / ) there is net IN migration

In those where it slopes downwards ( \ ) there is net OUT migration

The steeper the curve, the higher the rate.

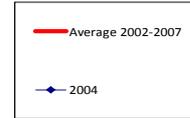
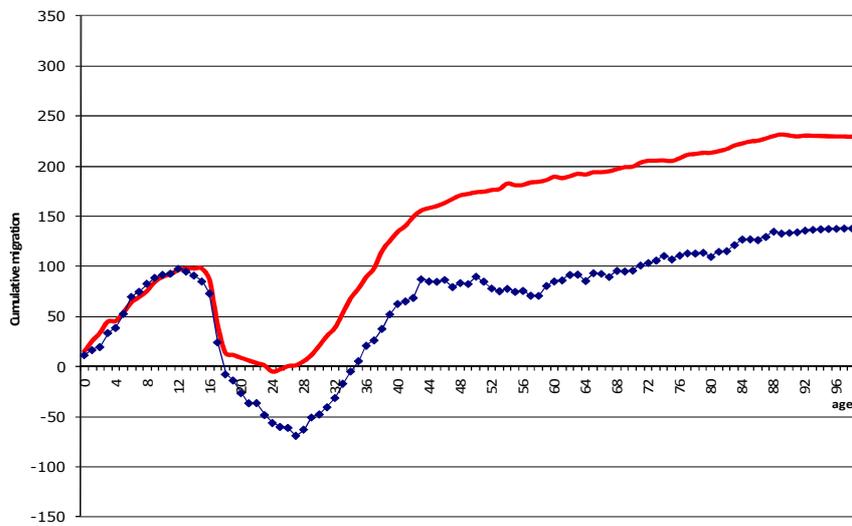
Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/Cairngormpro/cummig3

### Cumulative net migration by age

Deeside



**Interpretation**

In age ranges where the curve slopes upwards ( / ) there is net IN migration

In those where it slopes downwards ( \ ) there is net OUT migration

The steeper the curve, the higher the rate.

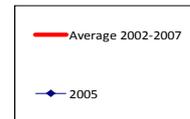
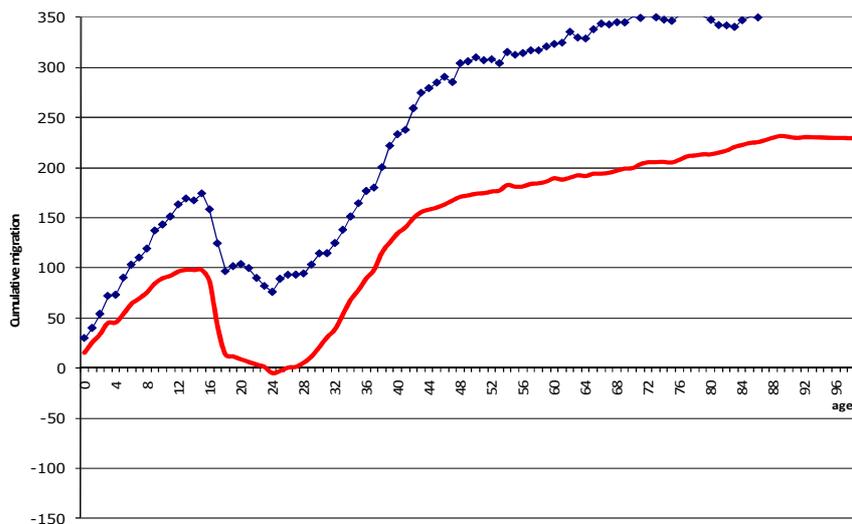
Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/  
Cairngormpro/cummig 4

### Cumulative net migration by age

Deeside



**Interpretation**

In age ranges where the curve slopes upwards ( / ) there is net IN migration

In those where it slopes downwards ( \ ) there is net OUT migration

The steeper the curve, the higher the rate.

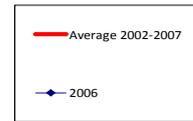
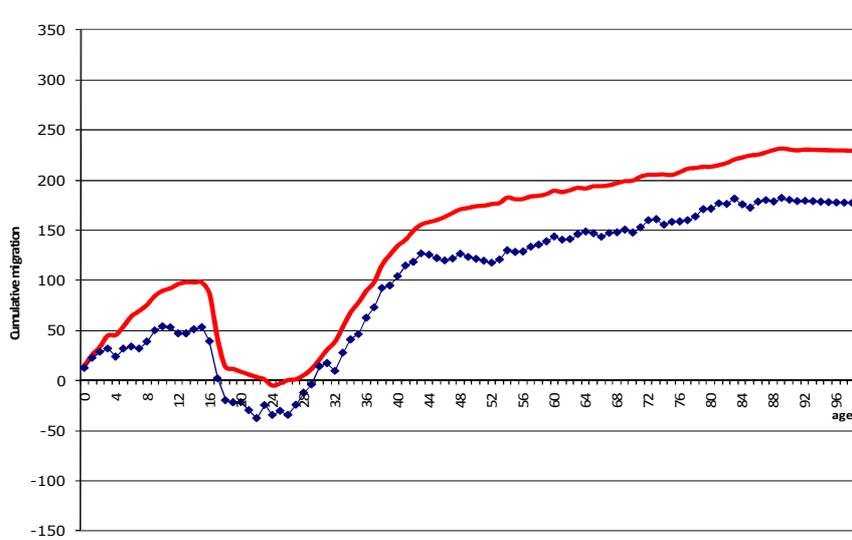
Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/  
Cairngormpro/cummig 7

### Cumulative net migration by age

Deeside



**Interpretation**

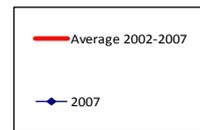
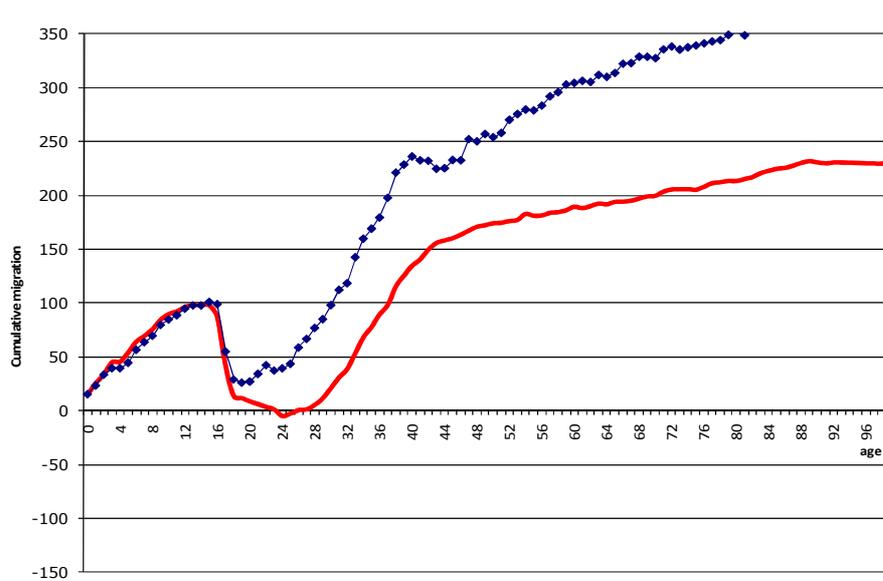
In age ranges where the curve slopes upwards ( / ) there is net IN migration  
 In those where it slopes downwards ( \ ) there is net OUT migration  
 The steeper the curve, the higher the rate.  
 Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/Cairngormpro/cummig 8

### Cumulative net migration by age

Deeside



**Interpretation**

In age ranges where the curve slopes upwards ( / ) there is net IN migration  
 In those where it slopes downwards ( \ ) there is net OUT migration  
 The steeper the curve, the higher the rate.  
 Where there is a corner in the curve the rate of migration changes. Where there is a peak or a valley the net direction of migration changes.

Source: General Register Office for Scotland

Ref: Z/Data/popn/Dreampeople/Cairngormpro/cummig 5

## Population drivers

Long term population drivers on Deeside, as elsewhere in Britain and most of the western world, are the gradual reduction in birth rates (which nationally dates back to the contraception advances and social changes of the 1960s) and the gradual increase in longevity as different fatal diseases are conquered or ameliorated and care systems improve. However these are common drivers, and at a local level their profound long term effect is swamped by changes due to labour markets and housing markets, which come to the surface through patterns of migration.

Looked at individually, the most striking feature of the Deeside migration patterns is the sudden loss of about 100 young people (net ) each year around age 17-18. The major factor driving internal population patterns in Scotland is the provision of higher education. This means that the places attracting young people are those where the government finances university and college places: Glasgow, Edinburgh, Aberdeen, Dundee, Stirling and St Andrews. Everywhere else is losing people, and especially rural areas.

Deeside does, however, lose more than most, and we suggest two particular reasons may be behind this: first of all the fact that so many young people have moved into Royal Deeside during their childhood: they are acclimatised to moving *per se*, and may be less psychologically and socially attached to the place. Secondly the proximity of Aberdeen (but the fact that it is beyond the level of commuting easily accommodated in a study-day) provides an ‘easy option’, particularly for the children of relatively prosperous families.

The other main drivers of population trends are likely to be housing and work. Recent research (Rabe & Taylor, 2010) shows that neighbourhood choice and work are very important for the location decisions of married migrants, and leaving the family home is by far the dominant event affecting migration for single people.

**Table 1 Net migration by age group**

	2002	2003	2004	2005	2006	2007	Mean	Std Devn
Newborn babies	14	8	12	30	13	16	15.1	7.6
Pre-school (1-5)	52	31	41	60	19	29	38.9	15.3
Primary age (6-10)	39	20	39	53	22	40	35.6	12.4
Secondary age (11-16)	- 13	- 3	- 19	15	- 15	14	-3.3	14.9
17-20	- 94	- 86	- 100	- 55	- 61	- 72	-77.8	18.2
21-30	- 8	- 14	- 21	11	36	71	12.2	35.3
31-45	144	144	131	170	107	134	138.4	20.5
46-64	11	20	- 6	41	24	74	27.3	27.7
65-79	4	- 8	6	11	17	34	11.0	14.2
80+	- 12	- 8	2	9	- 4	- 10	-3.9	7.8
Total	137	104	85	345	159	331	193.5	114.8

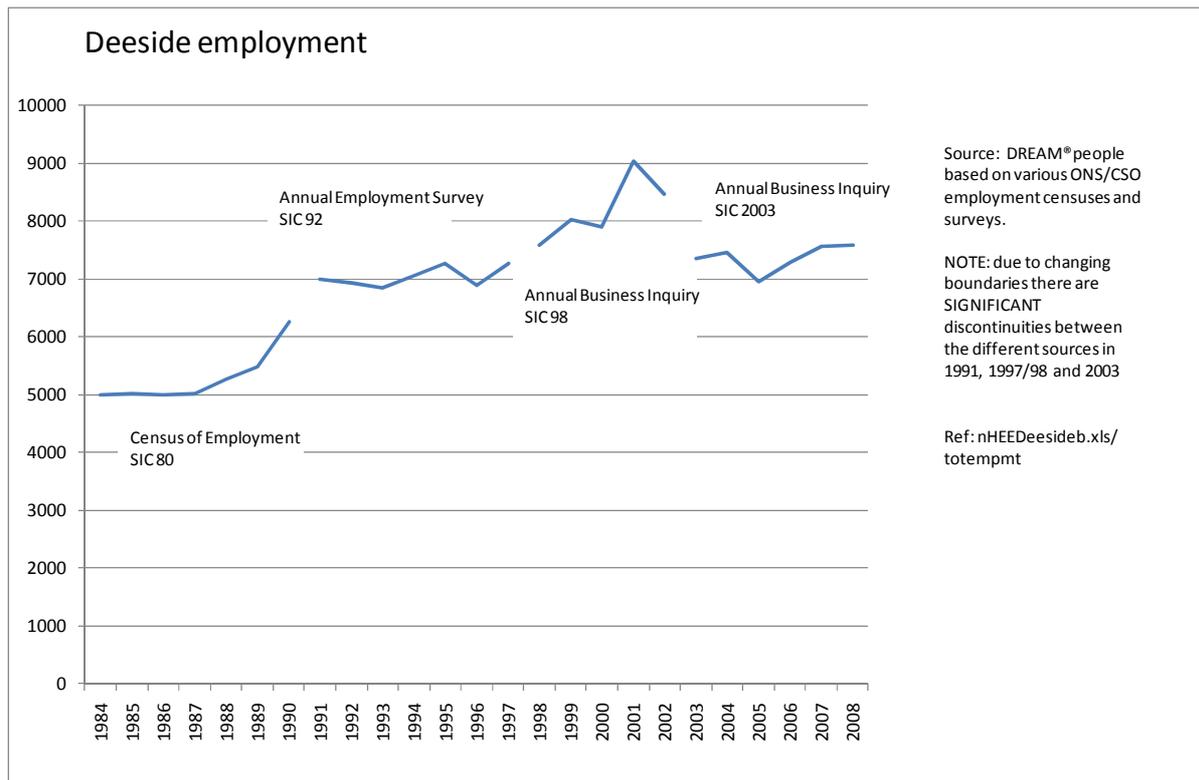
Source: DREAM®people Ref: Deesidepro2

# Working in Deeside

## Total numbers on the rise

The number of people working in Deeside has risen by about half over the past 30 years:

Figure 10 Employees in employment



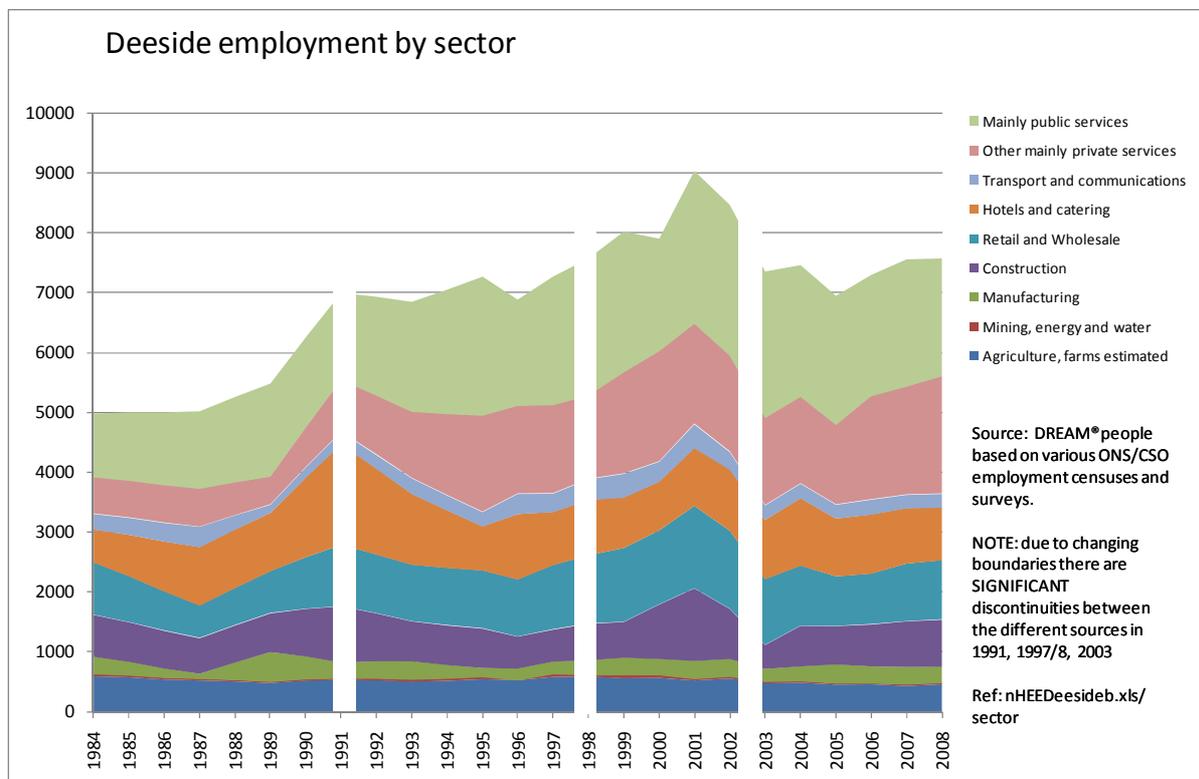
Although the chart suggests there may have been some decline from 2001 to 2003, this should not be taken as fully established, and may be the result of unavoidable geographical difficulties with the data. However the long term trend is for an increase of about 100 jobs per year, which is consistent with recent population growth of 200 per year.

There are, however, two important notes to the above:

1. The chart refers only to employees: the Census indicates that a very high percentage of people in the settlements of Royal Deeside are self-employed (Aboyne 11.1 per cent, Ballater 13.1 per cent and Banchory 7.8 per cent), so there are probably about 2000 self-employed people on Royal Deeside.
2. No reliable data has been made available for farm employment at a local level. As a rough approximation 10 per cent of the number of farm employees of Aberdeenshire have been added, a figure which declines from over 500 in 1984 to currently about 300. In addition there will be farm proprietors and their wives, probably also around 300 but with a much weaker downward trend.

## Services dominate sectoral employment growth

Figure 11 Employees by sector



This chart shows that the great majority of employment growth has been in the service sectors. Agriculture has declined, and the production industries are broadly constant. Construction has been characteristically erratic, and if 2001 was a peak year for jobs, then this was primarily the result of a building boom and surge in services.

Retailing and wholesaling have remained strong, while hospitality industries have fluctuated, with employment in their best year, 1991, more than double that in their worst, 2000. Transport employment has remained constant.

The fastest growth in employment in percentage terms has been private sector services, which have roughly trebled in employment terms. Public sector services, while they more than doubled between 1984 and the early years of this century, have now fallen back somewhat.

These trends are shown in the table on the next page and reviewed in more detail below.

Table 2 Employees by sector

Employee-jobs in Deeside										
	Agriculture, farms estimated	Mining, energy and water	Manufacturi ng	Constructio n	Retail and Wholesale	Hotels and catering	Transport and communica tions	Other mainly private services	Mainly public services	Total
1984	582	41	296	695	879	550	261	614	1069	4988
1985	567	38	228	661	768	691	287	624	1144	5008
1986	530	34	161	626	657	833	313	634	1219	5006
1987	513	30	94	592	546	975	339	644	1294	5025
1988	497	29	296	620	623	976	238	557	1425	5263
1989	469	29	498	648	701	977	138	471	1556	5488
1990	510	29	385	792	863	1332	171	671	1506	6260
1991	524	29	272	935	1026	1686	204	871	1456	7004
1992	516	34	293	798	985	1436	234	991	1649	6935
1993	494	39	314	661	944	1186	264	1110	1841	6853
1994	508	41	235	660	957	961	252	1363	2081	7056
1995	534	42	155	659	969	736	240	1615	2321	7271
1996	518	8	199	529	956	1092	338	1475	1775	6890
1997	569	54	219	532	1073	887	311	1478	2149	7272
1998	574	34	252	608	1144	927	350	1398	2294	7579
1999	553	55	294	596	1236	845	397	1699	2351	8026
2000	553	56	274	909	1236	814	336	1850	1879	7907
2001	514	32	307	1204	1383	967	403	1676	2549	9035
2002	546	37	298	835	1308	1025	295	1606	2524	8474
2003	468	30	217	399	1102	990	244	1461	2447	7358
2004	477	30	252	676	1004	1128	244	1454	2200	7465
2005	444	24	324	638	829	968	232	1337	2158	6954
2006	450	21	286	702	845	989	251	1732	2024	7300
2007	423	29	296	761	964	925	228	1811	2126	7563
2008	450	25	280	784	991	881	228	1969	1970	7578
Percentage shares										
1984	11.7%	0.8%	5.9%	13.9%	17.6%	11.0%	5.2%	12.3%	21.4%	100.0%
2008	5.9%	0.3%	3.7%	10.3%	13.1%	11.6%	3.0%	26.0%	26.0%	100.0%
Growth rates (continuous compounding)										
1984-2008	-1.1%	-2.1%	-0.2%	0.5%	0.5%	2.0%	-0.6%	4.9%	2.5%	1.7%
2002-2008	-3.2%	-6.5%	-1.0%	-1.1%	-4.6%	-2.5%	-4.3%	3.4%	-4.1%	-1.9%

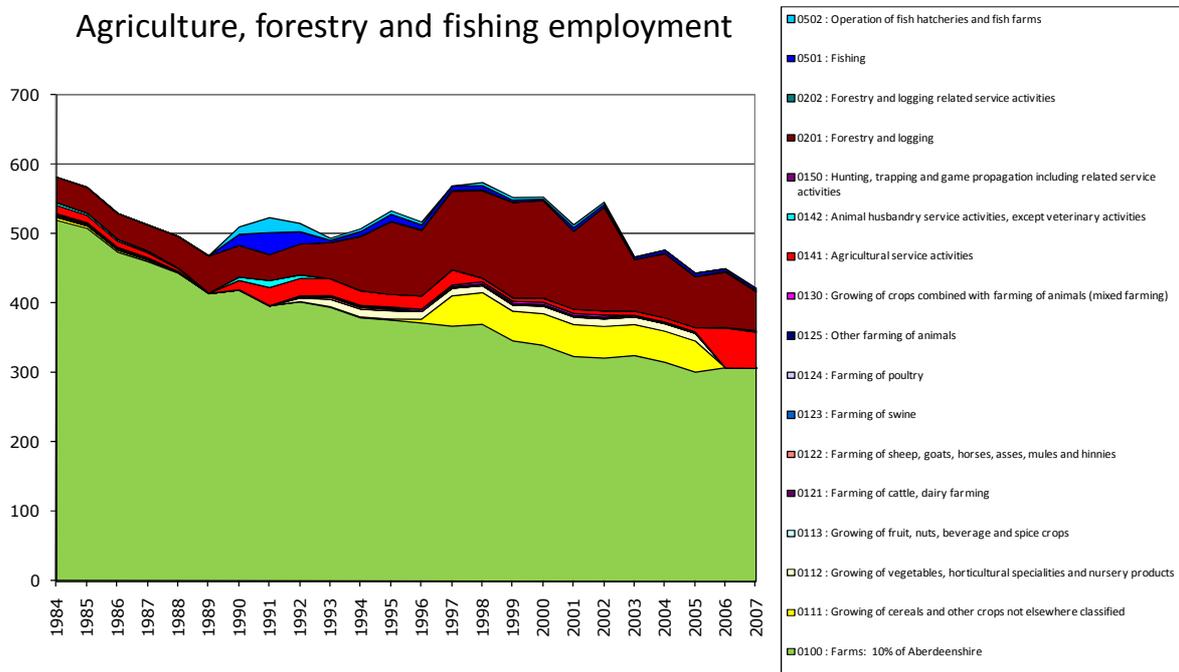
Source: DREAM® based on various ONS sources Ref nHEEDeeside B/verttot

These figures should be considered an indication of general trends. They have been grouped together from a very much larger data source which has been aggregated, linked over time and reclassified. Thus they aim to summarise more than 12 000 data items in a way that illustrates trends in the labour market without compromising the confidentiality of any individual employer).

The comments in the following section also aim to strike such a balance. In order to preserve confidentiality it is not possible to supply detailed charts with large captions.

## Agricultural sector: slow decline in jobs

Figure 12 Forest jobs flourish then fade as rising productivity drives down farming employment



The bulk of agriculture is not covered by the Annual Business Inquiry, and an assumption based on trends in Aberdeenshire as a whole has been made for this chart. At 6 per cent of employment agriculture is an unusually large sector of employment, compared with less than 1 per cent at GB level.

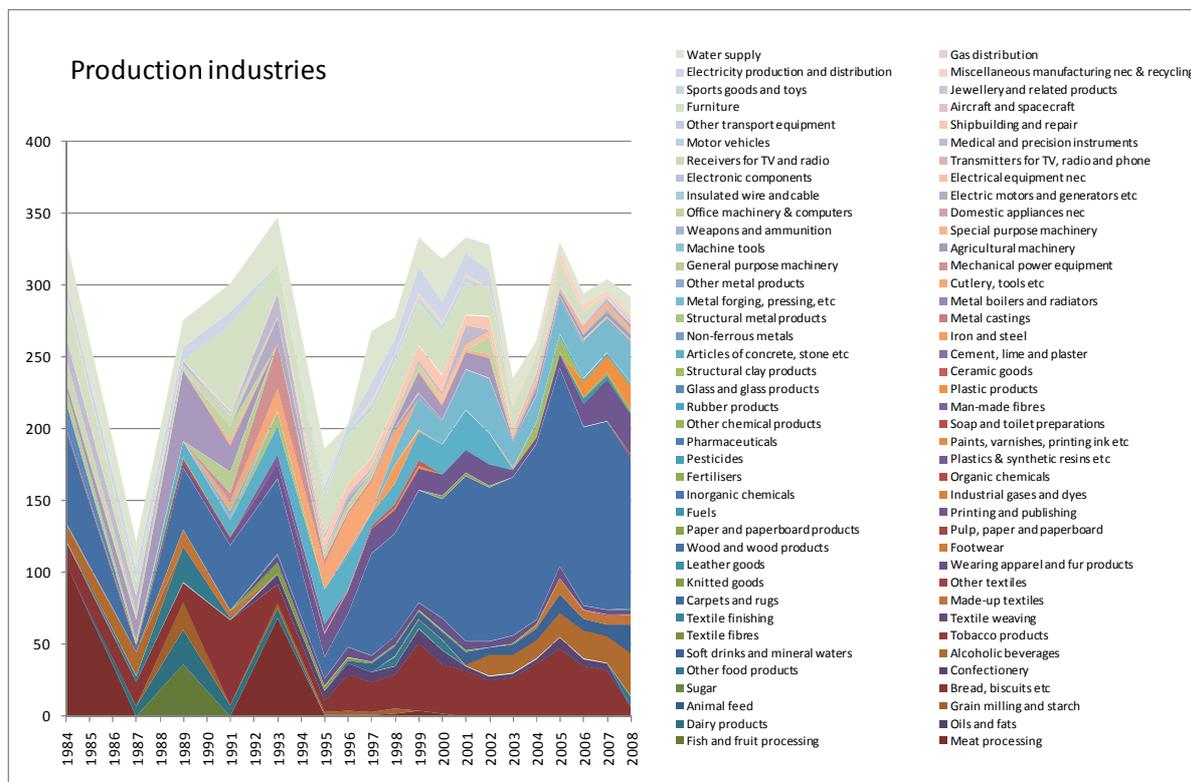
Increasing productivity leads to a fall in the demand for labour even when output is increasing. This falls predominantly on employees, as the typical farm is now operated by the farmer, their spouse, one or two employees if any, and contractors as required.

The area shown as yellow in the chart may be double counting, but there is no way of detecting this.

Forestry employment grew from around 50 in the 1980s to about 150 at the millennium, and has now fallen away to about 100. This broadly reflects the pattern of harvest activity, as harvesting is the most variable of forest industry activities. It too has shown significant productivity growth over the period.

## Production industries: about 250 jobs

Figure 13 Five sectors dominate production employment



Bakeries and other food processing, distilling, wood products, small metal working activities, and water supply are the main production industries. Their total employment has fluctuated around 250.

## Retail dominates the distribution sector

Figure 14 Distribution is three-quarters retail

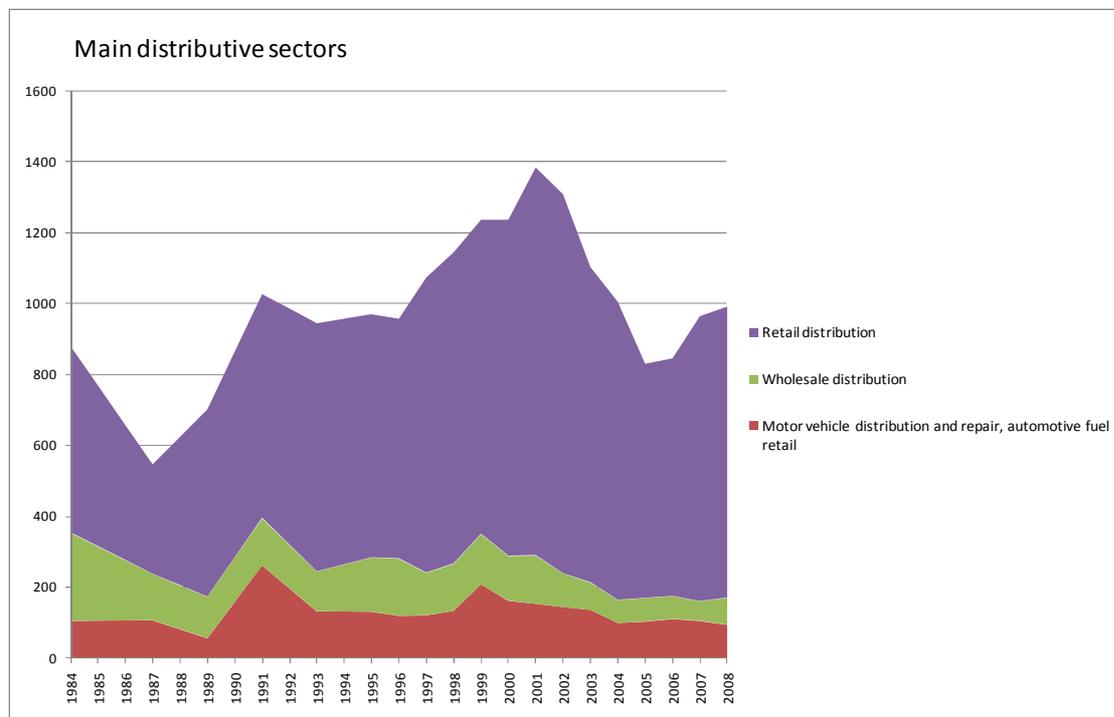
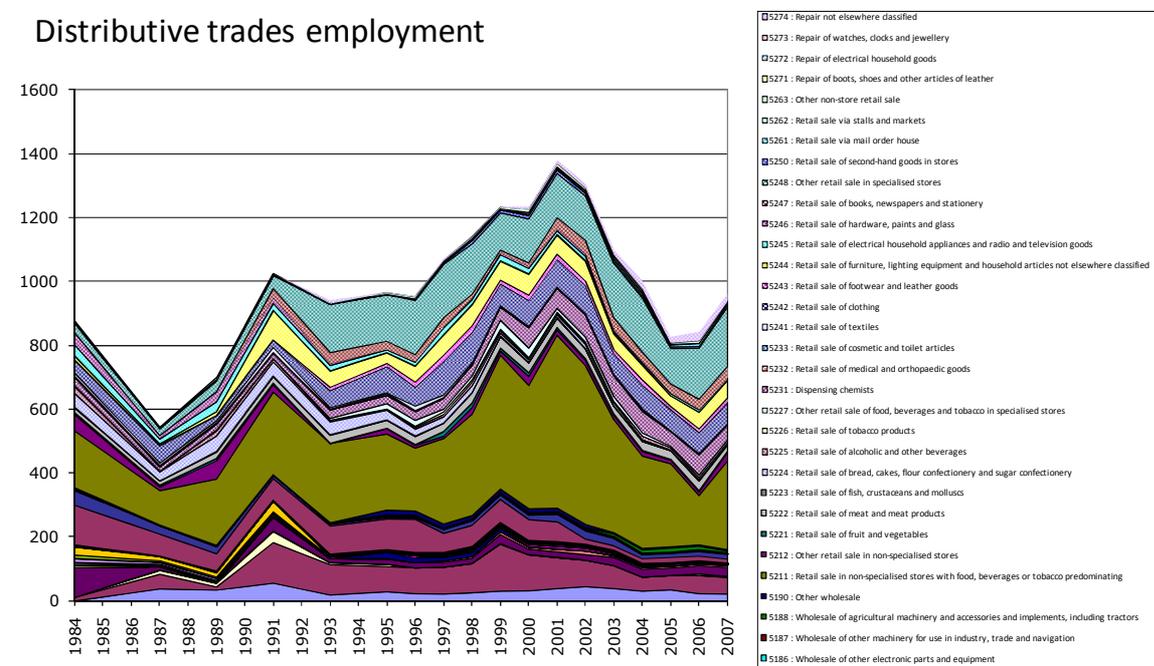


Figure 15 About half the retail sector is specialised

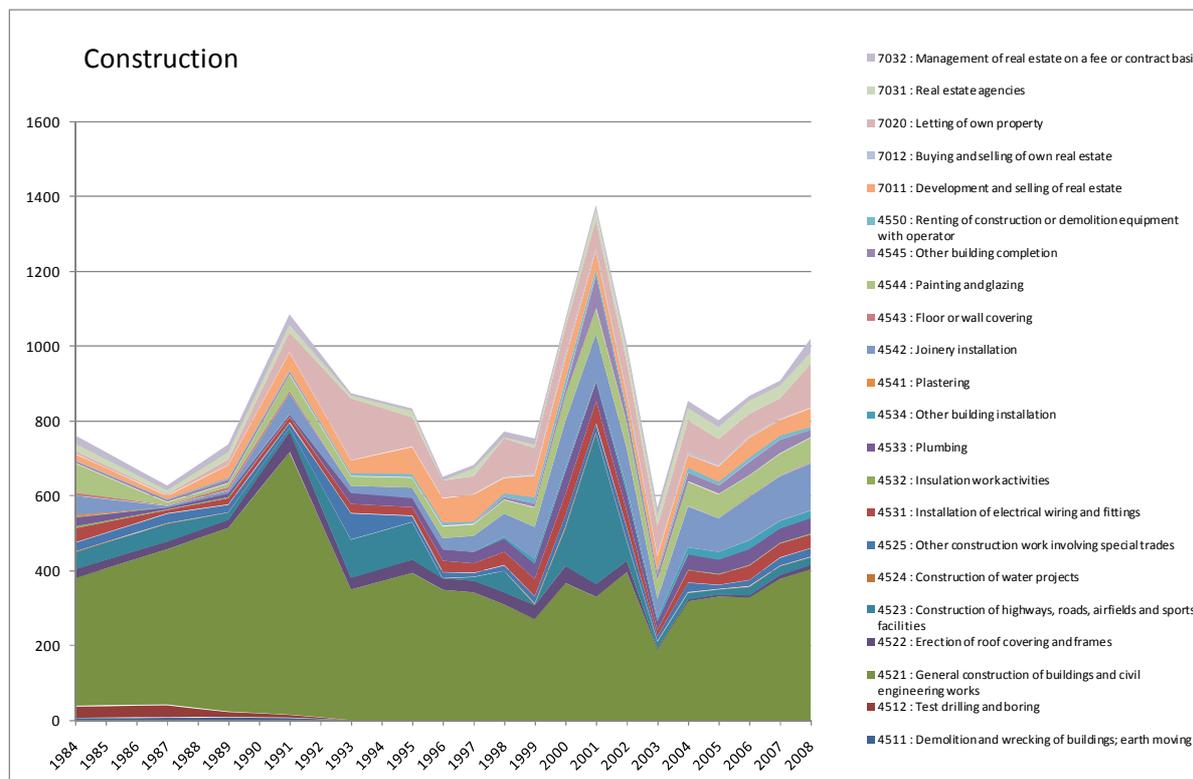


While the first chart illustrates the key role of retail, the second illustrates that about half of the sector consists of specialised shops – including, of course, most Royal Warrant Holders. Amongst wholesalers, wood merchants were historically important.

## Construction and real estate

In view of the rapid growth of the area, construction is an important sector on Deeside. Employment fluctuates, because it is a highly cyclical industry. The peak employment in 2001 is a consequence of very high reported employment in the highways construction sector.

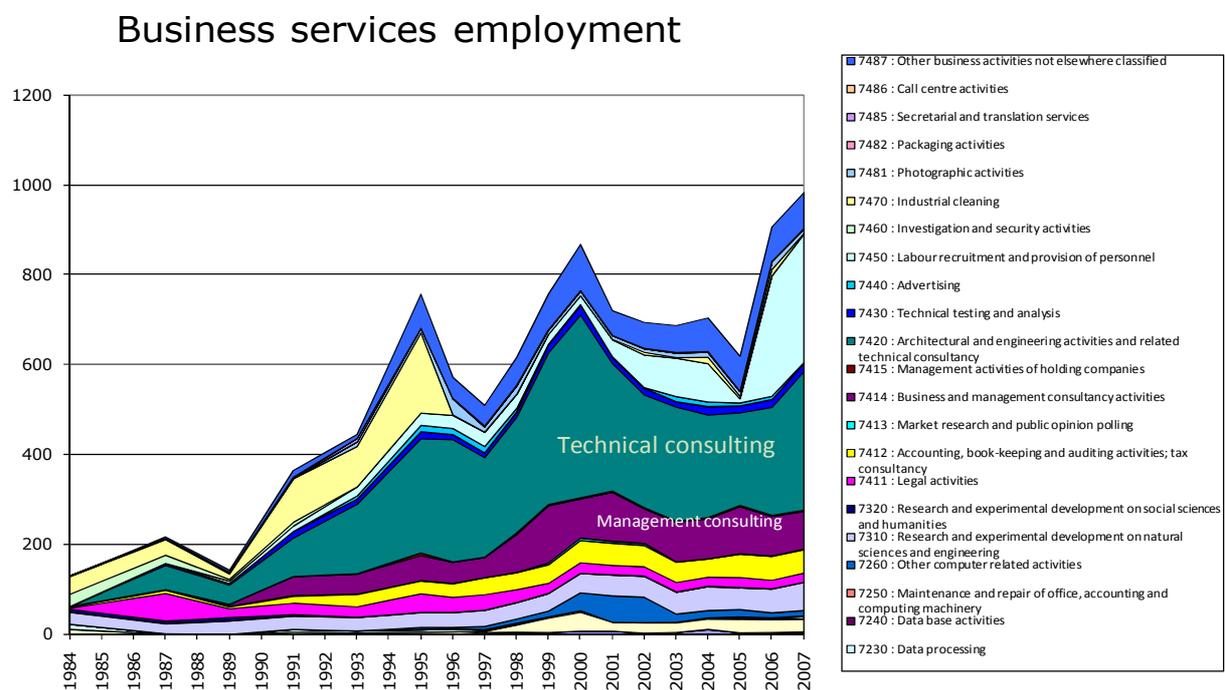
Figure 16 An average of 900 construction employees



## Private service sector

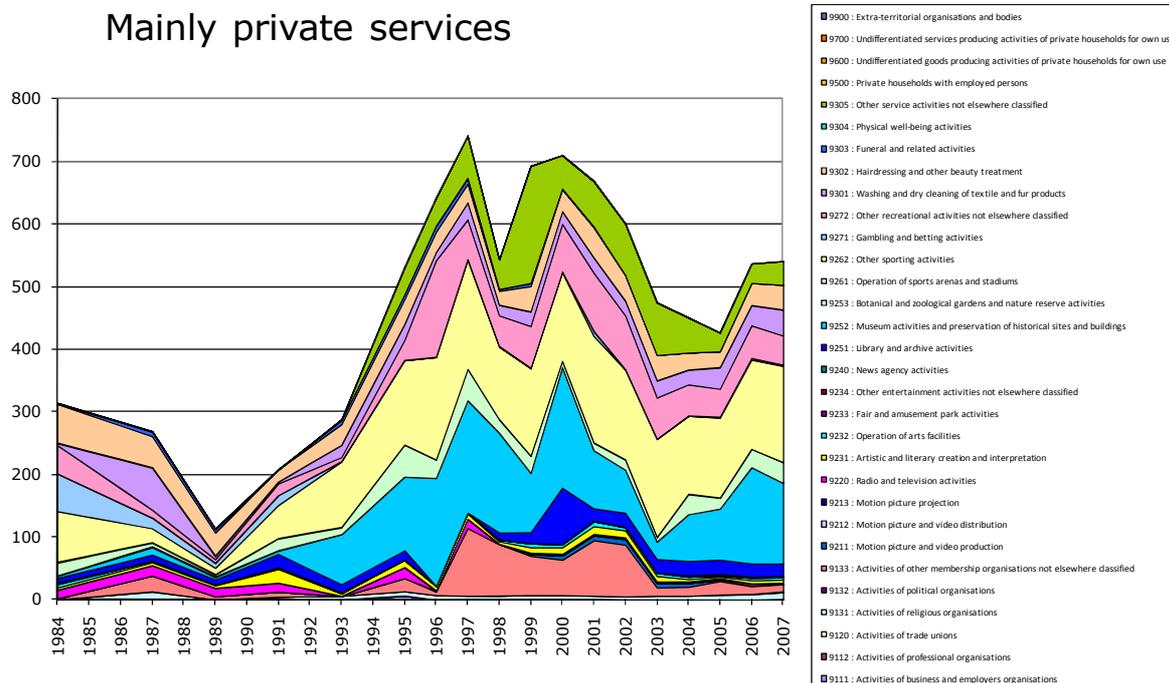
The growth of the private service sector brings home the reality of the growth of Aberdeen and development of energy industries. By far the fastest growing sector is technical consulting, followed by management consulting. In both of these fields Deeside is very much better represented than other rural areas of Scotland, and it is safe to assume that many of the services are actually delivered in Aberdeen or Edinburgh. Technical consulting has been growing at 9 per cent per year, especially through the 1990s, and the figures shown are consistent with a model where the oil and larger engineering and service companies downsize and outsource, and ex-executives and spin off businesses which are relatively mobile locate within reach of the city, but not on top of it.

Figure 17 Business services job growth averages 9 per cent per year



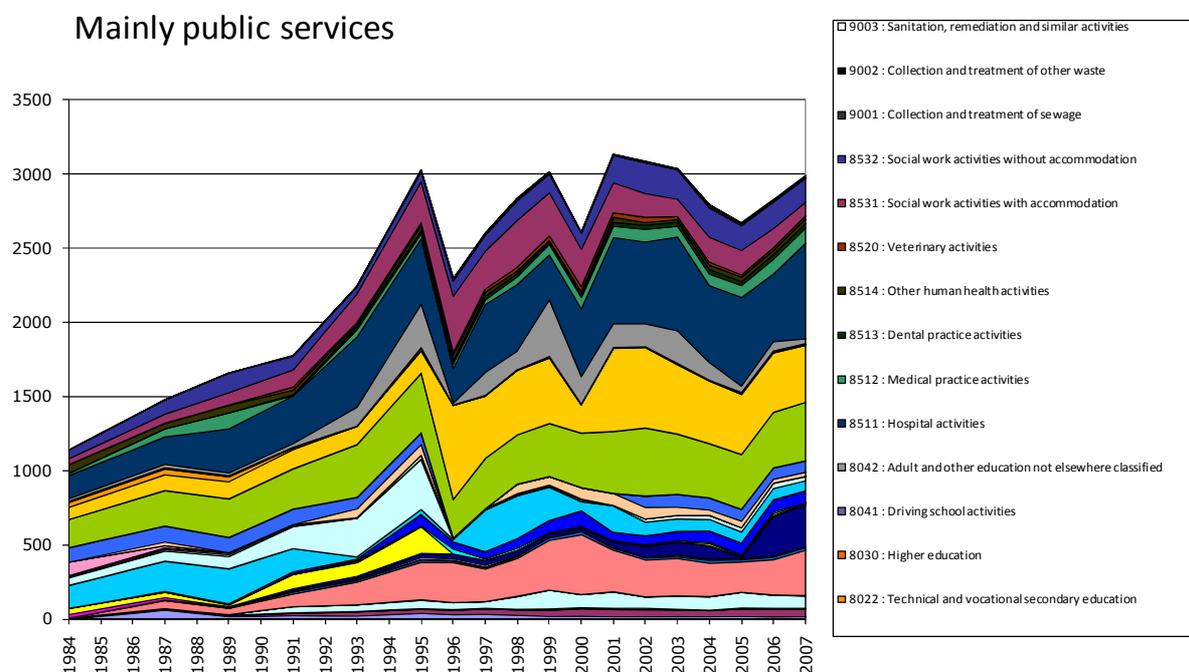
More personal private services have also been growing, although not as fast. The main sectors are museums, sporting and recreational services, as the graph on the following page shows.

Figure 18 – Private services - about 500 jobs



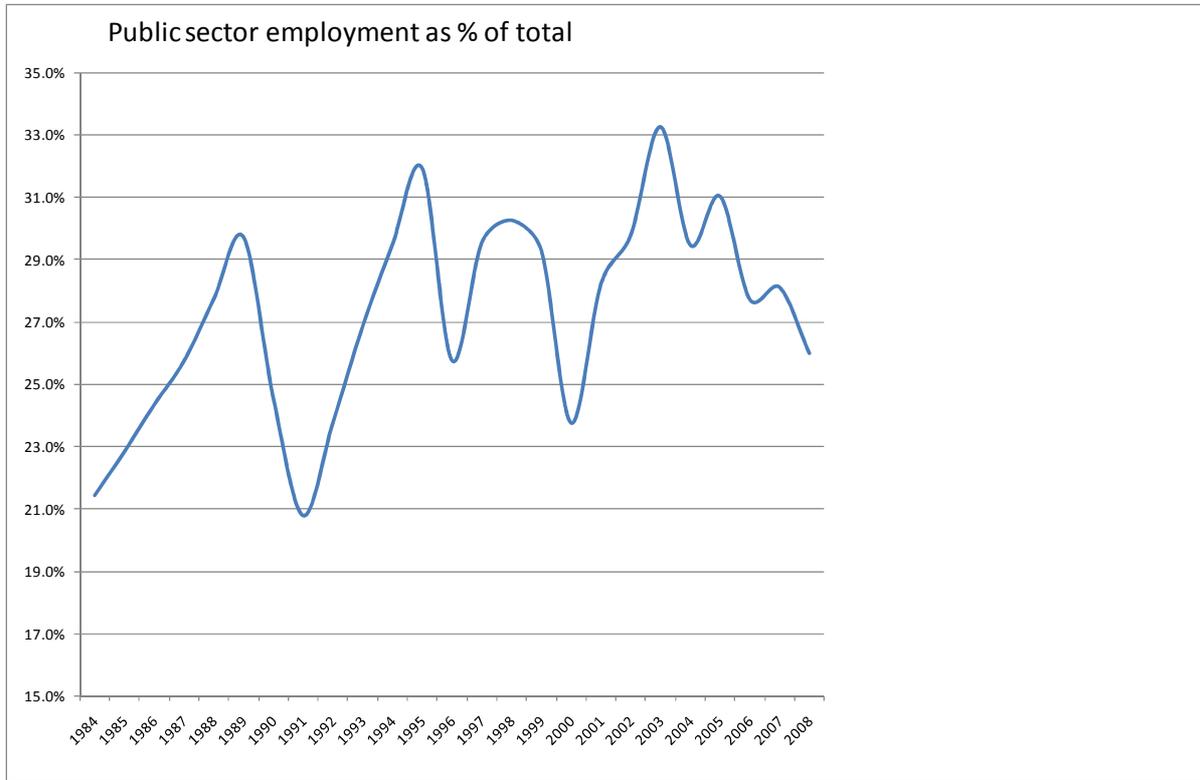
## Public services

Figure 19 Public service jobs grew from 1984 to 2001



Public services represent now rather more than a quarter of all employment, having been about a fifth in the early 1980s but rising to a third through the 1980s.

Figure 20 Public sector dominance rose in the 1980s and 1990s

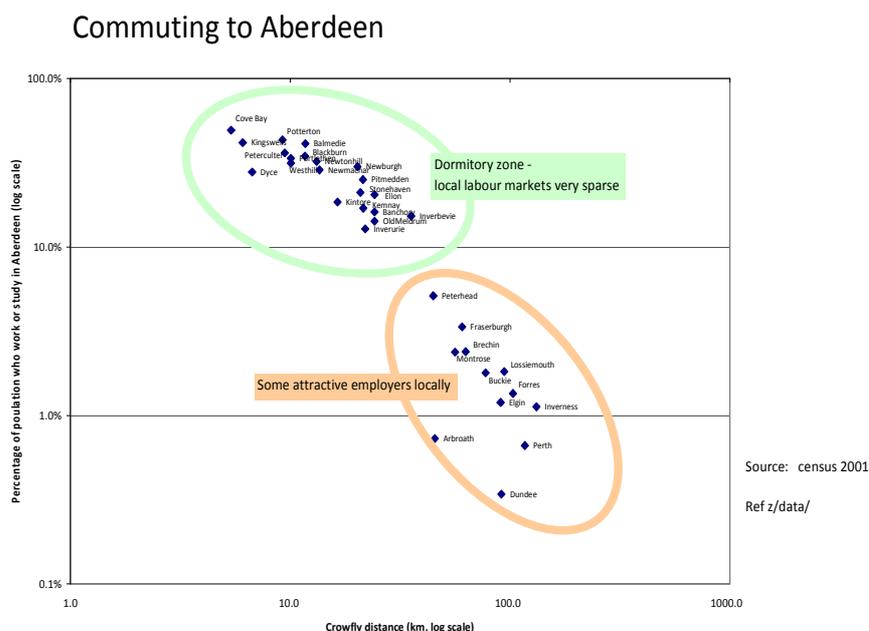


## Commuting and commuting income

The 2001 census of population figures can be used to provide an estimate of the level of commuting around Deeside.

As a small town, Ballater's economy is relatively narrow. Nevertheless it is 67 kilometres or 82 minutes by road from Aberdeen, a distance which places it on the edge of the normal catchment area for commuting. Figure 21 shows how the propensity to commute from Aberdeenshire places to Aberdeen depends primarily on how far away it is, but also on the range of other workplaces available. Conceptually most of Deeside falls into the green-ringed area - Aberdeenshire settlements which do not have a substantial diverse employment base of their own.

Figure 21 The Aberdeen commuting zone



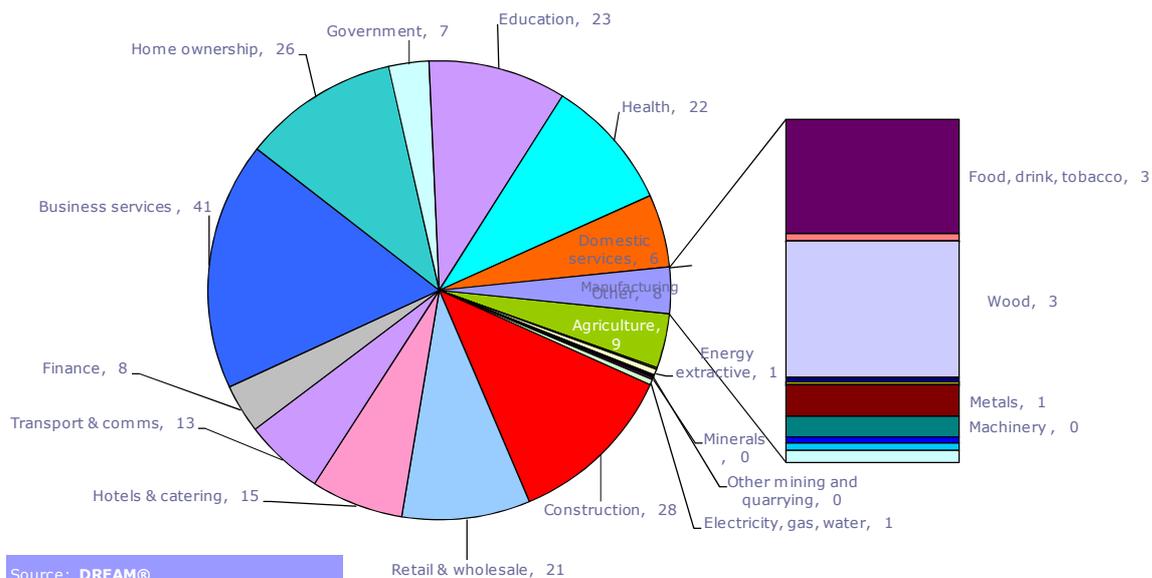
Ballater is the same distance from Aberdeen as Fraserburgh, which sends about 3.4 per cent of its population to work in the city. However, the local labour market in western Deeside is much smaller than on the north east coast. Banchory, which is less than half the distance from Aberdeen of Ballater, sends around 100, or 16 per cent of its population to work in the city. Taking a figure of seven per cent, we would estimate that about 100 people are likely to commute from Ballater and taking a figure of ten per cent about 200 from Aboyne, a further 100 might be added from other places, based on the trade-off between distance and commuting numbers found in Aberdeenshire. Inflows are likely to be much smaller, probably of the order of 100 individuals. Thus net commuting is probably about 2000 or slightly less, but this figure is highly dependent on where one draws the eastern boundary of Deeside. Nevertheless, because commuting jobs tend to be highly paid, it is likely that a quarter to a third of household earned incomes come from outwith Deeside itself.

# The economy of Deeside

## Value added structure

Figure 22 Structure of the Deeside economy

Gross Value Added 2004 Total £237 mn Deeside



Source: DREAM®  
REF: PiefromTT.xls/Pie (Year)

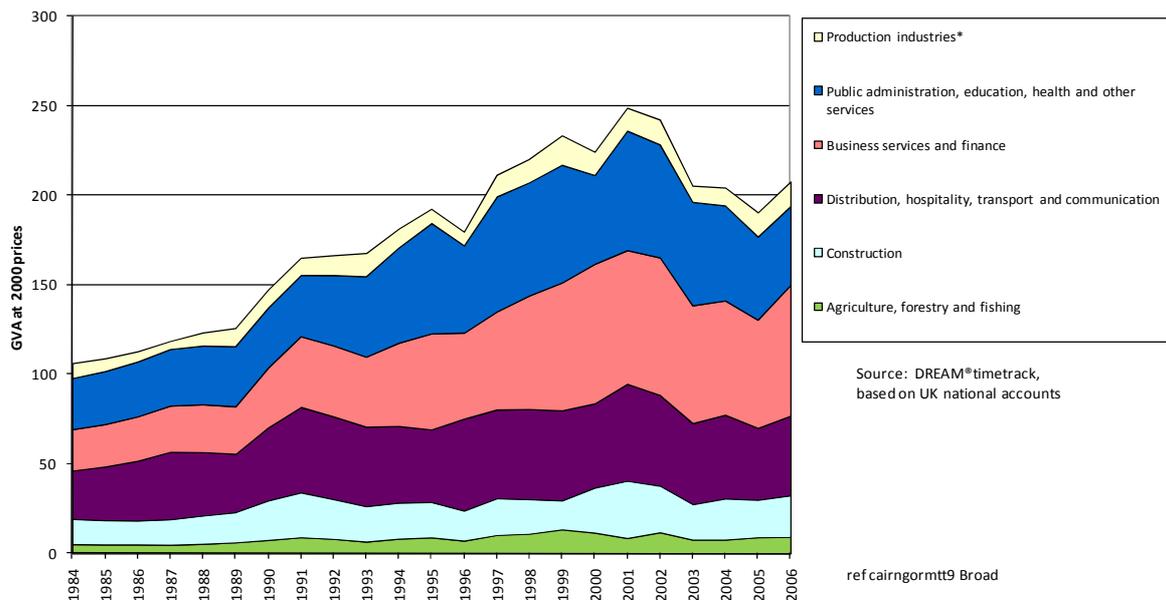
Eighty per cent of the value added generated in the Deeside economy is generated by services, and most of what is left comes from construction. Less than 8 per cent comes from the production of tradable goods.

## Real growth at a rapid rate

Value added itself grew at a spanking rate of 5 per cent per year in real terms from 1984 to 2001. There were minor faltering s in 1996 and 2000, but no real recession:

Figure 23 Growth of real GDP

### Deeside Real GVA



Since 2001 it has declined by 15 per cent in real terms, mainly as a consequence of public sector shrinkage (notably in education) but also of reduced margins in the distributive trades of reatiling and wholesaling, reduced construction ouptut, and lower haulage receipts. Nevertheless, growth since 1984 has average 3 per cent per year, which is almost half as fast again as the UK economy.

## Distinctive sectors

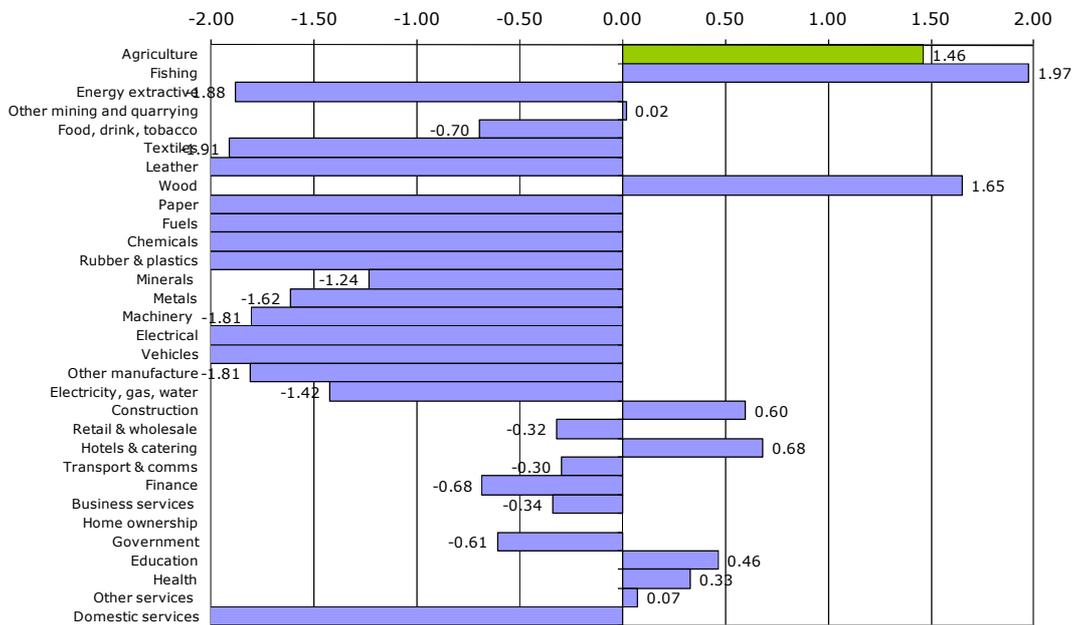
The small activity recorded for fish nurseries and farms are sufficient to make the fish industry the most distinctive on Deeside in GVA terms, but of course it would be miniscule in almost every other part of the UK<sup>1</sup>. In terms of difference from British norms this sector is followed by wood processing and then agriculture, hospitality, construction, education and health. Miscellaneous services and mining are represented close to normal levels, but no other broad sector is remarkable.

<sup>1</sup> Productivity in this sector is assumed at the Aberdeenshire average, and may therefore have been over estimated because of the role of the North east sea fishing industry which is highly productive.

Figure 24 Salient sectors in the Deeside economy

Distinctive sectors

Deeside





Cogent Strategies International Ltd  
Killylung House Holywood  
DUMFRIES DG2 0RL

Tel 01387 720462

Report prepared for Cairngorms National Park Authority,  
Highlands and Islands Enterprise and Scottish Enterprise



Cairngorms National Park Authority  
14 The Square  
Grantown on Spey PH26 3HG

Tel: 01479 873535