

Futureskills Scotland

The Scottish Labour Market 2003

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1. OBJECTIVES

PURPOSE OF THE REPORT

This is the second edition of The Scottish Labour Market. It updates the key statistics presented in the 2002 report but is much less concerned with describing detailed trends and developments. Most of the document focuses on four issues:

- Projections of Scotland's labour requirements to 2007;
- The main conclusions of Futureskills Scotland's survey of employers in 2002;
- Results from research into employability; and
- A review of popular myths about Scotland's labour market and the facts that contradict them.

ABOUT FUTURESKILLS SCOTLAND

Futureskills Scotland is part of Scottish Enterprise and Highlands & Islands Enterprise. It:

- Analyses the Scottish labour market, to inform policy making;
- Works to improve the availability, quality and consistency of labour market information and intelligence across Scotland; and
- Works closely with Careers Scotland to provide the organisation and its clients with labour market information.

This work is directed at a wide range of users, from beginners to experts. An effort is made to present analysis in a user-friendly, clear and accessible manner, using robust and reliable information.

FURTHER INFORMATION

Futureskills Scotland's website contains a comprehensive range of information about Futureskills Scotland, its publications and data, including:

- All reports published by Futureskills Scotland
- Online data access, delivered with the easy to use LMI toolkit
- Details of Futureskills Scotland's work plan and latest news

The address is: www.futureskillsscotland.org.uk

2. LABOUR MARKET UPDATE

KEY POINTS

This section provides a brief update of labour market indicators and trends. Among the key figures are:

- There were 2,376,000 people in employment in Scotland in 2002.
- Employment has grown over the past decade, though Scotland's growth has lagged behind the British rate. The average annual employment growth rate in Scotland between 1992 and 2002 was 0.3 per cent, against 0.9 per cent for Britain as a whole.
- Most employees are in full-time, permanent jobs.
- The average Scottish employee has been in post for eight years and four months.
- Service industries account for 79 per cent of Scottish employees.
- Scotland's occupational profile is very similar to the UK's, although with a slightly lower share of employees at managerial and other senior levels.
- Skills shortages are not an extensive problem in Scotland. Skill gaps are much more common
- Scottish wages lag seven per cent behind the British average.
- The population is slowly reducing in number, and the average age is rising. In 2003, the average age was 38.7 years: by 2025 it is forecast to be 41.2 years.
- Scotland's economic activity rate (78.5 per cent) is similar to the British rate. The employment rate (73.1 per cent) is slightly lower than for Great Britain as a whole (74.6), but has increased in recent years.
- Scotland's unemployment rate has much reduced in recent years, and stood at 6.8 per cent in 2002.
- Sixteen per cent of the working age population have a degree, or equivalent highest qualification. This represents an increase from 11.5 per cent in 1997 and translates into a 151,000 (or 42%) increase in numbers of working age individuals holding degree or equivalent as their highest qualification.
- Scotland's working age population is markedly better qualified than the UK average.

There were 2,376,000 people in employment in Scotland in 2002.

INTRODUCTION

The *Scottish Labour Market 2002* examined a wide range of labour market indicators. The section that follows provides a brief update on the more important of these and highlights some key trends in the labour market.

Major revisions to data sources

Analysis of the 2001 census results has prompted widespread revisions of datasets relevant to this report. Those relating to population projections, and data from the Labour Force Survey have been particularly affected. The figures that follow are as up to date, and as consistent, as it is possible to make them.

DEMAND

Who is employed?

Employment in Scotland peaked in 2001 (**Figure 1**). Latest estimates indicate only a very slight decline in 2002.

- There were 2,376,000 people in employment (including the self-employed) in Scotland in May 2002. This represented 8.6 per cent of Great Britain employees.
- Of these, 47 per cent were female, and 53 per cent male.
- Over the past ten years, female employment has been increasing, with male employment stable.
- Even though female employment is increasing, 42 per cent of women employees work part-time, compared to 9 per cent of male employees. Women work an average of 27.4 hours per week, men 38.5.
- The age structure of employees in Scotland is broadly in line with the Great Britain position (**Figure 2**), though Scotland has proportionately more workers aged over 35. Overall, the average age of the workforce is rising in Scotland and Great Britain alike.

Recent performance

Figure 3 represents the level of employment, indexed to 1992=100. It confirms that the rate of growth lagged behind the Great Britain average in the ten years to 2002. Scotland's growth rate for 1992 to 2002 averaged 0.3 per cent per year, compared with 0.9 per cent per year for Great Britain as a whole.

Scottish Employment has grown over the past decade, but at a slower pace than the Great Britain average.

The average Scottish worker has held his or her present job for eight years and four months.

Patterns of work

The vast majority of Scottish employees work in full-time, permanent jobs.

- Part-time employment has made up the bulk of employment growth, up 14 per cent since 1992 while full-time employment has risen by just 1 per cent.
- A quarter of Scottish employees now work part-time. Only 17 per cent of them would prefer to work longer hours, and just 11 per cent are working part-time because they were unable to find full-time jobs.
- 77 per cent have been in post for more than one year.
- The average employee in Scotland has been in his or her present job for 100 months, or eight years and four months.
- About two thirds (66 per cent) of employees who leave their jobs, do so voluntarily.
- 134,000 temporary workers made up 6 per cent of all in employment in 2002. 40 per cent of temporary workers were in that position because they could not find permanent work.
- 226,000 Scots were self-employed in 2002, making up 10 per cent of all in employment. Self employment remains at a similar level to previous years.

FIGURE 1

Total employment in Scotland 1992 to 2002
Source: Labour Force Survey, Spring Quarters

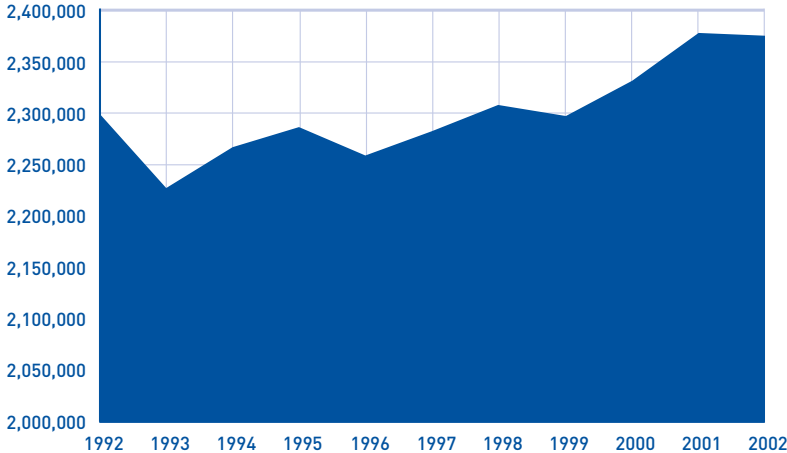


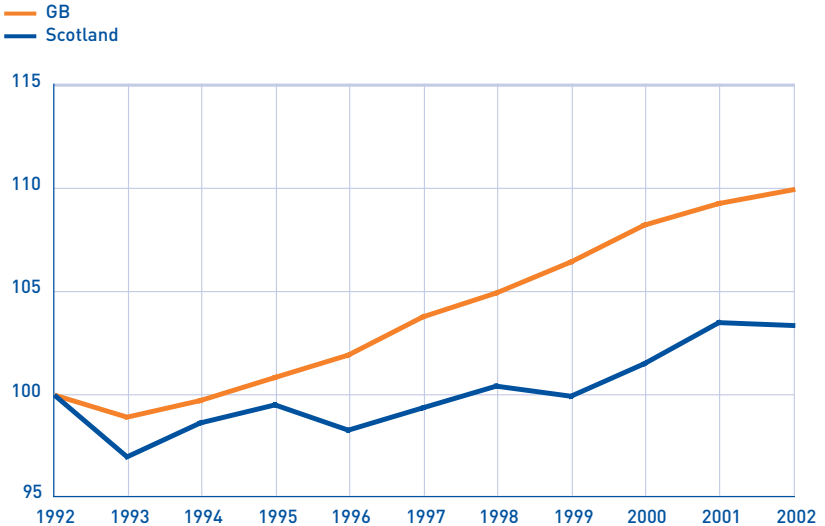
FIGURE 2

Age structure of people in work in 2002 and 1992 for Scotland and Great Britain
Source: Labour Force Survey, Spring Quarters

	Scotland		GB	
	% total 2002	% total 1992	% total 2002	% total 1992
% aged 16-19	5.9	6.9	5.3	6.0
% aged 20-24	9.3	11.6	8.8	11.2
% aged 25-34	23.1	26.4	23.6	26.0
% aged 35-49	39.0	34.4	37.8	35.6
% aged 50+	22.6	20.7	24.4	21.2

FIGURE 3

Total employment Scotland and Great Britain 1992 to 2002, 1992=100.
Source: Labour Force Survey, Spring Quarters



Nearly 80 per cent of Scots now work in the service sector.

Scotland's occupational profile is broadly similar to the rest of GB, though the Scottish workforce has slightly fewer people at senior or managerial level.

Skill shortages are not an extensive problem in Scotland.

Employment by industry

Service industries are by far the biggest employers in Scotland, accounting for 79 per cent of jobs. Within the sector, the distribution of jobs in 2001 was as follows:

- Public sector services 619,000 jobs, or 27 per cent of total jobs
- Wholesale/retail trade; repair, etc 372,000 (16 per cent)
- Business services 395,000 (17 per cent)

Manufacturing's share of the total jobs continues to fall, and now amounts to 13 per cent of the total (294,000 jobs). The structure of employment in Scotland differs from that of Great Britain as a whole in several respects (Figure 4). Public services account for a larger share of jobs in Scotland, as do construction, hotels & restaurants, mining & quarrying and agriculture. Lower shares of Scottish jobs are taken up by business services, retail and manufacturing.

Employment by occupation

The occupational profile of Scotland's workforce is represented in Figure 5 by total numbers and share of overall employment.

- Scotland's employees are distributed across the whole range of occupations.
- Growth has occurred in professional occupations between 2001 and 2002. Labour Force Survey sampling errors prevent any other firm conclusions about further changes in occupational employment being drawn.
- Scotland's occupational profile is very similar to that of the rest of the UK, though with a slightly lower share of managers and senior officials.

Section 3 discusses long-term occupational trends in employment.

Turnover, recruitment and skill shortages

In 2002, Futureskills Scotland filled a major gap in understanding about the demand side of the Scottish labour market by conducting a comprehensive employer skill survey, **Skills in Scotland: The Employers View**. This covered human resource issues like recruitment, vacancies, skill shortages and labour turnover. Key findings included:

- Skills issues were a middle-ranking issue for employers in 2002.
- The labour market is generally effective at filling vacancies.
- There were 65,000 vacancies, of which 29,000 were hard to fill. Only 12,000 vacancies were said by employers to be hard to fill because applicants lacked appropriate skills, qualifications or experience.
- The 12,000 skill shortage vacancies were a modest total when judged against 65,000 vacancies and 2.1 million employees. Skill shortage vacancies were equivalent to just 0.6 per cent of jobs and 18 per cent of vacancies.
- A skills gap exists when an employee is judged by the employer to be not fully proficient. One in six workplaces had at least one skills gap. 133,000 employees had a skills gap, equating to six per cent of all employees.
- Many skill gaps are transitory. The most frequently cited cause was that "people had not been in the job long enough". The second most cited cause was "insufficient training and development for staff". The third most cited cause was that "training programmes were only partially completed".
- Skill shortages and gaps, where occurring, were reported to have had serious effects including difficulties:
 - meeting customer service objectives;
 - meeting quality standards;
 - introducing new work practices; and
 - with increased operating/running costs.

- Average turnover across the workforce is 21 per cent (Figure 6). In the 12 months prior to June 2002, 439,000 employees were recruited and 395,000 employees left jobs.
- There are wide variations in turnover rates between industries, running from 8 per cent in public administration to 46 per cent in hotels and restaurants. Recent trends, and projections, in employee demand can be found in Section 3. More detailed findings from Skills in Scotland 2002 are presented in Section 4.

FIGURE 4

Employment by industry in 2001

Source: ABI

Industry	Scotland		% share of total employment GB	
	No.	%	No.	%
Agriculture, hunting and forestry	33,000	1.4	238,000	0.9
Fishing	6,000	0.3	10,000	0.0
Mining and quarrying	25,000	1.1	71,000	0.3
Manufacturing	294,000	12.7	3,603,000	14.2
Electricity, gas and water supply	19,000	0.8	138,000	0.5
Construction	116,000	5.0	1,149,000	4.5
Wholesale/retail trade; repair, etc	372,000	16.1	4,518,000	17.7
Hotels and restaurants	170,000	7.3	1,657,000	6.5
Transport, storage and communication	130,000	5.6	1,558,000	6.1
Financial intermediation	101,000	4.4	1,050,000	4.1
Real estate, renting, business activities	295,000	12.8	3,946,000	15.5
Public admin/defence; social security	147,000	6.4	1,320,000	5.2
Education	186,000	8.0	2,130,000	8.4
Health and social work	286,000	12.4	2,738,000	10.8
Other community, social/personal service	130,000	5.6	1,330,000	5.2
Total	2,309,000	100.0	25,456,000	100.0

FIGURE 5

Total employment 2002 and employment change 2001 to 2002

Source: Labour Force Survey, Spring Quarters

Occupation	Total employment 2002	% share of total employment	
		Scotland	GB
Managerial and senior official occupations	292,000	12	14
Professional occupations	293,000	12	12
Associate professional and technical occupations	302,000	13	13
Administrative and secretarial occupations	312,000	13	13
Skilled trades occupations	280,000	12	12
Personal service occupations	176,000	7	7
Sales and customer service occupations	198,000	8	8
Process, plant and machine operatives	210,000	9	9
Elementary occupations	305,000	13	12

FIGURE 6

Number of recruits and leavers, and calculated turnover rates by industry in 2002

¹ Turnover is calculated as follows: [(number of leavers in last 12 months plus number of recruits in last 12 months)/(2x stock of employees 12 months ago)] x100.

Source: Skills in Scotland 2002

Industry	Number of recruits in past 12 months	Number of leavers in past 12 months	Turnover rate ¹
Agriculture, hunting & forestry	4,500	4,100	21
Fishing	800	800	19
Mining & quarrying	5,400	3,500	15
Manufacturing	38,200	46,300	15
Construction	21,100	19,100	19
Wholesale & retail	87,300	85,500	25
Hotels & restaurants	89,300	78,900	46
Transport, storage & communication	19,800	17,900	20
Financial intermediation	13,900	9,300	13
Real estate & activities	63,900	49,800	22
Public administration & defence	10,800	8,100	8
Education	14,000	9,200	9
Health & social work	45,400	37,800	16
Other service activities	23,900	23,700	22
Total	439,200	395,000	21

Scottish wages lag by seven per cent behind the Great Britain average.

Incomes

The median is the middle point of any range of numbers, so the median wage is the amount in the middle of the entire range of wages. If someone earns the median wage, half of earners receive more, and half receive less.

Medians are a more useful measure of the typical wage than the 'average' or 'means'. That is because the presence of relatively few high wage earners can inflate the average beyond what most people earn.

Wages in Scotland are lower than the average level across Great Britain (Figures 7 and 8).

- The median gross weekly earnings in Scotland are £277 (UK: £297)
- The median gross weekly earnings for Full time employees in Scotland are £330 (GB: £356). Scottish full time earnings are 7 per cent lower than the GB average.
- The median weekly earnings for Scottish part-time workers are £100 per week (GB: £103)
- Scots earned an hourly median rate of £7.27, compared to £7.70 across the UK.

There is a gender gap in earnings. The gross median weekly wage for full-time women in employment averages £288, 79 per cent of the male equivalent of £366. This gender pay gap is slightly lower for the UK as a whole, where female median full time weekly earnings are 76 per cent of male earnings.

Wages can vary markedly across industries (Figure 9) and occupations (Figure 10). The variation in wages across occupations is one example of the benefits people can earn from investing in their skills.

FIGURE 7

Median weekly earnings for Scotland and the UK in 2002

Source: Labour Force Survey, 2002

	Scotland			GB		
	Full-time	Part-time	Total	Full-time	Part-time	Total
Male	£366	£80	£346	£390	£81	£370
Female	£288	£105	£217	£298	£110	£216
Total	£330	£100	£277	£356	£103	£297

FIGURE 8

Median hourly earnings for Scotland and the UK in 2002

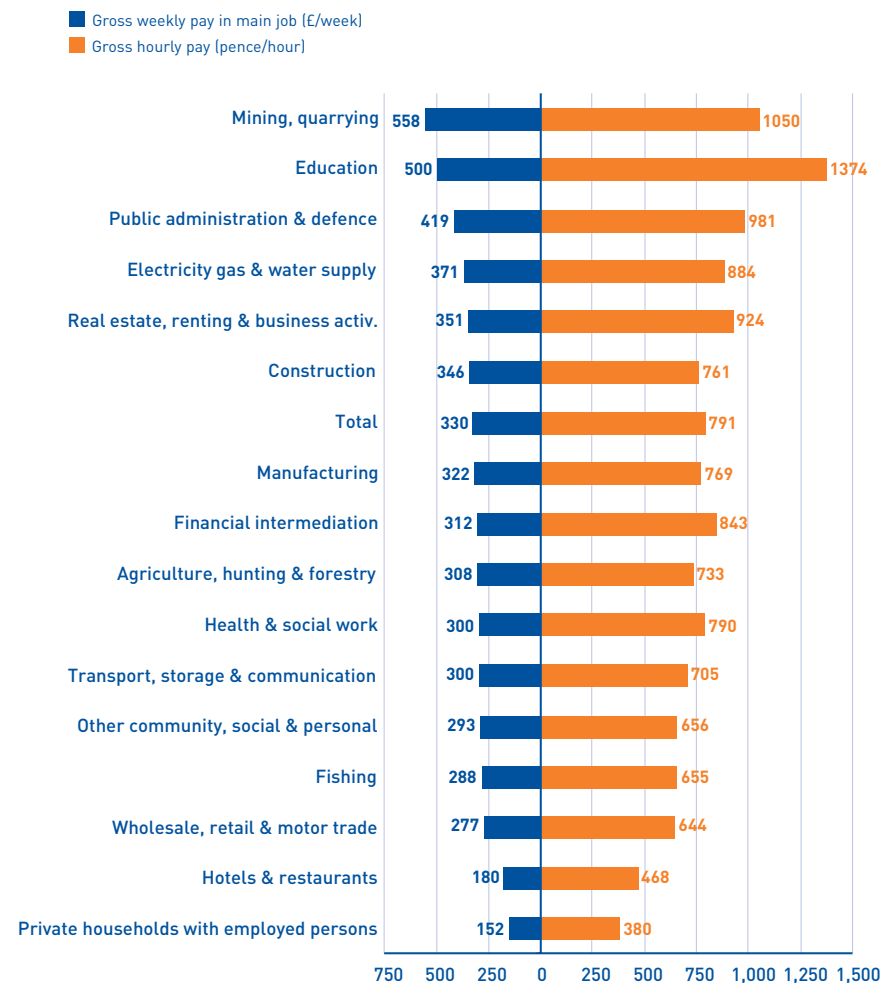
Source: Labour Force Survey, 2002

	Scotland			GB		
	Full-time	Part-time	Total	Full-time	Part-time	Total
Male	£8.38	£4.50	£7.84	£9.11	£5.00	£8.75
Female	£7.53	£5.25	£6.67	£7.71	£5.46	£6.70
Total	£7.91	£5.13	£7.27	£8.57	£5.33	£7.70

FIGURE 9

Median weekly and hourly earnings by industry in 2002, ranked by average weekly earnings

Source: Labour Force Survey, 2002



The Scottish population is slowly declining and the average age is rising. The average age is forecast to rise from 38.7 to 41.2 years by 2025.

Scotland's economic activity rate has caught up with the British level.

LABOUR SUPPLY

Who is, and will be, available for work?

The population of Scotland has already started to decline and age. The change will be a gradual one.

- In 2003, the population was 5,057,000, comprising 52 per cent women and 48 per cent males. The total is forecast to decline to 4,843,000 (or by 4.2 per cent) by 2025.
- There is a long-term trend towards an older workforce. In 2003, the mean age of the labour force (all those of working age) is estimated at 38.7 years. By 2025 it is projected to be 41.2.
- If the definition of the working age population remains unchanged (16-64 for men, 16-59 for women) the working age population will have declined by 11 per cent or 344,000 by 2026.
- Assuming, however, that the pensionable age for women rises to 65 as planned, the decline will be smaller, at just 169,000 (or 5 per cent).

There is little realistic prospect that the number of people of working age will fall to a level close to the number of people currently in employment, itself a historically high level. While there may be gaps and shortages for some jobs, the probability of there being a general shortage of labour is negligible.

Participation in economic activity

Scotland has traditionally had a lower employment rate (defined as the proportion of working age people in employment) than the GB average. But, since 2001, there has been a convergence. In 2002, 73.1 per cent of Scotland's working age population was in employment, still lower than the GB rate of 74.6. Male participation in Scotland (at 75.8 per cent) is well below the GB level (at 79.1 per cent). Participation for women is slightly higher in Scotland: 70.3 per cent, against GB's 69.7 per cent (Figure 11).

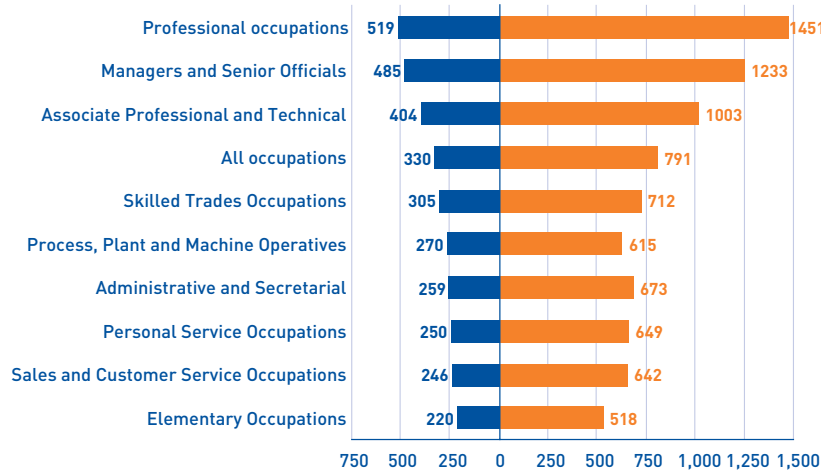
Scotland's economic activity rate was 78.5 per cent in 2002, very close to the GB average of 78.7 (Figure 12). The male rate is slightly lower than the GB figure, and the female rate slightly higher. The male activity rate has decreased slightly over the past decade, and the female rate increased slightly.

FIGURE 10

Median weekly and hourly earnings by occupation in 2002 for full-time employees, ranked by average weekly earnings

Source: Labour Force Survey, 2002

■ Gross weekly pay in main job (£/week)
 ■ Gross hourly pay (pence/hour)



Who is not in work?

Futureskills Scotland's recent employability project (Section 4) established that in 2001:

- 2,242,000 people in Scotland were in employment
- 684,000 people who were not students were not in work
- Of the 684,000, 332,000 wanted to work, of whom 136,000 were unemployed and 196,000 inactive (International Labour Organisation definitions).
- Of the people who lacked work and wanted it, 197,000 had not worked for 12 months or more.

Scottish unemployment has steadily declined for men and women alike over the past decade, from a rate of 9.7 per cent (240,000 people) in 1992 to 6.8 per cent (170,000) in 2002 (Figure 13). There was, however, a slight increase between 2001 and 2002. Moreover, the unemployment rate for young people has proved quite persistent in recent years, and stood at 18.5 per cent in 2002. Overall, unemployment has declined at a slower rate than for Britain as a whole, where the rate decreased from 9.8 per cent in 1992 to 5.1 in 2002.

FIGURE 11

Employment rates in Scotland, 1992 and 2002
Source: Labour Force Survey, Spring Quarters

	1992	2002
Per cent of all of working age in employment	71.1	73.1
Per cent of males of working age in employment	76.3	75.8
Per cent of females of working age in employment	65.5	70.3

FIGURE 12

Economic activity rates in Scotland, 1992 and 2002
Source: Labour Force Survey, Spring Quarters

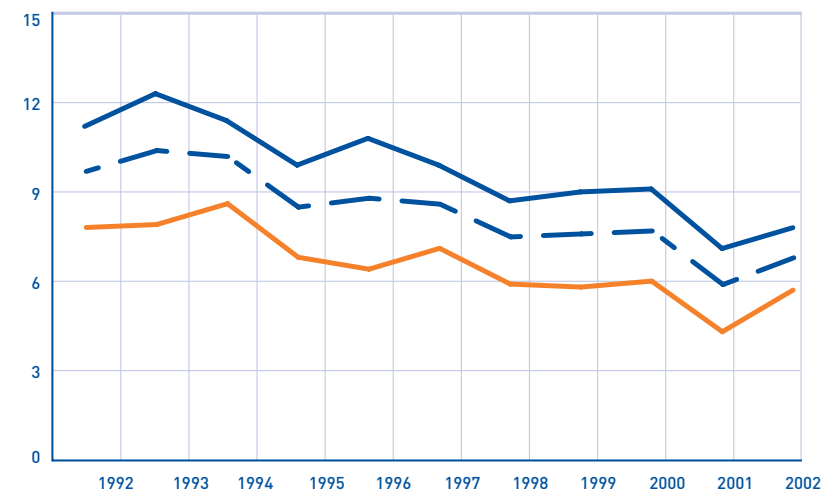
	1992	2002
Per cent of all of working age economically active	78.7	78.5
Per cent of males of working age economically active	85.9	82.2
Per cent of females of working age economically active	71.0	74.6

FIGURE 13

ILO unemployment rate 1992 to 2002

Source: Labour Force Survey, Spring Quarters

- all of working age
- males of working age
- females of working age



More and more of the workforce have degree-level qualifications.

The trend continues towards greater participation in further and higher education.

How skilled are Scottish workers?

For this report, the Labour Force Survey has been analysed in depth to determine the levels and types of qualification held by working-age people in Scotland. **Figures 14 and 15** show that:

- 16 per cent of the working-age population have a degree or its equivalent as their highest qualifications.
- 17 per cent have Credit S Grades, GCSE grades A to C, O Grades, or the equivalent as their highest qualifications while 16 per cent of working-age people in Scotland have no qualifications.

Figure 16 shows the highest qualifications held by working-age people in 1997 and 2002. Two key changes are evident:

- An increase of just over 151,000 in the numbers holding degrees or equivalent qualifications.
- A decrease in numbers whose highest qualification was 'other' or none.

So, in a relatively short period, the expansion of higher education has had an impact on the qualifications of the Scottish labour force.

Figure 17 compares the Scottish distribution of qualification types with that of the UK. It reveals that Scotland's working age population is markedly better qualified than the UK average. In particular:

- Scotland's share of degrees or the equivalent is broadly similar to the UK average.
- A greater share of the working age population is educated in higher education.
- A greater share count Highers, A-levels or the equivalent as their highest qualifications.

What types of skills are being developed?

Data for 2001/02 allow us to update the figures published in last year's report. Some of the main points to emerge are:

- For school leavers:
 - 5.8 per cent left with no award at or above SCQF 3 (Access 3, Foundation Standard Grade).
 - 12.5 per cent of leavers achieved passes at SCQF 7 (Advanced Higher).
 - Since 1997/98, women have been outperforming men at all levels of qualification. This trend continues.
- For further education (FE):
 - Some 514,877 students took courses at Scotland's 46 FE colleges: an 8 per cent increase on the previous year, and 36 per cent up on 1996/97.
 - More than two-thirds (67 per cent) of these students were women, up from 63 per cent in 1996/97
- For higher education (HE):
 - Student numbers were up 4 per cent on the previous year and 16 per cent on 1996/97, totalling 272,600 in 2001/02.
 - 76 per cent of HE students studied at HE institutions, and the remaining 24 per cent at FE colleges.
 - Much as with FE, the percentage of HE students who are women has risen from 63 to 66 per cent since 1996/67.

FIGURE 14

The highest SVQ equivalent level qualifications held by working-age individuals in Scotland in 2002

Source: Labour Force Survey Spring Quarter

Qualification Level (VQ equivalent)	Number	%
SVQ Level 4 and above	884,000	27.9
SVQ Level 3	480,000	15.1
Trade Apprenticeships	277,000	8.8
SVQ Level 2	412,000	13.0
Below SVQ Level 2	393,000	12.4
Other qualifications not classified here	227,000	7.2
No qualifications	495,000	15.6
Total	3,168,000	100.0

FIGURE 15

The highest type of qualification held by working-age individuals in Scotland in 2002

Source: Labour Force Survey Spring Quarter

Qualification type	Number	%
Degree or equivalent	513,000	16.2
Higher education	372,000	11.7
Highers / GCE A Level or equivalent	936,000	29.5
S Grade / GCSE grades A-C or equivalent	547,000	17.3
Other qualifications not classified here	291,000	9.2
No qualification	495,000	15.6
Don't know	15,000	0.5
Total	3,168,000	100.0

FIGURE 16

The highest qualification held by working-age individuals in Scotland by type in 1997 and 2002

Source: Labour Force Survey Spring Quarter

Qualification type	Number	2002 %	Number	1997 %	% Change 1997-2002
Degree or equivalent	513,000	16.2	362,000	11.5	41.7
Higher education	372,000	11.7	342,000	10.8	8.8
Highers / GCE A Level or equivalent	936,000	29.5	972,000	30.8	-3.7
S Grade / GCSE grades A-C or equivalent	547,000	17.3	531,000	16.8	3.0
Other qualifications not classified here	291,000	9.2	384,000	12.2	-24.2
No qualification	495,000	15.6	550,000	17.4	-10.0
Don't know	15,000	0.5	14,000	0.5	7.1
Total	3,168,000	100.0	3,155,000	100.0	0.4

FIGURE 17

The highest qualification held by working-age individuals in Scotland and the UK by type in 2002 as percentage shares of total working age populations

Source: Labour Force Survey Spring Quarter

Qualification type	Scotland %	UK %
Degree or equivalent	16.2	15.8
Higher education	11.7	8.2
Highers / GCE A Level or equivalent	29.5	24.3
S Grade / GCSE grades A-C or equivalent	17.3	22.0
Other qualifications not classified here	9.2	13.4
No qualification	15.6	15.7
Don't know	0.5	0.6
Total	100.0	99.9

3. TOMORROW'S JOBS

KEY POINTS

This chapter presents projections of what may happen in the Scottish labour market over the next five years. As always, due notice should be taken of the limitations that apply to using projections. Key predictions include:

- Stable total employment with little change expected between 2002 and 2007.
- Within the stable total levels of employment, changes in employment by sectors and occupations will occur:
 - Continued growth in employment in services. The primary and manufacturing sectors are projected to decline further.
 - Growth in professional; and associate professional and technical occupations
 - Decreases in managerial and senior; skilled trades; and process, plant and machine operatives occupations.
- Net demand of 465,000 new employees to be required between 2002 and 2007.
- This net demand will exist across all sectors, but will be highest in services. The demand for new employees from growth is projected to be much lower than demand for new employees arising out of replacement demand (the need to replace retiring workers or those who permanently leave a region, industry or occupation).
- Historically, there are grounds to expect an increase in the workforce's skills attainment, and there has been a shift in the distribution of employment towards higher skill occupations, and away from low/no skilled employment. This is expected to continue over the medium term.
- Significant net demand is projected for a wide range of occupations, skill levels, and qualifications. For example, between 2002 and 2007, a net demand for 100,000 employees with first degree or equivalent qualifications is anticipated, as is a net demand for 50,000 employees with no qualifications.

Forecasting reduces uncertainty, but cannot eliminate it.

INTRODUCTION

This chapter describes what the labour market may look like in the future. It is intended to provide readers with some guidance on likely future employment opportunities, and how they compare with historical and current trends. It makes use of data from a much more in-depth paper, **Labour Market Projections 2002-2007**, produced by Futureskills Scotland and available on the website <http://www.futureskillsscotland.org.uk/>

The purpose of predictions

The future has to be planned for, and it is always uncertain. Past trends and events provide some pointers to the future. Forecasting further reduces uncertainty, but cannot eradicate it.

Many individuals and organisations, including employers and government, make 'labour market' decisions based on what they believe the future might hold. There are clear advantages in basing decisions on a systematic and transparent assessment of future trends rather than in an ad hoc and probably inconsistent fashion. The usual way to achieve this is through economic forecasting models. These models are useful, provided a clear view is kept of the assumptions on which they are based and of the consequent limits to their legitimate use.

This chapter is particularly concerned with projecting demand for labour. To understand where future job opportunities come from, it helps to anticipate changes in the labour market that may generate demand for labour. New job opportunities generally arise in two ways:

- a. creation of new posts because of growth. This is termed expansion demand; and
- b. replacement of employees who permanently leave their jobs by retirement, migration or change to another occupation or industry. This is termed replacement demand.

The focus of this chapter is mostly on the net demand for new employees – which is the sum of expansion and replacement demand.

Forecasts – a health warning

Forecasting models are built on assumptions, and that places strict limits on their valid uses as a policy tool. With this in mind, here are eight suggested guidelines for using forecasting models and the data they produce:

1. Remember that forecasts are only one part of the process of trying to understand the future. There are many other factors and issues to consider as part of this process.
2. Forecasts are not facts. They are not events waiting to happen. They can be wrong.
3. Point forecasts (e.g. a specific change, such as a seven per cent rise) are subject to margins of error. A margin of error is an estimate of the likely scope for variation around an estimate – e.g. if there is a forecast of an increase of seven per cent with a margin of error of plus or minus two per centage points, it is more prudent to suggest an increase of between five per cent and nine per cent. Consequently it is sometimes wiser to consider broad movements and trends than point forecasts.
4. Forecasts should always take heed, in both composition and interpretation, of the wider economic and historical context.
5. Always ask critical questions about models and the forecasts they generate.
6. Projections are usually based on extending previous trends. They are less effective at anticipating or dealing with unforeseen events or their consequences. Economic shocks and 'turning points' are hard to predict.
7. The smaller the economy, the less accurate forecasts of its performance will be.
8. Projections have a 'sell by date,' and must be regularly revised and readjusted.

Sources of projections

Futureskills Scotland uses the forecasting model produced jointly by the Institute for Employment Research (based at the University of Warwick) and Cambridge Econometrics (an independent economics consultancy). These institutions have a long track record in forecasting, and have designed their projections to the needs of analysts, policy makers and others who require detailed labour market information. The model's methodologies and assumptions are also accessible and transparent.

Forecasts make most sense when considered alongside historical trends.

THE HISTORICAL CONTEXT

Forecasts of the future are best understood in the context of past and current labour market trends. As remarked in Section 1, Scotland's labour market is performing quite well in historical terms. Its current strengths include:

- Opportunities in the labour market have grown. Total employment in Scotland peaked in 2001 and remains high, reflecting a particularly marked increase in jobs for women. Male employment has been stable.
- Job opportunities with moderate, low and no skill requirements have consistently and continuously declined in the past 20 years. Yet there remains a significant level of employment in these occupations.
- Pay and rewards in lower skilled jobs have increased less than for higher skilled jobs.
- There has been an increase in the stock of qualifications held in the workforce.
- There are no expectations of population changes that might cause a shortage of labour in the next five years.
- Overall, indications are that the labour market has tightened in recent years.

The projections in the remainder of this section cover the years 2002 - 2007. The indicators for which projections are made are:

- Total employment and employment change
- Volume of retirements
- Volume of people leaving an occupation for other reasons (inter-occupational mobility)
- Net demand for new employees (effects of expansion or contraction, plus replacement demand – i.e. retirements and mobility)
- Qualifications sought in new employees

In general, these projections have been broken down into:

- 25 occupations (aggregated into nine major occupations for this report)
- 50 industries (condensed into 17 sectors for this report)

The UK has been one of the best performing OECD economies, despite slower growth in 2002.

The global economy showed weak growth in 2002, but is expected to recover slightly in 2003.

Scottish unemployment is expected to remain low over the next four years.

ECONOMIC OUTLOOK FOR SCOTLAND AND THE UK

It is important to place the IER/ Cambridge Econometrics projections used by Futureskills Scotland within the context of other projections, and to take a view on degrees of variation between them in respect of different indicators. A detailed comparison is provided in the issues paper 'Labour Market Projections 2002-2007', found on the Futureskills Scotland website. Several forecasters are compared: the IER, Experian Business Strategies Limited (EBSL), the Fraser of Allander Institute (FAI), and Cambridge Econometrics (CE). What do they say about the economic outlook for Scotland and the UK?

Recent performance and future outlook

There is broad consensus among forecasters and commentators on the following aspects of recent economic performance:

Global economy:

- Figures released in 2003 reveal weak output performance in 2002. It is estimated that the global economy will have recovered in the latter half of 2003.
- The outlook for beyond 2003 is more positive – with full recovery forecast to be apparent by 2004. This will be led by the US, Asia and South America with continued stagnation in the Euro Area and Japan.

For the UK:

- The UK has been one of the best performing economies in the OECD.
- GDP growth has continued at between 1 and 3% in recent years.
- A strong labour market performance has been reflected in rising employment and both low and stable levels of unemployment. Unemployment is forecast to remain low over the next few years.
- Low inflation and low interest rates are forecast to continue.
- Most forecasters project a steady, slow rise in employment over the next few years.

For Scotland:

- GDP was flat in 2002, showing no growth.
- A key influence on growth has been the poor performance of manufacturing, and especially electronics, across 2001 and 2002.
- A modest recovery is expected in the latter half of 2003 in terms of GDP growth. Beyond this, EBSL, CE and the FAI all forecast output growth of 2-3 per cent between 2003 and 2004. There is disagreement over the employment performance of Scotland – some forecasters project a small increase, some predict stable levels of employment.
- Low and stable unemployment rates are expected to continue over the medium-term.

Forecast Scottish Performance

Figure 18 summarises projected employment change in Scotland for the years 2002/03, 2003/04 and for the period 2002-2007 from a number of forecasting institutions. Note that the FAI forecast is for the period 2002-2006. A significant divergence in projections is evident.

Forecasters project stable employment levels between 2002 and 2007.

DEMAND PROJECTIONS 2002-2007: TOTAL EMPLOYMENT

Total employment is not forecast to change significantly: from 2,416,000 in 2002 to 2,409,000 in 2007. This represents a marginal decline of 7,000. Bearing potential forecasting errors in mind, however, the outlook is one of broad stability in total employment to 2007.

Sectoral variations

Figure 19 records employment by industry at intervals during the past 20 years, and provides projections for 2002 to 2007. The projections vary widely between sectors:

Further employment losses are expected in manufacturing and construction.

FIGURE 18

Selected projections of employment growth for Scotland between 2002 and 2003

Notes: 1 figures for 2002-2006 were analysed for FAI projections. BSL: December 2002; FAI: June 2003, 1 December 2002; IER/CE: January 2003; CE: July 2003

Forecast % employment growth	BSL	FAI	IER/CE	CE
2002-2003	0.9	1.5	-	-0.4
2003-2004		2.0	-	-0.5
2002-2007	2.4	-	-0.3	-
2002-2006	-	4.41	-	-

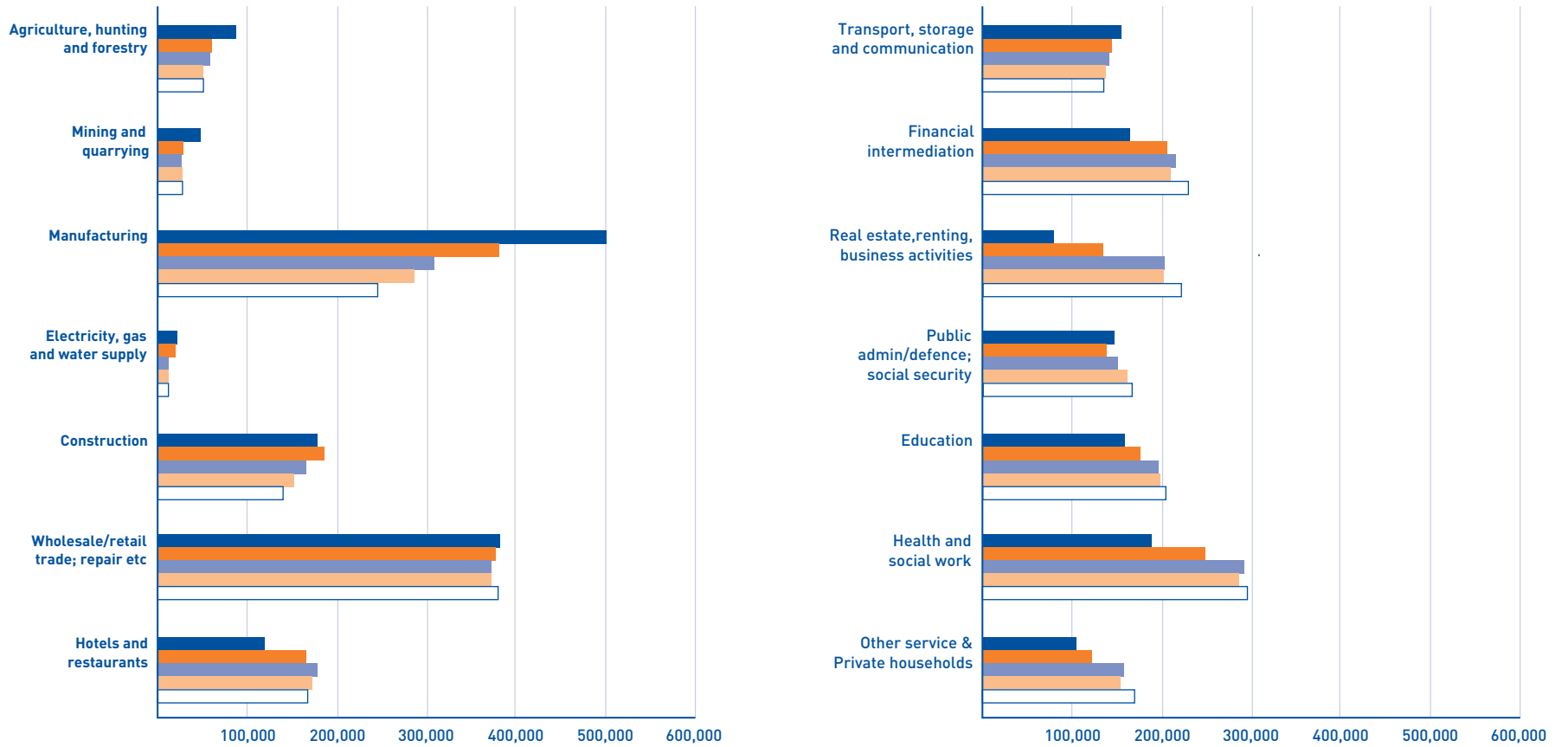
- Industries where employment is forecast to be relatively stable:
 - agriculture, hunting and forestry
 - mining and quarrying
 - electricity, gas and water supply
 - wholesale and retail
 - hotels and restaurants
 - transport, storage and communication
 - public administration and services
 - health and social work
- Increases in total employment are expected in the following industries:
 - financial intermediation (which includes financial services such as banking, insurance, pensions, financial markets) (+18,000 or +9 per cent)
 - real estate, renting and other business activities (+17,000 or +9 per cent)
 - other services and private households (+10,000 or +6 per cent)
- Decreases in total employment are expected in the following industries:
 - manufacturing (-42,000 or -15 per cent)
 - construction (-16,000 or -10 per cent)

FIGURE 19

Trends in historical and forecast employment stocks by industry 1981-2007

Source: IER

- 1981
- 1991
- 2001
- 2002
- 2007



Occupational variations

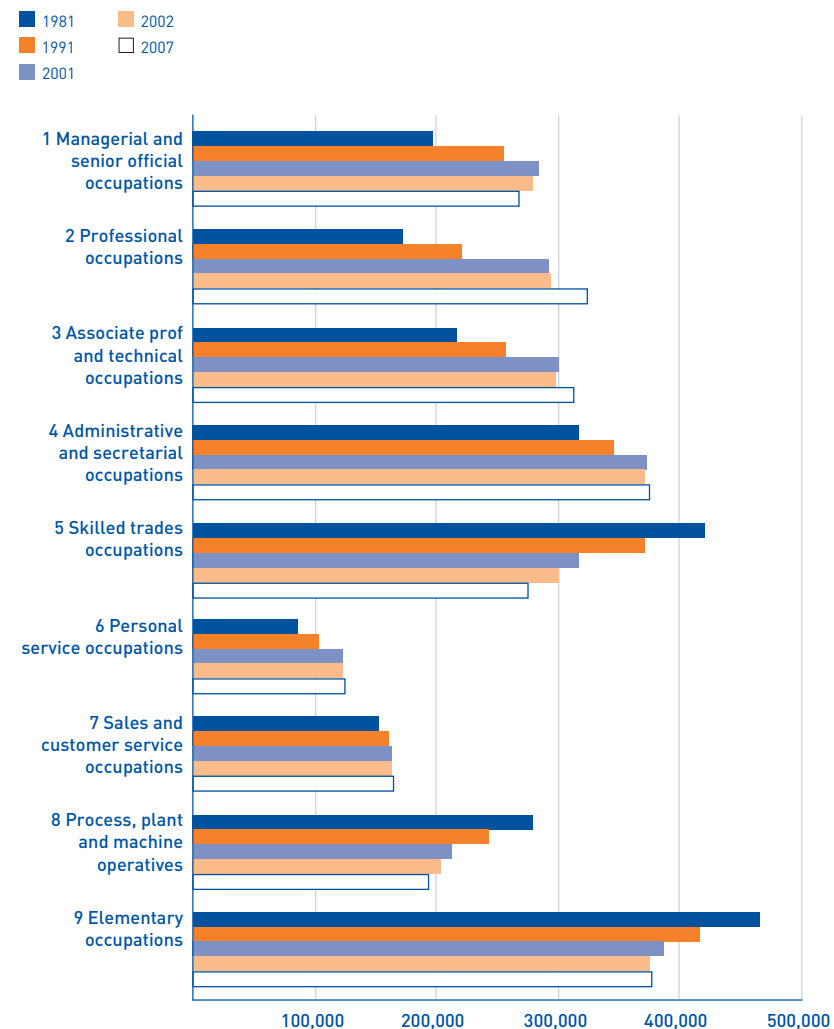
Figure 20 provides an occupational breakdown of historical employment totals and those forecast to 2007. In sum:

- Occupations where employment is forecast to be stable:
 - administrative and secretarial
 - personal service
 - sales and customer service
- Increases in employment are expected in the following occupations:
 - professional (+26,000 or +9 per cent)
 - associate professional and technical (+12,000 or +4 per cent)
- Decreases in employment are expected in the following occupations:
 - skilled trades (-25,000 or -5 per cent)
 - managerial and senior (-13,000 or -8 per cent)
 - process, plant and machine operatives (-12,000 or -6 per cent)

FIGURE 20

Trends in historical stocks and projections for Scotland by occupation 1981-2007

Source: IER



Even in declining industries there can be a need for inflows of new workers.

EMPLOYMENT DEMAND

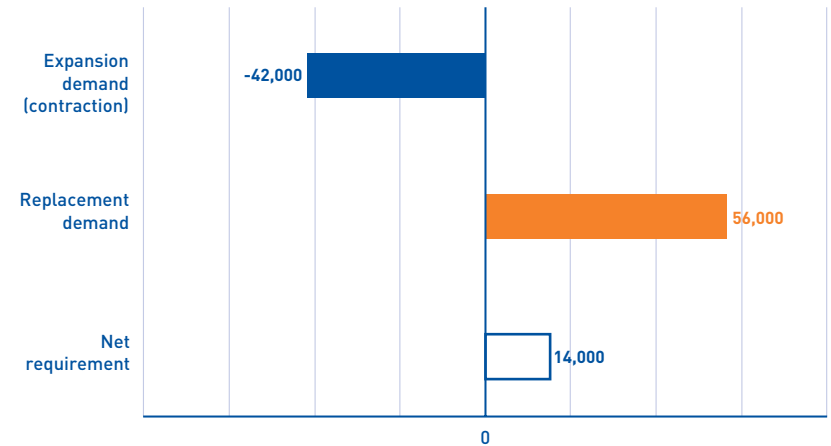
As mentioned at the beginning of this section, the main focus of the projections is the net demand for new employees. An example of how this is calculated is illustrated. In the case of manufacturing (Figure 21), between 2002 and 2007 the total number of jobs is projected to fall by 42,000. In other words, 'expansion demand' is expected to be (minus) -42,000 employees, while replacement demand is projected at 56,000. This produces a net demand for 14,000 employees, and shows how even in an industry where employment is in long-term decline, inflows of new workers – and provision of education and training – continue to be required.

Net demand means demand for employees new to that industry or occupation, and does not include flows of existing employees within the sector. For some industries and occupations there is a calculated negative net demand for employees. This occurs where replacement demand is negative and outweighs expansion demand. Negative replacement demand occurs if, for example individuals progress to a higher occupational status, increasing employment in that occupation. They could do this as they gain experience or qualifications within their existing jobs – moving from accounts clerk to a qualified accountant for example. It could also occur if projections take into account of high rate of entrants or high rates of intra-occupational mobility within a certain occupation. For example, an occupational category may have 40,000 employees who leave to retire between 2002 and 2007, but at the same time 50,000 new employees are forecast to enter this occupation over the period, based on historical characteristics or trends.

FIGURE 21

Forecast components of demand in manufacturing 2002-2007

Source: IER



Overall demand

An overall net demand for 465,000 new employees is forecast for 2002-2007.

- This is a product of -7,000 in expansion demand (i.e. a small decline) and 472,000 in replacement demand.
- The net demand of 465,000 as a proportion of total employment in 2002 is 19 per cent.
- Clearly, demand from growth will be much lower than from replacement.

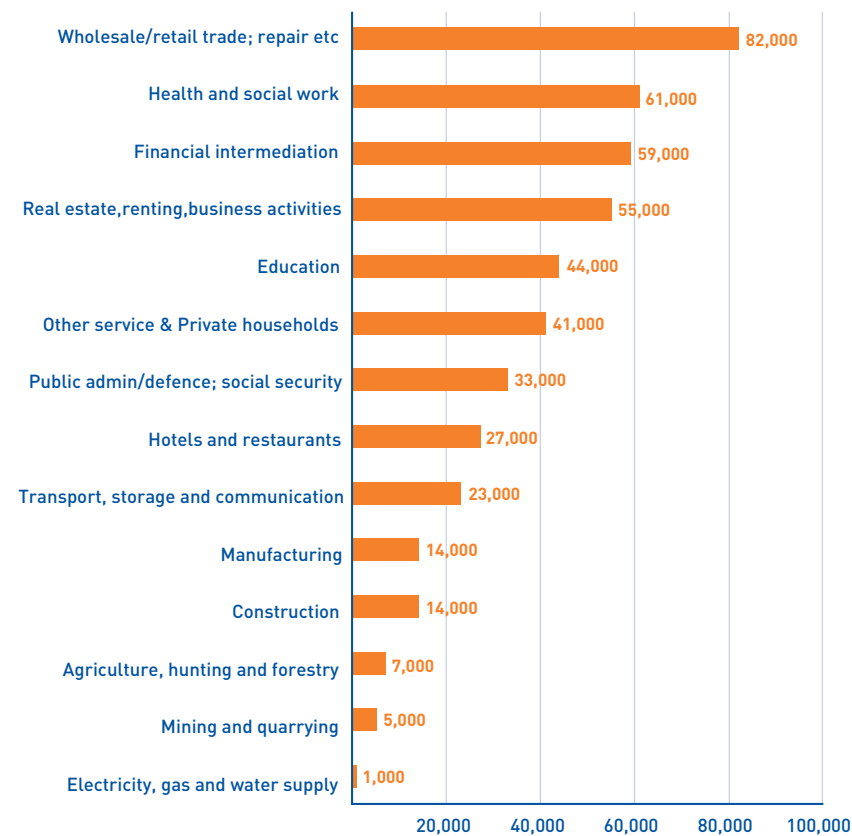
Demand by industry

There is positive net demand for new employees in every industrial sector (Figure 22) and across all sectors. There are particularly high levels of net demand in most service industries, while net demand in primary and manufacturing industries is low (Figure 23).

FIGURE 22

Forecast of net labour requirement 2002-2007 by sector

Source: IER



3 TOMORROW'S JOBS

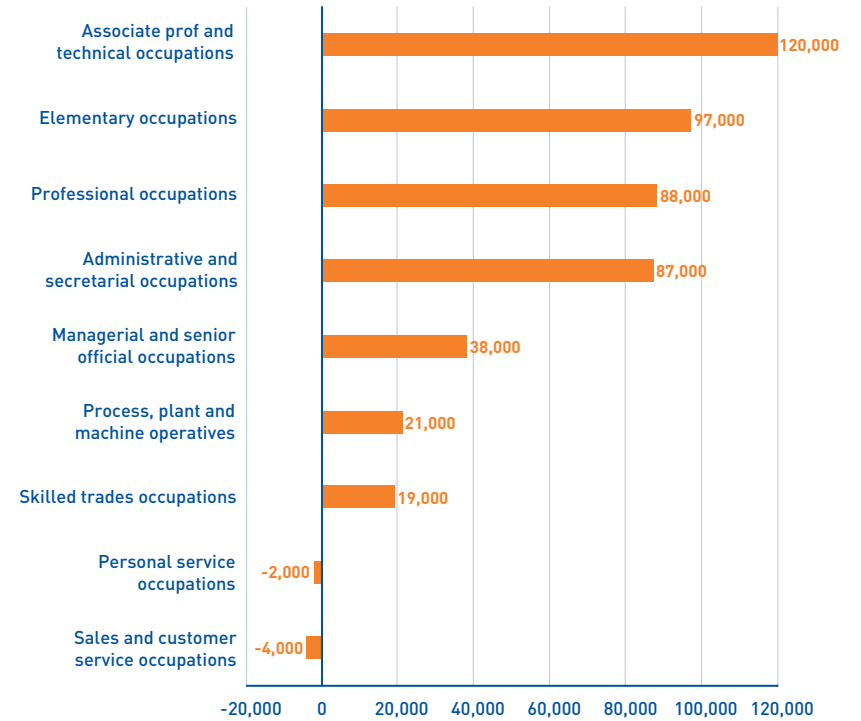
FIGURE 23

Projected employment, by sector, 2002-2007; components of demand
Source: IER

Industry	Total employment 2002	Expansion demand	Replacement demand	Net demand
Agriculture, hunting and forestry	52,000	-4,000	11,000	7,000
Mining and quarrying	28,000	-1,000	6,000	5,000
Manufacturing	286,000	-42,000	56,000	14,000
Electricity, gas and water supply	11,000	-1,000	2,000	1,000
Construction	154,000	-16,000	31,000	14,000
Wholesale/retail trade; repair etc	374,000	8,000	74,000	82,000
Hotels and restaurants	175,000	-8,000	34,000	27,000
Transport, storage and communication	135,000	-4,000	27,000	23,000
Financial intermediation	209,000	18,000	41,000	59,000
Real estate,renting,business activities	197,000	17,000	38,000	55,000
Public admin/defence; social security	161,000	2,000	31,000	33,000
Education	195,000	7,000	37,000	44,000
Health and social work	284,000	7,000	54,000	61,000
Other service & Private households	154,000	10,000	30,000	41,000
Total	2,416,000	-7,000	472,000	465,000

FIGURE 24

Forecast of net labour requirement 2002-2007 by major occupation
Source: IER



Demand is projected across the full range of qualifications.

Demand by occupation

Occupational projections are more revealing than industrial ones in assessing future demand for skills and competencies. Net demand by occupation is ranked in Figure 24. The main observations are that:

- Significant volumes of net demand for new employees are forecast for most occupations.
- Two occupational groups – personal service occupations, and sales and customer service occupations – show negative net demand.
- The highest volumes of net demand are forecast in associate professional and technical occupations, elementary occupations and administrative and secretarial occupations.

FIGURE 25

Projected demand for employees in Scotland 2002-2007 by occupation
Source: IER

Industry	Total employment 2002	Expansion demand	Replacement demand	Net demand
Managerial and senior official	281,000	-13,000	50,000	38,000
Professional	296,000	27,000	62,000	88,000
Associate prof and technical	300,000	12,000	108,000	120,000
Administrative and secretarial	372,000	1,000	86,000	87,000
Skilled trades	301,000	-25,000	44,000	19,000
Personal service	124,000	2,000	-3,000	-2,000
Sales and customer service	164,000	-1,000	-3,000	-4,000
Process, plant and machine operatives	204,000	-12,000	33,000	21,000
Elementary	375,000	3,000	95,000	97,000
Total	2,416,000	-7,000	472,000	465,000

Demand by occupation and industry

It is possible to forecast net demand for employees by both occupation and industry (Figure 26), though it should be remembered that certain industries have high proportions of employment in a narrow range of occupations. Examples include health and social work (associate professional and technical) and construction (skilled trades). The forecasts project strong net demands for employees in:

- Managerial and senior occupations in a broad range of service industries, especially wholesale/retail trade, repair, and hotels & restaurants.
- Professional occupations, mainly in financial and business services and in public services.
- Associate professional and technical occupations in a wide range of industries, including manufacturing, financial and business services, and public services.
- Administrative and secretarial occupations, mainly in transport, storage and communication, financial and business services, and public administration.
- Skilled trades occupations in construction, wholesale/retail trade & repair, and hotels and restaurants.
- Personal service occupations in health and social work.
- Sales and customer service occupations in wholesale/retail trade & repair.
- Elementary occupations in manufacturing, hotels and restaurants, other business services, and public and other services.

Across all sectors, apart from the transport, storage and communications sector, there are low levels of net demand for process, plant and machine operatives.

3 TOMORROW'S JOBS

FIGURE 26

Projected net demand for employees by occupation and industry 2002 to 2007

Source: CE/IER

Occupation	Managerial and senior official	Professional	Associate professional and technical	Administrative and secretarial	Skilled trades	Personal service	Sales and customer service	Process, plant and machine operatives	Elementary occupations
Industry									
Agriculture, hunting and forestry	-100	1,200	1,000	1,500	-500	-100	-900	1,100	1,400
Mining and quarrying	900	-100	-1,000	-300	400	400	-1,500	300	7,700
Manufacturing	-1,400	2,900	8,200	-300	500	-2,300	-8,300	2,600	12,000
Electricity, gas and water supply	-300	400	<100	1,100	<100	<100	-200	-100	200
Construction	1,100	-600	1,100	3,300	5,100	-800	-3,500	1,300	7,400
Wholesale/retail trade; repair etc	10,600	-1,500	9,900	100	5,600	-5,100	67,600	2,600	-8,000
Hotels and restaurants	13,400	-2,000	1,900	-2,800	10,400	-4,400	-7,100	-1,100	18,500
Transport, storage and communication	-900	800	2,500	10,700	-1,400	700	-3,600	7,900	6,500
Financial intermediation	800	5,100	13,500	42,400	1,200	-3,500	-4,700	<100	4,100
Real estate,renting,business activities	6,200	11,300	16,300	14,900	1,700	1,400	-7,000	2,200	7,800
Public admin/defence; social security	-100	6,200	9,600	18,800	-1,200	-2,400	-7,500	300	8,900
Education	-2,800	41,100	14,000	-2,700	-1,100	-3,200	-8,100	300	6,500
Health and social work	5,500	18,500	27,400	-100	-1,700	13,500	-11,500	-200	10,000
Other service & Private households	4,900	4,800	15,100	700	200	4,300	-7,600	4,100	14,300

FIGURE 27

Stocks and incremental demand for qualifications by SVQ level and equivalent, 2002-2007

Source: IER

SVQ Equivalent level of qualification	2002 Stock	Forecast incremental demand 2002-2007	Incremental demand as a % of 2002 Stock
SVQ5	115,000	28,000	24
SVQ4	683,000	165,000	24
SVQ3	489,000	80,000	16
SVQ2	483,000	81,000	17
SVQ1	323,000	61,000	19
No Qualifications	322,000	50,000	16

FIGURE 28

Incremental demand for employees with qualifications by equivalent SVQ level 2002-2007 by major occupation

Source: IER

Major occupation	No quals	SVQ1	SVQ2	SVQ3	SVQ4	SVQ5	Total
Managerial & senior official	4,000	4,000	7,000	9,000	11,000	2,000	38,000
Professional	4,000	3,000	6,000	9,000	51,000	15,000	88,000
Associate professional & technical	3,000	13,000	18,000	21,000	59,000	6,000	120,000
Admin & secretarial	3,000	9,000	18,000	17,000	35,000	5,000	87,000
Skilled trades	3,000	1,000	6,000	7,000	2,000	<1,000	19,000
Personal service	<1,000	<1,000	<1,000	<1,000	-1,000	<1,000	-2,000
Sales & customer service	-1,000	-2,000	-1,000	<1,000	1,000	<1,000	-4,000
Process, plant & machine operatives	3,000	4,000	6,000	5,000	2,000	<1,000	21,000
Elementary	32,000	29,000	21,000	11,000	4,000	<1,000	97,000
All occupations	50,000	61,000	81,000	80,000	165,000	28,000	465,000

Demand by qualification and skill level

Projections of future levels of qualifications demanded from new employees are set out in **Figure 27**. The main conclusion to draw is that projected demand is well distributed across the various types of qualifications. Significantly, there is also a forecast net demand for 50,000 unqualified employees between 2002 and 2007. It is expected that 100,000 graduates at first degree or equivalent level will be required over this period.

Figure 28 summarises forecast incremental demand by equivalent SVQ level and major occupation. Unsurprisingly, the stocks of qualifications held suggest a relationship between equivalent SVQ qualifications and occupational classification. There are, for example, few holders of SVQ level 5 in the mid, low or no-skilled occupations. But it is not a clear relationship, and there is a significant mix of qualification levels and occupations. For example, having no qualifications does not seem to have prevented some from entering managerial and senior official occupations.

The main projections in this respect are:

- New entrants to jobs will be required across the full range of qualifications.
- In particular, continued high demand is forecast for first and higher degrees.
- Demand for unskilled or unqualified employees is mostly anticipated in elementary occupations.
- Forecast demand for graduates is primarily in professional, associate professional/ technical, and administrative occupations.
- Significant forecast demand remains for those with no qualifications or qualifications up to SVQ3 (or equivalent) as new employees in elementary occupations.

The accuracy of a forecast diminishes as the subject matter gets smaller.

SUMMARY

The projections indicate what may happen over the next five years. It is probably more reliable to focus on the broad trends, movements and conclusions they indicate, rather than the detailed projections. The key messages are:

- Continued employment growth in services. Primary and manufacturing employment is forecast to decline further.
- Historically, there has been an increase in the workforce's skills attainment and a slow shift towards greater a greater share of employment resting in higher skill occupations, with smaller shares in low/no skilled employment.
- Historical and forecast performance alone might convince us that future job opportunities lie solely in services and high-skill or high-qualification occupations. But this would be misleading. Demand is a product of growth, decline and replacement.
- Indeed, net demand from growth is forecast to be much lower than net demand arising out of replacement.
- Net demand (combining growth/contraction and replacement) occurs across sectors, but is highest in services.

Significant net demand is forecast for a wide range of occupations, skill levels, and qualifications. For example, between 2002 and 2007, a net demand for 100,000 employees with first degree or equivalent qualifications is forecast – as is a net demand for 50,000 employees with no qualifications. One lesson, then, is that the number of new employees required as a result of growth is smaller than the number required for replacement of existing employees.

Another key lesson is that job opportunities for new employees are likely to be in a wide range of occupations and industries. Focusing attention on a narrow range of potential 'growth' industries (especially given the risk of forecast error) and assuming these are all high-skill/qualifications occupations would present only a partial understanding of the source and nature of future employment opportunities.

REMEMBER...

- Forecasts are only one part of trying to understand the future.
- Forecasts are not events waiting to happen. They can be wrong.
- Point forecasts are subject to margins of error.
- Forecasts need an accompanying appreciation of the wider economy.
- Models have their limits.
- Major shocks and turning points in the economy are hard to predict.
- The accuracy of a forecast diminishes as the subject matter gets smaller.
- Forecasts have a sell-by date.

4. KEY RESEARCH FINDINGS FROM THE FIRST YEAR OF FUTURESKILLS SCOTLAND

Futureskills Scotland has undertaken a number of projects in the last 12 months. The following chapter describes some of the key information to emerge thus far.

Skills issues are a middle ranking challenge for Scotland's employers.

A skill shortage is hard-to-fill vacancy that occurs when applicants lack the required skills, experience or qualifications.

SKILLS IN SCOTLAND 2002 – A SUMMARY OF KEY FINDINGS

In summer 2002 Futureskills Scotland carried out the first Scottish Employers Skill Survey, which used information from Scotland's employers to focus on skill shortages, skill gaps and training. Some of the key findings are summarised below, and the full results are published in **Skills in Scotland 2002: The Employers View** which can be downloaded from <http://www.futureskillsscotland.org.uk>.

To establish a context for understanding skills issues, respondents were asked:

"Are there any particular challenges that you feel your business is likely to face over the next 12 months? If so, what are these challenges?"

Roughly one in seven replied that attracting appropriately skilled staff was one of the main challenges they faced, though it was a less pressing concern than issues like increased competition and the changing structure of markets.

But while skills issues may be a middle-ranking challenge for Scotland's employers, they are the highest ranked challenge for which public sector intervention may be appropriate.

Vacancies

At the time of the survey there were 65,000 vacancies in Scotland. From a total of 2.1 million employees, this gives a vacancy rate of three per cent.

Vacancy rates were generally higher in occupations that usually require a lower level of skill. For example:

- **Personal services (which includes nursing and childcare assistants, hairdressers and travel agents) and elementary jobs (which includes hospital porters, shelf fillers, security guards and farm labourers) had the highest vacancy rates, at 5.4 per cent and 4.4 per cent, respectively.**
- **In contrast, there were low vacancy rates for managers and senior officials (0.8 per cent) and professional occupations (1.9 per cent).**

Of those 65,000 vacancies, employers reported that 46 per cent were hard to fill. On most occasions the market appears to fill vacancies effectively. But where hard-to-fill vacancies occur they can have a negative impact on employers.

Four per cent of Scottish workplaces had skill shortage vacancies in 2002.

Skill Shortages and Gaps

A skill shortage is hard-to-fill vacancy that occurs when applicants lack the required skills, experience or qualifications.

Employers reported that 18 per cent of vacancies (or 12,000) were skill shortage vacancies. This suggests that skill shortages are relatively rare, though their impact on employers is negative, and they can create difficulties in meeting customer service objectives (cited by 46 per cent of employers with a skill shortage), required quality standards (34 per cent) and delays developing new products or services (33 per cent).

Results suggested that skill shortages may be influenced by the characteristics of the job, as well as those of the applicants.

The skills most commonly found lacking in applicants were "soft skills": customer handling, oral communication, team working and problem solving.

Nevertheless, just four per cent of Scottish workplaces had skill shortage vacancies. As a proportion of those employed, they were most common in smaller workplaces, and six sectors accounted for two-thirds of these vacancies: hotels & restaurants; health & social work; other business activities; mechanical engineering; construction; and retailing.

Skill shortages arise when an employer seeks to recruit a new employee. Skill gaps, by contrast, emerge when the employer judges the skills of an existing employee to fall short of the desired proficiency. One Scottish workplace in six reports at least one skill gap. 133,000 employees have a skill gap, or six per cent of the Scottish workforce. Skill gaps, clearly, are more prevalent than skill shortages.

But more than half the skill gaps are temporary. The most commonly reported cause is that an employee is new to the job or has not yet completed a training programme. Through time, these skill gaps are likely to disappear.

Skill gaps occur most frequently in lower-skilled jobs:

- The skill gap rate was highest for elementary and personal service occupations (nine and eight per cent of employees, respectively)
- The skill gap rate was considerably lower among associate professional and technical occupations (four per cent), professionals (five per cent) and managers (five per cent)

As with skill shortages, skill gaps are most likely to be said to arise because of weaknesses of 'soft' skills. Employers cited customer handling, team working and oral communication skills among those most commonly deficient.

Roughly half of Scotland's employers provide off-the-job training and half do not.

Training

The survey showed an almost even split with regard to the proportion of employers that had funded or arranged off-the-job training in the preceding 12 months. Moreover, employers appear to divide into two distinct groups: those who train almost everyone and those who train no one.

The proportion of employers who fund training increases with establishment size. Just 44 per cent of workplaces with fewer than ten employees provided training: a figure which almost doubles to 86 per cent for workplaces with more than 250 staff.

The pattern of training varies between industries. Employers in the public services are most likely to provide training (85 per cent) and those in agriculture and distribution least likely (30 and 40 per cent respectively). More generally, private sector establishments are less likely than those in either the public or voluntary sectors to train their staff.

Job-specific training is the most common type provided, followed by health and safety, and induction. Employers who provide no off-the-job training mostly explain their approach on two grounds:

- The reason most commonly given is that 'training is not necessary in our business' (37 per cent).
- The next most popular reason is that staff are 'already fully proficient' (23 per cent).

Two of the most familiar arguments for public sector intervention in training are that no appropriate training exists and that costs are too high for some businesses to bear unaided. Yet neither reason looms large in the responses to this survey. Only six per cent of employers said that lack of funds was a reason not to train.

4 KEY RESEARCH FINDINGS

Employability means ability to gain sustained access to labour market opportunities.

DEFINITIONS

Employability means an individual's ability to access to labour market opportunities or employment successfully for a reasonable period of time; and to improve job prospects and rewards if so wished.

ILO unemployment is the internationally agreed definition of unemployment, covering people aged 16 and over who are a) without a job, want a job, have actively sought work in the last four weeks and can start work in the next two weeks; or are b) out of work, have found a job and are waiting to start it in the next two weeks.

Economically inactive adults are not in employment, not classified as unemployed under the ILO criteria, and neither actively seeking nor available for work.

Economically active adults are in employment, or unemployed but actively seeking work and are available for work. The activity, or participation, rate measures the proportion of a population engaged in economic activity. It is reached by dividing the number of economically active people by the population of working age. Activity rates can also be calculated for specific groups.

Workless, jobless, worklessness, joblessness are terms used to describe ALL individuals without employment. These terms are broader than those encompassed by official unemployment counts or benefit entitlements.

Working age: Ages 16-64 for men and 16-59 for women.

Inertia means momentum, or rather its lack. Used to describe how the difficulty of entering the labour market or finding a job increases over time for people with low employability.

NEET is an acronym for those Not in Employment, Education or Training – a term generally confined to people aged 16-19.

EMPLOYABILITY

During the course of 2002/03, Futureskills Scotland undertook a research project into employability. The aim of the research and ensuing report was to provide a clear understanding of employability in Scotland, in terms of:

- **concept:** what it is, how and to what extent is it a problem?
- **impact:** who is affected, where in particular, and with what consequences?
- **practice:** what has been, and can be, done to increase employability?

A detailed analysis of employability can be found in the main report *Employability (2003)*, available from the Futureskills Scotland website. Key findings are summarised below.

Definition

Employability means an individual's ability to gain sustained access to labour market opportunities: to enter the labour market and employment successfully for a reasonable period of time, and also to improve employment prospects and rewards, where that is the individual's wish.

Contributing factors

A number of important factors greatly influence employability, and its attendant problems:

- **Overall economic and labour market conditions, which change over time.**
- **Diversity: employability encompasses a range of features or characteristics, and the combination can change over time.**
- **Employer attitudes: how employers gauge employability in their recruitment policy is critically important, since they hold the key to opportunities for jobless people.**
- **The government and policy environment: there is a long record of intervention to improve the employability of certain members of the population. Recently there has been a focus on employability as a prime public policy objective.**

Problems of employability

Poor employability becomes a problem when it makes it harder for an individual to seek, find or retain a job. Consequences may include unemployment, joblessness, economic inactivity or insecure attachment to the labour market. A large number of people are affected: in 2001 684,000 individuals (excluding students) were jobless, of whom 332,000 wanted to work. Unemployment and inactivity have persisted in the long term (Figure 29), despite improving employment levels.

Customising support

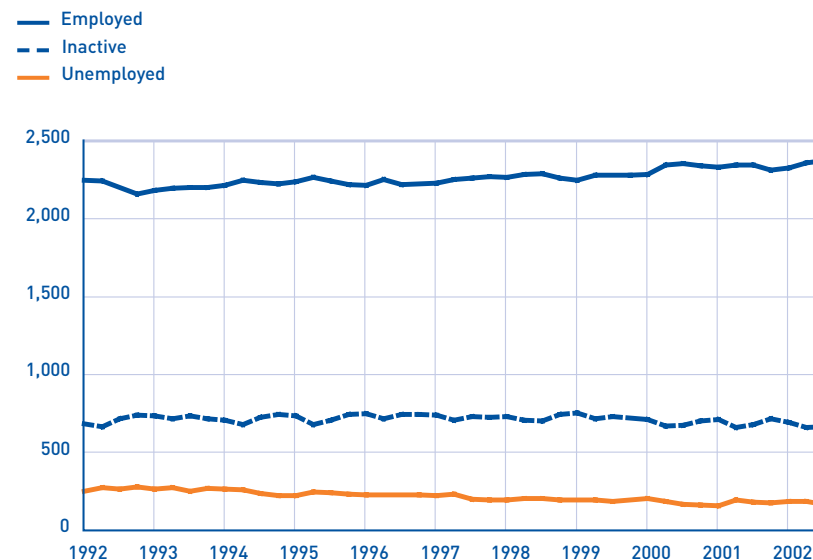
To treat people with employability problems as a single homogeneous group, or to stereotype them, is not helpful. The evidence is clear that their problems, characteristics, and likely ways of helping them, can vary greatly. Individuals can be at different distances from the labour market. They can face one or more barriers to eventual employment (Figure 30). Some symptoms of employability problems include:

- inability when young to make a first entry into the labour market;
- lack of involvement in the labour market or employment for periods of time;
- inability to progress from economic inactivity to activity and then to employment; and
- sickness or disability, preventing economic activity or employment.

FIGURE 29

Working age population
by economic status,
thousands 1992-2002

Source: Labour Force Survey



4 KEY RESEARCH FINDINGS

People with employability problems are not all the same.

One-fifth of working age people in Scotland do not work.

Scope and scale

A segmentation (Figure 31) of the working age jobless population in 2001 reveals that:

- 684,000 non-students were jobless, of whom...
 - 332,000 want to work:
 - 136,000 are ILO unemployed (of whom 40,000 have been unemployed for more than 12 months)
 - 196,000 are inactive (of whom 167,000 last had a job more than 12 months ago), of whom:
 - 79,000 are long term sick;
 - 73,000 have care responsibilities; and
 - 45,000 are inactive for other reasons.
 - more inactive people are thus seeking work than are ILO unemployed.

Looking more closely at groups traditionally assumed to face employability problems:

- 207,000 jobless individuals had not worked in the previous 12 months.
- 39,000 individuals aged 16-19 are “NEET” – either ILO unemployed, or economically inactive and not participating in education or training.

Individuals with certain characteristics, or from certain types of households, have a higher than average likelihood of being jobless. The risk is greatest for the following:

- Those with long term illness and/or disability are 4.1 times more likely than those without to be jobless.
- Individuals in single adult households are 3.6 times more likely to be jobless.
- Women with dependent children are 2.3 times more likely to be jobless than everyone else.
- Individuals with low or no qualifications are 2.1 times more likely to be jobless than those skilled to SVQ 1 (or equivalent) and above.
- Ethnic minorities are 1.9 times more likely than the average to be jobless.

Those from households with multiple incidences of illness, worklessness, and lack of qualifications appear more likely than average to be jobless, though available data prohibit calculating probabilities.

FIGURE 30

Potential Barriers to
Securing Employment

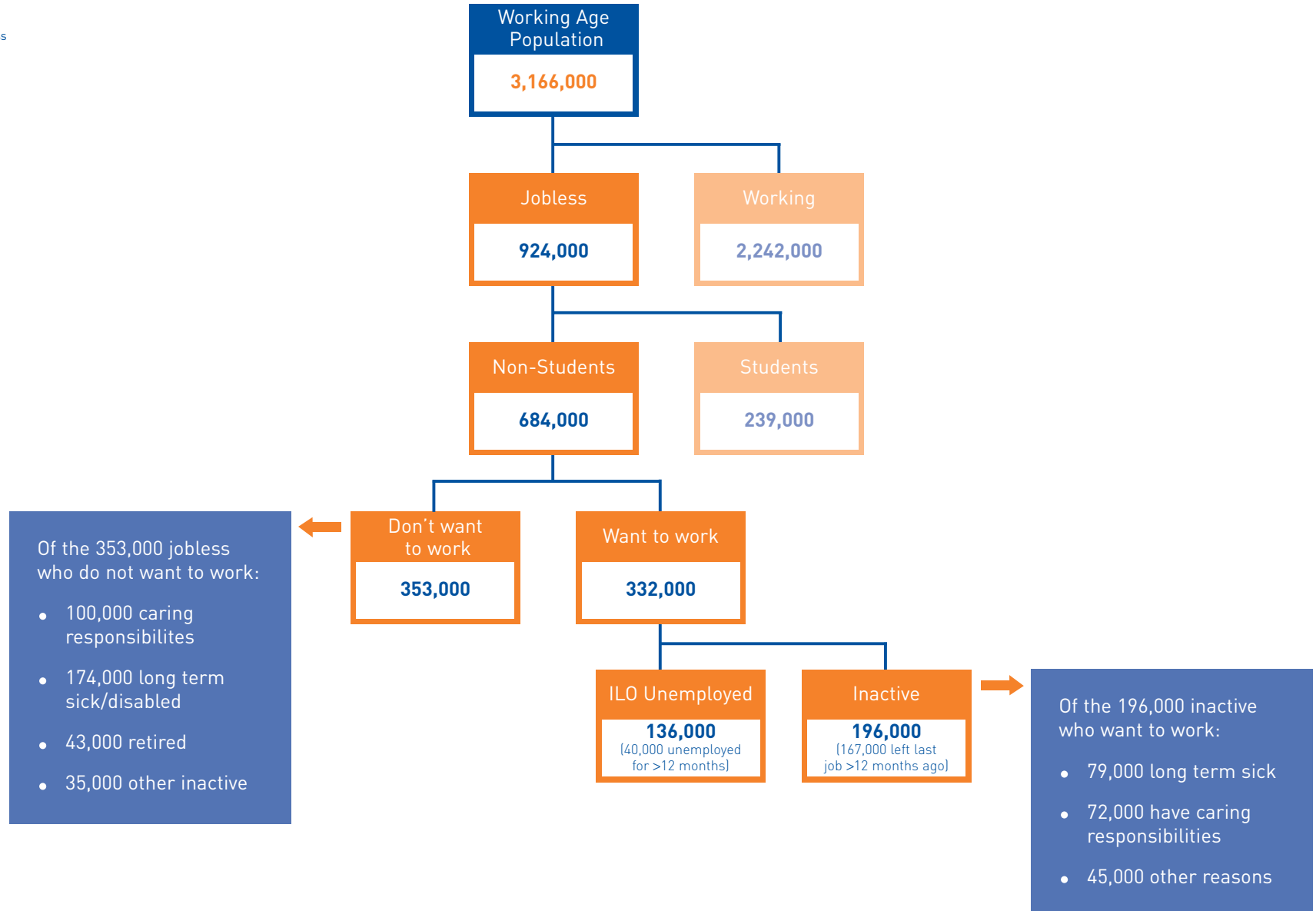
Source: Gardiner (1997)



FIGURE 31

Distribution of joblessness in 2001

Source: Labour Force Survey, Spring 2001



5. FACT OR FICTION? TEN LABOUR MARKET MYTHS

Many frequently reported statements about the labour market are unsubstantiated, and are often wrong. They often stem from misinterpreted statistics, anecdotal evidence or popular misconceptions. Others emerge from issues that lack clear explanation and evidence. This chapter therefore confronts a number of these labour market myths with evidence.

High technology industries, although making a critical contribution to future economic prospects, do not generate high numbers of jobs directly.

MYTH "TOMORROW'S JOBS ARE ALL IN GROWTH OR HIGH TECHNOLOGY INDUSTRIES"

The common perception that most future job opportunities will be in 'growth' or 'high technology' industries is misleading. The evidence is persuasive that in the foreseeable future, job opportunities will arise across a broad spread of occupations and industries.

The Department for Trade and Industry (DTI) provides a classification of high and medium technology industries according to 1992 Standard Industrial Classification. This classification, along with relevant SIC code classifications (in parentheses) include:

High Technology :

- Pharmaceuticals (24.4)
- Office machinery and computers (30.0)
- Aerospace (35.3)
- Electronics-communications (32.0)

Medium High Technology:

- Scientific Industries (33.0)
- Motor Vehicles (34.0)
- Electrical Machinery (31.0)
- Chemicals (24, excluding 24.4)
- Other Transport Equipment (35.2, 35.4, 35.5)
- Non-electrical Machinery (29.0)

Together, these industries accounted for an estimated 105,600 employees in 2001, or 4.5 per cent of Scotland's employees. Total employment in high technology industries increased by just three per cent between 1995 and 2001, against a nine per cent rise in Scottish employment overall. High technology industries did not exhibit strong growth compared with the rest of the economy: though that is not to deny their wider economic significance, for example as a stimulus to innovation or to output growth or in terms of their ability to generate jobs through multiplier or knock-on effects. Nevertheless, employment demand projections for 2002-2007 for high technology industries, as defined by the DTI, suggest that net demand for new employees in high technology industries over the period will be very small.

Not all job opportunities come from growth alone – replacement demand is also important.

What are the 'growth' industries?

Most of the growth in stock of jobs has come from the service industries (Figure 32), while manufacturing and the primary sector have shed jobs. But new job opportunities in an industry do not arise solely from net employment growth. There are two different types of demand:

- **Expansion demand:** the creation of new posts because of growth. This must be balanced with contraction, meaning the destruction of jobs through closures or workforce cutbacks.
- **Replacement demand:** the need to replace employees who permanently leave their jobs to retire, migrate, or move to another occupation and/or industry.

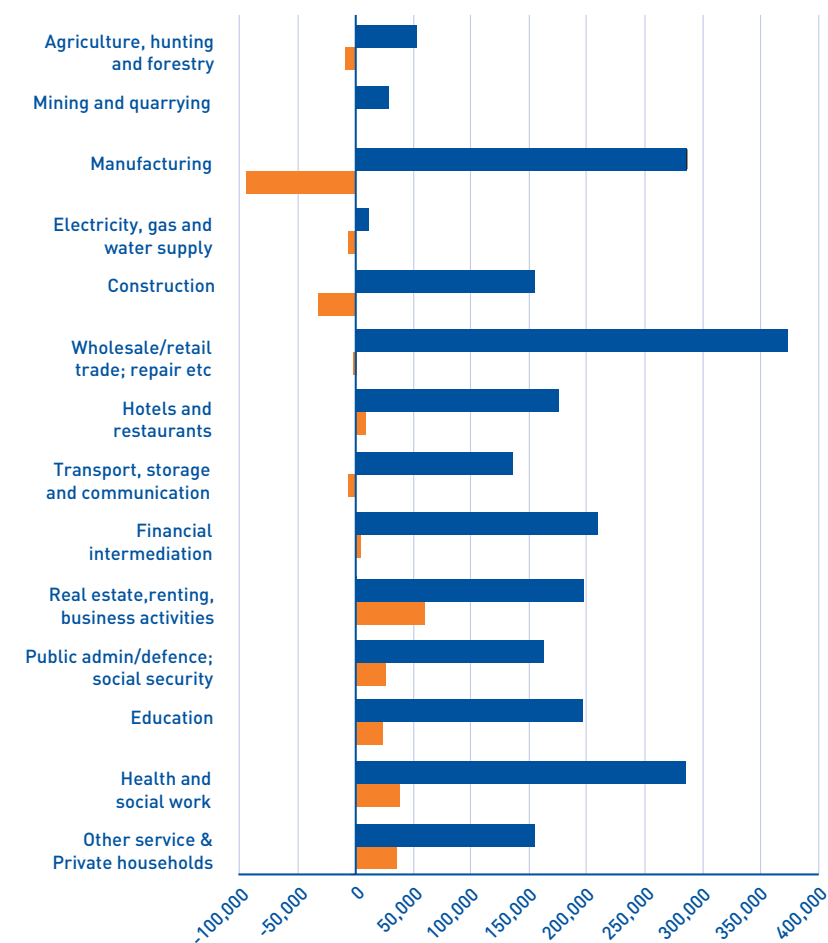
The combined figure is called **net demand**. Projections suggest (Section Three) that demand exists for new employees across a wide range of industries, and perhaps more importantly, a spread of occupations.

FIGURE 32

Estimated net change in total employment by industry 1991 to 2002, and total employment in 2002

Source: IER

■ Net change 1991-2002
■ Total employment 2002



5 FACT OR FICTION?

Tomorrow's jobs are to be found in many occupations and industries.

A skills shortage is a vacancy for which it is hard to find a suitably-skilled applicant.

The levels of skill shortage vacancies are not high in Scotland.

The occupational dimension

It is misleading to focus solely on industries. Any single industry uses skilled workers, even if it is not considered a 'high technology' industry as conventionally defined. Education and health care, for example, use a vast range of information technology applications and technically skilled staff, yet we would not normally consider them a hi-tech sector. The DTI does not classify healthcare as high technology, even though it is a sector heavily dependent on sophisticated technologies and skills.

Comparing job opportunities with skill levels certainly confirms a steady up-skilling of employees. Forecast future demand for more highly skilled occupations is strong. But the projections also show persistent and significant demand ahead in jobs that need lower levels of skills. It would be an oversight to ignore this.

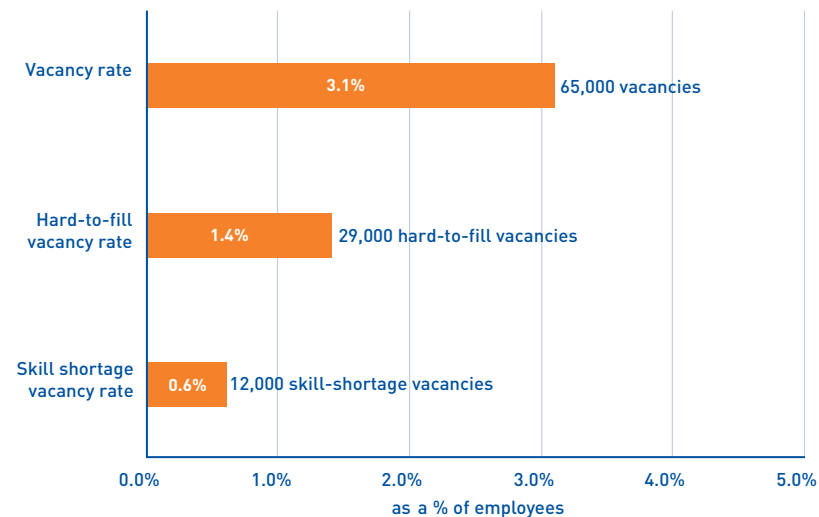
In short, the evidence shows that:

- Tomorrow's jobs are in a far wider range of occupations and industries than those conventionally and anecdotally labelled 'growth' or 'high technology'.
- Future employment opportunities will arise for other reasons than growth, notably in replacement demand.
- A purely sectoral focus misleads. Every industry employs a mix of skills and technology. For example, IT workers are found in many more industries than simply the 'IT industry'.

FIGURE 33

Vacancies, hard-to-fill vacancies and skills-shortage vacancies in Scotland in 2002

Source: Skills in Scotland, 2002



MYTH: "SKILLS SHORTAGES ARE A SIGNIFICANT PROBLEM FOR MANY OF SCOTLAND'S EMPLOYERS"

In the past few years, newspaper articles about skills shortages – even a skills "crisis" – have been a routine daily read. Yet evidence shows that not to be true. In 2002, Futureskills Scotland conducted a major survey of employers (Skills in Scotland, 2002) which provided robust evidence about recruitment, retention, skills shortages and workforce development.

Definitions

It is critical to be clear about what a skill shortage is. We define it as:

A vacancy that an employer describes as being hard to fill because the applicants lack the skills, experience or qualifications the employer seeks.

Skills are but one reason among many why an employer might have difficulty filling a vacancy. Other might include a lack of applicants, or candidates having a poor attitude or the pay on offer.

When employers were surveyed in June 2002 about current vacancies (Figure 33) their responses revealed that:

- The incidence of skill shortage vacancies was relatively low in Scotland:
 - there were 12,000 skill shortage vacancies, fewer than one-fifth of all vacancies, and equivalent to only 0.6 per cent of employees in Scotland
 - just four per cent of workplaces reported skills shortage vacancies
- Skill shortages were more common in skilled manual trades and lower skilled jobs; in small workplaces with ten or fewer employees; and among growing businesses and employers that train (though that may reflect a sharper employer awareness of skills deficiencies).
- Most hard-to-fill vacancies are not attributable to 'skills'.

So, contrary to the myth, the evidence shows that skill shortages are not a big problem for Scotland's economy. That being said, the survey found that where employers did face skills shortages, there were significant consequences for performance (Section Four).

There is no evidence that the labour market has become less secure.

MYTH: "JOBS HAVE BECOME LESS SECURE"

Many people believe that jobs have become more insecure. Over the past ten years, the perception has grown that employers have become more demanding in pursuit of workforce 'flexibility', with the result that working patterns have become less stable, and an increasing number of jobs temporary. Yet, some facts tell a different story, one of mostly stable employment conditions. Moreover, it is also clear that any shift towards flexible working or frequent changes of job is far from wholly involuntary. Yet, the myth is a resilient one.

There has been little change in job tenure over the past decade.

Job tenure

Popular wisdom holds that the length of time people spend in any job they have is becoming shorter, and that this is a bad thing. The evidence raises doubts about how accurate this perception is, and how much any change that might have occurred is problematical. It shows that:

- In recent years, labour demand has been relatively high. It is therefore sensible to suggest that people may change jobs more frequently because of heightened opportunity rather than greater jeopardy.
- In fact, the proportion of people who have not been in their jobs for long has barely risen, and in particular there has been no change in the proportion of people in work who have been in their jobs for less than two years (Figures 34 and 35).
- Neither has there been any significant change in length of time most employees have been in post (Figure 36). Average tenure remains at around eight years and four months.

Evidence suggests a lower proportion of people now leave their jobs involuntarily compared to 10 years ago.

Job security

Figures are also available on why people leave paid employment, and on whether their departure was voluntary or involuntary. These show (Figure 37) that:

- 34 per cent of people who left paid employment in the three months between March and May 2002 did so involuntarily (e.g. were dismissed, made redundant, took voluntary redundancy, or came to the end of a temporary job).
- The remainder, 66 per cent, left voluntarily (e.g. resigned, retired, or gave up work for health, family or personal reasons).
- In 1992 more people left their jobs involuntarily than in 2002, suggesting that job security may actually have increased across the decade, although it is important to remember that 1992 was the year in which a recession ended whereas 2002 was one of buoyant labour market conditions.

There is no evidence to corroborate an increase in job insecurity in Scotland.

5 FACT OR FICTION?

FIGURE 34

Length of time in current job for all working age employees in Scotland in 1992, 1997 and 2002

Source: Labour Force Survey, Spring Quarters

Year	< 3 mths	3 to 6 mths	6 to 12 mths	1 to 2 yrs	2 to 5 yrs	5 to 10 yrs	10 to 20 yrs	20+ yrs
1992	4%	4%	9%	4%	27%	21%	22%	10%
1997	4%	5%	10%	5%	22%	24%	20%	11%
2002	4%	4%	10%	5%	24%	19%	21%	12%

FIGURE 35

Length of time in current job for all working age employees in Scotland in 1992, 1997 and 2002

Source: Labour Force Survey, Spring Quarters

□ 1992 ■ 1997 ■ 2002

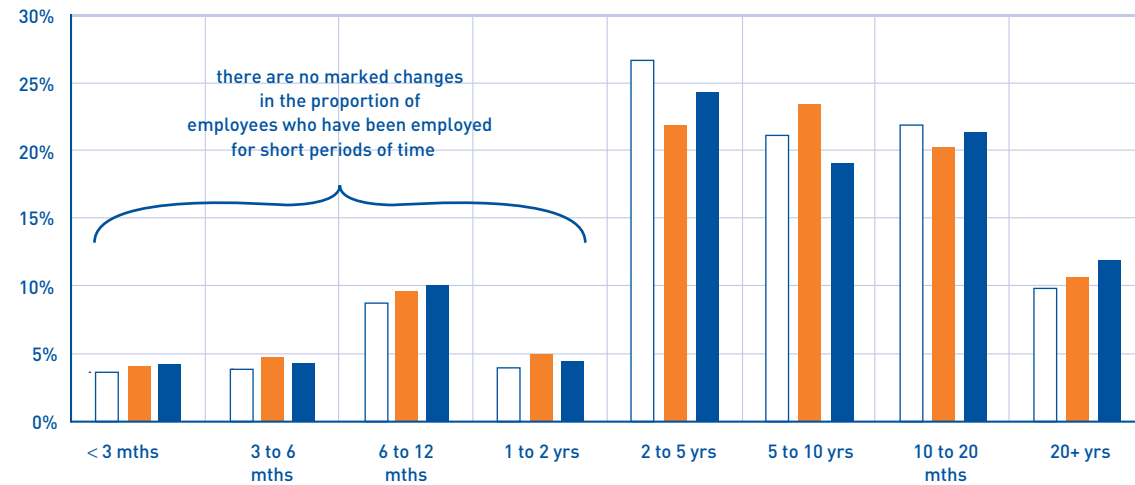


FIGURE 36

Average months spent in continuous employment in current job by age in 1992, 1997 and 2002

Source: Labour Force Survey, Spring Quarters

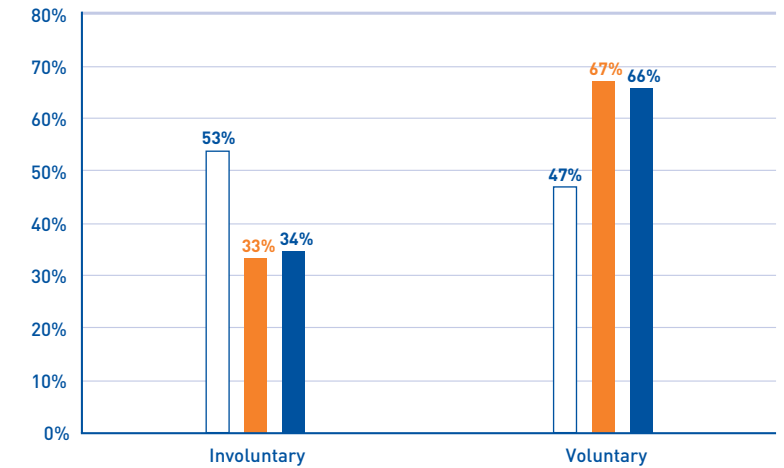
Age band	1992	1997	2002
16 to 24	33	30	26
25 to 34	67	68	65
35 to 49	115	120	119
50+	168	162	166
All employees	98	97	100

FIGURE 37

If left paid job in last 3 months – whether reason for leaving was involuntary or voluntary (UK) in 1992, 1997 and 2002

Source: Labour Force Survey, Spring Quarters

□ 1992 ■ 1997 ■ 2002



40% of temporary employees could not find permanent work.

Temporary and permanent employment

Overall (Figure 38), and contrary to perceptions, there has been no significant change in the proportions of employees taking temporary jobs over the past ten years. Other data reveal that:

- Half of all temporary work is contracted for a fixed period and fixed task (Figure 39).
- 40 per cent (53,000) of all 134,000 temporary workers took this work because they could not find permanent jobs. This proportion has decreased since 1992.
- The proportion of temporary employees undertaking contracts for less than a year has increased slightly since 1992.

So, temporary employment has not increased significantly. But it does seem that a large proportion of the people concerned would prefer permanent jobs.

In general, there is little evidence of increased job insecurity over recent years. However, there remains further work to be done to examine the range of issues surrounding this, such types of contract and shift work, and examining if job insecurity is a problem for specific individuals, types of work, or employers.

FIGURE 38

Proportion of total employees in permanent and temporary employment in 1992, 1997 and 2002

Source: Labour Force Survey Spring Quarter 2002

■ Permanent
■ Temporary

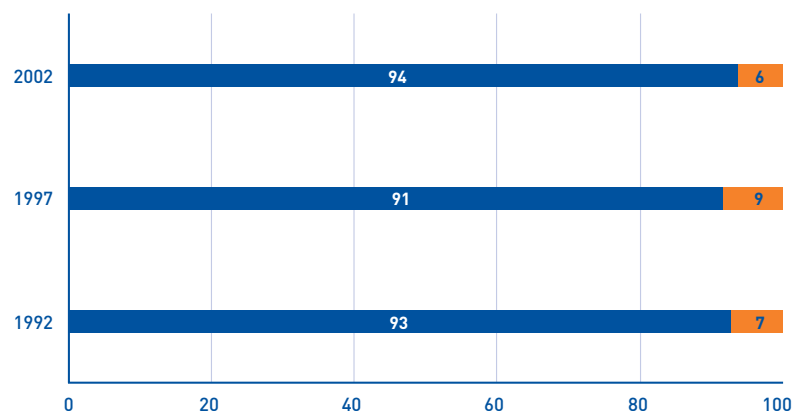


FIGURE 39

Type of temporary work, % of all temporary employees in 1992, 1997 and 2002

Source: Labour Force Survey Spring Quarter 2002

Type of temporary work	1992	1997	2002
Seasonal work	7	8	6
Contract for fixed period, fixed task	58	55	51
Agency temping	4	8	11
Casual work	15	18	18
Not permanent in some other way	17	12	14

Most people work part-time by choice.

Working hours have remained remarkably stable over the past ten years.

MYTH: “PART-TIME EMPLOYMENT IS INCREASING AT THE EXPENSE OF FULL-TIME JOBS, AND BECAUSE PEOPLE CAN’T GET FULL-TIME JOBS”

Part-time employment

In recent years, part-time employment has increased but so has full-time employment (see Section Two). The growth in part-time employment can therefore be seen as part of a general increase in labour market opportunities. To find out whether it also implies problems, we need to ask why people work part-time, and whether they would prefer to work longer hours or full-time. The evidence suggests:

- Only 17 per cent of part-time employees do want to work longer hours (Figure 40).
- Most people who work part-time do so by choice: 69 per cent say they do not want a full-time job. Only 11 per cent work part-time because they could not find full-time jobs.
- 28,000 part-time employees would like to work more hours at their basic rate and could therefore be considered ‘underemployed’. But this represents just five per cent of all part-time workers, or one per cent of all employees.

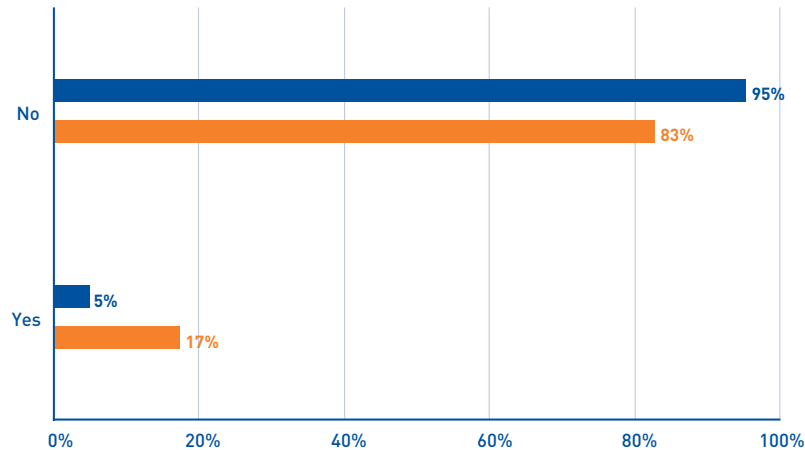
More people than before work part-time, yet it is a problem for only a small minority of employees.

FIGURE 40

Whether full-time and part-time employees would like to work longer hours at their basic rate, 2002

Source: Labour Force Survey Spring Quarter 2002

■ Full Time
■ Part Time



MYTH: “PEOPLE ARE WORKING LONGER HOURS”

A further perception is that growing numbers of people in Scotland are working ever longer hours. Once again, there is no evidence to support this claim; working hours have remained remarkably stable.

Statistics (Figures 41 and 42) on weekly working hours for the years 1992, 1997 and 2002 for all working aged employed individuals in Scotland reveal that:

- Average weekly working hours, excluding overtime, have changed little – at 37 hours in 1992, 1997 and 2002.
- Even including overtime, the working week has changed little over the years.
- Nor have weekly working hours for full-time workers changed significantly.
- Part-time workers have progressively worked more hours per week on average since 1992.
- The proportion of workers whose weekly working hours tend to vary (Figure 43) has also been consistent: at 44 per cent in both 1992 and 2002.
- The proportion of employees who never do shift-work has changed little – from 79 per cent in 1992 to 77 in 2002.

Figure 44 includes data on the times of the day, and days of the week, worked by those employed in Scotland in 2002. There are no comparable data for earlier years. What is evident is that a fair proportion work during evenings and weekends.

On average in Scotland, working hours and overtime levels have been remarkably stable over the past ten years. There has been little overall change, though that may not take account of variations between different types of jobs and industries. The evidence does confirm that a significant proportion of employees work out with daytime and weekdays.

FIGURE 41

Median weekly hours of work for all employed of working age in Scotland in 1992, 1997 and 2002

Source: Labour Force Survey Spring Quarters

All of working age in employment	1992	1997	2002
Usual hours (no overtime)	37.0	37.0	37.0
Usual hours including (paid & unpaid) overtime	43.0	43.0	42.5

FIGURE 42

Median weekly hours of work for all employed of working age in Scotland in 1992, 1997 and 2002 by mode of employment

Source: Labour Force Survey 2002 Spring Quarter

All of working age in employment	1992	1997	2002
Full-time employees			
Usual hours (no overtime)	39.0	39.0	39.0
Usual hours including overtime	44.0	44.0	44.0
Part-time employees			
Usual hours (no overtime)	16.0	17.0	18.8
Usual hours including overtime	21.0	21.5	22.5

FIGURE 43

Whether hours vary and if do shift-work, % of all working age employed in Scotland in 1992, 1997 and 2002

Source: Labour Force Survey Spring Quarters

Whether weekly hours tend to vary	1992	1997	2002
Weekly hours tend to vary	44	47	44
Usually shift work in main job	16	18	18
Sometimes shift work in main job	4	5	4

FIGURE 44

Time of day worked and whether work weekends 2002 – % of all of working age employed in Scotland

Source: Labour Force Survey 2002 Spring Quarter

Time of day/ day worked	% of all employees
Work during day	41
Work during evening	36
Work during night	13
Work Saturdays	45
Work Sundays	35

Demographic projections provide no evidence of an **immediate shortage of workers**.

MYTH: “A POPULATION CRISIS MEANS THAT NOT ENOUGH PEOPLE ARE AVAILABLE TO WORK”

There is much debate currently about a ‘population crisis’ and an imminent potential shortage of workers. Current population projections provide no evidence that such a crisis is happening right now, but the implications of demographic change in the long term could be important.

Demographic projections

Scotland’s population level has been fairly stable in recent years, though with a changing age profile (Figure 45) in that:

- Older adults (over 35s) represent an increasing proportion of the population.
- Numbers of children and young people have decreased.

The overall trend has been for the average age of the population to rise. A growing proportion of the 16-64 aged-group is aged 35 and over (Figure 46)

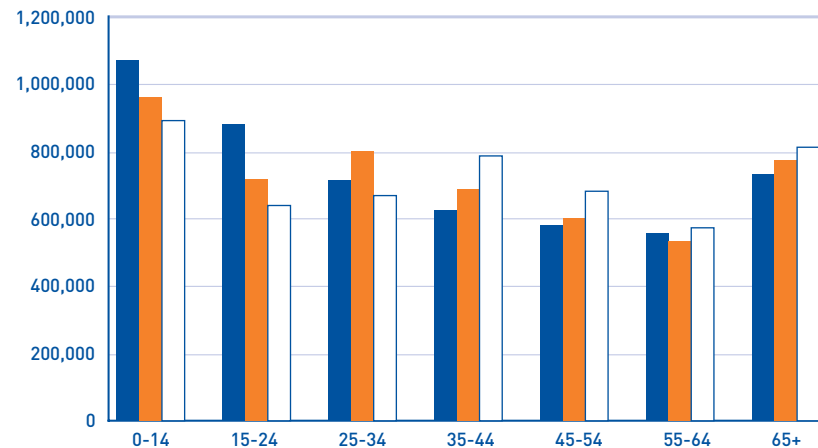
A key factor in all this is the changing definition of ‘working age’ population. It consists at present of males aged between 16 and 64, and females aged between 16 and 59. But this is set to change. Between 2010 and 2020 retirement age for women is to be gradually equalised with the male retirement age of 65. Were the definition to remain as it is now, the working age population would decline by 344,000, or 11 per cent by 2025. But the change in retirement age makes the likely decrease much smaller: around 169,000 by 2025.

FIGURE 45

Actual population levels by age 1982-2002

Source: General Register Office for Scotland, 2002

- 1982
- 1992
- 2002



Latest projections suggest that the working-age population of Scotland will not fall below its current level until 2006, and will have contracted by no more than one per cent – about 20,000 people – by 2019 (Figure 47). However the change in female retirement age is a key factor in reducing the impact of demographic change on the working population.

In summary, then:

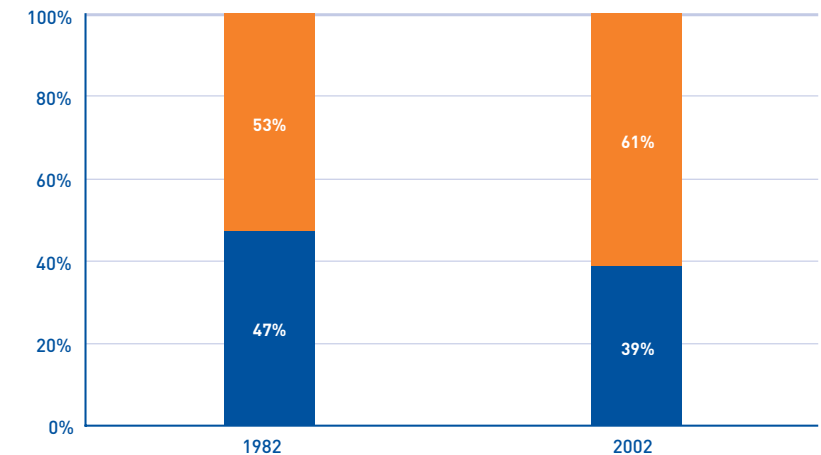
- The population, and working-age population, of Scotland is ageing.
- After 20 years the decline in working age population will still be small, though the picture is distorted by the planned change in female retirement age to 65 by 2020.
- There are implications for work and for employers in a workforce that will be increasingly middle-aged or older.

FIGURE 46

Shares of 15-64 year old population by age groups in Scotland in 1982 and 2002

Source: General Register Office for Scotland, 2002

- 15-35
- 35-65



Levels of self-employment have held steady over the past ten years.

Female employment, though increasing, has yet to overtake male employment, and much of it is part-time.

MYTH: "MORE WOMEN NOW WORK THAN MEN"

Another myth dispelled by the evidence is that women now work more than do men. There certainly is a trend over the past 40 years of increasing female employment in Scotland (Figure 48). Male employment, although declining between 1960 and 1980, has been stable since the late 1980s. Closer inspection of the data reveals that nearly all the growth in total employment since the 1990s is due to rising female employment.

- Although the gap is narrowing, total female employment, at 1.12 million in 2002, was still lower than male employment, which stood at 1.26 million.
- A higher proportion of women's employment is part-time:
 - 42 per cent of women employees worked part-time in 2002, compared with nine per cent of men.
 - The average actual weekly hours of work were 27.4 hours for women and 38.5 hours for men in May 2002.

MYTH: "MORE PEOPLE ARE SELF-EMPLOYED NOW"

Self-employment is a further area where perceptions are at odds with the facts. There is a belief that increasing numbers of people are choosing to be self-employed, and that they account for a growing proportion of the workforce. In fact, the Labour Force Survey reveals (Figure 49) that self-employment has been relatively stable, both numerically and as a proportion of total employees.

On average since 1992, self-employment has represented 9.7 per cent of all employees. The figure peaked at 10.2 per cent in 1995, and has reduced slightly over the past four years. This is consistent with Great Britain-wide trends.

FIGURE 47

Projections of the working age population, thousands, 2002-2026

Source: Government Actuary Department, 2002

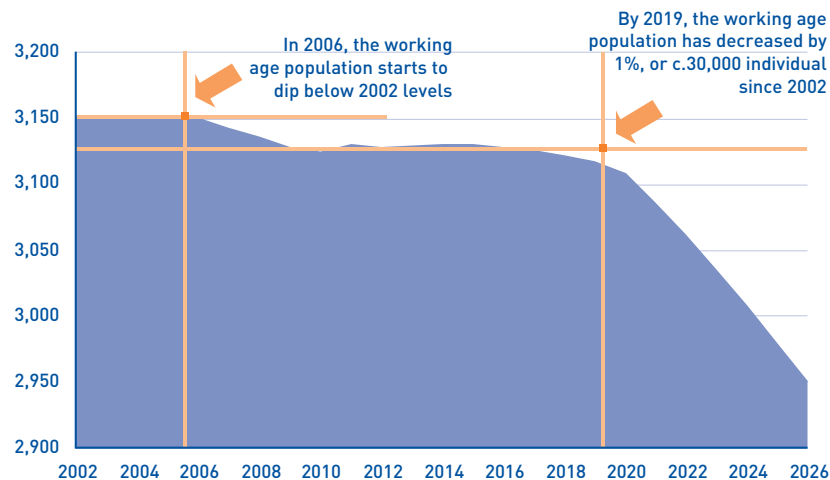
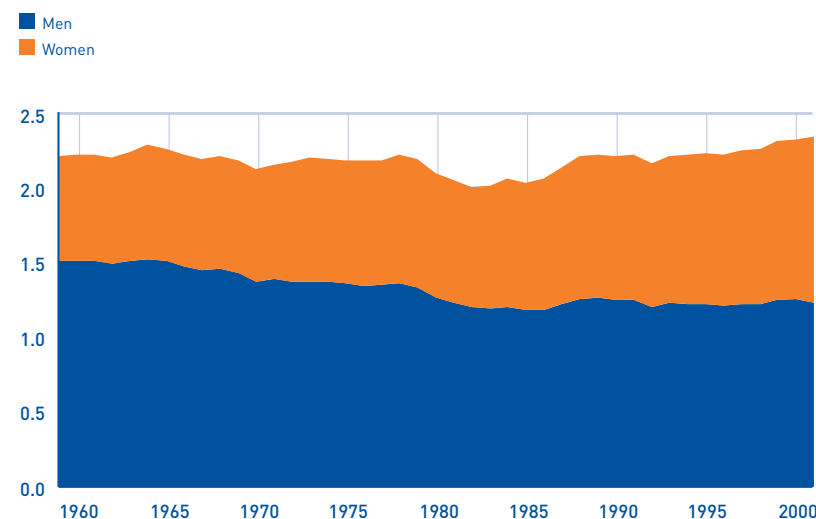


FIGURE 48

Male and female employees 1960-2002

Source: Office for National Statistics



MYTH: “PEOPLE AGED OVER 50 FIND IT EVER HARDER TO GET INTO WORK”

Compared with younger age groups, a smaller proportion of people aged 50 and over is in work. The employment rate for all working age people was 73 per cent in 2002 and only 33 per cent among those aged 50 and over. The reasons for the gap are complex, and include the fact that many people in the older age group have voluntarily retired. When the difference in employment rates is set alongside the fact that the average age of the population is rising, there are sometimes concerns that older workers face discrimination and that labour supply problems will become acute as demographic change proceeds.

However, one of the most notable changes of the last decade has been the increasing number and proportion of people aged 50 and over that is active in the labour market. Comparing 1992 and 2002 (Figure 50):

- the overall economic activity rate was 0.5 per cent higher in 2002 and the number of economically active people had risen by 12,000;
- the economic activity rate among people aged 50 and over was 10.4 per cent higher and the number of economically active over 50s had risen by 53,000;

- total employment was 83,000 (or 3.7 per cent) higher; and
- employment among people aged 50 and over was 61,000 (12.8 per cent) higher, meaning that employment among the over 50s accounted for 73 per cent of total employment growth.

The data do not necessarily mean that no older workers face any difficulties in obtaining or sustaining work. However, they suggest that in the last ten years increasing numbers of older workers have been successful in retaining or obtaining jobs. That is encouraging given the trends in the age profile of the workforce outlined in other parts of this report.

Looking to the future, there is one very great uncertainty that makes it more difficult than ever to anticipate how older people might fare in the labour market. The fall in the value of occupational pension funds and the consequent changes to the regulations that govern many of them could have a profound impact on the number of people aged 50 and over who want to or have to work. In this area, more than most, the past is likely to be an especially unreliable guide to the future.

FIGURE 49

Self employment in Scotland and Great Britain 1992-2002

Source: Labour Force Survey, Spring Quarters

	Scotland		Great Britain	
	Total self-employed	Self employed as % of all employees	Total self-employed	Self employed as % of all employees
2002	226,000	9.5	3,147,000	11.4
2001	222,000	9.3	3,085,000	11.2
2000	208,000	8.9	3,069,000	11.3
1999	214,000	9.3	3,128,000	11.7
1998	233,000	10.1	3,190,000	12.1
1997	229,000	10.0	3,262,000	12.5
1996	226,000	10.0	3,218,000	12.5
1995	232,000	10.2	3,274,000	12.9
1994	224,000	9.9	3,216,000	12.8
1993	218,000	9.8	3,108,000	12.5
1992	216,000	9.4	3,146,000	12.5

Many policymakers and organisations have an interest in the operation of the labour market at the local level.

Although the labour market has a spatial dimension, it is not possible to spatially define the local labour market.

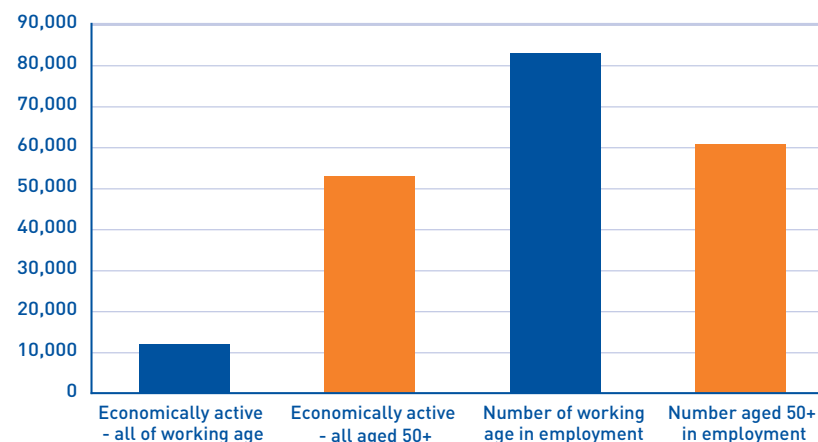
MYTH: “WE HAVE WELL DEFINED LOCAL LABOUR MARKETS”

Defining a local labour market is much less straightforward than it sounds. The labour market for part-time office cleaners is likely to be very localised, whereas the labour market for astrophysicists is global. Unitary authorities, Careers Scotland regions, or Local Economic Forums, operate within relatively fixed administrative boundaries, which are defined with reference to a wide range of criteria. These boundaries rarely correspond to precise approximations of local labour markets. Even when the scale and scope of a local labour market can be estimated at a point in time, labour market processes are dynamic in nature, and things can change.

FIGURE 50

Changes in number of economically active and employed people, by age group, May 1992 and 2002

Source: Quarterly Labour Force Survey



Other spatial aspects of labour markets need to be borne in mind:

- Local matters can affect the national economy and labour market, just as national issues affect the local economy and labour market. Global changes influence both. No labour market – local, national or international – operates in isolation.
- Spatial definitions of local labour markets often rely on an analysis of commuting patterns. Approximations to local labour markets have traditionally been defined on two criteria – the majority of jobs in that area must be held by local residents and the majority of working residents must work within that area.
- But there is no uniformity about how far people choose to live from their work, or what individuals regard as a reasonable or desirable travel time. Household factors, such as childcare responsibilities and access to transport are important, as indeed is the housing market itself.
- The flows and scope of people travelling to work, where they choose to look for work or locate their household are not only highly variable: they also cross administrative and sometimes national boundaries. The labour market is constantly adjusting to these ebbs and flows.
- It follows that, although the labour market has a spatial dimension, it is not possible to define spatially the local labour market in a precise way that does not change.

Nevertheless, regional and local authorities show perfectly proper concern for labour market issues within their boundaries, and often have a specific remit to address them. However, neither the forces of supply and demand, nor the movement of jobs and people, respect convenient administrative boundaries.

5 FACT OR FICTION?

Travel-to-work-areas were not originally designed to be approximations of local labour markets, however much they are used as such.

The best that can be done is to understand the spatial factors that influence labour market dynamics at the administrative area of interest, be it global, European, national, regional or local.

Travel-to-work-areas (TTWAs)

Within the UK, travel-to-work-areas (TTWAs) are often adopted as convenient approximations to 'local labour markets'. For this to be valid, it is important that some aspects of TTWAs are fully understood.

- TTWAs are academically defined areas, designed to provide a consistent basis for reporting unemployment rates. They were last revised in 1998.
- TTWAs were not originally designed to be approximations of local labour markets, however much they are used as such.
- TTWAs are defined in a consistent manner, using clear concepts and criteria, to allow for convenient comparisons across the UK. But their individual characteristics vary greatly – there is no 'typical' TTWA.
- TTWAs are static representations of a dynamic process, and as such cannot represent all the flows of jobs, workplaces, and people in an area. TTWAs are based on the commuting patterns of the 'average worker', omitting variations across gender, occupation and other characteristics which are important in labour market terms.
- TTWAs are based on Census data, and as such, their definition can lag behind changes in the economy and labour market.

So how can the local labour market be analysed?

In summary, caution is prudent when discussing the 'local' labour market' in spatial terms:

- However universal the concept, there is no standard, spatial definition of the local labour market.
- The complex and dynamic nature of labour markets makes any definition of a local labour market difficult, and invites over-simplification.

As such, perhaps the best approach is to understand the spatial factors that influence labour market dynamics in the administrative area of interest, be it global, European, national, regional or local. Such a detailed understanding, allied with appropriate local knowledge and evidence can lead to effective intervention in the labour market locally.

6. SUMMARY

RECENT TRENDS

This updated analysis of The Scottish Labour Market has thrown up some specific issues, although there are no remarkable departures from last year's edition of The Scottish Labour Market. The key points are that:

- Scottish employment remains high in historical terms, with 2,376,000 people in work in 2002. Scotland's employment growth over the past decade has lagged behind average performance across Great Britain as a whole.
- Service industries are dominant in terms of numbers employed.
- Scotland's earnings continue to lag some seven per cent behind the Great Britain average.
- There has been some convergence with the Great Britain average, to Scotland's gain, in economic activity and participation rates.
- Attainment of educational qualifications is increasing. Now, some 16 per cent of the working age population have degree-level qualifications, compared with 11.5 per cent in 1997. Participation in further and higher education has increased markedly in the past five years.

FUTURE PROJECTIONS

- The population is declining in the long term and the average age is rising. The working age population will decrease, though the fall will be mitigated by raising women's retirement age to 65 by 2020.
- Continued employment growth is forecast in services, and further contraction in primary industries and manufacturing.
- New job opportunities arising from replacement demand far exceed those created from economic growth.
- New job opportunities are forecast across a wide range of occupations. In sectoral terms, the biggest share will be in services.
- These new job opportunities will need people with a wide range of qualifications – from none, to degree level.

SKILLS SHORTAGES ARE NOT AN EXTENSIVE PROBLEM

- Skills were a middle-ranking issue for employers in 2002. When asked what challenges they expected their business to face over the next 12 months, they put "attracting appropriately skilled people" fourth.
- The labour market in Scotland and usually operates effectively in filling vacancies. Employers judged fewer than half their vacancies were hard to fill, showing the market to be working well on most occasions.
- A small proportion of vacancies are attributable to skill shortages. There were 65,000 vacancies, of which 29,000 were hard to fill. Just 12,000 of these were described by employers as being hard to fill because of applicants lacking appropriate skills, expertise or qualifications.
- These 12,000 skill shortage vacancies compared with 2.1 million employees and 65,000 vacancies. This means that skill shortage vacancies represent just 0.6 per cent of jobs and 18 per cent of vacancies.
- Many skill gaps are transitory. The most frequently cited cause was that "people had not been in the job long enough". The second most cited cause was "insufficient training and development for staff". The third most cited cause was that "training programmes were only partially completed".
- Although their incidence is not common, the impact of skill shortages and skill gaps can be serious.

EMPLOYABILITY

- Employability means an individual's ability to gain sustained access to labour market opportunities.
- It is a problem where individuals have poor or below average employability which makes it harder for them to seek, find or retain a job.
- Of the 684,000 jobless who are not students, 332,000 want to work.
- A large proportion (207,000 or 62 per cent) of the jobless who want to work have not worked for more than 12 months.
- Certain characteristics correspond to a higher probability of being jobless. They include having no or low qualifications, having a long-term illness or disability, and living in a single adult household.

MYTHS, FACTS AND CLARIFICATIONS

Facts are sacred: and some common assertions about the labour market are myths:

- **Myth:** tomorrow's jobs are all in growth or high-technology industries; **fact:** tomorrow's jobs are in a far wider range of occupations and industries than those associated with growth or high technology industries.
- **Myth:** skills shortages are a significant problem for many of Scotland's employers; **fact:** skills shortages are not a big problem in Scotland.
- **Myth:** jobs have become more insecure and employers increasingly require people to be more flexible; **fact:** there has been no dramatic rise in job insecurity or temporary employment.
- **Myth:** part-time jobs have increased at the expense of full-time jobs; **fact:** both part-time and full-time employment have increased.
- **Myth:** people are working longer hours; **fact:** working hours have not changed significantly in the past decade.
- **Myth:** we are in a population crisis, which means there will not be enough people available to work; **fact:** we are not in an immediate population crisis: change is gradual and in the long-term, and the reduction in working age population is small.
- **Myth:** women now work more than men; **fact:** female employment has increased, but does not exceed male employment, and women generally work fewer hours than men.
- **Myth:** more and more people are choosing to be self-employed; **fact:** the number of self-employed people has decreased slightly.
- **Myth:** people aged over 50 find it ever harder to get into work; **fact:** the number and proportion of the over 50s in work has risen over the last decade.
- **Myth:** we have well defined local labour markets; **fact:** the local labour market is often used in analysis and policy, but there is no consistent way to define it and it is open to many external influences.

7. USEFUL INFORMATION

- Industry definitions and classifications
- Occupational classifications
- Acknowledgements
- Feedback

INDUSTRY DEFINITIONS AND CLASSIFICATIONS

In this report, and many other Futureskills Scotland reports, industries are classified in standard ways. It is often difficult to know what kinds of economic activities are included in these industrial classifications. Most economists and researchers classify industries according to an established standard set by the UK Government – Standard Industrial Classifications (or SIC):

- There are 17 Sections in SIC, coded A to Q. If the industry of interest is transport, storage and communication, the indexing system works like this:
 - transport, storage and communication has 5 Divisions within it, which are coded with two digits,
 - 60 Land transport: transport via pipelines
 - 61 Water transport
 - 62 Air transport
 - 63 Supporting and auxiliary transport activities; activities of travel agencies
 - 64 Post and telecommunications
- Divisions are subdivided into Classes, which comprise three digits. For example, Division 64 Post and telecommunications has two Classes in it:
 - 64.1 Post and courier activities
 - 64.2 Telecommunications
- Further, Classes can be refined into more detailed Sub-Classes. For example, class 64.1 Post and courier activities can be further refined into the following sub-classes:
 - 64.11 National post activities
 - 64.12 Courier activities other than national post activities

POINTS TO NOTE ABOUT USING INDUSTRIAL CLASSIFICATIONS

There are some important points to note about the use of industrial classifications in analysing the labour market, especially in terms of appreciating the types of jobs people do:

- Industrial classifications are not wholly accurate at depicting the type of work people do. For example, within a factory that manufactures jet engines [Section D Manufacturing, Subclass 35.30 Manufacture of aircraft and spacecraft], the bulk of employees will of course be factory workers and

engineers. However, the specific tasks and roles of these engineers may differ greatly (from a chemical engineer who deals with fuels to an aeronautical engineer who designs the bodywork of the engine to be streamlined), and also the factory will employ accountants, computer technicians, management staff, janitors and security guards to name a few. Occupational classifications are more indicative of the types of work undertaken.

- It is best to describe industrial classifications as a description of what the employing organisation or workplace does in terms of its main industrial activity.
- Broad industrial classifications, such as Broad Industrial Groups (nine categories) or Sections (17 categories) can be interpreted by some people as quite vague. However, it is sometimes impractical to report in terms of detailed industry activities – both in terms of the length of reporting and the availability of reliable data.

INDUSTRIAL CLASSIFICATIONS USED IN THIS REPORT

In this report, the SIC Sections have been used consistently to describe industries. Unfortunately the titles given to Sections are not always helpful in describing what kinds of activities are undertaken. Below is a guide to the types of activities within each Section.

Describing Industrial Classifications

- A Agriculture, hunting and forestry**
Farming and growing of crops and livestock.
Services to support the agriculture industry.
Hunting, trapping, game and related services.
- B Fishing, fish farming and related services**
- C Mining and quarrying**
Mining and quarrying of coal, lignite, peat and other solid fuels.
Extraction of oil and gas, surveying for oil and gas.
Mining and quarrying of metals, minerals, and construction materials.
- D Manufacturing**
Manufacture of a wide range of products including food, drinks, tobacco, textiles, clothing, shoes, leather & products, wood & products, paper, printed materials, refined fuels (coke, petroleum, nuclear fuels), chemicals, rubber, plastic, mineral products, metals, metal products, machinery, equipment, electrical and electronic equipment, vehicles, furniture, consumer goods.

- E Electricity, gas and water supply**
Production and distribution of electricity.
Manufacture and distribution of gas.
Collection, purification and distribution of water.
- F Construction**
Activities relating to construction, building including site preparation, road construction, electrical installation, plumbing, joinery, plastering, glazing, painting, demolition.
- G Wholesale/retail trade; repair etc**
Sale, maintenance and repair of motor vehicles and motorcycles.
Retail sale of fuel for motor vehicles.
Wholesale trade of products and goods.
Retail trade of products and goods.
- H Hotels and restaurants**
Hotels, restaurants, campsites, youth hostels, holiday centres, bars, nightclubs, and catering.
- I Transport, storage and communication**
Transport of people and goods via railways, buses, taxis, boats, aircraft and spacecraft.
Transport of goods via pipelines.
- J Financial intermediation**
Banking, investment, leasing, factoring, venture capital.
Insurance and pension funding.
Administration of financial markets, security broking, fund management.
- K Real estate, renting, business activities**
Real estate, land and property development, selling, renting, management.
Renting of vehicles, transport equipment, machinery and equipment, personal and household goods.
Computer and related activities including hardware, software, data processing, databases, maintenance and repair.
Research, development, experiments in natural sciences, engineering, social sciences, humanities.
Legal activities.
Accounting, book-keeping, auditing, tax consultancy.
Market research and advertising.
Business and management consultancy.
Architecture, engineering and related consultancy.
- Recruitment and personnel agencies.
Security and investigation services.
Industrial cleaning.
- L Public admin/defence; social security**
Public administration, civil service, local authority administration, defence, justice and judiciary, police, fire services, social services.
- M Education**
Primary, secondary, further and higher education.
- N Health and social work**
Human health activities including hospitals, GPs, medical practices, dental practices.
Veterinary activities.
Social work activities.
- O Other service**
Sewage and refuse disposal, sanitation.
Business, professional and trade union organisations.
Recreation, cultural and sporting activities including films, TV, radio, entertainment, theatre, amusement parks, art galleries, news agencies, libraries, sports clubs and arenas, and gambling.
Washing and dry cleaning, hairdressing, beauty treatments, funeral services, gyms, and other services not elsewhere classified.
- P Private households**
Private households with persons employed as servants, assistants, carers etc.
- Further details of SIC 2003 can be found from the ONS website:
www.statistics.gov.uk/statbase/Product.asp?vlnk=9769

OCCUPATIONAL CLASSIFICATIONS

Occupational classifications provide information about both levels of skills and types of job. The structure of the SOC is based on two main concepts:

- the kind of work performed or job – a set of tasks or duties, usually structured by employers
- the concept of skill – defined for SOC in two ways:
 - skill level – the complexity of the tasks and duties to be performed; and
 - skill specialisation – the field of knowledge required for competent, thorough and efficient conduct of the tasks.

The SOC system was updated in 2000, with a reclassification of activities and occupations. This most recent system is referred to as SOC 2000. Prior to this, SOC 90 was used – a system of definitions established in 1990.

How the SOC classification system is structured

Major Group	Sub-Major Group	Minor Group	Unit Group	Group Title
8				PROCESS, PLANT AND MACHINE OPERATIVES
	81			PROCESS, PLANT AND MACHINE OPERATIVES
		811		Process Operatives
			8111	Food, drink and tobacco process operatives
			8112	Glass and ceramics process operatives

There are 4 levels of classification in SOC 2000, Major Group, Sub-Major Group, Minor Group, and Unit Group – each consecutively leading to finer levels of detailed occupational categorisation. An example of how the SOC Groups are structured is presented below.

There are 9 Major Groups, as follows:

- 1 Managers and Senior Officials
- 2 Professional Occupations
- 3 Associate Professional and Technical Occupations

- 4 Administrative and Secretarial Occupations
- 5 Skilled Trades Occupations
- 6 Personal Service Occupations
- 7 Sales and Customer Service Occupations
- 8 Process, Plant and Machine Operatives
- 9 Elementary Occupations

Some points to bear in mind when using SOC

- Major groups do not directly rank occupations according to skill levels. There is some degree of overlap between major groups in terms of skill level and specialisation as occupational classifications are subdivided by job type or role too.
- SOC2000 does match sub-major groups to four skill levels. For more information, please see the link to the relevant ONS website at the end of this subsection.
- Using the broadest descriptions of Major Groups is not very informative about the kinds of jobs performed within each Major Group. Therefore, a brief overview of job types associated with each Major Group has been listed in the following paragraphs.

Guide to the kinds of jobs within Major Groups

1 Managers and Senior Officials

Occupations whose main tasks consist of the direction and coordination of the functioning of organisations and businesses, including internal departments and sections, often with the help of subordinate managers and supervisors. Most occupations in this major group will require a significant amount of knowledge and experience of the production processes, administrative procedures or service requirements associated with the efficient functioning of organisations and businesses.

Job titles include: diplomat, member of parliament, permanent secretary, corporate directors, chief executive, general manager, treasurer, town clerk, engineering manager, works manager, clerk of works, construction manager, export manager, marketing manager, bank manager, sub-postmaster, armed forces officers, police force officers, farming managers, guest houses owners, hotels managers, restaurants managers, shop managers, wholesaler managers.

2 Professional Occupations

Occupations whose main tasks require a high level of knowledge and experience in the natural sciences, engineering, life sciences, social sciences, humanities and related fields. The main tasks consist of the practical application of an extensive body of theoretical knowledge, increasing the stock of knowledge by means of research and communicating such knowledge by teaching methods and other means. Most occupations in this major group will require a degree or equivalent qualification, with some occupations requiring postgraduate qualifications and/or a formal period of experience-related training.

Job titles include: Chemist, biochemist, microbiologist, pathologist, mathematician, physicist, civil engineer, mining engineer, electrical engineer, electronics engineer, design consultant, technologist, metallurgist, computer consultant, software consultant, software engineer, systems analyst, doctor, general practitioner, surgeon, registrar, pharmacist, optometrist, dentist, veterinarian, lecturer, professor, reader, teacher, head teacher, bursar, university administrator, research associate, research scientist, barrister, coroner, solicitor, judge, legal clerk, accountant, actuary, economist, management consultant, statistician, architect, quantity surveyor, civil servant (grade 6,7), social worker, minister (religion), librarian.

3 Associate Professional and Technical Occupations

This major group covers occupations whose main tasks require experience and knowledge of principles and practices necessary to assume operational responsibility and to give technical support to Professionals in the natural sciences, engineering, life sciences, social sciences, humanities and related fields and to Managers and Senior Officials. The main tasks involve the operation and maintenance of complex equipment; legal, financial and design services; the provision of information technology services; providing skilled support to health and social care professionals; and serving in protective service occupations. Culture, media and sports occupations are also included in this major group. Most occupations in this major group will have an associated high-level vocational qualification, often involving a substantial period of full-time training or further study. Some additional task-related training is usually provided through a formal period of induction.

Job titles include: laboratory technician, engineering technician, technical assistant, architectural assistant, building inspector, computer operator, IT technician, nurse, paramedic, chiropodist, dental technician, physiotherapist, osteopath, housing officer, corporal, sergeant, fireman, police constable, police officer, prison officer, artist, author, actor, dancer, violinist, graphic designer, journalist, photographer, sportsman, sportswoman, referee, keep fit instructor, train driver, pilot, legal executive, valuation surveyor, stockbroker, tax consultant, market researcher, conservation officer, senior executive officer (government), personnel officer, careers adviser.

4 Administrative and Secretarial Occupations

Occupations within this major group undertake general administrative, clerical and secretarial work, and perform a variety of specialist client-orientated clerical duties. The main tasks involve retrieving, updating, classifying and distributing documents, correspondence and other records held electronically and in storage files; typing, word-processing and otherwise preparing documents; operating other office and business machinery; receiving and directing telephone calls to an organisation; and routing information through organisations. Most occupations in this major group will require a good standard of general education. Certain occupations will require further additional vocational training or professional occupations to a well-defined standard.

Job titles include: administrative assistant, clerical assistant, credit supervisor, bookkeeper, filing clerk, data processor, telephone interviewer, telephonist, clerk, medical secretary, secretary, personal assistant, typist.

5 Skilled Trades Occupations

This major group covers occupations whose tasks involve the performance of complex physical duties that normally require a degree of initiative, manual dexterity and other practical skills. The main tasks of these occupations require experience with, and understanding of, the work situation, the materials worked with and the requirements of the structures, machinery and other items produced. Most occupations in this major group have a level of skill commensurate with a substantial period of training, often provided by means of work-based training programme.

Job titles include: farmer, gardener, gamekeeper, blacksmith, coremaker, welder, fitter, setter, aircraft engineer, watchmaker, car mechanic, electrician, telephone engineer, computer engineer, roofer, mason, carpenter, plumber, glazier, plasterer, painter, cobbler, screen printer, butcher, chef.

6 Personal Service Occupations

This major group covers occupations whose tasks involve the provision of a service to customers, whether in a public protective or personal care capacity. The main tasks associated with these occupations involve the care of the sick and the elderly; the supervision of children; the care of animals; and the provision of travel, personal care and hygiene services. Most occupations in this major group require a good standard of general education and vocational training. To ensure high levels of integrity, some occupations require professional qualifications or registration with professional bodies.

Job titles include: nursing auxiliary, dental nurse, classroom helper, croupier, travel agent, air hostess, train conductor, barber, beautician, butler, janitor.

7 Sales and Customer Service Occupations

This major group covers occupations whose tasks require the knowledge and experience necessary to sell goods and services, accept payment in respect of sales, replenish stocks of goods in stores, and provide information to potential clients and additional services to customers after the point of sale. The main tasks involve knowledge of sales techniques, a degree of knowledge regarding the product or service being sold, familiarity with cash and credit handling procedures and a certain amount of record keeping associated with those tasks.

Job titles include: retail assistant, shop assistant, cashier, meter reader, telephone adviser, customer services assistant.

8 Process, Plant and Machine Operatives

This major group covers occupations whose main tasks require the knowledge and experience necessary to operate and monitor industrial plant and equipment; to assemble products from component parts according to strict rules and procedures and to subject assembled parts to routine tests; and to drive and assist in the operation of various transport vehicles and other mobile machinery. Most occupations in this major group do not specify that a particular standard of education should have been achieved but will usually have an associated period of formal experience related training. Some occupations require licences issued by statutory or professional bodies.

Job titles include: bakery assistant, fabricator, process worker, galvaniser, wood machinist, coal miner, assembler, test engineer, tyre fitter, clothing machinist, laboratory assistant, scaffolder, van driver, driving instructor, baggage handler, fork-lift driver.

9 Elementary Occupations

This major group covers occupations which require the knowledge and experience necessary to perform mostly routine tasks, often involving the use of simple hand-held tools and, in some cases, requiring a degree of physical effort. Most occupations in this major group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training.

Job titles include: farm labourer, mushroom picker, packer, cleaner, labourer, docker, courier, office junior, hospital porter, waiter/waitress, street cleaner, security officer, car park attendant, shelf filler.

Further details and descriptions of SOC 2000 can be found from the ONS website: www.statistics.gov.uk/methods_quality/ns_sec/soc2000.asp

CLASSIFYING SKILLS AND QUALIFICATIONS

Defining SVQs/NVQs

SVQs (Scottish Vocational Qualifications) are work-related, competence-based qualifications, the equivalent of the NVQs awarded elsewhere in the UK.

They measure the skills and knowledge needed to do a job effectively, and represent national standards recognised by employers throughout the country. There are five levels of SVQ, denoting different levels of competence, skills and work practice. The table below attempts to ascribe qualifications to the equivalent SVQ levels. But an SVQ measures competence and skills, and is therefore both distinct from a qualification and not contingent on holding a qualification. The SVQ system accredits skills and competences gained on the job as well as those acquired through education and training.

SVQ Level	Description	Comparable qualifications
1	Competence in applying knowledge and skills in most of which may be a range of work activities, routine or predictable.	General Standard Grades GNVQ Foundation BTEC first certificate
2	Competence in applying knowledge and skills in a wider range of activities, performed in a variety of work contexts. Some these are complex or non-routine, and may require individual responsibility and autonomy. Collaboration with others, perhaps in a team, may also often be a requirement.	Credit Standard Grades GNVQ intermediate BTEC first diploma
3	Competence in applying knowledge and skills in a broad range of activities and a wide variety of contexts, most of which are complex or non-routine. There is considerable responsibility and autonomy, often extending to and control or guidance of others.	Advanced Higher HNC BTEC RSA higher Nursing, Teaching
4	Competence in applying knowledge and skills in a broad range of complex technical or professional activities, and a wide variety of contexts, involving substantial personal responsibility and autonomy, often including resource allocation and responsibility for the work of others.	First degree Sub degree higher education (HND, DipHE)
5	Competence in applying skills, and a significant range of fundamental principles, across a wide and often unpredictable variety of contexts. Very substantial personal autonomy, often coupled with significant responsibility for the work of others and for the allocation of substantial resources. Analysis and diagnosis, design, planning, execution and evaluation often feature strongly.	Higher degree (postgraduate)

The Scottish Credit and Qualifications Framework

The general aims of the Scottish Credit and Qualifications Framework (SCQF) are to help people access appropriate education and training, and employers, learners and the public to understand the full range of qualifications, how they relate to each other, and how they improve the skills of the workforce. The SCQF has 12 levels, described in the table below. It brings together all Scottish mainstream qualifications into a single unified framework.

The Scottish Credit and Qualifications Framework

SCQF Level	SQU National Units, Courses and Group Awards	Higher Education	SVQs* Level	SCQF Level
12		Doctorates		12
11		Masters	SVQ 5	11
10		Honours Degree; Graduate Diploma/Certificate		10
9		Ordinary Degree; Graduate Diploma/Certificate		9
8		Higher National Diploma; Diploma in Higher Education	SVQ 4	8
7	Advanced Higher	Higher National Certificate; Certificate in Higher Education		7
6	Higher		SVQ 3	6
5	Intermediate 2; Credit Standard Grade		SVQ 2	5
4	Intermediate 1; General Standard Grade		SVQ 1	4
3	Access 3; Foundation Standard Grade			3
2	Access 2			2
1	Access 1			1

FURTHER PUBLICATIONS

There is a main report and a summary of The Scottish Labour Market 2003. These and other publications are available on the website, or on request from:

The Network Helpline
 Scottish Enterprise
 150 Broomielaw
 Glasgow
 G2 8LU

Tel: 0141 248 2700
 Fax: 0141 221 3217
 Email: network.helpline@scotent.co.uk

Please note that Scottish Enterprise’s Network Helpline will deal with requests for the whole of Scotland including on behalf of Highlands and Islands Enterprise.

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