Foras Áiseanna Saothair
Training & Employment Authority

Expert Group on
Future Skills Needs

National Skills Bulletin 2009




National Skills Bulletin 2009

A Study by the Skills and Labour Market Research Unit (SLMRU) in FÁS for the Expert Group on Future Skills Needs

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Executive Summary

The National Skills Bulletin 2009 is the fifth annual report by the Expert Group on Future Skills Needs (EGFSN) on skills and occupational trends in Ireland. The Bulletin presents key labour market trends with the aim of assisting policy formulation in the areas of employment, education and training, and immigration. It also aims to provide information relating to developments in the Irish labour market for students, career guidance advisors, and other interested parties.

The Bulletin has two main purposes: to provide a statistical record of the employment data for all the main occupations in the economy and to draw on this data, and other qualitative information, to identify any shortages. While our aim is to identify occupations where shortages exist, further research is necessary to identify the cause of these shortages and the appropriate (if any) policy response. Occupations for which shortages are identified are highlighted and comments made regarding the nature of the shortage (skill shortage or labour shortage), expected duration and significance. The report highlights recent and current shortages and does not provide forecasts of skill shortages, unless it is implicit from the existing data.

The term 'shortage' in this report refers only to the situation where the supply of skills or labour from within the Irish workforce is insufficient to meet demand. It is possible that a sufficient supply of skills or labour for the occupation in question may be found within the European Union (EU) or the European Economic Area (EEA). Consequently there may not be a shortage from a European perspective.

This year's bulletin is based on the quarter 4 2008 (Sept-Nov) Central Statistics Office (CSO) Quarterly National Household (QNHS) data. It differs from all previous issues in which the data was from quarter 2 each year. Traditionally, the SLMRU received micro data only for quarter 2. To facilitate a timely analysis of the labour market at occupational level, the CSO provided the latest available micro data, which at the time of writing was quarter 4 2008. Due to the speed at which the economic activity has been declining, the use of the quarter 2 2008 would have rendered the 2009 bulletin out of date before it was even published and therefore quarter 4 was used.

A significant share of the analysis focuses on the period quarter 2 2007 to quarter 4 2008. This period is used in order to examine the effect of the downturn to date. An alternative would have been to focus on quarter 2 2008 to quarter 4 2008; however, this was considered too short a period given that employment peaked in quarter 3 2007 and has, in the main, been declining since. There are the following caveats with using this time period for comparisons:

1. Comparing quarter 2 with quarter 4 raises issues about seasonality in the data; this however, should not considerably distort the results as, historically, the largest seasonality effect is observed in quarter 3 of each year
2. Employment peaked in quarter 3 2007, which means that using quarter 2 2007 as a starting point of the downturn masks the true extent of the fall in employment (or rise in unemployment) when compared to the height of the boom.

Nonetheless, the analysis gives useful insights into trends in the labour market, including compositional shifts in employment and unemployment (e.g. in terms of age, nationality, education, etc.), which have emerged since the beginning of the downturn.

Key findings

Labour market indicators

Following more than a decade of strong employment growth and low unemployment rates, the Irish labour market has taken a sharp negative turn in 2008. Compared to 2007, all labour market indicators disimproved in 2008:

- annualised data shows that the labour force growth slowed to 1%
- annualised data shows that the participation rate decreased by 0.3 percentage points to 63.6%
- annualised data shows that net migration halved, with outward migration increasing and inward migration decreasing
- total national employment declined by almost 87,000 in the 12 months to quarter 4 2008
- unemployment increased by 70,000 in the 12 months to quarter 4 2008
- annualised data shows that the employment rate decreased by 1.5 percentage points to 67.7%
- between quarter 2 2007 and quarter 4 2008, the share of part-time workers reporting under-employment more than doubled to 3.7%
- in terms of annual averages, the unemployment rate increased by 1.8 percentage points to 6.4%; however, the unemployment rate increased to 7.7% by the fourth quarter of 2008 and further to 11.4% by April 2009.

Sectoral employment

In 2008, job losses were concentrated in four sectors – construction, manufacturing, hospitality and transport – amounting to a decline in employment of 41,000. While employment increased in other sectors, the net result for the economy was 13,000 fewer jobs in 2008 in relation to 2007.[1]

1 The QNHS provides employment data, not job creation data; however, by looking at the change in the level of employment one can assess the net result of the total job creation and job losses i.e. if an increase in the employment level is observed between two time points it implies that there were more jobs created than lost over that period and a net result is what we refer to as 'net job creation'; a decline in employment is referred to as 'net job loss'.

Construction suffered the largest decline in the downturn, with employment shrinking by 10% between 2007 and 2008 (almost 30,000 fewer employed on average annually). However, between quarter 4 2007 and quarter 4 2008, total job losses in this sector amounted to 46,000.

Regional employment

The occupational distribution of net job creation during the boom years (1998-2007) differed across regions: higher skilled (managerial, professional and associate professional) jobs accounted for a relatively greater share of job creation in the Dublin region; construction related jobs (craft and labouring) in other regions.

Between quarter 2 2007 and quarter 4 2008, employment declined in all regions except the South East. In absolute terms, the greatest net job losses were recorded in the Dublin (15,000) and Border regions (11,000). However, at greatest risk of unemployment were those living in the Midlands and West regions: the unemployment rates increased from 4.4% and 4.6% in quarter 2 2007 to 10% and 8.9% in quarter 4 2008 respectively.

Education and training

The supply of skills emerging from the further and higher education and training system in 2008, expressed as the number of awards issued by field and NFQ level, is presented in Table 1.

The education profile of the workforce continued to improve: in quarter 4 2008, 38% of the employed held third level qualifications, an increase on the 35% recorded for quarter 2 2007.

National Skills Strategy: Progress to Date

Changes in the educational profile of the labour force have been in the direction of the target set in the National Skills Strategy:[3] the share of the labour force with lower than secondary education attainment has been shrinking (from 29% in 2005 to 24% in 2008); the share with honours degree or above, increasing (from 20% in 2005 to 25% in 2008).

Immigration from non-EEA

In 2008, 8,487 new employment permits were issued to non-EEA nationals. This is a reduction of 7% since 2007. Occupations most frequently sourced through the employment permit scheme included chefs, medical practitioners, food processors (butchers/meat cutters), care assistants and labourers in farming (primarily work riders for the equestrian sector). Most green cards were issued to nurses, software engineers, computer programmers/analysts, accountants (qualified accountants and accounting technicians) and marketing managers. Intra-company transfer permits were most frequently issued for managers, particularly in the area of finance, marketing and production.

Vacancies

The number of vacancies advertised through the Irish Times, IrishJobs.ie and FÁS in 2008 each declined compared to 2007. The loosening of the labour market was confirmed in the results of the recruitment agency survey: many recruiters reported an absence of any difficulties to fill vacancies. Nonetheless, high level skill shortages were reported by some recruiters in the areas of IT, science, sales/marketing, health, accountancy, engineering and management.

Table 1. Summary of Further and Higher Education and Training Awards by Field of Education, 2008[2]

	NFQ Level						
	1-4	5	6	7	8	9/10	Total
General Programmes	1220	140	110	80	0	30	**1,580**
Education	0	10	70	90	1,810	2,410	**4,390**
Arts & Humanities	0	1,660	380	1,240	5,400	2,000	**10,680**
Social Science, Business & Law	700	3,580	2,520	2,850	7,740	4,830	**22,220**
Science	0	60	210	410	2,280	890	**3,850**
Computing	0	310	320	410	980	840	**2,860**
Engineering & Construction	70	470	6,500	1,930	2,580	830	**12,380**
Agriculture & Veterinary	60	640	560	300	300	50	**1,910**
Healthcare	10	6,210	670	940	4,390	2,400	**14,620**
Services	1,200	1,130	1,900	1,080	600	380	**6,290**
TOTAL	**3,260**	**14,210**	**13,240**	**9,330**	**26,080**	**14,650**	**80,770**

Source: FETAC (major awards), HEA

2 Awards data for universities and Institutes of Technology is based on 2007 data as this is the latest available.

3 EGFSN (2006) *Tomorrow's Skills: Towards a National Skills Strategy.*

Shortages

A skill shortage refers to a situation where there is an insufficient number of trained/qualified individuals in the domestic market to meet the demand for an occupation. This is different from a labour shortage which refers to a situation where there is an insufficient number of individuals willing to take up employment opportunities in a particular occupation.

Given the sharp rise in unemployment, there are no labour shortages in Ireland at present. The incidence of skill shortages is significantly lower than in previous bulletins. Nonetheless, some skill shortages persist for a number of positions requiring specialist knowledge, skills or experience and these are discussed in detail below.

Information Technology

While there has been a decline in the manufacturing side of the IT sector in Ireland recently, skills shortages persist in areas related to other aspects of the IT industry. The demand is still strong for individuals who not only have the advanced IT skills to install systems, but who can also customise and adapt those systems to a business's individual needs. In particular, there is a shortage of:

- experienced computer systems managers
- IT professionals with business knowledge and managerial skills
- programmers in specific software applications with substantial experience (e.g. Oracle, Java, web animation)
- experienced professionals with advanced software architecture skills
- networking experts (SharePoint, VMware, etc.)
- telecommunications experts (e.g. mobile phones technology)
- IT security experts
- research and design professionals, especially in electronics/ICT design and electronics hardware and semiconductor research.

Online sales, marketing, entertainment and social networking are also expected to continue to grow strongly in the coming years and drive the demand for creative and highly skilled web developers.

An increase in the demand for hybrid technologists is likely in the future as interdisciplinary activities expand in importance; ICT skills feature in most interdisciplinary convergence processes (e.g. business and IT; finance and IT; biotechnology, nanotechnology and IT).

Scientists

Despite the overall decline in employment, some science-related areas (e.g. pharmaceuticals, medical devices and diagnostics, and biotechnology) have been performing comparatively well and shortages still exist for highly qualified and experienced individuals with specific skills, both at professional level (fourth level research and development scientists, clinical trials managers, regulation compliance staff) and technician level (e.g. lab technicians, junior chemists, development/prototyping technicians).

A strategy launched by Science Foundation Ireland in March 2009, entitled 'Powering the Smart Economy', highlights the Government's commitment to the establishment of a critical mass of internationally competitive research teams in science and engineering. Such investment, aimed at advancing enterprise in biotechnology, ICT and energy, is expected to build on Ireland's reputation as a location of excellent research, thereby further expanding demand for people with advanced skills in these areas.

Energy, particularly renewable energy, is set to become one of the key growth sectors of the economy, and the demand for skills, at both technician and professional level, combining new technologies, interdisciplinary backgrounds (e.g. engineering/science/business) and innovation, is likely to expand in the future.

As the importance of ecology and environmental protection increases, along with EU regulation for this sector, new career opportunities will emerge for those with expertise in the natural sciences (e.g. impact assessment on flora and fauna in the context of major infrastructural projects).

The field of bio-convergence is growing, which is likely to result in a demand for hybrid technologists with backgrounds in science, IT and nanotechnology.

Engineering

Despite the current economic pressures, design engineers, particularly in research and development in the medical devices sector, are in short supply; the demand pertains to individuals with experience and/or industry specific knowledge (e.g. process automation design).

In a number of manufacturing sub-sectors (e.g. food processing, medical devices, etc.), there is a shortage of process diagnostic and control engineers and technicians who can implement lean manufacturing/Six Sigma principles to production processes.

As is the case for science graduates, engineers, especially electronic, electrical, quality control, and design and development, will be in demand in the renewable energy sector (e.g. wind, wave and tidal), which is expected to be one of the drivers of future growth.

Ecology and environmental protection are becoming increasingly important, creating new career opportunities for environmental engineers with expertise in the management of eco-systems.

Marketing/Sales

Experienced marketing managers with product and market expertise and/or foreign language proficiency are difficult to source. Demand is likely to remain strong in the future as marketing experts are expected to be important to increasing Ireland's market share of the global demand for products and services.

Despite a decline in employment for sales representatives overall, recruiters are continuing to report difficulties in sourcing experienced sales representatives with specific product or technical knowledge (e.g. medical sales, technical sales) and/or languages (e.g. telesales).

Online sales, marketing and advertising are expected to be strong growth areas in the coming years creating opportunities for individuals who can combine sales skills with competencies in other areas (e.g. foreign languages, online media, global markets and international business).

Healthcare

A wide range of policy initiatives have been adopted with the aim of re-shaping the healthcare sector with concomitant implications for service delivery and skill needs.[4] However, in the short to medium term, employment opportunities (even those that arise from replacement demand) in the public healthcare sector, as well as the publicly co-funded non-public sector, are severely curtailed due to the public funding crisis. Nonetheless, in some areas of healthcare, skills shortages still exist.

There is a shortage of medical practitioners:

- the current shortage of general practitioners (GPs) is likely to persist in the future, especially if the trend towards an increased share of female and part-time GPs continues
- there is a shortage of other specialist doctors required to meet the targets set out in the Report of the National Task Force on Medical Staffing.

There is a shortage of registered general nurses, as well as nurses in some specialised areas (theatre, intensive care, cardiac, neonatal/paediatric critical care, and oncology/cancer care). The shortage of general nurses is partly due to the fact that this segment of nursing is the main supply pool for most advanced nursing practitioners, as well as for most postgraduate courses (e.g. public health, children's nursing, etc.).

The education and training output from dentistry has not kept pace with the growing demand for dental/orthodontic services, resulting in a shortage in this area. The shortage is likely to continue given that almost one in three dentists is older than 55, which is likely to create a higher than average replacement demand over the medium term.

Although the number of vets in Ireland has been supplemented by a recent inflow of foreign-trained vets, there continues to be a shortage. The expansion demand arising from increasing food safety and traceability standards and the replacement demand arising from expected retirements (one in four vets is over 55) are likely to exceed existing graduate output in the short to medium term.

Financial

Despite the global and domestic financial crisis and the associated decline in employment, the demand for highly skilled financial professionals persists (e.g. chartered and certified accountants with expertise in project and system accounting, compliance experts, risk experts).

Changes in the regulatory environment are expected to create demand for high level, up-to-date accounting skills (compliance, financial reporting, financial management) and risk management expertise. In addition, strong demand is expected to continue for experts in actuarial science and quantitative finance. These skills are expected to be critical in driving employment growth in the financial services industry in the recovery.

4 These initiatives, *inter alia*, include the implementation of the Primary Care Strategy, the National Cancer Control Programme, and more generally, moves towards a patient centred model, community vs. hospital based healthcare and consultant-provided vs. consultant-led services.

Construction

Given the contraction in all segments of the construction industry in the short-term, shortages are not anticipated for any of the construction professional or craft occupations. In the medium term, job opportunities are most likely to arise, albeit not enough to absorb all of the excess supply, for those who have expertise in the following areas:

- residential repair and maintenance
- energy efficiency (e.g. retro-fitting, reduction of carbon dioxide emissions, renewable energy technologies)
- renewable energy infrastructure
- management of construction and demolition waste
- site assessment and water treatment
- supply chain management in off-site construction methods
- export of new building materials and processes.

In Focus: Unemployment

The *In Focus* section of this year's Bulletin examines the unemployed. The analysis, which focuses on the period quarter 2 2007 and quarter 4 2008, highlights the fact that while almost all labour market segments have been negatively affected by the downturn, they have not been affected to the same degree:

- males have been at greater risk of unemployment than females: the unemployment rate of males increased from 4.8% to 9.3%; of females from 4.3% to 5.5%
- younger persons (e.g. school leavers and new graduates and those 'last in') have been more adversely affected than older persons: the unemployment rate of 15-19 year olds increased from 14% to 22%; that of 20-24 year olds from 7% to 15%
- while third level graduates are not insulated from the downturn, persons with low levels of education remain at greater risk of unemployment: the unemployment rate of persons with less than secondary education increased from 7% to 12% over the period
- while both Irish and non-Irish nationals have been negatively affected by the downturn, the latter have been at greater risk of unemployment: the unemployment rate of Irish nationals increased from 4% to 7%; of non-Irish from 6% to 10%
- the downturn is disproportionately negatively affecting the BMW (Border, Midlands and Western) region: the unemployment rate increased from 4.8% to 9.1%
- those employed in the construction sector have been the most dramatically affected (the unemployment rate in this sector increased 5% to 17%); however, those employed in the personal etc. services sector continue to be at greatest risk of unemployment (up to 23% from 18%)
- craftspersons have been most dramatically affected (the unemployment rate increased from 5% to 14%), especially carpenters, bricklayers and plasterers; however, at greatest risk of unemployment continue to be labourers (the unemployment rate rose to 23% from 16%), especially labourers in construction.

Comparison with the National Skills Bulletin 2008

Almost all updated information on employment and other labour market indicators presented in the 2009 Bulletin show a break in the positive trends reported in previous bulletins. The key difference this year is that employment declined for most segments of the labour market and high unemployment emerged as an issue.

An excess supply of labour has emerged throughout the economy and it is particularly acute in relation to construction skills – a complete reversal of the situation reported in the 2005-2007 bulletins. Nonetheless, some skill shortages identified in previous issues of the bulletin have persisted, although this year they are almost exclusively confined to the specialised high skill niche areas within IT, science, engineering, finance, health and marketing.

Introduction

The National Skills Bulletin 2009 is the fifth annual report by the Expert Group on Future Skills Needs (EGFSN) on skills and occupational trends in Ireland. The Bulletin presents key labour market trends with the aim of assisting policy formulation in the areas of employment, education and training, and immigration. It also aims to provide information relating to developments in the Irish labour market for students, career guidance advisors, and other interested parties.

The main focus of the Bulletin is the analysis of employment at occupational level. Each occupation is examined in terms of its employment profile (based on the data from the Quarterly National Household Survey (QNHS) by the Central Statistics Office (CSO)), recent employment trends and other available indicators on the demand and supply of skills. Such indicators include:

- the number of employment permits issued to non-EEA nationals by the Department of Enterprise, Trade and Employment
- an extent of the difficulty in filling positions from the six-monthly survey of recruitment agencies (FÁS, Skills and Labour Market Research Unit (SLMRU))
- the number of vacancies advertised through FÁS, the Irish Times and IrishJobs.ie
- an estimate of the supply of skills emerging from the Irish education and training system derived from data supplied by the Higher Education Authority (HEA), Further Education and Training Awarding Council (FETAC), Higher Education and Training Awards Council (HETAC), Department of Education and Science, and the State Examinations Commission
- any other relevant findings from the EGFSN's sectoral studies.

The Bulletin synthesizes all available data on the above indicators in order to assess and comment on the balance between the demand and supply for 130 occupations across the Irish workforce. It has two main purposes: to provide a statistical record of the employment data for all the main occupations in the economy and to draw on this data, and other qualitative information, to identify any shortages. While our aim is to identify occupations where shortages exist, further research is necessary to identify the cause of these shortages and the appropriate (if any) policy response.

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Nonetheless, the analysis gives useful insights into trends in the labour market, including compositional shifts in employment and unemployment (e.g. in terms of age, nationality, education, etc.), which have emerged since the beginning of the downturn.

National Skills Bulletin 2009 is set out as follows:

- Section 1 is an overview of general labour market trends; this includes economic and employment growth, participation rates, employment by age and education, and migration.

- Section 2 discusses sectoral employment trends, including recent and expected future employment trends. Given its importance to the economy overall, a more detailed examination of the manufacturing sector is provided.
- Section 3 examines employment by broad occupation.
- Section 4 presents an overview of the regional employment trends.
- Section 5 focuses on the supply of skills from education and training providers.
- Section 6 provides an overview of the inflow of labour from non-EEA countries through the employment permit schemes.
- Section 7 examines vacancies by broad occupational group from a number of sources.
- Section 8 provides an analysis of 130 occupations categorised into 17 occupational groups and highlights areas of shortage.
- Section 9 outlines the profile of the unemployed in Ireland.

Section 1 General Labour Market Trends

1.1 Population – Labour Status

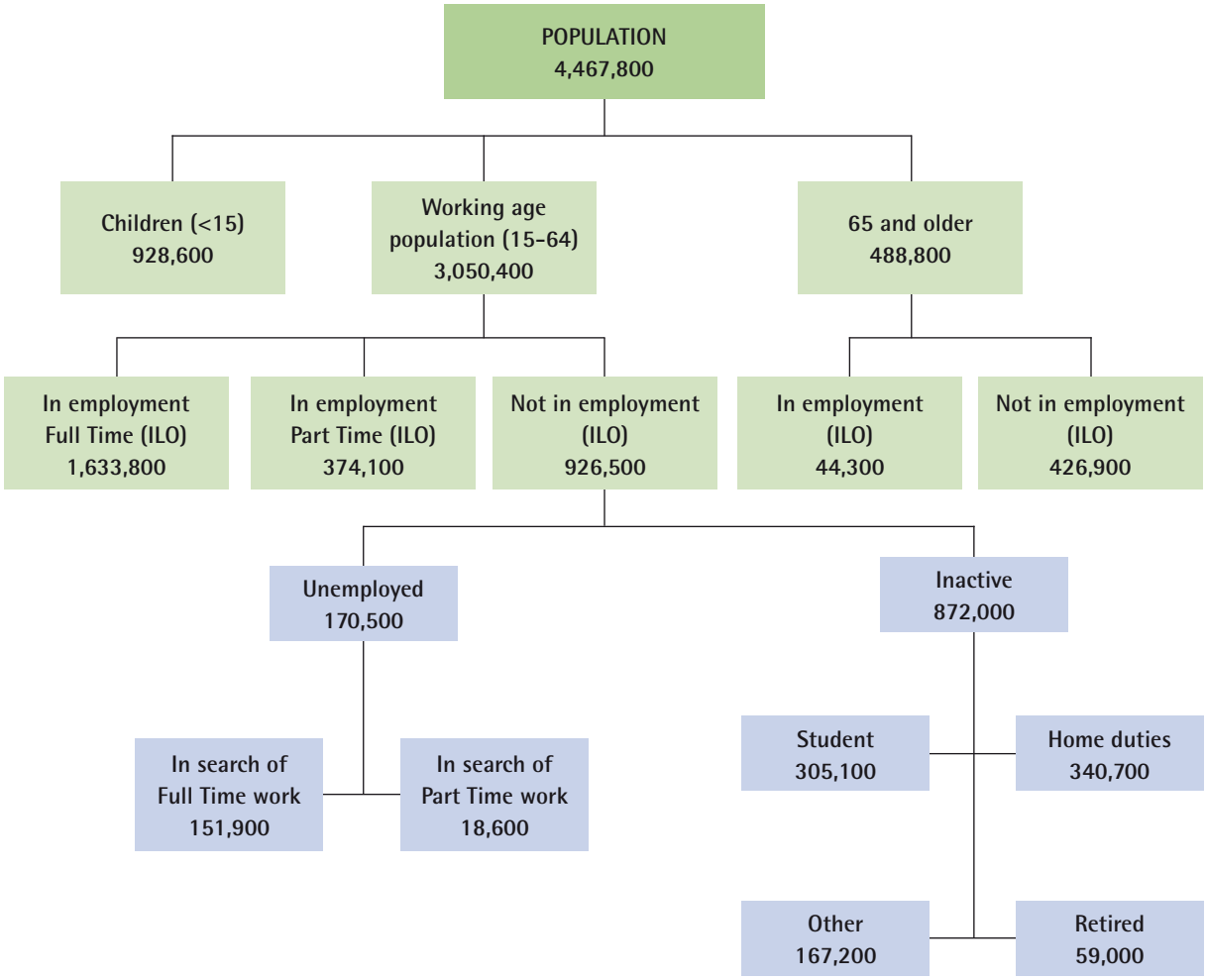
There were about 4.5 million persons residing in the Republic of Ireland in the last quarter of 2008 (Figure 1.1). There were approximately 930,000 persons who were younger than 15, while those aged 65 and above amounted to just under half a million.

The working age population (15-64) was estimated at 3 million, two thirds of which were in employment. In addition, there were 45,000 older persons (aged 65+) in employment, bringing total national employment in quarter 4 2008 to 2.05 million. This is 50,000 fewer than in quarter 2 2007.

There were approximately 170,000 unemployed persons in quarter 4 2008, an increase of 70,000 when compared to quarter 2 2007.

Of the 870,000 economically inactive persons in quarter 4 2008, 40% were engaged in home duties, over a third were students, 7% were retired, with the remainder being inactive for other reasons. This distribution is in line with that of quarter 2 2007, although there were 44,000 additional persons in the economically inactive category overall in quarter 4 2008. The increase is partly due to the reduced employment opportunities and the fall in real wages which has discouraged some workers from participating in the labour market.

Figure 1.1 Population by Labour Status in Quarter 4, 2008

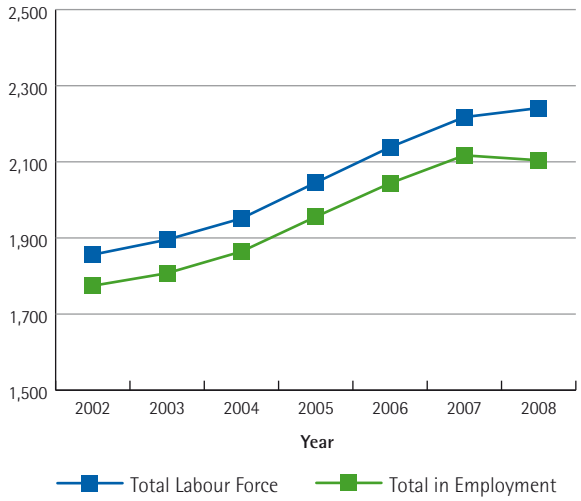


Source: FÁS (SLMRU) based on CSO data *(QNHS, Quarter 4, September-October-November 2008)*
Note: Any discrepancies in summations are due to the rounding of numbers

1.2 Labour Force

Ireland's labour force,[5] comprising the employed and unemployed, grew strongly over the period 2002-2007, averaging 3.6% per annum.[6] The natural increase, migration and increased participation all contributed to this growth. Immigration became particularly important in the latter part of the period, adding almost 100,000 to the labour force in 2006 and 2007 combined.

Figure 1.2 Labour force and employment (ILO) in 000s, annualised data for 2002-2008



Source: SLMRU (FÁS) analysis of CSO data

However, the growth in the labour force slowed to 1% in 2008 (Figure 1.2). The natural increase and immigration continued to contribute positively to labour force growth in 2008, although on a more moderate scale (adding just above 3,500 and 20,000 persons in 2008 respectively). In contrast, although the total number of those aged 15 and above in the population increased by almost 55,000 between 2007 and 2008, the size of the labour force expanded by just 24,000, on average, due to a decline in the participation rate (Table 1.1).

Between 2002 and 2007, the female participation rate increased more rapidly than that of males, albeit from a lower base. However, in the downturn, the female participation rate has been declining at a slower pace than that of males: down by half a percentage point compared to one percentage point for males between quarter 2 2007 and quarter 4 2008.

Table 1.1 Labour Force Participation Rates, 2002-2008

Year	Total
2002	60
2003	60
2004	60.7
2005	62
2006	63
2007	63.9
2008	63.6

Source: SLMRU (FÁS) analysis of CSO data

With the economic downturn, net migration in 2008 declined for the first time since 2003. Due to an increase in outflow and a decrease in inflow, net migration was 40% lower in 2008 than it was in 2007 (Table 1.2).

Table 1.2 Migration Estimates (000s) 2003-2008

Year	Outward migration	Inward migration	Net migration
2002	25.6	66.9	41.3
2003	29.3	60	30.7
2004	26.5	58.5	32
2005	29.4	84.6	55.1
2006	36	107.8	71.8
2007	42.2	109.5	67.3
2008	45.3	83.8	38.5

Source: CSO 2008, Database Direct

Average annual employment decreased by approximately 13,000 in 2008, which was a decline of 0.6% in relation to 2007 (Figure 1.2). At the same time, unemployment increased by almost 37,000 or by 36%. Between 2002 and 2007, the employment rate had been increasing but a decline in 2008 brought it back to its 2005 level of 67.7% (Table 1.3).

Between quarter 2 2007 and quarter 4 2008, the male employment rate decreased more noticeably: down by five percentage points (from 77.4% to 72.6%) for males; by one percentage point (from 60.3% to 59.0%) for females.

5 These figures are averaged over the four quarters of each year, while the data in Figure 1.1 refers to quarter 4 2008.

6 From 2006, the CSO has revised QNHS figures to take into account and reflect Census 2006 findings.

Table 1.3 Employment and Unemployment Rates, 2002-2008

Year	Employment rate (%)	Unemployment rate (%) (seasonally adjusted)	Participation rate (%)
2002	65.1	4.4	60
2003	65.4	4.6	60
2004	66.2	4.4	60.7
2005	67.7	4.4	62
2006	68.7	4.4	63
2007	69.2	4.6	63.9
2008	67.7	6.4	63.6

Source: CSO; SLMRU (FÁS) analysis of CSO data

* relates to 15-64 age group (No. in employment as a share of 15-64)

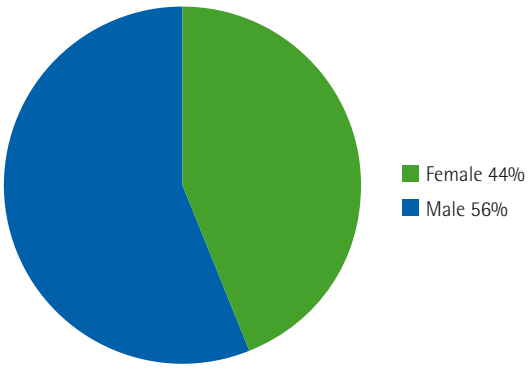
The labour market situation continued to deteriorate rapidly during 2008 so that in the fourth quarter of 2008:

- the employment rate fell to 65.8%
- the unemployment rate reached 7.7%
- the participation rate declined to 62.8% .

1.3 Employment Composition

Figure 1.3 presents the gender distribution of employment. Males accounted for 56% of the Irish workforce in quarter 4 2008.

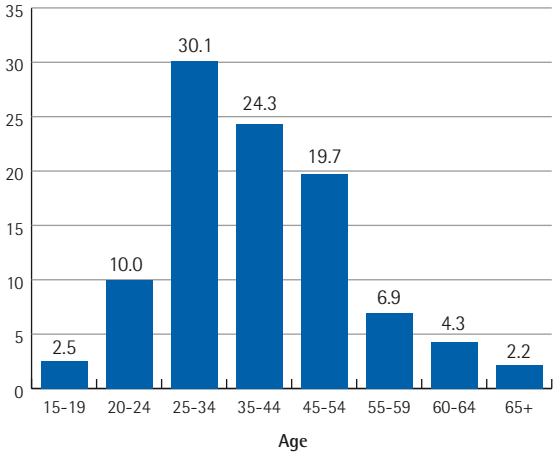
Figure 1.3 Employment by Gender, Quarter 4 2008



Source: SLMRU (FÁS) analysis of CSO data

Figure 1.4 shows the distribution of overall employment by age group for quarter 4 2008. Two thirds of employment is younger than 45. However, the share of those under 25 has declined when compared to quarter 2 2007. While this is consistent with the higher participation rate in third level education, it is also an indication of a decline in employment opportunities for new entrants. At the other end of the age spectrum, the relative size of more senior segments of the national workforce remained largely unchanged.

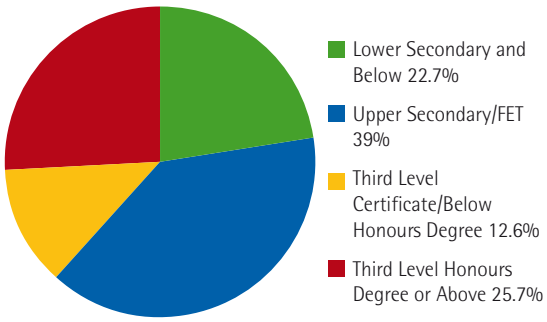
Figure 1.4 Employment by Age (%), Quarter 4 2008



Source: SLMRU (FÁS) analysis of CSO data

Figure 1.5 shows the education profile of the national workforce. The education profile of the workforce continues to improve: in quarter 4 2008, 38% held third level qualifications, an increase on the 35% recorded for quarter 2 2007.

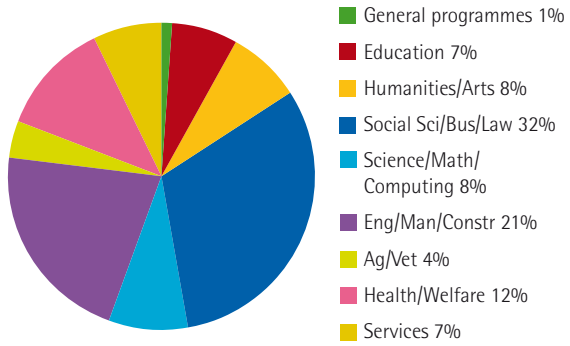
Figure 1.5 Employment by Education Level, Quarter 4 2008



Source: SLMRU (FÁS) based on analysis of CSO data

Figure 1.6 shows the education field of those in employment. Of those who stated their field of education, one in three had completed programmes in social sciences, business or law; one in five in engineering, manufacturing and construction.

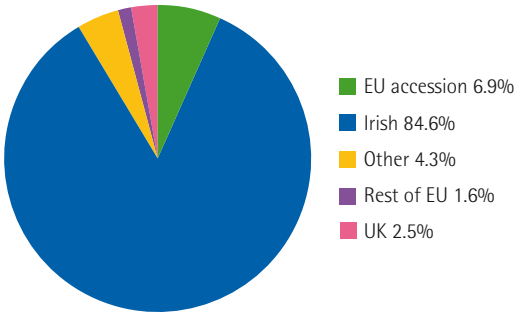
Figure 1.6 Employment by Education Field, Quarter 4 2008



Source: SLMRU (FÁS) based on analysis of CSO data
Note: only those with higher than Leaving Cert education attainment who stated an education field are included

Figure 1.7 shows the nationality profile of the workforce for quarter 4 2008. Non-Irish nationals accounted for 15.4% of national employment, almost half of whom originated from the 10 new member states which joined the EU in 2004.

Figure 1.7 Employment by Nationality, Quarter 4 2008



Source: SLMRU (FÁS) based on analysis of CSO data

In quarter 4 2008, of those in employment, 1.66 million were in full-time employment. This was 63,000 fewer than in quarter 2 2007. In contrast, between quarter 2 2007 and quarter 4 2008, the number of part-time workers increased by approximately 13,000 (3.5%). Importantly, the share of part-timers stating a preference for longer working hours (i.e. who were underemployed) increased from 1.5% to 3.7%. This rise in involuntary part-time employment has affected both males and females.

Of the total employment in quarter 4 2008, 352,000 were self-employed, with employees accounting for the remainder. When compared to quarter 2 2007, there were an additional 13,000 self-employed persons. Interestingly, the share of self-employed with no paid employees increased, while the share of those with paid employees decreased.

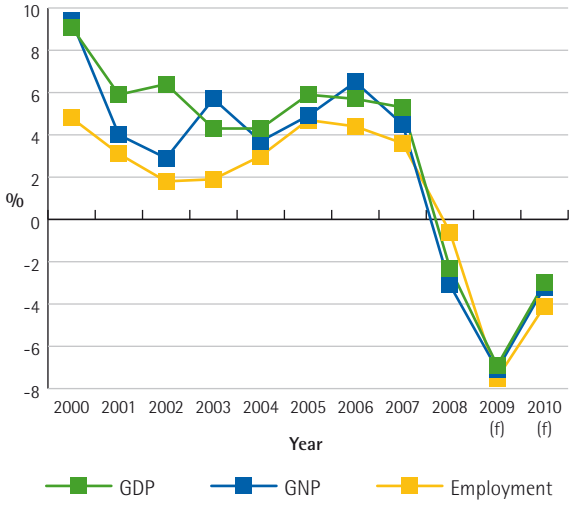
1.4 Economic Outlook and Implications for Employment

Ireland's economic performance in 2008 was weak, with real GDP declining by 2.3% on an annual basis and employment falling almost in tandem (Figure 1.8). The data revealed a further deterioration towards the end of the year, with GDP at constant prices being 7.5% lower in quarter 4 2008 compared to quarter 4 2007.[7] This negative trend continued into 2009, further depressing the national labour market.

The Department of Finance expects GDP to contract by 7.7% in 2009.[8] The CBFSAI (Central Bank and Financial Services Authority of Ireland) also forecasts a decline in GDP – 7% for 2009 and a further 3% for 2010.[9]

This decline in economic output will result in a further decline in the demand for labour. The ESRI predicts that 187,000 jobs will be lost in 2009, translating into an average annual unemployment rate of 13.2%. A further 102,800 jobs are expected to be lost in 2010, pushing the average annual unemployment rate to 16.8%.[10]

Figure 1.8 Economic and Employment Growth, 2000-2010



Source: CSO (2000-2008), Central Bank & Financial Services Authority of Ireland (2009 and 2010 estimates)[11]

7 CSO (2009), Quarterly National Accounts, Table 1 Gross Domestic Product by Sector of Origin and Gross National Product at Constant Market Prices (Chain linked annually and referenced to year 2006):3.

8 Department of Finance, Monthly Economic Bulletin, June 2009.

9 Central Bank and Financial Services Authority of Ireland, Quarterly Bulletin 2, 2009; the forecasts did not anticipate the potential impact of the fiscal measures announced on 7 April, Emergency Budget). Forecasts made subsequently by the EU Commission were even more pessimistic for 2009. (EU Commission website, last accessed May 2009. http://ec.europa.eu/economy_finance/thematic_articles/article14927_en.htm)

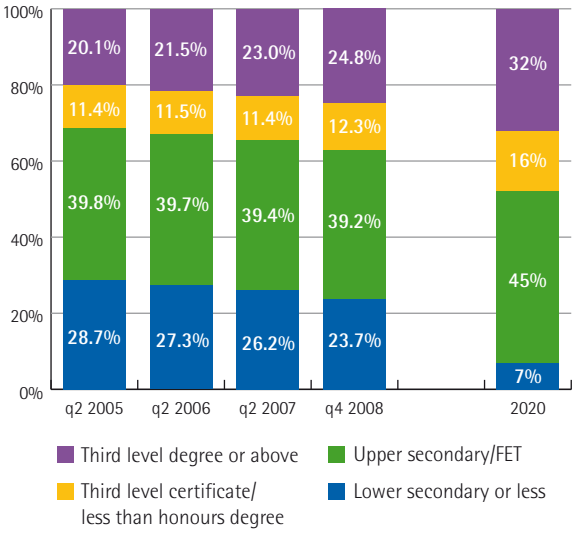
10 ESRI, 2009. Quarterly Economic Commentary, Research Bulletin 09/1.

11 Based on Gross Value Added at Constant Factor Cost by Sector of Origin and Gross National Income at Constant Market Prices, CSO and Central Bank and Financial Services Authority of Ireland, Quarterly Bulletin 2, April, 2009.

1.5 National Skills Strategy: Progress to Date

Figure 1.9 shows the progress made in the improvement of the education attainment of the labour force against the target set in the National Skills Strategy for 2020.[12] The shift in the education attainment is in the direction of the target: the share of labour force with the lowest education attainment is shrinking; the share with the highest level increasing.

Figure 1.9 Education Attainment of the Labour Force and the NSS Vision for 2020



Source: SLMRU (FÁS) based on analysis of CSO data

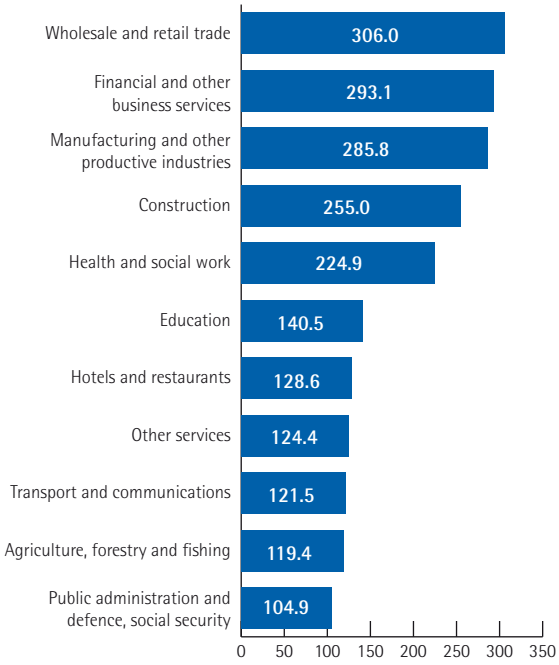
12 EGFSN (2006) *Tomorrow's Skills: Towards a National Skills Strategy.*

Section 2 Sectoral Employment Trends

2.1 Employment

The wholesale and retail sector continued to be the largest in 2008, employing 306,000 persons. The financial and business services sector employed 293,000 in 2008 and became the second largest sector in the economy, overtaking the manufacturing sector (inclusive of other productive industries). Despite a marked decline, the construction sector remained the fourth largest, ahead of the health and social work sector.

Figure 2.1 Employment by Sector in 000s, 2008 (annual average)



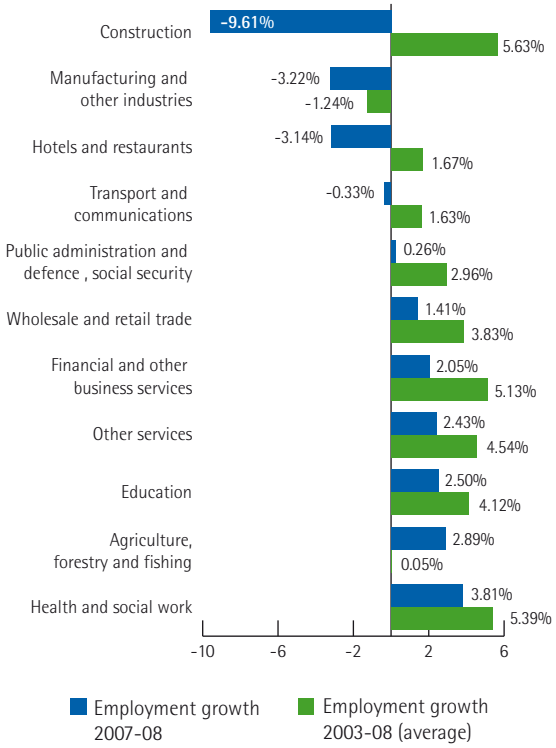
Source: Analysis by FÁS (SLMRU) based on CSO data

2.2 Employment Growth (2003-2008)

Over the last five years (2003-2008), employment grew by just above 3% per annum on average, and it is estimated that in 2008 there were approximately 300,000 more persons in employment than in 2003. However, this medium term pace of employment growth was not sustained in 2008, with total employment declining by 0.6%.

Figure 2.2 depicts changes in average annual employment across all broad sectors, ordered by the magnitude of change observed in 2008. The total number of jobs lost across four sectors in 2008 – construction, manufacturing, hospitality and transport – amounted to 41,000. While jobs were created in other sectors, amounting to 28,000 in total, the net result for the economy was 13,000 fewer jobs in 2008 in relation to 2007.

Figure 2.2 Employment Change by Sector, 2007-2008 and Annual Average Growth 2003-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Construction:

While this sector recorded strong growth between 2003 and 2007, it contracted sharply in 2008. In fact, construction suffered the largest decline in the downturn, with employment shrinking by 10% between 2007 and 2008 (almost 30,000 fewer employed on average annually). The annual average figures, however, mask the true decline that occurred towards the end of 2008 (there were 46,000 fewer jobs than at the end of 2007).

The CSO estimated that in December 2008 employment in private construction firms employing five or more persons decreased by 22% compared with December 2007.[13]

Hotels and Restaurants:

The hospitality sector contracted in 2008 by just above 4,000 persons, or 3.1% in relation to 2007. While the sector still employed 10,000 more persons than in 2003, last year's contraction brought the medium term growth rate down to 1.7 % per annum.

13 CSO, 2009. Index of Employment in Construction, February 2009. http://www.cso.ie

The sector has been particularly adversely affected by the current economic environment at home and overseas – the number of overseas visits to Ireland declined in 2008, which was a reversal of the trend observed during the 2002-2007 period.[14]

Transport and Communication:

The transport and communication sector declined marginally, by 0.3%; the total employment in 2008 stood at 122,000. Within the sector, consistent with the developments noted last year, the air and water transport segments both contracted, with a particularly sharp decline in the latter of these two. Land transport, the biggest sub- sector, with employment estimated at 54,000, expanded by 4.1%. Given that employment in the post and communications sub-sector has not changed, the expansion of land transport activities has maintained employment in the sector overall.

Public Administration and Defence:

The total employment in this sector was estimated at 105,000 in 2008. The sector remained static in 2008 – the growth rate of 0.3% was just a fraction of its medium term rate of 3% per annum recorded for the 2003-2008 period.

Wholesale and Retail Trade:

The wholesale and retail sector grew by 1.4 % last year, which was considerably below the rate observed for the 2003-2008 period, when the annual average growth rate for the sector was 3.8 %.

With regard to the three main components of the sector, the retail sub-sector, amounting to almost two thirds of the total employment, contracted marginally by 0.5%. The remaining two sub-sectors, wholesale trade and the motor trade sub-sector, both expanded in 2008 - the former by 5.5% and the latter by 4.4%.

Financial and Other Business Services:

The total employment in this sector was 293,000. This was almost 6,000 or 2% more than in 2007. However, this amounted to a considerable slowdown in the pace of growth – the rate of increase during the 2003-2008 period averaged 5% per annum.

Within the sector, financial intermediation (banking) remained the largest segment employing 64,000, followed by IT related business services, estimated at 38,000. Both of these sub-sectors expanded in 2008, the latter notably so, by 10%.

Other Services:

There were 124,000 persons engaged in economic activities classified as *other services* in 2008. Recreational, cultural and sporting activities remained the largest segment of activity within this sector, expanding by 6%. Sanitation and refuse disposal activities, one of the sub-sectors characterised by strong growth of late, declined in 2008 when 8,000 people were engaged in these activities, compared to almost 10,000 in the previous year.

Education:

A total of 140,000 persons were employed in the education sector in 2008. The sector expanded by 2.5%, adding 3,500 more persons since 2007 and almost 26,000 cumulatively over the 2003-2008 period, when employment grew by 4.1% annually, on average.

While the pace of employment growth slowed in 2008, especially in relation to the medium term growth rate observed over the 2003-2008 period, this sector nevertheless accounted for one in eight of total job gains in the economy.

Agriculture, Forestry and Fishing:

In 2008, total employment in agriculture, forestry and fishing was 120,000. There were approximately 3,500 more persons engaged in this sector in relation to 2007. The agricultural sub-sector alone accounted for this expansion, since the other two sub-sectors declined marginally.

Health:

The health sector recorded the largest expansion in 2008 – it expanded by in excess of 8,000 persons. Nevertheless, the pace of expansion observed last year for the sector, at 3.8%, was below its medium term growth rate of 5.4%. Additional posts in the sector amounted to 30% of total job creation overall. This meant that more than one in ten workers are now engaged in health and social care related activities.

2.2.2 Manufacturing and Other Productive Industries

This section examines the industrial sector, comprising manufacturing together with other productive industries, in more detail given its potential role in restoring Ireland's capacity for export-led growth.

Employment

The industrial sector (comprising all manufacturing activities, mining and extraction activities, and utilities) employed just fewer than 286,000 in 2008, accounting for 14% of total employment in the economy.

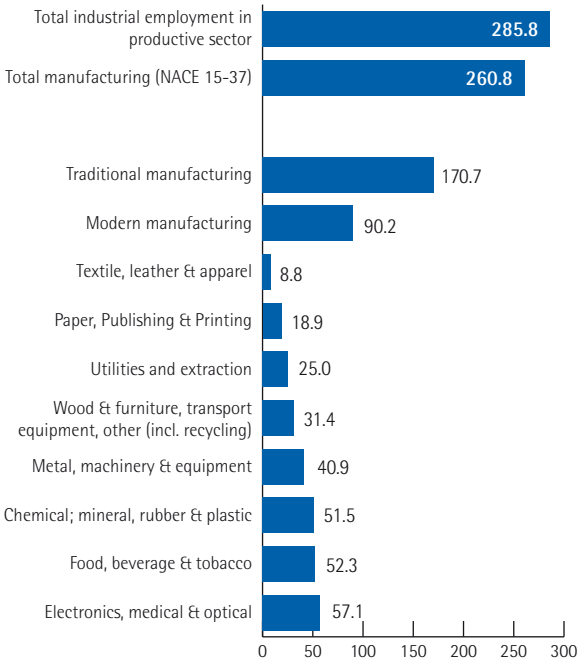
14 CSO (2009) Tourism and Travel Quarter 4 2008.

The sector can be disaggregated into eight sub-sectors, of which seven are manufacturing industries (Figure 2.3). In 2008, there were 261,000 persons engaged in manufacturing; 25,000 persons in the utilities & extraction sector.

The sub-sector producing office, electrical machinery and precision instruments (electronics, medical and optical) employed approximately 57,000. This segment of activity was the largest, followed by the food, beverage and tobacco sub-sector employing 52,000, and chemical and plastics sub-sector where 52,000 were employed.

Manufacturing can be grouped into two segments: modern or 'high-tech' (comprising electronic and chemical and pharmaceutical industries) and traditional.[15] There were 171,000 persons working in traditional manufacturing activities, and the remaining 90,000 were engaged in modern manufacturing. The modern segment is particularly relevant given its knowledge and skill intensity and relative contribution to exports and GDP.[16]

Figure 2.3 Industrial Employment (000s) by Sub-sectors, 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Employment Changes in the Industrial Sector

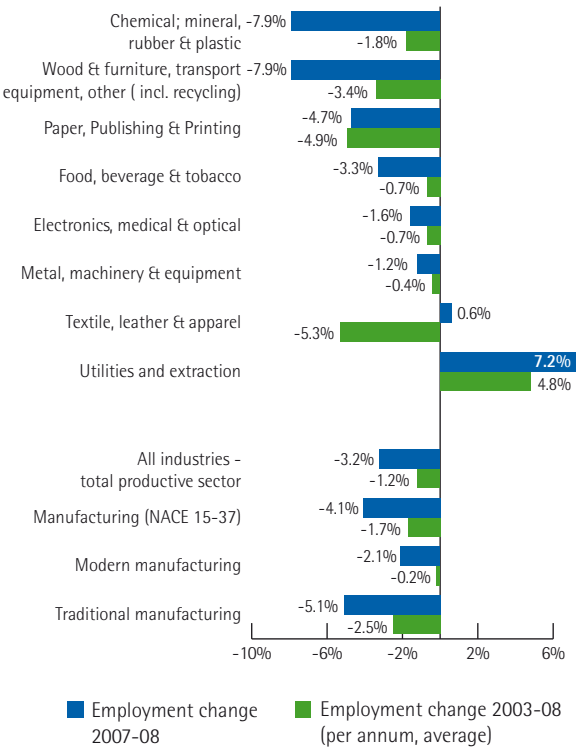
Figure 2.4 shows the growth in employment in the different industrial sub-sectors for periods 2003-2008 and 2007-2008.

Over the period 2003-2008, the industrial sector contracted by 1.2% on average, annually. The decline accelerated between 2007 and 2008 (a 3.2% fall), with a net job loss of 9,500, accounting for almost a quarter of all job losses economy-wide for this period.

Within the industrial sector, manufacturing activities contracted over the period 2003-2008 (23,500 net jobs lost), while utilities and mining & extraction activities expanded (5,000 net jobs created). Importantly, almost half of these net job losses in manufacturing occurred in 2008.

The decline in manufacturing has been particularly pronounced in the traditional segment. It declined by 2.5% between 2003 and 2008 compared to 0.2% for the modern segment; it contracted by 5.1% between 2007 and 2008 compared to 2.1%, for the modern segment.

Figure 2.4 Annual Average Employment Growth in Industrial Sectors (%), 2007-2008 and 2003-2008



Source: Analysis by FÁS (SLMRU) based on CSO data

15 This grouping is consistent with the CSO methodology as adopted in the Statistical Yearbook of Ireland 2007. Note that the reproduction of recorded media (NACE 223), which is a modern segment, is classified within traditional industry, under NACE 22 (paper, publishing and printing).

16 DETE & FORFAS. 2008. The Report of the High Level Group on Manufacturing.

Chemicals, Plastics and Non-metallic Materials

Employment in this sector contracted sharply in 2008 (by 8%), reducing the medium term rate to -1.8% on average annually. Of the total net job loss in manufacturing in 2008, one quarter was in the manufacture of non-metallic mineral products.

Following several years of positive growth, the manufacture of chemicals and related products (including pharmaceuticals) also contracted in 2008, but at a slower rate of 3%. The manufacturing of rubber and plastic products sub-sector declined by 3.8% over the period 2003-2008, although this decline was halted in 2008 with employment remaining at the 2007 level of 7,500.

Other Manufacturing (Wood and Furniture, Transport Equipment, Recycling)

This sector includes the manufacture of wood and furniture, transport equipment and other manufacturing not elsewhere classified (including recycling). While declining steadily over the period 2003-2008, it contracted sharply in 2008 – the speed of decline was more than twice that observed over the five year period.

Within the sector, activities related to the manufacturing of motor vehicles, trailers and semi-trailers (which is primarily the manufacture of parts and accessories for motor vehicles and engines) declined by 17% in 2008.

Paper, Print and Publishing

The paper, printing and publishing sector contracted by almost 5% on average annually over the period 2003-2008, with a net loss of 5,500 jobs. The rate of decline observed in 2008 was in line with the medium term rate.

Within the sector, the manufacture of pulp, paper and paper products has been declining more rapidly than the sector overall throughout the last five years.

Food, Drink and Tobacco

The food, drink and tobacco sector is the largest indigenous industry. Employment in this sector peaked in 2006 at 57,000. It began to contract in 2007 and continued to decline in 2008, shrinking by 3.3%. This translated into approximately 2,000 fewer persons engaged in this sector in 2008 when compared to 2007.

Office and Electrical Machinery and Precision Instruments (electronic, medical & optical)

This sector includes the manufacturing of office machinery and computers, and medical, precision and optical instruments. Employment in the manufacture of office machinery and computers remained, on average, static over the last five years: the total number of persons engaged in 2008 was approximately 17,000, which was almost identical to that recorded in 2003.

The manufacturing of medical, precision and optical instruments remained the largest within the sector, providing employment for almost 23,000 in 2008. This number was, however, 4.4 % lower in relation to 2007.

The manufacturing of radio, television and communication equipment was the only sub-sector that expanded in relation to 2007, with year-on-year growth rate of almost 7%. The result of this expansion was that the sub-sector employed an additional 1,000 persons in relation to the beginning of the five year period.

The manufacturing of electrical machinery declined by 15% per annum during the 2003-2008 period, and by 22% in 2008, the result being that the number in employment in 2008 was about one half of that observed in 2003.

Metals and Machinery

In 2008, the metals and machinery sector, widely referred to as the traditional engineering sector, provided employment for approximately 41,000 persons which was almost identical to the level observed a decade previously. Within the sector, the manufacturing of fabricated metal products remained the largest, accounting for more than 60% of sectoral employment in 2008.

Textiles and Clothing

The sector declined over the period 2003-2008 with a net job loss of almost 3,000, or 5.3% per annum. However, it remained relatively unchanged between 2007 and 2008.

Utilities, Extraction and Mining Activities

The utilities, extraction and mining sector continued to expand – the number in employment grew by 7.2% between 2007 and 2008, while the medium term growth rate averaged 4.8% over the period 2003-2008.

Within the sector, the expansion was accounted for almost entirely by the growth in extraction and mining related activities – the number in employment in this sub-sector grew by almost 11% during the five year period, whereas the growth in the utilities sub-sector averaged 1%. As a result, these two sub-sectors became similar in terms of employment level, employing 11,500 and 13,500 respectively in 2008.

2.3 Expected Employment Trends by Sector

In this section we outline employment expectations by sector, taking into consideration both current and expected trends. Last year's Bulletin focused on the medium term outlook for each sector.[17] However, given the speed at which economic activity has declined since 2007, this year's edition also includes a short term perspective based on the policy context and the economic commentary current at the time of writing.

Global Context

The global outlook will impact on sectors where output (and therefore employment) is heavily dependent on foreign demand. Globally, a sharp deterioration in trade was already evident in the latter part of 2008. Growth in world trade slowed to 2% in 2008, down from 6% in 2007. There was a sharp decline in exports in most major world economies and trade prospects for 2009 remain heavily influenced by the financial crisis. It is expected that, due to the collapse in global demand and the ongoing adverse developments in the financial markets, world merchandise exports will decline by 9% in volume terms in 2009, while the contraction in developed countries is expected to be even more severe with a 10% decline anticipated.[18]

This global contraction in trade has already affected Ireland's trade volumes. Total exports (goods and services) in 2008 fell, due mostly to a particularly poor performance in the fourth quarter of the year – merchandise exports registered an annual decline of 0.6% in volume terms (or 3.5% in value terms) while there was no growth in the volume of services exports in 2008 (a decline of 0.1% was recorded, while in value terms they grew by 2.9%).[19]

The most recent data available confirms that the Irish exports continued to decline, contracting by 9.6% in value terms in the first quarter of 2009 - merchandise exports declined by 3.4% and services exports by 18% in relation to the first quarter of 2008; it is expected that the decline will amount to 13% for the whole year, with services exports particularly affected, set to decline by 20% in relation to 2008.[20]

Construction

The construction industry has been contracting faster in the downturn and is expected to experience a slower recovery in the upturn than most other sectors. There were two main drivers of construction employment growth in the latter part of the boom:

- demand arising from the buoyancy in the global economy, export sector growth, demographic growth, growth in real incomes, etc. (cyclical factors)
- investment motivated by low interest rates, availability of credit and high capital gains in the housing market etc.

While it is expected that the former will be revived once the global recession is over, the latter is unlikely to be re-established as a driver of employment growth in the foreseeable future. In addition, the initial growth in demand is not expected to translate into the same rate of employment growth: at least part of the demand is expected to be met by the output overhang (unsold houses and commercial property units) [21] inherited from the boom.

As a result:

- while some job losses in construction are transitory, some are permanent
- the recovery in construction employment is likely to lag behind other sectors
- on recovery, construction employment is unlikely to reach its pre-boom levels (13% of national employment in 2007).

Within the construction sector, the residential sub-sector has been most affected by the downturn. In the medium term, the number of new houses built is expected to be only a fraction of the output of 88,000 houses recorded at the peak of activity in 2006. The commercial building sub-sector is also expected to contract significantly over the medium term. Although the productive and social infrastructure projects held last year, funding future capital expenditures under the NDP will be challenging given the pressure on public finances in the downturn.[22] By contrast, residential repair and maintenance has been holding up and is expected to continue to provide some job opportunities. This is partly due to the initiatives for energy efficiency improvements (e.g. Greener Homes Scheme, The Home Energy Saving, Sustainable Energy Ireland).

17 Based on ESRI Mid Term Review 2008 and FÁS/ESRI Occupational Employment Forecasts.

18 WTO Secretariat estimates; URL: http://www.wto.org, last accessed in April 2009. Production and trade may be measured in volume ('real') or value ('nominal') terms. Measures of volume production and trade flows are adjusted for price changes and do not take account of exchange rate changes. Value or nominal measures include actual changes as well as changes in underlying prices and exchange rates.

19 In quarter 4 2008, the volume of exports fell 5% year-on-year. This was mainly due to weak merchandise exports, which declined by 8.4% year-on-year, although services exports were maintained at the same level. Sources: CSO (External Trade publications), Central Bank and Financial Services Authority of Ireland, Quarterly Bulletin 2, April, 2009.

20 Irish Exporters Association 2009. First Quarter Review 2009. Total exports for the first quarter of 2009 stood at €33.78 billion down from €37.38 billion in the same period last year.

21 Goodbody Stockbrokers estimate that at the beginning of 2009 there were 350,000 vacant housing units up from 266,000 recorded in the 2006 CSO Census.

22 Gross Voted Capital expenditure in 2009 has been reduced by €624 (or €576 million if additional allocations are factored in). *Source:* Department of Finance, 2009. Supplementary Budget April 2009.

Agriculture

The prospect for the sector will depend largely on global future agricultural commodity markets, which, while exhibiting volatility at present, are likely to recover as global demand is set to outstrip global supply in the medium term and beyond. In the short term, while agriculture is not insulated from the recession, it benefits from EU transfers and subsidies: just over €2 billion was paid to Irish farmers and companies operating in the agri-sector in the twelve month period from October 2007 to October 2008.[23] However, the sector offers limited employment prospects and will remain relatively small in terms of its share of total employment.

Healthcare

At present, there is a wide range of policy initiatives aimed at restructuring the healthcare system (e.g. a move towards a patient centred model; consultant-provided services; community-based services). These are likely to increase demand for some healthcare skills (and possibly reduce demand for others). However, severe budgetary constraints will negatively impact on employment opportunities in the healthcare sector and are likely to impede the realisation of these initiatives in the short to medium term.

Manufacturing and Other Industry

Although manufacturing employment has been declining for some time, the value of manufacturing output contracted for the first time in 2008 (by 1.5%) following several years of continuous growth. The traditional segment bore the brunt of the decline, contracting by 4.5% in volume terms, whereas the modern segment contracted only marginally, by 0.1%.[24] The main challenge for the sector is the combination of falling domestic demand (from both consumers and businesses) and lower export orders. Given the export orientation of the sector, manufacturing is particularly exposed to the global downturn.

Employment prospects in the sector will ultimately depend on the speed and extent of the global economic recovery and improvements in the level of Ireland's competitiveness. In the short term, in order to prevent further deterioration, the new Government Enterprise Stabilisation Fund aims at assisting indigenous, small-medium sized export-oriented enterprises that are experiencing difficulty as a result of the global downturn.[25]

Distribution - Wholesale & Retail

The slowdown that had been predicted for this sector in the medium term arrived sooner than anticipated. The retail segment of the sector contracted sharply in the first quarter of 2009, reflecting a decline in real incomes and negative consumer sentiment.[26]

The employment prospects in the sector are dependent on domestic demand, which is set to remain subdued in the short to medium term mirroring the overall economic performance. Cross-border shopping is expected to further undermine job opportunities in the retail sector in the Republic.

Financial and Business Services

The financial sector is currently faced with two main challenges: exposure to the property market collapse and the global financial crisis. Although it is uncertain how the events will unfold, it is clear that this sector will undergo serious restructuring. This will include an increase in government involvement (e.g. nationalisation or recapitalisation of banks) and an introduction of new national and international regulatory frameworks, e.g. limiting over-reliance on wholesale funding by banks, increasing regulation of banks' usage of special investment vehicles, etc.[27] As a result, employment prospects depend on the recovery in the global financial markets and the effectiveness of domestic policy decisions.

Within the business services sub-sector, Computer Services have shown a degree of resilience to the current downturn with employment holding up throughout 2008, suggesting that the global demand for ICT services is relatively inelastic.

Hospitality sector

The decline in real incomes and rise in unemployment is reducing domestic demand in this sector. The global recession and adverse exchange rates are negatively affecting the number of tourists coming to Ireland. While this sector is highly exposed to the domestic and global recession, there is a potential for partially off-setting the impact on employment providing that a considerable number of Irish holidaymakers substitute holidays abroad with holidays at home.

23 Department of Agriculture, Fisheries and Food. URL:www.agriculture.gov.ie,

24 CSO, 2009. Industrial Production & Turnover: *February 2009 (Provisional) and January 2009 (Final)*

25 Department of Finance, URL: http://www.budget.gov.ie

26 CSO 2009, Retail Sales Index January 2009 (First Estimates), December 2008 (Final Figures).

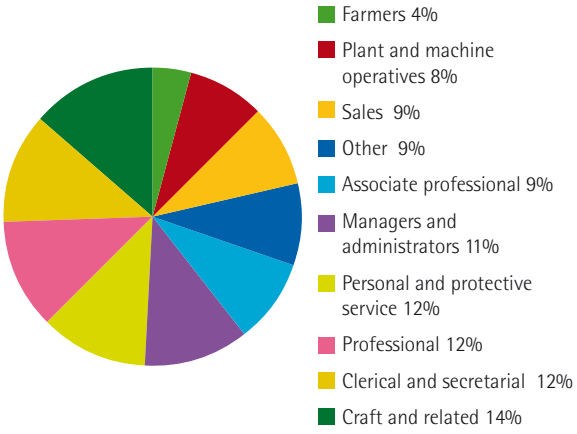
27 Financial Stability Forum (FSF).

Section 3 Employment by Broad Occupation

3.1 Employment

This section presents employment in 2008 by broad occupational groups. The sharp contraction in the construction industry has resulted in a slight redistribution of employment across occupational groups: the share of craft workers and labourers (predominant in the 'other' occupational group) declined by two and one percentage points respectively compared to 2007, with concomitant increases in the employment shares for professional and service occupations. Professional and associate professional occupations continued to account for one fifth of total employment.

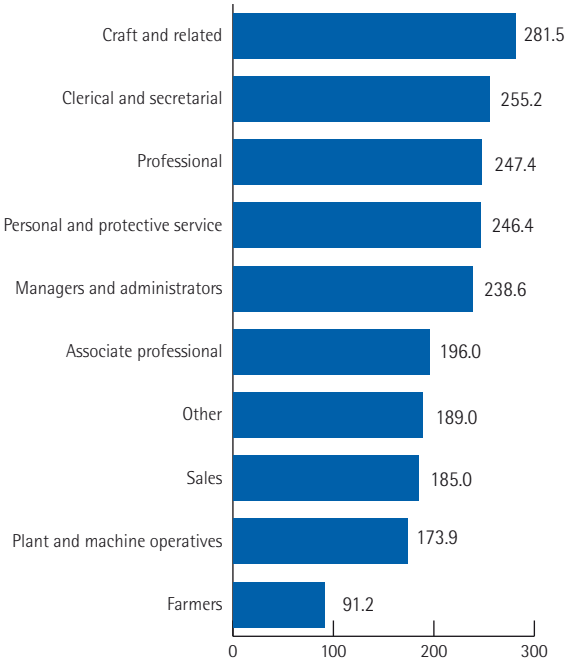
Figure 3.1 Employment by Broad Occupational Group (%), 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 3.2 presents employment levels by broad occupational group for 2008. Although employment in craft occupations declined relative to 2007, the numbers employed as craftspersons exceeded any other occupational group. However, by quarter 4 of 2008, the gap between the levels employed in craft relative to professional occupations was closing with 264,000 craftspersons and 254,000 professionals employed. Professional, associate professional and managerial jobs amounted to 680,000, while lower skilled ones (operatives and labourers which are captured in the other category) accounted for 360,000 jobs. There were just fewer than 260,000 various clerks employed in Ireland, over 240,000 service workers, 185,000 sales personnel and 90,000 farmers.

Figure 3.2 Numbers Employed by Broad Occupational Group, 2008 (000s)



Source: Analysis by FÁS (SLMRU) based on CSO data

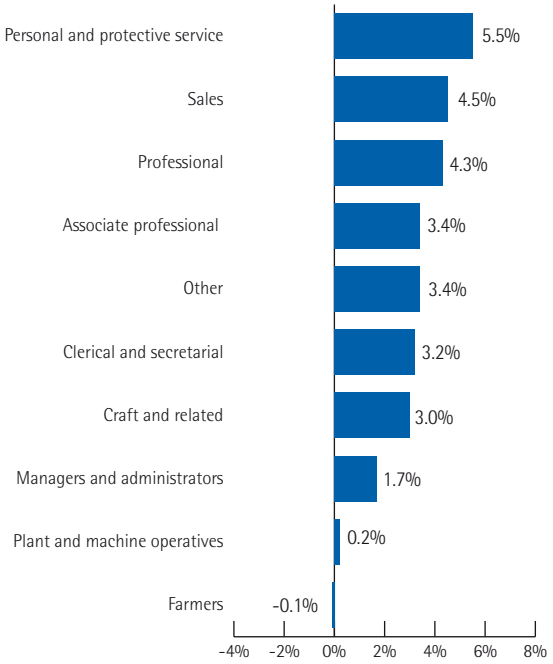
3.2 Employment Growth

Figure 3.4 presents the average annual employment growth rates for broad occupational groups over the period 2003-2008. With the exception of farmers, employment growth was positive in all occupational groups over the period.

While the five-year average annual employment growth (2003-2008) outpaced the national average for professionals, associate professionals, labourers, service workers, sales personnel and clerks, the rate of growth for each group decelerated compared to the period 2002-2007.

Over the period 2003-2008, the strongest employment growth was in services occupations. Given that the total net job creation over the period is estimated at just fewer than 300,000, one in five net created jobs were in personal services. One third of all net job creation was at the high skill end (managerial, professional and associate professional).

Figure 3.3 Annual Average Employment Growth by Broad Occupational Group (%), 2003-2008

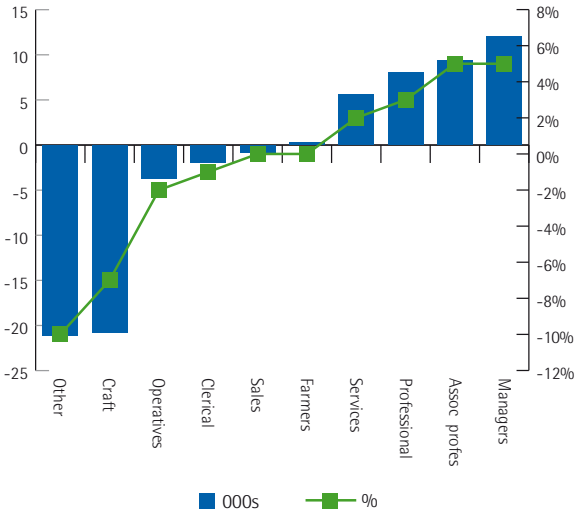


Source: Analysis by FÁS (SLMRU) based on CSO data

Following a decade of growth, employment contracted in 2008. Figure 3.4 presents annualised data for the change in employment, in absolute and relative terms, for broad occupational groups between 2007 and 2008. The economic downturn which led to the sharp contraction in construction activity resulted in a decline in the number of craftspersons and labourers employed. A net loss of over 40,000 jobs was recorded among craftspersons and labourers combined, which represents a contraction of 7% and 10% respectively.

A net job creation of almost 30,000 was recorded in high skilled occupations (managerial, professional and associate professional) between 2007 and 2008. However, by the last quarter of 2008 employment contracted in all occupational groups except for professional occupations.

Figure 3.4 Employment Growth by Broad Occupational Group, Annualised Data 2007-2008

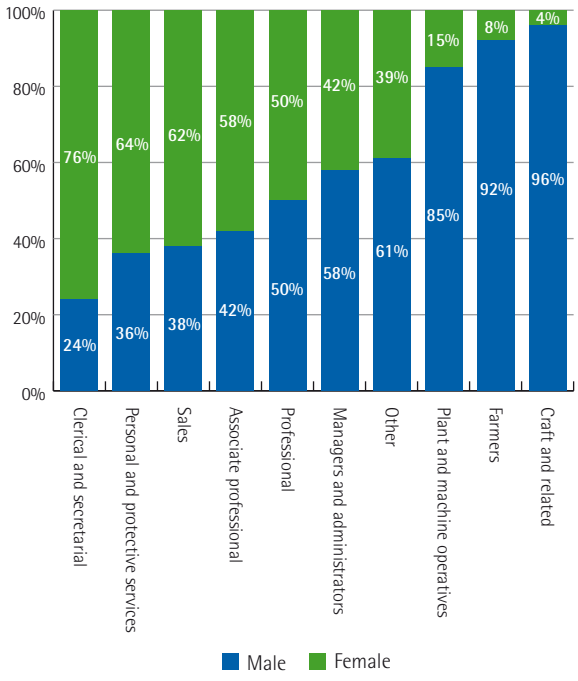


Source: Analysis by FÁS (SLMRU) based on CSO data

3.3 Employment by Gender

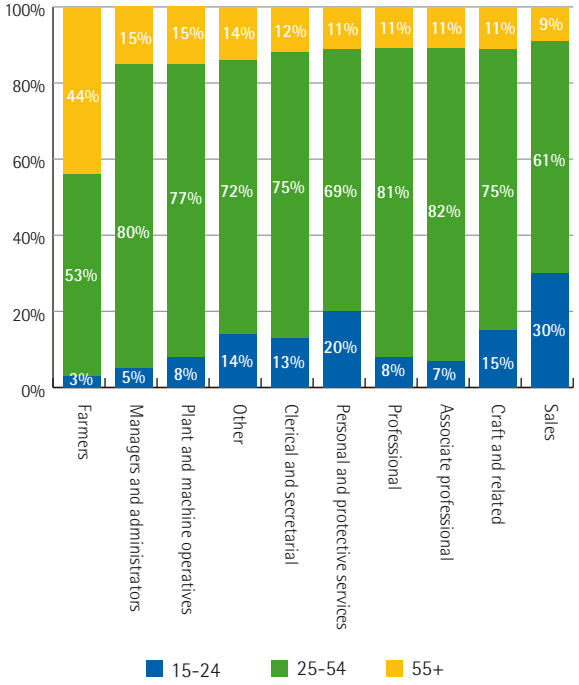
The gender distribution of the workforce by broad occupational group is presented in Figure 3.5. The gender distribution of employment by occupational group remains broadly unchanged compared to the preceding years. As in previous Bulletin issues, one in four clerks is male, while one in 20 craftspersons is female. There is an equal number of female and male professionals, while the share of female managers increased by one percentage point compared to 2007 to 42%.

Figure 3.5 Employment by Gender in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 3.6 Employment by Age in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

3.4 Employment by Age

Figure 3.6 presents the age distribution of employment in broad occupational groups in 2008.

Almost one in three sales workers and one in five service workers is younger than 25. The share of labourers, craftspersons and clerks under 25 is also greater than the national average, although the share of labourers over 55 is also greater than the national average.

The lower share of under 25s amongst professionals, associate professionals and managers is due to the prerequisites to entry into these occupations which include longer duration of education or/and longer experience.

The share of craftpersons aged under 25 has decreased by 5 percentage points since 2007 to 15%. This, *inter alia*, reflects a decline in the new apprentice registrations, which almost halved between 2007 and 2008.[28] The share of under 25s also decreased for all other occupational groups (except managers, professionals and farmers), albeit not as markedly, suggesting that younger persons have, in general, been disproportionately affected in the downturn.

28 FÁS (2009)

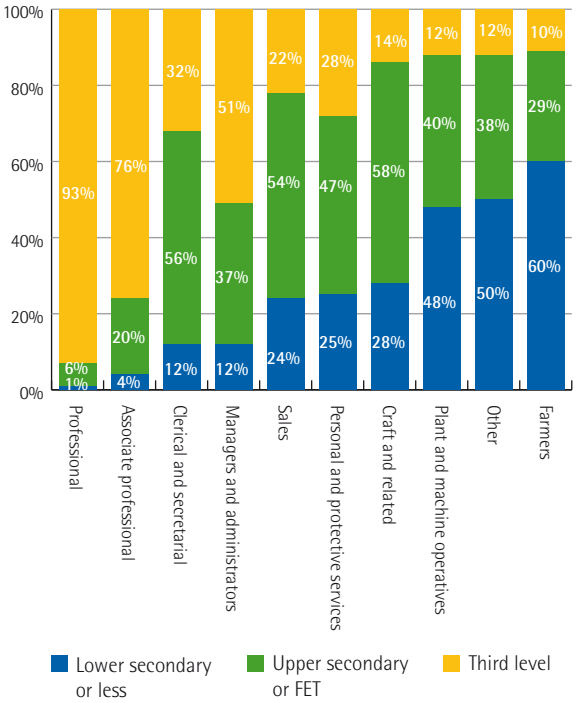
3.5 Employment by Education

The education distribution of employment in broad occupational groups for 2008 is presented in Figure 3.7.

A high concentration of skilled workers is found amongst professionals and associate professionals: nine in ten professionals and three in four associate professionals hold third level qualifications.

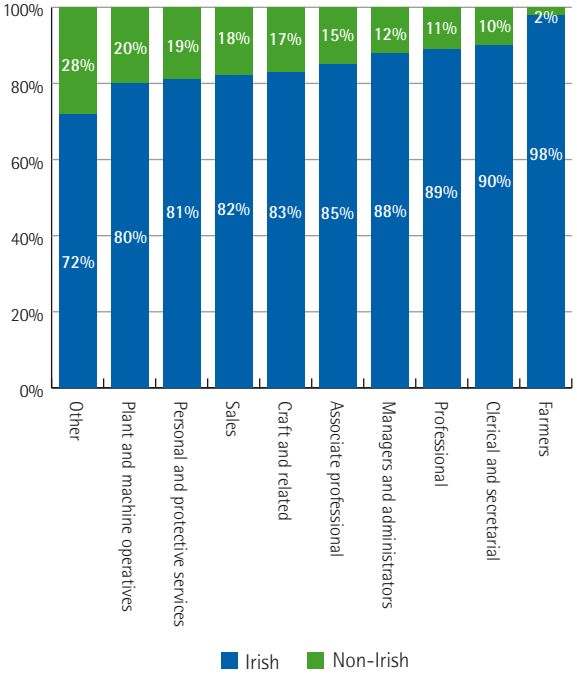
The education distribution of employment by broad occupational group in quarter 4 2008 improved on quarter 2 2007 (reported in the previous year's Bulletin), whereby the share of workers holding third level qualifications increased across the board. This is partly due to the disproportionate decline in employment for the lower educated over the observed period. Within all occupational groups, net job losses were recorded for those with lower than upper secondary or less education, while net job creation was recorded for those with third level qualifications (with the exception of craft and clerical workers where employment in all educational groups declined).

Figure 3.7 Employment by Education in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 3.8 Employment by Nationality in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

3.6 Employment by Nationality

Employment in broad occupational groups broken down by nationality is presented in Figure 3.8.

The share of non-Irish workers is lowest amongst farmers (2%) and highest amongst labourers ('other' category) (28%). Non-Irish workers are predominantly found in low skilled occupations: more than a quarter of all labourers and one in five of all service workers and operatives are non-Irish.

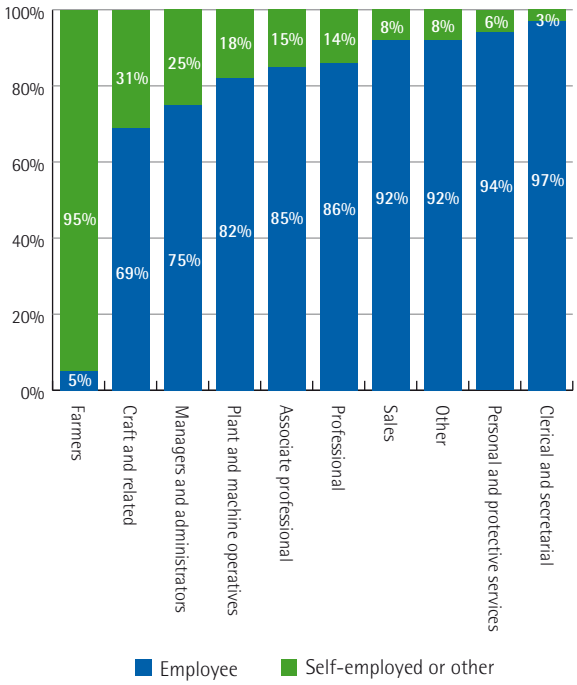
Between quarter 2 2007 and quarter 4 2008 the share of non-Irish workers increased amongst labourers, operatives, craftspersons and sales persons; for other occupational groups it remained unchanged. This would suggest that the net job creation/loss was evenly distributed between Irish and non-Irish for most occupations except for labourers, operatives, crafts and sales persons. In these occupational groups the Irish workers were disproportionately negatively affected by the job losses. For instance, between quarter 2 2007 and quarter 4 2008, the overall net job losses for craftspersons is estimated at 36,000, while the employment of Irish craftsworkers declined by 32,000, suggesting greater share of Irish in the job losses (89%) than in the employment stock in this occupational group (which was 84% in quarter 2 2007).

3.7 Employment Status

Figure 3.9 presents the employment status of persons in employment by broad occupational group. The distribution of employment between employees and the self-employed changed on quarter 2 of the previous year. Although a significant majority in all occupational groups (except farmers) remain in the employee category, the share of self-employed rose for all occupational groups, except clerks and sales persons. This would suggest that the slowdown in the economy has pushed some redundant workers in most occupational categories to set up their own businesses.

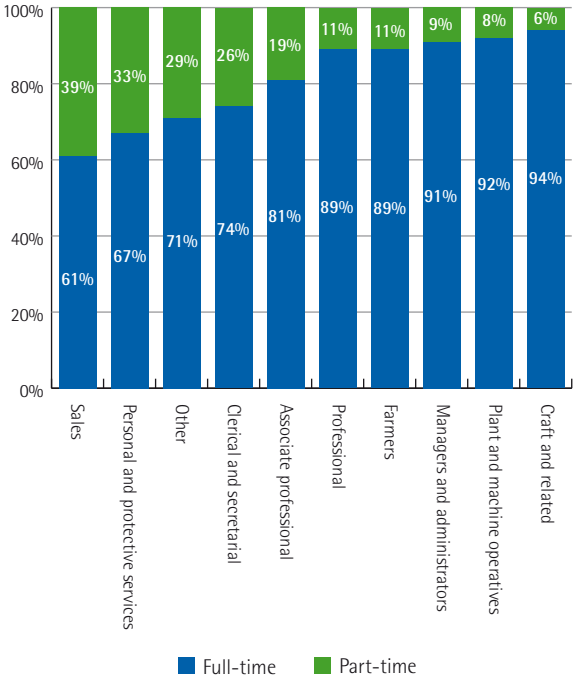
One quarter of managers are self-employed, a significant majority of whom are proprietors of the businesses they manage e.g. publicans, shop owners.

Figure 3.9 Employment by Employment Status in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 3.10 Full-time and Part-time Employment in Broad Occupational Groups (%), Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

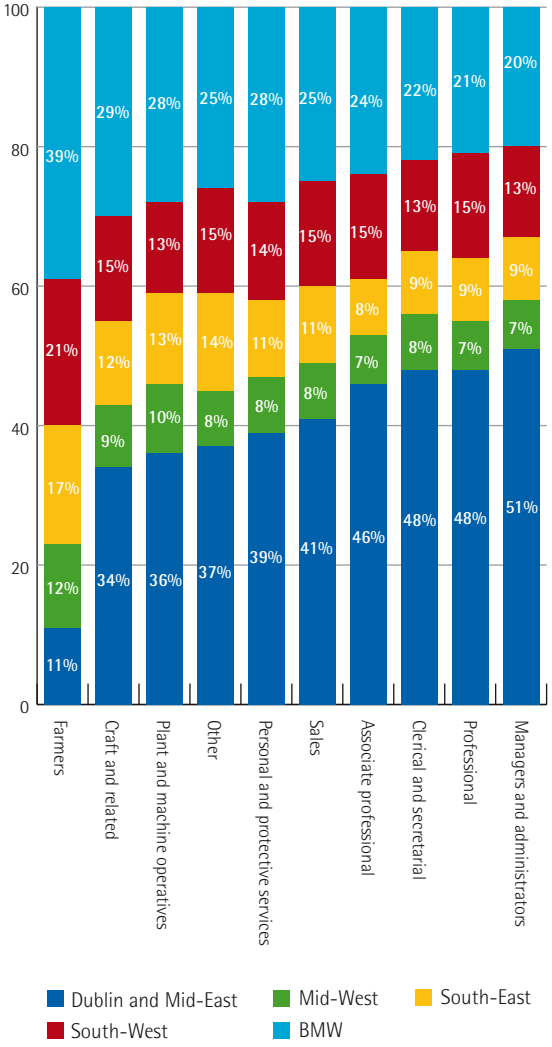
Figure 3.10 presents the distribution of employment in broad occupational groups between full-time and part-time work. Although in all occupational groups a significant majority of workers work full-time, between quarter 2 2007 and quarter 4 2008, there has been an increase in the share of part-time work in all occupational groups, except amongst professionals and clerks. The reduction in hours worked is an indication of the labour market response to the decrease in the economic activity observed over the period.

3.8 Employment by Region

Figure 3.11 presents the regional distribution of employment by broad occupational group. [29] At least a third of employment in all occupational groups is located in the Dublin and Mid-East regions. The exception is farming, which, as expected, is located outside the urban areas, with 90% of employment located outside Dublin and the Mid-East region. Approximately one half of all high skilled (professional, associate professional, managerial) and clerical jobs are based in Dublin and the Mid-East.

29 While regions are defined by NUTS 3, for presentation purposes, the Border, Midlands and Western Regions have been grouped together and the Dublin and the Mid East Regions have also been grouped.

Figure 3.11 Employment by Region in Broad Occupational Groups (%), Quarter 4 2008



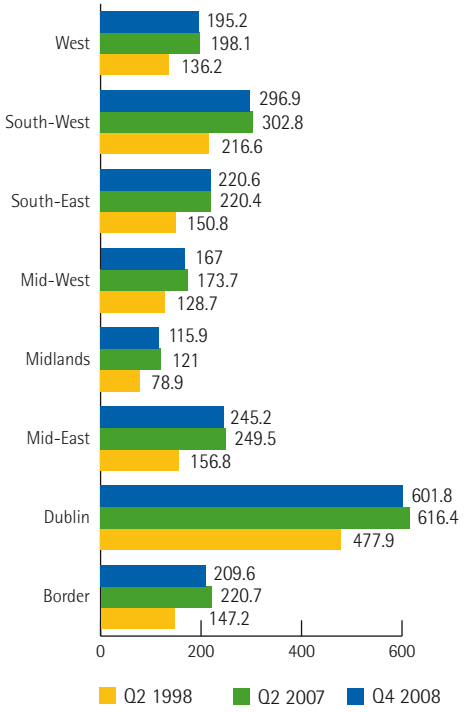
Source: Analysis by FÁS (SLMRU) based on CSO data

Section 4 Regional Skill Profiles

4.1 Employment Level and Employment Growth

This section provides an overview of regional employment[30]. Figure 4.1 presents employment level by region in 1998, 2007 and 2008. The greatest number of employed is found in the Dublin region which has almost one third of national employment. However, the Dublin region's share of employment has declined from 32% in 1998 to 29% in the last 10 years. At the same time, the Midlands region has had the lowest share of employment throughout the period.

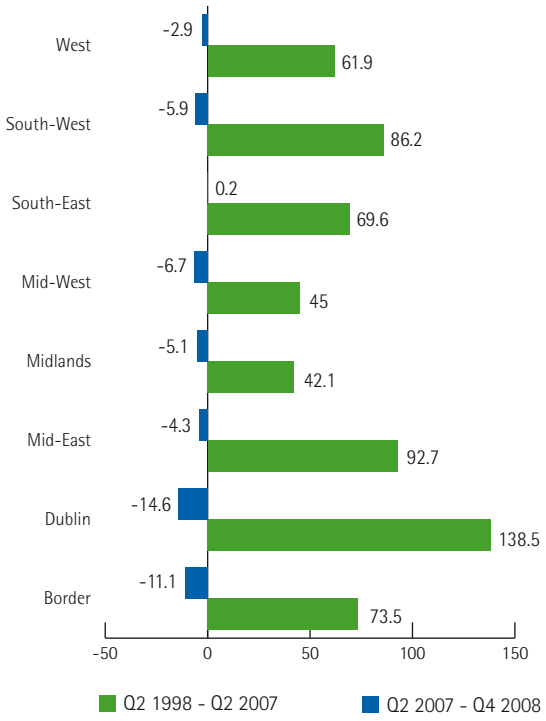
Figure 4.1 Employment by Region (000s)



Source: Analysis by FÁS (SLMRU) based on CSO data

Employment levels increased in all regions between quarter 2 1998 and quarter 2 2007, with a total of 610,000 net jobs created over the period (Figures 4.2 and 4.3). The greatest net job creation in absolute terms was in the Dublin region with just fewer than 140,000 additional jobs over the period. In relative terms, the strongest employment growth over the period was recorded in the Mid East, where the employment level increased by almost 60% (93,000 additional jobs).

Figure 4.2 Employment Growth by Region (000s)

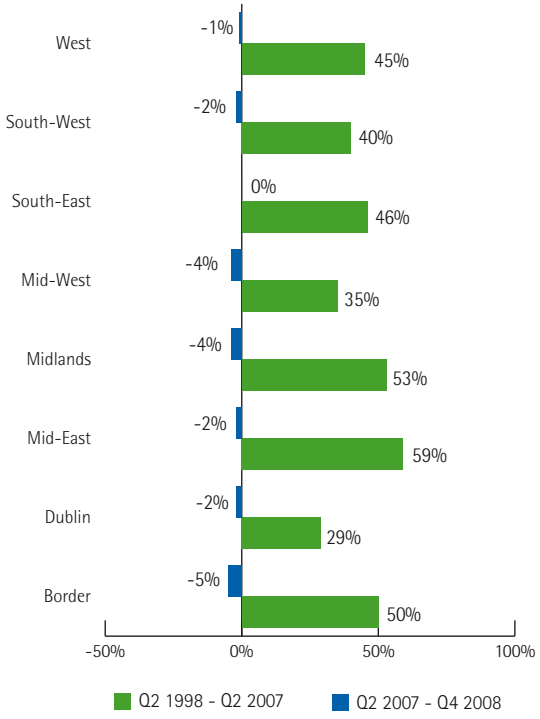


Source: Analysis by FÁS (SLMRU) based on CSO data

Between quarter 2 2007 and quarter 4 2008, employment declined in all regions except the South East, where it remained almost unchanged. In absolute terms, the greatest net job losses were recorded in the Dublin (15,000) and Border regions (11,000). The Border region also experienced the greatest decline in relative terms, contracting by 5% over the period. This is followed by the Midlands and the Mid-West regions, each declining by 4%. The Dublin region accounted for the largest share of total employment gain in the period q2 1998-q2 2007 (23%), it also had the highest share of the net job losses in the period quarter 2 2007-quarter 4 2008, at 29% (Table 4.1). The Mid-East region, on the other hand, had a relatively high share of job gains (15%), but a relatively low share of job losses (8%) over these two periods respectively. The Border region accounted for the second highest share of net job losses over the period quarter 2 2007 to quarter 4 2008, with 22%.

30 Note: the data refers to the region of residence which may not coincide with the location of employment.

Figure 4.3 Employment Growth by Region (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 4.1 Change in Employment and Regional Shares in the Change

Region	Q2 1998 – Q2 2007		Q2 2007 – Q4 2008	
	Absolute net gain	Share in total gain	Absolute net decline	Share in total decline
Border	73,500	12%	-11,100	22%
Dublin	138,400	23%	-14,500	29%
Mid-East	92,600	15%	-4,200	8%
Midlands	42,200	7%	-5,200	10%
Mid-West	45,100	7%	-6,700	13%
South-East	69,600	11%	*	*
South-West	86,200	14%	-5,800	12%
West	61,900	10%	-2,900	6%
Total	**609,500**	**100%**	**-50,300**	**100%**

* Observations could be subject to sampling error

Source: Analysis by FÁS (SLMRU) based on CSO data

In relative terms, however, the greatest impact of the economic downturn was in the Midlands, where the unemployment rate increased from 4.4% in quarter 2 2007 to 10% in quarter 4 2008 (Table 4.2). Although all regions experienced a considerable increase in their unemployment rates the Midlands was the only region to reach a two digit figure in quarter 4 2008.

Table 4.2 Unemployment Rates by Region

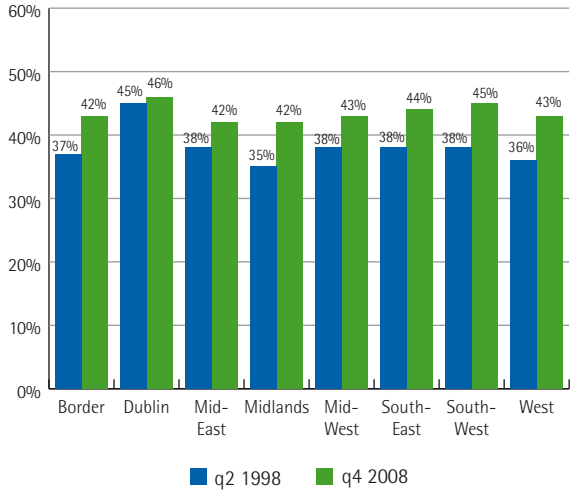
Region	Quarter 2 2007	Quarter 4 2008
Border	5.3%	8.7%
Dublin	4.4%	7.0%
Mid-East	4.1%	6.1%
Midlands	4.4%	10.0%
Mid-West	5.7%	8.5%
South-East	5.1%	8.7%
South-West	3.6%	6.7%
West	4.6%	8.9%

Source: Analysis by FÁS (SLMRU) based on CSO data

4.2 Employment by Gender

Regional employment by gender is presented in Figure 4.4. In all regions, the share of females accounts for less than 50%. The share of females is the greatest in the Dublin region; it is the lowest in the Midlands and the Mid East. There has been a change in the gender distribution of employment over the last ten years with the share of females increasing across all regions. The greatest shifts occurred in the Midlands, West and South-West regions: the share of females in the employment stock increased by 7 percentage points in each of these regions over the period 1998-2008.

Figure 4.4 Share of Females in Employment by Region

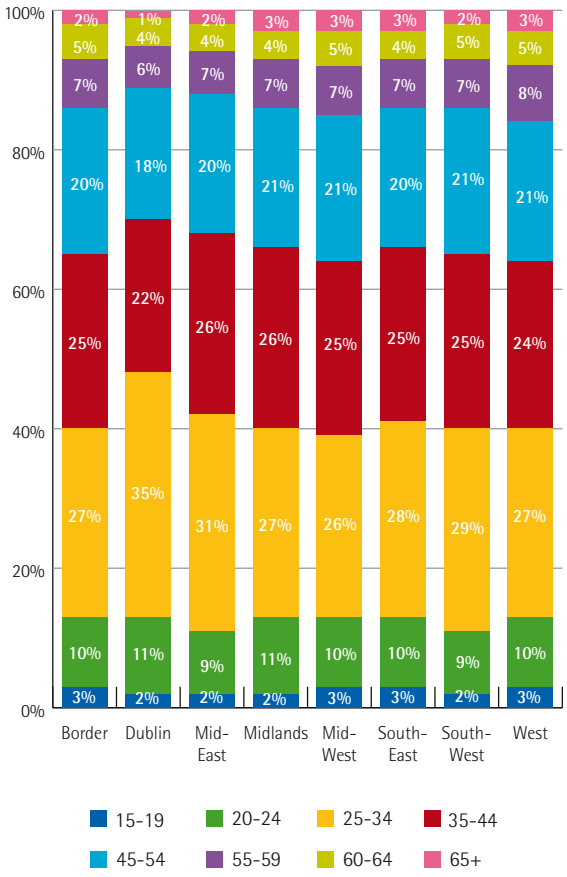


Source: Analysis by FÁS (SLMRU) based on CSO data

4.3 Employment by age

Regional employment by age is presented in Figure 4.5. The Dublin region has the youngest workforce: just under one half is younger than 35 and 12% is older than 55; the West region has the oldest: 39% under 35 and 16% over 55.

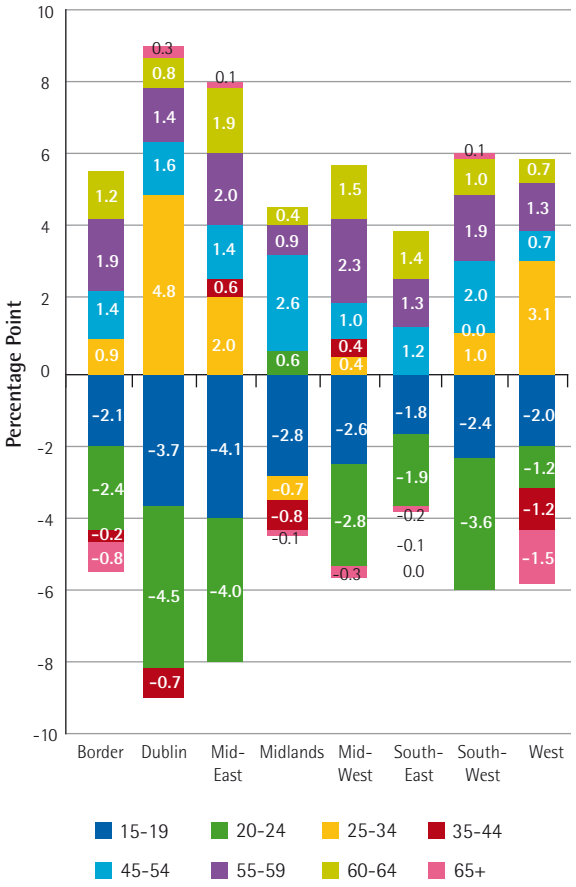
Figure 4.5 Regional Employment by Age, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Over the last ten years the workforce in all regions has aged: the share of those aged 15-19 and 20-24 in employment declined across all regions (Figure 4.6). The share in the 25-34 age group increased in most regions, with a particularly strong increase in Dublin (five percentage points). This is partly due to the longer stay in education and delayed entry into the labour force. The share of over 55s increased in all regions, reflecting a more general trend of population ageing.

Figure 4.6 Regional Employment by Age: Change in Shares 1998-2008

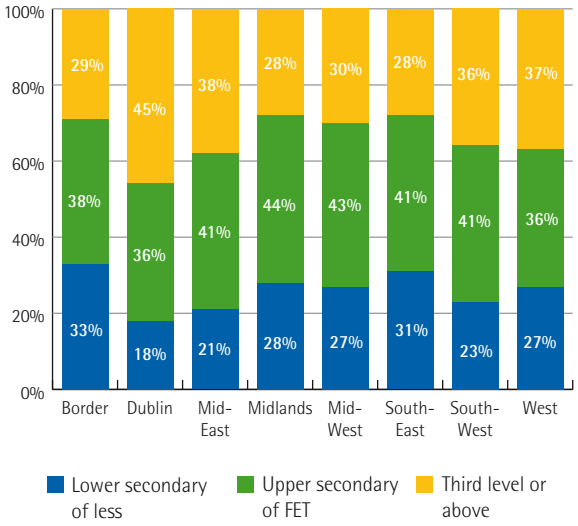


Source: Analysis by FÁS (SLMRU) based on CSO data

4.4 Employment by Education

Figure 4.7 presents the educational distribution of the regional employment. The Dublin workforce has the highest level of educational attainment with 45% holding third level qualifications and 18% attaining less than secondary education. By contrast, 29% of those employed in the Border region has third level education, while one third are in the lower secondary level or less category. The Midlands and South East regions have the lowest shares of third level graduates in their workforce.

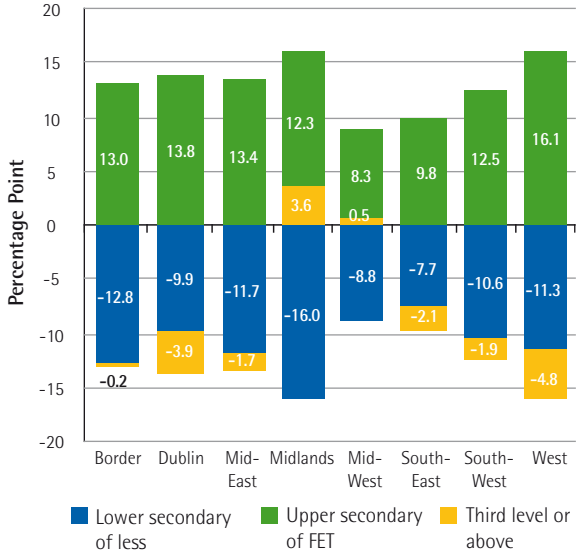
Figure 4.7 Regional Employment by Education, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

The education level has improved across all regions over the last decade. Since 1999, the share of those in the lower secondary or less category in the workforce declined in each region; this drop was most pronounced in the Midlands with a 16 percentage points decline over the period (Figure 4.8). At the same time, the share of third level graduates increased in each region, with the greatest increase recorded in the West region.

Figure 4.8 Regional Employment by Education: Change in Shares 1999-2008



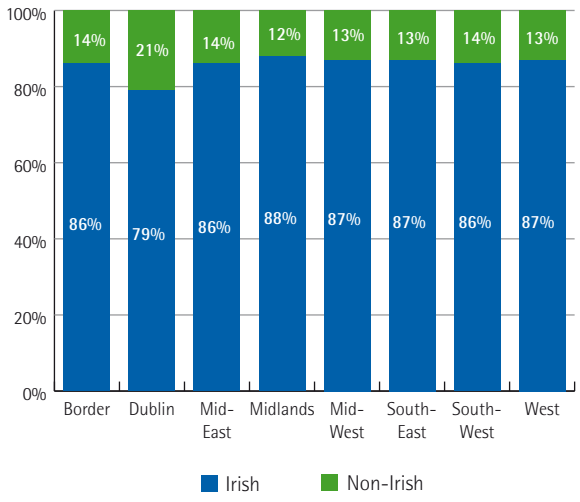
Source: Analysis by FÁS (SLMRU) based on CSO data

4.5 Employment by Nationality

Regional employment by nationality is presented in Figure 4.9. Irish nationals account for a significant majority of the workforce in each region. The greatest share of non-Irish nationals is found in the Dublin region – one in five. In the other regions, non-Irish nationals account for between 12% and 14% of the workforce, with the lowest share in the Midlands.

Over the last 10 years, the share of non-Irish nationals increased in all regions. In 1999, non-Irish nationals accounted for 4% in Dublin and 3% or less in the other regions.

Figure 4.9 Regional Employment by Nationality, Quarter 4 2008

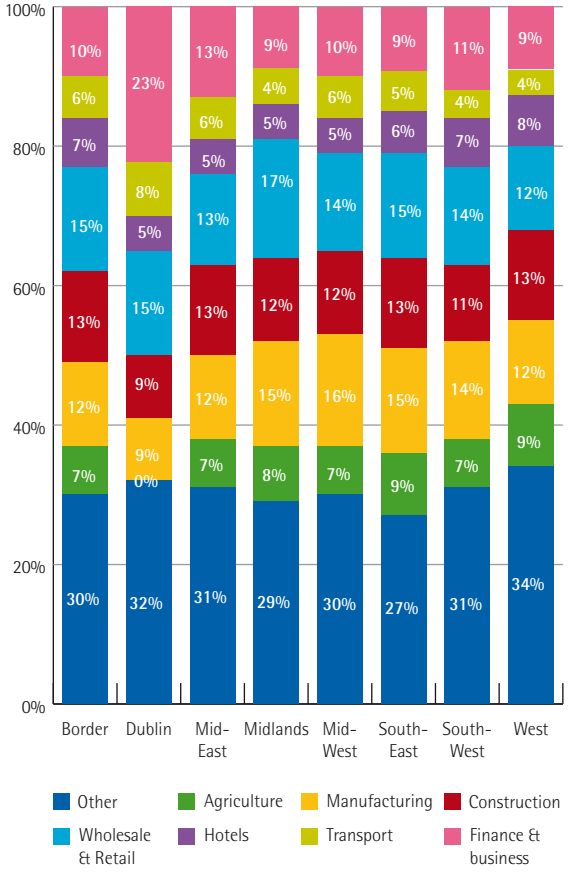


Source: Analysis by FÁS (SLMRU) based on CSO data

4.6 Employment by Sector

Regional employment by sector is presented in Figure 4.10. Approximately one third of employment in each region is in the 'other' sector category, which consists of health, education, utilities, public sector, etc. Outside of the Dublin region, the manufacturing, construction and wholesale/retail sectors combined account for approximately 40% of employment in each region. In the Dublin region, 23% of employment is in the finance/business sector- almost double that of any other region.

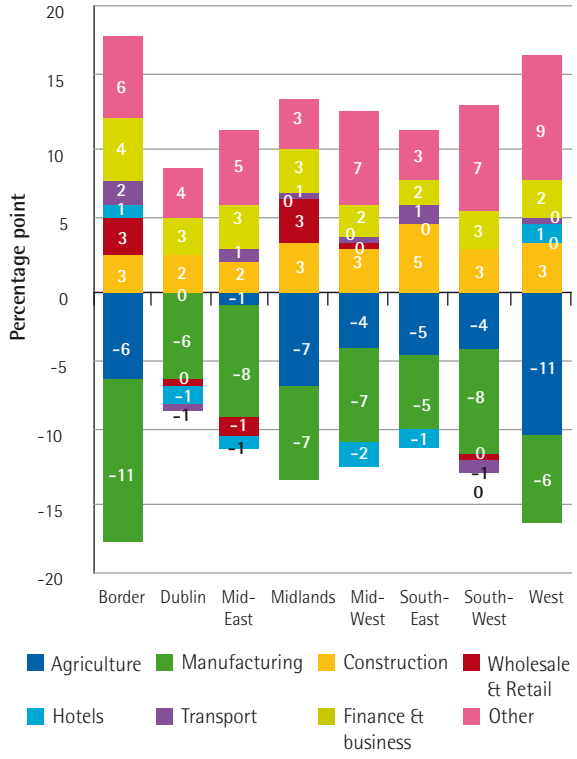
Figure 4.10 Regional Employment by Sector, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Over the last decade, there has been a shift in the sectoral distribution of employment across all regions (Figure 4.11). Most notably, the share of employment in manufacturing declined in each region by at least five percentage points, with the sharpest decline occurring in the Border region. The share also declined across the regions for agriculture (except Dublin). By contrast, the share employed in the construction and finance/business sectors increased across all regions.

Figure 4.11 Regional Employment by Sector: Change in Shares 1998-2008

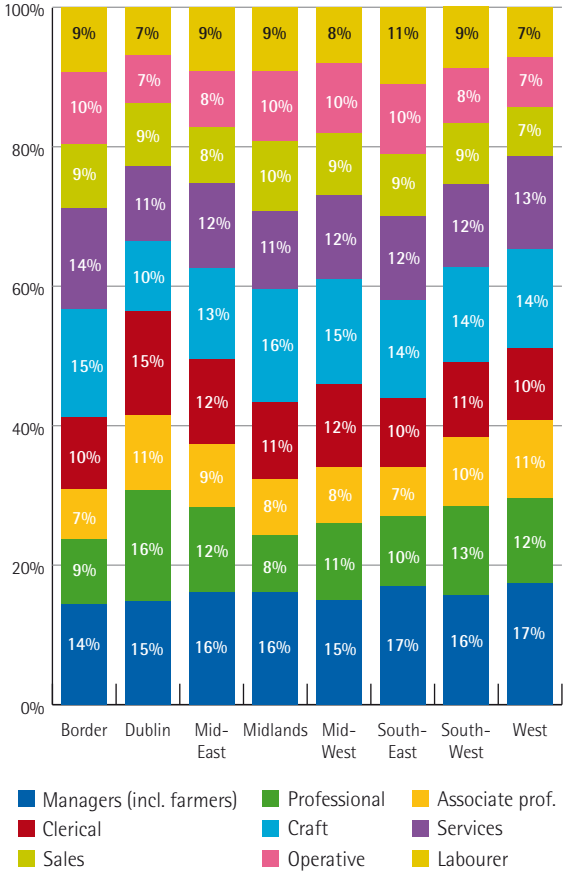


Source: Analysis by FÁS (SLMRU) based on CSO data

4.7 Employment by Occupation

The occupational distribution of regional employment is presented in Figure 4.12. The Dublin region has the greatest share of professionals and associate professionals in its workforce (27% compared to 17% in the Border, Midlands and South-East regions) and the lowest share of operatives and labourers (14% compared to 20% in the Border and South-East regions).

Figure 4.12 Regional Employment by Occupation, Quarter 4 2008

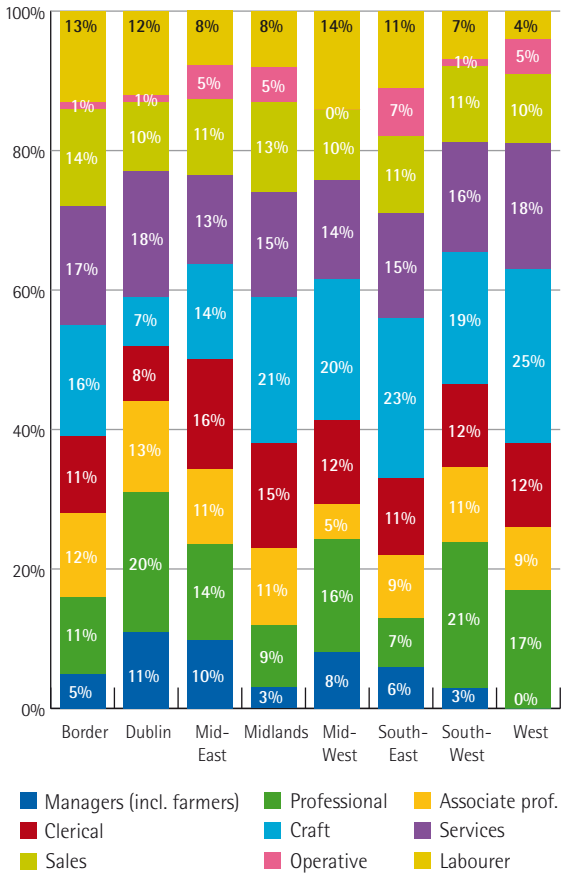


Source: Analysis by FÁS (SLMRU) based on CSO data

Over the last 10 years, the share of operatives and labourers declined in all regions, as did the share of farmers (grouped in the managerial category), while the share of higher skilled (professional and associate professional), service and sales jobs increased across the board.

The quality of jobs created during the boom years varied across regions. Figure 4.13 presents the occupational distribution of the net job gains during the boom for each region. In the Dublin region, one in three additional jobs created were in the professional and associate professional categories, compared to one in five for the Midlands and Mid-West regions. At 16%, the South East region had the lowest share of the total net job gain at this level. One in four additional jobs in the West region and one in five in the Midlands and Mid-West regions were in craft related occupations, compared to 7% in this category for the Dublin region.

Figure 4.13 Occupational Distribution of the Net Job Creation within Regions, 1998-2007



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 4.3 lists individual occupations associated with the greatest increase/decline in employment level during the period 1998-2007 for each region. In all regions, the greatest decline in employment levels was recorded for occupations associated with manufacturing (lineworkers, machinists, packers) and agriculture (farmers, farm workers). The greatest gains in all regions were for construction-related (craft and labourers), sales and care occupations. There were more jobs gained in professional and associate professional occupations in the Dublin region than elsewhere.

Table 4.3 Occupations with Highest Net Job Gains/Losses by Region, Quarter 2 1998 – Quarter 2 2007

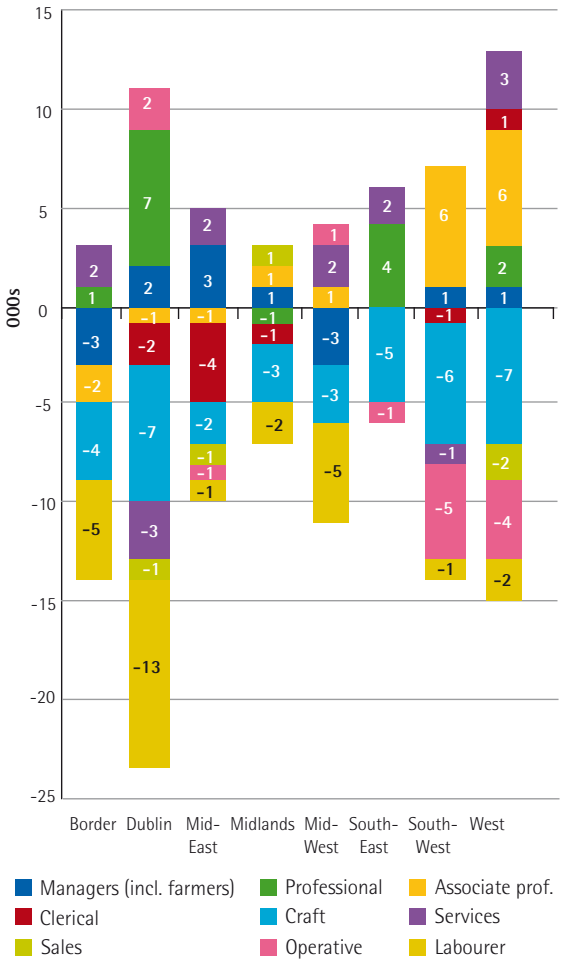
Region	Quarter 2 1998 - Quarter 2 2007	
	Net gain (2000+)	Net loss (1000+)
Border	Sales assistants	Packers
	Care assistants	Lineworkers
	Clerks	Sewing machinists
	Drivers	
	Builders	
	Carpenters	
	Nurses	
	Cleaners, domestics	
	Primary/nursery teachers	
Dublin	Sales assistants	Labourers in industries
	Accountants	Farmers
	Bank clerks	Teachers
	Building labourers	Metal fitters
	Care assistants	Sales representatives
	Chefs,	Proprietors of shops
	Taxi drivers	Lineworkers
	Nurses	Secretaries
	General managers	
	Clerks	
	Cleaners, domestics	
	Labourers	
	Carpenters	
	Warehousemen/women	
	Marketing managers	
	Financial clerks	
	Teaching professionals	
	Scientific technicians	
	Computer managers	
	Financial managers	
	Plumbers	
	Childcare workers	
	Solicitors	
	Underwriters/fin analysts	
	Electricians	
	Waiters	
	Medical practitioners	
	Architects	
	Personnel managers	
	Educational assistants	
	Catering assistants	
Mid East	Sales assistants	Lineworkers
	Clerks	
	Care assistants	
	Labourers	
	Carpenters	
	Cleaners, domestics	
	Drivers	
	Accountants	
	Financial clerks	

Region	Quarter 2 1998 - Quarter 2 2007	
	Net gain (2000+)	Net loss (1000+)
Midlands	Sales assistants	Farm workers
	Clerks	Farmers
	Labourers	
	Carpenters	
	Care assistants	
MidWest	Sales assistants	Farm workers
	Labourers in industries	Lineworkers
	Clerks	
	Cleaners, domestics	
SouthEast	Sales assistants	Publicans
	Carpenters	Farm workers
	Electricians	
	Labourers	
	Clerks	
	Drivers	
	Care assistants	
	Nurses	
	Tech sales reps	
SouthWest	Sales assistants	Proprietors of shops
	Clerks	Farmers
	Care assistants	Lineworkers
	Carpenters	
	Cleaners, domestics	
	Nurses	
	Accountants	
	Teaching profess	
West	Sales assistants	Farm workers
	Care assistants	Farmers
	Carpenters	
	Drivers	
	Nurses	
	Bricklayers	
	Financial clerks	

Source: Analysis by FÁS (SLMRU) based on CSO data

Over the period quarter 2 2007 and quarter 4 2008 employment declined in all regions. However, the effect of the downturn was not evenly distributed across occupational groups (Figure 4.14). In all regions, most net job losses were recorded for craft occupations and labourers. Each region had net job gains in some occupational groups. Most of the net job gain in the Dublin region was in professional occupations, compared to the South-West and West regions where the greatest increase was in associate professional occupations.

Figure 4.14 Absolute Change in Regional Employment by Occupational Group Quarter 2 2007- Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

In terms of individual occupations (Table 4.4), the greatest negative impact of the downturn was for construction related occupations (craftspersons, building labourers etc.) in all regions. However, there were still net job gains for some occupations; employment of care assistants increased in almost all regions, while employment of bus/ coach drivers, accountants, computer systems managers increased in some of the regions.

There is also a possible indication of a return to farming and self employment. In some instances the direction of employment change has reversed between the boom and the downturn, e.g. for farmers (Mid-East region) and proprietors of businesses (South-West region).

Table 4.4 Occupations with Highest Net Job Gains/Losses by Region, Quarter 2 2007 – Quarter 4 2008

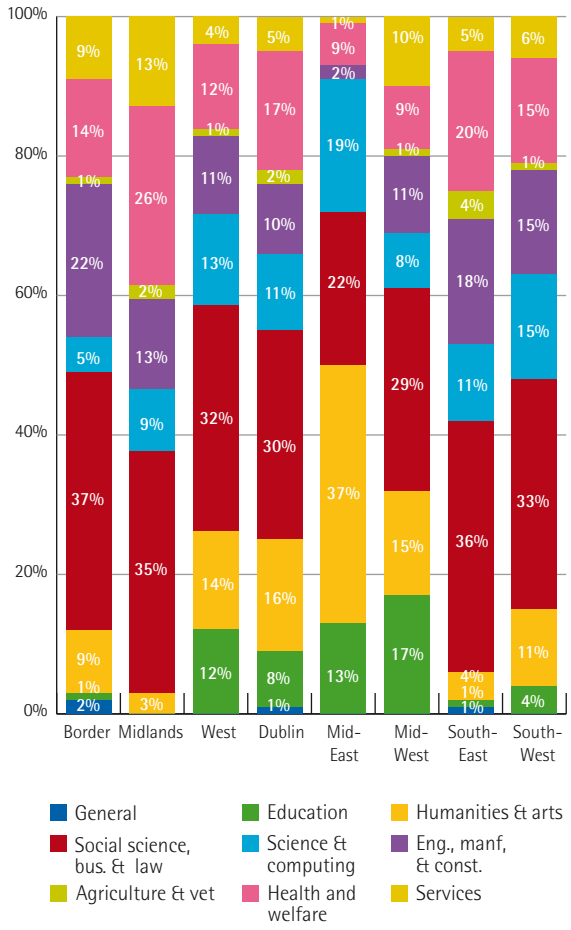
Region	Quarter 2 2007- Quarter 4 2008	
	Net gain 1000+	Net loss 1000+
Border	Clerks	Building labourers
	Therapists	Cleaners, domestics
	Welders	Carpenters
	Drivers (bus)	Farmers
		General labourers
		Plasterers
		Nurses
		Builders
Dublin	Accountants	Hospital assistants
	Computer managers	Clerks
	Clerks	Catering assistants
	Care assistants	Teaching professionals
	Primary/nursery teachers	Couriers
	Gardeners	Warehousemen/women
	Drivers (bus)	Building managers
	Architects	Labourers
	Teachers	Electrical trades
	Sports/entertainment managers	Nurses
	Childcare workers	Scientific technicians
	Legal workers	Sales representatives
		Metal fitters
		Electricians
		Waiters
		Bar staff
		Chefs
		Building labourers
Mid East	Farm labourers	Labourers
	Farmers	Sales assistants
	Drivers	Production managers
	Financial managers	Building labourers
		Clerks
Midlands	Cleaners, domestics	Bricklayers
		Building labourers
Mid West	Care assistants	Plasterers
		Cleaners
		Farmers
		Bricklayers
		Labourers in industries
South East	Care assistants	Farmers
	Accountants	Bricklayers
		Electricians
		Building labourers
		Carpenters
South West	Nurses	Lineworkers
	Care assistants	Sales representatives
	Sales assistants	Building labourers
	Accountants	Bricklayers
	Proprietors of shops	Construction workers
		Carpenters
West	Clerks	Bricklayers
	Primary/nursery teachers	Warehousemen/women
	Computer programmers	Drivers
		Metal fitters
		Building labourers
		Plasterers
		Sales assistants
		Clerks

Source: Analysis by FÁS (SLMRU) based on CSO data

4.8 Graduates by field of education

The distribution of third level graduates (IoTs and universities) for 2007 by region and field of education is presented in Figure 4.15. With the exception of the Mid-East, approximately one third of graduations in each region are in the social sciences, business and law category. The combined share of science and computing and engineering manufacturing and construction graduates amounts to approximately one quarter in most regions.

Figure 4.15 Distribution of Graduates (2007) by Field of Education and Region

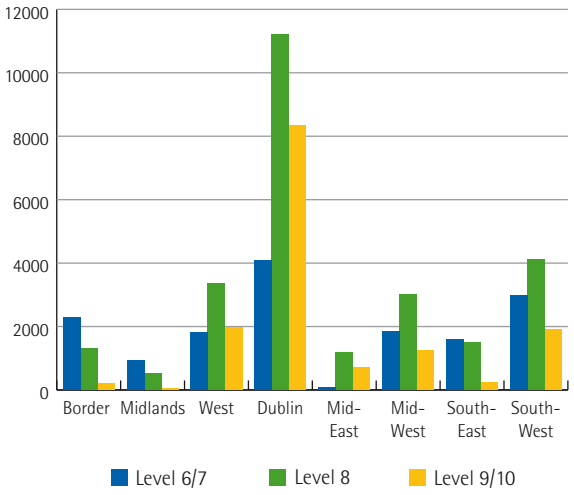


Source: SLMRU analysis based on HEA data

4.9 Graduates by level

The number of third level graduates by National Framework of Qualifications (NFQ) level and region is presented in Figure 4.16. The share of graduates at each level varies from region to region, often reflecting the type of education provision in the region (university vs institutes of technology): regions, such as the Border and Midlands, where higher education is provided chiefly by the Institute of Technology (IoT) sector have higher shares of level 6/7 graduates; the Dublin and mid-East regions, where several universities are located, have higher shares of levels 8-10 graduates.

Figure 4.16 Graduates by Level and by Region, 2007



Source: SLMRU analysis based on HEA data

Section 5 Education and Training

This section presents an overview of the supply of labour from education and training providers in Ireland. A more detailed account of education and training data is provided in a forthcoming EGFSN report, *Monitoring Ireland's Skills Supply: Trends in Education/Training Outputs 2009*.

In Ireland, education and training qualifications are classified according to the National Framework of Qualifications (NFQ). The NFQ has ten levels which are described below by award type:

Level 1-2: Level 1 and 2 Certificate
Level 3: Level 3 Certificate and Junior Certificate
Level 4: Level 4 Certificate
Level 4/5: Leaving Certificate
Level 5: Level 5 Certificate
Level 6: Advanced/Higher Certificate
Level 7: Ordinary Bachelor Degree
Level 8: Honours Bachelor Degree/Higher Diploma
Level 9: Masters Degree/Postgraduate Diploma
Level 10: Doctoral Degree.

The tables below provide the estimated number of awards made at each NFQ level in 2008 by provider type (Table 5.1) and field of education (Table 5.2).[31]

Table 5.1 Summary of Education and Training Awards by NFQ Level, 2008[31]

	Level 1/2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9/10	TOTAL
Junior Certificate		56,020							**56,020**
Leaving Certificate			55,590						**55,590**
FETAC (Major awards)	60	1,420	1,780	14,200	6,970				**24,430**
Institutes of Technology					4,760	7,540	8,550	1,700	**22,550**
Universities					1,500	1,800	17,520	12,950	**33,770**
Total	**60**	**57,440**	**71,570**		**13,230**	**9,340**	**26,070**	**14,650**	**192,360**

Source: State Examination Commission, FETAC, HEA

Table 5.2 Summary of Further and Higher Education and Training Awards by Field of Education, 2008[31]

	Level 1/2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9/10	Total
General Programmes	60	970	190	140	110	80	0	30	**1,580**
Education				10	70	90	1,810	2,410	**4,390**
Arts & Humanities				1,660	380	1,240	5,400	2,000	**10,680**
Social Science, Business & Law		450	250	3,580	2,520	2,850	7,740	4,830	**22,220**
Science				60	210	410	2,280	890	**3,850**
Computing				310	320	410	980	840	**2,860**
Engineering & Construction			70	470	6,500	1,930	2,580	830	**12,380**
Agriculture & Veterinary			60	640	560	300	300	50	**1,910**
Healthcare			10	6,210	670	940	4,390	2,400	**14,620**
Services			1,200	1,130	1,900	1,080	600	380	**6,290**
TOTAL	**60**	**1,420**	**1,780**	**14,210**	**13,240**	**9,330**	**26,080**	**14,650**	**80,770**

Source: FETAC (major awards), HEA

31 Graduation data for universities and Institutes of Technology is based on 2007 data as this is the latest available. All data in Tables 5.1 and 5.2 has been rounded. Awards granted to Irish students who undertook studies outside of the Republic of Ireland are not included.

5.1 Junior and Leaving Certificate

In 2008, 111,600 candidates sat either the Junior Certificate or the Leaving Certificate examinations. The Junior Certificate awards, placed at level 3 on the NFQ, amounted to 56,020 in 2008, while the Leaving Certificate awards, placed across levels 4 and 5, reached almost 55,600. The Leaving Certificate awards break down into 37,639 Leaving Certificate Established awards (68% of the total Leaving Certificates); 14,500 Leaving Certificate Vocational Programme awards (26%) and 3,500 Applied Leaving Certificate awards (6%).

5.2 Further Education and Training

The Further Education and Training Awards Council (FETAC) is the awarding body for further education and training in Ireland. Programmes leading to FETAC awards are offered through: Fáilte Ireland, FÁS, Teagasc, Bord Iascaigh Mhara (BIM), Vocational Education Committees (VECs), adult and community education and training centres, private providers, and the workplace. These range from courses of a short duration (i.e. a number of days) to those of longer duration (i.e. apprenticeships).

Table 5.3 presents FETAC awards data for 2008. Approximately 131,000 candidates received 219,550 FETAC awards (various types) across levels 1 to 6 in 2008, a 2% increase on the preceding year.

In 2008, the number of major awards made by FETAC totalled 24,400 representing a 7% increase when compared to 2007. There were 177,228 minor awards made to almost 94,000 candidates with, on average, two minor awards per candidate. Candidates receiving special purpose awards totalled 17,176 with a further 717 receiving supplemental awards in 2008.

Table 5.3 FETAC Awards by Type and Candidates, 2008

Award Type	2007		2008	
	Awards	Candidates	Awards	Candidates
Major	22,759	22,689	24,429	24,429
Minor (disaggregated)[32]	176,321	87,662	177,228	93,910
Special Purpose	24,157	20,290	17,176	17,176
Supplemental	456	456	717	717
TOTAL	223,693	128,624*	219,550	131,089*

Source: FETAC

*The total number of candidates does not sum up as some candidates gained awards in more than one award type.

Major awards: over one half of all major awards were made at level 5 (14,200 awards) and more than a quarter (29%) were at level 6 (almost 7,000 awards). The remaining 13% were almost equally distributed between levels 3 and 4, with just 65 awards at levels 1 and 2 combined. In terms of field of education, the largest share of major awards was for health and welfare programmes (e.g. childcare), which accounted for one quarter of all major awards (mostly at level 5); a further quarter was for courses in engineering, manufacturing and construction (which were made mostly at level 6).

Minor awards: on average, recipients of minor awards achieved two minor awards in a single year. Almost one half (80,000) of minor awards were made at level 5, with levels 3 and 4 each accounting for a quarter of the total (over 40,000 awards each). The fields of education with the highest share of awards were services (with just over a quarter of the total, mostly at level 5) and general programmes (also with one quarter of the total, mostly at level 3).

Special purpose awards: special purpose awards were made at levels 4-6 only, with level 5 awards making up 85% of the total, followed by level 6 with 12%. Engineering, manufacturing and construction accounted for a half of all special purpose awards (e.g. health and safety at roadworks), and services (e.g. bar specialisation) made up more than a third.

All **supplemental awards** were made at level 6 most of which were for gas and heating installation and solar hot water systems courses.

5.3 Higher Education

The higher education sector in Ireland is comprised of the university sector and the institute of technology (IoT) sector. This also includes the colleges of education and some private institutions providing education in specialist areas such as medicine.

This section is divided into two parts. First, the supply of skills emerging from the university and IoT sectors is outlined, by NFQ level and field of education. This is followed by an overview of Irish-domiciled students pursing higher education abroad.

5.3.1 Universities and Institutes of Technology

The data in this section is the latest available and relates to graduate output data up to 2007 and CAO acceptance data to 2008.

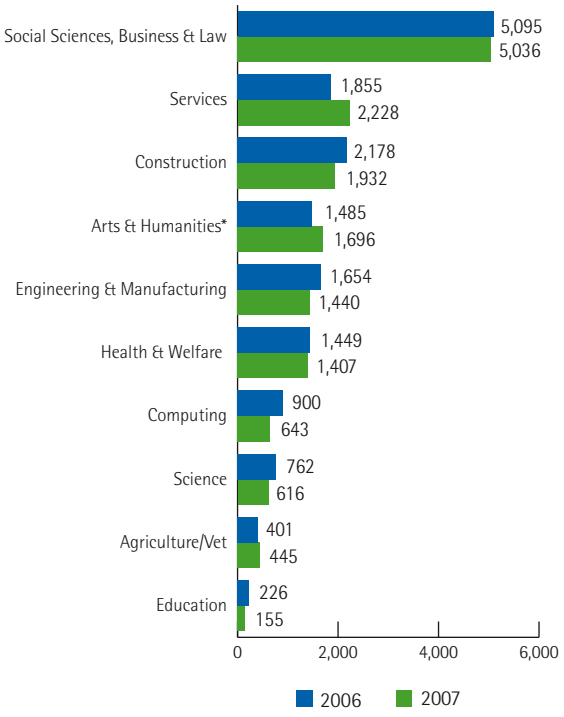
32 One or more minor awards may lead to a FETAC Component Certificate. The figures here refer to the disaggregated numbers of minor awards. On average, each candidate received two minor awards.

Level 7/6

There were 15,600 level 7/6 graduates from Irish higher education (universities and institutes of technology) in 2007. The declining trend observed in recent years for level 7/6 graduate output continued in 2007, with a 3% fall in the number of graduates compared to 2006. Despite a small increase in CAO acceptances in 2008 for level 7/6 courses, the overall trend in recent years has been towards a falling number of school leavers accepting places in higher education at this level. Consequently, graduate output at this level is expected to continue to decline at least in the short term.

Figure 5.1 outlines graduates by broad discipline in 2006 and 2007. The decline in the graduate output since 2006 is reflected across most disciplines.

Figure 5.1 Graduations in Universities and IoTs at Level 7/6 by broad discipline, 2006 and 2007



Source: HEA, IoTs

The most notable changes between 2006 and 2007 occurred in the fields of education outlined below.

Construction: Graduate output in this field declined in the period 2006-2007. CAO acceptances in this discipline also declined in 2008. Recent data on CAO applications for 2009 suggests that, due to the current economic climate, interest in this discipline has dropped significantly compared with previous years and this may result in further declines in graduate output in the medium term.

Engineering and Manufacturing: Graduate output from engineering-related courses has been in decline in recent years and fell by 13% over the period 2006-2007. However, the number of CAO acceptances at level 7/6 for this discipline remained steady between 2006 and 2007 and actually increased by 15% between 2007 and 2008, suggesting that graduate output could increase in the short term.

Arts and Humanities: There was a 14% increase in graduate output in the period 2006-2007. Along with services and agriculture and veterinary, it was the only discipline where the number of graduates increased over this period. This trend for arts and humanities may be expected to reverse in the short term as CAO acceptances for this discipline have been declining in recent years.

Computing: The number of computing graduates fell by more than a quarter (29%) between 2006 and 2007. A continued fall in the number of level 7/6 computing graduates is expected in the short term given the decline in the number of CAO acceptances for computing courses in recent years. Acceptance data for 2008, however, shows an annual increase of 13% indicating that, in the medium term, the downward trend in the number of computing graduates at this level may be reversed.

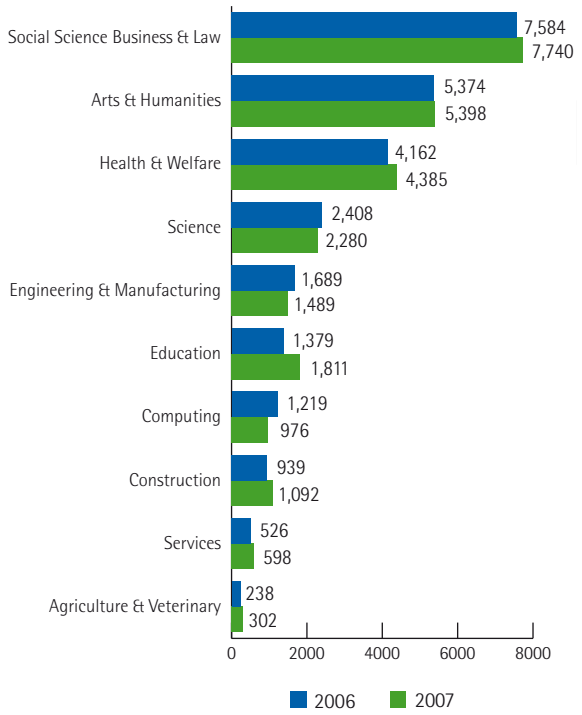
Science: Level 7/6 graduate output in science fell by almost a fifth between 2006 and 2007, the first significant decline for this discipline in five years. Graduate output may be expected to increase next year, due to increases in CAO acceptances for science programmes observed in 2005 and 2006; thereafter, however, due to declines in CAO acceptances from 2007 and 2008, the number of graduates is likely to decline again from 2010.

Level 8

There were over 26,000 level 8 graduates from Irish higher education institutions in 2007. This is an increase of 2% on 2006 and a continuation of a trend towards increased graduate output at this level observed in recent years. Level 8 graduate output is expected to further increase, given the continued rise in the numbers of students accepting CAO offers of level 8 courses (+7% since 2007).

Figure 5.2 outlines graduations by broad discipline in 2006 and 2007. In 2007, almost a third of all graduations were for programmes in social sciences, business and law; this was followed by arts and humanities with a fifth of the total.

Figure 5.2 Graduations in Universities and IoTs at Level 8 by broad discipline, 2006 and 2007



Source: HEA, IoTs

The most notable changes between 2006 and 2007 occurred in the fields of education outlined below.

Health and Welfare: The number of graduates in this discipline increased by 5% over the period 2006-2007, due to the increased student capacity on existing courses (e.g. medicine) as well as the introduction of new or add-on healthcare courses (e.g. health science) in recent years. Nursing graduate output is likely to fall in the medium term due to an 18% reduction in the intake of student nurses from 2009.

Science: Over the period 2006-2007, graduate output in this discipline decreased by 5%. Although graduate output is expected to continue to decline in the short-term, this fall may be reversed in the medium term since CAO acceptance data for 2008 shows a 19% increase compared to 2007. This partly stems from the increase in numbers of students in existing courses, particularly in the area of biomedicine.

Engineering and Manufacturing: There was a 12% decline in graduate output from engineering related courses. This decline is expected to continue in the short term, although a levelling off may occur in the medium term due to a relatively constant number of CAO acceptances on these courses over the last five years.

Education: Graduate output from education related programmes increased by a fifth over the period 2006-2007. Increases in CAO acceptances point to further growth in graduate output in the short to medium term.

Computing: The number of computing graduates fell by a fifth between 2006 and 2007. This reflects a declining trend in computing graduate output which is expected to continue in the short term due to a drop in the number of CAO acceptances since 2002. More recently, however, the number of CAO acceptances has shown signs of recovery with a 6% increase between 2007 and 2008, and this is expected to have a positive effect on output in the medium term.

Construction: Graduate output increased by 16% between 2006 and 2007. As the number of CAO acceptances in 2008 increased by 18% on the previous year, future construction output is expected to grow in the short-term. The current economic climate, however, is expected to affect the take-up of construction-related courses. This is already evident from 2009 CAO applications, which are lower compared to previous years.

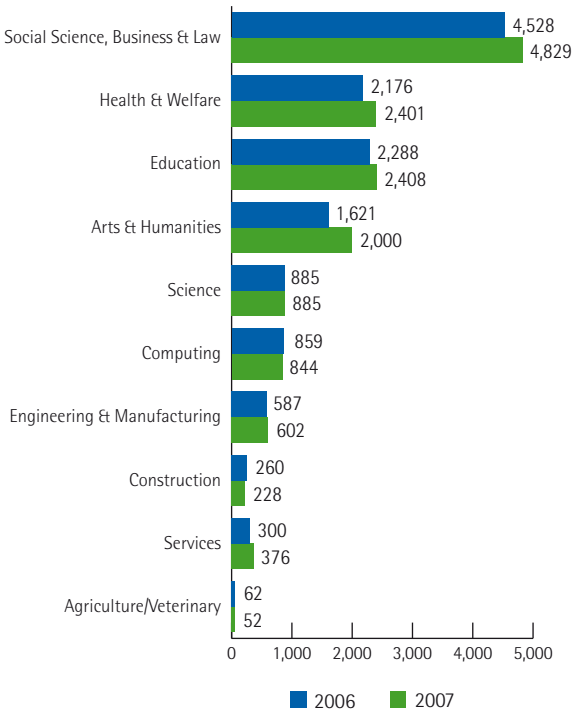
Level 9/10

Level 9/10 refers to graduate diplomas, taught and research master degrees and doctorates.

In 2007, there were over 14,600 graduates at levels 9/10 from the higher education system, representing an 8% rise when compared to 2006. Graduate enrolments have increased steadily in recent years which will lead to continued growth in graduate output for all award types at levels 9/10 in the coming years. Over half (55%) of level 9/10 awards in 2007 were for master degrees; postgraduate diploma/certificate awards made up 38% and doctoral awards 7%.

Figure 5.3 presents the discipline breakdown of postgraduate awards for 2006 and 2007. In 2007, one third of all postgraduate awards were made in social science, business and law (predominantly at level 9). This was followed by education and health and welfare, both accounting for 16% of all level 9/10 awards.

Figure 5.3 Graduations in Universities and IoTs at Level 9/10 by broad discipline, 2006 and 2007



Source: HEA, IoTs

The most notable points relating to postgraduate output occurred in the fields of education outlined below.

Health and Welfare: After a decline between 2005 and 2006, the number of health and welfare awards increased by 10% in 2007 compared to 2006. Approximately two thirds of awards were for postgraduate diplomas (mostly in nursing) which were made predominantly in the university sector.

Science: There was no change to the overall number of graduates in science between 2006 and 2007. Awards were almost equally distributed between masters and doctoral degrees. Doctoral degrees in science accounted for more than one third (34%) of all doctoral awards in 2007.

Computing: Despite an increase of 15% between 2005 and 2006, the number of awards made in computing was 2% lower in 2007 when compared to 2006. Master degrees made up 70% of computing awards at this level in 2007.

Engineering and Manufacturing: There was an overall increase of 3% in the number of graduates between 2006 and 2007. Masters degrees accounted for the majority of awards at this level in engineering and manufacturing (60%). Over 13% of all doctoral degrees in 2007 were in this discipline.

5.3.2 Irish Students Abroad

Every year, thousands of Irish students undertake studies at universities abroad, mostly in the UK.[33] The OECD holds data on foreign student enrolments in universities of OECD countries. Data is broken down according to the type of programme: Tertiary Type A programmes are comprised of honours bachelor degree, postgraduate diploma and master degree courses; Type B programmes refer to ordinary bachelor degrees and higher certificates; Advanced Research programmes are doctoral programmes.

Table 5.4 presents Irish students' enrolments in foreign universities by type of programme for 2006, the latest year available. There were almost 18,600 Irish students enrolled in foreign universities in 2006, approximately 600 more than in 2005. The vast majority of Irish students abroad (97%) were enrolled in universities based in English speaking countries, chiefly in the UK, and to a lesser extent, the USA. Three quarters of Irish domiciled students abroad were enrolled in Type A programmes, and approximately 6% were in advanced research programmes.

Table 5.4 Irish Student Enrolments Abroad by Programme Level and Country (2006)

Country	Type A	Type B	Advanced Research	Unspecified	Total
UK	13,512	2,132	1,146	-	**16,790**
US	-	-	-	1,139	**1,139**
Australia	147	1	24	-	**172**
Canada	108	-	18	-	**126**
Denmark	115	9	-	-	**124**
Spain	68	-	5	-	**73**
Sweden	65	-	-	-	**65**
Others	60	5	13	-	**78**
Total	**14,075**	**2,147**	**1,206**	**1,139**	**18,567**

Source: OECD Education Online Database

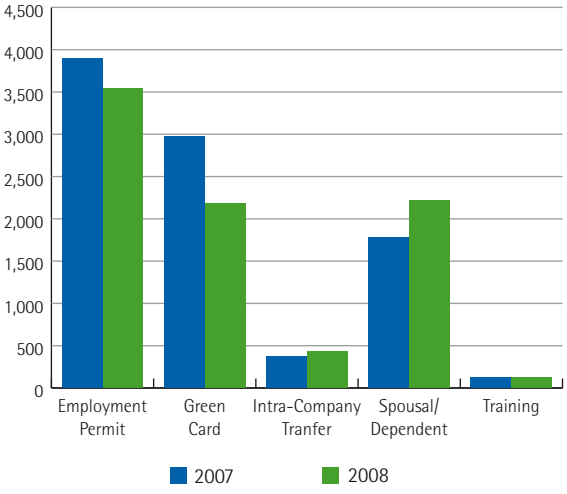
33 'Irish students' refers to students whose permanent address is located in the Republic of Ireland.

Section 6 Employment Permits

This section provides an overview of the extent to which employers source labour from outside the EEA. For the citizens of the EEA (with the exception of Romania and Bulgaria) there are no access restrictions to the Irish labour market. On the other hand, non-EEA, Bulgarian and Romanian citizens must obtain an employment permit from the Department of Enterprise, Trade and Employment (DETE) prior to entering the Irish labour market. A number of schemes are available since the implementation of the Employment Permits Act in February 2007. An examination of the statistics on new employment permits issued provides, in theory, an indication of the areas in which employers cannot find a sufficient supply of skills in the EEA (excluding Romania and Bulgaria).

Figure 6.1 shows the number of new employment permits issued in each permit category in 2007 (from February to December) and 2008. In 2008, 8,487 new employment permits were issued. This is a reduction of 7% since 2007, with further decline expected for 2009.

Figure 6.1 New Employment Permits by Type, 2007-2008



Source: DETE

6.1 Employment permit scheme

Employment permits are issued for eligible occupations in the salary range €30,000-€60,000 which are not covered by the green card scheme. In exceptional cases, employment permits are granted for positions with a salary less than €30,000. Applications are subject to a labour market test, whereby a vacancy must be advertised with FÁS, EURES – European job mobility portal – and in the national newspaper as proof that no suitable EEA candidates are available.

Given the sharp rise in unemployment, the DETE increased the duration of the labour market test, changed the fee structure and removed work riders, HGV (heavy goods vehicles) drivers and domestic workers from the eligible list in April 2009[34].

In 2008, at 3,538, the employment permit scheme had the highest number of permits issued to non-EEA workers, although this was a decline of 9% on the previous year. On average, there were just under 300 employment permits issued monthly in 2008. In terms of sectors (Table 6.1), most employment permits were issued in the areas of healthcare, catering, services, agriculture and IT. The drop in the number of permits issued between 2007 and 2008 is mainly due to a drop in the number of permits in the category of Pre New Legislation Permits[35], whereas gains were experienced in IT, agriculture and services.

In terms of occupations (Table 6.2), those most frequently sourced through the employment permit scheme included chefs, medical practitioners, food processors (butchers/meat cutters), care assistants and labourers in farming (primarily work riders for the equestrian sector).

6.2 Green card scheme

In 2008, 2,183 green cards were issued to non-EEA workers. A green card is an employment permit issued to an employee which allows employment in a specified occupation. It covers all occupations if the gross annual salary is greater than €60,000 and selected high skilled occupations with a salary range of €30,000-€60,000. These include selected professional and associate professional occupations in the areas of healthcare, engineering, IT, finance and science. However, since April 2009, some healthcare occupations (e.g. physiotherapists), finance (e.g. fund accountants) and marketing managers no longer qualify for this scheme[36].

The green card scheme experienced the most significant decline in numbers on the previous year when compared with the other available schemes. On average, 180 new green cards were issued monthly compared with 270 in 2007. Almost 40% of all new green cards were issued for the healthcare sector and over a quarter for the IT sector. The most significant declines in the number of permits issued between 2007 and 2008 occurred in healthcare and the financial services sector.

In terms of individual occupations, approximately a third of all new green cards were issued to nurses. This was followed by software engineers (11% of all green cards issued), computer programmers/analysts (7%), accountants (qualified accountants and accounting technicians) and marketing managers, both at 3%.

34 The list of ineligible occupations for employment permits from 2007 continues to apply for Romanian and Bulgarian citizens

35 Refers to applications for schemes prior to the introduction of the Employment Permits Act in February 2007

36 The list of ineligible occupations for employment permits from 2007 continues to apply for Romanian and Bulgarian citizens

6.3 Intra-company transfers (ICT)

In 2008, 426 ICT permits were issued to non-EEA nationals. The ICT scheme was re-introduced in order to facilitate the transfer of staff from an overseas branch of a multinational company to its Irish branch.

Given that the ICT scheme is primarily designed for senior management and staff with specialist knowledge requiring a high level of qualification, experience or specialist technical knowledge, 40% of the permits issued in this category were for managers, particularly in the area of finance, marketing and production.

6.4 Employment permits for spouses and dependants of employment permit holders

This scheme was introduced to allow spouses and dependants of employment permit holders to apply for an employment permit. From June 2009, standard employment permit eligibility criteria, which include a labour market test, restriction to vacancies in eligible job categories and payment of the standard application fee, applies to spouses of new employment permit applicants.

In 2008, 2,221 employment permits were issued to spouses and dependants of employment permit holders. Unlike employment permits and green cards, the number of permits issued for this scheme increased by 24% since 2007. The increases were most pronounced in sectors including healthcare (primarily care assistants), catering and retail. These sectors, along with the services sector (sales assistants, cleaners and catering staff), accounted for the majority of new permits.

6.5 Training

In 2008, 119 employment permits were issued for training purposes. Over 60% of permits were in manufacturing, with a further third in information technology.

Table 6.1 New Employment Permits by Sector, 2008

Sector	Employment Permit	Green Card	ICT	Spousal	Training	Total
Agriculture and Fisheries	371	2	-	49	-	**422**
Catering	567	2	-	229	-	**798**
Construction	119	79	15	55	1	**269**
Domestic	84	-	-	71	-	**155**
Education	102	38	-	40	-	**180**
Entertainment	33	4	3	3	-	**43**
Financial Services	131	249	74	83	2	**539**
Government	7	6	2	3	-	**18**
Healthcare	800	841	3	578	-	**2,222**
Information Technology	337	597	124	104	40	**1,202**
Legal Services	12	8	-	3	-	**23**
Manufacturing	79	82	146	99	73	**479**
Pre New Legislation Permit	17	-	-	1	-	**18**
Research	54	36	1	6	-	**97**
Retail	78	19	6	216	-	**319**
Services	459	173	46	607	3	**1,288**
Sport	118	4	-	5	-	**127**
Tourism	72	2	6	47	-	**127**
Transport	98	41	-	22	-	**161**
Total	**3,538**	**2,183**	**426**	**2,221**	**119**	**8,487**

Source: DETE

Table 6.2 New Employment Permits by Type and Most Frequent Occupations, 2008

Type of permit/occupation	New permits	%
Employment permit (of which)	3,524	100%
Chefs	499	14%
Medical practitioners	490	14%
Butchers/meat cutters	308	9%
Care assistants and attendants	147	4%
Labourers in farming	127	4%
Software engineers	126	4%
Other	1,827	52%
Green card (of which)	2,183	100%
Nurses	697	32%
Software engineers	236	11%
Computer programmers/analysts	159	7%
Chartered & certified accountants	75	3%
Marketing Managers	57	3%
Other	959	44%

Source: DETE

Section 7 Vacancies

This section provides an overview of labour demand expressed in terms of the stock of recently notified job vacancies and related trends. This is done by an analysis of vacancies notified to FÁS, the Irish Times and IrishJobs.ie. In addition, we report the findings of the FÁS/SLMRU Recruitment Agency Survey.

7.1 Notified vacancies

This section presents an analysis of the vacancies advertised through FÁS, the Irish Times[37] and IrishJobs.ie[38] in 2008. Although all agencies have experienced a decline in the absolute number of notified vacancies since August 2008, due to the limitations of the vacancy data[39] the results are expressed in relative terms.

The occupational distribution of vacancies in 2008 is presented in Figure 7.1. Of all notified vacancies to IrishJobs.ie and the Irish Times, over 60% refer to higher skilled jobs (professional, associate professional and managerial); of those notified to FÁS, 23% were in this category compared to 17% in 2007.

Lower skilled vacancies (operatives, labourers, service and sales jobs) account for 57% of all notified vacancies to FÁS. The share of vacancies for clerical positions is broadly comparable across all agencies, while FÁS is favoured over the other two agencies for the advertisement of craft related positions.

Figure 7.1 Vacancies by Occupational Group (%), 2008

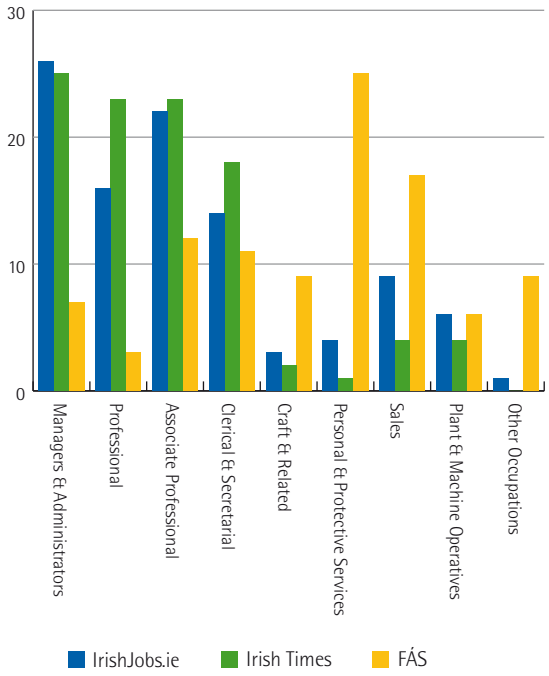


Table 7.1 below presents the occupations which have appeared most frequently in the various sources in 2008. In terms of managerial and professional occupations, 5% of all vacancies advertised in the Irish Times and 6% of all IrishJobs.ie notified vacancies were for marketing managers. This occupation also appeared regularly in FÁS vacancy data. Civil/mining and software engineering vacancies were both frequently advertised in the Irish Times and on IrishJobs.ie, although not in FÁS.

In relation to associate professional and clerical occupations, 11% of all vacancies advertised in the Irish Times were for accounts and wages clerks. Within this occupation, job titles advertised included accounts payable, finance assistants, fund accountants and payroll administrators. Specific job titles for computer analysts included: IT helpdesk, software engineer, systems analyst and technical support.

At 7%, vacancies for technical and wholesale sales representatives accounted for the highest proportion of FÁS notifications; job titles for this occupation included sales representatives and business developers. This occupation also appeared repeatedly in vacancies advertised by both the Irish Times and IrishJobs.ie.

37 The Irish Times vacancy data was only available for the period May to December 2008. IrishJobs.ie data for 2008 excludes both July and August data.

38 The IrishJobs.ie data refers to those vacancies advertised directly by employers and excludes agency-advertised vacancies.

39 The following issues arise with advertised job vacancy data: vacancies may be advertised through channels not captured in the analysis leading to an underestimation of the true demand; vacancies may be advertised simultaneously through several channels leading to an overestimation of the true demand; the extent to which vacancies are arising due to expansion demand (the creation of a new position by an employer), replacement (a person leaving an already existing position) or other reason is unclear; difficulty in distinguishing between true vacancies and persistent agency advertisements for profiles which are in demand in general can lead to an overestimation of the true demand; the difficulty, if any, in filling a vacancy with a suitable candidate is unclear; this prevents the use of vacancies as an indicator of skills shortages; the length of time it takes to fill the vacancy is unclear; this prevents the use of vacancies as an indicator of skills shortages.

Table 7.1 Principal Occupations Cited in Vacancy Surveys (%)

	Irish Times	Irish Jobs.ie	FÁS
Managers & Professional Occupations:			
Production and works managers	4%	3%	-
Marketing etc. managers	5%	6%	2%
Other financial managers n.e.c.	3%	3%	-
Civil/mining engineers	4%	1%	-
Software engineers	2%	4%	-
Associate Professional & Clerical Occupations:			
Computer analyst/ programmers	2%	5%	3%
Underwriters, claims assessors and analysts	4%	2%	-
Accounts and wages clerks, other financial clerks	11%	5%	1%
Other clerks (n.o.s.)	3%	4%	6%
Sales & Services Occupations:			
Chefs, cooks	-	1%	5%
Technical and wholesale sales representatives	2%	4%	7%
Sales assistants	-	3%	5%
All Other Occupations	**60%**	**59%**	**71%**
TOTAL	**100%**	**100%**	**100%**

Based on 2008 IrishJobs.ie data, further analysis showed that:

- 77% of all vacancies advertised by employers on IrishJobs.ie were for permanent full-time positions
- Of those job advertisements that stated the level of experience required, 17% required up to one year, 57% required 1-4 years and a further 26% required 4+ years
- 65% of all notified vacancies specified an educational requirement; of these, 19% required lower secondary or less, 18% upper secondary or trade qualification, 52% a third-level qualification and 12% a professional qualification
- Of all vacancies advertised, 16% were for positions in the IT sector, 10% in sales, 9% each in engineering & utilities and accountancy & finance.

7.2 FÁS/SLMRU Recruitment Agency Survey

The key findings from the survey conducted in April 2009 were:

- The labour market is loosening further, with, for the first time, some respondents stating that they have no vacancies which are difficult to fill
- The demand for construction related workers has diminished markedly, resulting in a significant excess supply of skills in this area[40]
- Although there is a general excess supply of labour, vacancies that are difficult to fill continue to exist
- Over half of all vacancies cited as difficult to fill were for managerial or professional occupations (a higher proportion than that of the previous survey), almost all of which were considered very difficult to fill
- An insufficient number of skilled candidates was the primary reason given for the difficulty in filling vacancies
- In terms of level of experience required, 65% of vacancies were seeking candidates with 1-5 years experience, with a further 25% of vacancies requiring at least 5 years experience; in general, the greater levels of experience were sought for the higher level positions.

Job titles most frequently mentioned as difficult to source included:

- **Software developers**– there remains a particularly strong demand for highly skilled individuals in software development with competencies and experience in networks, project management and specific software applications (e.g. Java, Oracle).
- **Nurses** - demand continues to be strong for advanced nursing practitioners with experience of an Irish hospital setting (e.g. theatre nurses, radiology nurses, cardiology unit nurses).
- **Sales representatives** - vacancies were difficult to fill for technical and medical sales representatives along with those with foreign language skills and practical experience.
- **Accountants** - demand exists for experienced chartered and certified accountants with specific skills sets (e.g. systems or project accounting) along with accounts managers.

40 In particular, for foremen and finishing foremen.

- **Engineers** - various types of engineers, especially those with substantial experience, are proving difficult to source; these include engineers in design, manufacturing, telecommunication, quality control, packaging and production.
- **Scientists** - lab technicians (in particular for energy related projects) and junior chemists with at least one year's experience were both mentioned as difficult to source.
- **Managers** - a number of managerial vacancies are proving difficult to fill. These include managers in marketing, finance (accounts, regulatory affairs and company financial managers), and retail.

Section 8 Occupational Employment Profiles

In this section we examine employment trends by occupation. The statistical analysis covers the period 2003-2008, which is the most recent detailed quantitative occupational information available. However, given their severity and effect on the labour market, the developments since the beginning of 2009 have also been taken into consideration when commenting on skill shortages.

The section is organised as follows: first, a table containing most of the data used in the analysis is presented (Table 8.1); this is followed by profiles of selected occupations.

Table 8.1 contains demand and shortage indicators for selected occupations and broad occupational groups which were used in the analysis of skills shortages. The contents of the table are as follows:

Column 1 contains occupation titles. Occupations highlighted in bold are broad occupational groups. Below most broad occupation titles, the key individual occupations comprising that group are detailed.

Column 2 presents the employment stock for each occupation. Employment is reported as the annual average figure for 2008. *Source:* Analysis by FÁS (SLMRU) based on data provided by the Central Statistics Office – Quarterly National Household Survey (QNHS), quarter 1 to quarter 4 2008.

Column 3 shows the percentage of females in the employment stock of an occupation. *Source:* QNHS, quarter 4 2008.

Column 4 shows the percentage of part-time workers in the total employment of an occupation. *Source:* QNHS, quarter 4 2008.

Column 5 gives an indication of the unemployment levels in broad occupational groups. The unemployment rate is calculated by dividing the number of unemployed in an occupational group by the sum of employment and unemployment in that group. The unemployment rate is indicated as follows:

- **'below average'** for unemployment rates less than 7.7% (the national rate for quarter 4 2008)
- **'above average'** for unemployment rates greater than or equal to 7.7%.

Only unemployed persons who stated their occupation are captured in this indicator. As a result, the indicator used here could understate the true unemployment level in an occupational group. *Source:* QNHS, quarter 4 2008.

Column 6 shows the percentage of persons older than 55 represented in the total employment of an occupation. This indicator was used in combination with the appropriate replacement rate (Column 11) to estimate the replacement demand for an occupation. An age distribution skewed towards older workers indicates higher retirement rates in the short to medium-term. *Source:* QNHS, quarter 4 2008.

Column 7 shows the percentage of non-Irish persons in the total employment in each occupation. A higher than average proportion of non-Irish nationals in an occupation suggests that Irish employers have had to look outside of the Irish labour supply to fill vacancies. *Source:* QNHS, quarter 4 2008.

Column 8 shows the average annual employment growth rate for the period 2003-2008. This was used to assess employment growth trends. *Source:* QNHS 2003-2008.

Column 9 presents the number of new employment permits issued for each occupation for the year 2008. This data was used as an indicator of demand for labour that could not be met from domestic or EEA sources. *Source:* Department of Enterprise, Trade and Employment (DETE).

Column 10 reports the results of the SLMRU Recruitment Agency Survey. Occupations which were frequently mentioned as difficult to fill are indicated by 'X'. *Source:* FÁS/SLMRU Recruitment Agency Survey, May 2009.

Column 11 contains replacement rates for each occupation. The replacement rate indicates the share of employment in an occupation which is expected to be lost each year as a result of workers moving to other occupations, retirement, illness, emigration or death. In other words, the replacement rate reflects the minimum number of persons required annually to preserve the existing employment stock in each occupation. *Source:* Current Trends in Occupational Employment and Forecasts for 2010 and 2020: Final Report to the Expert Group on Future Skill Needs. ESRI, 2006.

Column 12 provides an indication of shortage for each occupation. The indicator was derived by considering all indicators (columns 2-11), as well as by using additional information on vacancies, education and relevant qualitative information including recent and on-going sectoral studies. The following explains the indicator of shortage:

- 'no shortage' is used for occupations where there are no apparent labour market imbalances
- 'skill shortage' is used for occupations where shortages of skills have been identified
- 'labour shortage' is used for occupations where there is an insufficient number of individuals willing to take up employment opportunities
- 'inconclusive' is used for occupations where available quantitative information is insufficient for the identification of shortages.

For grouped occupations an indication of shortage does not mean that all occupations in the grouping are in short supply.

The term 'shortage' in this report refers only to the situation where the supply of skills or labour from within the Irish workforce is insufficient to meet demand. It may be the case that there is a sufficient supply of skills or labour for the occupation in question within the EU or EEA. Consequently, there may not be a shortage from a European perspective.

Column 13 elaborates further on the shortages identified in column 12. So that:

- 'S' stands for significant shortage
- 'C' stands for current shortage
- 'F' stands for possible future shortage.

Also included is any other relevant comment on the nature of identified shortages.

Using the data from the Table 8.1, individual occupations were examined in detail. The analysis covered 125 occupations, which were grouped into families of skills. These were:

- Scientists
- Engineers
- IT occupations
- Business & financial occupations
- Healthcare occupations
- Education occupations
- Social and care occupations
- Legal & security occupations
- Construction professional occupations
- Construction craft occupations
- Other craft occupations
- Arts, sports & tourism occupations
- Transport & logistic occupations
- Clerical occupations
- Sales occupations
- Operatives
- Labourers.

In general, occupations in the same sector or occupations with similar duties are grouped together. First, the level of employment for each occupational group in 2008 is presented. This is followed by an examination of employment growth trends for the period 2003-2008. Small occupations are either excluded or grouped. Subsequently, age profiles are analysed by grouping employment into the following categories: persons aged 15 to 24, 25 to 54, and 55 and older. This is followed by an examination of education profiles by grouping employment into the following categories: persons with lower secondary education or less; upper secondary or further education and training (FET); and third level education.

Each section also contains a summary of the balance between the demand and supply. For each occupation we estimated the recruitment requirement by combining expansion and replacement demand. In the short term, most of the recruitment requirement is expected to arise from replacement demand.

The supply of skills was approximated using the expected output from the formal education system.[41] The expected output was derived using third level enrolment and graduation data, as well as data from FÁS and other education providers. All of this data is held in the National Skills Database in FÁS at course level.

Supply data at occupational level is not reported due to the complexity of linking course output to specific occupations (e.g. business courses can be a source of supply for numerous occupations). In addition, for the majority of occupations there are no mandatory qualification requirements; this further complicates the task of determining supply. Thus, the intention is not to provide an exact quantification of supply for each occupation but rather to obtain a general approximation.

By comparing estimates of demand and supply, an indication of potential shortage was derived. In addition, the other shortage indicators (e.g. work permits, difficult to fill vacancies, etc.) were examined to reinforce the findings. The results also drew on conclusions from previous reports produced by the Expert Group on Future Skills Needs and other qualitative information where available. The objective was to identify areas of shortages, without quantifying them.

Identified shortages are classified as skill or labour shortages and an indication of the persistence of shortages is also discussed. Given that the findings are based on current data, future shortages are only indicated in cases where there is clear evidence that the shortages will persist or where current trends in education provision indicate that future shortages will emerge.

A skills shortage may arise for a number of different reasons. For example, the shortage may reflect a temporary or a sustained increase in the demand for a particular expertise, or a reduction in the number of students who are acquiring the relevant qualifications.

The most effective way to alleviate a shortage will depend on the reason the shortage has arisen. For example, if the shortage is of a temporary nature, it may be more effective to source the

41 It should be noted that it is possible that individuals do not work in the occupations for which they are trained.

scarce skills from abroad rather than to increase the number of student places in the relevant disciplines.

It is outside the scope of this bulletin to provide an analysis of why shortages have arisen in certain occupations. However, it is important for policy makers to appreciate that the existence of shortages does not necessarily require a response from Government, either in terms of increasing education or training provision or in terms of increasing immigration. The purpose of this bulletin is solely to identify occupations where shortages exist. Identification of the cause of these shortages and the appropriate (if any) policy response requires further research. The EGFSN's research programme includes a number of such studies.

Table 8.1 Demand and Shortage Indicators for Selected Occupations

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
General managers and administrators	19.6	31.8%	10.6%	Below Average	23.8%	7.8%	4.1%	59		-1.5%	No Shortage	
Production managers in industry	27.1	17.5%	4.4%	Below Average	15.4%	10.0%	-0.3%	156		-1.5%	No Shortage	
Building managers	6.7	15.9%	4.0%		14.1%	7.4%	-0.3%	17		-1.5%	No Shortage	
Specialist managers	50.3	42.5%	6.9%	Below Average	7.4%	11.6%	6.6%	288	X	-1.5%	Skill Shortage	
Marketing etc. managers	21.3	40.9%	7.9%		8.7%	10.5%	3.5%	132	X	-1.5%	Skill Shortage	High level expertise
Purchasing managers	1.6	25.7%	0.0%		7.4%	15.1%	4.2%	6		-1.5%	No Shortage	
Advertising & pr managers	4.7	57.5%	5.8%		5.4%	9.3%	14.4%	21		-1.5%	No Shortage	
Personnel managers	7.4	75.1%	8.8%		5.9%	8.6%	9.5%	15		-1.5%	No Shortage	
Computer systems managers	12.3	22.9%	3.5%		4.5%	14.5%	16.6%	65	X	-1.5%	Skill Shortage	High level expertise
Financial institution and office managers	38.0	63.5%	14.1%	Below Average	12.8%	11.0%	3.9%	109		-1.5%	No Shortage	
Bank and other financial managers	30.9	65.7%	14.5%		12.0%	12.0%	5.9%	106		-1.5%	No Shortage	
Credit controllers	3.2	53.2%	15.9%		17.9%	14.5%	1.3%	3		-1.5%	No Shortage	
Managers in transport and storage	11.4	19.6%	2.7%	Below Average	15.1%	11.7%	-1.3%	15		-1.5%	No Shortage	
Transport managers	5.0	18.8%	3.8%		19.0%	12.5%	2.1%	2		-1.5%	No Shortage	
Stores managers	3.2	18.8%	1.7%		9.4%	9.4%	-2.3%	10		-1.5%	No Shortage	
Warehousing managers	3.2	22.2%	2.1%		15.0%	13.2%	-4.8%	3		-1.5%	No Shortage	
Protective service officers	2.2	14.2%	0.0%	Below Average	7.7%	0.0%	4.1%	5		-1.5%	No Shortage	
Managers in farming, horticulture, forestry and fishing	91.8	7.7%	10.7%		43.9%	1.9%	-0.3%	16		3.1%	No Shortage	
Farm owners and managers	91.2	7.7%	10.6%		44.2%	1.9%	-0.1%	5		3.1%	No Shortage	
Managers and proprietors in service industries	75.3	45.6%	8.6%	Below Average	18.4%	14.0%	-0.3%	102	X	-1.5%	No Shortage	
Hotel & accommodation managers	6.6	63.9%	12.4%		23.1%	10.9%	-2.0%	14		-1.5%	No Shortage	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Restaurant & catering managers	10.7	56.6%	13.1%		10.2%	33.2%	1.8%	30		-1.5%	No Shortage	
Publicans, innkeepers & club stewards	5.1	28.4%	10.6%		32.5%	4.4%	-4.1%	0		-1.5%	No Shortage	
Entertainment/sports managers	3.6	55.1%	14.8%		10.6%	9.8%	7.6%	15		-1.5%	No Shortage	
Travel agency managers	2.2	74.8%	11.9%		11.1%	16.4%	0.9%	3		-1.5%	No Shortage	
Other managers and administrators	14.7	51.5%	14.1%	Below Average	21.2%	10.8%	-2.0%	100		-1.5%	No Shortage	
Natural scientists	9.7	49.1%	6.9%	Below Average	9.9%	12.1%	5.3%	61		2.8%	Skill Shortage	
Chemists	1.9	60.5%	10.2%		6.9%	26.2%	0.0%	13	X	2.8%	Skill Shortage	
Biological scientists	4.6	54.4%	5.7%		13.7%	7.4%	8.9%	20		2.8%	Skill Shortage	F
Physicists & other natural scientists	3.2	32.0%	6.4%		6.1%	8.8%	4.2%	28		2.8%	Skill Shortage	F
Engineers and technologists	44.0	11.1%	2.3%	Below Average	6.1%	18.5%	2.6%	727		2.8%	Skill Shortage	
Civil/mining engineers	12.6	8.0%	1.4%		6.5%	18.3%	8.2%	27		2.8%	No Shortage	
Mechanical engineers	6.0	4.9%	4.6%		8.5%	16.2%	10.2%	8		2.8%	Skill Shortage	F
Electrical engineers	3.3	2.6%	3.1%		10.3%	15.7%	-0.6%	5		2.8%	Skill Shortage	High level niche areas
Electronic engineers	3.3	12.5%	5.1%		4.0%	10.0%	1.9%	51	X	2.8%	Skill Shortage	High level niche areas
Software engineers	8.5	17.1%	1.2%		2.7%	28.3%	-2.4%	435	X	2.8%	Skill Shortage	High level niche areas
Chemical engineers	2.1	2.6%	2.1%		2.1%	9.8%	7.0%	2		2.8%	Skill Shortage	High level niche areas
Design & development engineers	1.3	12.8%	8.7%		8.5%	8.7%	-6.3%	77	X	2.8%	Skill Shortage	High level niche areas
Planning & quality control engineers	2.0	35.7%	0.0%		2.8%	33.2%	-3.6%	24	X	2.8%	Skill Shortage	
Other engineers & technologists n.e.c.	4.9	13.0%	1.2%		8.9%	11.6%	0.4%	98	X	2.8%	No Shortage	
Health professionals	17.6	45.3%	11.3%	Below Average	13.4%	21.2%	-0.2%	555		2.8%	Skill Shortage	
Medical practitioners	10.7	43.3%	9.2%		10.4%	26.3%	-0.6%	523		2.8%	Skill Shortage	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Pharmacists/ pharmacologists etc	3.1	72.1%	17.3%		6.7%	12.7%	1.3%	16		2.8%	Skill Shortage	
Dental practitioners	1.4	24.3%	17.1%		33.2%	0.0%	0.0%	9		2.8%	Skill Shortage	
Veterinarians	1.8	26.4%	12.0%		25.5%	19.4%	0.0%	5		2.8%	Skill Shortage	
Teaching professionals	88.0	71.9%	16.0%	Below Average	13.9%	5.8%	3.0%	115		2.8%	No Shortage	
University and iot lecturers	12.0	47.1%	18.2%		21.1%	16.5%	2.9%	79		2.8%	No Shortage	
Secondary and vocational education teachers	32.4	68.2%	14.3%		13.0%	3.9%	3.2%	7		2.8%	No Shortage	
Primary & nursery education teachers	34.2	84.1%	9.0%		10.4%	3.1%	4.5%	8		2.8%	No Shortage	
Other teaching professionals n.e.c.	9.4	74.7%	42.0%		18.9%	6.9%	-2.2%	21		2.8%	No Shortage	
Legal professionals	10.4	45.6%	4.6%	Below Average	10.6%	5.7%	4.6%	17		2.8%	No Shortage	
Judges, barristers & advocates	2.1	54.5%	3.5%		12.1%	9.9%	4.3%	4		2.8%	No Shortage	
Solicitors	8.3	43.7%	4.8%		10.2%	4.8%	4.7%	13		2.8%	No Shortage	
Business and financial professionals	50.7	44.9%	7.9%	Below Average	7.1%	10.0%	9.1%	275		2.8%	Skill Shortage	
Accountants & tax experts	43.6	46.9%	7.6%		7.3%	8.9%	8.4%	187	X	2.8%	Skill Shortage	High level niche areas
Actuaries, economists, statisticians	2.1	40.4%	4.2%		5.5%	15.3%	8.4%	17		2.8%	Skill Shortage	F
Business analysts	7.0	33.6%	10.7%		6.6%	15.6%	9.7%	122		2.8%	Inconclusive	
Architects, town planners and surveyors	8.8	25.8%	5.2%	Below Average	17.5%	16.8%	7.3%	38		2.8%	No Shortage	
Architects and town planners	7.5	29.2%	4.6%		18.0%	14.6%	10.8%	35		2.8%	No Shortage	
Building, mining and other surveyors	1.3	4.3%	9.0%		14.3%	31.0%	-5.2%	3		2.8%	No Shortage	
Librarians, archivists & curators	2.0	78.5%	32.6%	Below Average	13.9%	4.0%	-4.4%	0		2.8%	No Shortage	
Other professional occupations	13.9	68.1%	23.2%	Below Average	16.7%	16.8%	8.4%	25		2.8%	No Shortage	
Psychologists & other social/ behavioural scientists	3.3	72.0%	22.3%		5.5%	26.7%	14.2%	10	X	2.8%	Inconclusive	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Social workers, probation officers	8.2	81.6%	26.8%		8.7%	16.8%	19.3%	11		2.8%	Inconclusive	
Scientific technicians	20.6	32.5%	6.4%	Below Average	11.7%	10.2%	0.5%	237		2.6%	Skill Shortage	
Laboratory technicians	5.9	55.7%	15.8%		14.3%	9.9%	-2.2%	56	X	2.6%	Skill Shortage	
Engineering technicians	2.0	14.1%	7.0%		0.0%	20.0%	1.0%	28		2.6%	No Shortage	
Electrical/electronic technicians	1.8	9.5%	2.8%	Below Average	14.1%	9.7%	-7.1%	2		2.6%	No Shortage	
Architectural and civil engineering technicians	1.5	10.5%	5.2%		17.3%	12.7%	2.9%	13		2.6%	No Shortage	
Other scientific technicians n.e.c.	9.4	29.7%	0.8%		11.1%	7.9%	4.1%	138		2.6%	No Shortage	
Draughtspersons, quantity and other surveyors	6.1	18.5%	12.7%	Below Average	8.1%	12.5%	5.4%	24		2.6%		
Draughtspersons	2.6	32.3%	11.4%		10.0%	19.9%	4.4%	15		2.6%	No Shortage	
Quantity surveyors	3.5	9.0%	14.4%		5.7%	7.5%	6.1%	9		2.6%	No Shortage	
Computer analyst/ programmers	16.6	22.9%	7.5%	Below Average	5.6%	20.2%	3.0%	298	X	2.6%	Skill Shortage	
Ship/aircraft officers incl. Air traffic controllers	1.9	14.3%	10.2%	Below Average	24.0%	18.8%	-6.1%	61		2.6%	No Shortage	
Health associate professionals	70.5	89.3%	25.9%	Below Average	11.2%	17.3%	3.2%	1010		2.6%	Skill Shortage	
Nurses and midwives	56.7	92.3%	25.7%		11.2%	18.9%	2.6%	829	X	2.6%	Skill Shortage	
Medical radiographers	1.2	94.8%	12.4%		9.9%	11.8%	-1.6%	40		2.6%	No Shortage	
Physiotherapists	2.0	87.7%	22.5%		4.1%	3.4%	5.9%	38		2.6%	No Shortage	
Medical technicians, dental auxiliaries	2.2	76.6%	31.6%		7.2%	8.7%	6.6%	18		2.6%	No Shortage	
Occupational & therapists n.e.c.	6.0	79.6%	32.6%		18.6%	20.3%	14.1%	82		2.6%	No Shortage	
Other health associate professionals n.e.c.	3.0	59.3%	17.7%		9.2%	5.5%	-2.5%	5		2.6%	No Shortage	
Legal associate professionals	2.0	71.9%	9.2%	Below Average	4.9%	14.3%	5.9%	7		2.6%	No Shortage	
Business and financial associate professionals	17.0	44.8%	4.9%	Below Average	7.7%	10.8%	2.4%	126		2.6%	No Shortage	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Underwriters, claims assessors and analysts	12.1	40.4%	2.1%		6.5%	11.8%	2.9%	63		2.6%	No Shortage	
Personnel, industrial relations officers	2.5	75.8%	17.6%		13.5%	4.2%	2.6%	10		2.6%	No Shortage	
Matrons, houseparents, welfare, community & youth workers	10.0	73.8%	37.6%	Below Average	13.6%	1.8%	2.6%	35		2.6%	No Shortage	
Literary, artistic and sports professionals	34.2	38.7%	20.6%	Below Average	9.7%	19.2%	7.2%	190		2.8%	No Shortage	
Other associate professional and technical occupations	17.7	48.7%	17.0%	Below Average	18.8%	14.9%	3.9%	90		2.6%	No Shortage	
Careers guidance advisors	1.7	74.9%	21.9%		34.4%	16.5%	5.5%	1		2.8%	No Shortage	
Vocational, industrial trainers	7.3	57.5%	18.2%		12.8%	12.3%	5.8%	23		2.6%	No Shortage	
Administrative/clerical officers and assistants in civil service	35.0	70.8%	12.2%	Below Average	14.9%	1.2%	5.5%	1		3.5%	No Shortage	
Numerical clerks & cashiers	65.7	76.4%	27.6%	Below Average	9.5%	10.1%	4.1%	170		3.5%	No Shortage	
Filing & records clerks	7.7	68.9%	20.5%	Above Average	15.7%	12.3%	-4.9%	41		3.5%	No Shortage	
Other clerks	68.2	81.4%	27.2%	Below Average	11.8%	10.6%	6.7%	95		3.5%	No Shortage	
Warehousemen/women	20.1	**14.8%**	**11.0%**	Above Average	**6.1%**	**23.2%**	**2.5%**	51		3.5%	No Shortage	
Secretaries, personal assistants etc.	37.8	97.1%	39.7%	Below Average	16.7%	5.5%	-1.7%	22		3.5%	No Shortage	
Legal secretaries	5.0	98.2%	32.9%		8.0%	7.6%	5.1%	2		3.5%	No Shortage	
Other secretaries	32.8	97.0%	40.6%		17.7%	5.2%	-2.5%	20		3.5%	No Shortage	
Receptionists & telephonists	17.5	90.7%	38.6%	Above Average	13.6%	12.8%	2.5%	22		3.5%	No Shortage	
Computer & other office machine operators	3.3	41.3%	7.3%	Above Average	1.9%	32.3%	-2.3%	15		3.5%	No Shortage	
Construction trades	78.3	1.0%	7.1%	Above Average	13.0%	19.5%	5.2%	46		2.7%	No Shortage	
Bricklayers, masons	11.2	0.0%	6.3%		6.4%	29.2%	-0.2%	6		2.7%	No Shortage	
Roofers, slaters, tilers, sheeters, cladders	7.4	0.0%	5.6%		6.0%	23.3%	9.0%	2		2.7%	No Shortage	
Plasterers	12.4	0.0%	3.8%		7.3%	19.6%	5.9%	12		2.7%	No Shortage	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Builders, building contractors	22.7	1.5%	5.0%		18.1%	14.4%	11.1%	2		2.7%	No Shortage	
Scaffolders, riggers, steeplejacks	2.6	0.0%	3.0%		6.8%	38.5%	10.2%	15		2.7%	No Shortage	
Floorers, floor coverers, carpet fitters, tilers	2.8	0.0%	10.0%		11.4%	22.1%	2.3%	4		2.7%	No Shortage	
Painters & decorators	11.2	1.7%	9.2%		15.8%	14.9%	2.3%	2		2.7%	No Shortage	
Other construction trades n.e.c.	8.0	2.5%	17.2%		18.8%	17.7%	0.3%	3		2.7%	No Shortage	
Metal machining, fitting & instrument making trades	26.1	4.8%	3.7%	Below Average	12.5%	12.5%	2.2%	88		1.5%	No Shortage	
Electrical/ electronic trades	42.5	3.2%	3.6%	Below Average	6.5%	7.0%	2.1%	53		2.1%	No Shortage	
Metal forming, welding & related trades	29.5	1.0%	2.3%	Above Average	9.8%	16.3%	2.6%	20		1.5%	No Shortage	
Plumbers, heating & related trades	15.6	1.5%	3.4%		11.7%	4.9%	5.4%	1		2.7%	No Shortage	
Other metal forming, welding & related trades	13.9	0.6%	1.2%		7.9%	27.5%	-0.1%	19		1.5%	No Shortage	
Vehicle trades	19.4	1.0%	5.4%	Above Average	7.6%	16.2%	1.2%	23		2.1%	No Shortage	
Textiles, garments and related trades	4.7	53.1%	24.1%	Above Average	27.1%	15.3%	-3.8%	7		2.7%	No Shortage	
Printing and related trades	7.4	23.7%	10.8%	Below Average	11.3%	25.4%	3.9%	8		2.7%	No Shortage	
Woodworking trades	45.5	0.9%	4.8%	Above Average	10.2%	15.4%	4.2%	20		2.7%	No Shortage	
Carpenters & joiners	40.0	0.6%	4.4%		9.8%	15.3%	4.0%	18		2.7%	No Shortage	
Wood working trades	5.5	2.8%	7.8%		13.2%	15.5%	5.5%	2		2.7%	No Shortage	
Food preparation trades	9.2	11.0%	4.6%	Above Average	3.8%	49.7%	0.4%	341		1.5%	No Shortage	
Other craft & related occupations	18.5	12.8%	15.3%	Above Average	13.3%	19.0%	1.6%	22		2.7%	No Shortage	
Ncos and other ranks in the armed services	5.8	5.6%	0.0%	Below Average	7.4%	1.8%	-1.3%	2		1.2%	No Shortage	
Ncos and other ranks including senior officers	6.9	7.7%	0.0%		7.2%	1.5%	-0.6%	7		1.2%	No Shortage	
Security and protective service occupations	36.4	15.1%	13.8%	Below Average	12.2%	12.0%	5.6%	66		1.2%	No Shortage	

Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Police officers	13.5	20.2%	1.5%		4.4%	0.0%	4.0%	1		3.9%	No Shortage	
Fire service officers	2.8	2.0%	18.0%		5.7%	3.8%	2.3%	1		3.9%	No Shortage	
Prison service officers	3.5	10.9%	1.6%		4.2%	0.0%	7.8%	0		3.9%	No Shortage	
Security guards	17.3	13.6%	24.8%		20.1%	25.2%	7.1%	63		1.2%	No Shortage	
Catering occupations	67.0	54.1%	39.4%	Above Average	5.5%	31.4%	1.2%	666		3.9%	No Shortage	
Chefs, cooks	23.4	41.5%	19.2%		7.3%	38.8%	3.0%	579		3.9%	No Shortage	
Waiters, waitresses	21.8	83.0%	52.4%		4.1%	43.3%	1.9%	81		3.9%	No Shortage	
Bar staff	21.8	40.2%	49.0%		5.0%	12.0%	-1.2%	6		3.9%	No Shortage	
Travel attendants and related occupations	3.4	72.1%	23.7%	Below Average	6.2%	29.6%	-0.6%	3		3.9%	No Shortage	
Travel & flight attendants	3.4	77.1%	25.3%		6.7%	31.7%	-0.6%	3		3.9%	No Shortage	
Health and related occupations	53.2	82.7%	37.2%	Below Average	17.5%	14.5%	8.3%	552		2.6%	No Shortage	
Care assistants etc.	49.5	84.6%	39.3%		17.9%	15.5%	8.2%	549		2.6%	No Shortage	
Dental nurses	2.2	100.0%	16.8%		13.1%	0.0%	4.1%	2		2.6%	No Shortage	
Childcare and related occupations	37.3	97.9%	36.7%	Below Average	8.7%	17.4%	15.1%	56		3.9%	No Shortage	
Nursery nurses and playgroup leaders	8.1	95.9%	42.4%		9.1%	15.7%	12.5%	5		3.9%	No Shortage	
Educational assistants	14.6	98.3%	25.8%		11.9%	3.7%	23.4%	7		3.9%	No Shortage	
Other childcare & related occupations	14.6	98.5%	44.8%		5.1%	32.4%	10.4%	44		3.9%	No Shortage	
Hairdressers, beauticians etc.	21.6	92.8%	33.7%	Below Average	3.4%	8.3%	7.3%	24		3.9%	No Shortage	
Domestic staff and related occupations	17.1	54.8%	42.2%	Below Average	31.6%	22.7%	3.6%	110		3.9%	No Shortage	
Other personal and protective service occupations	4.8	42.5%	33.3%	Above Average	11.7%	13.0%	3.7%	15		3.9%	No Shortage	
Buyers, brokers etc.	4.6	47.1%	11.9%	Below Average	8.2%	10.2%	2.8%	9		4.4%	No Shortage	
Sales representatives	37.1	30.0%	10.7%	Below Average	13.1%	13.9%	3.1%	42	X	4.4%	Skill Shortage	Specialists
Sales assistants	132.9	72.2%	48.4%	Below Average	7.5%	19.3%	4.9%	209		4.4%	No Shortage	
Other salespersons etc.	4.9	10.7%	12.4%	Below Average	13.2%	20.2%	11.8%	0		4.4%	No Shortage	
Other sales occupations	5.9	66.1%	36.5%	Below Average	13.6%	17.1%	1.8%	15		4.4%	No Shortage	

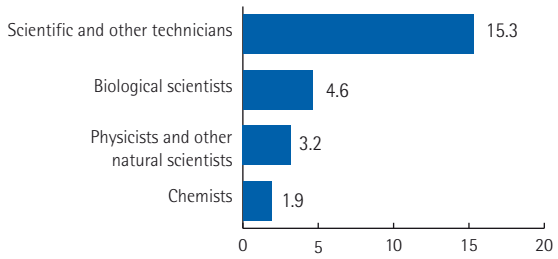
Occupations	Numbers employed ('000s)	% female	Part-time	Unemployment	% >55	% Non-Irish nationals	Annual average growth rate 2002-2008	Employment permits	SLMRU Recruitment Agency Survey	Replacement rate	Shortage indicator	Comment
Food, drink and tobacco operatives	15.4	26.2%	9.6%	Above Average	12.2%	37.3%	-2.1%	11		1.5%	No Shortage	
Chemicals, paper, plastic and related process operatives	10.9	34.4%	7.7%	Above Average	7.7%	19.0%	-5.7%	20		1.5%	No Shortage	
Metal making and treating process operatives	1.1	17.3%	0.0%	Above Average	9.0%	0.0%	0.0%	6		1.5%	No Shortage	
Metal working process operatives	1.0	5.0%	5.0%	Below Average	8.5%	48.4%	-10.1%	99		1.5%	No Shortage	
Assemblers/lineworkers	14.8	49.0%	5.6%	Above Average	5.3%	27.4%	-8.1%	6		1.5%	No Shortage	
Other routine process operatives	12.1	49.6%	10.8%	Above Average	5.5%	38.0%	-5.0%	59		1.5%	No Shortage	
Road transport operatives	77.7	3.5%	10.8%	Below Average	20.9%	15.1%	5.1%	75		-1.2%	No Shortage	
Other transport and machinery operatives	22.6	1.3%	1.5%	Above Average	11.5%	9.8%	6.0%	13		1.5%	No Shortage	
Other plant and machine operatives nec	17.0	6.5%	6.7%	Above Average	12.4%	15.7%	-1.0%	26		1.5%	No Shortage	
Other occupations in agriculture, forestry and fishing	18.2	23.9%	17.1%	Below Average	13.0%	34.0%	2.4%	152		3.1%	No Shortage	
Other occupations in mining and manufacturing	15.0	35.8%	9.3%	Above Average	8.8%	24.0%	11.8%	69		4.5%	No Shortage	
Other occupations in construction	32.2	1.7%	7.9%	Above Average	10.3%	28.4%	2.3%	3		4.5%	No Shortage	
Other occupations in transport	6.6	2.8%	12.5%	Above Average	11.9%	11.0%	3.0%	12		4.5%	No Shortage	
Other occupations in communication	10.9	19.0%	8.2%	Below Average	16.7%	2.5%	0.4%	0		-1.2%	No Shortage	
Other occupations in sales and services	74.8	72.3%	54.3%	Below Average	16.0%	36.2%	4.8%	362		4.5%	No Shortage	
Other occupations n.e.c.	34.6	22.6%	18.2%	Above Average	14.5%	15.3%	0.8%	11		4.5%	No Shortage	
All occupations	**2,106**	**44.2%**	**19.1%**	Average	**13.4%**	**15.4%**	**3.1%**	**8,487**				

8.1 Science Occupations

Key points for selected science occupations

- Approximately 25,000 persons were employed in selected science occupations, representing just over 1% of Ireland's workforce
- Employment is concentrated in manufacturing (chemical and chemical products, food products and beverages), and healthcare
- Approximately 60% of employment is at technician level; the remainder is at professional level
- One third of scientific technicians are laboratory technicians
- Employment for biological scientists and physicists and other natural scientists grew faster than the national average of 3.1% for the period 2003-2008; however, between 2007 and 2008, employment in all science occupations, except chemists, declined faster than the national average
- There were an additional 3,200 posts created in science occupations over the period 2003-2008; two thirds of job creation was for professional level positions
- Over 80% of employment in each science occupation is in the 25-54 age group
- With over 90%, third level graduates make up the vast majority of employment at professional level; almost two thirds at technician level are graduates
- More than one quarter of chemists are non-Irish which is well above the national average of 15.4%
- Professional science occupations are broadly gender balanced while 60% of technicians are male.

Figure 8.1.1 Numbers Employed (000s) in Selected Science Occupations, 2008



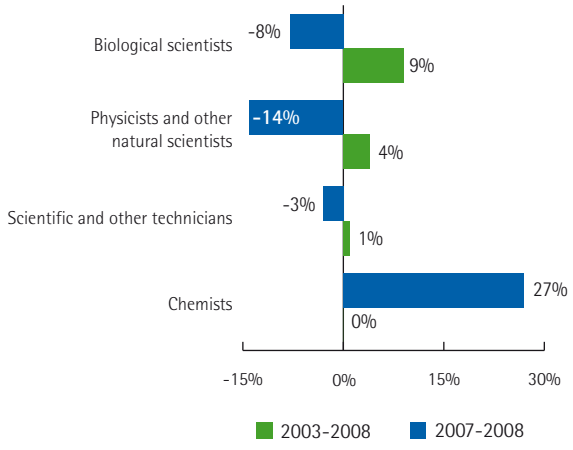
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.1.1 Age Profile of Selected Science Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Scientific and other technicians	7%	80%	12%	100%
Biological scientists	5%	81%	14%	100%
Physicists and other natural scientists	7%	87%	6%	100%
Chemists	6%	87%	7%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.1.2 Annual Average Growth in Selected Science Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.1.2 Education Profile of Selected Science Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Scientific and other technicians	5%	30%	65%	100%
Biological scientists	1%	7%	92%	100%
Physicists and other natural scientists	0%	2%	98%	100%
Chemists	0%	7%	93%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

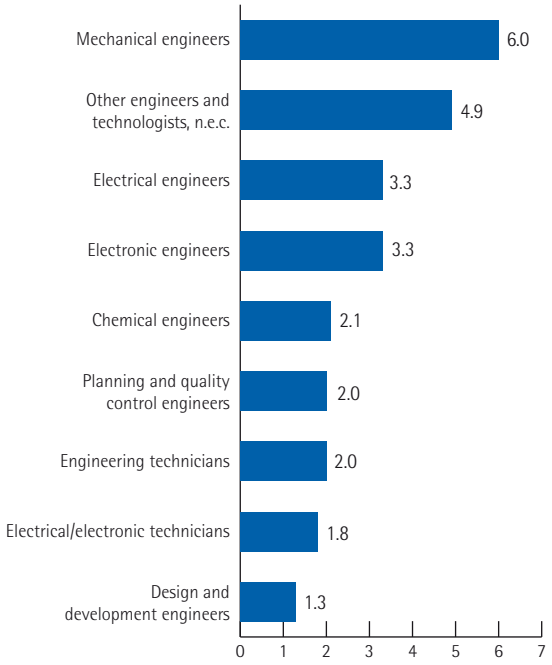
- Despite the overall decline in employment, some science-related areas (e.g. pharmaceuticals, medical devices and diagnostics, and biotechnology) have been performing comparatively well and shortages still exist for highly qualified and experienced individuals with specific skills, both at professional level (fourth level research and development scientists, clinical trials managers, regulation compliance staff) and technician level (e.g. lab technicians, junior chemists, development/prototyping technicians).
- A strategy launched by Science Foundation Ireland in March 2009, entitled 'Powering the Smart Economy', highlights the Government's commitment to the establishment of a critical mass of internationally competitive research teams in science and engineering. Such investment, aimed at advancing enterprise in biotechnology, ICT and energy, is expected to build on Ireland's reputation as a location of excellent research, thereby further expanding demand for people with advanced skills in these areas.
- Energy, particularly renewable energy, is set to become one of the key growth sectors of the economy, and the demand for skills, at both technician and professional level, combining new technologies, interdisciplinary backgrounds (e.g. engineering/science/business) and innovation, is likely to expand in the future.
- As the importance of ecology and environmental protection increases, along with EU regulation for this sector, new career opportunities will emerge for those with expertise in the natural sciences (e.g. impact assessment on flora and fauna in the context of major infrastructural projects).
- The field of bio-convergence is growing, which is likely to result in a demand for hybrid technologists with backgrounds in science, IT and nanotechnology.

8.2 Engineering Occupations

Key points for selected engineering occupations

- There are almost 27,000 persons employed in selected engineering occupations, representing just over 1% of national employment
- More than half of engineering employment is in manufacturing
- Employment in engineering occupations is predominantly at professional level (over 80%); the remainder is at technician level
- Over the period 2003-2008, employment in engineering occupations grew by 1.2% on average annually; even in 2008, an additional 1,500 jobs were created in these occupations overall; however, in 2008, the experience was mixed across different engineering fields: employment increased for chemical, mechanical, electronic engineers and engineering technicians; it contracted for electrical, design and development, other engineers and technologists and electrical/electronic technicians; it remained static for planning and quality control
- With 10% or less aged 55+, the share of older workers in professional engineering occupations is below the national average (13.4%)
- At 2.6% each, chemical engineers and electrical engineers have the lowest share of female employment of all professional/technician level occupations economy-wide
- Part-time employment is well below the national average of 19% for all selected engineering occupations

Figure 8.2.1 Numbers Employed (000s) in Selected Engineering Occupations, 2008



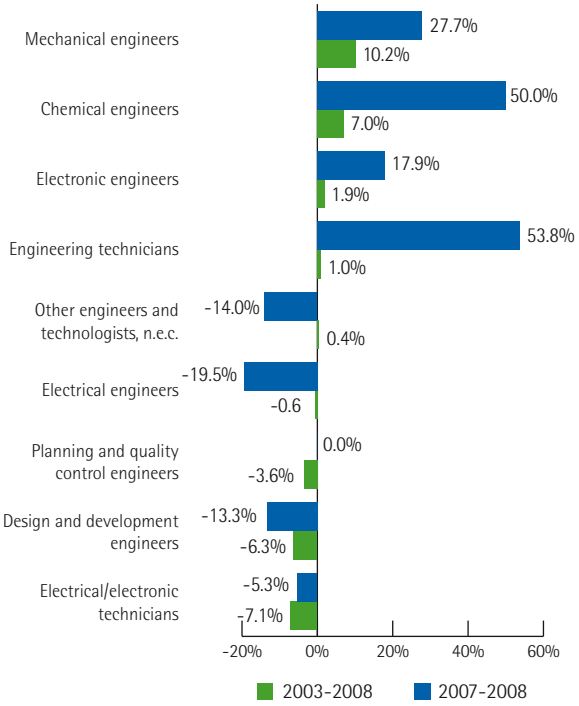
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.2.1 Age Profile of Selected Engineering Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Other engineers and technologists, n.e.c.	8%	83%	9%	100%
Mechanical engineers	10%	81%	8%	100%
Electrical engineers	4%	86%	10%	100%
Electronic engineers	3%	93%	4%	100%
Electrical/electronic technicians	11%	75%	14%	100%
Design and development engineers	13%	78%	9%	100%
Planning and quality control engineers	9%	88%	3%	100%
Chemical engineers	17%	81%	2%	100%
Engineering technicians	9%	91%	0%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.2.2 Annual Average Growth in Selected Engineering Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.2.1 Education Profile of Selected Engineering Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Other engineers and technologists, n.e.c.	3%	14%	84%	100%
Mechanical engineers	1%	21%	78%	100%
Electrical engineers	5%	14%	81%	100%
Electronic engineers	0%	5%	95%	100%
Electrical/electronic technicians	11%	31%	58%	100%
Design and development engineers	0%	18%	82%	100%
Planning and quality control engineers	3%	11%	87%	100%
Chemical engineers	3%	0%	97%	100%
Engineering technicians	8%	36%	56%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

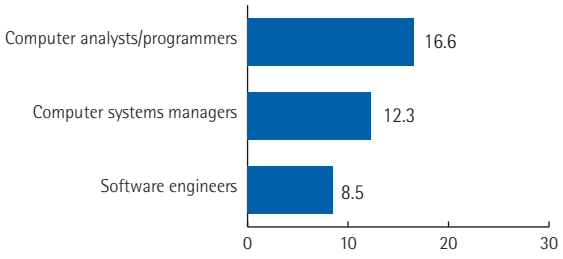
- Despite the current economic pressures, design engineers, particularly in research and development in the medical devices sector, are in short supply; the demand pertains to individuals with experience and/or industry specific knowledge (e.g. process automation design).
- In a number of manufacturing sub-sectors (e.g. food processing, medical devices, etc.), there is a shortage of process diagnostic and control engineers and technicians who can implement lean manufacturing/Six Sigma principles to production processes.
- As is the case for science graduates, engineers, especially electronic, electrical, quality control, and design and development, will be in demand in the renewable energy sector (e.g. wind, wave and tidal), which is expected to be one of the drivers of future growth.
- Ecology and environmental protection are becoming increasingly important, creating new career opportunities for environmental engineers with expertise in the management of eco-systems.

8.3 IT Professional Occupations

Key points for selected IT professional occupations

- There are over 37,000 persons employed in selected IT professional occupations, which amounts to 1.75% of Ireland's workforce
- Over the period 2003-2008, employment in IT professional occupations grew by 4.8% on average annually; even in 2008, an additional 4,000 jobs were created in these occupations, almost three quarters of which were for computer systems managers
- Over 85% of employment in each selected IT professional occupation is in the 25-54 age group
- IT professional occupations have one of the highest educational profiles in the economy: over 80% are third level graduates while only a negligible share has not attained at least a Leaving Certificate
- With 3%-6% of employment aged 55+, the share of older workers in IT professional employment is substantially smaller than that in the economy overall (13%)
- Approximately one fifth of employment in IT occupations is female
- One fifth of all computer analysts/programmers and over a quarter of all software engineers are non-Irish – shares that are in excess of the national average (15.4%); a high number of work permits/green cards were issued for computer analysts and programmers in 2008 (almost 300).

Figure 8.3.1 Numbers Employed (000s) in Selected IT Professional Occupations, 2008



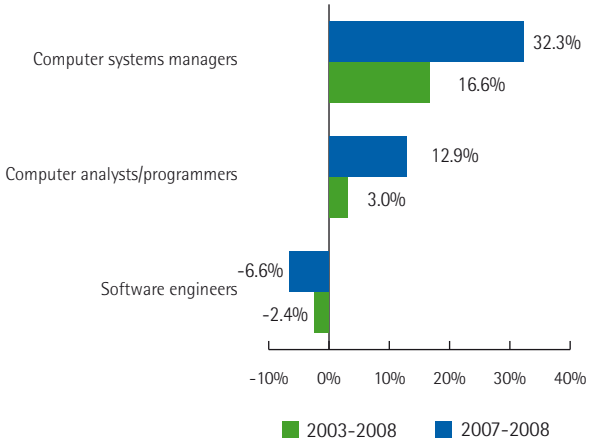
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.3.1 Age Profile of Selected IT Professional Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Computer analysts/ programmers	6%	88%	6%	100%
Software engineers	2%	95%	3%	100%
Computer systems managers	5%	91%	5%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.3.2 Annual Average Growth in Selected IT Professional Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.3.2 Education Profile of Selected IT Professional Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Computer analysts/ programmers	1%	16%	83%	100%
Software engineers	0%	8%	92%	100%
Computer systems managers	1%	15%	84%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

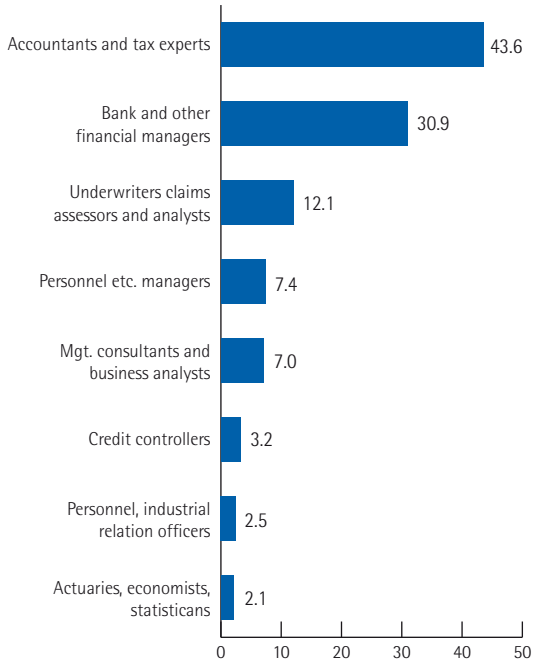
- While there has been a decline in the manufacturing side of the IT sector in Ireland recently, skills shortages persist in areas related to other aspects of the IT industry. The demand is still strong for individuals who not only have the advanced IT skills to install systems, but who can also customise and adapt those systems to a business's individual needs. In particular, there is a shortage of:
  - experienced computer systems managers
  - IT professionals with business knowledge and managerial skills
  - programmers in specific software applications with substantial experience (e.g. Oracle, Java, web animation)
  - experienced professionals with advanced software architecture skills
  - networking experts (SharePoint, VMware, etc.)
  - telecommunications experts (e.g. mobile phones technology)
  - IT security experts
  - research and design professionals, especially in electronics/ICT design and electronics hardware and semiconductor research.
- Online sales, marketing, entertainment and social networking are also expected to continue to grow strongly in the coming years and drive the demand for creative and highly skilled web developers.
- An increase in the demand for hybrid technologists is likely in the future as interdisciplinary activities expand in importance; ICT skills feature in most interdisciplinary convergence processes (e.g. business and IT; finance and IT; biotechnology, nanotechnology and IT).

8.4 Business and Financial Occupations

Key points for selected business and financial occupations

- There are 108,000 persons employed in selected business and financial occupations, which accounts for just over 5% of national employment
- Accountants and tax experts make up 40% of employment in business and financial occupations
- Over the period 2003-2008, employment in business and financial occupations grew by 6.7% on average annually, creating an additional 30,000 posts, approximately half of which were for accountants and tax experts; even in 2008, an additional 11,000 jobs were created in business and financial occupations with almost all occupations expanding in employment
- With the exception of credit controllers and personnel, industrial relations officers, more than 80% of employment is in the 25-54 age group
- At least one half of employment are third level graduates; the share is highest (≥90%) for actuaries, economists and statisticians and accountants and tax experts
- Three quarters of personnel managers and personnel officers are female; in contrast, males outnumber females for underwriters, claims assessors and analysts, actuaries, economists and statisticians and management consultants and business analysts; employment is gender balanced for accountants and tax experts (47 % are female) and credit controllers (53% are female).

Figure 8.4.1 Numbers Employed (000s) in Selected Business and Financial Occupations, 2008



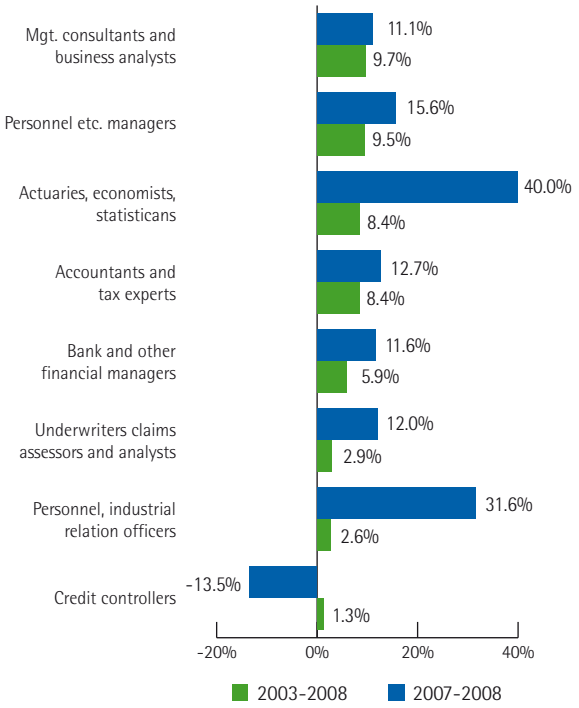
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.4.1 Age Profile of Selected Business and Financial Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Accountants and tax experts	9%	84%	7%	100%
Bank and other financial managers	5%	83%	12%	100%
Underwriters claims assessors and analysts	11%	82%	6%	100%
Mgt. consultants and business analysts	3%	91%	7%	100%
Personnel etc. managers	9%	85%	6%	100%
Credit controllers	12%	70%	18%	100%
Personnel, industrial relation officers	12%	74%	13%	100%
Actuaries, economists, statisticans	4%	90%	6%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.4.2 Annual Average Growth in Selected Business and Financial Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.4.2 Education Profile of Selected Business and Financial Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Accountants and tax experts	0%	10%	90%	100%
Bank and other financial managers	6%	41%	53%	100%
Underwriters claims assessors and analysts	3%	24%	73%	100%
Mgt. consultants and business analysts	2%	11%	87%	100%
Personnel etc. managers	2%	14%	83%	100%
Credit controllers	5%	44%	51%	100%
Personnel, industrial relation officers	0%	18%	82%	100%
Actuaries, economists, statisticans	0%	4%	96%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

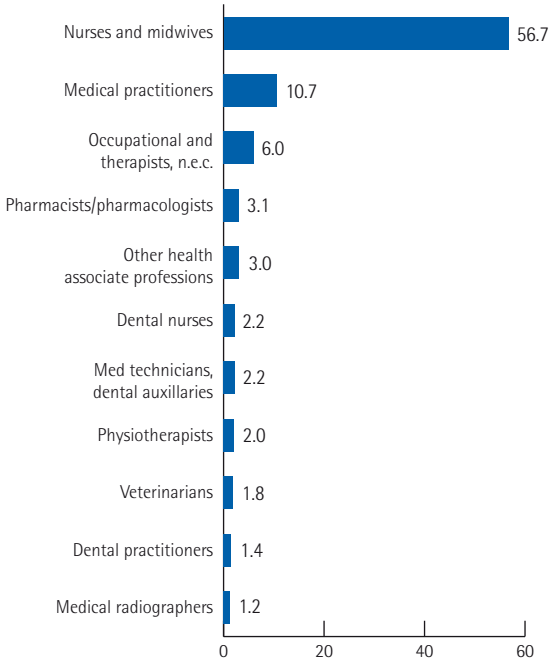
- Despite the global and domestic financial crisis and the associated decline in employment, the demand for highly skilled financial professionals persists (e.g. chartered and certified accountants with expertise in project and system accounting, compliance experts, risk experts).
- Changes in the regulatory environment are expected to create demand for high level, up-to-date accounting skills (compliance, financial reporting, financial management) and risk management expertise. In addition, strong demand is expected to continue for experts in actuarial science and quantitative finance. These skills are expected to be critical in driving employment growth in the financial services industry in the recovery.

8.5 Healthcare Occupations

Key points for selected healthcare occupations

- There were just above 90,000 persons employed in selected healthcare occupations in 2008, amounting to almost 4.5% of Ireland's total workforce
- Nurses and midwives are by far the largest occupation, accounting for more than half of all selected healthcare occupations; they are now the second largest professional grouping in the economy (after teaching professionals)
- The total employment in these selected occupations remained effectively unchanged since last year but there were an additional 10,000 posts since 2003
- Over the period 2003-2008, employment in most associate professional occupations increased, with the number of therapists (excluding physiotherapists) growing the fastest; on the other hand, professional healthcare occupations (dentists, doctors and vets) remained static
- Over a quarter of medical practitioners and almost a fifth of nurses and midwives are non-Irish; in contrast, dental practitioners are almost exclusively Irish
- Overall, selected healthcare occupations are predominantly female (80% of the workforce); 92% of nurses and midwives are female
- Healthcare occupations are highly skilled with a significant majority (89%) holding third level qualifications

Figure 8.5.1 Numbers Employed (000s) in Selected Healthcare Occupations, 2008



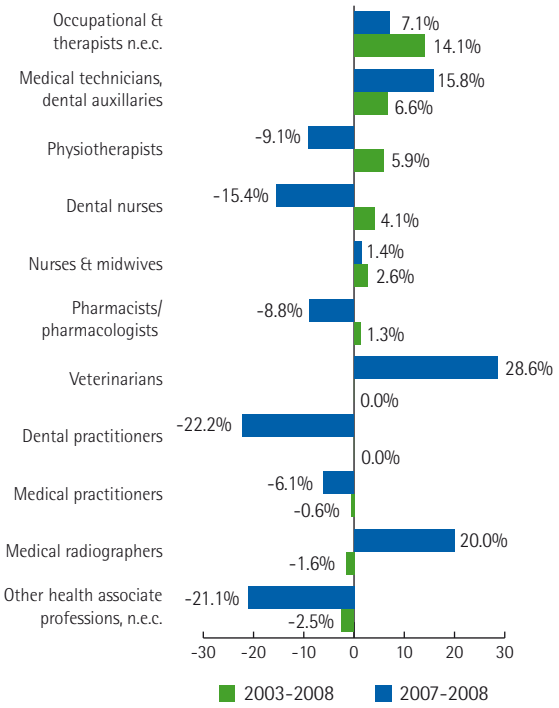
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.5.1 Age Profile of Selected Healthcare Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Nurses and midwives	4.2%	84.7%	11.2%	100%
Medical practitioners	5.2%	84.4%	10.4%	100%
Occupational and therapists, n.e.c.	6.4%	75.0%	18.6%	100%
Other health associate professions, n.e.c.	8.8%	81.9%	9.2%	100%
Pharmacists/ pharmacologists etc.	6.1%	87.3%	6.7%	100%
Dental nurses	21.4%	65.6%	13.1%	100%
Veterinarians	4.7%	69.7%	25.5%	100%
Physiotherapists	12.0%	83.9%	4.1%	100%
Medical technicians, dental auxillaries	2.4%	90.4%	7.2%	100%
Dental practitioners	0.0%	66.8%	33.2%	100%
Medical radiographers	15.4%	74.7%	9.9%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.5.2 Annual Average Growth in Selected Healthcare Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.5.2 Education Profile of Selected Healthcare Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Nurses and midwives	1%	10%	90%	100%
Medical practitioners	3%	4%	93%	100%
Occupational and therapists, n.e.c.	0%	11%	89%	100%
Other health associate professions, n.e.c.	11%	15%	74%	100%
Pharmacists/ pharmacologists etc.	3%	6%	91%	100%
Dental nurses	10%	42%	47%	100%
Veterinarians	0%	0%	100%	100%
Physiotherapists	0%	0%	100%	100%
Medical technicians, dental auxillaries	5%	23%	72%	100%
Dental practitioners	0%	0%	100%	100%
Medical radiographers	5%	0%	95%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

- A wide range of policy initiatives have been adopted with the aim of re-shaping the healthcare sector with concomitant implications for service delivery and skill needs.[42] However, in the short to medium term, employment opportunities (even those that arise from replacement demand) in the public healthcare sector, as well as the publicly co-funded non-public sector, are severely curtailed due to the public funding crisis. Nonetheless, in some areas of healthcare, skills shortages still exist. [43]

- There is a shortage of medical practitioners:

  - the current shortage of general practitioners (GPs) is likely to persist in the future, especially if the trend towards an increased share of female and part-time GPs continues

  - there is a shortage of other specialist doctors required to meet the targets set out in the Report of the National Task Force on Medical Staffing.

- There is a shortage of registered general nurses, as well as nurses in some specialised areas (theatre, intensive care, cardiac, neonatal/paediatric critical care, and oncology/ cancer care). The shortage of general nurses is partly due to the fact that this segment of nursing is the main supply pool for most advanced nursing practitioners, as well as for most postgraduate courses (e.g. public health, children's nursing, etc.).

- The education and training output from dentistry has not kept pace with the growing demand for dental/orthodontic services, resulting in a shortage in this area. The shortage is likely to continue given that almost one in three dentists is older than 55, which is likely to create a higher than average replacement demand over the medium term.

- Although the number of vets in Ireland has been supplemented by a recent inflow of foreign-trained vets, there continues to be a shortage. The expansion demand arising from increasing food safety and traceability standards and the replacement demand arising from expected retirements (one in four vets is over 55) are likely to exceed existing graduate output in the short to medium term. [44]

42 These initiatives, *inter alia*, include the implementation of the Primary Care Strategy, the National Cancer Control Programme, and more generally, moves towards a patient centred model, community vs. hospital based healthcare and consultant-provided vs. consultant-led services.

43 FÁS / SLMRU (forthcoming) *A Quantitative Tool for Workforce Planning in Healthcare: Example Simulations: Report by the Skills and Labour Market Research Unit, FÁS on behalf of the Expert Group on Future Skills Needs*

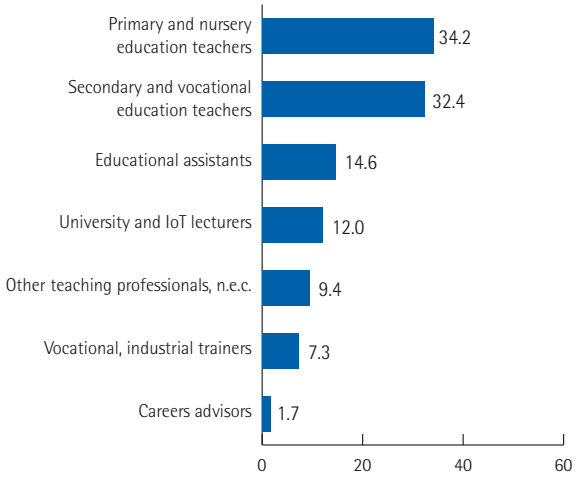
44 The Competition Authority, Competition in Professional Services – Veterinary Practitioners provides a detailed analysis of the demand and supply for vets.

8.6 Education Occupations

Key points for selected education occupations

- Approximately 112,000 persons are employed in education-related occupations, representing 5% of Ireland's workforce
- The majority of employment is in primary/nursery and secondary/vocational teaching
- All education occupations have a higher proportion of females than the national average and have a significant number of persons working part-time
- Over the period 2003-2008, the annual average employment growth for education occupations was higher than the national average, with the exception of university and IoT lecturers and other teaching professionals; employment grew fastest for education assistants (23.4%)
- Employment increased by over 24,000 over the period 2003-2008, with new education assistants posts accounting for almost 40% of this growth
- More than one third of career advisors is over 55
- Those employed in selected education occupations have high education attainment: 86% of the total employed hold third level education
- Over 16% of those employed as university and IoT lecturers are non-Irish nationals and 1% of all employment permits issued in 2008 were for this occupation

Figure 8.6.1 Numbers Employed (000s) in Selected Education Occupations, 2008



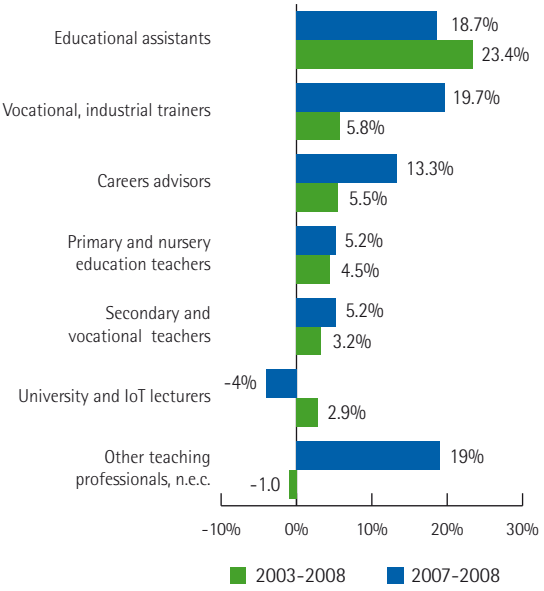
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.6.1 Age Profile of Selected Education Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Secondary and vocational education teachers	9%	78%	13%	100%
Primary and nursery education teachers	13%	76%	10%	100%
University and IoT lecturers	3%	75%	21%	100%
Educational assistants	7%	81%	12%	100%
Other teaching professionals, n.e.c.	8%	73%	19%	100%
Vocational, industrial trainers	1%	86%	13%	100%
Careers advisors	0%	66%	34%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.6.2 Annual Average Growth in Selected Education Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.6.2 Education Profile of Selected Education Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Secondary and vocational education teachers	0%	2%	98%	100%
Primary and nursery education teachers	0%	4%	95%	100%
University and IoT lecturers	0%	1%	99%	100%
Educational assistants	12%	50%	38%	100%
Other teaching professionals, n.e.c.	1%	14%	85%	100%
Vocational, industrial trainers	6%	38%	56%	100%
Careers advisors	10%	11%	79%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

- Although there are no shortages at present, there are a number of factors which may create increased demand in future years:
  - As outlined in the forthcoming EGFSN report,[45] increased fertility rates are expected to have an impact on junior infant enrolments from 2011, thus creating a future increased demand for primary teachers and subsequently secondary teachers.
  - A greater demand for vocational trainers is likely to occur due to the training needs of an increasing unemployment stock
  - The demand for education and training providers in the future is also likely to be driven by the fact that an increasing share of the workforce will have several different careers over the course of their working life.

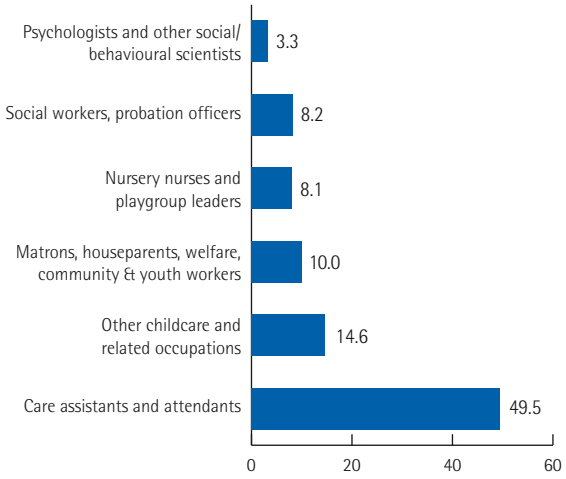
45 Monitoring Ireland's Skills Supply: education and training outputs 2009.

8.7 Social and Care Occupations

Key points for selected Social and Care occupations

- There are approximately 94,000 persons employed in selected social and care occupations (50% of whom are health care assistants), which represents a considerable expansion in relation to the situation in 2003 when the corresponding figure was about 61,000 persons
- Employment growth during the 2003-2208 period averaged 9% per annum, almost three times the national average, and this rapid pace of growth was maintained in 2008, when these occupations expanded by 10% overall in relation to 2007
- While employment in all but one care occupation (matrons, house parents and welfare and community workers) grew considerably faster than the national average, the number of social workers and probation officers expanded the fastest, growing by 19.3% on average annually over the period 2003-2008
- 80% of selected social and care workers are employed in the healthcare sector
- More than two thirds of all social and care workers are female while females account for more than 90% of all childcare workers. are female

Figure 8.7.1 Numbers Employed (000s) in Selected Social and Care Occupations, 2008



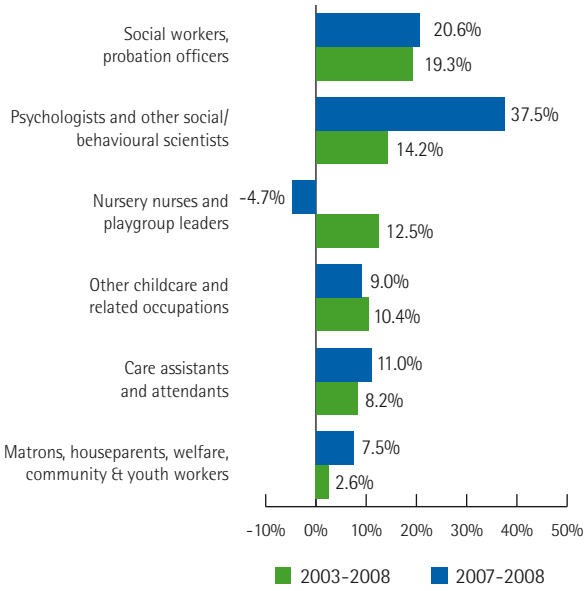
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.7.1 Age Profile of Selected Social and Care Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Care assistants and attendants	8%	74%	18%	100%
Other childcare and related occupations	28%	67%	5%	100%
Matrons, houseparents, welfare, community and youth workers	9%	77%	14%	100%
Nursery nurses and playgroup leaders	20%	71%	9%	100%
Social workers, probation officers	11%	80%	9%	100%
Psychologists and other social/behavioural scientists	0%	94%	6%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.7.2 Annual Average Growth in Selected Social and Care Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.7.2 Education Profile of Selected Social and Care Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Care assistants and attendants	35%	41%	25%	100%
Other childcare and related occupations	18%	50%	32%	100%
Matrons, houseparents, welfare, community and youth workers	17%	26%	58%	100%
Nursery nurses and playgroup leaders	19%	44%	37%	100%
Social workers, probation officers	4%	3%	93%	100%
Psychologists and other social/behavioural scientists	0%	2%	98%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

- Given that there are currently no mandatory qualification requirements for employment as a health care assistant (HCA), there are no shortages in this area. However, should the proposed regulations[46] regarding minimum qualifications (e.g. FETAC Level 5 Health Care Support Award) be implemented, shortages would arise, as the current supply from the training system would be insufficient to meet the recruitment requirement.

  In the long term, the demand for healthcare assistants will be driven by demographic changes. It is projected that the total recruitment requirement for this occupation will increase considerably above the current level, due to the fact that the size of the older age cohort (the main users of the HCA service) is projected to increase at a faster rate than the general population.

- Currently, employment opportunities for clinical psychologists are limited. However, demand will depend on relevant policy developments in the area of mental health. If the service provision changes as outlined in the policy document, 'A Vision for Change', shortages are likely to emerge.

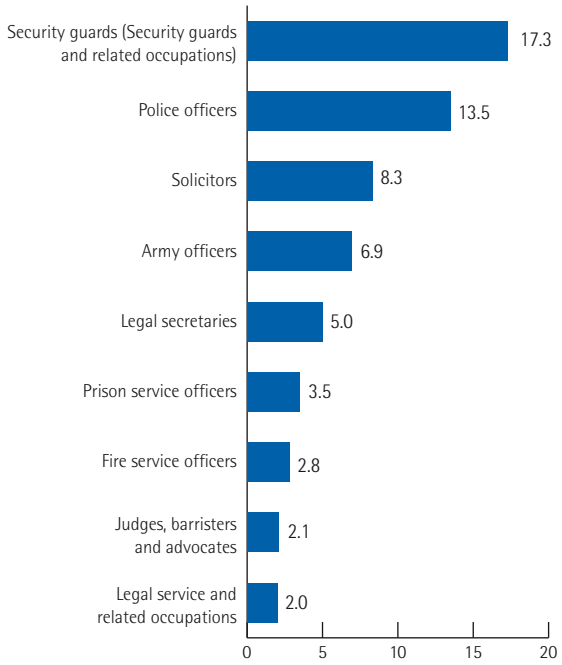
46 For example, the Health Information and Quality Authority has submitted the National Quality Standards for Residential Care Settings for Older People for approval to the Minister for Health and Children.

8.8 Legal and Security Occupations

Key points for selected legal and security occupations, 2008

- There are approximately 61,000 persons employed in legal and security occupations, which represents almost 3% of Ireland's workforce
- Employment is primarily concentrated in two sectors: other business activities and public administration
- Security guards and related occupations account for the largest occupational grouping with 17,300 persons employed
- Expansion occurred in all occupations, excluding army officers, over the period 2003-2008, with prison service officers accounting for the most significant annual average employment growth, at 7.8%
- A third of those employed as legal secretaries and a quarter of all security guards are in part-time employment
- Almost all legal secretaries are female although the reverse is the case for those employed in the army and fire services
- Security guards and related occupations had a higher than average proportion of persons aged 55+; this occupational grouping also had the lowest levels of education with 40% holding lower secondary qualifications or less
- One in four security guards is non-Irish; by contrast, the share of non-Irish amongst judges, solicitors, prison officers, army officers and gardaí is negligible.

Figure 8.8.1 Numbers Employed (000s) in Selected Legal and Security Occupations, 2008



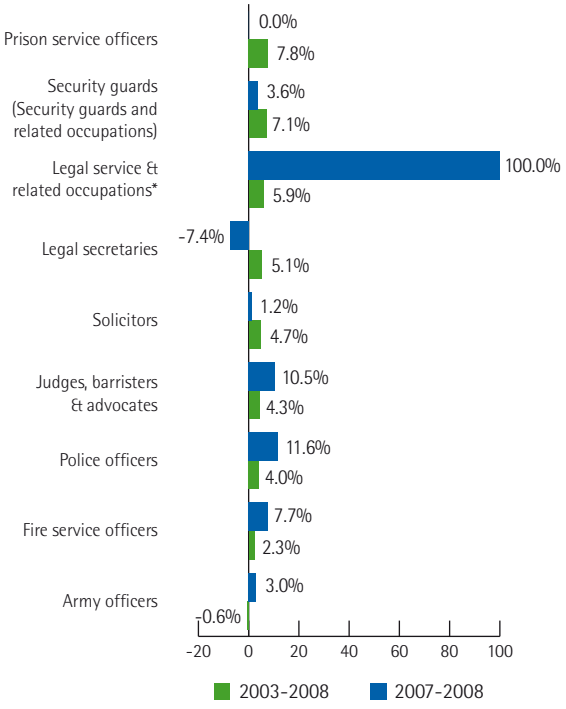
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.8.1 Age Profile of Selected Legal and Security Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Security guards (Security guards and related occupations)	14%	66%	20%	100%
Police officers	10%	86%	4%	100%
Solicitors	3%	87%	10%	100%
Army officers	13%	80%	7%	100%
Legal secretaries	10%	82%	8%	100%
Prison service officers	5%	91%	4%	100%
Fire service officers	2%	92%	6%	100%
Judges, barristers and advocates	11%	76%	12%	100%
Legal service and related occupations	5%	90%	5%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.8.2 Annual Average Growth in Selected Legal and Security Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data
*Due to the small numbers involved, data could be subject to a sampling error

Table 8.8.2 Education Profile of Selected Legal and Security Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Security guards (security guards & related)	40%	44%	16%	100%
Police officers	1%	38%	61%	100%
Solicitors	0%	1%	99%	100%
Army officers	26%	39%	35%	100%
Legal secretaries	4%	70%	26%	100%
Prison service officers	19%	55%	26%	100%
Fire service officers	20%	47%	33%	100%
Judges, barristers and advocates	0%	0%	100%	100%
Legal service and related occupations	3%	12%	85%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

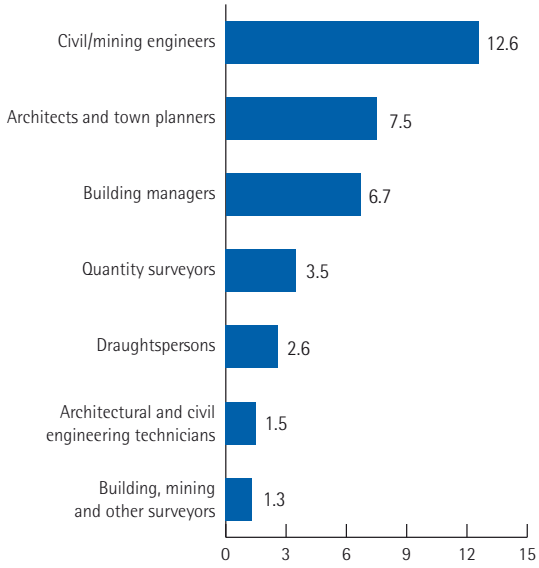
There are no shortages of legal and security skills occupations in Ireland at present.

8.9 Construction Professional and Associate Professional Occupations

Key points for selected construction professional and associate professional occupations

- There are approximately 36,000 persons employed in the selected construction professional and associate professional occupations, representing just under 2% of Ireland's workforce
- Employment in these occupations is predominantly concentrated in the construction and real estate, renting and business activities sectors, with a share of 52% and just under 30% respectively
- Employment of architects and town planners and civil/mining engineers grew at an annual average rate of 10.8% and 8.2% respectively over the period 2003-2008 – by far exceeding the national average of 3.1%
- At 79% and over, employment in most occupations is concentrated in the 25-54 age cohort
- With the exception of building managers, the majority of persons employed in construction professional and associate professional occupations are third level graduates
- At 18%, the share of non-Irish nationals in the employment stock of construction professionals and associate professionals exceeds the national average.

Figure 8.9.1 Numbers Employed (000s) in Selected Construction Professional Occupations, 2008



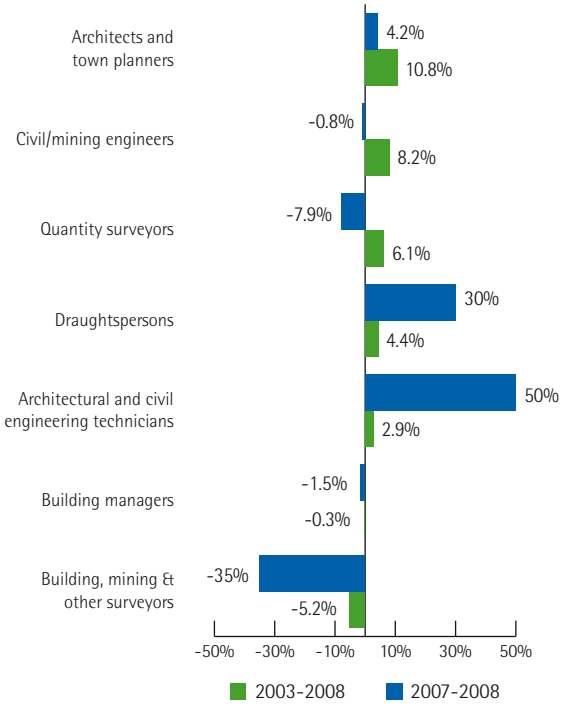
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.9.1 Age Profile of Selected Construction Professional Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Civil/mining engineers	8%	85%	6%	100%
Architects and town planners	3%	79%	18%	100%
Building managers	5%	81%	14%	100%
Quantity surveyors	11%	84%	6%	100%
Building, mining and other surveyors	4%	81%	14%	100%
Draughtspersons	9%	81%	10%	100%
Architectural and civil engineering technicians	4%	79%	17%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.9.2 Annual Average Growth in Selected Construction Professional Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.9.2 Education Profile of Selected Construction Professional Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Civil/mining engineers	1%	2%	96%	100%
Architects and town planners	2%	3%	94%	100%
Building managers	23%	26%	51%	100%
Quantity surveyors	2%	11%	87%	100%
Building, mining and other surveyors	5%	17%	78%	100%
Draughtspersons	3%	41%	57%	100%
Architectural and civil engineering technicians	4%	3%	92%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

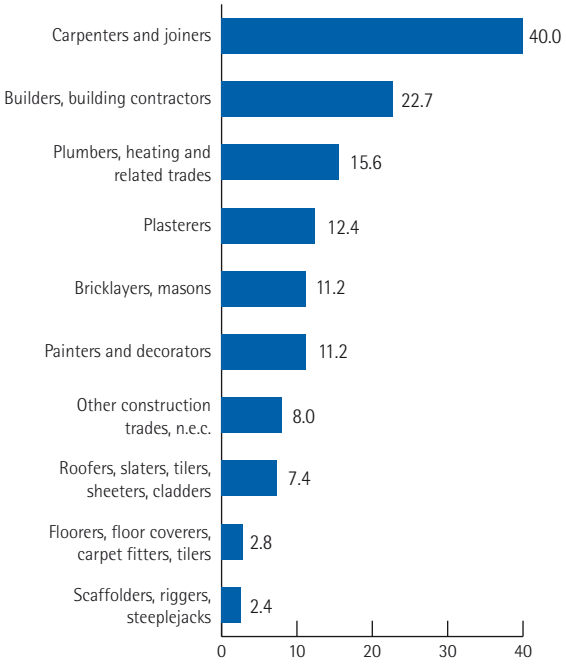
- Given the contraction in all segments of the construction industry in the short-term, shortages are not anticipated for any of the construction professional and associate professional occupations.
- The construction industry is contracting as well as undergoing a structural shift: the relative size of the new residential sub-sector is declining, resulting in a more even distribution of employment across sub-sectors. As a result, while further job losses are expected in the new residential sub-sector, in the medium term, job opportunities are most likely to arise for those who have expertise in the following areas:
  - residential repair and maintenance
  - energy efficiency (e.g. retro-fitting, reduction of carbon dioxide emissions, renewable energy technologies)
  - renewable energy infrastructure
  - management of construction and demolition waste
  - site assessment and water treatment
  - supply chain management in off-site construction methods
  - export of new building materials and processes.

8.10 Construction Craft Occupations

Key points for selected construction craft occupations

- Approximately 134,000 persons are employed in selected construction craft occupations, representing 6% of total national employment
- At 4.8%, the annual average employment growth for construction craft occupations exceeded the national average for the period 2003-2008; a net 28,000 jobs have been created in this occupational group over the period, with the most significant number created for builders and building contractors (9,300), followed by bricklayers (7,100) and plumbers (3,600)
- However, between 2007 and 2008, employment contracted sharply by more than 14,000 (or almost 10%) with all of these occupations suffering job losses; most notably, bricklayers and masons, carpenters, and painters and decorators declined by 5,000, 3,400 and 1,900 respectively
- The age profile of those employed as plumbers, carpenters and bricklayers is younger than the national average: 26%, 20% and 16% respectively are aged 15-24 – largely reflecting the inclusion of apprentices in the employment figures of these occupations
- Approximately one third of those employed in construction craft occupations have below Leaving Certificate qualifications; at the same time, 58% hold upper secondary or FET qualifications – both of these shares are above the national average
- The share of non-Irish employment in most selected occupations is significantly above the national average; almost 30% of those employed in bricklaying are non-Irish
- Employment in each of these occupations is almost exclusively male.

Figure 8.10.1 Numbers Employed (000s) in Selected Construction Craft Occupations, 2008



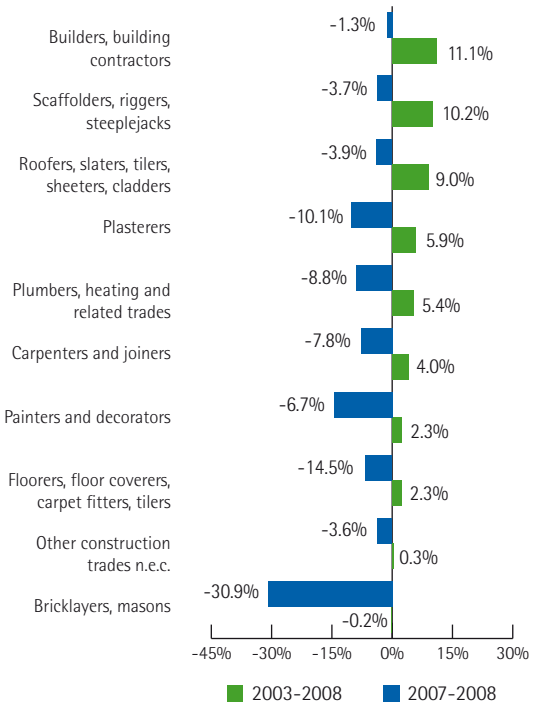
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.10.1 Age Profile of Selected Construction Craft Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Carpenters and joiners	20%	70%	10%	100%
Builders, building contractors	5%	77%	18%	100%
Bricklayers, masons	16%	78%	6%	100%
Plumbers, heating and related trades	26%	62%	12%	100%
Plasterers	12%	81%	7%	100%
Painters and decorators	8%	77%	16%	100%
Roofers, slaters, tilers, sheeters, cladders	12%	82%	6%	100%
Other construction trades, n.e.c.	7%	74%	19%	100%
Floorers, floor coverers, carpet fitters, tilers	13%	76%	11%	100%
Scaffolders, riggers, steeplejacks	9%	85%	7%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.10.2 Annual Average Growth in Selected Construction Craft Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.10.2 Education Profile of Selected Construction Craft Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Carpenters and joiners	20%	71%	9%	100%
Builders, building contractors	44%	42%	14%	100%
Bricklayers, masons	35%	50%	14%	100%
Plumbers, heating and related trades	18%	70%	12%	100%
Plasterers	35%	58%	7%	100%
Painters and decorators	48%	46%	6%	100%
Roofers, slaters, tilers, sheeters, cladders	48%	51%	1%	100%
Other construction trades, n.e.c.	46%	42%	13%	100%
Floorers, floor coverers, carpet fitters, tilers	38%	51%	11%	100%
Scaffolders, riggers, steeplejacks	30%	66%	4%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

- As the construction industry continues to contract, shortages are not anticipated for any of the construction craft occupations in the short-medium term.
- The extension of mandatory energy rating to the existing housing stock at the point of sale or rent from January 2009 under the Energy Performance of Buildings Directive (EPBD) and improved energy efficiency standards under Part L of the Building Regulations for new homes has the potential to create employment opportunities for craft-workers with the skills to install renewable energy heating systems, ventilation systems and insulation. While these skills have not been provided through the traditional apprenticeship system, an increasing number of upskilling programmes in these areas are becoming available.[47]

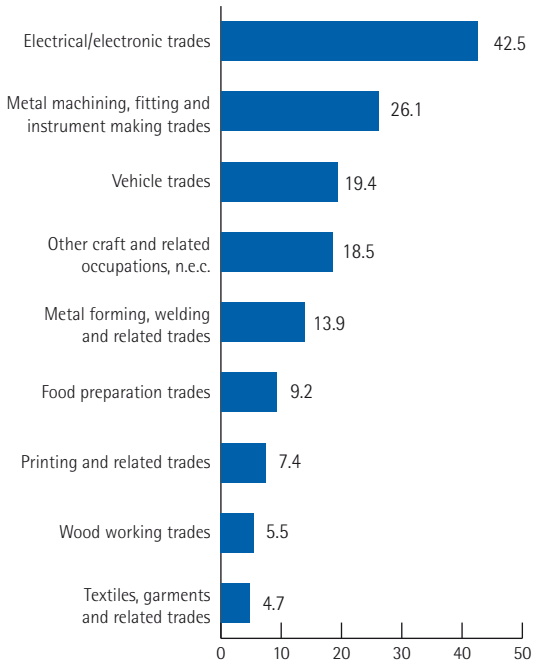
47 For example, FÁS in conjunction with Sustainable Energy Ireland (SEI) and Construction Industry Federation (CIF) provide nationally accredited training courses for qualified craft-workers who wish to upgrade their skills in the area of renewable energy technologies.

8.11 Other Craft Occupations

Key points for selected other craft occupations

- Approximately 147,000 persons are employed in selected other craft occupations, which is just over 7% of national employment
- Employment is concentrated in the manufacturing and construction sectors of the economy – accounting for 37% and 21% respectively
- Over the period 2003-2008, average annual employment growth in other craft occupations was 1.6%, which is almost half the national average; at 5.5% on average annually, the strongest employment growth was for woodworking trades; however, between 2007 and 2008, employment in other craft occupations overall declined by 4.3% (6,500 job losses)
- Over the period 2003-2008, 11,000 additional jobs were created in these occupations, more than two thirds of which were in electrical/electronic trades and metal machining, fitting and instrument making trades; however these two trades were most affected by the contraction in employment that occurred between 2007 and 2008, with a decline of 3,700 and 2,200 respectively
- With the exception of those employed in textile, garment and related trades, the share of those aged 55 and over in the employment stock of other craft occupations is either at or below the national average
- Approximately 60% of those employed in other craft occupations have attained an upper secondary/FET qualification, exceeding the national average of 39%; however, over one third of those in other craft and related trades, textiles, garments and related trades and food preparation trades have less than Leaving Certificate qualifications, which is considerably above the national average
- With the exception of textiles, garments & related trades (about 50%), employment in these occupations is predominantly male
- Almost half of those employed in food preparation trades is non-Irish – the highest of all occupations economy-wide; almost one third of those in metal forming and welding trades is non-Irish.

Figure 8.11.1 Numbers Employed (000s) in Selected Other Craft Occupations, 2008



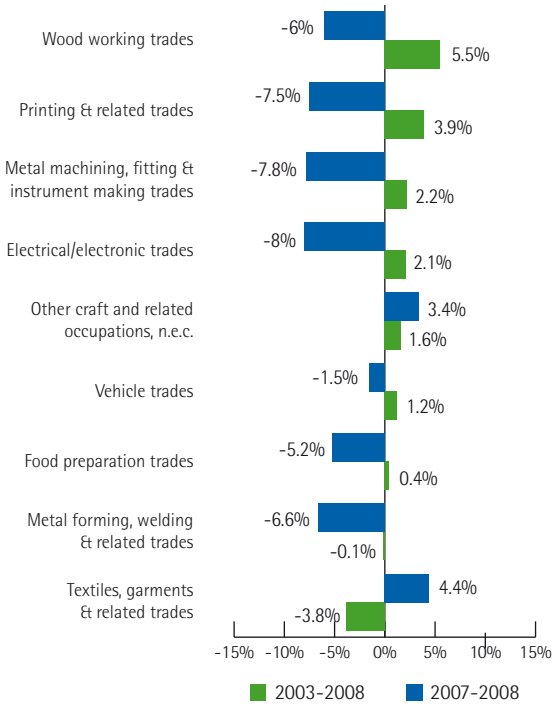
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.11.1 Age Profile of Selected Other Craft Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Electrical/electronic trades	20%	74%	7%	100%
Metal machining, fitting and instrument making trades	10%	77%	12%	100%
Vehicle trades	20%	72%	8%	100%
Other craft and related occupations, n.e.c.	11%	76%	13%	100%
Metal forming, welding and related trades	13%	79%	8%	100%
Food preparation trades	13%	84%	4%	100%
Printing and related trades	8%	81%	11%	100%
Wood working trades	21%	66%	13%	100%
Textiles, garments and related trades	10%	62%	27%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.11.2 Annual Average Growth in Selected Other Craft Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.11.2 Education Profile of Selected Other Craft Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Electrical/electronic trades	12%	64%	24%	100%
"Metal machining, fitting and instrument				
making trades"	21%	56%	23%	100%
Vehicle trades	25%	70%	5%	100%
Other craft and related occupations, n.e.c.	40%	41%	19%	100%
Metal forming, welding and related trades	33%	57%	10%	100%
Food preparation trades	39%	54%	8%	100%
Printing and related trades	31%	54%	15%	100%
Wood working trades	19%	67%	14%	100%
Textiles, garments and related trades	46%	48%	6%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

There are no shortages for any of the other craft occupations.

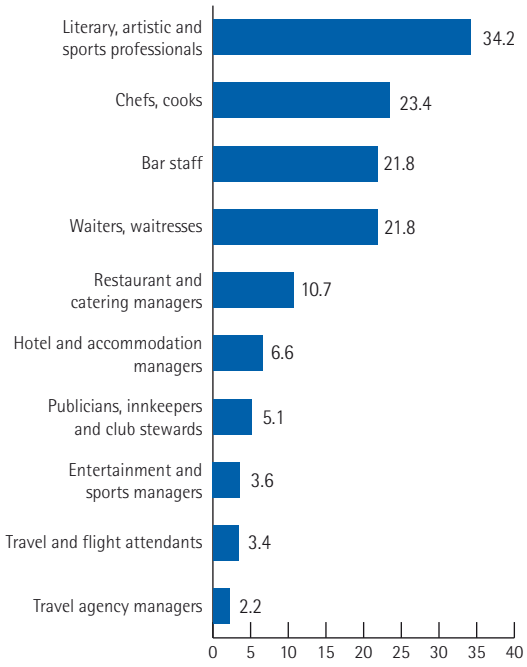
Driven by the sustainability agenda, there have been some employment opportunities for electricians in the installation of electrical services in SMART homes, electronic security systems and renewable energy technologies (e.g. wind turbines and solar-photo voltaic panels).

8.12 Arts, Sports and Tourism Occupations

Key points for selected arts, sports and tourism occupations

- There are approximately 133,000 persons employed in selected arts, sports and tourism occupations, which represents 6.3% of Ireland's workforce
- Employment is concentrated in the hospitality sector, where 60% are working
- At 2.2%, the annual average employment growth rate for these occupations over the period 2003-2008 was slower than the national average; between 2007 and 2008, there were 2,000 net job losses in selected occupations, with bar and waiting staff and chefs accounting for most of the decline
- Literary, artistic and sports professionals have the highest level of education with more than two thirds holding third level qualifications; in contrast, 15% of bar staff are third level graduates, the lowest amongst selected occupations
- While females account for at least three quarters of the workforce in some occupations (i.e. waiting staff, flight and travel attendants, and travel agency managers), the gender distribution for selected occupations is even overall
- The prevalence of part-time work for waiting and bar staff is amongst the highest of all occupations with approximately one half of those employed working part-time
- One quarter of those engaged in these occupations is non-Irish; moreover, at 43% and 39% respectively, waiting staff and chefs have amongst the highest shares of non-Irish employed economy-wide

Figure 8.12.1 Numbers Employed (000s) in Selected Arts, Sports and Tourism Occupations, 2008



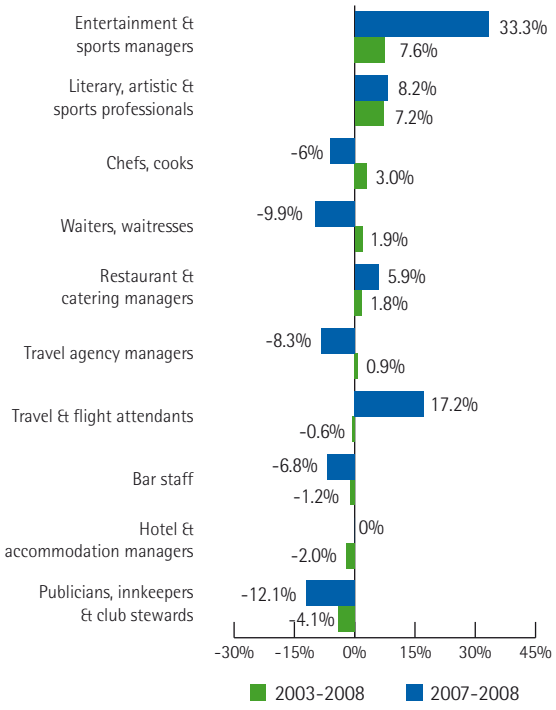
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.12.1 Age Profile of Selected Arts, Sports and Tourism Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Literary, artistic and sports professionals	12%	78%	10%	100%
Bar staff	46%	49%	5%	100%
Chefs, cooks	10%	82%	7%	100%
Waiters, waitresses	39%	57%	4%	100%
Restaurant and catering managers	5%	85%	10%	100%
Publicians, innkeepers and club stewards	0%	68%	32%	100%
Hotel and accommodation managers	2%	75%	23%	100%
Travel and flight attendants	10%	83%	7%	100%
Travel agency managers	9%	80%	11%	100%
Entertainment and sports managers	15%	75%	11%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.12.2 Annual Average Growth in Selected Arts, Sports and Tourism Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.12.2 Education Profile of Selected Arts, Sports and Tourism Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Literary, artistic and sports professionals	5%	28%	67%	100%
Bar staff	22%	63%	15%	100%
Chefs, cooks	17%	39%	45%	100%
Waiters, waitresses	24%	54%	21%	100%
Restaurant and catering managers	21%	40%	39%	100%
Publicians, innkeepers and club stewards	32%	50%	19%	100%
Hotel and accommodation managers	16%	42%	43%	100%
Travel and flight attendants	6%	41%	53%	100%
Travel agency managers	5%	50%	45%	100%
Entertainment and sports managers	4%	46%	50%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

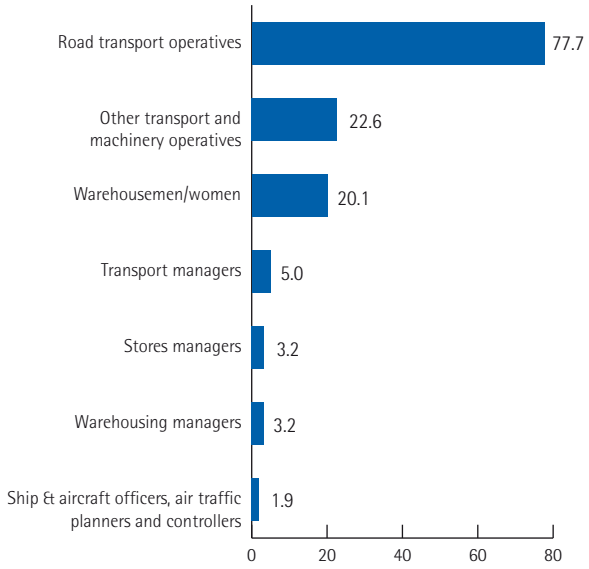
The demand for hospitality staff is set to decline and there are no shortages at present, nor are any expected in the medium term.

8.13 Transport and Logistics Occupations

Key points for selected transport and logistics occupations

- There are approximately 134,000 persons employed in selected transport and logistic occupations, which represents just over 6.3% of Ireland's workforce
- Road transport operatives make up 58% of employment
- Over the period 2003-2008, employment growth for transport and logistics occupations overall was slightly above the national average; however, between 2007 and 2008, growth slowed to 1.8%, which is less than one half of the medium term rate for these occupations
- Almost 26,000 additional jobs were created over the period 2003-2008, mostly in operative occupations; however, there were approximately 2,000 job losses over the same period (mostly for warehousing and stores managers); this brings the net job creation in transport and logistics to almost 24,000
- Transport managers and operatives have the oldest age profile of these occupations, with one in five of those employed aged 55 or above
- Almost 94% of those employed in these occupations overall are male
- Overall, the education profile of those employed in these occupations is skewed towards lower education attainment: 12% are third level graduates – a share considerably lower than the national average (38%); at least 55% of those employed in operative level occupations have below Leaving Certificate qualifications

Figure 8.13.1 Numbers Employed (000s) in Selected Transport and Logistics Occupations, 2008



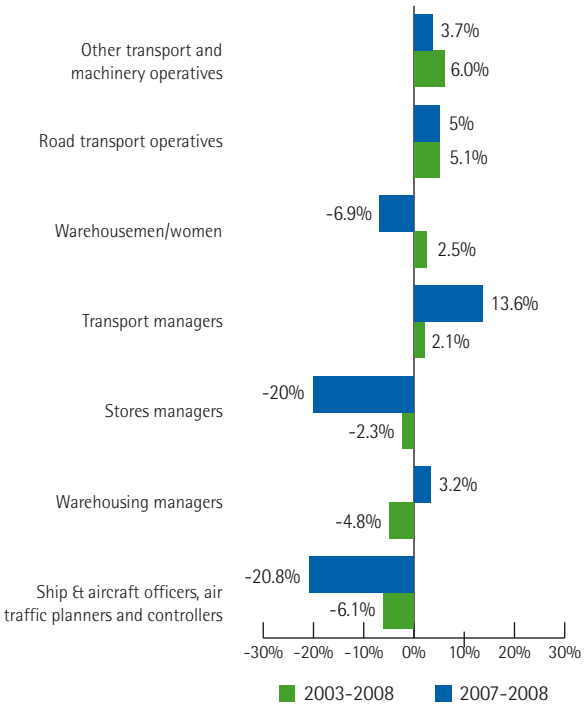
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.13.1 Age Profile of Selected Transport and Logistics Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Road transport operatives	4%	76%	21%	100%
Warehousemen/women	17%	77%	6%	100%
Other transport and machinery operatives	13%	75%	11%	100%
Stores managers	6%	84%	9%	100%
Transport managers	2%	79%	19%	100%
Warehousing managers	5%	80%	15%	100%
Ship & aircraft officers, air traffic planners and controllers	0%	76%	24%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.13.2 Annual Average Growth in Selected Transport and Logistics Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.13.2 Education Profile of Selected Transport and Logistics Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Road transport operatives	55%	35%	9%	100%
Warehousemen/women	37%	50%	14%	100%
Other transport and machinery operatives	60%	36%	3%	100%
Stores managers	20%	56%	24%	100%
Transport managers	18%	40%	42%	100%
Warehousing managers	26%	42%	32%	100%
Ship & aircraft officers, air traffic planners and controllers	4%	35%	61%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

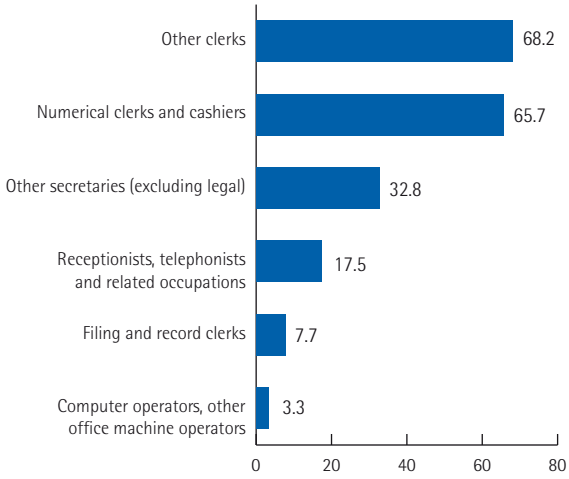
- While, in general, there are currently no shortages in the areas of transport and distribution, there is evidence that some sectors (e.g. food industry, medical devices) are experiencing difficulties in sourcing experts in international supply chain management.

8.14 Clerical Occupations

Key points for selected clerical occupations

- There are over 195,000 persons employed in selected clerical occupations, which represents approximately 9% of national employment
- While clerical occupations are distributed across all economic sectors, over a third of employment is in the financial intermediation, wholesale and retail, and business sectors
- While the number employed in clerical occupations increased over the period 2003-2008, not all occupations exhibited the same growth patterns: the number of filing & record clerks and other secretaries declined by 5% and 2.5% on average annually respectively; in contrast the number of other clerks and numerical clerks and cashiers increased by 6.7% and 4.1% on average annually, respectively
- Over the period 2003-2008, there were an additional 31,000 posts created for other clerks & numerical clerks and cashiers; however, the losses in other clerical occupations brought net job creation to 26,000 over the period
- With the exception of other clerks, employment for all clerical occupations contracted between 2007 and 2008
- At 18% and 16% respectively, the share of other secretaries and filing & record clerks aged over 55 exceeds the national average
- With 22% holding third level qualifications, secretaries, receptionists and telephonists have the lowest education attainment amongst clerical occupations
- At almost 40%, the share of part-time employment for other secretaries and receptions & telephonists is twice the national average
- Clerical occupation employment is predominantly female: with the exception of computer operators, a minimum of two thirds of employment in these occupations is female

Figure 8.14.1 Numbers Employed (000s) in Selected Clerical Occupations, 2008



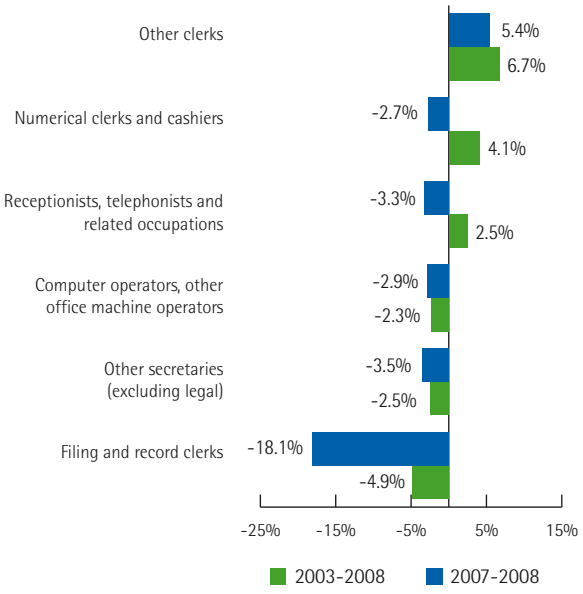
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.14.1 Age Profile of Selected Clerical Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Numerical clerks and cashiers	15%	75%	9%	100%
Other clerks	14%	74%	12%	100%
Other secretaries (excluding legal)	6%	76%	18%	100%
Receptionists, telephonists and related occupations	26%	61%	14%	100%
Filing and record clerks	5%	79%	16%	100%
Computer operators, other office machine operators	9%	89%	2%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.14.2 Annual Average Growth in Selected Clerical Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.14.2 Education Profile of Selected Clerical Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Numerical clerks and cashiers	8%	53%	39%	100%
Other clerks	12%	53%	35%	100%
Other secretaries (excluding legal)	10%	68%	22%	100%
Receptionists, telephonists and related occupations	20%	58%	22%	100%
Filing and record clerks	8%	58%	35%	100%
Computer operators, other office machine operators	13%	40%	47%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

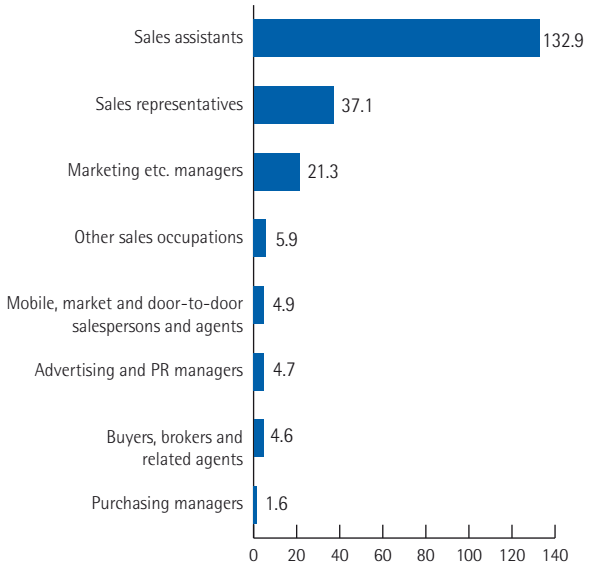
There is no evidence of any shortages of clerks.

8.15 Sales Occupations

Key points for selected sales occupations

- There are approximately 213,000 persons employed in selected sales occupations, which represents approximately 10% of Ireland's workforce
- With almost 133,000 persons employed, sales assistants make up the largest single occupation in the economy and account for over 60% of employment in all selected sales occupations
- Over the period 2003-2008, employment growth was positive for all selected sales occupations; moreover, it was well in excess of the national annual average (3.1%) for advertising and PR managers (14%) and mobile, market and door-to-door sales persons and agents (12%); however, between 2007 and 2008, there was little overall growth, while employment for sales representatives actually declined by 7% (3,000 fewer jobs)
- Over the period 2003-2008, there were an additional 43,000 posts in sales occupations; two thirds of job creation was for sales assistants
- The age profile of sales assistants is skewed towards the younger age cohorts: more than a third is aged 24 or less; in the economy as a whole, only bar staff and waiters/ waitresses have higher shares in this age group
- Almost three quarters of sales assistants and two thirds in other sales occupations are female
- The share of part-time employment for sales assistants is over 48% - one of the highest economy wide
- The share of non-Irish for sales assistants and mobile, market and door-to-door sales persons and agents exceeds the national average – almost a fifth are non-Irish

Figure 8.15.1 Numbers Employed (000s) in Selected Sales Occupations, 2008



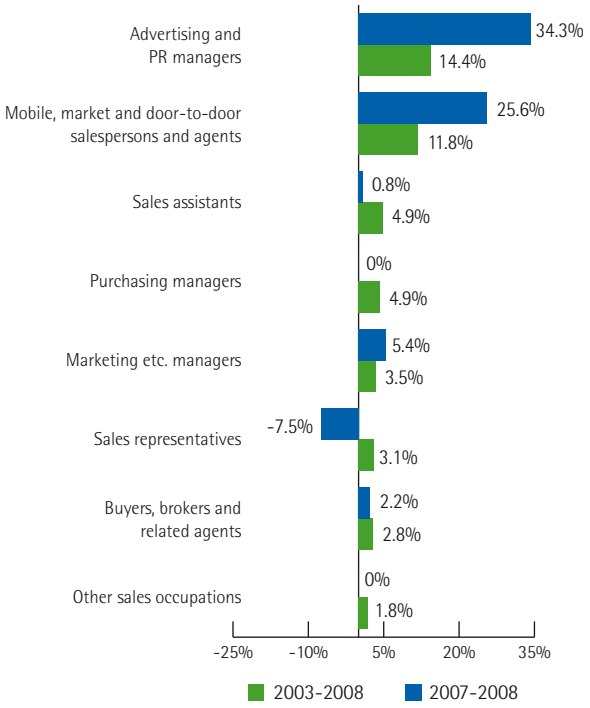
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.15.1 Age Profile of Selected Sales Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Sales assistants	37%	56%	7%	100%
Sales representatives	11%	76%	13%	100%
Marketing etc. managers	4%	87%	9%	100%
Other sales occupations	26%	60%	14%	100%
Buyers, brokers and related agents	2%	90%	8%	100%
Mobile, market and door-to-door salespersons and agents	5%	82%	13%	100%
Advertising and PR managers	6%	88%	5%	100%
Purchasing managers	4%	89%	7%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.15.2 Annual Average Growth in Selected Sales Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.15.2 Education Profile of Selected Sales Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Sales assistants	26%	57%	17%	100%
Sales representatives	17%	45%	38%	100%
Marketing etc. managers	7%	30%	63%	100%
Other sales occupations	26%	50%	24%	100%
Buyers, brokers and related agents	7%	38%	56%	100%
Mobile, market and door-to-door salespersons and agents	43%	48%	9%	100%
Advertising and PR managers	3%	22%	75%	100%
Purchasing managers	4%	39%	57%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

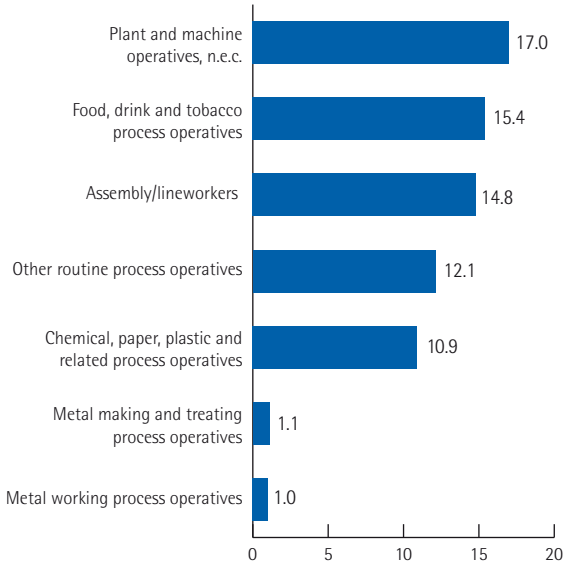
- Experienced marketing managers with product and market expertise and/or foreign language proficiency are difficult to source. Demand is likely to remain strong in the future as marketing experts are expected to be important to increasing Ireland's market share of the global demand for products and services.
- Despite a decline in employment for sales representatives overall, recruiters are continuing to report difficulties in sourcing experienced sales representatives with specific product or technical knowledge (e.g. medical sales, technical sales) and/or languages (e.g. telesales).
- Online sales, marketing and advertising are expected to be strong growth areas in the coming years creating opportunities for individuals who can combine sales skills with competencies in other areas (e.g. foreign languages, online media, global markets and international business).

8.16 Operatives

Key points for selected operatives and related occupations, 2008

- There are approximately 73,200 persons employed as operatives in Ireland, accounting for 3% of national employment
- Over the period 2003-2008, employment of operatives declined across all occupations
- Between 2007 and 2008 alone, employment of operatives contracted by just above 10%, amounting to approximately 9,000 net job losses
- The proportion of non-Irish nationals employed in most of these occupations is higher than the national average and is more than twice the national average for food process operatives and other routine process operatives
- This occupation has a relatively young workforce: 24% of routine process operatives and 16% of food, drink and tobacco process operatives are aged between 15 and 24; the share of operatives aged 55 and over is below the national average
- Overall, the education attainment for operatives is lower than the national average; over 40% of plant and machine operatives and food, drink and tobacco operatives have attained lower secondary education or less.

Figure 8.16.1 Numbers Employed (000s) in Selected Operatives and Related Occupations, 2008



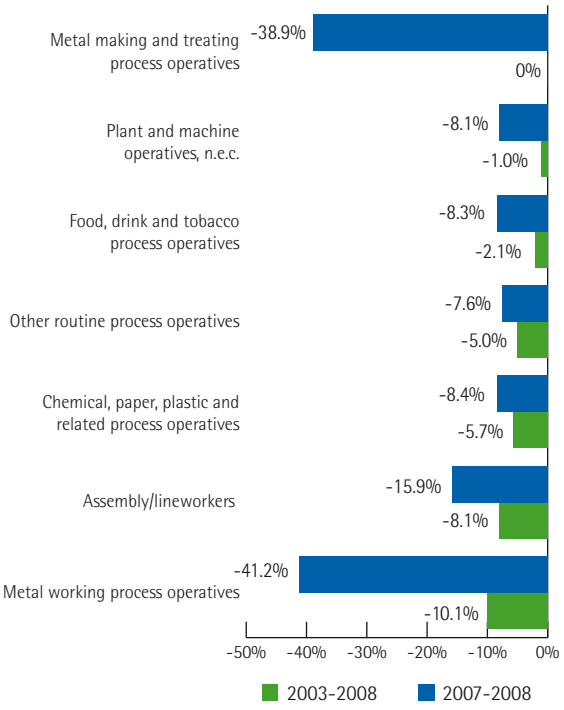
Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.16.1 Age Profile of Selected Operatives and Related Occupations, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Metal working process operatives	11%	81%	9%	100%
Plant and machine operatives, n.e.c.	7%	81%	12%	100%
Food, drink and tobacco process operatives	16%	72%	12%	100%
Metal making and treating process operatives	0%	91%	9%	100%
Chemical, paper, plastic and related process operatives	5%	87%	8%	100%
Other routine process operatives	24%	71%	6%	100%
Assembly/lineworkers	12%	83%	5%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 8.16.2 Annual Average Growth in Selected Operatives and Related Occupations, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.16.2 Education Profile of Selected Operatives and Related Occupations, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Metal working process operatives	22%	35%	43%	100%
Plant and machine operatives, n.e.c.	50%	40%	10%	100%
Food, drink and tobacco process operatives	46%	42%	12%	100%
Metal making and treating process operatives	24%	30%	46%	100%
Chemical, paper, plastic and related process operatives	25%	59%	16%	100%
Other routine process operatives	26%	46%	28%	100%
Assembly/lineworkers	25%	49%	25%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

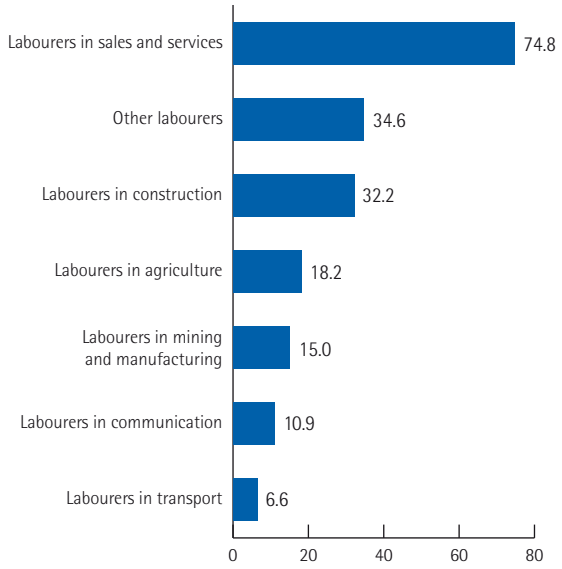
There are currently no shortages of operatives in Ireland at present.

8.17 Labourers and occupations not elsewhere classified (n.e.c.)

Key points for selected labourers[48], 2008

- Approximately 192,000 persons are employed as labourers, which represents just over 9% of Ireland's workforce
- Employment grew by almost 30,000 over the period 2003-2008 (3.4% on average annually); however, employment contracted sharply between 2007 and 2008 for labourers in construction (9,000 fewer jobs) and for other labourers (11,000 fewer jobs) although there were an additional 2,000 jobs for labourers in agriculture
- Unemployment levels are above average for labourers in mining and manufacturing, construction and other labourers
- Over 70% of those employed as labourers in sales and services are female; in contrast, less than 2% of labourers in construction are female
- At 54%, labourers in sales and services also have the highest share of persons in part-time employment economy wide
- Over a third of those employed as labourers in agriculture and sales and services are non-Irish, with these occupations combined accounting for over 6% of all employment permits issued in 2008 to non-EEA citizens
- Labourers in communication have the oldest age profile of selected occupations, with a lower than national average share aged 15-24 (3%) and a higher than average share aged 55+ (17%)
- The education profile of labourers is skewed towards lower education attainment: in most labourer occupations, approximately one half of those employed have lower secondary education or less (almost twice the national average); conversely the share with third level qualifications is almost a third of the national average

Figure 8.17.1 Numbers Employed (000s) Labourers, 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

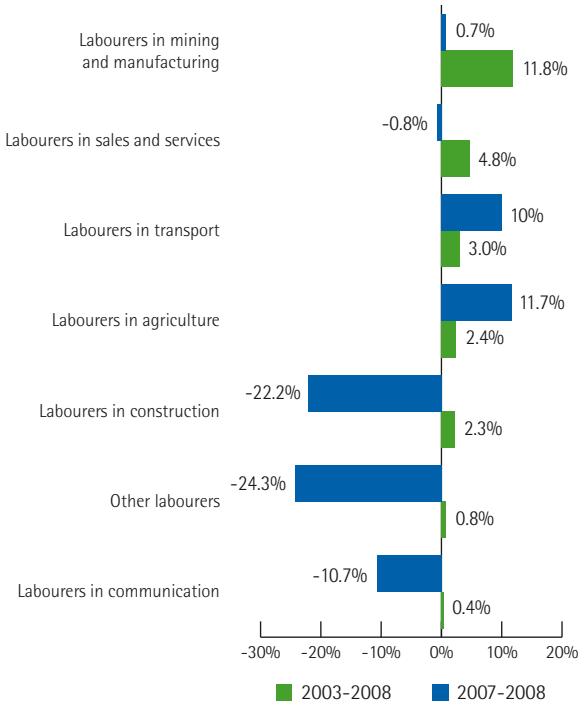
Table 8.17.1 Age Profile of Labourers, 2008

Occupation	Age			
	15-24	25-54	55+	Total
Labourers in sales and services	14%	70%	16%	100%
Other labourers	15%	70%	14%	100%
Labourers in construction	13%	76%	10%	100%
Labourers in agriculture	18%	69%	13%	100%
Labourers in communication	3%	81%	17%	100%
Labourers in mining and manufacturing	14%	78%	9%	100%
Labourers in transport	9%	79%	12%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

48 There are a number of occupations discussed in this section which for simplicity are referred to as labourers; these include cleaners, porters, sorters, various types of mates

Figure 8.17.2 Annual Average Growth for Labourers, 2003-2008 (%) and 2007-2008 (%)



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 8.17.2 Education Profile of Labourers, 2008

Occupation	Education			
	Lower secondary or less	Upper secondary or FET	Third level	Total
Labourers in sales and services	53%	35%	13%	100%
Other labourers	53%	36%	11%	100%
Labourers in construction	51%	39%	10%	100%
Labourers in agriculture	46%	39%	15%	100%
Labourers in communication	44%	45%	11%	100%
Labourers in mining and manufacturing	39%	49%	11%	100%
Labourers in transport	52%	40%	8%	100%

Source: Analysis by FÁS (SLMRU) based on CSO data

Shortage Indicators

There are currently no shortages of labourers in Ireland at present.

Section 9 In Focus: Unemployment

Introduction

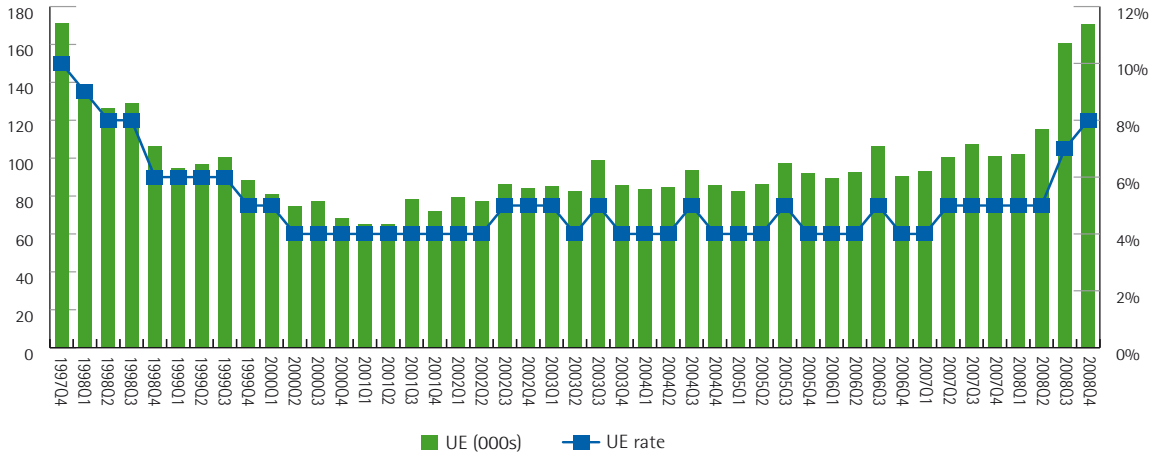
Following a decade of low unemployment, Ireland has experienced a dramatic increase in the number of persons unemployed since the beginning of 2008. This section provides an overview of unemployment in terms of age, gender, nationality, education, etc. The changes in these distributions in the downturn to date are also commented on.

9.1 Unemployment and unemployment rate

Quarterly data on unemployment is presented in Figure 9.1. In quarter 4 2008, the number of unemployed was just over 170,000, almost the same level as that recorded in quarter 4 1997. In the intervening quarters, the unemployment level formed a U-shaped curve, with unemployment hovering below 100,000 for over 30 quarters, reaching an all-time low of 65,000 in quarter 2 2001. While unemployment declined rapidly from levels recorded at the end of 1997, the rise in unemployment has been even faster in the economic downturn: within 2008 alone, unemployment increased by almost 70,000. Year on year changes in unemployment levels for quarters between 1997 and 2008 are presented in Figure 9.2.

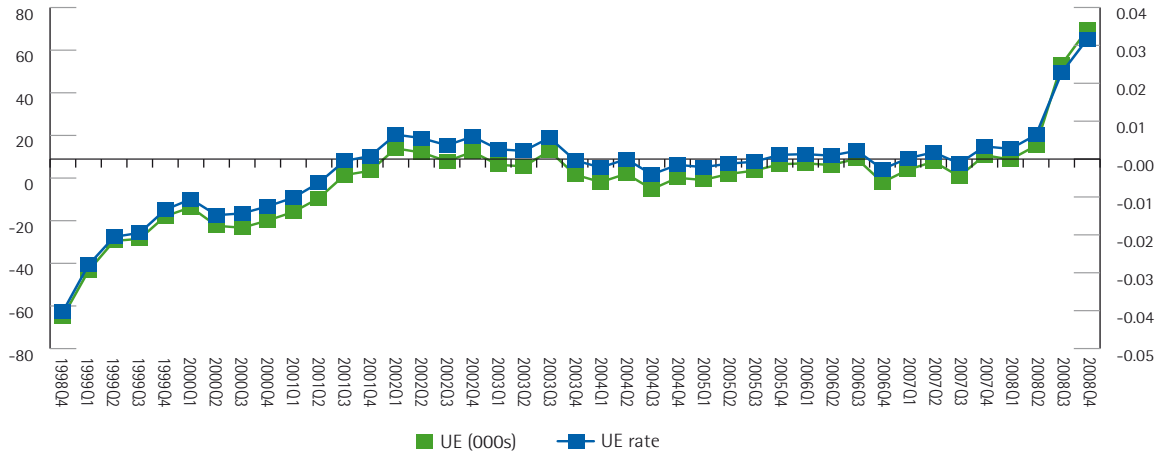
Movements in the unemployment level are broadly mirrored in movements in the unemployment rate. However, although the number of unemployed has been drifting upwards since the lows recorded in 2001, the unemployment rate remained stationary particularly over the period quarter 1 2002 and quarter 1 2008, with a mean annual change of 0.0005 (Figure 9.2). However, by the last quarter in 2008, the unemployment rate jumped to 7.7% or by over 3 percentage points on the previous year.

Figure 9.1 Unemployment (000s) and Unemployment Rate (%), Quarter 4 1997 – Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 9.2 Unemployment (000s) and Unemployment Rate (percentage point): Year on Year Change, Quarter 4 1998 – Quarter 4 2008

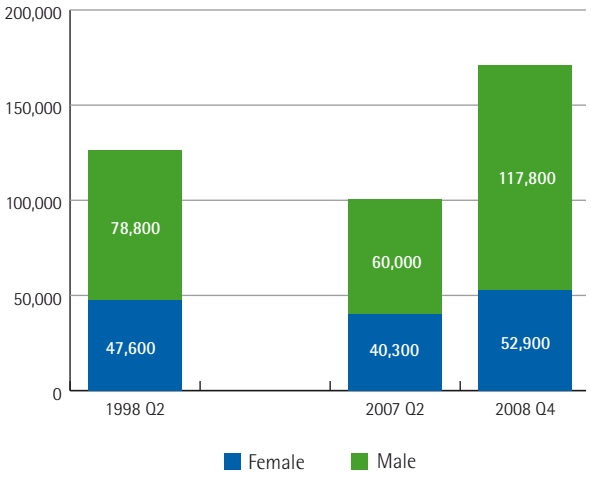


Source: Analysis by FÁS (SLMRU) based on CSO data

9.2 Unemployment by Gender

Figures 9.3 and 9.4 present the distribution of unemployment by gender. In quarter 4 2008, just fewer than 118,000 males were unemployed, compared to 53,000 females. The number of unemployed males almost doubled between quarter 2 2007 and quarter 4 2008, while the number of females increased by a third.

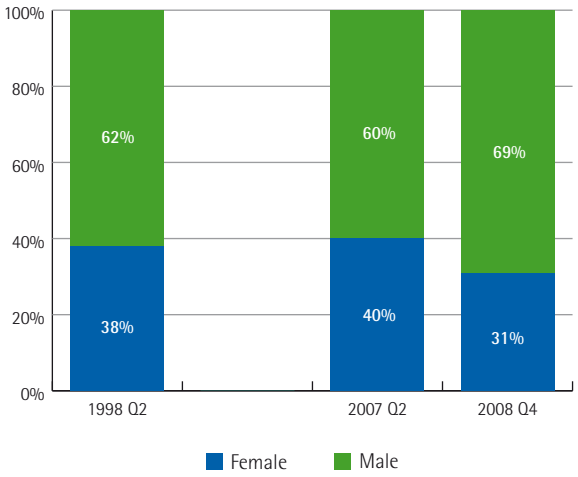
Figure 9.3 Unemployment by Gender (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

While the ratio of unemployment between males and females remained broadly unchanged over the period 1998 to 2007 at 60:40, the share of males increased by 9 percentage points between quarter 2 2007 and quarter 4 2008. Over the same period, the unemployment rate of males increased from 4.8% to 9.3%; of females from 4.3% to 5.5%, suggesting that males have been disproportionately affected by the job losses associated with the recent downturn in economic activity. Of the total increase in the number unemployed between quarter 2 2007 and quarter 4 2008, 82% were male.

Figure 9.4 Distribution of Unemployment by Gender (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

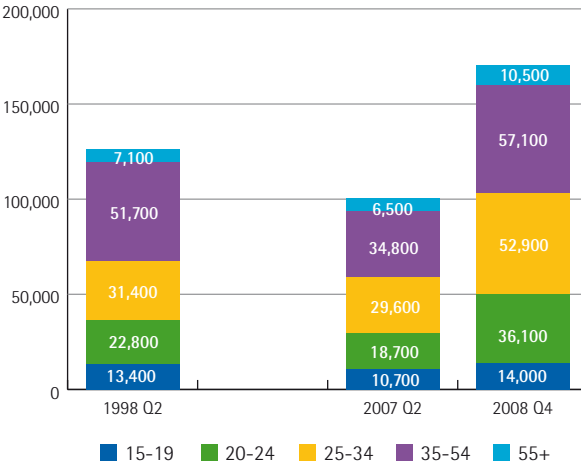


Source: Analysis by FÁS (SLMRU) based on CSO data

9.3 Unemployment by Age

Figures 9.5 and 9.6 present the age composition of unemployed persons. Unemployment in all age categories followed a broadly U-shaped pattern between 1998 and 2008, with unemployment in all categories in 2007 being lower than the levels recorded in both 1998 and 2008.

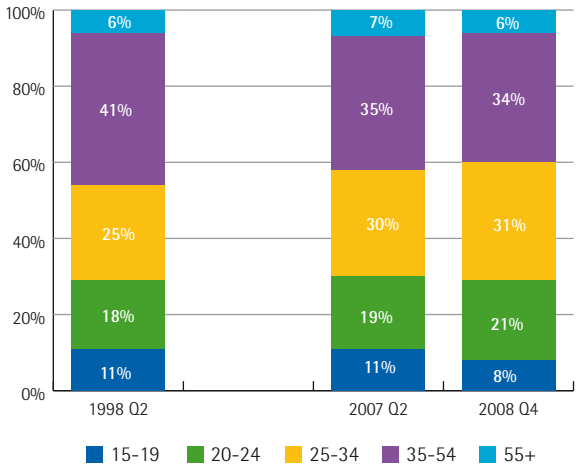
Figure 9.5 Unemployment by Age (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Between quarter 2 2007 and quarter 4 2008 the unemployment level of 20-24 year olds almost doubled, while that of 25-34 year olds increased by almost 80%, growing faster than the overall rise in the unemployment level. This has led to an increase in the share of these age cohorts in the unemployment stock, suggesting that graduates and those 'last in' were somewhat disproportionately affected by the recent loss of job opportunities. In fact, the unemployment rate of 15-19 year olds increased from 14% to 22%; that of 20-24 year olds from 7% to 15%, while for other age cohorts the unemployment rate increased by two to three percentage points and remained in one digit.

Figure 9.6 Distribution of Unemployment by Age (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

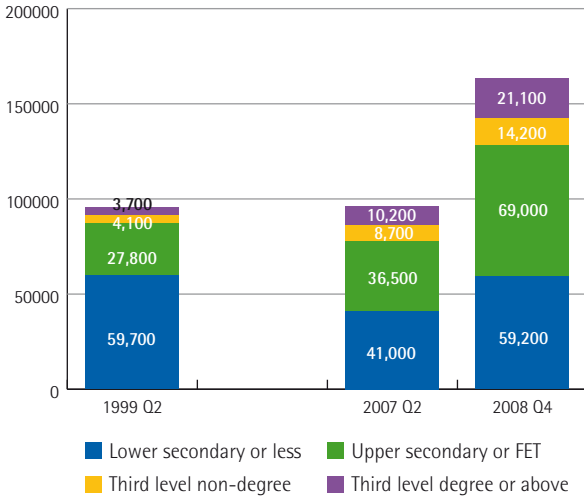


Source: Analysis by FÁS (SLMRU) based on CSO data

9.4 Unemployment by Education

Figures 9.7 and 9.8 present the level of education of those unemployed. Between quarter 2 2007 and quarter 4 2008 the level of unemployment increased for all education categories. However, the greatest increase was recorded for holders of upper secondary or FET qualifications and those with degrees or higher levels of education, with increases of 89% and 107% respectively.

Figure 9.7 Unemployment by Education (000s), Quarter 2 1999, Quarter 2 2007, Quarter 4 2008[49]



Source: Analysis by FÁS (SLMRU) based on CSO data

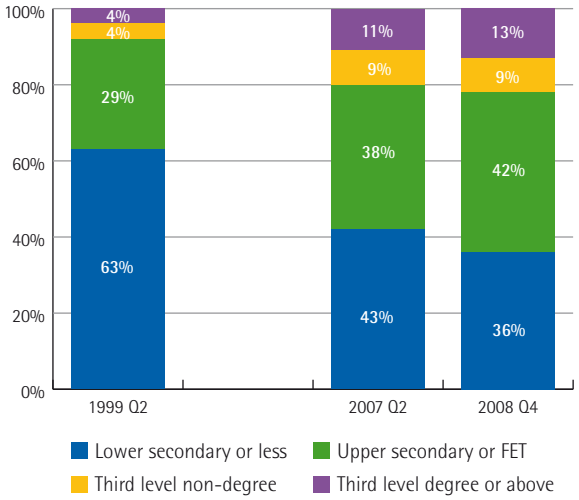
While historically the unemployed consisted predominantly of persons with lower than secondary education, accounting for almost two thirds in 1999, the education composition of unemployment had changed significantly by 2008. The share of persons holding a degree or higher level of education more than trebled over that period to account for 13% of total unemployment, while the share of those with upper secondary or FET qualifications increased by 13 percentage points to 42% (Figure 9.8).

Of the total increase in the number of unemployed over that period, 46% were in the upper secondary/FET category (which include craftspersons affected by the downturn in the construction sector); a quarter was in the less than secondary level category and 23% held third level qualifications (partly indicating the difficulties faced by new graduates entering the labour market).

As the education level of the labour force increased over the period, the change in shares does not accurately reflect the level of exposure to the economic downturn. In fact, the unemployment rate of persons with less than secondary education increased from 7% in quarter 2 2007 to 12% in quarter 4 2008, from 4% to 8% for holders of secondary level or FET qualifications, from 4% to 5% for holders of third level non-degree and 2% to 4% for those with third level degree qualifications or above. While no education category is immune, the data suggests that the lower educated remain more exposed in the economic downturn.

49 The education variable was introduced in the QHNS in 1999

Figure 9.8 Distribution of Unemployment by Education (%),Quarter 2 1999, Quarter 2 2007, Quarter 4 2008

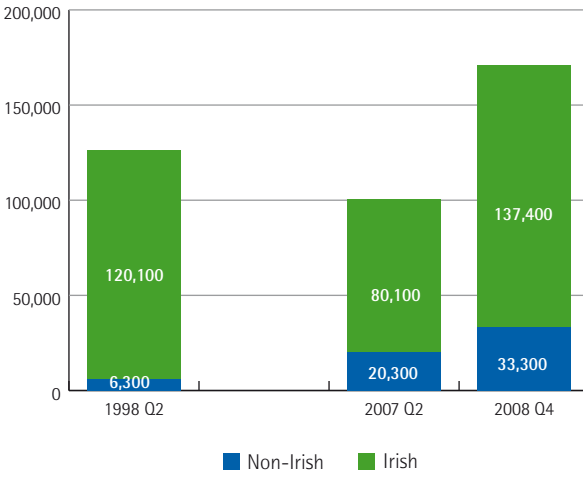


Source: Analysis by FÁS (SLMRU) based on CSO data

9.5 Unemployment by Nationality

Figures 9.9 and 9.10 present unemployment by nationality in absolute and relative terms. The unemployment level of Irish nationals followed a U-shape pattern between 1998 and 2008. Starting from a low base, the unemployment level of non-Irish nationals trebled between 1998 and 2007 and further increased by 13,000 by the end of 2008.

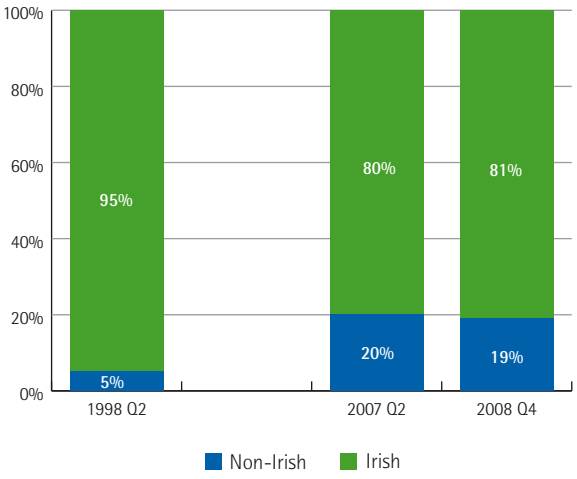
Figure 9.9 Unemployment by Nationality (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

The share of non-Irish nationals in the unemployment stock was 5% in 1998; by 2007 this changed to 20% to reflect significant inward migration over the period and changed only marginally by quarter 4 2008.

Figure 9.10 Unemployment by Nationality (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

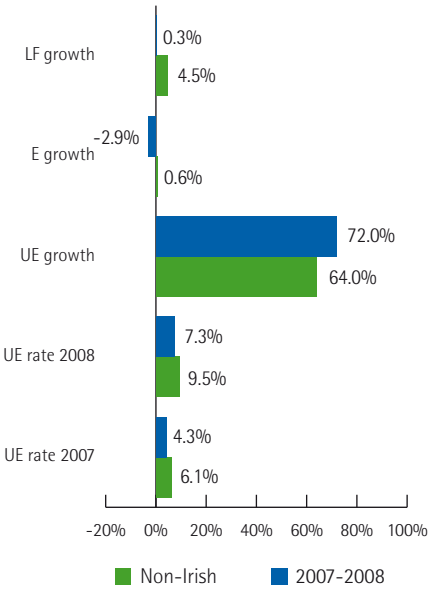


Source: Analysis by FÁS (SLMRU) based on CSO data

Between quarter 2 2007 and quarter 4 2008, the unemployment of Irish nationals increased by 72% (57,000) compared to 64% (13,000) for non-Irish nationals (Figure 9.11). Over the same period, the employment of Irish nationals contracted by 3% compared to an increase of 0.6% for non-Irish[50]. It should be noted that the employment level of non-Irish nationals continued increasing up to quarter 1 2008 (Figure 9.12), while the employment level for Irish peaked two quarters earlier. The decline from the peak for non-Irish was 36,000, compared to 82,600 for Irish nationals, which is proportionally a greater decline given the size of the immigrant workforce (10% of the peak workforce, compared to 5% of the peak workforce for the Irish). The non-Irish nationals had varied experiences in the initial downturn: while the employment level declined for EU or EEA workers, it increased for non-EEA workers when quarter 2 2007 and quarter 4 2008 are compared.

50 The figure for quarter 2 2007 differs between the one generated by the SLMRU (314,000) and that published by the CSO (316,000). The discrepancy is likely to be due to rounding. In the published CSO data the non-Irish employment level is at almost the same levels in the two points in time observed.

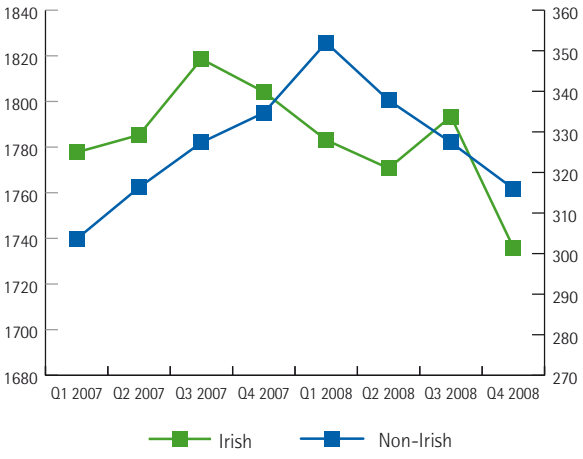
Figure 9.11 Unemployment, Employment and Labour Force by Nationality (%), Quarter 2 2007 and Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Between quarter 2 2007 and quarter 4 2008, the labour force of Irish nationals increased by 0.3% (5,000); that of non-Irish nationals by 4.5% (15,000). As a result, the unemployment rate of Irish nationals increased to a lesser extent (from 4% to 7%) than the unemployment rate of non-Irish (from 6% to 10%).

Figure 9.12 Employment by Nationality

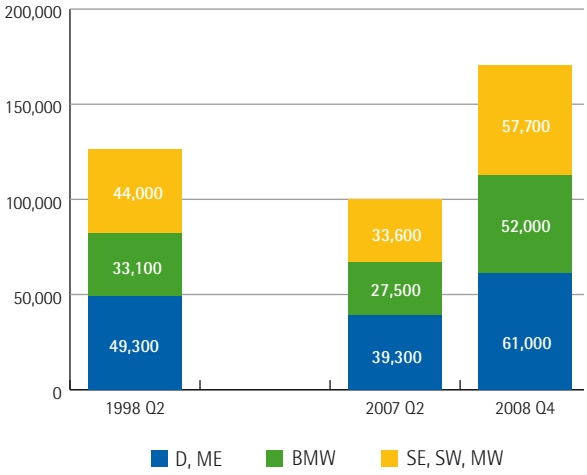


Source: Analysis by FÁS (SLMRU) based on CSO data

9.6 Unemployment by Region

Figures 9.13 and 9.14 present a regional distribution of unemployment in absolute and relative terms.[51] Over the period 1998-2007 unemployment decreased in all regions and increased sharply between quarter 2 2007 and quarter 4 2008.

Figure 9.13 Unemployment by Region (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

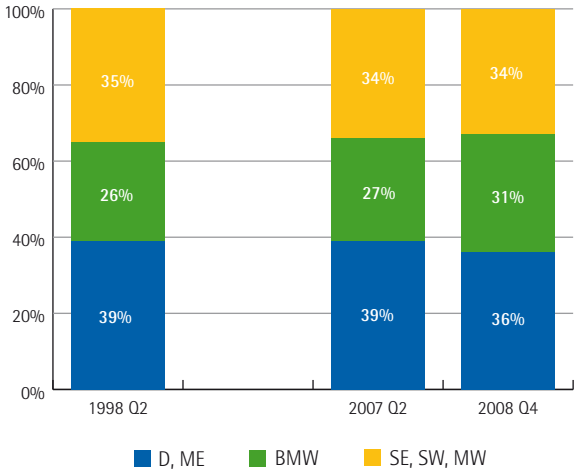


Source: Analysis by FÁS (SLMRU) based on CSO data

Almost 40% of unemployed persons were located in Dublin and the Mid-East in 1998 and the distribution remained relatively unchanged until 2007 (Figure 9.14). However, the downturn seems to be disproportionately negatively affecting the Border, Midlands and West region: over the period quarter 2 2007 and quarter 4 2008, the share of unemployment located in the region increased by four percentage points, while the unemployment rate increased from 4.8% to 9.1% – the highest unemployment rate and the largest increase of all regions.

51 While regions are defined by NUTS 3, for presentation purposes we group regions into the following three categories: BMW – Border, Midlands and West; D,ME – Dublin and Mid East and SE, SW, MW – South East, South West and Mid West.

Figure 9.14 Unemployment by Region (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

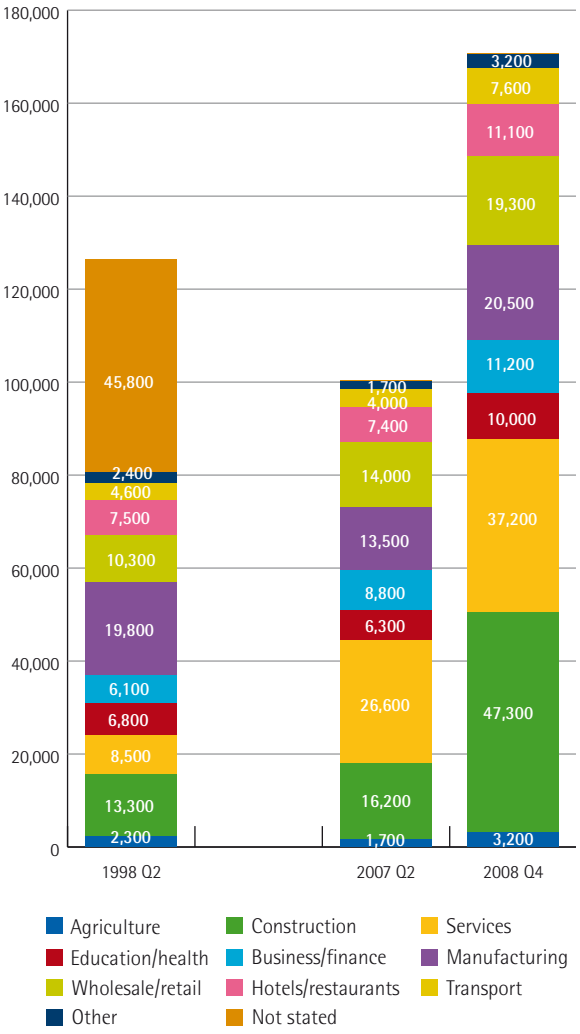


Source: Analysis by FÁS (SLMRU) based on CSO data

9.7 Unemployment by Sector

The sectoral distribution of unemployment is presented in Figures 9.15 and 9.16. In 1998, a considerable share of unemployed persons did not state the sector where they were previously employed. This prevents a direct comparison between 1998 and 2007.

Figure 9.15 Unemployment by Sector (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

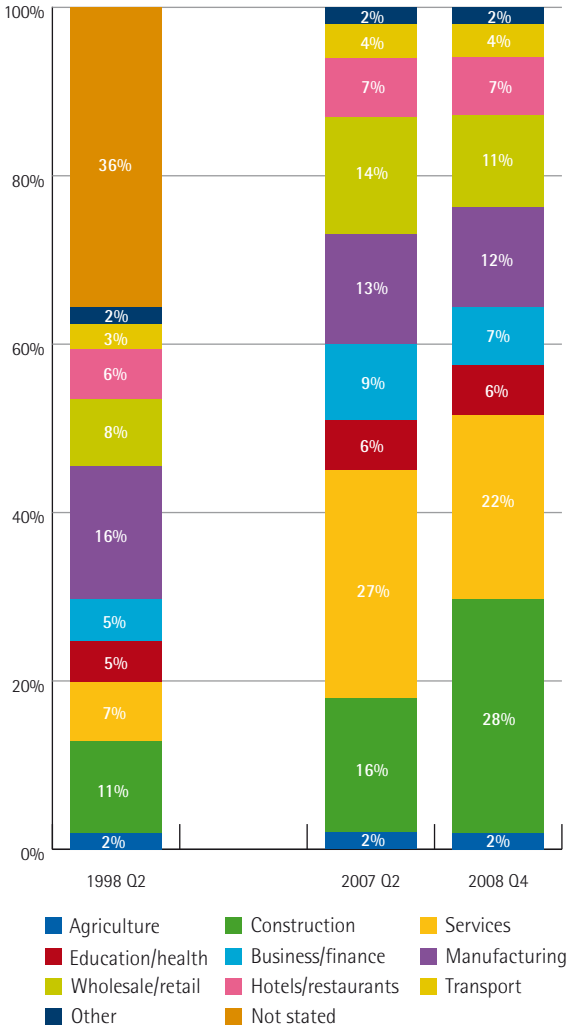


Source: Analysis by FÁS (SLMRU) based on CSO data

Unemployment increased in all sectors between quarter 2 2007 and quarter 4 2008. The greatest increase in absolute and relative terms was recorded in construction, with an additional 31,000 unemployed persons or 44% of the total increase in unemployment over that period; the increase in the services sector was 11,000 persons or 15% of the total; manufacturing accounted for 7,000 or 10% of the total. As a result, the share of construction workers amongst the unemployed increased by 12 percentage points, while the shares of others declined or remained the same. The disproportionate effect of the downturn on construction workers is confirmed by the increase in the unemployment rate in the construction sector from 5% to 17% over the period quarter 2 2007 and quarter 4 2008. However, the greatest unemployment rate remains in the personal etc. services sector: up to 23% from 18%.

Because the inflow of construction workers into the unemployment stock during 2008 was comparably greater than the inflow from other sectors, there has been a shift in the sectoral distribution of the unemployed: the share of construction sector increased from 16% in quarter 2 2007 to 28% in quarter 4 2008, while the shares of most other sectors declined (Figure 9.16).

Figure 9.16 Distribution of Unemployment by Sector (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 9.1 summarises the change in the unemployment level between quarter 2 2007 and quarter 4 2008 by sub-sector. Within the services sector, those most affected by the downturn are job seekers from the hotels and restaurants and retail trade sectors.

Table 9.1 Change in Unemployment Level Between Quarter 2 2007 and Quarter 4 2008 by Sector

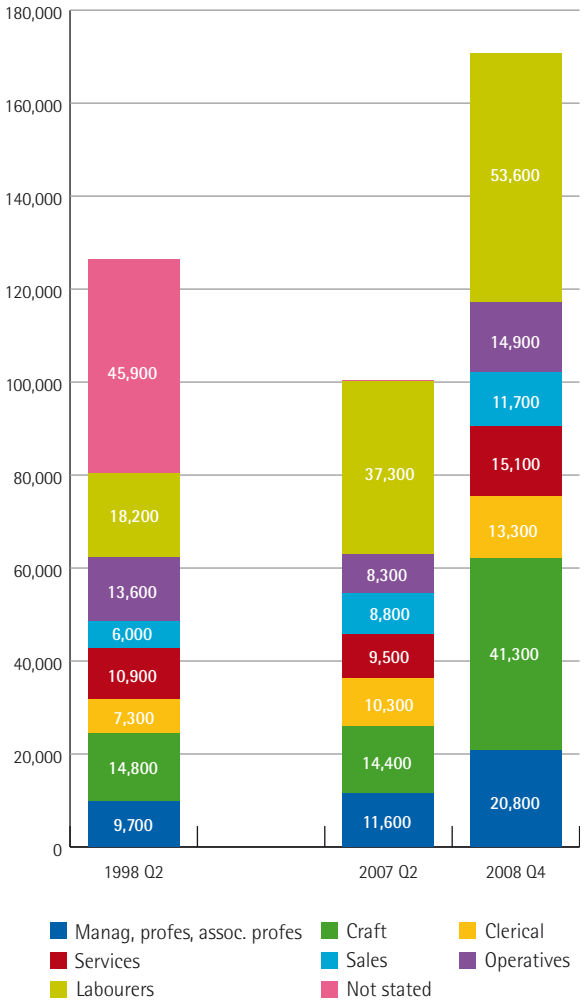
Sector	2007 Quarter 2-2008 Quarter 4	
	Number	%
Construction	31,100	44%
Hotels and restaurants	3,700	5%
Retail trade	2,900	4%
Sale, maintenance and repair of motor vehicles	2,300	3%
Education	2,300	3%
Recreational, cultural and sporting activities	2,000	3%
Post and telecommunications	1,600	2%
Land transport; transport via pipelines	1,600	2%
Manufacture of fabricated metal products	1,500	2%
Health and social work	1,500	2%
Agriculture	1,400	2%
Manufacture of food products and beverages	1,400	2%
All other sectors	17,300	25%
Total	**70,600**	**100%**

Source: Analysis by FÁS (SLMRU) based on CSO data

9.8 Unemployment by Occupation

Figures 9.17 and 9.18 show the occupational distributions of unemployment in absolute and relative terms.

Figure 9.17 Unemployment by Occupational Group, (000s), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008

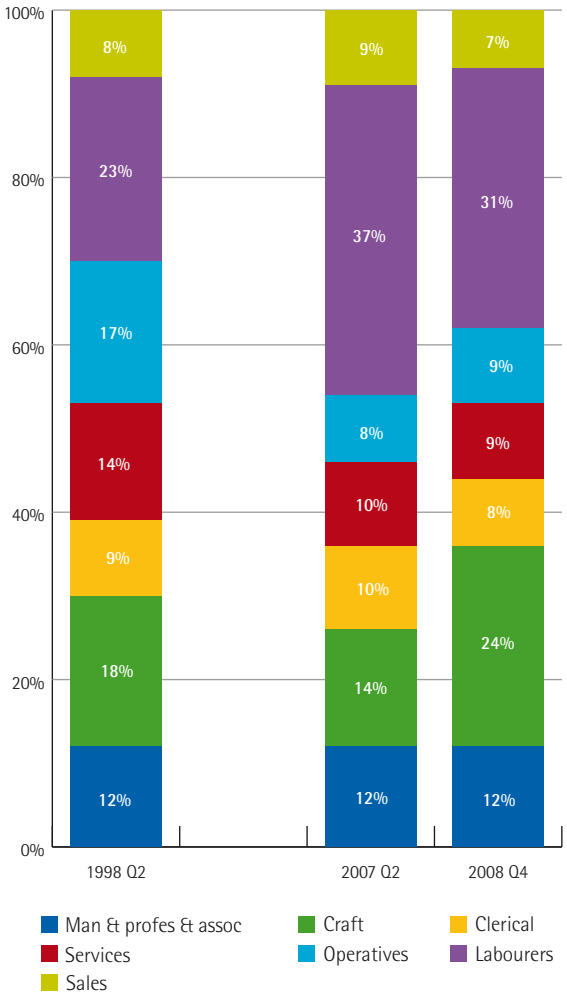


Source: Analysis by FÁS (SLMRU) based on CSO data

Between quarter 2 2007 and quarter 4 2008 unemployment increased in absolute terms in all occupational groups. The greatest increase was recorded for craft occupations with an additional 27,000 persons unemployed, accounting for 38% of the total increase in unemployment over the period. This is followed by a rise in unemployment amongst labourers of 16,000 or 23% of the total. As a result the occupational distribution of unemployment changed: the share of craft occupations increased by ten percentage points, while the share of the other occupational groupings declined or remained broadly unchanged (Figure 9.18). In addition, the greatest increase in unemployment rates was observed in this category (from 4.6% in quarter 2 2007 to 13.5% in quarter 4 2008), although labourers continue to have the greatest unemployment rate: 23.4% up from 15.5%.

In relation to the individual occupations, labourers were most affected by the downturn. Of the craftspersons, those most affected by the decline in labour demand following the downturn in the construction sector were carpenters (accounting for 9% of the increase in the unemployment level over the period quarter 2 2007 to quarter 4 2008), plasterers and bricklayers.

Figure 9.18 Distribution of Unemployment by Occupational group (%), Quarter 2 1998, Quarter 2 2007, Quarter 4 2008



Source: Analysis by FÁS (SLMRU) based on CSO data

Table 9.2 Change in Unemployment Level Between Quarter 2 2007 and Quarter 4 2008 by Occupation

Occupation	Quarter 2 2007–Quarter 4 2008	
	Number	%
Other labourers	9,900	14%
Carpenters and joiners	6,200	9%
Building labourers	4,400	6%
Plasterers	3,100	4%
Bricklayers, masons	2,500	4%
Drivers	2,400	3%
Builders, building contractors	2,100	3%
Plumbers, heating and related trades	1,700	2%
Clerks	1,700	2%
Painters and decorators	1,400	2%
Electricians/maintenance fitters	1,300	2%
Waiters, waitresses	1,300	2%
Chefs, cooks	1,300	2%
Mechanical plant operatives	1,200	2%
Scaffolders, riggers, steeplejacks	1,100	2%
All other occupations	28,700	41%
Total	**70,300**	**100%**

Source: Analysis by FÁS (SLMRU) based on CSO data

EGFSN Members

Ms. Una Halligan, Director, Government & Public Affairs for Ireland, Hewlett Packard, Chairperson

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Ms. Anne Forde, Principal Officer, Department of Education and Science

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Mr. Peter Rigney, Industrial Officer, ICTU

Mr. Martin Shanahan, Divisional Manager, Science Technology and Human Capital, Forfás

Ms. Jacinta Stewart, Chief Executive, City of Dublin VEC

Publications by the Expert Group on Future Skills Needs

Report	Date of Publication
A Quantitative Tool for Workforce Planning in Healthcare: Example Simulations	June 2009
The Expert Group on Future Skills Needs Statement of Activity 2008	June 2009
A Review of the Employment and Skills Needs of the Construction Industry in Ireland	December 2008
Statement on Raising National Mathematical Achievement	December 2008
National Skills Bulletin 2008	November 2008
All-Island Skills Study	October 2008
Monitoring Ireland's Skills Supply: Trends in Education/Training Outputs 2008	July 2008
The Expert Group on Future Skills Needs Statement of Activity 2007	June 2008
Future Requirement for High-Level ICT Skills in the ICT Sector	June 2008
Future Skills Needs of the Irish Medical Devices Sector	February 2008
Survey of Selected Multi-National Employers' Perceptions of Certain Graduates from Irish Higher Education	December 2007
The Future Skills and Research Needs of the International Financial Services Industry	December 2007
National Skills Bulletin 2007	November 2007
Monitoring Ireland's Skills Supply: Trends in Educational/Training Outputs	June 2007
Tomorrow's Skills: Towards a National Skills Strategy	March 2007
National Skills Bulletin 2006	December 2006
Future Skills Requirements of the International Digital Media Industry: Implications for Ireland	July 2006
Careers and Labour Market Information in Ireland	July 2006
Skills at Regional Level in Ireland	May 2006
SME Management Development in Ireland	May 2006
Monitoring Ireland's Skills Supply: Trends in Educational/Training Outputs	January 2006
Data Analysis of In-Employment Education and Training in Ireland	December 2005
National Skills Bulletin 2005	October 2005
Skills Needs in the Irish Economy: The Role of Migration	October 2005
Languages and Enterprise	May 2005
Skills Requirements of the Digital Content Industry in Ireland Phase I	February 2005
Innovate Market Sell	November 2004
The Supply and Demand for Researchers and Research Personnel	September 2004
Literature Review on Aspects of Training of those at Work in Ireland	June 2004
Financial Skills Monitoring Report	November 2003
Responding to Ireland's Growing Skills Needs - The Fourth Report of the Expert Group on Future Skills Needs	October 2003
The Demand and Supply of Skills in the Biotechnology Sector	September 2003
Skills Monitoring Report - Construction Industry 2003/10	July 2003
Benchmarking Education and Training for Economic Development in Ireland	July 2003
The Demand and Supply of Engineers and Engineering Technicians	June 2003
The Demand and Supply of Skills in the Food Processing Sector	April 2003
National Survey of Vacancies in the Private Non-Agricultural Sector 2001/2002	March 2003
National Survey of Vacancies in the Public Sector 2001/2002	March 2003

Report	Date of Publication
The Irish Labour Market: Prospects for 2002 and Beyond	January 2002
Labour Participation Rates of the over 55s in Ireland	December 2001
The Third Report of the Expert Group on Future Skills Needs - Responding to Ireland's Growing Skills Needs	August 2001
Benchmarking Mechanisms and Strategies to Attract Researchers to Ireland	July 2001
Report on E-Business Skills	August 2000
Report on In-Company Training	August 2000
The Second Report of the Expert Group on Future Skills Needs - Responding to Ireland's Growing Skills Needs	March 2000
Business Education and Training Partnership 2nd Forum, Dublin	March 2000
Business Education and Training Partnership Report on the Inaugural Forum, Royal Hospital Kilmainham	March 1999
The First Report of the Expert Group on Future Skills Needs - Responding to Ireland's Growing Skills Needs	December 1998

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Expert Group on
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