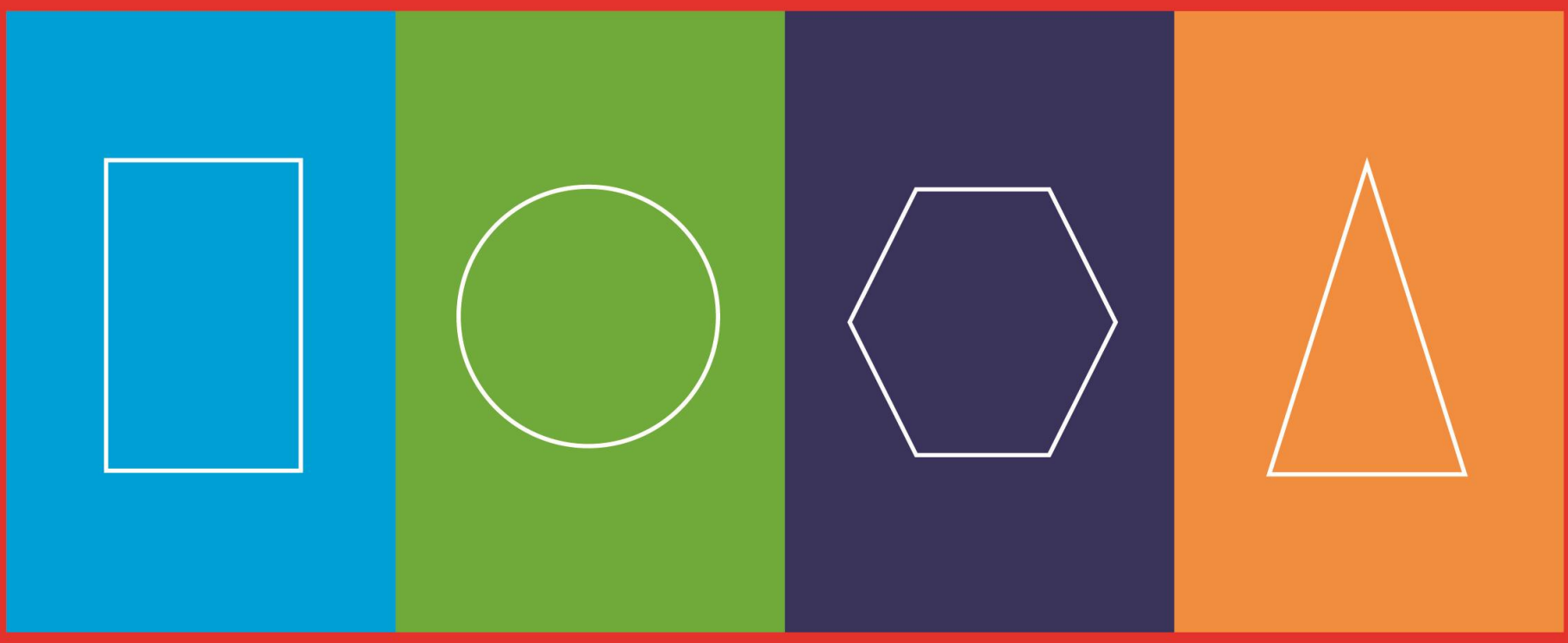

National Skills Bulletin 2011

July 2011

Foras Áiseanna Saothair
Training & Employment Authority

Expert Group on
Future Skills Needs

National Skills Bulletin 2011

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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Foreword

The National Skills Bulletin 2011 is the seventh in a series of annual reports produced by the Skills and Labour Market Research Unit of FÁS for the Expert Group on Future Skills Needs. The Bulletin provides an overview of the Irish labour market at occupational level and highlights areas in which skill shortages have been identified. The analysis is based on the information gathered and maintained in the National Skills Database.

The data for 2010 shows a further deterioration in the labour market, albeit at a slower pace compared to the previous year. Despite negative employment trends in most segments of the Irish labour market, shortages continue to persist. Skills in short supply have been identified in the areas of ICT, engineering, science, sales, transport, healthcare and finance. Shortages are few in terms of the numbers of persons required, and are typically confined to individuals with high skill levels, significant experience, niche area expertise and/or specific skill mix. The analysis also points to an increasing demand for foreign language fluency.

This year's Bulletin provides an overview of income distributions for various segments of the Irish labour market. Full time employees in the financial, professional services and ICT sectors, as well as those who were graduates or working in professional and managerial occupations had a higher share earning over €732 per week in terms of their net take home pay compared to their counterparts.

The Bulletin aims to assist policy formulation in the areas of education and training provision, active labour market measures and immigration and to inform career guidance advisors, students, job seekers and other individuals facing career and educational choices.

Una Halligan

Chairperson, Expert Group on Future Skills Needs

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Executive Summary

The National Skills Bulletin 2011 is the seventh in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in FÁS on behalf of the Expert Group on Future Skills Needs (EGFSN). It provides an overview of the Irish labour market at occupational level.

The Bulletin aims to assist policy formulation in the areas of employment, education/training, immigration and career guidance by providing a statistical record of the labour market situation at occupational level and by identifying occupations where shortages exist.

When interpreting the data, the following should be borne in mind:

- the employment level for each occupation is expressed as an annual average (i.e. the average of four quarters)
- the trend analysis covers the five-year period 2005-2010
- the employment composition (i.e. age, gender etc.) is based on most recent data, which is quarter 4 2010
- unless otherwise specified, the annual change in employment is measured between quarter 4 2009 and quarter 4 2010
- the term 'shortage' in this report refers only to the situation whereby the supply of skills or labour from within the Irish labour force is insufficient to meet demand (which does not imply a shortage at the European Economic Area (EEA) level).

Irish Labour Market in 2010

Although worsening further, the rate of deterioration in all labour market indicators slowed compared to 2009. Looking at the annual average data, between 2009 and 2010:

- the labour force contracted by 48,000 to 2.14 million
- employment declined by 80,000 to 1.85 million
- unemployment increased by 33,000 to 292,000
- the labour force participation rate declined to 60.9%
- the employment rate declined by 2.2 percentage points to 60.1%
- the unemployment rate increased by 1.8 percentage points to 13.6%
- the number of redundancies declined from the peak reached in 2009.

The economic dependency ratio increased from 1.37 in quarter 4 2009 to 1.46 in quarter 4 in 2010.

Sectoral Employment

With the exception of education, health, transport and wholesale & retail, between quarter 4 2009 and quarter 4 2010, employment declined in all sectors. By far the greatest absolute and relative decline was recorded in construction (27,000 or 20%), with all other sectors in decline recording net losses of less than 10,000 and below 10%.

Although employment in manufacturing as a whole contracted between quarter 4 2009 and quarter 4 2010, employment in pharmaceuticals and chemicals manufacturing increased.

Regional Employment

Between quarter 4 2009 and quarter 4 2010, employment declined in all regions. However, with the exception of Dublin and the Midlands where the decline was of similar magnitude, the rate of decline was half or less than that recorded in the previous year.

Unemployment rates increased in all regions, with the unemployment rate remaining highest in the

South-East (18.1%) and lowest in Dublin and the Mid-East (12.7%).

With the exception of the West region, participation in the labour market declined in all regions, with the Border region continuing to have the lowest participation rate (54.4%).

Education and Training Output

The supply of skills, measured by the number of awards from the education and training system in 2010, is presented in Table A1. In 2010, there were almost 54,400 awards in the higher education sector and almost 32,000 major awards in the further education and training sector. The combined total of awards, spanning levels 1-10, was 86,000, which is a 2% rise on the preceding year.

Table A1 Summary of Further and Higher Education and Training Awards by Field and National Framework of Qualifications (NFQ) Level, 2010[1]

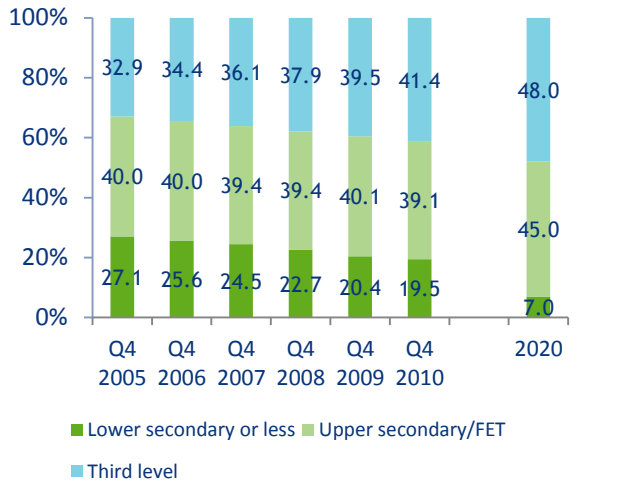
	NFQ Level						
Field	1-4	5	6	7	8	9/10	Total
General	3,390	40	-	-	-	-	3,430
Education	-	20	70	50	1,720	3,080	4,940
Hum., Arts	-	2,470	680	1,110	4,810	2,020	11,090
Social, Bus., Law	410	5,080	1,960	2,580	7,920	5,240	23,190
Science	-	610	480	900	3,090	1,710	6,790
Eng & Cons.	20	540	4,060	2,030	2,730	850	10,230
Ag & Vet.	70	1,110	980	210	270	70	2,710
Health	20	8,670	1,420	960	4,620	2,630	18,320
Services	530	1,970	1,120	910	580	380	5,490
Total	4,440	20,510	10,770	8,750	25,740	15,980	86,190

Source: FETAC (Major awards); HEA

[1] Awards data for universities and institutes of technology is based on 2009; FETAC awards data is for 2010.

As presented in Figure A.2, during 2010, Ireland continued to make progress towards achieving the National Skills Strategy (NSS)[2] targets: the share of third level graduates increased to 41%, while the share of the labour force with less than upper secondary education declined to below 20%. Further improvements are necessary if the targets at all levels are to be met by 2020.

Figure A2 Education Attainment of the Labour Force and the NSS Vision for 2020



Source: SLMRU (FÁS) analysis of CSO data

Note: Based on those in the labour force (15-64) stating their highest level of education attained; quarters are calendar based

Sourcing of Skills from Outside the European Economic Area (EEA)

At 3,762, the number of new[3] employment permits issued to non-EEA, Romanian and Bulgarian workers was 4% higher than in 2009, although less than half of the number issued in 2008. With over 100 new permits each, the occupations most frequently sourced from outside the EEA included: software

[2] EGFSN (2007) Tomorrow's Skills: Towards a National Skills Strategy

[3] See Section 6 for details on what is included in the 'new' employment permit category.

engineers, computer programmers, medical practitioners, chefs and nurses.

Vacancies

The data on job vacancies advertised through FÁS, Irishjobs.ie and the Irish Times confirms that despite the recession, job vacancies continued to arise during 2010, albeit at a significantly lower level than in 2007. Although vacancies span all occupational groups, they are more concentrated in services, clerical, sales (telesales) professional (ICT, engineering, health and finance), and customer care (e.g. technical support) occupations. Third level education, relevant experience and languages (e.g. German and Nordic languages) are frequently mentioned as a requirement in job advertisements.

The results from the spring SLMRU recruitment agency survey suggest that some difficult to fill vacancies exist in the Irish labour market. These are primarily confined to highly skilled and experienced candidates in the areas of ICT (e.g. Java, C# (C sharp)), engineering (e.g. power generation engineers), management (e.g. project management), science (e.g. chemists), healthcare (e.g. medical practitioners), sales (e.g. multilingual telesales) and finance (e.g. risk experts).

Shortages

A labour shortage arises when there is an insufficient number of individuals who are available to take up employment opportunities in a particular occupation. Given further declines in employment during 2010, there has been an increase in the excess supply of labour in Ireland. As a result, no labour shortages exist in the Irish labour market.

A skills shortage refers to a situation where there is an insufficient number of individuals who have the required qualifications, skills set and/or experience to fill a particular post. Some skills shortages have been identified and although the incidence of shortages is nowhere near the levels recorded at the peak of economic activity in 2007, the mentions were slightly more frequent than in 2009. The magnitude of shortages is unlikely to be greater than several hundred (in terms of headcount) for the overall economy. They continue to be confined to skilled professionals, senior positions and niche areas (e.g. telesales with Nordic languages).

Science

Recent data points to shortages of chemists in product development, biologists, medical scientists and nutritionists. At technician level, shortages of laboratory analysts have been identified.

Engineering

The following engineering skills have been reported as difficult to source: chemical (process safety), design and development (pharmaceuticals, medical devices, food etc.), electrical (power generation, high voltage), electronic (printed circuit board (PCB) microchip), planning and quality control (standards compliance, validation), mechanical (renewable energy) and production (process automation and Six Sigma).

Information technology

Along with engineering skills, IT skills were the most frequently mentioned as difficult to source by recruitment agencies. In 2010, almost 500 employment permits were issued to non-EEA software engineers and computer programmers. Job titles in short supply include: senior software applications developers (Java, C++, C#, VB, Ruby, Perl, Python), network and security experts (.net, SharePoint, encryption, cloud computing, virtualisation (VMware)), system administrators (Oracle, J2EE, SQL Server), web developers (PHP, JavaScript, XML, HTML, Flex, ColdFusion), business analysts and IT project managers.

Financial

Despite significant job losses in the retail banking sector, high level financial skills in the areas of risk analysis, management and cost accounting, compliance and regulatory standards (domestic, EU (e.g. MiFID, Solvency II) and global (e.g. Basel II)) and financial analysis are in short supply. Financial experts with proficiency in financial software packages (e.g. SUMMIT and SAP) are also difficult to source.

Health and social care

Employment opportunities in the public healthcare sector have further diminished due to the deterioration in the public finances and the moratorium on recruitment. Nonetheless, shortages of the following skills persist: medical practitioners (general practitioners and non-consultant hospital doctors (at Senior House Officer grade)), specialist nurses (theatre, intensive care, dialysis, geriatric and midwives), medical radiographers (CT and MRI), senior therapists (including speech and language therapists), and clinical psychologists.

There are currently no shortages of social and care occupations. However, in 2010, 250 new work permits were issued to non-EEA care assistants and there have been some mentions of difficulty in sourcing private home care assistants, which suggests there may be issues in filling these positions from the supply of candidates who are on the Live Register.

Sales and marketing

The following sales skills have been identified as in short supply: experienced marketing managers; technical sales representatives with specific industry, product and market knowledge; multilingual telesales (particularly with German and Nordic languages), customer care and customer support staff.

Craft

The data points to a continuation of the issues with sourcing meat cutter/de-boners: meat cutting skills were mentioned as difficult to source in the 2011 recruitment agency survey and 50 new work permits were issued to non-EEA meat cutters in 2010.

Transport

Multilingual international supply chain managers with forecasting, planning and scheduling skills have been mentioned as difficult to source.

Clerical

Recruiters mentioned difficulty in sourcing multilingual debt collectors and multilingual accounts and transfer agency staff.

Response to shortages

While the objective of the Bulletin is to identify occupations for which shortages exist, further research is necessary to identify the cause of these shortages and the appropriate (if any) response. The difficulty in filling vacancies may be due to a lack of skilled candidates, but also due to the unwillingness of skilled candidates to take up employment in a particular post (e.g. unsuitable conditions of employment).

A response to a shortage can vary from the provision of long-term education and training programmes (e.g. medical professionals) and postgraduate courses (e.g. wind engineers) to short training courses (e.g. JAVA programmers acquiring skills in J2EE). It can involve work placements and internships (e.g. marketing managers) or a review of career paths within an occupation (e.g. progression to senior therapist grades). In some cases, it may be appropriate to source skills in short supply from abroad.

Unemployment

Between quarter 4 2009 and quarter 4 2010, unemployment increased further to reach 299,000. However, the risk of unemployment varied between different segments of the labour market. In quarter 4 2010:

- construction workers continued to be at the greatest risk of unemployment, with an unemployment rate of 42%
- At 29% and 22% respectively, craftspersons and labourers continued to have the highest unemployment rate amongst all occupational groups; the unemployment rate of 'white collar' workers (managers, professionals, associate professionals and clerks) remained below 10%
- males continued to be at a greater risk of unemployment than females: in quarter 4 2010, the unemployment rate for males was 17%, compared to 10% for females
- younger persons continued to be at a greater risk of unemployment than older persons: in quarter 4 2010, the unemployment rate of persons aged 15-25 was 29%, compared to 13% for those aged 25-54 and 8% for those aged over 55
- persons with lower education attainment continued to be at a greater risk of unemployment than those with higher education attainment: the unemployment rate of persons with less than upper secondary education was 23% compared to 8% for third level graduates
- at all levels of education, persons younger than 25 had higher unemployment rates than older persons: at 18%, the unemployment rate of under 25s who held third level qualifications was higher than the unemployment rate of those older than 25 who held upper secondary or FET qualifications or those aged over 55 who held less than upper secondary level qualifications
- with an unemployment rate of 18%, non-Irish nationals continued to be at a greater risk of unemployment than Irish nationals (14%).

Income

In quarter 4 2010, higher managers and professionals had the highest median income, with higher managers, health and financial professionals' median income estimated at above €700 per week. At less than €400 per week, catering occupations, sales assistants and agricultural occupations had the lowest median income.

While a significant majority (44%) of all full-time employees earned between €325 and €547 per week in net take home pay, the share of persons earning over €732 per week, in quarter 4 2010, was greater amongst:

- males compared to females: one in five males was in this income category, compared to 14% of females
- persons aged 35-55 compared to younger persons: one in four 35-55 year olds, compared to 12% for 25-35 year olds and 2% for under 25s
- third level graduates compared to persons with lower education attainment: 28% for graduates compared to 10% for persons with upper secondary education and 6% for persons with less than upper secondary education
- Irish compared to non-Irish nationals: one in five Irish, compared to 12% for non-Irish nationals
- EU15 nationals compared to other non-Irish nationals: 28% compared to 16% for non-EEA and 4% for EU 15-27
- persons employed in Dublin and the Mid-East compared to other regions: 26% for these combined regions compared to 19% for South West and 13% for all other regions
- persons working in the financial, professional services and ICT sector compared to other sectors: over a third, compared to less than a quarter for all other sectors
- managers and professionals compared to other occupational groups: over a third, compared to a quarter or less for all other occupations.

Introduction

The National Skills Bulletin 2011 is the seventh in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in FÁS on behalf of the Expert Group on Future Skills Needs (EGFSN). It provides an overview of the Irish labour market at occupational level. The Bulletin aims to assist policy formulation in the areas of employment, education/training and immigration, as well as to inform career guidance advisors, students and other individuals making career and educational choices.

In the Bulletin, occupations are classified using the Standard Occupational Classification (SOC) 1990. In cases where the number of persons employed in an occupation is too small to allow for meaningful statistical analysis, two or more occupations are merged into an occupational group. The analysis covers 135 occupations.

Each occupation is examined in terms of:

- the employment profile (e.g. age, gender, nationality etc.), employment change[4] and recent employment trends using the data from the Central Statistics Office (CSO) Quarterly National Household Survey (QNHS)[5]
- the number of employment permits issued to non-EEA, Romanian and Bulgarian nationals by the Department of Jobs, Enterprise, and Innovation (DJEI)
- the level of difficulty in filling vacancies reported in the six-monthly survey of recruitment agencies conducted by the SLMRU
- an analysis of vacancies advertised through FÁS, the Irish Times and IrishJobs.ie
- job announcements by the Industrial Development Authority (IDA) and in national newspapers
- 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 Skills (DES), the State Examinations Commission (SEC), the Central Applications Office (CAO) and selected private sector education providers
- any other relevant findings from the EGFSN's sectoral studies.

The Bulletin synthesises all available data on the above indicators in order to:

- provide a statistical record of the labour market situation at occupational level
- draw on this data, and other qualitative information, to identify any shortages.

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

While the aim is to identify occupations for which shortages exist, further research is necessary to

[4] By looking at the change in the level of employment one can assess the net result of the total job creation and job losses. 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 -this is referred to as 'net job creation'; a decline in employment is referred to as 'net job losses'.

[5] The CSO re-issued micro data from the QNHS back to the year 1998; all quarters in the revised data series are calendar based and sectoral codes have been reclassified using the NACE Rev. 2 classification back to 2004. This may result in some discrepancies between the historical data presented in this issue and the data published in previous editions of the National Skills Bulletin.

identify the cause of these shortages and the appropriate (if any) policy response.

The occupations for which shortages have been identified are highlighted and comments are made regarding the nature of the shortage (e.g. a skill shortage or labour shortage). The report highlights recent and current shortages but does not provide forecasts of skill shortages, unless it is implicit from the existing data.

While some skills shortages have been identified in this report, it should be noted that the magnitude of shortages is estimated not to be greater than several hundred (in terms of headcount) for the overall economy. There is an excess supply of labour in Ireland at present and no labour shortages exist, while skill shortages are confined to a small number of persons with specialist skills.

The analysis of employment was carried out by the SLMRU based on the QNHS data. When interpreting the data, the following should be borne in mind:

- the employment level for each occupation is expressed as an annual average (i.e. the average of four quarters)
- the trend analysis covers the five-year period 2005-2010
- the employment composition (i.e. age, gender etc.) is based on the most recent data, which is quarter 4 2010
- unless otherwise stated, annual changes cover the period quarter 4 2009 to quarter 4 2010.

The National Skills Bulletin 2011 is structured as follows:

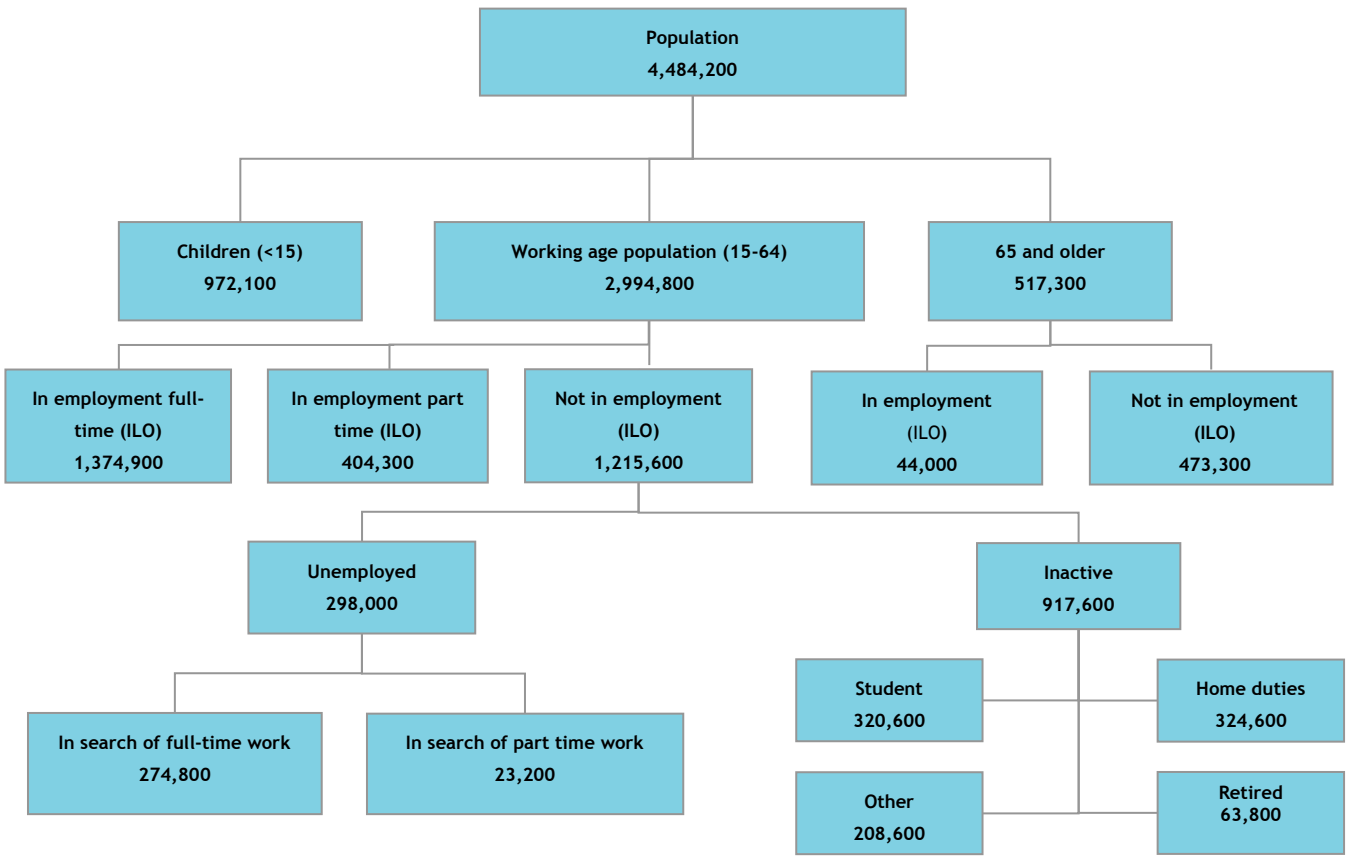
- Section 1: presents an overview of general labour market trends, which includes employment growth; employment, unemployment and participation rates; and the composition of the national workforce
- Section 2: examines employment trends and outlook by economic sector
- Section 3: presents employment by broad occupational group
- Section 4: provides employment trends and composition by region
- Section 5: focuses on the supply of skills from the education and training system by level and field
- Section 6: examines the inflow of labour from non-EEA countries, Romania and Bulgaria through the employment permit schemes
- Section 7: provides an overview of vacancies advertised through FÁS, Irishjobs.ie and the Irish Times and the results of the latest SLMRU recruitment agency survey on difficult to fill vacancies
- Section 8: presents an analysis of employment for 135 occupations across 17 occupational groups and highlights areas of shortage
- Section 9: provides a profile of unemployed persons
- Section 10: examines income data for full-time employees.

Section 1 Labour Market Overview

1.1 Population - Labour Market Status

The total number of persons residing in Ireland in quarter 4 2010 was 4,484,000, which was 12,000 more than in quarter 4 2009 (Figure 1.1).

Figure 1.1 Population by Age and Labour Status, October-December (Quarter 4) 2010



Source: SLMRU analysis of CSO (QNHS) data

Note: Any observed discrepancies in the summations are due to the rounding of numbers

In quarter 4 2010, the working age population (15-64 year olds) totalled just below 3 million persons, compared to 3.02 million persons in quarter 4 2009. Of those in the working age population 1,779,000 persons were in employment (approximately 45,000 persons fewer than in quarter 4 2009); a total of 1,215,600 persons were not in employment, compared to 1,174,200 in quarter 4 2009. Those not in employment comprised 298,000 unemployed persons and 917,600[6] economically inactive persons.

At almost 325,000 persons, those engaged in home duties were the largest group within the economically inactive category. The number of retired persons aged less than 65 was almost 64,000.

[6] The economically inactive are defined as persons who are not in employment or unemployed, i.e. not part of the labour force.

There were almost 321,000 students, an increase of almost 15,000 year-on-year. Finally, there were approximately 209,000 persons who were inactive for reasons other than retirement, studying or home duties. The inactivity rate was 30.6%[7], which was slightly higher than the rate which prevailed in the same period in 2009. This was due to both the increase in the number of economically inactive persons (+10,000) and the decrease in the working age population (-25,000).

The population aged less than 15 was estimated at 972,100 persons in quarter 4 2010, while those aged 65 and above totalled 517,300 persons. These figures represent an increase of 21,500 and 16,000 on the quarter 4 2009 figures respectively. Consequently, the overall age dependency ratio increased when compared with the same period in 2009: although the old age dependency ratio in quarter 4 2010 was 16.7% (almost identical to the preceding year), the youth dependency ratio increased by one percentage point to 32.5%, bringing the total age dependency ratio to 49.2% (up from 48.1%)[8].

The number of persons marginally attached to the labour force - discouraged workers and passive job seekers - remained largely unchanged in quarter 4 2010 when compared to quarter 4 2009 figure[9]. This was in stark contrast to the period quarter 4 2008-quarter 4 2009 when the number of persons in this group almost doubled.

The overall economic dependency ratio (the number of inactive persons to every active person) in quarter 4 2010 was 1.46, compared to 1.37 in quarter 4 2009.

1.2 Labour Force – Employment and Unemployment

The Irish labour force averaged 2.14 million persons in 2010 (Figure 1.2). Having already shrunk in 2009 by 2.4%, it declined further in 2010 by a similar margin (2.2%). The contraction in the labour force was a result of net outward migration and a decline in participation. The labour force participation rate declined by 1.15 percentage points, from 62.05% to 60.9 %.

In 2010, the number of persons in employment averaged just fewer than 1.85 million – down by over 80,000 compared to 2009; the number of unemployed persons averaged 292,000 - an increase of almost 33,000 compared to 2009. While employment continued to decline during 2010, at 4.2%, the rate of decline was half of that observed in 2009. The number of usual hours worked per week in quarter 4 2010 was 35, which was one hour less than that recorded two years previously in quarter 4 2008.

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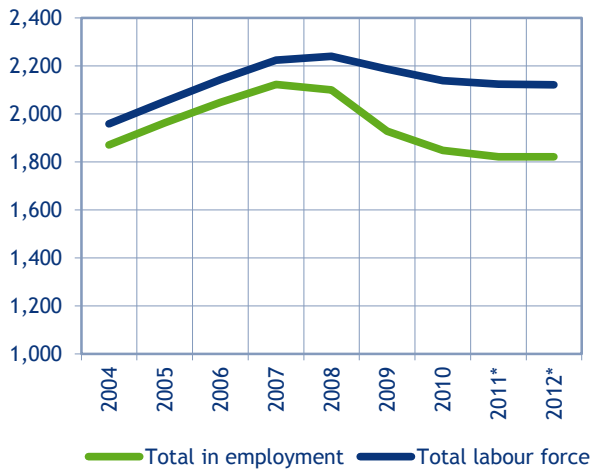
[7] The inactivity rate represents the number of economically inactive persons aged 15-64 as a share of the population aged 15 to 64; this is referred to as the 'headline inactivity rate'.

[8] The age dependency ratios compare the non-working age population to those of working age in any given population. The dependency ratio is derived by expressing the non-working age population groups - young (aged 0 to 14 years) and old (aged 65 years and over) - as a proportion of the working age (15 to 64 years) population.

[9] Discouraged workers are often referred to as 'hidden unemployed'.

Figure 1.2 Labour Force and Employment (000s), Annualised Data 2004-2010



Source: SLMRU (FAS) analysis of CSO data (historical); Central Bank of Ireland, Quarterly Bulletin April 2011 (forecasts)

Note: These growth projections are in line with those of the Department of Finance (Ireland - Stability Programme Update, April 2011).

Between 2009 and 2010, both the average annual labour participation rate and the average annual employment rate declined; the former by 1.1 percentage points to 60.9% and the latter by 2.2 percentage points to 60.1% (Table 1.1). The unemployment rate averaged 13.6% in 2010, representing an increase of 1.8 percentage points in relation to 2009. However, the rate continued to increase throughout 2010, reaching 14.1% by quarter 4.

Table 1.1 Participation, Employment & Unemployment Rates (%), 2005-2010

Year	Participation rate (%) (15+)	Employment rate (%) (15-64)	Unemployment rate (%) (15+)
2005	62.1	67.8	4.4
2006	63.2	68.7	4.4
2007	64.0	69.2	4.6
2008	63.6	67.6	6.3
2009	62.0	62.2	11.8
2010	60.9	60.1	13.6

Source: SLMRU (FÁS) analysis of CSO data

At the end of 2010, more than one half of all unemployed persons were long term unemployed. By quarter 4 2010, the long term unemployment rate increased to 7.3%, compared to 4.1% in quarter 4 2009 and 1.7 % in quarter 4 2008.

Table 1.2 shows migration estimates for the period 2005-2010. In 2010, net migration remained negative, with outward migration exceeding inward migration by almost 35,000 persons.

Table 1.2 Migration Estimates (000), 2005-2010

Year	Inward	Outward	Net migration
2005	84.6	29.4	55.1
2006	107.8	36.0	71.8
2007	109.5	42.2	67.3
2008	83.8	45.3	38.5
2009	57.3	65.1	-7.8
2010	30.8	65.2	-34.5

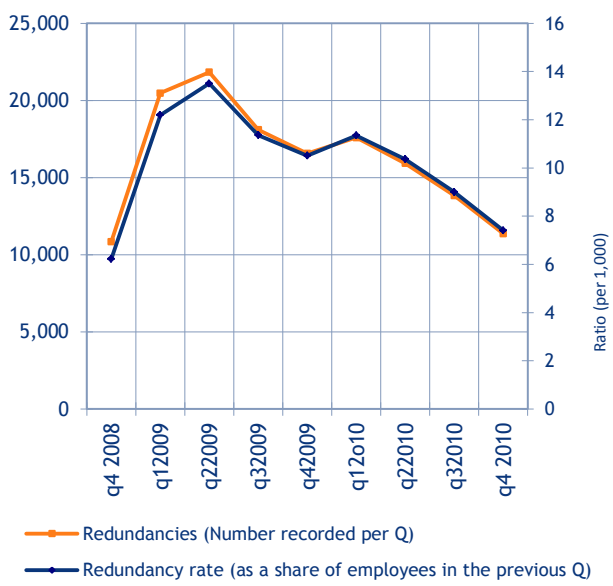
Source: CSO, Data Direct & Population and Migration Estimates. Preliminary figures used for the period 2007-2010

1.3 Redundancies

Figure 1.3 shows the redundancy numbers and rates over the period quarter 4 2008 to quarter 1 2010. Following increases in both 2008 and 2009, the number of redundancies declined in 2010. Moreover, there were consecutive declines in the number of redundancies in each quarter of 2010. At 11,000, the number of redundancies in quarter 4 2010 was broadly similar to the level recorded in quarter 4 2008.

The redundancy rate peaked in quarter 2 2009, reaching 13.5 per 1,000 employees but declined thereafter, dropping to below 10 per 1,000 employees in the last two quarters in 2010.

Figure 1.3 Redundancy Numbers and Rates, Quarter 4 2008- Quarter 4 2010

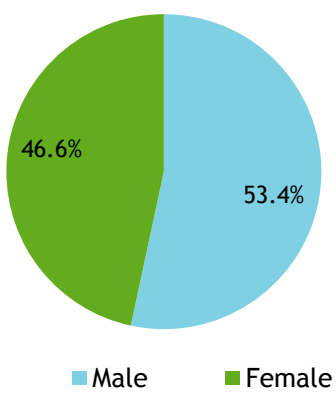


Source: SLMRU (FÁS) analysis of CSO data & SLMRU analysis of Department of, Jobs, Enterprise and Innovation/DJEI data on redundancies

1.4 Employment Composition

Figure 1.4 shows the gender distribution of employment in quarter 4 2010. In that quarter, 53.4% of the workforce was male, representing a one percentage point decrease on the share in quarter 4 2009.

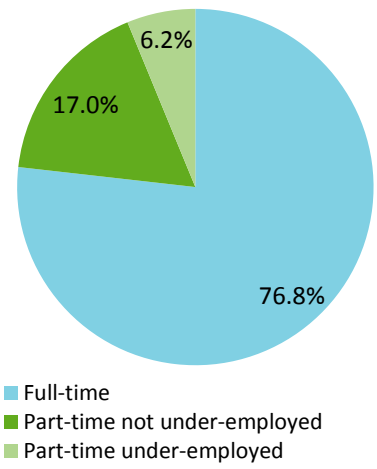
Figure 1.4 Employment by Gender (%), Quarter 4 2010



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

Figure 1.5 shows the breakdown between part-time and full-time employment in quarter 4 2010. A total of 23.2% of workers were in part-time employment – one percentage point (+4,000) above the share in quarter 4 2009. Approximately one in four persons in part-time employment in quarter 4 2010 were underemployed, indicating that a sizeable share of part-time employment was involuntary.

Figure 1.5 Employment by Employment Type (%), Quarter 4 2010

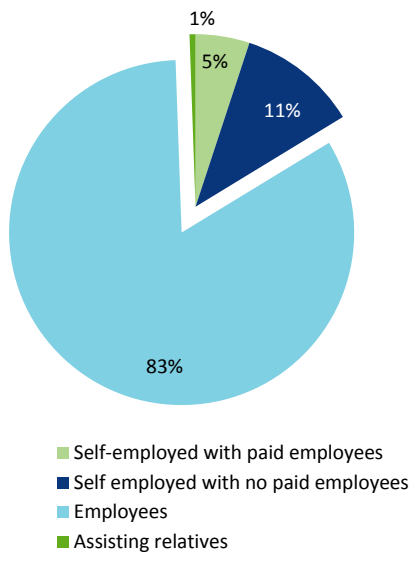


Source: SLMRU (FÁS) analysis of CSO data

Figure 1.6 shows the distribution of employment by employment status in quarter 4 2010. Employees comprised 83% of the national workforce, while just over one-in-ten persons were running their own business (Figure 1.6).

In absolute terms, all categories declined in relation to the corresponding period in 2009: there were almost 35,000 fewer employees, and approximately 26,000 fewer self-employed, with both sub-categories (those with and those without paid employees) declining by almost an equal number. However, the decline was more pronounced for the self-employed with paid employees – this category declined by 12% in relation to the same period last year, whereas the self-employed without paid employees declined by 6%.

Figure 1.6 Employment by Employment Status (%), Quarter 4 2010

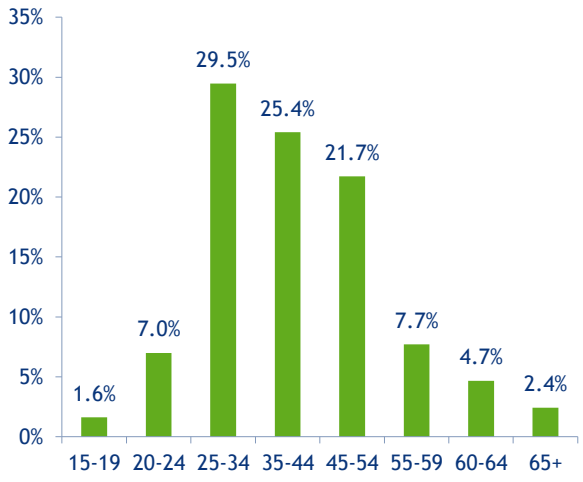


Source: SLMRU (FÁS) analysis of CSO data

Figure 1.7 depicts the age distribution of employment in quarter 4 2010. Those aged 55 and above comprised 15% of total employment in that quarter, while those aged 15-34 accounted for 38%. The former group increased in terms of its relative size when compared to quarter 4 2009, while the latter decreased.

Between quarter 4 2009 and quarter 4 2010, the employment rates of the younger age cohorts declined, particularly for those aged 20-24, which decreased by 4.5 percentage points. This was a continuation in the trend observed since the beginning of the recession, with a cumulative decline of 22 percentage points in the employment rate for this age group between quarter 4 2007 and quarter 4 2010.

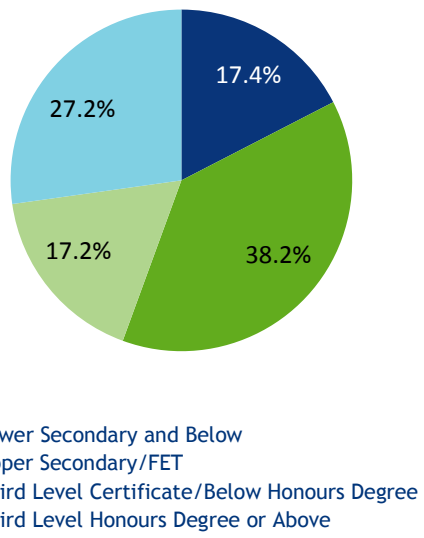
Figure 1.7 Employment by Age (%), Quarter 4 2010



Source: SLMRU (FÁS) analysis of CSO data

Figure 1.8 shows the highest level of education achieved by persons in employment in quarter 4 2010. Third level graduates accounted for almost 45% of employment in that quarter, followed by 38% with upper secondary/FET qualifications and 17% with below Leaving Certificate qualifications.

Figure 1.8 Employment by Education (Highest Level Achieved) (%), Quarter 4 2010



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

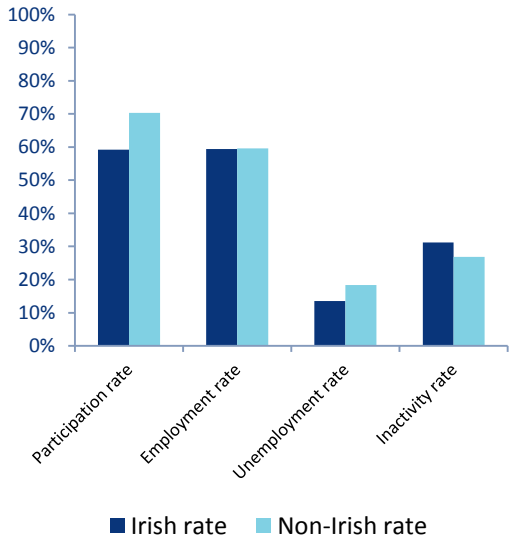
Note: Data relates to the 15-64 age group in employment

Of the 2.1 million persons in the labour force in quarter 4 2010, 270,000 were non-Irish nationals, amounting to a 12.7% share of the labour force; this compares to 14% in quarter 4 2009. Figure 1.9 shows that:

- the labour force participation rate for non-Irish nationals (at 70.3%) was higher than that for Irish nationals (59.2%)
- the unemployment rate, at 18.4%, was higher for non-Irish nationals than for Irish nationals (13.5%)
- the employment rate was almost the same for each of the broad nationality groups (59.6% and 59.4% for non-Irish and Irish nationals respectively)
- the headline inactivity rate (15-64-year age group) was 26.9% for non-Irish nationals compared to 31.2% for Irish nationals

Of the total 1.8 million persons in employment in Ireland, 12% were non-Irish nationals, a decrease of 1.5 percentage points on the quarter 4 2009 share.

Figure 1.9 Participation, Employment, Unemployment and Inactivity Rates by Nationality, Quarter 4 2010

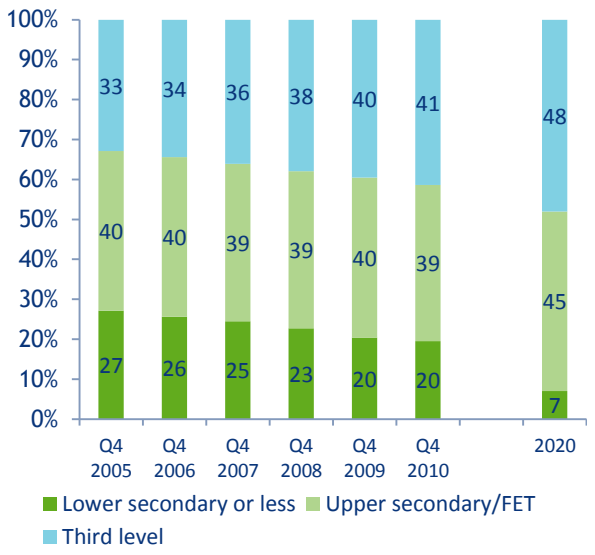


Source: Source: SLMRU (FÁS) analysis of CSO data

1.4 National Skills Strategy: Progress to Date

Figure 1.10 compares the education attainment of the labour force with the targets set out in the National Skills Strategy (NSS) for 2020[10]. The education profile of the labour force continued to improve in 2010, however, further improvements will be necessary if the targets set out in the NSS are to be achieved by 2020. In quarter 4 2010, third level graduates made up over 40% of the labour force, compared to the target of 48% for 2020.

Figure 1.10 Education Attainment of the Labour Force and the NSS Vision for 2020



Source: SLMRU (FÁS) analysis of CSO data

Note: Based on those in labour force (15-64) stating their highest level of education attained

[10] EGFSN (2007) Tomorrow's Skills: Towards a National Skills Strategy

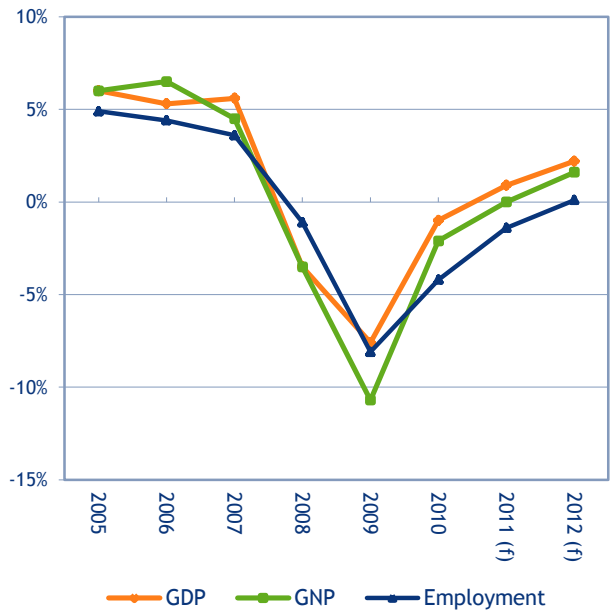
1.5 Economic outlook and implications for employment and demand for labour

Between 2009 and 2010, the economy contracted by 1% (GDP) or 2.1% (GNP)[11] (Figure 1.11). While the decline decelerated compared to the period 2008-2009 (when the economy contracted by 7% (GDP) and 11% (GNP)), 2010 was nevertheless the third consecutive year of decline.

Very little change in GNP (from zero to 0.5%) is expected in 2011, with a return to growth of 2% projected for 2012; growth in GDP of 0.9% and 2.2% is forecast for 2011 and 2012 respectively. With domestic demand expected to remain weak (personal consumption is set to decline by 2.2% and public consumption by 4.7% in 2011), the export sector is likely to continue to be the main source of growth in the short-term[12].

The decline in employment is expected to slow to almost 1.5% in 2011 (translating into a further decrease of approximately 30,000), before halting in 2012. Despite the expected continued negative net migration and the fall in labour force participation, the unemployment rate is set to persist at its current rate of over 14%. The number of unemployed persons is not projected to fall below 300,000 by 2012.

Figure 1.11 Economic and Employment Growth (Year-on-Year Percentage Change), 2005-2012



Source: CSO Quarterly National Accounts; Central Bank of Ireland, Quarterly Bulletin April 2011(for 2011 and 2012 estimates); SLMRU (FÁS) analysis of CSO data[13]

[11] GNP excludes repatriated profits from international companies.

[12] Central Bank of Ireland Quarterly Bulletin, April 2011. These growth projections are in line with the rate of 0.8 (GDP) for 2011 and 2.5% (GDP) for 2012 from the Department of Finance (Ireland - Stability Programme Update, April 2011).

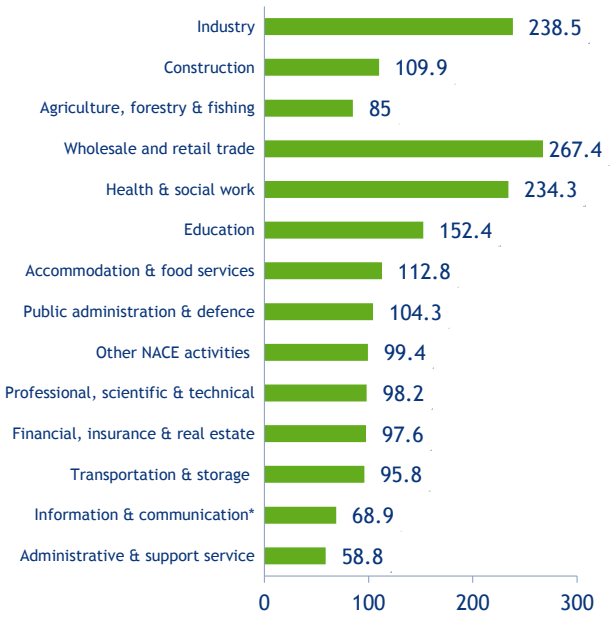
[13] Based on Gross Value Added at Constant Factor Cost by Sector of Origin and Gross National Income at Constant Market Prices (chain linked to 2008)

Section 2 Employment by Economic Sector

2.1 Employment

Figure 2.1 depicts employment by broad economic sector in quarter 4 2010. In terms of size, the wholesale and retail sector remained the largest, employing 267,400 persons. Industry, comprising manufacturing and other productive industries, was the second largest, providing employment for 238,500 persons. Health and social work, with 234,300 persons engaged was the third largest, followed by the education sector which employed 152,400.

Figure 2.1 Employment by Broad Economic Sector (000s), Quarter 4 2010



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

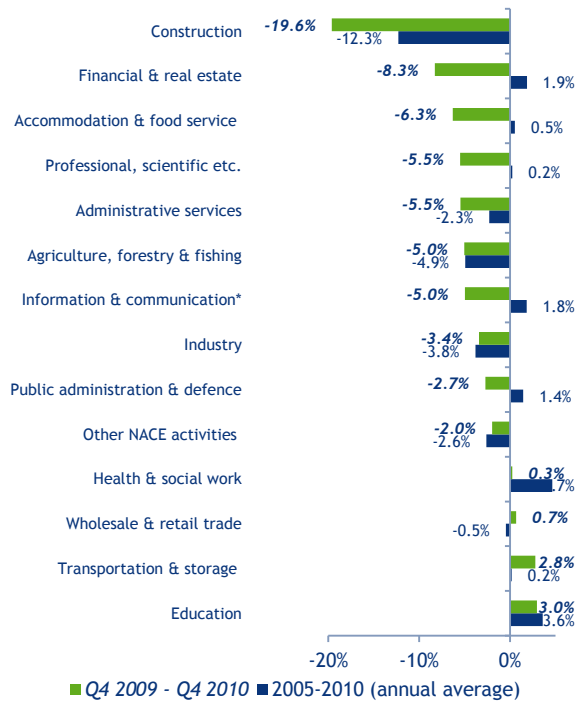
* Note: The information and communication sector includes computer programming, telecommunications, information services, publishing and broadcasting; it does not include ICT equipment manufacturing or the wholesale of computers, computer peripheral equipment and software.

2.1.1 Employment Growth (2005-2010)

The decline in employment during the downturn brought employment below 2005 levels and resulted in a negative five-year annualised employment growth rate for the period 2005-2010 in many sectors (Figure 2.2). The most severely affected sectors were: construction, agriculture, industry, administrative services, wholesale and retail, and a range of various NACE activities[14].

With the exception of health, retail, transport and education, employment in all sectors declined between quarter 4 2009 and quarter 4 2010.

Figure 2.2 Employment Growth by Sector (%)



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

* Note: The information and communication sector includes computer programming, telecommunications, information services, publishing and broadcasting; it does not include ICT equipment manufacturing or the wholesale of computers, computer peripheral equipment and software.

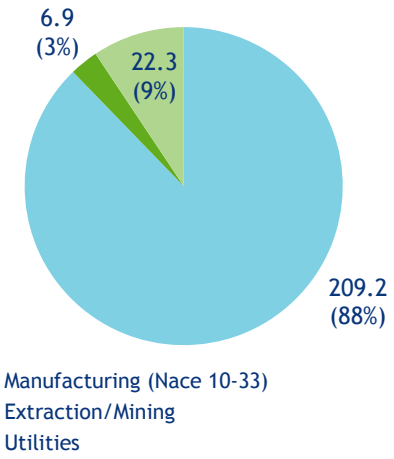
[14] Other NACE activities comprise: creative arts and entertainment, cultural activities, sports, amusement and recreation activities, gambling and betting activities, activities of membership organisations, repair of personal and household goods, a range of personal service activities including employment domestic personnel, activities of extraterritorial organisations and bodies and other not stated activities.

Industry

This broad economic sector, comprising extraction and mining, manufacturing, and utilities provided employment for 238,500 persons in quarter 4 of 2010 (Figure 2.3). Over the period quarter 4 2009-quarter 4 2010, employment in this sector contracted by 3.4%, while its share of total national employment remained at 13%.

In quarter 4 2010, manufacturing accounted for 88% of total industrial employment, amounting to 209,000 jobs. There were 22,300 persons employed in utilities (electricity, gas, water, and waste), accounting for 9% of total industrial employment – electricity & gas supply activities accounted for approximately half of this. Extraction and mining activities, the smallest segment of the industry sector, employed almost 7,000 persons.

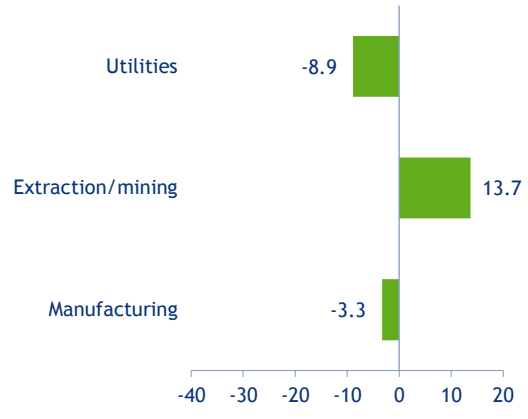
Figure 2.3 Industrial Employment by Sector (000s), Quarter 4 2010



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

Between quarter 4 2009 and quarter 4 2010, employment declined in utilities and manufacturing, by 9% and 3% respectively. In contrast, employment increased by 14% in extraction and mining (Figure 2.4).

Figure 2.4 Industrial Employment Growth by Sector (%), Quarter 4 2009-Quarter 4 2010

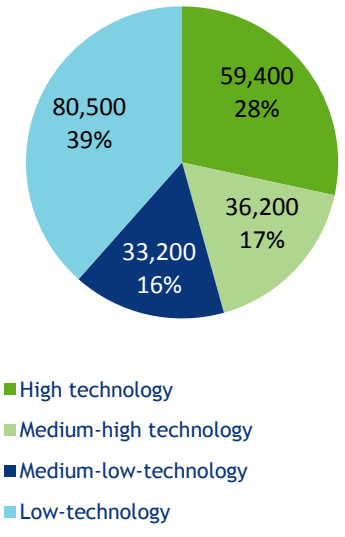


Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 2.5 shows the breakdown of manufacturing employment by technological intensity. In quarter 4 2010, more than one quarter of employment (28%) was in high technology manufacturing industries, which includes the production of pharmaceuticals and computers, electronic and optical products. An additional 17% of employment was in the medium-to-high technology category, which includes the manufacture of chemicals, electrical, transport and machinery equipment. Combined employment in these two broad sectors accounted for 45% of manufacturing employment in quarter 4 2010. However, at the same time, the low technology[15] segment of manufacturing was the largest, accounting for 39% of total employment.

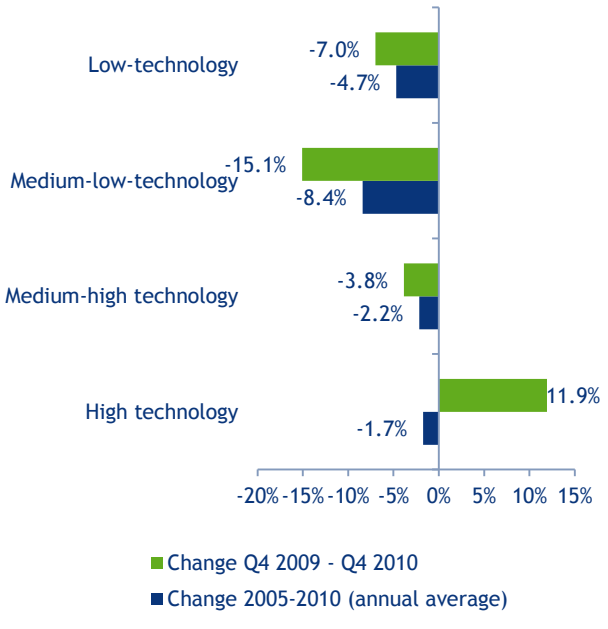
[15] This segment of manufacturing includes the manufacture of food products, beverages, tobacco products, textiles, wearing apparel, leather and leather products, wood and wood products of wood, paper and paper products, printing, furniture, other manufacturing activities, and the reproduction of recorded media. The medium-low technology segment includes the manufacture of coke and refined petroleum products, rubber and plastic products, other non-metallic mineral products, basic metals, fabricated metal products (except machinery and equipment, and the installation of machinery and equipment).

Figure 2.5 Manufacturing Employment by Technological Intensity, Quarter 4 2010



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

Figure 2.6 Manufacturing Employment by Technological Intensity - % Change



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

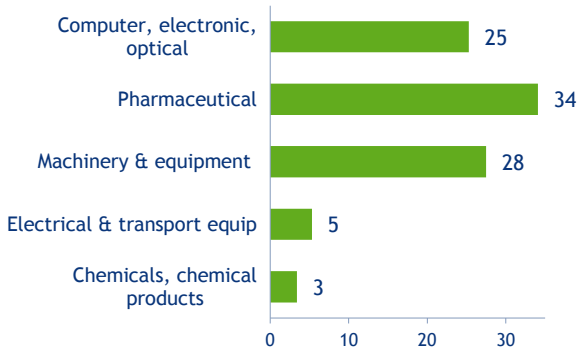
Between quarter 4 2009 and quarter 4 2010, employment declined in all manufacturing segments except in the high technology segment (Figure 2.6). The most pronounced decline was recorded in the medium-low technology sector, which contracted by 15% over that period. Compared to employment levels in 2005, all segments experienced a decrease in employment, with the high and medium-high technology sectors recording the smallest declines – 1.7% and 2.2% respectively.

In quarter 4 2010, high and medium-high technology manufacturing employed 95,000 persons. Pharmaceutical activities accounted for over one third of total employment in high and medium high technology manufacturing, followed by machinery and equipment and computer, electronic and optical (which includes some types of medical devices) (Figure 2.7).

Within the high technology manufacturing segment, pharmaceutical activities accounted for more than one half.

Between quarter 4 2009 and quarter 4 2010, employment increased in high technology activities – it grew considerably in pharmaceutical activities, and only marginally in computer, electronic and optical segment. It declined in medium-high technology activities, with the noted exception of the chemical segment which expanded strongly during the second half of 2010, albeit from a relatively small base (Figure 2.8).

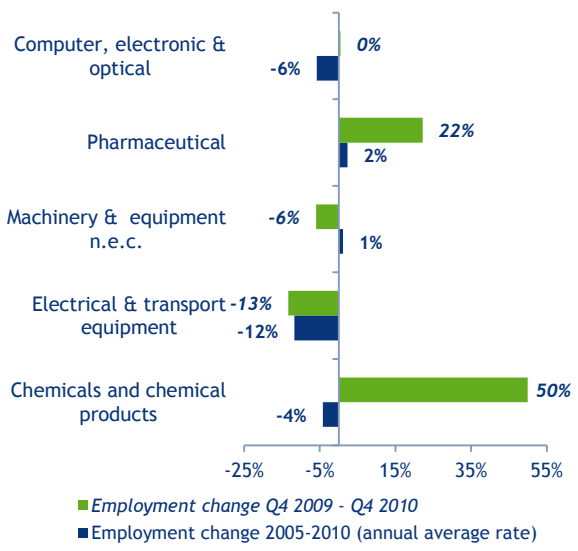
Figure 2.7 High & Medium-High Tech Manufacturing Employment (000), Quarter 4 2010



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

In terms of five-year annual average employment change between 2005 and 2010, only the pharmaceutical sector experienced growth (2.3%). Employment in computer, electronic and optical manufacturing declined by 5.8% per annum, on average, over the period 2005-2010; there were approximately 8,500 fewer persons employed in these activities in 2010 when compared to 2005.

Figure 2.8 High and Medium-High Technology Intensive Manufacturing Employment - % Change



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

Construction

Over the period quarter 4 2009 to quarter 4 2010, employment in construction declined by one fifth, which translated into 27,000 fewer persons working in the sector. It accounted for 6% of total employment in quarter 4 2010, compared to 13% at the peak of the boom. The sector has been contracting since 2007, employing 170,000 fewer people in 2010 than in 2007.

Agriculture

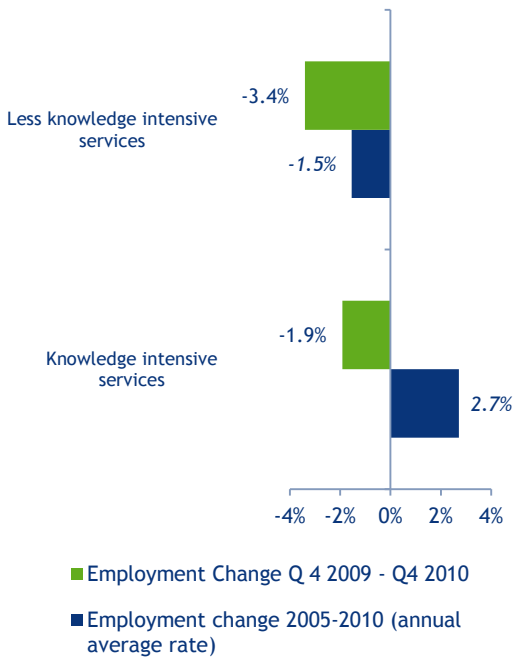
Agricultural employment declined at an annual average rate of 4.9% over the period 2005-2010.This translated into 24,500 fewer persons engaged in the sector in 2010 when compared to 2005. Between quarter 4 2009 and quarter 4 2010, employment declined by 5%. Within the sector, employment declined in crop and animal production, while it increased in forestry & logging and fishing & aquaculture.

Services

In quarter 4 2010, there were 1.1 million persons employed in the provision of services. Employment in knowledge intensive services totalled approximately 817,500, which includes those working in sectors such as ICT, finance, insurance, legal, engineering, R&D, marketing, public administration and defence (PAD), education, health, arts and entertainment. There were 305,000 persons employed in less knowledge intensive services, which includes those working in sectors such as wholesale and retail, transport, accommodation and food, office administration, real estate and leasing.

Over the period 2005-2010, the knowledge intensive services sector expanded by 2.7% per annum, on average, while the less knowledge intensive services sector contracted by 1.5%. However, both sectors contracted over the period quarter 4 2009-quarter 4 2010, by 1.9% and 3.4% respectively (Figure 2.9).

Figure 2.9 Services Sector Employment Change by Knowledge Intensity



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

Wholesale and Retail Trade

Between quarter 4 2009 and quarter 4 2010, employment in the wholesale and retail sector remained almost unchanged. However, within the sector, employment in retail contracted by 2% during the period, while it expanded by 7% in both motor trade and wholesale trade. Retail continued to account for the majority of employment in this sector – providing jobs for 181,500 persons, while wholesale and motor trade provided jobs for 52,000 persons and just above 33,500 persons respectively in quarter 4 2010.

Health

In quarter 4 2010, there were 234,000 persons in employment in the health sector. Of this, 150,000 persons were engaged in human health service provision; 24,000 persons were employed in providing residential care services; and approximately 60,500 persons were engaged in the provision of various social (non-residential) services.

Between quarter 4 2009 and quarter 4 2010, employment in activities related to human health expanded by 1.8%,while it contracted by 0.7% in residential care and social work activities respectively.

Education

There were 152,500 persons employed in the education sector in quarter 4 2010. In that quarter, there were 4,500 additional persons in employment in the education sector compared to quarter 4 2010.

Accommodation and Food Services

Between quarter 4 2009 and quarter 4 2010, employment in the accommodation and food services sector contracted by approximately 7,500. While employment declined in both segments of the sector, the bulk of the decline was in food services and beverages services.

Public Administration and Defence (PAD)

In quarter 4 2010, there were just fewer than 105,000 persons employed in public administration and defence. This represents a 2.75% contraction in employment relative to quarter 4 2009.

Other NACE activities

In quarter 4 2010, employment in a diverse range of activities not elsewhere classified – ranging from various personal services to sport, amusement & recreation activities – amounted to just fewer than 100,000 persons. This represented a decline of 2% when compared to quarter 4 2010.

Professional, Scientific and Technical Activities

By quarter 4 2010, employment declined to 98,000 – a contraction of 3.5% compared to quarter 4 2009. Within the sector, legal and accounting activities expanded, adding approximately 4,000 persons in employment, while architectural and engineering activities contracted by approximately the same magnitude. Employment in other activities (advertising and market research and other professional, scientific and technical activities) also contracted sharply over the period.

Financial, Insurance and Real Estate Services

Although the sector grew over the period 2005-2010, expanding by 1.9% per annum, on average, it contracted sharply during 2010, with a net loss of almost 9,000 jobs between quarter 4 2009 and quarter 4 2010. Financial service activities (banking) accounted for almost the entire decline, with approximately 7,000 less persons in employment compared to quarter 4 2009, with employment in activities auxiliary to financial services also declining. Employment in insurance, reinsurance and pension funding activities declined only marginally, whereas employment in real estate activities remained static.

Transportation and Storage

In quarter 4 2010, total employment in the transportation and storage sector amounted to just below 96,000. Between quarter 4 2009 and quarter 4 2010, employment in land transport contracted by 3%, although it still remained the largest employer in the transport and storage sector in quarter 4 2010, with almost 50,000 persons employed. In contrast, postal & courier activities and air transport expanded by 6.5% and 7.8% respectively between quarter 4 2009 and quarter 4 2010.

Information and Communications[16]

The information and communication technology sector grew by 1.8% per annum, on average, during the period 2005-2010, with employment expanding by almost 6,500 persons. However, while the sector has performed reasonably well during a large part of the recession, the latest figures indicate that a contraction of 5% occurred over the period quarter 4 2009-quarter 4 2010, translating into about 3,500 net job losses.

Between quarter 4 2009 and quarter 4 2010, publishing activities and information services experienced the largest declines in relative terms (by 30% and 27% respectively). The largest decline in absolute terms was recorded in telecommunications, with employment in this segment contracting by over 2,000 persons over that period.

During the same period, computer programming, consultancy and related activities proved resilient, employment expanded to 36,000 persons by quarter 4 2010. These activities recorded an average annual employment growth rate of 2.6%, adding approximately 4,500 persons over the period 2005-2010.

Administrative and Support Service Activities

Following declines in both 2008 and 2009, employment in administrative and support services contracted further in 2010. In contrast to sharp declines recorded in the preceding two years, employment in property related activities (renting and leasing) remained relatively stable between quarter 4 2009 and quarter 4 2010. Employment also remained relatively static in office administration and support activities, while it contracted in all other sub-sectors

[16] The information and communication sector includes computer programming, telecommunications, information services, publishing and broadcasting; it does not include ICT equipment manufacturing and wholesale of computers, computer peripheral equipment and software.

(recruitment, travel, security, etc.), with the largest decline recorded in recruitment related services.

2.1.3 Economic Outlook and Expected Employment Trends by Sector

Global Context and Outlook

The world economy expanded in 2010, with the growth rate reaching 5% (3% for advanced economies). Growth of 4.4% (2.4% for advanced economies) is projected for 2011, with similar growth rates projected for 2012. World trade flows grew strongly in 2010, increasing by 12.4% compared to 2009. It is expected that the international trade volume will increase further in both 2011 and 2012, by 7.4% and 6.9% respectively[17]. The positive global outlook, in addition to Ireland's improved cost competitiveness, is expected to sustain strong growth in the export of Irish goods and services.

Sectoral Outlook and Employment Prospects

Manufacturing and Other Industry

Strong external demand, coupled with improvements in competitiveness (stemming from the fall in unit labour costs in manufacturing)[18], outweighed the effect of rising oil and raw material prices and unfavourable exchange rates on the performance of the manufacturing sector. Merchandise exports are expected to continue to increase in volume terms in 2011 and 2012 by 4.6% and 4.3 % respectively. Exports are set to provide a continued impetus, especially for the high technology sector, in the short-medium term. However, employment growth is expected to lag behind the growth in manufacturing output in the short-term.

Utilities

An important impetus for growth in the energy sector lies in the policy targets regarding renewable energy use (16% of total final energy consumption)[19]. The activities expected to provide job opportunities are wind generation and the supply and installation of smart electricity meters. In the short-term, however, the employment growth potential of this sector is likely to be tempered by sluggish demand for energy (due to the recession) and budgetary constraints (the lack of available credit) facing possible investors.

Changes in EU and national environmental requirements are likely to positively affect the demand for water preservation and supply services, with waste water treatment likely to be the main priority[20].

Growth is also expected for waste collection, treatment and disposal activities, with waste management, recovery and recycling and environmental consultancy services expected to expand.

Construction

The latest indicators point towards a further decline in activity in all construction sub-sectors – residential, commercial and infrastructure[21]. Increased uncertainty, lower disposable incomes, credit constraints, weak labour demand and negative net migration, will continue to negatively impact on residential and commercial construction in the short to medium term. Civil

[17] IMF (2011) World Economic Outlook (WEO)
[18] The fall in relative unit labour costs for the period 2007-2010 is estimated at 9.6%; the annual decline in unit labour costs for 2010 is estimated at 6.1% (Central Bank of Ireland, 2010, Quarterly Bulletin 01).
[19] The EU Directive 2009/28/EC
[20] Forfás (2010) Future Skills Needs of Enterprise within the Green Economy; Government of Ireland (2008) Building Ireland's Smart Economy: A Framework to Sustainable Economic Renewal
[21] Construction Purchasing Managers' Index, March 2011

engineering is likely to continue to underperform given the continued reduction in capital spending on infrastructural projects. Some employment opportunities are expected to arise within the green economy (e.g. renewable energy, energy efficiency, retrofitting, waste management, etc.).

Agriculture

Agriculture enjoyed considerably improved terms of trade in 2010, with output prices for all major products increasing. However, while the sector performed well in the second half of 2010, it nevertheless recorded a contraction in employment on an annual basis.

Wholesale and Retail

Employment in this sector is expected to remain below its peak level in 2008 in the medium-term. Personal spending is forecast to fall by almost 2% in 2011, with a recovery not expected before 2013. Economic uncertainty, credit constraints, and lower disposable personnel incomes will continue to adversely affect consumption levels. In addition, upward-only rent reviews for existing retail property leases continue to impose barriers to downward price adjustments for some consumer goods.

While the scrappage scheme[22] has provided a temporary stimulus to activity in the motor trade sector, the same factors affecting general consumption will continue to create a challenging environment for this sub-sector in the short-medium term.

[22]The scrappage scheme provides for Vehicle Registration Tax (VRT) relief when a new passenger car with CO2 emissions of not more than 140g/km is purchased and registered and another passenger car, over ten years old is scrapped. The scheme will end on 30 June 2011.

Healthcare

Although demand for healthcare services is expected to rise (e.g. due to an ageing population, the recent high numbers of births), employment prospects, particularly in the public sector, are likely to remain limited in the short-medium term due to public and household budgetary constraints.

Accommodation and Food Services

The food and accommodation sector continued to suffer from falling demand in 2010. As in 2009, the number of overseas visitors to Ireland decreased by 12.9% in 2010. In addition, demand from domestic consumers was negatively affected by the decline in real disposable incomes.

The recovery in the global economy is expected to positively impact on performance of the accommodation and food services sector in the coming years. Nonetheless, the sector faces a number of challenges in its aim to return to the levels of activity observed at the peak by 2015.

Recent policy initiatives (e.g. VAT reduction, removal of Air Travel Tax and easing of some travel restrictions for short stay visitors) are expected to impact positively on this sector.

Professional, scientific and technical activities

The demand for professional, scientific and technical services is expected to be strong in the coming years, driven by a global recovery, technological upgrades, regulatory changes and continued shifts towards higher value added activities (e.g. legal, accounting, R&D, engineering).

The outlook for architectural and construction related engineering remains unfavourable.

Financial, Insurance and Real Estate

Within the financial sector, retail banking is set to contract further in the short-medium term due to the on-going restructuring of the banking system[23]. The associated employment decline could amount to several thousand jobs in 2011. While insurance activities are also expected to be affected by the on-going restructuring and regulatory changes (e.g. Solvency II), the impact on employment is not expected to be as significant. In contrast, the outlook for the international financial services is more favourable.

Information and Communication Technology

Computer services (software and hardware) performed well in the final quarter of 2010, increasing by 16% in value terms and accounting for a sizeable share of the observed increase in services export – this trend is expected to continue. Areas expected to perform strongly in the coming years are cloud computing and data analytics, for which Ireland is well placed to acquire a considerable share of the international market.

Demand for a wide range of electronic communications services is expected to remain strong, despite the expected number of redundancies announced by Eircom and An Post.

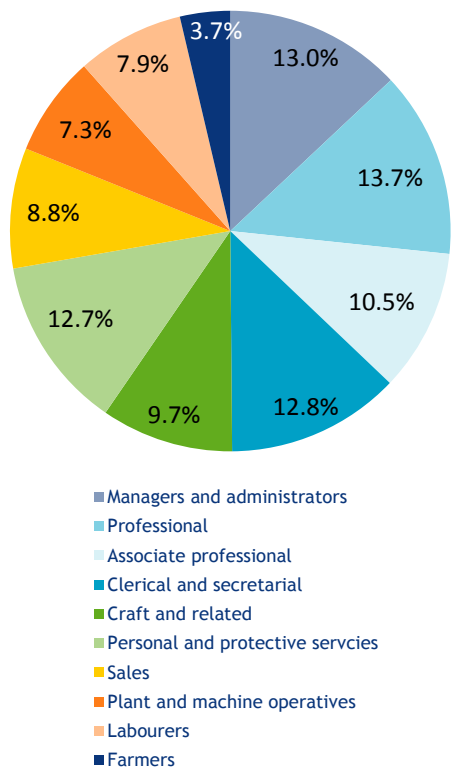
[23] Financial Measures Programme ('FMP') – the Central Bank of Ireland's obligation under the agreement between the European Commission, European Central Bank and the International Monetary Fund

Section 3 Employment by Broad Occupation

3.1 Employment

Figure 3.1 presents employment in 2010 by broad occupation. The occupational distribution of employment in 2010 remained almost unchanged compared to 2009. There was a one percentage point gain in the share for professionals and a loss of share of a similar magnitude for craft occupations. As a result, 'white collar' employment reached 50%, with managerial, professional, associate professional and clerical occupations combined accounting for one in two jobs in 2010.

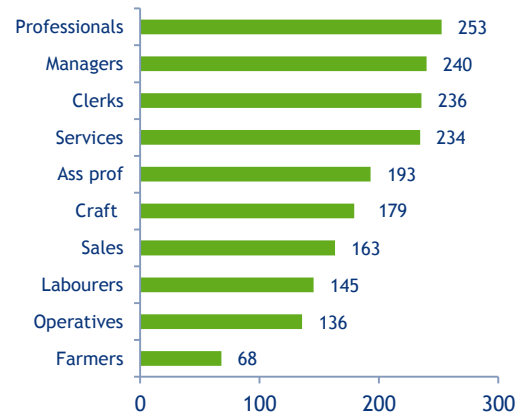
Figure 3.1 Employment by Broad Occupational Group (%), 2010



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

In terms of numbers employed, professionals were the largest occupational group in 2010, with just over one quarter of a million persons employed (Figure 3.2). Clerks, which were the second largest occupational group in 2005, slipped to the third place in 2010, behind managers. Craft occupations, which had been the largest occupational group over the period 2005-2008, slipped one place further to become the sixth largest occupational group, accounting for just fewer than 180,000 employed.

Figure 3.2 Employment by Broad Occupational Group (000s), 2010

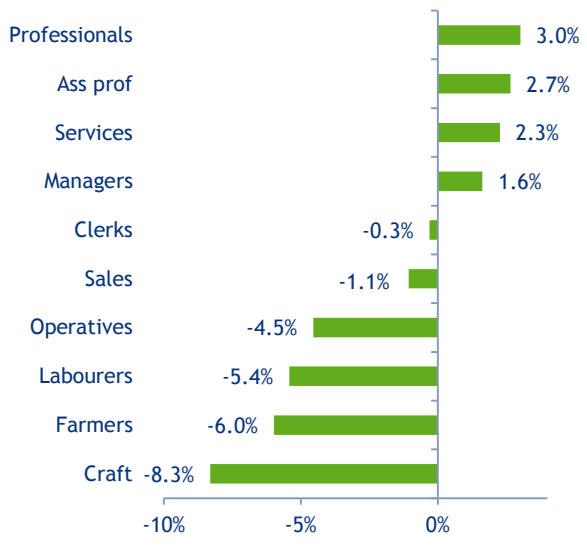


Source: Analysis by FÁS (SLMRU) based on CSO data

3.2 Employment Growth

Employment growth in broad occupational groups for the period 2005-2010 is presented in Figure 3.3. With the exception of farmers (where the downward trend had been identified long before the recession), employment in all occupational groups grew until 2007, however, in most groups it has declined since. A decline to the levels below 2005 resulted in a negative five-year average annual growth rate for craft, operative, labouring, and sales and clerical occupations. By 2010, employment in professional, associate professional, services and managerial occupations was above 2005 levels because it either continued to increase or remained broadly similar to the peak, resulting in a positive 5-year annual average employment growth rate.

Figure 3.3 Annualised Employment Growth by Broad Occupational Group, 2005-2010



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

Figure 3.4 Employment Growth by Broad Occupational Group, Annualised Data, 2009-2010

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

Between 2009 and 2010, employment declined in all occupational groups, except professionals (Figure 3.4). However, with the exception of managers and services occupations, the decline was slower compared to the previous year, in both absolute and relative terms. The greatest decline was again recorded for craft occupations, for which employment contracted by a further 30,000 persons (or 15%) on an average annual basis; the number of farmers and labourers contracted by 10,000 each.

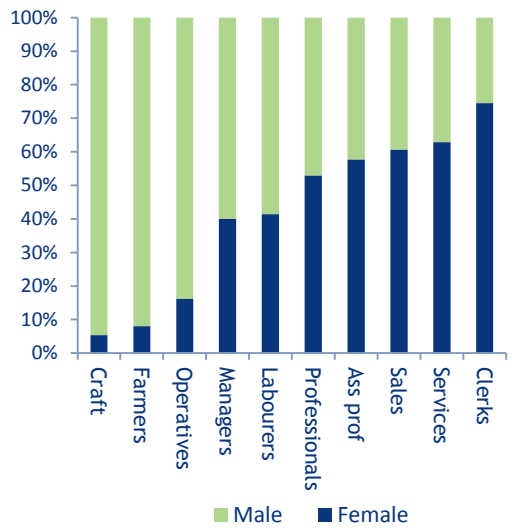
The number of professionals increased by 6,000, while the number of associate professionals remained broadly unchanged compared to 2009.

3.3 Employment by Gender

The gender distribution of employment in broad occupational groups in quarter 4 2010 is presented in Figure 3.5. The gender distribution of occupational employment remained broadly in line with the previous year, with females outnumbering males amongst clerks, salespersons, services workers and associate professionals.

The greatest shift in the gender distribution occurred in professional occupations, where females gained two additional percentage points to account for 53% of professionals. Females lost one percentage point in managerial occupations, accounting for 40% of managers in quarter 4 2010.

Figure 3.5 Employment by Gender and Broad Occupational Group (%), Quarter 4 2010



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

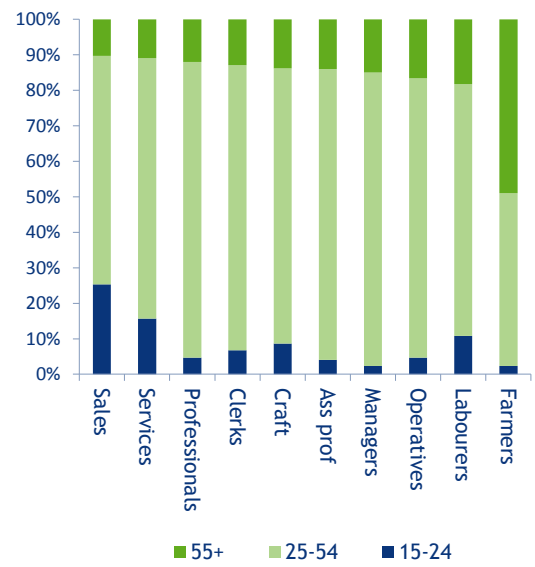
3.4 Employment by Age

Figure 3.6 presents the age distribution of employment in broad occupational groups in quarter 4 2010. With one in two workers aged 55 years or more, farmers had the oldest age profile. This compares to other occupations where the share of older workers was less than 20%. The share of younger workers was highest amongst sales workers, where one in four was younger than 25.

Between quarter 4 2009 and quarter 4 2010, the age distribution of employment shifted further away from the youngest workers in almost all occupational groups, although the shift was not as pronounced as in the preceding year. The share of persons younger than 25 years declined in all occupations, except for farmers and operatives. The greatest decline in the share of under-25s was again observed for craftspersons and clerks (three percentage points each). In contrast, the share of persons older than 55 years increased marginally in most occupations.

The continued shift towards older cohorts in the age distribution of the workforce in 2010 suggests that an increasing share of younger persons are opting to stay in or return to full-time education, but also that the lack of job opportunities in the recession continues to affect young persons (most of whom are new entrants into the labour market) disproportionately more than other persons.

Figure 3.6 Employment by Age and Broad Occupational Group (%), Quarter 4 2010



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

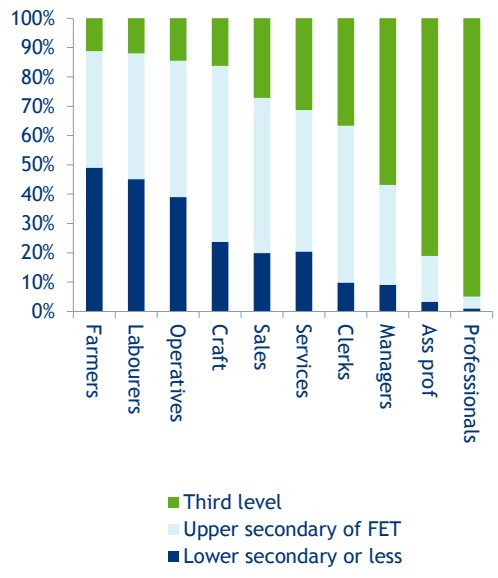
3.5 Employment by Education

The education distribution of employment in broad occupational groups is presented in Figure 3.7. As in the previous year, in quarter 4 2010, the share of third level graduates was highest for professionals, associate professionals and managerial occupations. The share of persons with less than secondary education was highest amongst famers, labourers and operatives.

Between quarter 4 2009 and quarter 4 2010, the share of third level graduates increased in all occupational groups. The greatest increase was observed for sales occupations, where the share

increased by five percentage points to 27%. The share of persons with less than secondary education decreased in all occupational groups, except clerical, with the greatest declines occurring for operatives and labourers (5 and 4 percentage points respectively). The shift in the education distribution towards higher education levels suggests that in each occupational group, persons with lower education attainment were more adversely affected by the decline in labour demand than those with higher education attainment.

Figure 3.7 Employment by Education and Broad Occupational Group (%), Quarter 4 2010



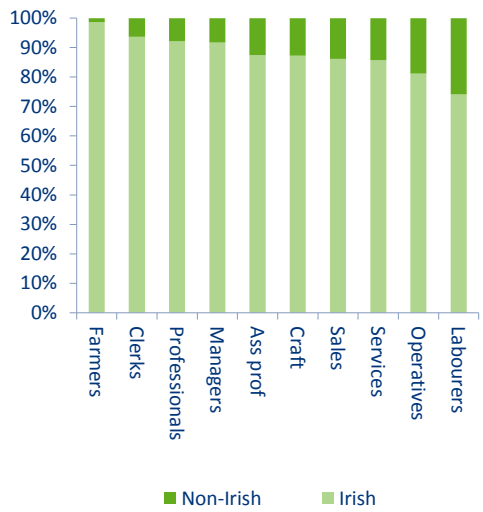
Source: Analysis by FÁS (SLMRU) based on CSO data

3.6 Employment by Nationality

Employment in broad occupational groups by nationality is presented in Figure 3.8. In quarter 4 2010, the greatest share of non-Irish nationals was observed in low skilled occupations: one in four labourers and one in five operatives were non-Irish nationals. The occupational groups with the lowest share of non-Irish nationals were clerks, managers and professionals, where 10% of employment in each group was made up of non-Irish nationals.

Between quarter 4 2009 and quarter 4 2010, the share of non-Irish nationals decreased in all occupational groups, except operatives, labourers and farmers. The greatest decline in the share of non-Irish nationals was observed for services workers (four percentage points).

Figure 3.8 Employment by Nationality and Broad Occupational Group (%), Quarter 4 2010



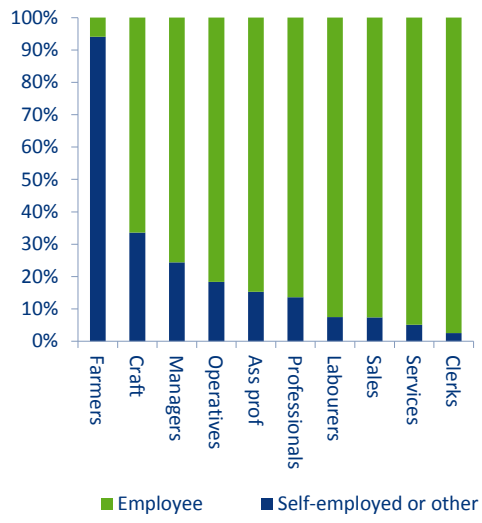
Source: Analysis by FÁS (SLMRU) based on CSO data

3.7 Employment Status

Employment in broad occupational groups by employment status is presented in Figure 3.9. With the exception of farmers, most persons in employment in quarter 4 2010 were employees. The greatest share of self-employed was found amongst craftspersons (one in three) and managers (one in four). The high share of self-employed amongst managers is due to the inclusion of proprietors (e.g. shop owners, inn keepers etc.) in this category.

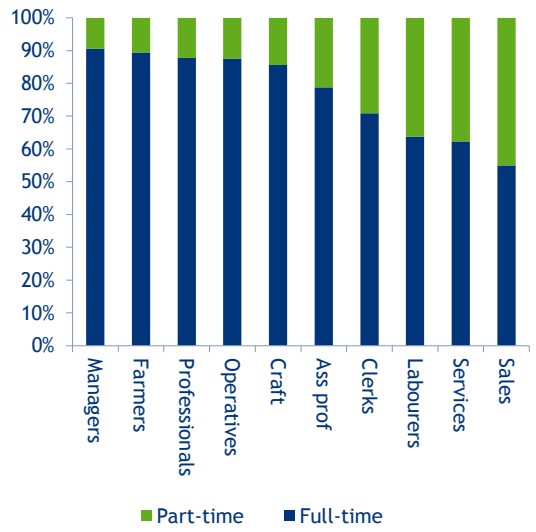
Contrary to one year previously, the share of self-employed declined slightly (the decline ranging from 0.1 to 1.6 percentage points) in all occupations, except clerks and associate professionals. The greatest decline was observed for professionals and operatives.

Figure 3.9 Employment by Employment Status and Broad Occupational Group (%), Quarter 4 2010



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

Figure 3.10 Full-Time and Part-Time Employment by Broad Occupational Group (%), Quarter 4 2010



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

The distribution of employment between full-time and part-time workers in broad occupational groups is presented in Figure 3.10. In quarter 4 2010, the greatest share of part-time workers was found amongst sales persons, services workers and labourers, while managers were the least likely to work part-time.

Between quarter 4 2009 and quarter 4 2010, the share of part-time workers increased in all occupational groups (the increase ranging from 0.5 to 2.3 percentage points), except for associate professionals and operatives. This suggests that there were further downward adjustments in the labour market in line with lower levels of economic activity, with an increasing share of persons in most occupations working shorter hours.

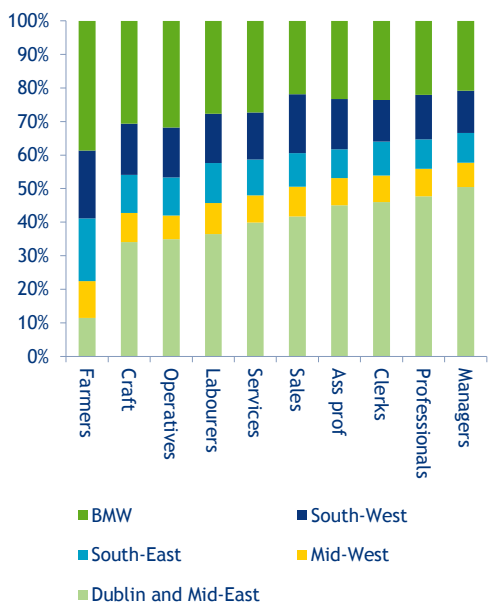
3.8 Employment by Region[24]

Figure 3.11 presents the regional distribution of employment in broad occupational groups. In quarter 4 2010, Dublin and the Mid-East held a disproportionately greater share of 'white collar' jobs compared to other regions. Dublin and the Mid-East held 42% of overall employment, while their share in managerial, professional, associate professional and clerical jobs was 51%, 48%, 45% and 46% respectively.

Compared to quarter 4 2009, there were no significant changes in the regional distribution of employment for quarter 4 2010. The share of professionals, operatives, labourers and farmers located in Dublin and the Mid-East increased marginally (by one percentage point), while the share of managers and clerks declined (by two percentage points each).

[24] While regions are defined by NUTS3, for presentation purposes the Border, Midlands and Western Regions are grouped into the BMW region while the Dublin region and the Mid-East region were grouped to form the Dublin and Mid-East region.

Figure 3.11 Employment by Region and Broad Occupational Group (%), Quarter 4 2010



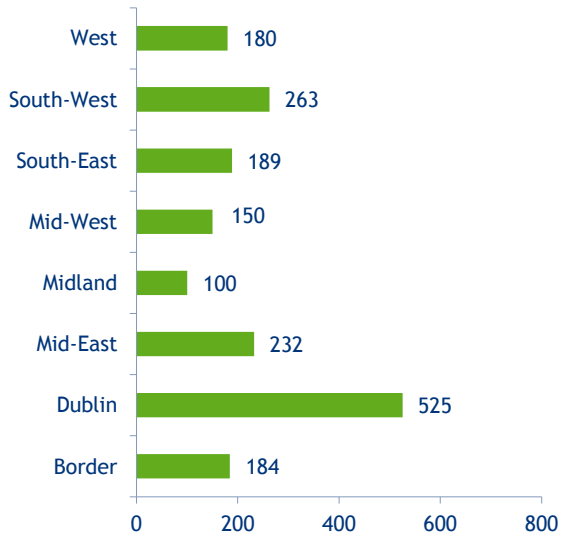
Source: Analysis by FÁS (SLMRU) based on CSO data

Section 4 Regional Skills Profiles

4.1 Employment Growth

Figure 4.1 presents employment levels across regions in Ireland. In quarter 4 2010, over half a million persons were employed in the Dublin region. Combined with the Mid-East, these two regions accounted for over 40% of total national employment. In absolute terms, the employment level was the lowest in the Midlands (100,000).

Figure 4.1 Employment by Region (000s), Quarter 4 2010

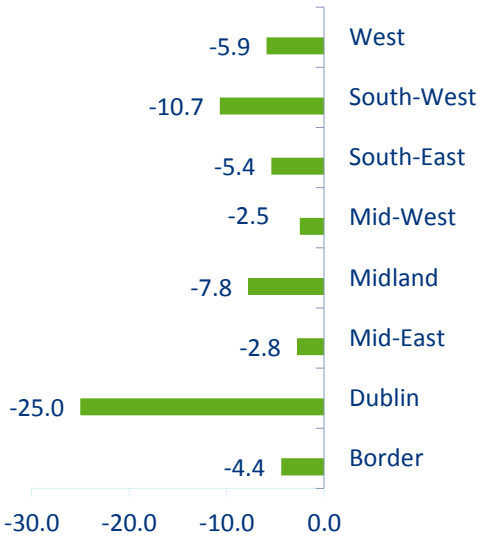


Source: CSO

Between quarter 4 2009 and quarter 4 2010, employment declined in all regions. However, the decline slowed relative to the previous year with all regions except the Midlands recording net job losses of over 10,000.

In the year to quarter 4 2010, at 25,000, the greatest absolute decline in employment was recorded in Dublin (Figure 4.2). This was followed by the South-West (where employment declined by almost 11,000), while employment declined by less than 10,000 in all other regions.

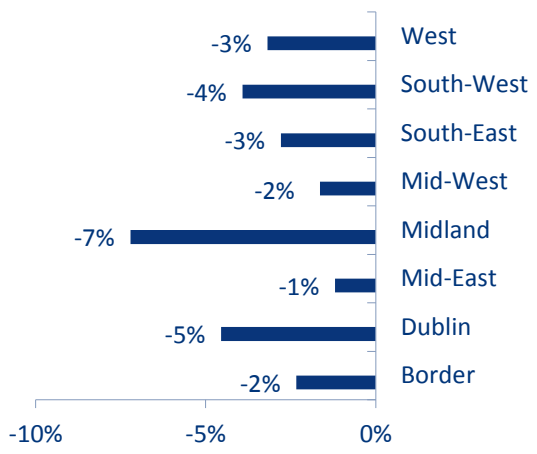
Figure 4.2 Employment Change by Region (000s), Quarter 4 2009 - Quarter 4 2010



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

However, in relative terms, the greatest declines were recorded in the Midlands, where employment contracted by 7% between quarter 4 2009 and quarter 4 2010 (Figure 4.3). The smallest relative decline was recorded in the Mid-East region.

Figure 4.3 Employment Change by Region (%), Quarter 4 2009-Quarter 4 2010



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

Of the total employment decline of almost 65,000 recorded between quarter 4 2009 and quarter 4 2010, over 40% was located in Dublin and the Mid-East, which was in line with their share in total employment (Table 4.1). The most disproportionate decline in employment was recorded in the Midlands, where the regional share in the net job losses (12%) was twice its share in the total employment (6%).

Table 4.1 Change in Employment (000s) and Regional Share in the Change

	Q4 2009 - Q4 2010	Share in total decline	Share in total employment (Q4 2010)
Border	-4.4	7%	10%
Dublin	-25.0	39%	29%
Mid-East	-2.8	4%	13%
Midlands	-7.8	12%	6%
Mid-West	-2.5	4%	8%
South-East	-5.4	8%	10%
South-West	-10.7	17%	14%
West	-5.9	9%	10%
Total	-64.5	100%	100%

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

Although at a slower rate than the previous year, between quarter 4 2009 and quarter 4 2010 unemployment increased in all regions except the Border region (Table 4.2). In absolute terms, the greatest increase in unemployment was recorded in Dublin (+10,000), which represents one third of the total increase in unemployment over the period.

In quarter 4 2010, the unemployment rate remained in double digits in all regions. Persons located in the South-East were at the greatest risk of unemployment where the unemployment rate was 18%. The unemployment rate was also higher than the national average in the Midlands, Mid-West and West regions. The risk of unemployment was the lowest in Dublin, the Mid-East and South-West.

Table 4.2 Unemployment (000s), Change in Unemployment (000s) and Unemployment Rates (%) by Region

	Q4 2010	Q4 2009 - Q4 2010	UE rate	Share in total UE
	000s			
Border	28.2	-(<1.0)	13.3%	9%
Dublin	76.6	9.7	12.7%	26%
Mid-East	33.7	3.4	12.7%	11%
Midlands	18.9	<1.0	15.9%	6%
Mid-West	30.5	5.3	16.9%	10%
South East	41.7	5.5	18.1%	14%
SouthWest	38.4	3.3	12.8%	13%
West	31	4.5	14.7%	10%
Total	299	31.6	14.1	100%

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

Compared to quarter 4 2009, the unemployment rate increased by one-to-three percentage points in all regions except the Border region, where it remained unchanged. The greatest increase was recorded for the Mid-West where the unemployment rate increased by almost three percentage points, from 14.2% to 16.9%

In quarter 4 2010, the lowest participation rate in the labour market was in the Border region (Table 4.3). Withdrawal from the labour force continued in most regions during 2010, with participation rates declining in all regions except the Mid-West and West. Between quarter 4 2009 and quarter 4 2010, the greatest decrease was observed in the Midlands, where the participation rate declined by 3.4 percentage points to 56.7%.

Table 4.3 Participation Rates by Region

	Q4 2009	Q 4 2010	Percentage point change
Border	55.2%	54.4%	-0.8
Dublin	63.5%	62.6%	-0.9
Mid-East	65.8%	64.9%	-0.9
Midland	60.1%	56.7%	-3.4
Mid-West	60.9%	61.4%	0.5
South-East	59.0%	58.4%	-0.6
South-West	59.9%	58.9%	-1.0
West	61.7%	62.0%	0.3
Total	61.2%	60.4%	-0.8

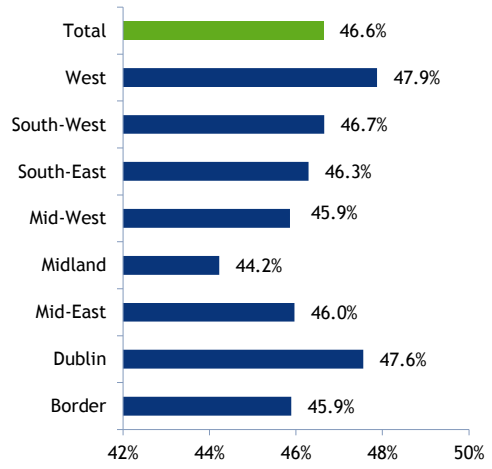
Source: Analysis by FÁS (SLMRU) based on CSO data

4.2 Employment by Gender

The share of females employed in each region is presented in Figure 4.4. As in the preceding year, in quarter 4 2010, males dominated employment in all regions. The highest share of females was found in the West and Dublin regions; the lowest was in the Midlands.

Between quarter 4 2009 and quarter 4 2010, the change in the share of females was relatively small and ranged between -0.4 and +1.3 percentage points. The greatest increase was recorded in the West and South West, where females narrowed the gender gap by a further 1.3 and 1.1 percentage points.

Figure 4.4 Share of Females in Employment by Region, Quarter 4 2010



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

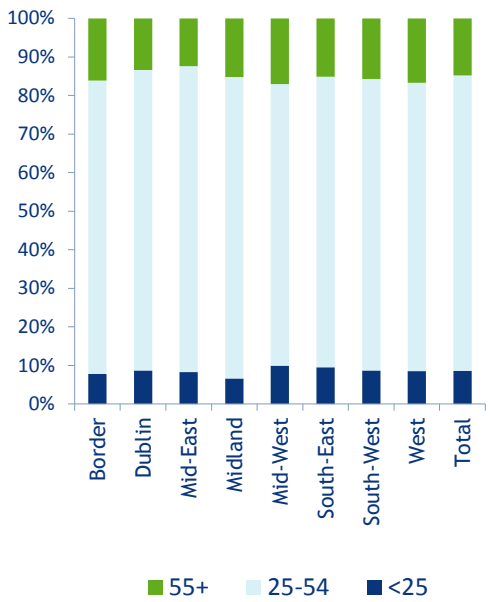
4.3 Employment by Age

Regional employment by age for quarter 4 2010 is presented in Figure 4.5. As in the preceding year, all regions had similar age distributions, with approximately three quarters of employment in the 25-54 age cohort. At 17%, the West and Mid-West regions had the highest share of persons aged 55 and over in employment.

The share of employment in the under 25s category continued to decline during 2010 in all regions, except the Mid-West where it remained unchanged. The share of under-25s was lowest in the Midlands, where it fell by a further three percentage points compared to 7% in quarter 4 2009.

Between quarter 4 2009 and quarter 4 2010, further decreases in the labour market participation rates of the under-25s were recorded in each region except the Mid-West. The greatest decline was recorded in the Midlands region which, together with the Border region, had the lowest participation rate of under-25s of 33%.

Figure 4.5 Regional Employment by Age, Quarter 4 2010



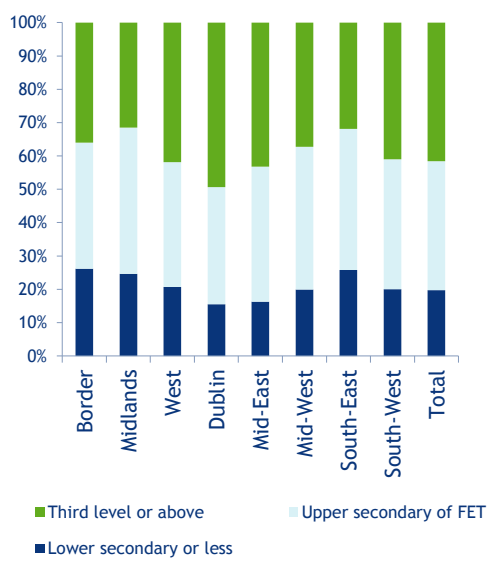
Source: Analysis by FÁS (SLMRU) based on CSO data

4.4 Employment by Education

Regional employment by the highest level of education attained is presented in Figure 4.6. In quarter 4 2010, one in two persons in employment in the Dublin region held a third level qualification, compared to 36% in the Midlands.

Between quarter 4 2009 and quarter 4 2010, the share of third level graduates increased in all regions. The largest increase was in the South-East region (seven percentage points). The share of persons holding upper secondary or further education and training (FET) qualifications remained broadly unchanged (except in the South-East region where it declined by three percentage points); the share of those with less than secondary education declined by up to four percentage points. Further improvements in the educational composition of employment observed over the period suggest that, in each region, third level graduates continued to be less severely affected by the recession than persons with lower qualifications.

Figure 4.6 Regional Employment by Education, Quarter 4 2010



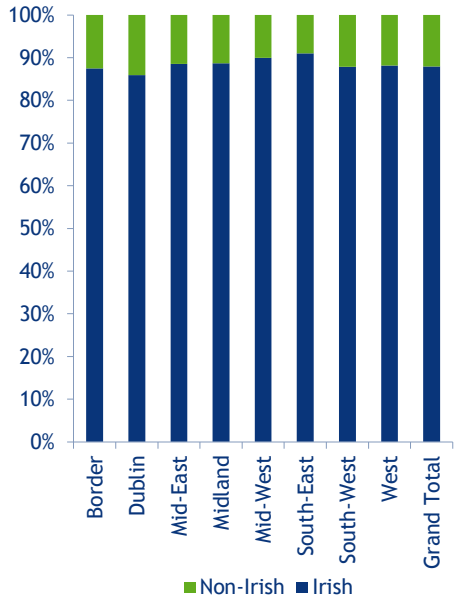
Source: Analysis by FÁS (SLMRU) based on CSO data

4.5 Employment by Nationality

Regional employment by nationality is presented in Figure 4.7. In quarter 4 2010, the highest share of non-Irish workers was recorded in Dublin (14%); the lowest in the South-East (9%).

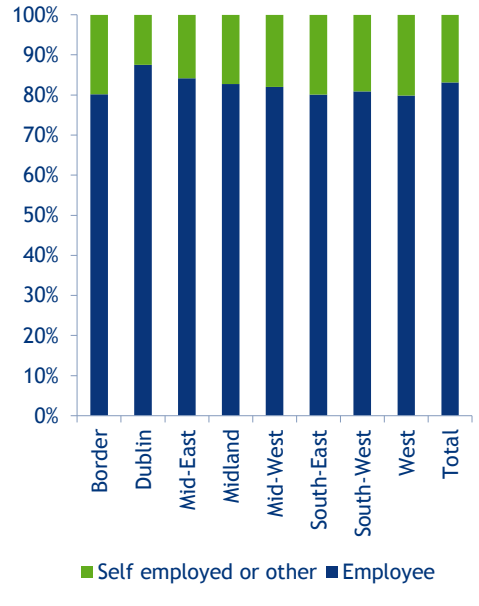
Between quarter 4 2009 and quarter 4 2010, the share of non-Irish workers declined by between one and three percentage points in each region, except in the Border and Midlands regions, where it increased by two and one percentage points respectively.

Figure 4.7 Regional Employment by Nationality, Quarter 4 2010



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

Figure 4.8 Regional Employment by Employment Status, Quarter 4 2010



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

4.6 Employment by Employment Type

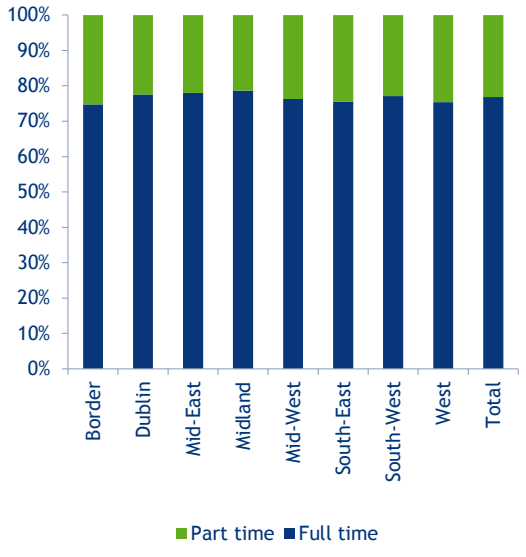
Regional employment by employment status is presented in Figure 4.8. In quarter 4 2010, Dublin had the lowest share of self-employed persons at 12%, while one in five persons in employment in the Border, South-East and West were self-employed.

The share of self-employed persons declined marginally in all regions between quarter 4 2009 and quarter 4 2010, with the greatest decline recorded in the Midlands (three percentage points).

Regional employment by employment type is presented in Figure 4.9. In quarter 4 2010, a significant majority of employed persons in each region was working full-time. The highest share of part-time employment was recorded in the Border, West and South-East regions, where one in four persons in employment were working part-time.

Between quarter 4 2009 and quarter 4 2010, the share of part-time workers increased in all regions except the Midlands, South-East and West, where it remained almost unchanged.

Figure 4.9 Regional Employment by Employment Type, Quarter 4 2010



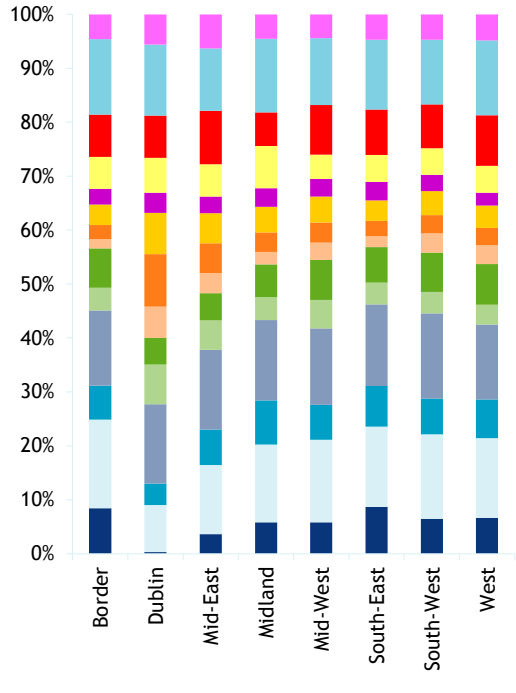
Source: Analysis by FÁS (SLMRU) based on CSO data

4.7 Employment by Sector

Regional employment by sector is presented in Figure 4.10. In quarter 4 2010, almost a quarter of employment in Dublin was in high value added activities (ICT, professional services and finance) compared to the Border and South-East regions where these activities accounted for less than 10% of employment. On the other hand, Dublin had a lower share of employment in agriculture and household activities. Almost all regions outside Dublin (except the Mid-East) had around 30% of employment in manufacturing, agriculture and construction combined.

During 2010, the share of construction employment declined by a further one-to-three percentage points, to account for less than 10% of employment in each region by quarter 4 2010.

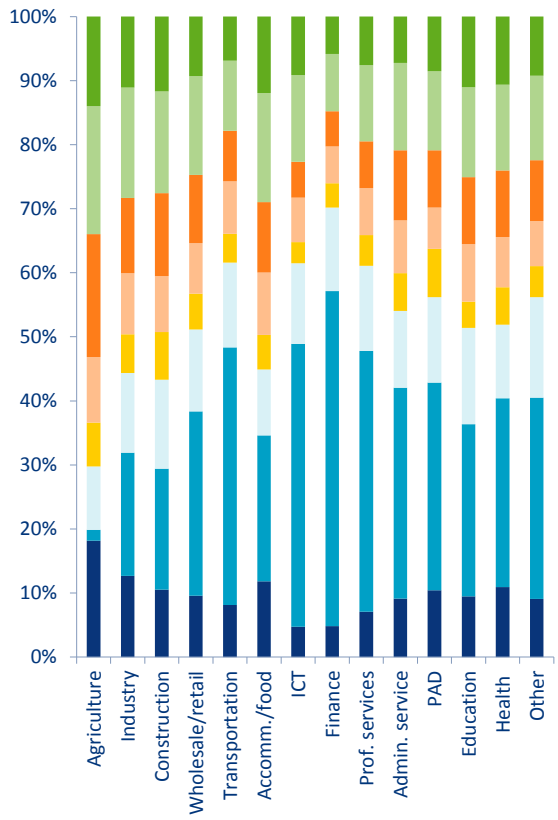
Figure 4.10 Regional Employment by Sector, Quarter 4 2010



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

Sectoral employment by region is presented in Figure 4.11. In quarter 4 2010, more than 40% of ICT, transport, professional and finance related employment was located in Dublin. While having a disproportionately higher share of higher skilled employment, Dublin had the lowest share of employment in agriculture, manufacturing and construction.

Figure 4.11 Sectoral Employment by Regions, Quarter 4 2010



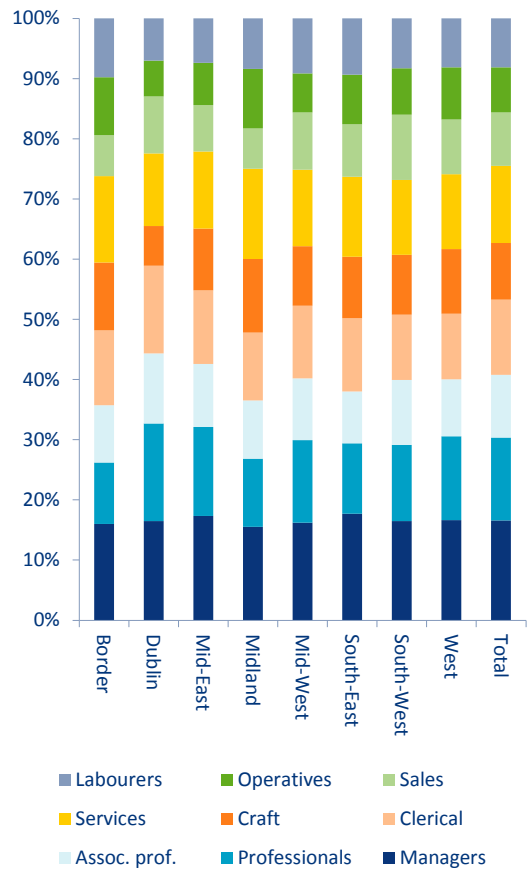
Source: Analysis by FÁS (SLMRU) based on CSO data

4.8 Employment by Occupation

Regional employment by broad occupational group is presented in Figure 4.12. In quarter 4 2010, 59% of employment in Dublin was in 'white collar' jobs (professional, associate professional, managerial and clerical) compared to 48% in the Border and Midlands regions. At 13%, the share of lower skilled jobs (operative and labouring) in the Dublin region was the lowest, while almost one in five jobs in the Border region was in these occupational groups.

Between quarter 4 2009 and quarter 4 2010, the occupational distributions of regional employment changed only marginally (changes ranging 0-2 percentage points), with the most pronounced change occurring in the share of services workers in the Midlands, which increased by four percentage points to 15%.

Figure 4.12 Regional Employment by Occupation, Quarter 4 2010



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

The individual occupations that recorded the largest net increase/decline in employment (1,000+) between quarter 4 2009 and quarter 4 2010 are presented in Table 4.4. Overall, there were a smaller number of occupations which recorded gains or losses of a magnitude greater than 1,000 compared to the previous year. Most regions had a higher number of occupations with net job losses (>1,000) than gains (>1,000). Most of the job gains and losses were in lower skilled occupations. Given the size of its labour market, Dublin recorded the

greatest number of occupations with gains and losses of at least 1,000.

Table 4.4 Occupations with Net Job Gains/Losses Greater than 1,000 by Region, Q4 2009 – Q4 2010

Region	Net job gains >1,000	Net job losses >1,000
Border	Meat cutters	Clerks
	Cleaners	Sales assistants
		Welders
Dublin	Catering assistants	General managers
	Drivers (goods)	Bank clerks
	Receptionists	Other clerks
	Transport managers	Care assistants
	Accountants	Sales assistants
	Sales reps	Computer programmers
	Shop managers	Architects
	Gardí	Civil service officers
		Accounts clerks
		Chefs
		Cleaners
		Taxi drivers
		University teachers
		Painters and decorators
		Filing clerks
Mid-East	Drivers (goods)	General managers
	Shop managers	Clerks
	Sec. school teachers	Scientific technicians
Midlands		Farmers
		Primary/nursery teachers
		Sales assistants
		Secretaries
Mid-West		Farmers
South-East	Farmers	Carpenters
	Clerks	Shop managers
	Nurses	Cleaners
	Bar staff	
South-West	Sales assistants	Farmers
		Secretaries
		Clerks
West	Assemblers/lineworkers	Farmers
	Clerks	Sales assistants

In most regions, the net job losses were greatest for clerical occupations (e.g. filing clerks, bank clerks, secretaries), sales assistants and farmers. Construction-related occupations were less prominent amongst job losses than in the previous year.

Section 5 Education and Training

This section provides an overview of the supply of skills from the education and training system in Ireland across all levels of the National Framework of Qualifications (Appendix A provides details of the awards and level on the Framework). Table 5.1 shows the estimated number of awards made at each NFQ level in 2010 by provider type; Table 5.2 provides the field of learning for each award type. Further education and training awards data in Tables 5.1 and 5.2 refer to major awards only. Table 5.1 Summary of Education and Training Awards by NFQ Level, 2010

Table 5.1 Summary of Education and Training Awards by NFQ Level, 2010[25]

	NFQ 1-2	NFQ 3	NFQ 4	NFQ 5	NFQ 6	NFQ 7	NFQ 8	NFQ 9/10	Total
Junior Certificate	-	56,000	-	-	-	-	-	-	56,000
Leaving Certificate	-	-	58,000		-	-	-	-	58,000
FETAC (Major awards)*	450	2,600	1,370	20,500	6,830	-	-	-	31,750
Institutes of Technology	-	-	-	-	2,760	6,860	8,650	2,010	20,280
Universities	-	-	-	-	1,170	1,870	17,090	13,960	34,090
Total	450	58,600	79,870		10,760	8,730	25,740	15,970	200,120

Source: SEC; FETAC (Major Awards); HEA

Table 5.2 Summary of Further and Higher Education and Training Awards by Field of Education, 2010[26]

Field	NFQ 1-2	NFQ 3	NFQ 4	NFQ 5	NFQ 6	NFQ 7	NFQ 8	NFQ 9/10	Total
General	450	2,410	530	40	-	-	-	-	3,430
Education	-	-	-	20	70	50	1,720	3,080	4,940
Humanities & Arts	-	-	-	2,470	680	1,110	4,810	2,020	11,090
Social Science, Bus. & Law	-	200	210	5,080	1,960	2,580	7,920	5,240	23,190
Science	-	-	-	610	480	900	3,090	1,710	6,790
Engineering & Construction	-	-	20	540	4,060	2,030	2,730	850	10,230
Agriculture & Veterinary	-	-	70	1,110	980	210	270	70	2,710
Health & Welfare	-	-	20	8,670	1,420	960	4,620	2,630	18,320
Services	-	-	530	1,970	1,120	910	580	380	5,490
Total	450	2,610	1,380	20,510	10,770	8,750	25,740	15,980	86,190

Source: FETAC (Major awards); HEA

*There are four award types on the National Framework of Qualifications (major, minor, special purpose and supplemental). Further education and training awards data refers to major awards only. Other award types in the further education and training sector are discussed in Section 5.2.

[25]Graduation data for universities and institutes of technology is for 2009 – the most recent available data. All data presented in Tables 5.1 and 5.2 has been rounded and therefore the figures do not add to the totals in each respective table.

5.1 Junior and Leaving Certificate

There were almost 114,000 combined Leaving and Junior Certificate students in 2010. The Junior Certificate, placed at level 3 on the NFQ, accounted for just over 56,000 sits, representing a 1% increase since 2009. At almost 58,000 in 2010, the number of Leaving Certificates (NFQ 4-5) increased by 1% compared to 2009 - the highest level in five years. Of the 58,000 Leaving Certificates, approximately 39,000 had followed the Leaving Certificate Established programme, almost 16,000, the Leaving Certificate Vocational programme (LCVP) and over 3,000 the Leaving Certificate Applied programme (LCA), making up 67%, 27% and 6% of total sits respectively. Approximately 2% of Leaving and Junior Certificate candidates in 2010 were re-entrants to education, sitting the examinations through schemes such as the Vocational Training Opportunities Scheme (VTOS).

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, Bord Iascaigh Mhara, Teagasc, FÁS, Vocational Education Committees (VECs), adult and community education and training centres, private providers and the workplace (e.g. Skillnets). The courses offered range in duration from a number of days to longer courses, such as apprenticeship programmes, which are typically 4 years.

The number of FETAC awards for 2009 and 2010 is presented in Table 5.3. The number of award holders increased by approximately 1% over the period 2009-2010, reaching almost 177,000 in 2010. There was also an increase in the total number of awards made, which reached 348,005 in 2010, up 11% on the preceding year.

With the exception of special purpose awards, the number of awards and award holders increased for each award type between 2009 and 2010:

- the number of major awards increased by 10% (almost 3,000 awards) to approximately 32,000;
- the number of minor awards increased by 13% to reach 304,000 while the number of minor award holders rose by 4% to reach 141,000; on average, minor award holders received two minor awards each
- the number of special purpose awards declined by 30%, to just over 11,000
- the number of supplemental awards increased by 4% to approximately 1,300.

Major Awards: major awards were made predominantly at level 5 (65%) and level 6 (22%); most of the remaining awards were made at levels 3 and 4 (a combined total of almost 4,000 awards); the combined share of level 1 and 2 awards amounted to less than 2% (or just under 500 awards).

In terms of field of learning[26], approximately 30% of major awards (almost 9,000) were in education, health and welfare, the vast majority of which were at level 5 (e.g. childcare, healthcare support); the second largest field of learning was business and administration, which amounted to one fifth (6,500) of all major awards, most of which were also at level 5.

Minor awards: more than one half of all minor awards were at level 5; awards at levels 3 and 4 each accounted for 20% while 7% of minor awards were at level 6; the combined number of awards at levels 1 and 2 accounted for less than 0.5%.

[26] Field of learning refers to FETAC internal classifications (and not ISCED as has been used elsewhere in this report); the FETAC data in Tables 5.1 and 5.2, which refers to major awards only, was classified by the SLMRU according to ISCED field of learning codes.

At more than 77,000 in 2010, one quarter of all minor awards were in the services field of learning (e.g. manual handling, security skills); a further 24% (approximately 71,000) were for core skills, language and general studies (e.g. communications, computer literacy); business and administration awards, at over 54,000, made up almost one fifth of the total.

Special purpose awards: special purpose awards were made at levels 4, 5 and 6 only; the majority (85%, or 9,600 awards) were made at level 5; with 12% at level 6 and the remaining 3% at level 4.

More than one half of all special purpose awards were in the field of construction and the built environment: these awards related mostly to best practice training (3-day courses) for private and public sector employees working in the construction industry, (mainly roadworks).

Supplemental awards: all awards were made at level 6 for courses in heating and water installation (e.g. gas, solar, biomass, etc).

Table 5.3 FETAC Award by Type and Award Holders, 2009 and 2010

	2009		2010	
Award Type	Awards	Award Holders	Awards	Award Holders
Certificates (Major)	28,772	28,722	31,764	31,764
Component (Minor)[27]	268,680	135,804	303,577	141,046
Special Purpose	16,087	16,087	11,337	11,337
Supplemental	1,281	1,281	1,327	1,327
Total	314,820	174,870*	348,005	176,570*

Source: FETAC

* Note: the **total** number of candidates is not equivalent to the number of candidates for each award type as some candidates gained more than one award type.

[27] One or more minor awards may lead to a FETAC Component Certificate. The figures here refer to the disaggregated numbers of minor awards.

5.3 Higher Education

Higher education spans levels 6-10 on the NFQ and is provided by the institutes of technology (IoTs), universities and private colleges. This section first examines the supply of skills from the Irish higher education sector (IoT and universities) by NFQ level; this is followed by an overview of the awards made to students at private/independent colleges. The final section provides information on Irish domiciled students pursuing higher education abroad.

5.3.1 Universities and IoTs

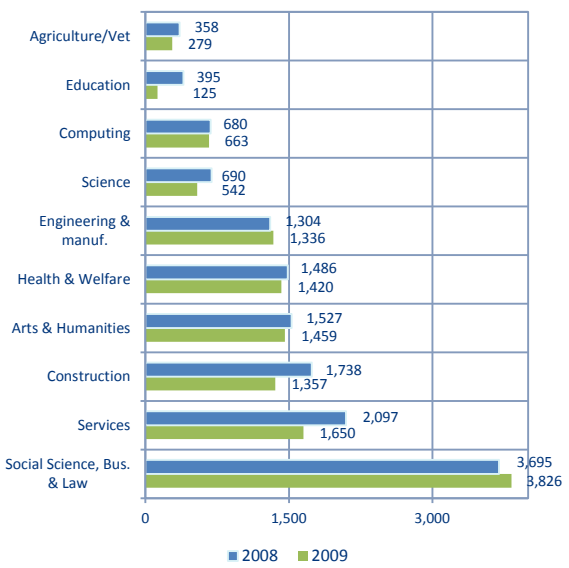
The current supply of persons gaining higher education qualifications is ascertained through graduate data, while CAO data provides an indication of future trends. The latest data available for graduate numbers relates to 2009; CAO acceptance data is for 2010.

Level 7/6

In 2009, there were almost 12,700 level 7/6 graduates from Irish higher education. Outputs from levels 7/6 have been in decline since 2004, primarily relating to level 6 courses, and this continued with a further decline of 9% on the 2008 figure. While CAO acceptances at these levels have shown some recovery in recent years, this increase is unlikely to counteract the steady decline in graduate output observed in recent years.

Figure 5.1 shows the number of graduates by field of education in 2008 and 2009. The decline in graduate output at this level since 2008 is reflected in most disciplines, except social science, business & law, and engineering & manufacturing.

Figure 5.1 Level 7/6 Graduates, 2008-2009



Source: HEA

The most notable changes in graduate output over the period 2008-2009 occurred in the following education fields:

Social science, business and law: at 4%, this discipline experienced the greatest percentage increase in graduate output over the period 2008-2009. While declines in the number of CAO acceptances continued at level 6, this was offset by slight increases at level 7.

Construction: the decline in output observed between 2008 and 2009 is likely to continue, at least in the short to medium term, as CAO acceptances continue to be affected by the downturn in this sector.

Engineering & Manufacturing: this was one of two disciplines to experience an increase in output over the period 2008-2009. With CAO acceptances showing only minor declines after a number of years of increasing, output levels are expected to remain stable in the short-medium term.

Computing: while graduate output declined slightly between 2008 and 2009, an increase in CAO acceptances in recent years indicates that the downward trend observed in recent years has halted.

Science: graduate output declined by 27% between 2008 and 2009. A recent fluctuation in the number of CAO acceptances in this discipline suggests that no clear pattern is likely to emerge in the short term at level 7/6 although significant increases are unlikely.

Education: Output levels in this discipline reverted to 2007 levels, with no increases expected in the short-term.

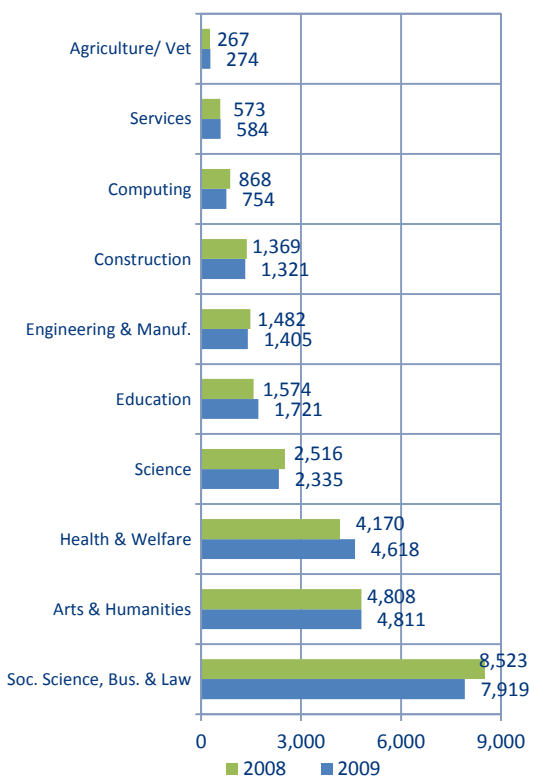
Services: While output declined by 21% in 2009, a reversal is expected in the short term due to a sharp increase in CAO acceptances in this discipline at level 6 in 2010.

Level 8

The number of level 8 graduates remained relatively static in 2009 at almost 25,800. Future growth in graduate outflow at this level is expected as CAO acceptances continue to rise, albeit at a slower rate than previous years.

Figure 5.2 compares graduate numbers by broad discipline for 2008 and 2009.

Figure 5.2 Level 8 Graduates, 2008-2009



Source: HEA

Trends emerging from the data include:

Engineering & manufacturing: the decline in graduate output that occurred since 2006 has slowed, while the impact of recent rises in CAO acceptances has yet to be realised.

Construction: this is the first year that a decline has been observed in output from construction courses – the significant decline in CAO acceptances would suggest that this decline is set to continue, and indeed intensify, in the medium term.

Computing: graduate output has been in decline in recent years, with a 13% year-on-year decline between 2008 and 2009.The increase in CAO acceptances, particularly since 2008, would indicate that a reversal of this trend is likely in the short-medium term.

Science: while graduate output increased between 2007 and 2008, reversing the downward trend of previous years, this increase was short-lived, as output declined by 7% in 2009. However, CAO acceptances have shown signs of recovery.

Health and welfare: following a decline in 2008, output increased by 11% in 2009. While output for nursing courses is down, numbers are up for courses related to medicine and diagnostics and therapy and counselling.

Arts & humanities: after a significant drop in output over the period 2007-2008, figures remained stable in the most recent time period.

Social science, business and law: The graduate output in this discipline declined by 7% in 2009 - the first decline in recent years.

Level 9/10

Level 9/10 qualifications include postgraduate certificates and diplomas, master degrees and PhDs. The total number of postgraduate awards has been increasing steadily in recent years, with a 24% increase over the period 2005 to 2009; the number of PhDs awarded over this period increased by 50%. Further increases in level 9/10 output are expected due to the steady growth in the number of enrolments at postgraduate level.

In 2009, 38% of level 9/10 awards were postgraduate certs/diplomas, 54% were masters and 8% were PhDs. The discipline breakdown of postgraduate awards for 2008 and 2009 is shown in Figure 5.3.

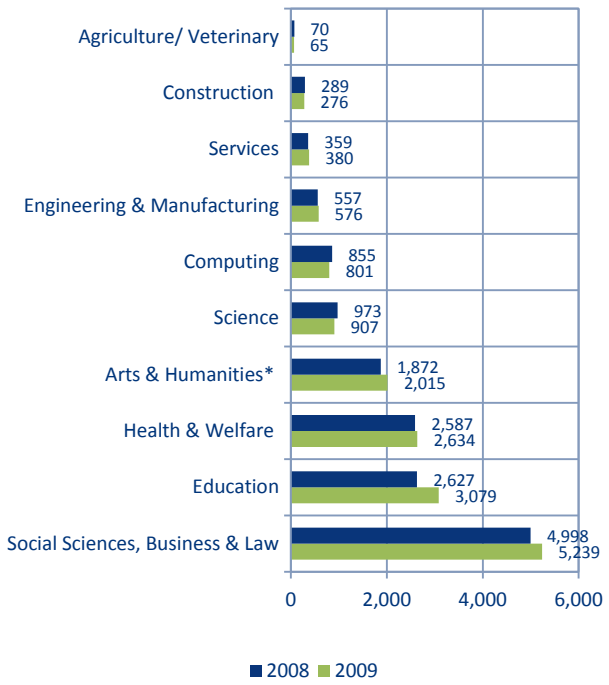
Trends emerging from the data include:

Engineering & manufacturing: the overall number of level 9/10 graduates in this discipline increased by 3% year-on-year between 2008 and 2009, due to increases at PhD level. The rise in enrolment levels

across all programme types suggest that output will continue to increase.

Construction: after increasing in recent years, this discipline experienced a decline of 4% between 2008 and 2009; the decline occurred primarily at masters level.

Figure 5.3 Level 9/10 Graduates, 2008-2009



Source: HEA

*Includes general and combined studies.

Science: the number of PhD graduates continued to increase, with science remaining the discipline with the highest number of PhDs. However, a drop in the number of postgraduate cert/diploma and masters graduates resulted in an overall decline of 7%.

Computing: declines in the number of postgraduate cert/diploma and masters graduates resulted in an overall decline of 6% in this discipline, although the number of PhD graduates increased slightly.

Education: output in this discipline increased by 17% between 2008 and 2009, due to significant gains at postgraduate cert/diploma level. Those graduating from teacher training with subject specialisation accounted for the largest group in this category. The number of masters graduates declined slightly.

Social science, business and law: this discipline accounted for a third of all postgraduate awards in 2009. Output continued to increase (by 5% in 2009) due to a growth in the number of masters graduates.

Arts and humanities: the overall graduate output decline in 2008 was reversed in 2009, primarily due to increases at masters level.

5.3.2 Private Education Provision

Education and training in Ireland also takes place outside the public system. Private schools, colleges and a range of professional institutes offer various types of education within the further education and training sector, the higher education sector and professional level training. This section first examines the number of awards made by HETAC to learners in higher education institutions outside of the university and IoT sector. This is followed by an overview of the qualifications made by some of the professional institutes in Ireland[28]. Courses offered by private providers which lead to FETAC awards are not included in this section as they are present in the awards data outlined earlier in this chapter (section 5.2).

Private independent colleges (e.g. Dublin Business School, Griffith College) offer programmes that are accredited by HETAC, foreign universities (usually UK), or sometimes, jointly by HETAC and another awarding body. The data outlined in Table 5.4 refers to HETAC (or joint HETAC/other HEI) awards made at a range of private colleges in 2009.

[28]Appendix B details these professional institutes.

Appendix B provides a list of the colleges whose awards are included.

There were over 3,600 awards made in the higher private education and training sector in 2009 (Table 5.4). Almost one half of the awards were made for arts courses, the majority of which were at NFQ level 8; business had the second highest share of awards, at 44% (1,596), while the remaining 7% of awards were in science and engineering, mostly at levels 8 and 9. Over one half (58%) of the awards were made to females.

Table 5.4 HETAC Awards (including joint awards) for Selected Private Colleges, 2009

Field of Learning	NFQ Level				
	6	7	8	9/10	Total
Arts	177	430	1,083	79	1,769
Business	150	188	928	330	1,596
Science& Engineering	11	31	89	133	264
Grand Total	**338**	**649**	**2,100**	**542**	**3,629**

Source: HETAC

Many awards made by several professional institutes are aligned with the National Framework of Qualifications (e.g. IMI, ACCA). However, as this is not the case for all awards considered here, we present the data in three categories: undergraduate (including sub-degree and degree qualifications); postgraduate (where an undergraduate qualification or equivalent is required prior to enrolment; many awards in this category are aligned with the NFQ at level 9) and 'other', which includes shorter courses including courses that lead to specific purpose and minor awards and which are aligned with the National Framework of Qualifications.

Table 5.5 shows the number of awards made to students taking courses through various professional bodies. The awards were made entirely within the broad field of business and include the numbers who qualified as accountants, tax experts and financial and insurance professionals. The awards made in 2010 (2009 for accountancy awards), had an almost equal share of undergraduate and postgraduate awards (38% of the total each); a further one quarter of the awards were in the other category and were chiefly for short courses (e.g. several days).

Table 5.5 Professional Institutes Awards 2010* (accountancy awards are for 2009)

Course Level	Awards
Undergraduate	2,046
Postgraduate	2,045
Other*	1,271
Total	5,362

Source: HETAC, Institute of Bankers, Irish Tax Institute, IMI, IAASA (Irish Auditing and Accounting Supervisory Authority)

5.3.3 Irish Students Abroad

Every year a number of Irish students opt to pursue all or part of their higher education in countries outside of Ireland. This section examines (a) those enrolled in higher education programmes abroad and (b) Irish ERASMUS students who went to a foreign university as part of the higher education programmes in which they were enrolled in Ireland.

The OECD Education online database holds data on the distribution of international students by, *inter alia*, country of origin and level of education. Levels of education are classified according to ISCED[29] levels with education levels comparable to Irish higher level corresponding to the ISCED categories of: Tertiary Type A (honours bachelor degree/master degree); Tertiary Type B (higher certificate/ordinary degree) or advanced research (PhD level).

[29] International Standard Classification of Education (ISCED)

There were over 17,000 Irish domiciled students enrolled in higher education students in other OECD countries in 2008 (Table 5.6). The majority (97%) studied in other English speaking countries. The UK was the most popular destination for Irish students abroad with a total of 15,261 (approximately 89% of the total). The United States had the second highest number of Irish students at over 1,000.

In 2008, three quarters of Irish students abroad were enrolled on Tertiary Type A programmes (comparable to honours bachelor degree and master degree programmes in Ireland) while 6% were in advanced research degree programmes (e.g. doctoral programmes).

The number of Irish domiciled students abroad declined between 2007 and 2008 (by 5%, or 870 students).

Table 5.6 Irish Students' Enrolments in OECD Countries , 2008

Country	Tertiary A	Tertiary B	Advanced Research	Unspe-cified	Total
UK	12,035	2,261	965	-	**15,261**
USA	-	-	-	1,019	**1,019**
Germany	285	-	0	-	**285**
Australia	174	-	19	-	**193**
Canada	96	7	21	-	**124**
Spain	69	-	4	-	**73**
N Zealand	15	12	13	-	**40**
Others	98	-	28	-	**126**
Total	**12,772**	**2,280**	**1,050**	**1,019**	**17,121**

Source: OECD online database

*Excluding Ireland

The European region action scheme for the mobility of university students (ERASMUS) is a programme that enables higher education students to study or do a work placement for three to 12 months in one of 30 other European countries as part of their studies[30]. Students on ERASMUS programmes are usually registered students in their home universities. The numbers included in this section are therefore a subset of the numbers outlined in section 5.3.1 of this report.

Table 5.7 shows the numbers of outgoing Irish students over the period in 2007/08 and 2008/09. In 2008/2009, the number of ERSAMUS students reached their highest number to date: 1,836 students went abroad that year, of which 415 were work placement students. Compared to the preceding year, there was a slight increase (1% or 19 students).

In 2008/09, over a quarter of all students went to France, followed by Spain (17%) and Germany (14%). The most notable change observed over the two-year period was a 41% increase (66 individuals) in the number of students going to the UK.

Table 5.7 ERASMUS Students from Ireland by destination country, 2007/08-2008/09

Destination Country	2007/08	2008/09
France	464	473
Spain	324	316
Germany	245	252
UK	158	224
Netherlands	68	86
Italy	102	84
Others*	456	401
Total	1,817	1,836

Source: European Commission

*Includes: Sweden, Denmark, Belgium, Austria, Finland, a.o.

[30] ERASMUS participating institutions are located in the EU as well as Norway, Iceland and Turkey.

Section 6 Employment Permits

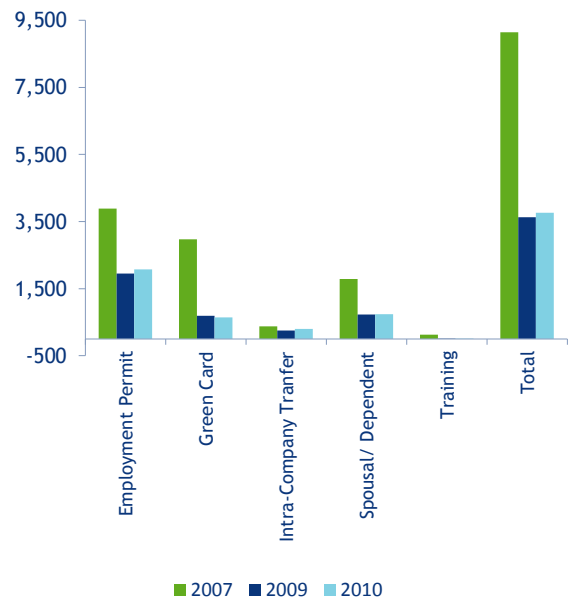
Non-EEA nationals and Romanian and Bulgarian citizens must obtain an employment permit from the Department of Jobs, Enterprise and Innovation (DJEI) in order to work in Ireland. Permit types include: employment permits, green cards, intra-company transfers (ICT), spousal/dependent permits and training permits.

Despite further declines in economic activity and labour demand, employers continue to source some skills from abroad. In 2010, a total of 3,762 new[31] employment permits were issued to non-EEA, Romanian and Bulgarian nationals (Figure 6.1). This represents an increase of 4% since the previous year and a reduction of 59% since 2007.

When interpreting employment permit data the following should be borne in mind:

- the number of work permits issued represents an over-estimation of the true annual inflow of non-EEA, Romanian and Bulgarian workers into the Irish labour market, because not all new employment permits are issued to first time applicants; for instance, when an employment permit holder is made redundant, a labour market needs test is not required for future applications; in these cases, a new permit is issued rather than the old permit renewed; it is estimated that almost one quarter of all new employment permits issued in 2010 were repeat new permits
- during 2010, a number of new employment permits were issued in order to regularise the labour market status of some persons who had already been working in Ireland
- from June 2009, the standard employment permit eligibility criteria (which includes a labour market test, the restriction to vacancies in eligible job categories and the payment of the standard application fee) apply to spouses of new employment permit applicants; however, spouses of employment permit holders who obtained their permits prior to June 2009 and spouses of Green Card holders are not subject to the eligibility criteria.

Figure 6.1 New Permits by Type



Source: DJEI

6.1 Green Cards

A green card is an employment permit issued to employees allowing them to gain employment in a specified occupation. Unlike employment permits, green card applications do not have to undergo a labour market test. Occupations which qualify for green cards are those with an annual salary of €60,000 or above and a restricted list of occupations within the salary range of €30,000 to €60,000, mainly within the ICT, health, financial services, and services sectors. However, since April 2009, some healthcare occupations (e.g. psychologists), finance

[31] While each year a number of employment permits are renewed, focusing on new permits allows for the identification of the most recent occupations sourced from outside the EEA.

(e.g. hedge fund specialists) and marketing managers no longer qualify for this scheme, although these occupations continue to be eligible for green cards provided the annual salary offered is €60,000 or above.

At 646, the number of new green cards issued declined by 6% in the period 2009-2010. A third of all new green cards issued were for positions with salaries of €60,000 plus and these were primarily in the IT and financial sectors. In the €30,000-€59,999 category, those employed as software engineers and nurses accounted for over a half of the new green cards issued.

In terms of sectors (Table 6.1), the IT sector accounted for 43% of all new green cards issued in 2010 – an increase of 60 (28%) compared to 2009. While the healthcare sector still accounted for the second highest share of green cards issued in 2010, its share declined from 35% in 2009 to 23% in 2010.

The most frequently cited occupations in 2010 remained the same as those in 2009 (Table 6.2), however, the numbers involved changed somewhat. While the number of new green cards issued to those working as nurses and marketing managers decreased, the demand for IT occupations remained strong, with an increase in the number of green cards issued to software engineers and computer analysts/programmers.

6.2 Employment Permits

Employment permits accounted for the largest share of all permit types issued in 2010. These are issued to occupations which have been identified as being difficult to source in the Irish labour market and for which the salary is between €30,000 and €60,000. Only in exceptional cases are employment permits issued for positions offering less than €30,000. Applications are subject to a labour market test – a vacancy must be advertised with FÁS, EURES (European job mobility portal) and in the national newspapers as proof that no suitable EEA candidates are available. Since the downturn in the Irish economy, the Department of Jobs, Enterprise and Innovation (DJEI) has increased the duration of the labour market test and have refined the list of eligible occupations[32].

In 2010, a total of 2,075 new employment permits were issued - an increase of 7% since 2009. Employment permits accounted for 55% of all new permits issued in 2010. However, when persons from Romania/Bulgaria are excluded from the data, a 32% decline occurred year-on-year.

With 372 permits issued in 2010, the healthcare sector accounted for the largest share of new employment permits, although the share declined from 33% in 2009 to 18% in 2010 (Table 6.1). Between 2009 and 2010, the number of employment permits issued to those working in catering and services sectors increased both in absolute and relative terms.

In terms of occupations (Table 6.2), medical practitioners accounted for the largest number of employment permits issued in 2010 – a total of 286, which is 254 below the number issued in 2009. One of the reasons for this reduction was the introduction of new arrangements for employment permits in June 2010 – employment permits since then are not required for some positions (e.g. doctors in trainee specialist divisions, senior house officers, registrars).

The number of permits issued to chefs and software engineers remained almost unchanged in 2010. While cleaners and HGV drivers are no longer eligible for new permits, these occupations appeared in the top five most frequent occupations for which employment permits were issued. The

[32] The list of ineligible occupations for employment permits continues to apply to Romanian and Bulgarian citizens.

majority of these were issued to Romanian/Bulgarian citizens.

6.3 Intra-Company Transfers (ICT)

The ICT scheme was designed to facilitate the transfer of senior management, key personnel and trainees who are foreign nationals from an overseas branch of a multinational corporation to its Irish branch. The annual salary of the applicant must be at least €40,000 and the person must have been an employee of the parent company for at least 12 months prior to the application. No labour market test is required for this scheme.

A total of 298 permits were issued to those employed in the ICT category in 2010 – a 17% rise on the 2009 figure. Managers accounted for a third of all permits issued in this category, with professionals and associate professionals accounting for 28% and 26% respectively. In terms of sectors, IT accounted for 35% of all ICT permits, with manufacturing accounting for a further 31% (Table 6.1).

6.4 Employment Permits for Spouses and Dependants of Employment Permit Holders

The legislation introduced in June 2009 has resulted in a significant decline in the number of spousal/dependent permits issued. Despite a year-on-year increase of 2% between 2009 and 2010, a decrease of almost 60% occurred since 2007.

Permits issued to those in the healthcare sector accounted for 37% of the total, primarily for care assistant positions (27% of all permits issued to spouses/dependents were for this occupation). Services and catering accounted for 20% and 13% of the total number of permits issued respectively.

Table 6.1 New Employment Permits by Sector, 2010

Sector*	Employment Permit	Green Card	ICT	Spousal	Train.	Total
Agriculture	124	1	3	28	-	156
Catering	377	2	-	98	-	477
Construction	43	3	-	2	1	49
Domestic	42	-	1	16	-	59
Education	46	13	-	21	-	80
Entertainment	21	3	-	1	-	25
Financial	24	78	55	16	-	173
Government	-	-	-	-	-	-
Healthcare	372	151	8	277	1	809
IT	267	276	104	28	1	676
Legal Services	1	1	-	-	-	2
Manufac-turing	76	39	93	25	-	233
Research	3	6	4	3	-	16
Retail	108	13	-	60	-	181
Services	401	48	23	145	1	618
Sport	43	1	-	1	-	45
Tourism	62	2	1	17	-	82
Transport	65	9	6	1	-	81
Total	**2,075**	**646**	**298**	**739**	**4**	**3,762**

Source: DJEI

*Sectors are defined by the DJEI

6.5 Training

Employment permits can also be issued to non-EEA, Romanian and Bulgarian nationals undertaking training in Irish-based companies. In 2010, only 4 employment permits were issued for training purposes, compared to 18 in 2009.

Table 6.2 New Employment Permits by Type and Most Frequent Occupations, 2010

Type of permit/occupation	New permits	%
Employment permit (of which)	**2,075**	**100%**
Medical practitioners	286	14%
Chefs	220	11%
Software engineers	145	7%
Cleaners	102	5%
Drivers of road goods vehicles	67	3%
Other	1,255	60%
Green card (of which)	**646**	**100%**
Nurses	121	19%
Software engineers	120	19%
Computer analyst/programmers	84	13%
Chartered & certified accountants	40	6%
Marketing managers	19	3%
Other	262	41%

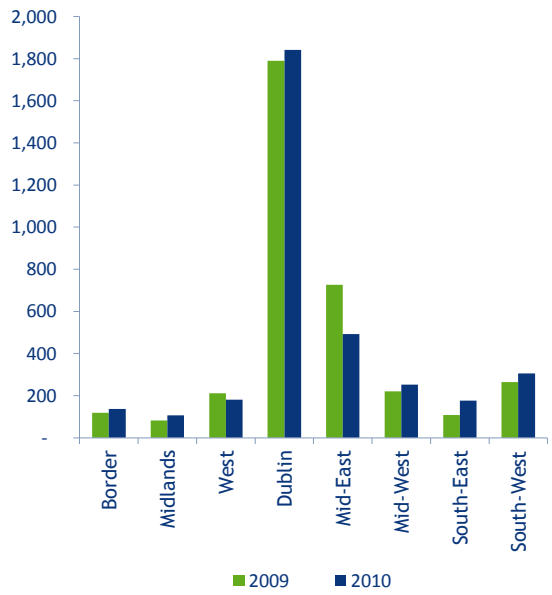
Source: DJEI

6.6 Employment Permits by Region

Over 50% of all new permits were issued in Dublin (Figure 6.2). While most regions experienced an increase in the number of new work permits issued between 2009 and 2010, the West and Mid-East regions experienced declines of 15% and 32% respectively.

For each of the regions, catering occupations accounted for at least 12% of all new work permits issued in 2010. In the Mid-East region, medical practitioners accounted for a third of all new work permits issued and a further 11% in health/childcare and related occupations. At 14%, the Mid-West region[33] had the highest share of permits issued to occupations in agriculture, forestry and fishing. At 12%, the Border region had the highest share of permits issued to transport and machinery operatives. In Dublin, business and financial professionals, catering occupations and computer analysts/programmers each accounted for 10% of permits issued. Permits issued to those working as butchers, meat cutters and boners were primarily located in the Midlands, Mid-East and South-East regions.

Figure 6.2 New Permits by Region



Source: DJEI

[33] The Mid-West data includes Tipperary (both North and South Riding) as it was not possible to separate these districts in the data.

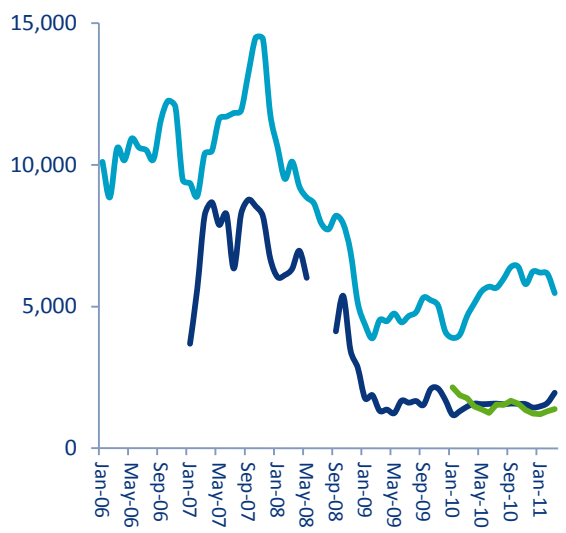
Section 7 Vacancies

Since the beginning of the downturn, the number of job vacancies declined significantly. In quarter 4 2010, the job vacancy rate[34] was estimated at 0.6%[35], which was lower than the EU 27 average of 1.5% and well below the rate recorded during the boom of 3.8%[36]. However, although still low, the job vacancy rate improved by 0.3 percentage points compared to the rate in quarter 4 2009.

7.1 Notified Vacancies[37]

The data on job vacancies advertised through the FÁS Jobs Ireland, IrishJobs.ie and the Irish Times confirms that despite the recession, job vacancies have continued to arise in the Irish labour market, albeit at a significantly lower level than at the peak (Figure 7.1). In quarter 1 2011, the number of vacancies advertised through FÁS and Irishjobs.ie was higher than in quarter 1 2010.

Figure 7.1 New Notified Job Vacancies (three-month moving average)[38]



In 2010, vacancies advertised through Irishjobs.ie and the Irish Times were mostly concentrated in managerial, professional and associate professional occupations, and also jobs related to various aspects of customer care. Newly advertised vacancies though FÁS Jobs Ireland were concentrated in personal services (e.g. care, catering and security), clerical and sales (including customer care activities) (Figure 7.2).

[34] The job vacancy rate (JVR) measures the proportion of vacant posts to the number of employees.

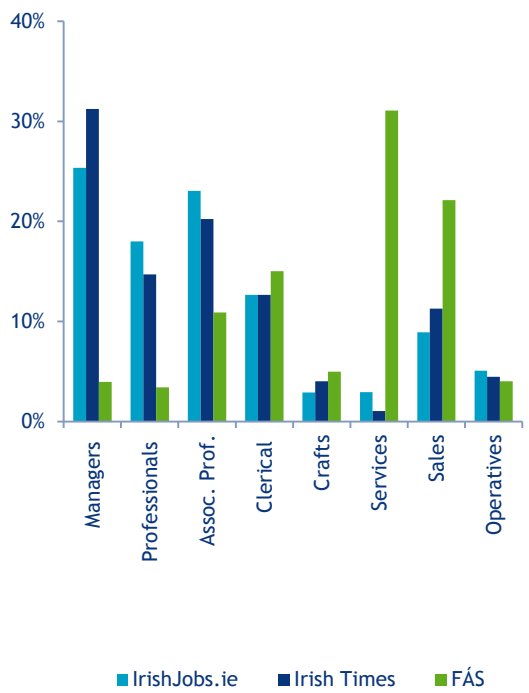
[35] CSO Hours and Employment Costs Survey and Eurostat, URL: http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/job_vacancies/main_tables

[36] CSO (2009) *Employee Skills, Training and Job Vacancies Survey 2006*.

[37] Several issues arise with advertised job vacancy data including the following: 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 arise due to expansion demand (the creation of a new position by an employer), replacement demand (a person leaving an existing position) or for other reasons is unclear.

[38] A break occurred in the IrishJobs.ie data between May 2008 and July 2008 and is, therefore, excluded from the trend analysis reported here. The Irish Times data is only available from the beginning of 2010 due to coding issues with this data.

Figure 7.2 Vacancies by Occupational Group (%), 2010



Managers

- During 2010 and the first quarter of 2011, managerial vacancies were most frequently advertised in the following sectors: sales (e.g. on-line sales and business development executives), banking, insurance and financial services, ICT (software development managers), marketing, retail, accountancy and finance. Managerial sales vacancies notified to IrishJobs.ie increased in the first three months of 2011.
- Specific skills stated as a requirement in the vacancies descriptions for managers included: foreign languages (particularly for sales-related vacancies), project management, compliance and regulation, business/product development and innovation.
- The majority of managerial vacancies advertised in 2010 specified that candidates should at least hold a third level qualification and have significant work experience.

Professionals

- During 2010 and the first quarter of 2011, professional vacancies were most frequently advertised in the following sectors: ICT (e.g. software developers, systems/network engineers), engineering and utilities (e.g. electrical, R&D, design, process and quality assurance), banking, insurance and financial services, accountancy and finance (e.g. financial control and reporting, compliance, actuaries, risk experts), healthcare, science, education (e.g. TEFL teachers).
- German and French language skills featured in some of the vacancies for professionals in ICT, engineering and finance. In the area of software development, skills in Java, C++, C#, .Net and programming for mobile devices were the most frequently cited skills required.
- A degree or above was a requirement in 85% of professional vacancies, while a significant level of experience was a requirement in the majority of vacancies.

Associate Professionals

- Vacancies for associate professionals were most frequently advertised in the following sectors: IT (e.g. multilingual IT technical support), banking, insurance and financial services (e.g. underwriters, claims assessors and analysts), accountancy and finance and healthcare (e.g. nurses, primarily UK-based). The number of vacancies notified to IrishJobs.ie in this occupational group increased in the first quarter of 2011, primarily in the IT sector.
- Foreign language skills were a specified requirement for roles in IT technical support, claims and collections with French and German the languages most in demand, but also Swedish, Norwegian, Danish, Dutch and Italian.
- Two thirds of vacancies for associate professionals required a degree or higher level of educational attainment with three quarters of vacancies seeking over 2 years of experience.

Clerical

- Clerical vacancies were most frequently advertised in the following sectors: accountancy and finance (e.g. fund accountants, claims administrators, shareholder services administrators), banking, insurance and financial services, customer services (e.g. multilingual customer service agents and client service officers), secretarial and administration.
- Language skills including German, French, Italian and Dutch were frequently mentioned as a requirement in vacancies for customer service positions.
- The majority of clerical and secretarial positions required less than a third level degree. A significant minority of vacancies for clerks had none or up to 2 years of experience specified as a requirement.

Craft

- Unlike during the boom years, when the largest share of vacancies was concentrated in the construction sector, in 2010, vacancies for craftspersons were concentrated in the following sectors: engineering and utilities (e.g. metal working, production and maintenance fitters, electrical engineers, motor mechanics), and ICT (e.g. computer installation and maintenance).

Services

- Vacancies for personal and protective services providers were concentrated in the following sectors: hotel and catering (e.g. chefs and cooks, waiting staff), healthcare (e.g. care assistants), and services (e.g. security officers, cleaners, hairdressers/barbers).
- A third level degree was not specified as a requirement in almost two thirds of the vacancies advertised for personal and protective services providers, and almost one half of the advertised vacancies specified none or up to 2 years' experience as a requirement.

Sales

- During 2010 and the first quarter of 2011, vacancies for sales occupations were concentrated in the following sectors: sales (e.g. technical sales representatives, door-to-door sales representatives), retail, wholesale and purchasing (e.g. sales assistants, engineering buyers, supply chain specialists, procurement specialists), and customer services (e.g. multilingual customer care).
- The majority of telesales, on-line and customer care vacancies required language skills. Many vacancies required at least two languages – German and French were the most prominent languages required for customer service agent positions.
- For the majority of posts advertised for salespersons, a third level qualification was not a prerequisite. Up to two years' experience was specified as a requirement in the majority of vacancies advertised for salespersons.

Operatives

- Vacancies for operatives were concentrated in the following sectors: services (e.g. HGV drivers), engineering and utilities, ICT, manufacturing (e.g. routine machine operatives).

7.2 FÁS (SLMRU) Recruitment Agency Survey

The key findings from the survey of recruitment agencies conducted by the SLMRU in April 2011 are presented below. The analysis is qualitative in nature and focuses on the types of occupations for which vacancies were difficult to fill (DTF). The difficulty in filling vacancies may be due to a lack of skilled candidates, but also due to the unwillingness of skilled candidates to take up employment in a

particular post (e.g. unsuitable employment conditions).

- Although demand remains weak with many agencies stating that they did not experience any difficulty in filling vacancies, there were still some occupations for which vacancies were difficult to fill; the frequency of DTF mentions appears to be somewhat higher than in autumn 2010.
- The DTF vacancies remain concentrated at the higher end of the skills scale: one half of all DTF mentions were for professionals, 16% were for associate professionals, and 13% were for managerial and senior posts. Sales related posts accounted for 11% of all DTF mentions.
- Almost one half of DTF posts required at least 5 years of experience.
- Recruitment agencies reported that they were able to fill more than one half of all DTF vacancies with Irish nationals; this is in contrast to the finding last year, when most DTF vacancies were filled by non-Irish candidates.
- With regard to the quality of Irish graduates, skill deficiencies, most notably in relation to IT, European languages, engineering, green energy and science, were mentioned, as well as a lack of experience, particularly in the commercial arena.
- Issues with geographical mobility were expressed. There were difficulties in sourcing native foreign language speakers for positions located outside major cities and, at a senior level, there was evidence of a reluctance on the part of senior, well qualified staff to move jobs due to uncertainty regarding economic recovery.
- An expansion of the IT contract market was reported, especially for design & development (e.g. Java, .Net) and infrastructure and support related specialists (e.g. systems/network engineers).

The occupations that were mentioned as being difficult to source included:

- Software engineers: particularly, designers and developers with specific skill sets (e.g. Linux, VB .NET, Ruby on Rails, Java, C# and C++); demand is particularly strong for those with a combination of IT skills (most often C++, Java and Summit); while software engineers accounted for 16% of all DTF vacancies, about one half of these were for those proficient in Java and associated programming languages
- Engineers: electrical engineers (especially relating to power generation e.g. design, power grid integration); process and production engineers (particularly validation and quality control), with most demand for these types of engineers arising from the bio-pharma and chemical industry; process automation & system control engineers (including Six Sigma specialists); and design engineers in the medical devices industry
- Managers: project management in IT, production management with a relevant engineering background, marketing managers with industry specific knowledge, and financial managers.
- Scientists: biologists, chemists (e.g. product formulation, analytical development, R&D – design and chemical engineering)
- Healthcare professionals and associate professionals: specialist doctors (e.g. GPs, non-consultant hospital doctors, consultant radiologists); senior clinical psychologists; senior therapists (e.g. occupational, speech and language), radiographers; nurses (e.g. advanced nursing practitioners in theatre nursing, radiology, diabetes, renal medicine and midwifery)
- Sales representatives: sales & marketing skills integrated with IT (e.g. online digital marketing, “pay per click” operators, multilingual IT technical support staff, senior IT salespersons); telesales with language skills (i.e. Nordic languages, German); sales representatives with

technical skills and relevant industry knowledge, sales specialists for online offerings (including the online gaming industry)

- Financial professionals: financial analysts, risk experts, actuaries, accountants (e.g. cost and management accountants), regulation & compliance experts
- Clerks: clerks (usually multilingual) in niche areas, including credit control, debt recovery, anti-money laundering, and some specialist roles in supply chain operations.

Section 8 Occupational Employment Profiles

This section examines employment trends by occupation. The statistical analysis covers the period 2005-2010 and, for selected indicators, the first quarter of 2011.

Most of the data used in the analysis is presented in Table 8.1. This is followed by employment profiles for the selected occupations, numbering 17 in total.

Table 8.1 shows the demand and shortage indicators for the selected occupations and broad occupational groups which were used in the analysis of skills shortages.

Column 1 contains occupational titles; the list of occupations is based on the Standard Occupational Classification (SOC) 1990. In cases where the number of observations in an occupation generated employment figures of less than 1,000, two or more occupations were merged to form an occupational group. This was done in order to generate a sufficiently large number of observations to allow for statistical inference.

Column 2 presents the employment stock figure for each occupation. Employment figures are reported as the annual average figures for 2010. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 1 to quarter 4 2010.

Column 3 shows the percentage of females in an occupation. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 4 shows the percentage of persons who work part-time in an occupation. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 5 provides an indication of the unemployment level in an occupation. The unemployment rate is calculated by dividing the number of unemployed persons aged 15 and over in an occupation by the sum

of the number of employed and unemployed persons aged 15 and over in that occupation.

The unemployment rate is indicated as follows:

'below average' for unemployment rates less than 14.1% (i.e. the national unemployment rate for quarter 4 2010)

'above average' for unemployment rates exceeding 14.1%.

To avoid issues with small sample size at this level of disaggregation, the unemployment rate could only be reported for occupations with at least 4,000 persons employed. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 6 shows the percentage of persons aged 55 and over in an occupation. This indicator was used in combination with the appropriate replacement rate (Column 12) to estimate the replacement demand for an occupation. The age distribution of the workforce of an occupation skewed towards older age cohorts indicates higher retirement rates in the short to medium-term. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 7 shows the percentage of non-Irish persons in an occupation. A higher than average proportion of non-Irish nationals in an occupation suggests that Irish employers had to recruit suitable candidates from abroad to fill vacancies. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 8 shows the percentage of persons who have attained a third level qualification in an occupation. Third level qualifications span NFQ levels 6-10. See

Appendix A for the award types placed at these levels. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), quarter 4 2010.

Column 9 shows the average annual rate of employment growth for an occupation for the period 2005-2010. These rates were used to assess employment growth trends. Source: Analysis by FÁS (SLMRU) based on data provided by the CSO (QNHS), 2005-2010 (inclusive).

Column 10 shows the annual number of new employment permits that were issued for an occupation in 2010. This information was used as an indicator of the demand for labour that could not be met from domestic or EEA sources (excluding Romania and Bulgaria). Source: Department of Jobs, Enterprise and Innovation.

Column 11 presents the results of the FÁS (SLMRU) Recruitment Agency Survey conducted in April 2011. The occupations with mentions of difficult-to-fill vacancies reported by recruitment agencies are indicated by an 'X'. Source: FÁS (SLMRU) Recruitment Agency Survey.

Column 12 presents replacement rates for each occupation. The replacement rate indicates the share of employment in an occupation which is expected to be lost annually due to retirement, illness, maternity leave, inter-occupational movements, emigration and death in service. Essentially, the replacement rate reflects the minimum number of persons required annually to preserve the existing employment stock in an occupation. Source: Current Trends in Occupational Employment and Forecasts for 2010 and 2020: Final Report to the Expert Group on Future Skills Needs. ESRI, 2006.

Column 13 provides an indication of shortage for each occupation. The indicator was derived by considering all indicators as well as using additional information on vacancies, education and relevant qualitative information including recent and on-going sectoral studies. The following provides an explanation of the indicator of shortage:

- 'no shortage' is reported for occupations for which there are no apparent labour market imbalances
- 'skill shortage' refers to a situation whereby there are an insufficient number of individuals who have the required level of educational attainment, skills set and/or experience to meet the required labour market demand; it should be noted that the difficulty in filling vacancies may be due to a lack of skilled candidates, but also due to the unwillingness of skilled candidates to take up employment in a particular post (e.g. unsuitable conditions of employment)
- 'labour shortage' refers to a situation whereby there are an insufficient number of individuals available to take up employment opportunities in a particular occupation; a labour shortage is typically associated with occupations which require relatively lower levels of education, a shorter duration of training (e.g. on the job) and/or no previous experience.
- 'inconclusive' is reported for occupations for which the 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' within 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 14 provides some further elaboration on the shortages identified in Column 13.

Using data from Table 8.1, individual occupations were examined in detail. The analysis covered the following:

- Science occupations

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

In general, occupations that are associated with the same sector of employment or occupations with similar duties are grouped together. The following information is provided for each occupational group:

- The level of employment (expressed as an annual average figure)
- Employment growth trends for the period 2005-2010
- Age profile — employment is grouped into the following age categories: persons aged 15-24, 25-54, and 55 and older
- Educational attainment — employment is grouped into the following educational categories: persons with lower secondary education or less; upper secondary or further education and training (FET); and third level education.

Each section on the occupational profiles also contains a summary of the balance between the demand and supply. For each occupation, the estimated recruitment requirement was derived by combining expected expansion and replacement demand. In the short-term, most of the recruitment requirement for most occupations is expected to arise from replacement demand.

The supply of skills was approximated using the expected output from the formal education and training system[39]. The expected output was derived using third level enrolment and graduation data, as well as data from FÁS and other education providers.

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 (EGFSN) and other qualitative information. The objective was to identify areas of shortages, without quantifying them.

Identified shortages are classified as skill or labour shortages. In addition, 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 if 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

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

temporary or a sustained increase in 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 for which the shortage has arisen. For example, if the shortage is of a temporary nature, it may be more effective to source the scarce skills from abroad rather than to increase the number of student places in the relevant disciplines.

The purpose of this bulletin is solely to identify occupations for which shortages exist. The 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

Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
General managers and administrators	19.6	34.3%	9.5%	Below Average	28.1%	3.5%	58.0%	0.3%	20		-1.5%	No shortage	
Production managers in industry	16.8	19.4%	3.2%	Below Average	16.0%	8.1%	60.0%	-4.5%	46	X	-1.5%	Skill shortage	High level expertise
Building managers	4.2	1.9%	5.4%		16.0%	3.8%	52.1%	-6.4%	6		-1.5%	No shortage	
Marketing managers	18.7	41.0%	5.2%	Below Average	7.4%	10.2%	71.3%	0.2%	57	X	-1.5%	Skill shortage	High level expertise
Purchasing managers	1.9	29.4%	0.0%		5.0%	13.9%	67.1%	10.1%	1		-1.5%	No shortage	
Advertising and PR managers	3.4	58.8%	10.3%		14.3%	10.9%	76.5%	0.9%	28		-1.5%	No shortage	
Personnel managers	6.5	70.2%	10.6%	Below Average	5.4%	1.1%	79.0%	5.5%	10		-1.5%	No shortage	
Computer systems managers	14.9	22.6%	6.1%	Below Average	2.3%	11.9%	88.4%	13.1%	35	X	-1.5%	Skill shortage	High level expertise
Specialist managers not elsewhere classified	3.7	46.0%	21.8%		18.2%	8.9%	55.9%	6.5%	21		-1.5%	No shortage	
Bank and other financial managers	30.5	53.4%	12.2%	Below Average	8.2%	7.9%	63.7%	4.9%	42	X	-1.5%	Skill shortage	High level expertise
Credit controllers	3.6	82.5%	26.8%		16.8%	13.5%	49.2%	-0.9%	2		-1.5%	No shortage	
Civil Service Executive Officer	4.7	69.2%	17.0%		13.2%	0.0%	35.0%	-4.5%	3		3.5%	No shortage	
Transport managers	5.9	13.7%	5.1%	Below Average	10.3%	8.8%	53.0%	5.8%	18	X	-1.5%	Skill shortage	High level expertise
Stores managers	3.6	12.5%	12.5%		21.4%	13.4%	19.6%	-0.2%	6		-1.5%	No shortage	
Warehousing managers	3.0	0.0%	2.4%		15.3%	2.6%	24.5%	-1.2%	3		-1.5%	No shortage	
Farm owners and managers in farming	68.1	8.1%	10.6%	Below Average	48.9%	1.3%	11.2%	-6.0%	20		3.1%	No shortage	
Hotel & accommodation managers	7.6	58.3%	12.5%	Below Average	24.7%	17.4%	59.4%	2.6%	15		-1.5%	No shortage	
Restaurant & catering managers	10.8	58.9%	10.4%	Below Average	7.9%	17.6%	47.7%	4.6%	12		-1.5%	No shortage	
Publicans, innkeepers & club stewards	7.2	24.9%	13.2%	Below Average	38.3%	1.2%	22.2%	2.7%	0		1.7%	No shortage	
Entertainment/sports managers	4.7	48.6%	10.4%	Below Average	8.8%	8.3%	69.9%	14.8%	2		-1.5%	No shortage	
Travel agency managers	1.9	84.9%	9.4%		0.0%	4.5%	55.2%	-5.6%	0		-1.5%	No shortage	
Managers and proprietors in service industries not elsewhere classified	47.3	36.6%	9.0%	Below Average	20.7%	7.4%	36.0%	1.5%	16		-1.5%	No shortage	
Managers and administrators not elsewhere classified	17.7	50.0%	12.3%	Below Average	17.2%	8.4%	68.4%	-1.6%	45		-1.5%	No shortage	
Chemists	2.6	61.3%	3.0%		0.0%	13.0%	100.0%	5.6%	3	X	2.8%	Skill shortage	High level niche areas

Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
Biological scientists	5.3	60.2%	8.7%	Below Average	15.4%	4.6%	98.0%	6.9%	7	X	2.8%	Skill shortage	High level niche areas
Physicists & other natural scientists not elsewhere classified	5.3	44.7%	7.5%	Below Average	4.8%	13.7%	97.4%	13.9%	14	X	2.8%	Skill shortage	High level niche areas
Civil/mining engineers	8.7	7.3%	5.2%	Below Average	13.2%	10.2%	97.7%	-2.0%	3		2.8%	No shortage	
Mechanical engineers	4.4	9.4%	2.1%	Below Average	7.0%	6.4%	90.8%	0.8%	1	X	2.8%	Skill shortage	High level niche areas
Electrical engineers	3.1	0.0%	2.4%		5.1%	6.7%	82.4%	-2.9%	2	X	2.8%	Skill shortage	High level niche areas
Electronic engineers	2.9	5.3%	0.0%		5.3%	14.5%	91.8%	-7.6%	7	X	2.8%	Skill shortage	High level niche areas
Software engineers	9.7	14.8%	2.2%	Below Average	0.9%	20.1%	94.8%	2.7%	307	X	2.8%	Skill shortage	High level niche areas
Chemical engineers	1.6	31.6%	0.0%		0.0%	8.6%	100.0%	3.6%	0	X	2.8%	Skill shortage	High level niche areas
Planning & quality control engineers	1.4	44.8%	0.0%		0.0%	9.6%	87.5%	-8.0%	6	X	2.8%	Skill shortage	High level niche areas
Engineers & technologists not elsewhere classified	9.1	9.5%	6.6%	Below Average	10.5%	5.7%	91.0%	2.4%	33	X	2.8%	Skill shortage	High level niche areas
Medical practitioners	12.1	41.0%	10.1%	Below Average	19.7%	20.2%	96.9%	2.0%	299	X	2.8%	Skill shortage	
Pharmacists/pharmacologists	3.6	62.7%	25.2%		20.9%	8.1%	92.0%	3.6%	1		2.8%	No shortage	
Dental practitioners	1.5	45.7%	33.3%		16.4%	11.0%	96.3%	-3.3%	2		2.8%	No shortage	
Veterinarians	1.9	35.0%	9.3%		4.4%	15.4%	90.2%	2.0%	0		2.8%	No shortage	
University and IoT lecturers	12.2	41.5%	21.3%	Below Average	19.5%	23.0%	99.5%	1.0%	33		2.8%	No shortage	
Teaching professionals not elsewhere classified	11.7	73.2%	40.8%	Below Average	18.7%	11.3%	84.2%	-3.0%	15		2.8%	No shortage	
Secondary and vocational education teachers	35.1	69.6%	15.2%	Below Average	13.4%	1.9%	98.4%	3.8%	1		2.8%	No shortage	
Primary & nursery education teachers	35.4	88.2%	9.2%	Below Average	8.9%	1.3%	94.6%	5.0%	2		2.8%	No shortage	
Judges, barristers & advocates	1.9	67.6%	0.0%		16.9%	0.0%	100.0%	-1.7%	4		2.8%	No shortage	
Solicitors	10.6	48.8%	10.0%	Below Average	11.1%	2.8%	98.5%	7.7%	0		2.8%	No shortage	
Accountants & tax experts	43.0	44.3%	8.2%	Below Average	8.8%	6.4%	94.5%	6.0%	83	X	2.8%	Skill shortage	High level niche areas
Actuaries, economists, statisticians	1.7	16.4%	6.9%		20.9%	29.7%	92.2%	0.8%	3	X	2.8%	Skill shortage	High level expertise
Business analysts	6.3	44.6%	12.2%	Below Average	13.3%	16.8%	85.8%	2.4%	63	X	2.8%	Skill shortage	High level niche areas
Architects and town planners	4.0	33.0%	13.5%	Above Average	14.6%	4.7%	100.0%	-6.3%	2		2.8%	No shortage	
Building, mining and other surveyors	1.5	17.1%	11.5%		9.1%	5.0%	100.0%	-3.1%	0		2.8%	No shortage	

Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
Librarians, archivists & curators	2.4	81.3%	12.8%		23.9%	4.0%	83.8%	7.7%	0		2.8%	No shortage	
Psychologists & other social/behavioural scientists	2.4	88.3%	19.0%		27.7%	10.3%	100.0%	4.5%	2	X	2.8%	Skill shortage	High level niche areas
Social workers, probation officers	9.2	84.1%	23.9%	Below Average	10.2%	2.8%	90.4%	10.1%	6		2.8%	No shortage	
Clergy	2.7	24.8%	12.3%		53.9%	18.3%	100.0%	-4.3%	0		2.8%	No shortage	
Laboratory technicians	5.3	60.5%	17.3%	Below Average	9.1%	3.4%	82.6%	-1.8%	16	X	2.6%	Skill shortage	
Electrical/electronic technicians	1.7	0.0%	2.7%		10.7%	3.4%	68.8%	-3.4%	5		2.6%	No shortage	
Technicians not elsewhere classified	12.2	12.1%	4.9%	Below Average	12.7%	9.6%	66.6%	-0.5%	35		2.6%	No shortage	
Draughtspersons	1.4	29.1%	7.3%		14.7%	7.3%	52.1%	-7.2%	4		2.6%	No shortage	
Quantity and other surveyors	2.8	3.6%	8.4%		15.2%	8.1%	91.3%	-0.8%	1		2.6%	No shortage	
Computer analyst/programmers	18.9	19.8%	5.6%	Below Average	2.3%	15.5%	85.0%	3.5%	171	X	2.6%	Skill shortage	High level niche areas
Ship/aircraft officers and air traffic controllers	2.6	14.9%	2.6%		22.3%	5.6%	68.4%	1.5%	0		2.6%	No shortage	
Nurses and midwives	58.5	93.1%	28.2%	Below Average	15.8%	17.3%	93.9%	2.7%	146	X	2.6%	Skill shortage	Niche areas
Physiotherapists	2.8	79.2%	25.4%		23.5%	12.6%	100.0%	6.9%	13		2.6%	No shortage	
Medical technicians, dental auxiliaries	3.5	64.9%	25.1%		5.4%	3.2%	68.6%	18.1%	9		2.6%	No shortage	
Occupational and other therapists not elsewhere classified	7.1	81.0%	32.5%	Below Average	13.6%	14.9%	91.7%	9.9%	24	X	2.6%	Skill shortage	Senior level niche areas
Health associate professionals not elsewhere classified	5.4	75.2%	20.6%	Below Average	17.6%	11.8%	93.7%	1.4%	14	X	2.6%	Skill shortage	Niche areas
Underwriters, claims assessors and analysts	11.2	34.7%	7.9%	Below Average	8.6%	11.9%	70.9%	2.1%	33	X	2.6%	Skill shortage	
Personnel, industrial relations officers	1.6	73.0%	44.1%		0.0%	6.0%	73.9%	-10.7%	5		2.6%	No shortage	
Matrons, houseparents, welfare, community & youth workers	9.3	67.9%	36.3%	Below Average	22.5%	4.7%	63.1%	5.5%	6		2.6%	No shortage	
Literary, artistic and sports professionals	29.9	37.0%	24.6%	Below Average	12.9%	10.0%	70.1%	3.0%	72		2.8%	No shortage	
Careers guidance advisors	1.7	82.2%	42.2%		33.3%	11.4%	86.9%	7.7%	0		2.8%	No shortage	
Vocational, industrial trainers	6.3	47.8%	14.4%	Below Average	26.7%	11.1%	65.1%	3.8%	3		2.6%	No shortage	
Associate professional and technical occupations not elsewhere classified	10.2	54.1%	20.5%	Below Average	16.5%	13.2%	78.1%	4.1%	25		2.6%	No shortage	
Administrative/clerical officers and assistants in civil service	30.0	68.8%	12.7%	Below Average	10.1%	0.9%	42.8%	-0.3%	3		3.5%	No shortage	

Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
Numerical clerks & cashiers	64.0	76.5%	26.6%	Below Average	10.4%	6.8%	45.0%	-0.3%	27	X	3.5%	Skill shortage	Multilingual, niche areas
Filing & records clerks	7.1	67.3%	31.7%	Below Average	15.2%	7.6%	33.2%	-3.2%	10		3.5%	No shortage	
Clerks not elsewhere classified	70.7	79.3%	29.8%	Below Average	12.6%	7.1%	38.3%	7.5%	37		3.5%	No shortage	
Warehousemen/women	15.6	9.8%	16.2%	Above Average	14.0%	13.6%	8.0%	-5.1%	35		3.5%	No shortage	
Secretaries, personal assistants etc.	28.5	95.2%	46.2%	Below Average	18.3%	3.1%	30.6%	-5.9%	6		3.5%	No shortage	
Legal secretaries	3.6	100.0%	31.8%		12.3%	2.1%	35.2%	-6.4%	1		3.5%	No shortage	
Receptionists & telephonists	14.2	88.5%	51.7%	Below Average	18.1%	8.2%	23.0%	-5.5%	14		3.5%	No shortage	
Computer operators, other office machine operators	2.1	28.8%	14.0%		10.3%	19.9%	52.5%	-11.3%	5		3.5%	No shortage	
Bricklayers, masons	4.5	0.0%	15.2%	Above Average	4.0%	10.8%	6.5%	-22.6%	1		2.7%	No shortage	
Roofers, slaters, tilers, sheeters, cladders	2.9	0.0%	9.6%		5.9%	10.5%	2.9%	-16.0%	0		2.7%	No shortage	
Plasterers	4.6	0.0%	18.6%	Above Average	15.9%	15.5%	1.5%	-19.0%	5		2.7%	No shortage	
Construction trades not elsewhere classified	4.0	0.0%	27.1%	Above Average	31.0%	12.9%	6.8%	-8.5%	0		2.7%	No shortage	
Builders, building contractors	12.8	3.8%	14.3%	Above Average	18.9%	9.1%	19.7%	-8.6%	0		2.7%	No shortage	
Floorers, floor coverers, carpet fitters, tilers	1.2	0.0%	16.2%		5.4%	13.7%	12.2%	-14.2%	2		2.7%	No shortage	
Painters & decorators	7.1	0.0%	16.7%	Above Average	22.7%	16.0%	6.9%	-10.6%	1		2.7%	No shortage	
Metal machining, fitting & instrument making trades	20.8	4.7%	6.5%	Below Average	11.9%	8.6%	21.8%	-4.2%	30		1.5%	No shortage	
Electrical/ electronic trades	30.4	3.8%	7.2%	Above Average	9.6%	7.7%	25.0%	-6.0%	13		2.1%	No shortage	
Plumbers, heating & related trades	10.7	1.6%	15.8%	Above Average	9.5%	5.7%	12.4%	-5.7%	0		2.7%	No shortage	
Metal forming, welding & related trades	8.9	0.0%	16.2%	Above Average	6.7%	14.1%	10.4%	-10.0%	10		1.5%	No shortage	
Vehicle trades	16.3	0.9%	10.5%	Above Average	16.6%	18.1%	9.9%	-3.7%	8		2.1%	No shortage	
Textiles, garments and related trades	2.9	69.0%	42.0%		25.6%	20.4%	10.0%	-8.4%	5		2.7%	No shortage	
Printing and related trades	4.9	22.0%	19.1%	Above Average	20.0%	10.8%	22.4%	-7.0%	7		2.7%	No shortage	
Carpenters & joiners	18.7	0.9%	11.5%	Above Average	9.7%	8.6%	8.8%	-13.5%	3		2.7%	No shortage	
Wood working trades	3.5	7.9%	38.3%		16.6%	15.1%	11.4%	-5.5%	3		2.7%	No shortage	
Food preparation trades	9.9	11.1%	17.0%	Below Average	9.0%	38.6%	12.4%	1.1%	57	X	1.5%	Skill shortage	Niche areas

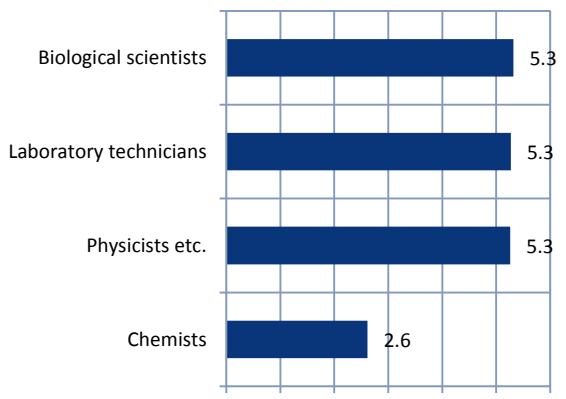
Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
Craft & related occupations not elsewhere classified	15.3	11.4%	25.6%	Above Average	22.0%	14.3%	27.7%	-4.0%	20		2.7%	No shortage	
Army personnel	8.6	8.5%	0.0%	Below Average	3.2%	0.7%	22.1%	4.8%	2		1.2%	No shortage	
Gardaí	15.5	27.8%	0.9%	Below Average	2.5%	0.0%	80.3%	4.9%	0		1.2%	No shortage	
Fire service officers	3.0	7.1%	13.3%		6.5%	0.0%	40.2%	4.5%	0		1.2%	No shortage	
Prison service officers	3.2	11.5%	0.0%		0.0%	0.0%	33.6%	0.2%	0		1.2%	No shortage	
Security guards	12.9	19.0%	24.7%	Above Average	19.8%	16.8%	14.4%	-1.2%	54		1.2%	No shortage	
Chefs, cooks	21.0	41.2%	28.8%	Below Average	10.3%	32.0%	40.0%	-1.2%	259		3.9%	No shortage	
Waiters, waitresses	18.9	81.1%	66.7%	Above Average	3.5%	26.6%	25.3%	-1.3%	45		3.9%	No shortage	
Bar staff	22.6	37.0%	54.2%	Above Average	7.8%	9.2%	19.8%	-0.7%	10		3.9%	No shortage	
Travel and flight attendants	3.5	82.4%	18.2%		4.6%	18.9%	39.8%	6.0%	5		3.9%	No shortage	
Dental nurses	2.3	97.1%	42.6%		6.0%	2.4%	71.9%	3.2%	0		2.6%	No shortage	
Care assistants and related occupations	47.8	84.7%	40.1%	Below Average	18.3%	14.8%	25.4%	4.2%	263		2.6%	No shortage	
Health and related occupations not elsewhere classified	1.6	13.4%	0.0%		12.5%	6.6%	77.7%	11.6%	3		2.6%	No shortage	
Nursery nurses and playgroup leaders	6.5	98.6%	51.0%	Average	3.4%	8.6%	28.5%	-0.5%	4		3.9%	No shortage	
Educational assistants	13.2	98.4%	28.2%	Below Average	8.7%	8.2%	45.6%	10.7%	3		3.9%	No shortage	
Childcare & related occupations not elsewhere classified	13.6	98.5%	54.5%	Below Average	8.4%	20.9%	29.7%	4.1%	18		3.9%	No shortage	
Hairdressers, beauticians etc.	21.1	93.8%	48.5%	Below Average	3.0%	7.3%	27.8%	3.1%	7		3.9%	No shortage	
Domestic staff and related occupations	16.1	49.8%	46.6%	Below Average	32.2%	23.2%	13.0%	1.4%	55		3.9%	No shortage	
Personal and protective service occupations not elsewhere classified	5.0	31.1%	49.3%	Below Average	12.2%	1.6%	19.7%	3.6%	14		3.9%	No shortage	
Buyers, brokers etc.	3.8	53.8%	7.9%		4.1%	8.4%	56.6%	-4.9%	5		4.4%	No shortage	
Sales representatives	36.2	30.7%	11.7%	Below Average	14.1%	6.3%	45.0%	-0.9%	40	X	4.4%	Skill shortage	Specialists
Sales assistants	113.9	72.0%	57.6%	Above Average	8.8%	16.6%	20.8%	-1.0%	93		4.4%	No shortage	
Other sales occupations	9.5	42.0%	65.9%	Below Average	15.3%	10.7%	23.0%	-0.2%	6	X	4.4%	Skill shortage	Multilingual telesales
Food, drink and tobacco operatives	13.3	28.7%	9.6%	Below Average	8.0%	46.4%	19.3%	-4.6%	26		1.5%	No shortage	
Chemicals, paper, plastic and related process operatives	9.1	32.4%	5.6%	Above Average	3.6%	11.5%	23.9%	-5.6%	7		1.5%	No shortage	

Occupation	Numbers Employed (2010 annual average)	% Female	% Part-Time	Unemployment Rate	%>55	% Non-Irish Nationals	% Third Level Graduates	Annual Average Employment Growth Rate, 2005-2010	New Employment Permits	SLMRU Recruitment Agency Survey	Replacement Rate	Shortage Indicator	Comment
Assemblers/lineworkers	17.4	42.3%	9.3%	Above Average	8.0%	25.1%	25.2%	-0.8%	6		1.5%	No shortage	
Routine process operatives not elsewhere classified	9.5	45.2%	11.2%	Above Average	3.7%	29.7%	35.9%	-4.2%	34		1.5%	No shortage	
Road transport operatives	61.5	2.8%	15.2%	Above Average	24.8%	12.9%	6.4%	-2.1%	72		-1.2%	No shortage	
Transport and machinery operatives (excluding road transport operatives)	11.6	4.0%	11.2%	Above Average	13.1%	12.2%	9.2%	-10.3%	19		1.5%	No shortage	
Plant and machine operatives not elsewhere classified	13.3	9.0%	13.7%	Above Average	20.9%	12.7%	14.6%	-11.2%	40		1.5%	No shortage	
Occupations in agriculture, forestry and fishing not elsewhere classified	14.8	18.1%	21.6%	Below Average	15.7%	30.0%	13.0%	-0.3%	65		3.1%	No shortage	
Occupations in mining and manufacturing not elsewhere classified	9.9	27.1%	9.8%	Above Average	9.3%	23.7%	8.1%	1.2%	56		4.5%	No shortage	
Occupations in construction not elsewhere classified	13.8	1.5%	12.9%	Above Average	19.5%	17.3%	6.5%	-16.2%	10		4.5%	No shortage	
Occupations in transport not elsewhere classified	4.7	2.7%	8.7%	Above Average	8.7%	29.1%	5.8%	-2.7%	7		4.5%	No shortage	
Occupations in communications not elsewhere classified	10.9	18.0%	12.5%	Below Average	26.9%	0.5%	7.1%	0.3%	0		-1.2%	No shortage	
Occupations in sales and services not elsewhere classified	63.3	74.5%	59.6%	Below Average	17.8%	32.9%	12.9%	-1.0%	330		4.5%	No shortage	
Gainful occupations not elsewhere classified	28.0	22.2%	27.7%	Above Average	20.3%	23.8%	16.5%	-11.6%	12		4.5%	No shortage	
All occupations	**1,847.9**	**46.6%**	**23.2%**		**14.8%**	**12.1%**	**44.4%**	**-1.2%**	**3762**		**0.0%**	No shortage	

8.1 Science Occupations[1]

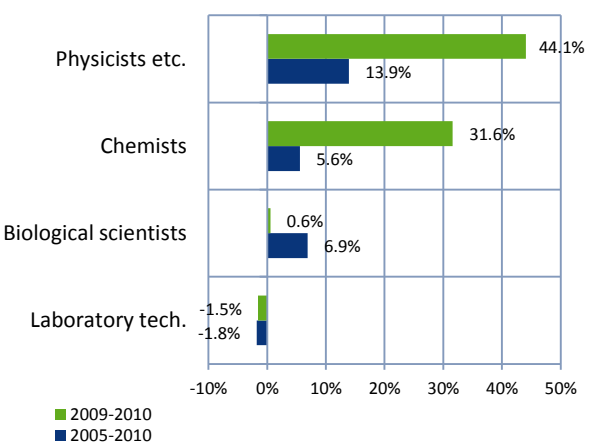
- There were approximately 18,500 persons employed in the selected science occupations, representing approximately 1% of national employment
- Over three quarters of employment was in three sectors: industry (e.g. pharmaceuticals); healthcare; and professional, scientific and technical activities (e.g. scientific R&D)
- Technician level occupations accounted for almost 30% of employment; professional occupations for approximately 70%
- With an annual average growth rate of 5.2% over the period 2005-2010, employment growth for science occupations was well in excess of the national average of -1.2%
- Employment growth over the five-year period was the strongest for physicists, which, at 13.9%, was almost double that of biological scientists (6.9%); in contrast, negative employment growth was recorded for laboratory technicians, although the numbers employed in 2009 and 2010 were similar
- At 6%, the unemployment rate for science occupations overall in 2010 was less than half the national average of 14.1%; that for physicists and chemists was even lower at 2% and 3% respectively
- At least four fifths of employment in professional and technician level science occupations was in the 25-54 age group; chemists had the youngest age profile with almost all those employed aged less than 55
- However, the age profile of biological scientists and chemists shifted further away from the younger age group over the period 2005-2010; the share of biological scientists and chemists aged less than 25 fell from 19% each to 2% and 9% respectively
- Over 95% of those employed in professional level occupations and over 80% of those at technician level held third level qualifications; overall, science occupations had the highest educational attainment of all occupational groups economy-wide (94%)
- With the exception of physicists, females outnumbered males in science occupations; in contrast, employment of physicists was 55% male.

Figure 8.1.1 Numbers Employed (000s) in Selected Science Occupations, 2010



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

Figure 8.1.2 Average Annual Growth (%) in Selected Science Occupations



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

[1] Due to a reclassification of occupations in 2011, the technician category is not comparable with that cited in the 2010 issue of the National Skills Bulletin.

Table 8.1.2 Age Profile of Selected Science Occupations, 2010

	15-24	25-54	55+	Total
Biologists	2%	83%	15%	100%
Laboratory tech.	3%	88%	9%	100%
Physicists etc.	3%	92%	5%	100%
Chemists	9%	91%	0%	100%

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

Table 8.1.2 Education Profile of Selected Science Occupations, 2010

	Lower Secondary or Less	Upper Secondary or FET	Third level	Total
Biologists	0%	2%	98%	100%
Laboratory tech.	6%	11%	83%	100%
Physicists etc.	0%	3%	97%	100%
Chemists	0%	0%	100%	100%

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

Shortage Indicators

Recent data points to shortages of chemists in product development, biologists, medical scientists and nutritionists. At technician level, shortages of laboratory analysts have been identified.

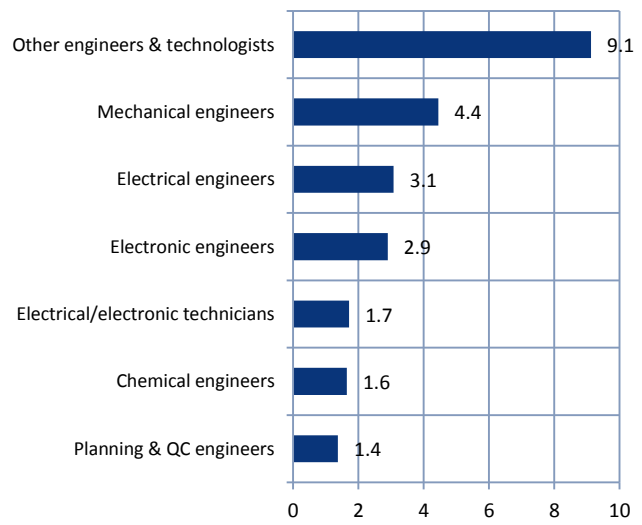
There are a number of factors expected to positively impact on the demand for science skills:

- The expected strong performance of the high technology manufacturing sector, primarily medical devices and pharmaceuticals; despite the economic crisis, employment in the manufacturing of basic pharmaceutical products (NACE 21) increased by 6,000 between quarter 4 2009 and quarter 4 2010; recent job announcements include those by Optivia Biotechnology and ClearStream Technologies; the plans announced to establish a Global Pharmaceutical Centre of Excellence are also likely to result in some job creation in the coming years for scientists in a number of areas including pharmacokinetics, pharmacodynamics and pharmacogenomics.
- Moves towards higher value added activities within the high technology manufacturing sectors; between quarter 4 2009 and quarter 4 2010 alone, the share of operatives in the manufacturing of basic pharmaceutical products (NACE 21) declined by 5 percentage points to 22%, while the share of professionals and technicians (super-operatives) increased by 2 and 3 percentage points respectively.
- The Government's on-going investments in science, technology and innovation (e.g. Science Foundation Ireland and the IDA) are expected to facilitate further job creation in high technology activities such as biotechnology (Bio), ICT, and sustainable energy and energy-efficient technologies; during 2010, the IDA announced a significant number of jobs in research in the pharmaceutical, medical devices and other sectors, to be rolled out over the coming years; by hosting the EuroScience Open Forum, Dublin will be the City of Science 2012 and will facilitate an international dialogue on the latest advances in science and technology, further enhancing Ireland's reputation as a scientific hub.
- Technological advances and the green agenda are expected to drive demand for interdisciplinary teams which bring together science, ICT, engineering and other skills to be deployed in the area of renewable energy, environmental protection, healthcare, bio-convergence etc.
- The increase in demand for healthcare and healthcare products is also expected to be driven by the aging population, greater expectations and a higher awareness of health issues.

8.2 Engineering Occupations

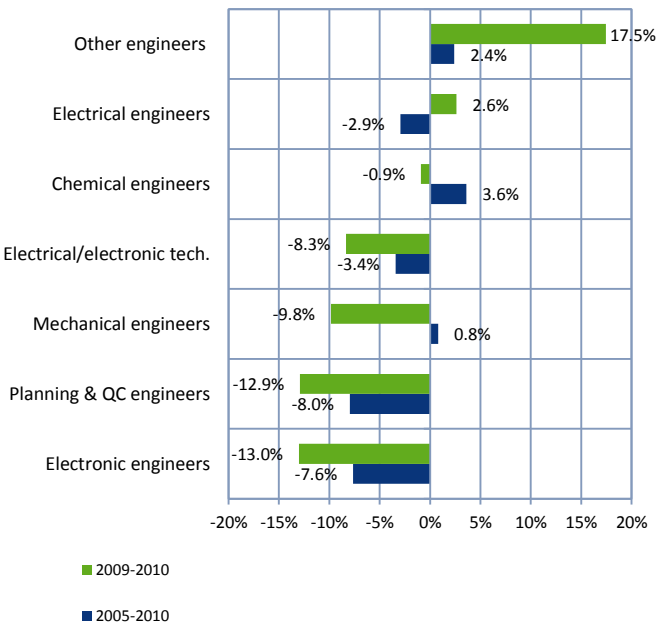
- There were 24,300 persons employed in the selected engineering occupations, accounting for approximately 1.3% of Ireland's workforce
- More than three quarters of employment was in industry (manufacture of computers & electronics, pharmaceuticals and machinery & equipment), professional, scientific and technical activities, and ICT
- Over 90% of employment was at professional level (engineers); the remainder was at technician level
- While employment contracted by 1.2% on average annually over the period 2005-2010, employment change turned positive between 2009 and 2010 (0.6%); this growth was driven primarily by a 17.5% increase in the employment of design and development engineers in 2010 (a net increase of 1,400 jobs); in almost all other engineering occupations, employment contracted over the period 2009-2010
- At 7%, the share of older workers was less than half the national average of 15%; nonetheless, the age profile of employment in these occupations has, on average, shifted further towards older age cohorts: in many occupations (except planning and QC engineers), the share of younger workers halved between 2009 and 2010
- The vast majority of those in engineering occupations were highly skilled: at least 80% at professional level and almost 70% at technician level were third level graduates
- At an average of 89%, employment in almost all engineering occupations was predominantly male; the employment composition of planning and quality control engineers was almost gender balanced where males only slightly outnumbered females (55% male vs. 45% female)
- At 7%, the unemployment rate for engineers was half the national average (14.1%).

Figure 8.2.1 Numbers Employed (000s) in Selected Engineering Occupations, 2010



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

Figure 8.1.2 Average Annual Growth (%) in Selected Engineering Occupations



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

Table 8.2.1 Age Profile of Selected Engineering Occupations, 2010

	15-24	25-54	55+	Total
Other engineers	1%	89%	10%	100%
Mechanical engineers	2%	91%	7%	100%
Electrical engineers	2%	93%	5%	100%
Electronic engineers	2%	92%	5%	100%
Electrical/electronic tech.	0%	89%	11%	100%
Chemical engineers	0%	100%	0%	100%
Planning and QC engineers	5%	95%	0%	100%

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

Table 8.2.2 Education Profile of Selected Engineering Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Other engineers	2%	7%	91%	100%
Mechanical eng.	4%	5%	91%	100%
Electrical engineers	2%	15%	82%	100%
Electronic engineers	3%	6%	92%	100%
El./electronic tech.	0%	31%	69%	100%
Chemical engineers	0%	0%	100%	100%
Planning &QC eng.	5%	8%	88%	100%

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

Shortage Indicators

The following engineering skills have been reported as difficult to source: chemical (process safety), design and development (pharmaceuticals, medical devices, food etc.), electrical (power generation, high voltage), electronic (printed circuit board (PCB) microchip), planning and quality control (standards compliance, validation), mechanical (renewable energy) and production (process automation and Six Sigma).

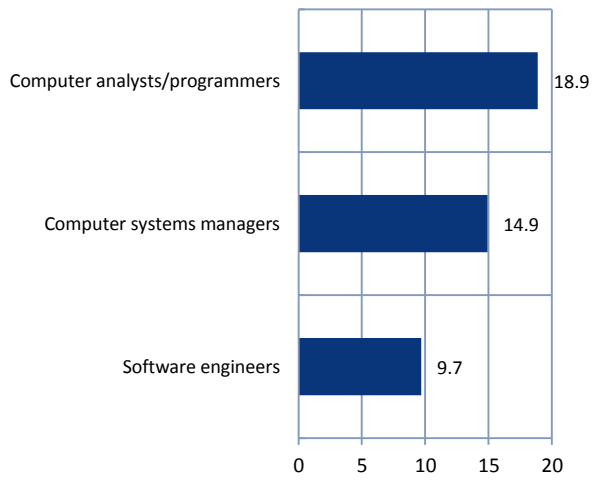
The demand for engineering skills is expected to be driven by a number of factors:

- The strong performance of the high technology manufacturing sector is expected to continue to drive the economy out of recession with engineering skills being one of the key enablers of this growth. For example, a significant number of jobs for engineering skills in the areas of transport equipment manufacturing, medical devices and electronic equipment, machinery and equipment manufacturing, the manufacture of rubber and plastic, spanning managerial, professional, technician and craft (e.g. metal working production and maintenance fitters) levels have been announced by the IDA.
- Global competition and the need to reduce the costs of manufacturing through process automation, the implementation of lean manufacturing and Six Sigma principles, increased efficiencies, and material, product and process innovation, will drive job creation in high level engineering skills.
- Changes in the regulatory environment are expected to enhance the demand for engineers with expertise in regulatory standards (e.g. safety), quality control and validation.
- Rising concerns about the sustainability of energy supply is driving investment in improvements in the generation, transmission and efficiency of energy production, and the rise of renewable energy technologies are expected to impact positively on the demand for engineering skills (mechanical, electrical, electronic etc.). In particular, engineering skills are expected to be needed for the installation, servicing and maintenance of renewable energy installations; the development of international interconnector and a national grid connection system that is capable of incorporating a range of small-scale renewable power supplies; the development and installation of smart network technologies including smart metering etc. The demand for these skills is reflected in the recent job announcements by Shell and Wind Energy Direct.

8.3 IT Professional Occupations

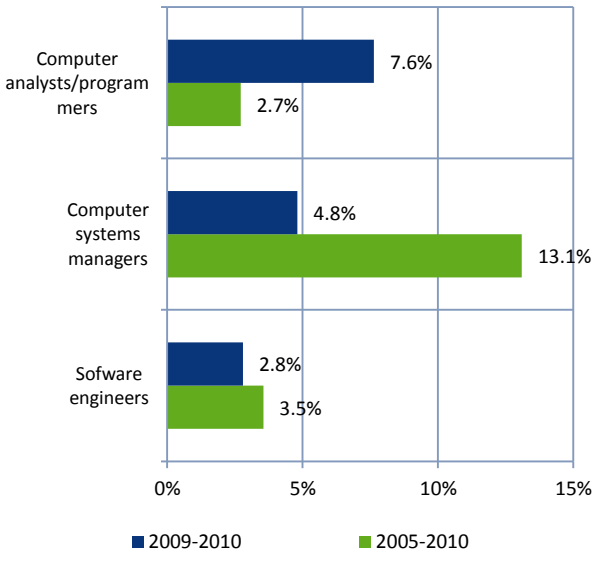
- There were approximately 43,000 persons employed in the selected IT professional occupations, accounting for almost 2.5% of the national workforce
- More than half of employment was in the ICT sector; a further 15% was in industry (mostly in the manufacture of computers, electronic and optical products)
- Employment in IT professional occupations grew by 6.1% on average annually over the period 2005-2010; this translated into a net job creation of 11,000, more than half of which was recorded since the recession began in 2008
- On average, 97% of employment in IT professional occupations was in the 25-54 year-old age cohort
- Although the age profile of those employed in these occupations was young relative to other occupations, there was nonetheless a shift away from the younger age cohorts between 2005 and 2010: the shares of those aged less than 25 declined by nine percentage points for programmers, by seven percentage points for engineers and four for computer systems managers
- Those in IT professional occupations were highly skilled with, on average, 88% of employment holding third level qualifications
- The educational profile of IT professionals shifted further towards higher level qualifications with the share of graduates increasing by at least three percentage points between 2005 and 2010 for each occupation
- At 7.5%, the unemployment rate for IT professionals was almost half the national average
- Approximately one fifth of overall employment in IT occupations was female
- Approximately one fifth of software engineers was non-Irish.

Figure 8.3.1 Numbers Employed (000s) in Selected IT Professional Occupations, 2010



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

Figure 8.3.2 Average Annual Growth (%) in Selected IT Professional Occupations



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

Table 8.3.1 Age Profile of Selected IT Professional Occupations, 2010

	15-24	25-54	55+	Total
Computer analysts/ programmers	2%	96%	2%	100%
Computer systems managers	1%	97%	2%	100%
Software engineers	0%	99%	1%	100%

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

Table 8.3.2 Education Profile of Selected IT Professional Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Computer analysts/ programmers	1%	14%	85%	100%
Comp. systems managers	1%	11%	88%	100%
Software engineers	1%	5%	95%	100%

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

Shortage Indicators

Along with engineering skills, IT skills were the most frequently mentioned as difficult to source by recruitment agencies. In 2010, almost 500 employment permits were issued to non-EEA software engineers and computer programmers.

Job titles in short supply include:

- senior software applications developers (Java, C++, C#, VB, Ruby, Perl, Python)
- network and security experts (.net, SharePoint, encryption, cloud computing, virtualisation (VMware))
- system administrators (Oracle, J2EE, SQL Server)
- web developers (PHP, JavaScript, XML, HTML, Flex, ColdFusion)
- business analysts
- IT project managers.

Despite the recession, the demand for IT skills remains strong, as illustrated by recent job announcements which span a variety of sectors, from ICT (HP Ireland, Avaya, Quest Software) to gaming (PopCap Games), on-line gambling (Paddy Power) and energy (e.g. Endeco Technologies), with the financial sector featuring prominently as an employer of IT skills (Fidelity Investments, Monex, Fidessa, Murex).

Job creation is expected to be sustained as the greatest number of jobs announced by the IDA in 2010, which will be rolled-out over the medium-term, is in ICT. Jobs are expected to span managerial, professional and technician levels, with a significant majority in software development.

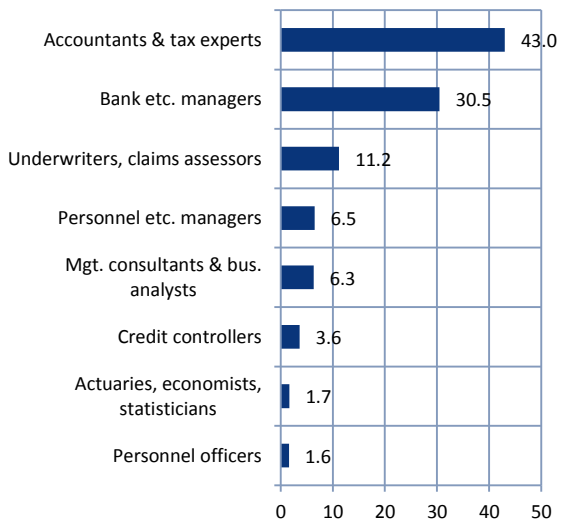
The demand for IT skills is expected to be driven by the following factors:

- Harnessing ICT is expected to feature prominently in businesses' efforts to reduce costs and improve efficiencies through innovation in business processes. This is expected to further expand the use of SaaS (software as a service) and cloud computing platforms.
- Increased use of the internet for marketing, advertising, sales, networking, communication (blogs and social networks) and recruitment purposes throughout the economy.

8.4 Business and Financial Occupations

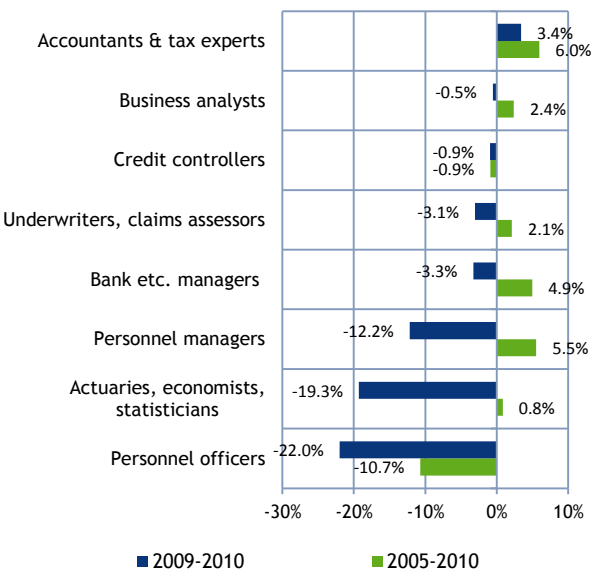
- Approximately 104,000 persons were employed in the selected business and financial occupations, accounting for almost 6% of Ireland's workforce
- Approximately one third of total employment in these occupations was in financial and insurance activities; almost one quarter in professional, scientific and technical activities (mostly in legal and accounting services)
- Almost one half of employment was at professional level (primarily accountants and tax experts); approximately 40% was at managerial level and the remainder was at associate professional level
- Over the period 2005-2010, employment in business and financial occupations grew by 4.2% on average annually — equivalent to a total net job creation of 19,000 over the period; more than half of these additional jobs were for accountants and tax experts
- Over the period 2009-2010, however, employment contracted for this occupational group (-1.7%); most of the job losses were for personnel officers; in contrast the number of accountants and tax experts rose by 3.4%
- Over the period 2005-2010, there was a shift towards older age cohorts for those employed in most financial occupations: the share of employment in the 15-24 age category fell for all occupations and the share in the 55+ category increased for accountants and tax experts, actuaries, credit controllers and business analysts
- The gender distribution of employment in financial occupations varied by occupation: personnel managers, personnel officers and credit controllers were predominantly female (at least 70%), while actuaries and underwriters were mostly male (84% and 65% respectively)
- Actuaries, economists, and statisticians and accountants and tax experts had the highest level of educational attainment, with over 90% holding third level qualifications; in contrast, credit controllers had the lowest level – less than half were graduates.

Figure 8.4.1 Numbers Employed (000s) in Selected Business and Financial Occupations, 2010



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

Figure 8.4.2 Average Annual Growth (%) in Selected Business and Financial Occupations



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

Table 8.4.1 Age Profile of Selected Business and Financial Occupations, 2010

	15-24	25-54	55+	Total
Accountants/tax experts	7%	84%	9%	100%
Bank etc. managers	2%	90%	8%	100%
Underwriters claims assessors	6%	85%	9%	100%
Personnel etc. managers	1%	93%	5%	100%
Management consultants/ business analysts	1%	86%	13%	100%
Credit controllers	2%	81%	17%	100%
Actuaries, economists, statisticians.	0%	79%	21%	100%
Personnel officers	11%	89%	0%	100%

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

Table 8.4.2 Education Profile of Selected Business and Financial Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Accountants tax experts	0%	5%	95%	100%
Bank etc. managers	3%	33%	64%	100%
Underwriters claims assess.	0%	29%	71%	100%
Personnel etc. managers	0%	21%	79%	100%
Mgt consultant, business analysts	1%	13%	86%	100%
Credit controllers	4%	47%	49%	100%
Actuaries, economists, statisticians	0%	8%	92%	100%
Personnel officers	5%	21%	74%	100%

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

Shortage Indicators

Despite significant job losses and job loss announcements in the banking sector (including Anglo Irish Bank, AIB and TSB), high level financial skills in the areas of risk analysis, management and cost accounting, compliance and regulatory standards (domestic, EU (e.g. MiFID, Solvency II) and global (e.g. Basel II)) and financial analysis are in short supply. Financial experts with proficiency in financial software packages (e.g. SUMMIT and SAP) are particularly difficult to source.

The demand for financial skills is illustrated by some recent job announcements including those by Apex Fund Services, Fidelity Investments, Acorn Life, Smith and Williamson, Deutsche Bank and First Ireland.

International financial services activities have held up well during the recession in terms of employment levels[2]. Further job creation is expected in the medium-term driven, in part, by projects announced by the IDA in 2010. These jobs include financial management, accounting, hedge fund, risk, compliance and financial analysis positions.

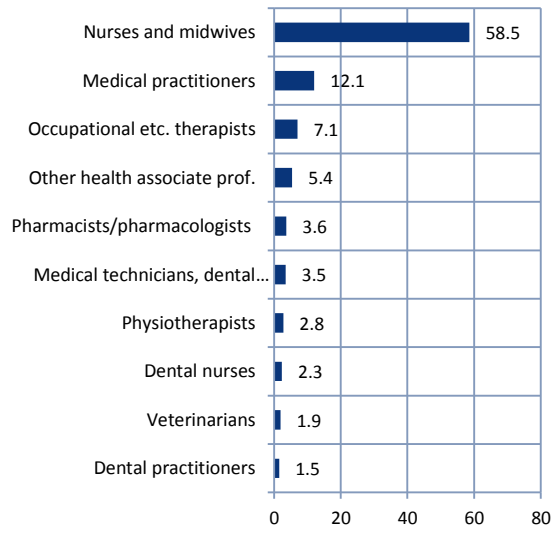
Demand for high level financial skills is expected to be driven by the global recovery, reform of the banking system, product innovation, changes in the regulatory environment and attitudes to risk.

[2] Forfás (2011) Annual Employment Survey 2010

8.5 Healthcare Occupations

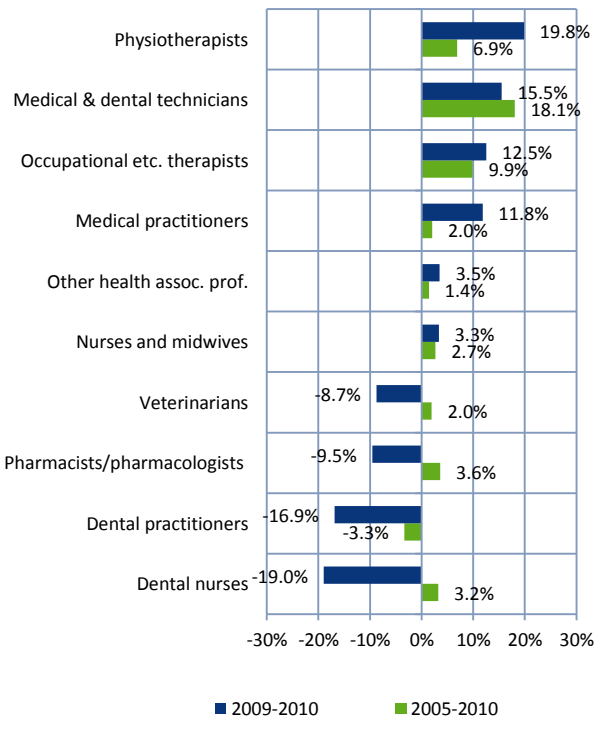
- There were almost 100,000 persons employed in the selected healthcare occupations, representing 5% of Ireland's workforce
- Almost 80% of employment was at associate professional level (primarily in nursing and midwifery)
- Nurses and midwives were one of the largest occupations in the workforce as a whole, after sales assistants, other clerks and farmers
- Employment in healthcare occupations increased by 3% on average annually over the period 2005-2010 – above the national average of -1.2%; a net 15,000 additional jobs were created in that five-year period, primarily for nurses and midwives, therapists and medical practitioners
- The majority of those employed in healthcare occupations held third level qualifications: over 90% were third level graduates
- Approximately one fifth of persons employed as medical practitioners was non-Irish; in contrast, almost all dental nurses and medical/dental technicians were Irish
- At approximately 80%, the workforce of healthcare occupations was predominately female (over 90% for nurses and midwives)
- At one fifth aged under 25, the workforce of pharmacists/pharmacologists was the youngest among the selected healthcare occupations.

Figure 8.5.1 Numbers Employed (000s) in Selected Healthcare Occupations, 2010



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

Figure 8.5.2 Average Annual Growth (%) in Selected Healthcare Occupations



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

Table 8.5.1 Age Profile of Selected Healthcare Occupations, 2010

	15-24	25-54	55+	Total
Nurses and midwives	3%	81%	16%	100%
Medical practitioners	7%	73%	20%	100%
Occupational therapists	4%	82%	14%	100%
Other health associate prof.	2%	81%	17%	100%
Pharmacists/pharmacolog.	20%	59%	21%	100%
Medical and dental tech.	4%	91%	5%	100%
Physiotherapists	3%	74%	23%	100%
Dental nurses	5%	89%	6%	100%
Veterinarians	0%	96%	4%	100%
Dental practitioners	3%	80%	17%	100%

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

Table 8.5.2 Education Profile of Selected Healthcare Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Nurses and midwives	0%	6%	94%	100%
Medical practitioners	2%	1%	97%	100%
Occupational therapists	2%	6%	92%	100%
Other health assoc.prof.	0%	6%	94%	100%
Pharmacists/pharmacolog.	0%	8%	92%	100%
Medical and dental tech.	6%	25%	69%	100%
Physiotherapists	0%	0%	100%	100%
Dental nurses	0%	28%	72%	100%
Veterinarians	0%	10%	90%	100%
Dental practitioners	4%	0%	96%	100%

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

Shortage Indicators

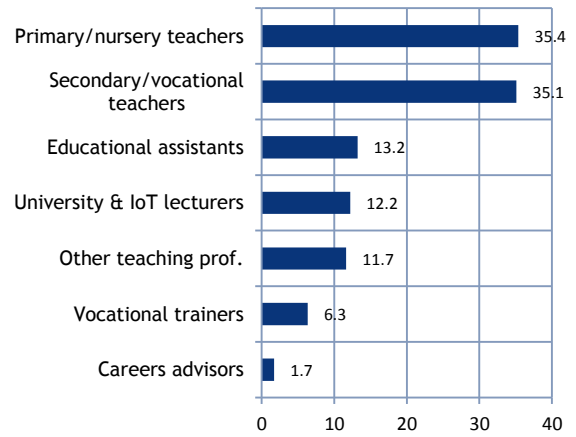
Employment opportunities in the public healthcare sector have been further diminished due to the deterioration in the public finances. Nonetheless, shortages of the following skills persist:

- Medical practitioners (general practitioners and non -consultant hospital doctors (Senior House Officer grade)); 300 non-EEA doctors were issued new employment permits in 2010.
- Specialist nurses (theatre, intensive care, dialysis, geriatric and midwives); just under 150 non-EEA nurses were issued new employment permits in 2010.
- Medical radiographers (CT and MRI).
- Senior therapists (including speech and language therapists); 24 employment permits were issued to non-EEA therapists in 2010.

8.6 Education Occupations

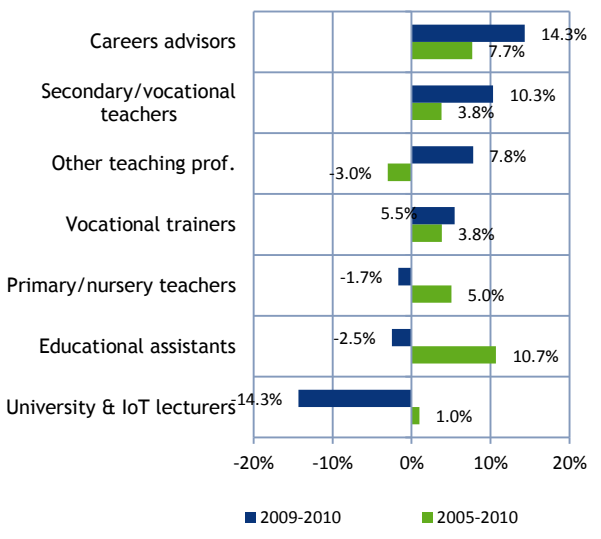
- There were approximately 116,000 persons employed in the selected education-related occupations, representing 6% of Ireland's workforce
- Just over 80% were employed in professional occupations
- Between 2005-2010 employment in education-related occupations increased by 3.7% in contrast to a 1.2% decline in the national average; the largest absolute increase in employment was for primary/nursery teachers, although it has remained relatively unchanged since 2009
- Between 2005-2010, a net 19,000 jobs were created in these occupations, 80% were at professional level, predominantly in primary/nursery and secondary/vocational teaching
- The majority of employed educational professionals held third level qualifications; at 46%, educational assistants had the lowest share of third level graduates, although this has been increasing in recent years
- One third of employed career advisors was 55 years or older – one of the most mature workforces among associate professional occupations; in contrast, primary/nursery teachers had the youngest age profile
- With the exception of university and IoT lecturers, the share of females employed in all education-related occupations exceeded the national average
- Just under one fifth of those employed as university and IoT lecturers were non-Irish nationals – one of the highest shares among professional occupations.

Figure 8.6.1 Numbers Employed (000s) in Selected Education Occupations, 2010



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

Figure 8.6.2 Average Annual Growth (%) in Selected Education Occupations



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

Table 8.6.1 Age Profile of Selected Education Occupations, 2010

	15-24	25-54	55+	Total
Primary & nursery teachers	11%	80%	9%	100%
Secondary/vocational teachers	2%	84%	14%	100%
Educational assistants	2%	89%	9%	100%
Univ. & IoT lecturers	1%	79%	20%	100%
Other teaching prof.	7%	74%	19%	100%
Vocational, trainers	1%	72%	27%	100%
Careers advisors	0%	67%	33%	100%

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

Table 8.6.2 Education Profile of Selected Education Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Primary & nursery teachers	1%	4%	95%	100%
Secondary/vocational teachers	0%	1%	99%	100%
Educational assistants	6%	48%	46%	100%
Univ. & IoT lecturers	0%	1%	99%	100%
Other teaching prof.	2%	14%	84%	100%
Vocational, trainers	9%	26%	65%	100%
Careers advisors	9%	4%	87%	100%

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

Shortage Indicators

There is no evidence of shortages of education and training professionals. Employment opportunities in the public education sector remain limited due to the restrictions on recruitment in the public sector.

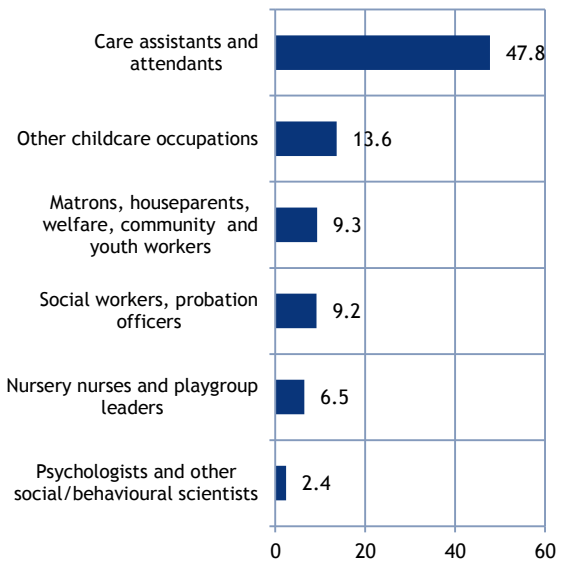
The demand for education and training is likely to increase due to:

- the need to up-skill or re-skill large numbers of unemployed persons in order to improve their employability
- a greater number of school leavers entering third level education combined with a greater number of students opting to remain in education for longer periods. These developments reflect the relative lack of employment opportunities in the labour market at present.

8.7 Social and Care Occupations

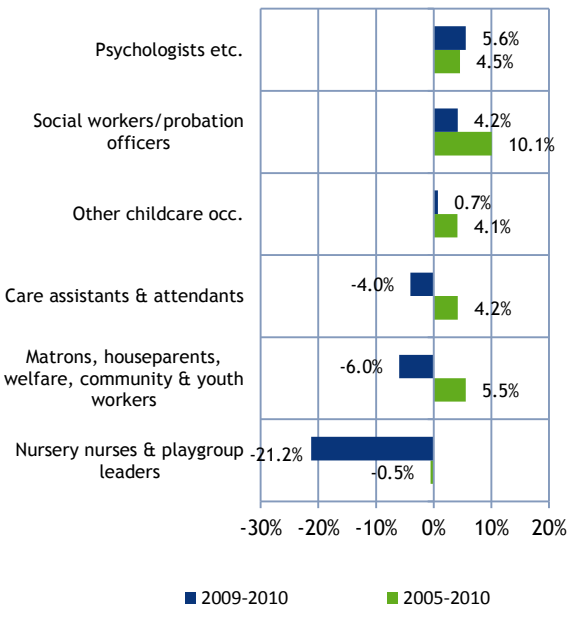
- There were approximately 89,000 persons employed in social and care occupations, representing almost 5% of Ireland's workforce
- At over 50%, care assistants and related occupations accounted for the highest share of those employed in social and care occupations; professional occupations (i.e. psychologists and social workers) accounted for 13%
- Employment in the selected occupations grew at an annual average rate of 4.5% over the period 2005-2010; at 10%, the strongest employment growth was recorded for social workers and probation officers during that period
- Approximately 17,400 additional jobs were created during the period 2005-2010; the most significant number was created for care assistants and attendants (almost 9,000), followed by social workers and probation officers (approximately 3,500)
- One fifth of those employed in childcare related occupations was non-Irish, exceeding the national average of 12%
- Childcare related workers had the youngest workforce in this occupational group with over 15% younger than 25
- All of those employed in professional occupations (psychologists and social workers and probation officers) held a third level qualification; at the other end of the educational spectrum, just under one third of all employed care assistants held a third level qualification; however, the share with third level qualifications has been increasing in recent years
- At 86%, the overall workforce of social and care occupations was predominantly female, exceeding the national average of 47%
- The share of those working part-time in most occupations exceeded the national average of 23%; approximately, half the workforce of childcare related workers and nursery nurses worked part-time

Figure 8.7.1 Numbers Employed (000s) in Selected Social and Care Occupations, 2010



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

Figure 8.7.2 Average Annual Growth (%) in Selected Social and Care Occupations



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

Table 8.7.1 Age Profile of Selected Social and Care Occupations, 2010

	15-24	25-54	55+	Total
Care assistants	7%	75%	18%	100%
Other childcare occupations	18%	72%	8%	100%
Community & youth workers	2%	76%	22%	100%
Social workers/probation officers	2%	87%	10%	100%
Nursery nurses	16%	81%	3%	100%
Psychologists etc.	0%	72%	28%	100%

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

Table 8.7.2 Education Profile of Selected Social and Care Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Care assistants	30%	45%	25%	100%
Other childcare occupations	14%	56%	30%	100%
Community & youth workers	14%	23%	63%	100%
Social workers/probation officers	4%	6%	90%	100%
Nursery nurses	18%	53%	29%	100%
Psychologists etc.	0%	0%	100%	100%

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

Shortage Indicators

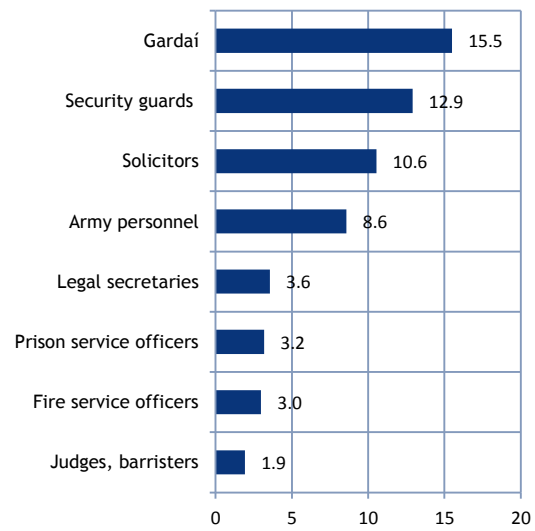
Clinical psychologists have been mentioned by recruitment agencies as difficult to source.

There are currently no shortages of social and care occupations. However, in 2010, 250 new work permits were issued to non-EEA care assistants and there have been some mentions of difficulty in sourcing private home care assistants, which suggests there may be issues in filling these positions from the supply of candidates who are on the Live Register.

8.8 Legal and Security Occupations

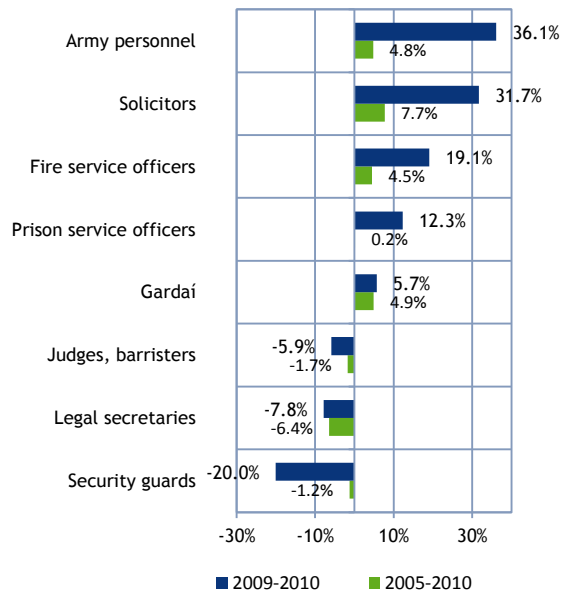
- There were approximately 59,000 persons employed in legal and security occupations, accounting for 3% of total national employment
- Over half of employment in these occupations was concentrated in public administration and defence
- The majority of persons were employed as Gardaí and security guards : 15,500 and 12,900 respectively
- Employment in legal and security occupations expanded by 2.4% on average annually between 2005 and 2010 with a total net job creation of 6,600 over that period; the largest number of jobs were created for both Gardaí and solicitors, followed by army personnel (just over 3,000 each and 1,800 respectively); employment of solicitors grew the strongest during that period
- Just under 3,000 net job gains were recorded between 2009 and 2010; the largest number of job gains was recorded for solicitors and army personnel; in contrast, the largest number of job losses was for security guards, while there were negligible changes for the other occupations
- The workforce of security guards was the most mature among the selected occupations — one in five were aged 55, exceeding the national average; the workforce of this occupation had the lowest level of education — one in four had attained lower secondary or less qualifications
- Just under one fifth of all employed security guards were non-Irish; the share in all other security occupations was negligible
- Almost one third and one quarter of all employed legal secretaries and security guards worked part-time
- While the workforce of legal secretaries was almost exclusively female, it was the reverse in the case of army personnel, prison and fire officers

Figure 8.8.1 Numbers Employed (000s) in Selected Legal and Security Occupations, 2010



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

Figure 8.8.2 Average Annual Growth (%) in Selected Legal and Security Occupations



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

Table 8.8.1 Age Profile of Selected Legal and Security Occupations, 2010

	15-24	25-54	55+	Total
Gardaí	3%	94%	3%	100%
Security guards	8%	72%	20%	100%
Solicitors	1%	88%	11%	100%
Army personnel	13%	84%	3%	100%
Legal secretaries	3%	85%	12%	100%
Prison service officers	3%	97%	0%	100%
Fire service officers	0%	93%	7%	100%
Judges, barristers	4%	79%	17%	100%

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

Table 8.8.2 Education Profile of Selected Legal and Security Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Gardaí	1%	19%	80%	100%
Security guards	41%	44%	14%	100%
Solicitors	1%	0%	99%	100%
Army personnel	28%	50%	22%	100%
Legal secretaries	0%	65%	35%	100%
Prison service officers	3%	64%	33%	100%
Fire service officers	24%	36%	40%	100%
Judges, barristers	0%	0%	100%	100%

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

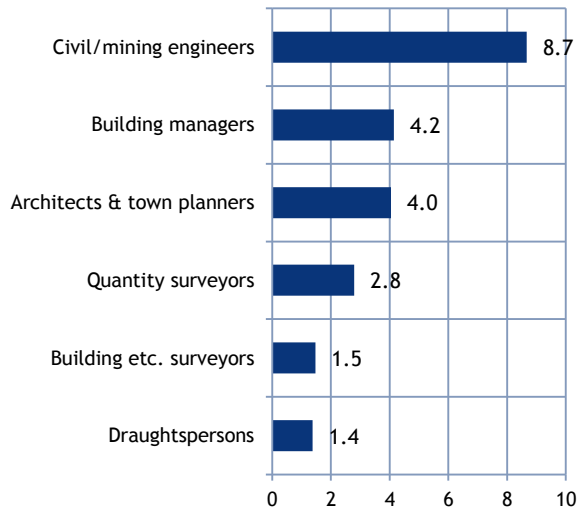
Shortage Indicators

No shortages of legal and security skills have been identified.

8.9 Construction Professional and Associate Professional Occupations

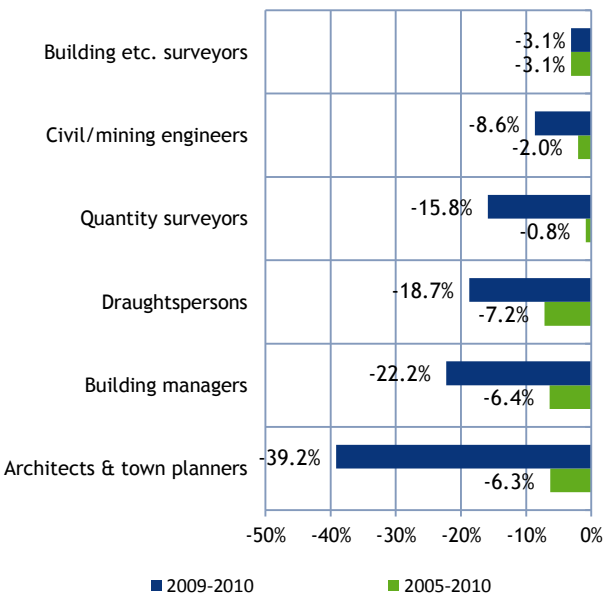
- There were approximately 23,000 persons employed in the selected professional and associate professional construction occupations, representing just over 1% of the national workforce
- Employment in these occupations was predominantly concentrated in construction and professional, scientific and technical activities, accounting for a share of just under 20% and almost 60% respectively; within the latter sector, most of those employed were engaged in architectural and engineering activities, technical testing and analysis
- Employment in the selected occupations contracted by 4% on average annually over the period 2005-2010; the strongest rate of decline in employment was recorded for draughtspersons (7.2%) followed jointly by building managers and architects (just over 6%)
- Employment in all occupations contracted between 2009 and 2010 – a total of over 5,000 job losses, representing a decline of just under 20%; the largest number of job losses was for architects and building managers
- With the exception of building managers and draughtspersons, the majority of persons employed in construction professional and associate professional occupations were third level graduates
- At 80% and over, employment in all occupations was concentrated in the 25-54 age cohort
- At 10% and below, the share of non-Irish in the employment stock of each occupation was below the national average of 12%
- The workforce of each occupation was predominantly male.

Figure 8.9.1 Numbers Employed (000s) in Selected Construction Professional Occupations, 2010



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

Figure 8.9.2 Average Annual Growth (%) in Selected Construction Professional Occupations



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

Table 8.9.1 Age Profile of Selected Construction Professional Occupations, 2010

	15-24	25-54	55+	Total
Civil/mining engineers	4%	83%	13%	100%
Building managers	2%	82%	16%	100%
Architects/town planners	0%	85%	15%	100%
Quantity surveyors	3%	82%	15%	100%
Building etc. surveyors	6%	85%	9%	100%
Draughtspersons	5%	80%	15%	100%

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

Table 8.9.2 Education Profile of Selected Construction Professional Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Civil/mining engineers	1%	1%	98%	100%
Building managers	12%	36%	52%	100%
Architects/planners	0%	0%	100%	100%
Quantity surveyors	0%	9%	91%	100%
Building etc. surveyors	0%	0%	100%	100%
Draughtspersons	7%	41%	52%	100%

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

Shortage Indicators

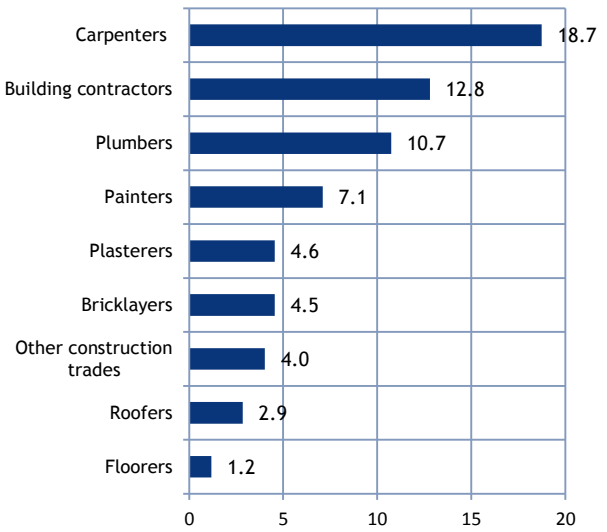
Due to the low levels of construction activity, there are currently no shortages of construction skills in Ireland. Recent job announcements were in the renewable energy sector (Wind Energy Direct), manufacturing (Intel's new factory) and services (M7 motorway service facilities).

Some job creation is expected in the green sector in the areas of energy generation, transmission and efficiency, waste management and water supply and treatment.

8.10 Construction Craft Occupations

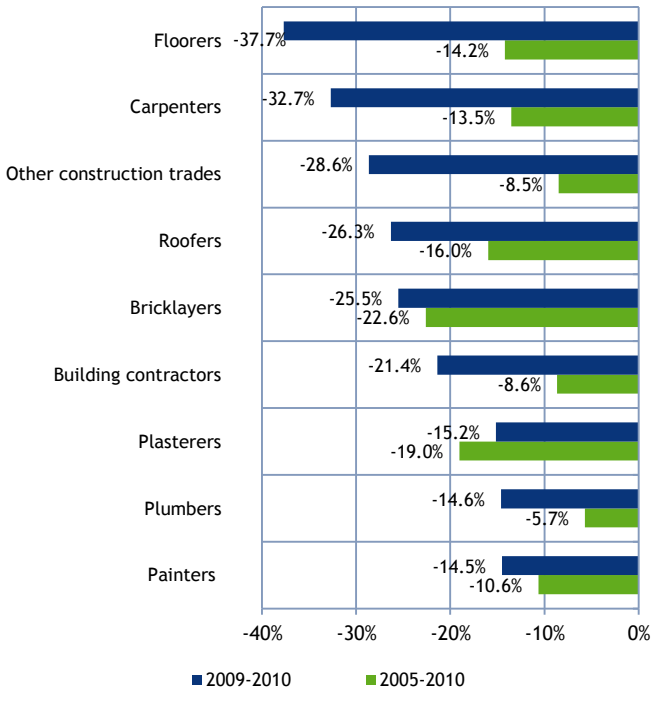
- There were approximately 67,000 persons employed in construction craft occupations, representing 3.6% of national employment
- At 85%, employment was predominantly concentrated in the construction sector
- Employment in construction craft occupations decreased at an annual average rate of 12.6% between 2005 and 2010 – the strongest rate of decline among all occupational groups in the national workforce; the most significant number of job losses was for carpenters and bricklayers
- Between 2009 and 2010, employment in craft occupations declined by 24%, resulting in 21,000 job losses; carpenters and building contractors experienced the most significant absolute decline in employment, with 9,000 and 3,500 job losses respectively
- The unemployment rate of construction craft workers was just over three times the national rate of 14% in quarter 4 2010 – the highest among all occupational groups economy-wide
- The workforce of carpenters and plumbers was younger than the national average – approximately 13% and 17% were aged 15-24 respectively compared to the national average of 9% – reflecting the inclusion of apprentices in the employment figures
- Approximately 60% of persons employed in these occupations held upper secondary or FET qualifications (mostly National Craft Certificates), while 30% held below Leaving Certificate qualifications; both of these shares exceeded the national average; approximately 20% of all employed building contractors were third level graduates – the highest representation among all craft occupations
- At approximately 16% each, the share of non-Irish nationals was highest amongst plasterers and painters
- Employment in these occupations was almost exclusively male.

Figure 8.10.1 Numbers Employed (000s) in Selected Construction Craft Occupations, 2010



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

Figure 8.10.2 Average Annual Growth (%) in Selected Construction Craft Occupations



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

Table 8.10.1 Age Profile of Selected Construction Craft Occupations, 2010

	15-24	25-54	55+	Total
Carpenters	13%	77%	10%	100%
Building contractors	2%	79%	19%	100%
Plumbers	17%	73%	10%	100%
Painters	2%	75%	23%	100%
Plasterers	8%	76%	16%	100%
Bricklayers	4%	92%	4%	100%
Other construction. trades	8%	61%	31%	100%
Roofers	0%	94%	6%	100%
Floorers	6%	89%	5%	100%

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

Table 8.10.2 Education Profile of Selected Construction Craft Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Carpenters	22%	69%	9%	100%
Building contractors	29%	51%	20%	100%
Plumbers	16%	72%	12%	100%
Painters	41%	52%	7%	100%
Plasterers	29%	69%	2%	100%
Bricklayers	42%	51%	7%	100%
Other constr.trades	41%	52%	7%	100%
Roofers	45%	52%	3%	100%
Floorers	40%	48%	12%	100%

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

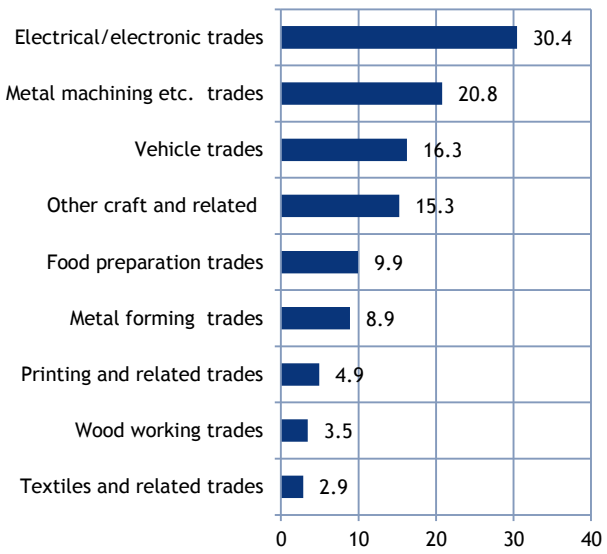
Shortage Indicators

Due to the low levels of activity in the construction sector, there are currently no shortages of construction craft skills in Ireland. Most job opportunities are concentrated in the residential repair and maintenance sector. Some job creation is expected in the green sector in the areas of energy efficiency (e.g. retro-fitting and improved energy efficiency (ventilation, heating and insulation), standards under Part L of the Building Regulations and the Energy Performance of Buildings Directive), waste management and water supply and treatment.

8.11 Other Craft Occupations

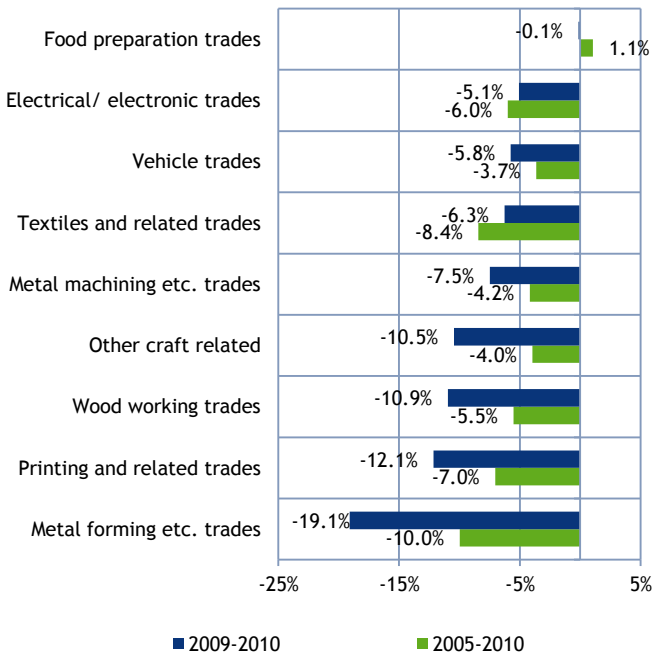
- There were approximately 113,000 persons employed in other craft occupations, representing 6% of Ireland's workforce
- Employment was predominantly concentrated in manufacturing and wholesale and retail – accounting for a share of 35% and 20% respectively
- Combined employment in two trades – electrical/electronic trades and metal machining, fitting & instrument making trades– accounted for 45% of total employment in other craft occupations
- At an annual average rate of 5%, employment in other craft occupations contracted at a faster pace than the national average over the period 2005-2010; electrical/electronic, metal forming and metal machining etc. trades recorded the largest number of net job losses
- Employment contracted in each of the selected occupations between 2009 and 2010 – an overall net decline of 10,000 jobs or 8%; metal forming trades, other craft, metal machining and electrical/electronic trades experienced the largest number of job losses
- The age profile of all persons employed in these occupations was broadly equivalent to the national average; at 20% and over, textiles, garments, other craft and printing trades had the most mature workforces among the selected occupations
- At 60%, the share of those employed in the selected occupations who held upper secondary/FET qualifications was well above the national average; in contrast, the share of third level graduates was significantly below the national average of 44%
- Almost 40% of those employed in food preparation trades were non-Irish – the second highest share for occupational groups economy-wide, after food, drink and tobacco operatives
- With the exception of textiles, garments and related trades, the workforce of each of the other craft occupations was predominantly male.

Figure 8.11.1 Numbers Employed (000s) in Selected Other Craft Occupations, 2010



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

Figure 8.11.2 Average Annual Growth (%) in Selected Other Craft Occupations



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

Table 8.11.1 Age Profile of Selected Other Craft Occupations, 2010

	15-24	25-54	55+	Total
Electrical/electronic	10%	80%	10%	100%
Metal machining etc.	7%	81%	12%	100%
Vehicle	9%	74%	17%	100%
Other craft	6%	72%	22%	100%
Food preparation	10%	81%	9%	100%
Welding and related	11%	82%	7%	100%
Printing and related	9%	71%	20%	100%
Wood working	5%	79%	16%	100%
Textiles related	2%	72%	26%	100%

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

Table 8.11.2 Education Profile of Selected Other Craft Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Electrical/electronic	7%	68%	25%	100%
Metal machining etc.	20%	58%	22%	100%
Vehicle	18%	72%	10%	100%
Other craft	35%	37%	28%	100%
Food preparation	31%	57%	12%	100%
Welding and related	26%	63%	11%	100%
Printing and related	25%	52%	23%	100%
Wood working	29%	60%	11%	100%
Textiles related	47%	43%	10%	100%

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

Shortage Indicators

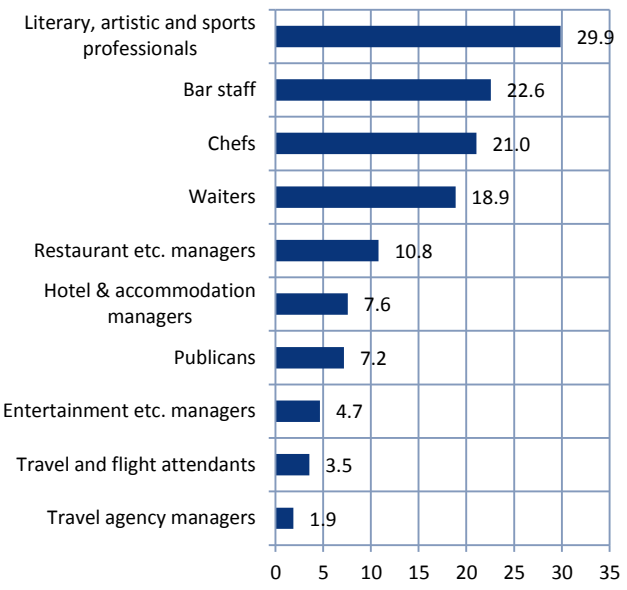
The data points to a continuation of the issues with sourcing meat cutter/de-boners: meat cutting skills were mentioned as difficult to source in the 2011 recruitment agency survey and 50 new work permits were issued to non-EEA meat cutters in 2010.

While there are currently no shortages, the rise of renewable energy and the green agenda is expected to positively impact on the demand for electricians (e.g. wind turbines, solar panels).

8.12 Arts, Sports and Tourism Occupations

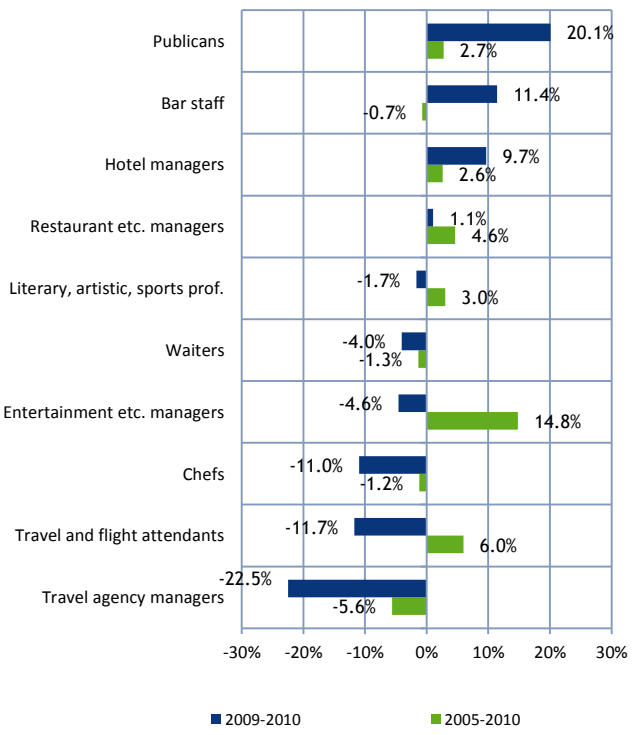
- There were approximately 128,000 persons employed in the selected arts, sports and tourism occupations, representing almost 7% of national employment
- Employment was primarily concentrated in accommodation and food services and arts, entertainment and recreation activities – 60% and 15% respectively
- Employment in the selected occupations expanded between 2005 and 2010 – an overall gain of 7,000 net jobs; most of these were for literary, artistic and sports professionals and entertainment and sports managers
- Those employed as literary, artistic and sports professionals and entertainment and sports managers had the highest education profile in the group – over two thirds held third level qualifications; in contrast, one fifth of employed bar staff were third level graduates
- Waiting and bar staff had the youngest workforce among the selected occupations – approximately two fifths were younger than 25 years; publicans had the most mature workforce, with two fifths aged 55 and over
- The overall workforce of the selected occupations was gender balanced; however, there was a higher representation of females in the workforce of waiting staff, flight and travel attendants and travel agency managers, accounting for at least four fifths of each respective workforce
- The workforce of waiting and bar staff had the highest proportion of those in part time employment – two thirds and over one half respectively
- Almost one third and just over one quarter of the workforce of chefs and waiting staff was non-Irish respectively – the share for chefs was one of the highest among all occupational groups economy-wide.

Figure 8.12.1Numbers Employed (000s) in Selected Arts, Sports and Tourism Occupations, 2010



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

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



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

Table 8.12.1 Age Profile of Selected Arts, Sports and Tourism Occupations, 2010

	15-24	25-54	55+	Total
Literary, artistic, sports professionals	9%	78%	13%	100%
Bar staff	40%	52%	8%	100%
Chefs, cooks	11%	78%	10%	100%
Waiters, waitresses	45%	51%	4%	100%
Restaurant managers	4%	88%	8%	100%
Accommodation managers	2%	73%	25%	100%
Publicans	0%	62%	38%	100%
Entertainment etc. managers	11%	80%	9%	100%
Travel and flight attendants	13%	82%	5%	100%
Travel agency managers	12%	88%	0%	100%

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

Shortage Indicators

There are currently no shortages of arts, sports and tourism skills in Ireland.

Table 8.12.2 Education Profile of Selected Arts, Sports and Tourism Occupations, 2010

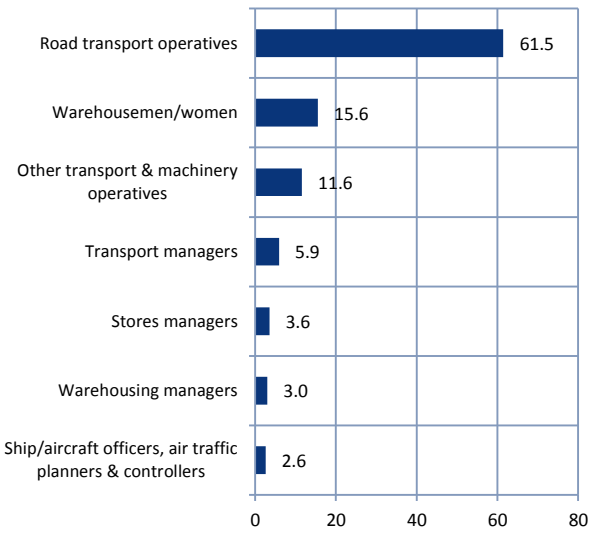
	Lower secondary or less	Upper secondary or FET	3rd level	Total
Lit., artistic, sports professionals.	6%	24%	70%	100%
Bar staff	15%	66%	19%	100%
Chefs, cooks	12%	48%	40%	100%
Waiters, waitresses	19%	56%	25%	100%
Restaurant managers	20%	32%	48%	100%
Accommodation managers	7%	34%	59%	100%
Publicans	31%	47%	22%	100%
Entertain etc. managers	0%	30%	70%	100%
Travel and flight attendants	5%	56%	40%	100%
Travel agency managers	0%	45%	55%	100%

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

8.13 Transport and Logistics Occupations

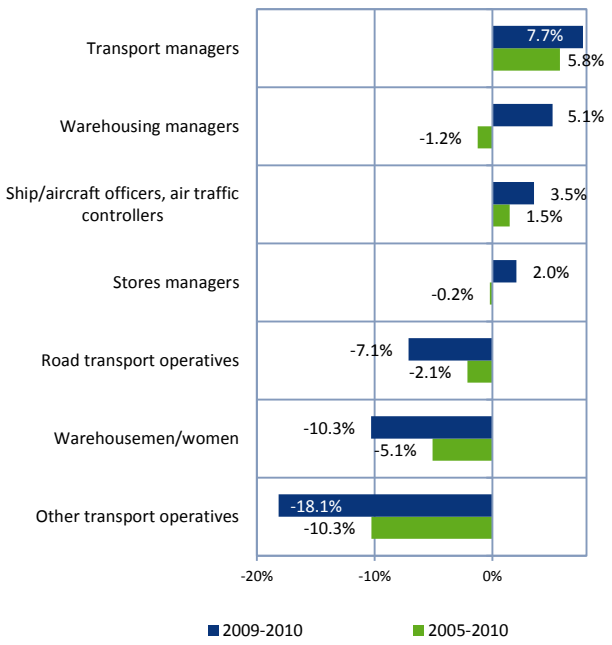
- There were approximately 104,000 persons employed in transport and logistics occupations, accounting for almost 6% of Ireland's workforce
- Operative occupations made up approximately 70% of total employment in this group
- While employment declined by 3.2% over the period 2005-2010, the contraction was more than twice that rate between 2009-2010 (-7.4%); in the 12-month period, more than 8,000 net jobs were lost, mostly at operative level
- The age profile of those employed in transport and logistics occupations was one of the oldest of all occupational groups; one in five employed in this group was 55 or older
- At 95%, the overall workforce of these occupations was predominantly male
- Approximately one in two of those employed in transport and logistics operative occupations had not completed upper secondary education.

Figure 8.13.1 Numbers Employed (000s) in Selected Transport and Logistics Occupations, 2010



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

Figure 8.13.2 Average Annual Growth (%) in Selected Transport and Logistics Occupations



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

Table 8.13.1 Age Profile of Selected Transport and Logistics Occupations, 2010

	15-24	25-54	55+	Total
Road transport operatives	1%	74%	25%	100%
Warehousemen/women	9%	77%	14%	100%
Other transport operatives	5%	82%	13%	100%
Transport managers	0%	90%	10%	100%
Stores managers	0%	79%	21%	100%
Warehousing managers	0%	85%	15%	100%
Ship/aircraft officers, controllers	3%	75%	22%	100%

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

Table 8.13.2 Education Profile of Selected Transport and Logistics Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Road transport operatives	50%	44%	6%	100%
Warehousemen/women	38%	54%	8%	100%
Other transport operatives	49%	42%	9%	100%
Transport managers	16%	31%	53%	100%
Stores managers	19%	61%	20%	100%
Warehousing managers	33%	43%	24%	100%
Ship/air officers, controllers	12%	19%	69%	100%

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

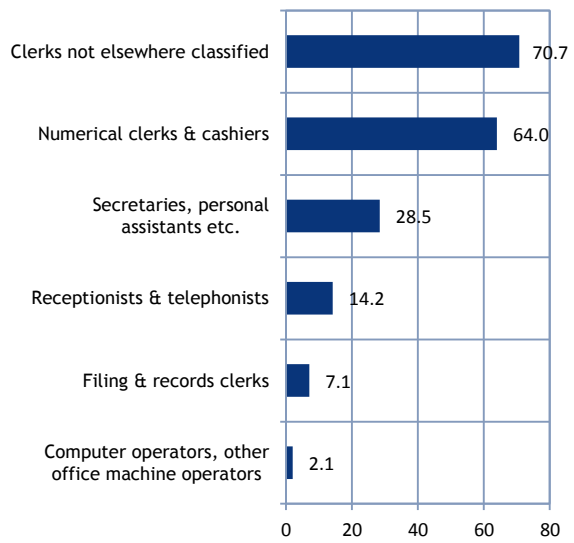
Shortage Indicators

Multilingual international supply chain managers with forecasting, planning and scheduling skills have been mentioned as difficult to source. Supply chain management skills are required across many sectors, with a significant demand coming from the bio-pharma chemical and medical devices manufacturing sectors (e.g. recent jobs announcement by PRL Group).

8.14 Clerical Occupations

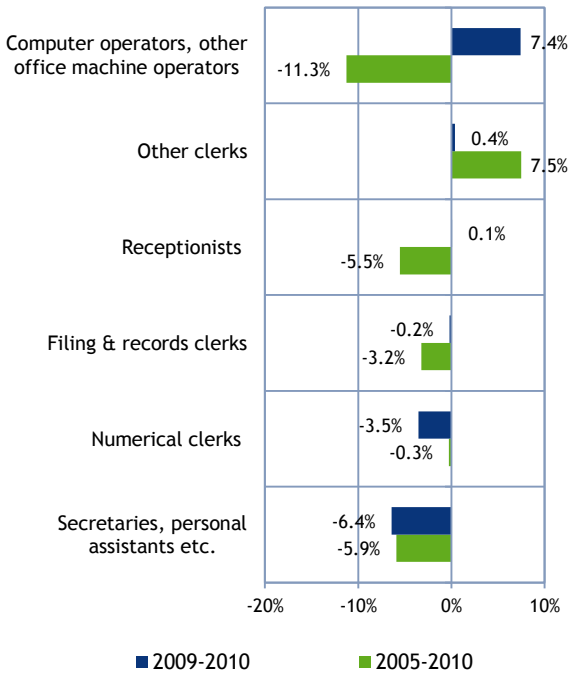
- There were approximately 187,000 persons employed in clerical occupations, accounting for 10% of Ireland's workforce
- Employment was distributed across several sectors of the economy, primarily in health, education and public administration (25%), finance and insurance (22%), and wholesale and retail (11%)
- Employment in this occupational group contracted by 2% between 2009 and 2010, resulting in almost 4,000 net job losses; the job losses were concentrated in the numerical clerks/cashiers and secretaries/personal assistants categories
- Although the share of those aged 55+ was either at or below the national average (18%), the profile for most of these occupations aged slightly over the period 2009-2010; this was mainly due to smaller shares of those under 25 employed; only secretaries/personal assistants saw an increase in the share of younger workers (from 3% to 5%); the share of under 25s was highest for receptionists, which at 17% was almost twice the national average (9%)
- With the exception of computer and office machine operators and numerical clerks, the share employed with third level qualifications in each of the occupations was below the national average
- Employment in clerical occupations was predominantly female: with the exception of computer and office machine operators, at least two thirds of the workforce in each occupation was female
- Almost 50% of all employed receptionists and telephonists worked part-time
- At 7%, the share of non-Irish employed in the selected occupations was below the national average.

Figure 8.14.1 Numbers Employed (000s) in Selected Clerical Occupations, 2010



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

Figure 8.14.2 Average Annual Growth (%) in Selected Clerical Occupations, 2009-2010 & 2005-2010



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

Table 8.14.1 Age Profile of Selected Clerical Occupations, 2010

	15-24	25-54	55+	Total
Other clerks	7%	81%	13%	100%
Numerical clerks	7%	82%	10%	100%
Secretaries	5%	77%	18%	100%
Receptionists	17%	65%	18%	100%
Filing clerks	6%	79%	15%	100%
Computer operators	5%	84%	10%	100%

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

Table 8.14.2 Education Profile of Selected Clerical Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Other clerks	7%	55%	38%	100%
Numerical clerks	7%	48%	45%	100%
Secretaries	11%	58%	31%	100%
Receptionists	15%	62%	23%	100%
Filing clerks	11%	55%	33%	100%
Computer operators	0%	47%	53%	100%

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

Shortage Indicators

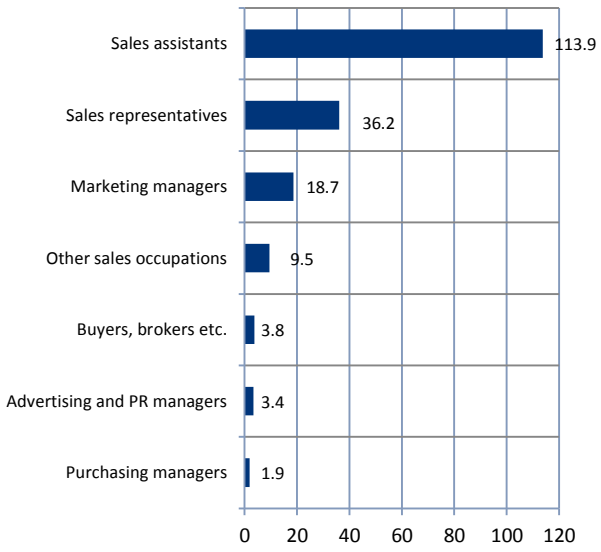
There are currently no shortages of general clerks in Ireland. Job opportunities are expected to arise primarily from the annual replacement demand (e.g. retirements, illness, withdrawals etc.), which is likely to be several thousand per annum given the size of the clerical workforce of 187,000. Clerical skills will also be recruited as support to other expansion activities, such as IT and high technology manufacturing, as illustrated by the several hundred clerical posts associated with the companies attracted by the IDA in 2010.

Recruiters mentioned difficulties in sourcing multilingual debt collectors and multilingual accounts and transfer agency staff.

8.15 Sales Occupations

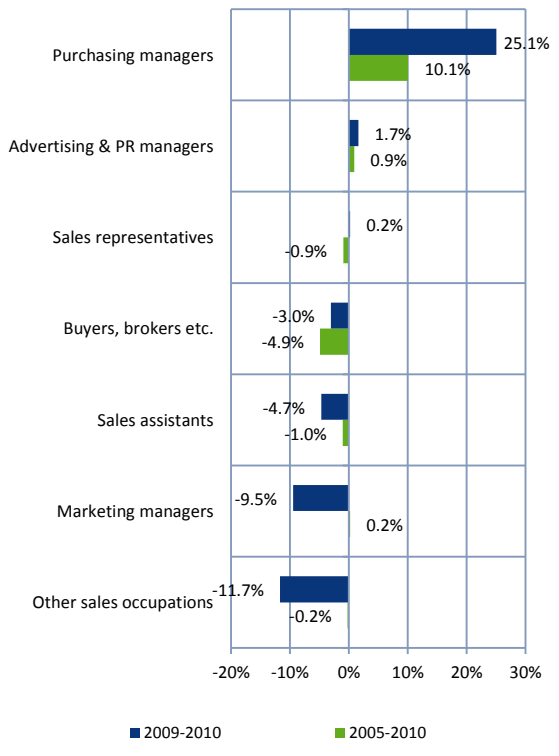
- There were approximately 187,000 persons employed in sales occupations, representing approximately 10% of total national employment
- At almost 110,000, sales assistants was the largest occupation economy-wide
- Over the period 2005-2010, the annual average rate of decline in employment for this occupational group (-0.8%) was close to the national average (-1.2%); the rate for the 2009-2010 period (-4.3%) was also in line with the national average (-4.2%)
- Over the five-year period 2005-2010, the educational profile of those in sales occupations shifted markedly towards higher educational attainment: the share of third level graduates increased by at least nine percentage points in almost all occupations; at the same time, the share of those with lower secondary attainment declined, particularly for sales assistants and sales representatives, which fell by eleven and five percentage points respectively
- Almost three quarters of sales assistants and over one half of advertising/PR managers and buyers/brokers were female
- At 58%, the share of sales assistants working part-time was more than twice the national average (23%)
- Sales assistants had one of the youngest age profiles economy-wide: one third were aged less than 25 years; only bar staff and waiters/waitresses had greater shares of younger workers; nonetheless, the share of younger workers in these selected occupations declined from 35% in 2009 and 41% in 2005
- At 17%, the share of non-Irish sales assistants exceeded the national average (12%).

Figure 8.15.1 Numbers Employed (000s) in Selected Sales Occupations, 2010



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

Figure 8.15.2 Average Annual Growth (%) in Selected Sales Occupations



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

Table 8.15.1 Age Profile of Selected Sales Occupations, 2010

	15-24	25-54	55+	Total
Sales assistants	33%	59%	9%	100%
Sales representatives	9%	77%	14%	100%
Marketing managers	5%	88%	7%	100%
Other sales occupations	7%	78%	15%	100%
Buyers and related agents	5%	91%	4%	100%
Advertising & PR managers	4%	82%	14%	100%
Purchasing managers	0%	95%	5%	100%

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

Table 8.15.2 Education Profile of Selected Sales Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Sales assistants	22%	57%	21%	100%
Sales representatives	12%	43%	45%	100%
Marketing managers	6%	23%	71%	100%
Other sales occupations	28%	49%	23%	100%
Buyers & related agents	2%	41%	57%	100%
Advertising & PR managers	2%	21%	77%	100%
Purchasing managers	0%	33%	67%	100%

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

Shortage Indicators

The following sales skills have been identified as in short supply:

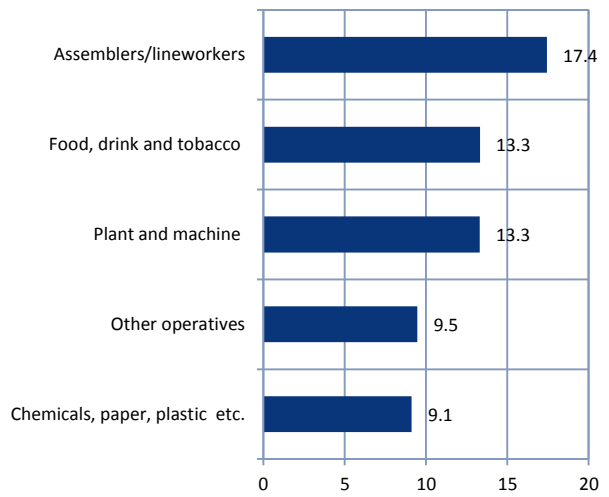
- experienced marketing managers; over 50 new employment permits were issued to non-EEA persons with high level marketing skills; as the use of on-line marketing increases, IT skills (e.g. pay per click marketing, search engine optimisation, social media, data retrieval and analysis etc.) are becoming an integral part of the marketing skills set along with traditional marketing and business development skills (market research, client relationship, design, creativity, innovation)
- technical sales representatives with specific industry (e.g. medical devices, pharmaceuticals, food, etc.), product and market knowledge and proficiency in foreign languages
- multilingual telesales (particularly with German and Nordic languages), customer care and customer support staff; job creation is illustrated by the recent job announcements by Linkedin and Paddy Power.

Further growth is expected as over 2,500 jobs announced by IDA client companies in 2010 are rolled out over the medium term. Marketing and business development positions are mostly in the IT, manufacturing (e.g. medical devices and pharmaceuticals) and financial sectors, while sales and technical support roles are mostly in the IT sector.

8.16 Operatives

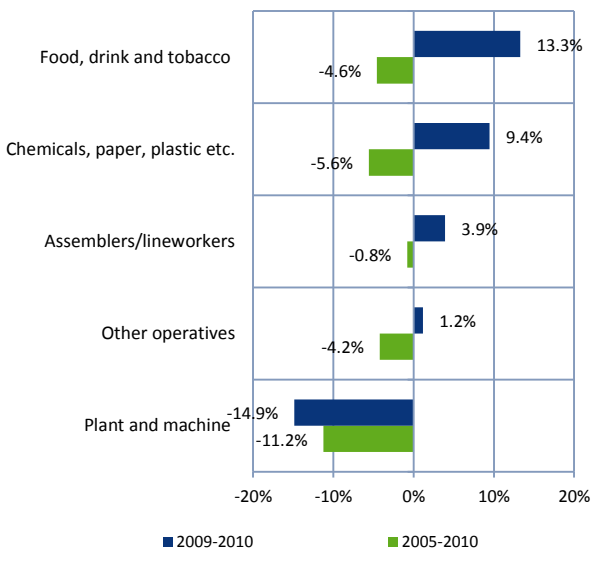
- There were approximately 63,000 persons employed as operatives, accounting for approximately 3% of overall national employment
- Employment in these occupations was distributed across various sectors of the economy
- Overall, between 2005 and 2010, employment in operative occupations contracted by a quarter, resulting in approximately 20,000 net job losses
- However, over the period 2009-2010, annual average employment grew at a rate above the national average (1.3% compared to -4.2%); with the exception of plant and machine operatives, there were job gains across most occupations, including for example food and drink operatives which grew by 13.3% (1,600 net jobs gained)
- Plant and machine operatives had the oldest age profile among the selected occupations: they had a smaller than the national average share of those under 25 years (9% vs. 7%) and a greater than average share of those aged 55 and over (9% vs. 21%)
- With the exception of chemicals, paper & plastics operatives, the share of non-Irish nationals employed in each occupation exceeded the national average (12%); the share for food, drink and process operatives was three times the national average
- Although operatives had one of the lowest education profiles economy-wide (27% on average held less than upper secondary qualifications), their educational attainment increased significantly over the period 2005-2010: the share of third level graduates rose across all occupations, but in particular for assemblers (from 11% to 25%) and chemical operatives (from 13% to 24%); there were also declines in the share of those with low educational attainment; in particular, the share of low educational achievers among food and drink operatives declined from 46% to 28%; that of assemblers from 33% to 25%, and other routine operatives from 37% to 14%
- Employment in each of these occupations was predominantly male.

Figure 8.16.1 Numbers Employed (000s) in Selected Operatives and Related Occupations, 2010



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

Figure 8.16.2 Average Annual Growth (%) in Selected Operatives and Related Occupations



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

Table 8.16.1 Age Profile of Selected Operatives and Related Occupations, 2010

	15-24	25-54	55+	Total
Assembly/lineworkers	9%	83%	8%	100%
Food, drink and tobacco	9%	83%	8%	100%
Plant and machine	7%	72%	21%	100%
Other operatives	10%	85%	4%	100%
Chemical, paper, plastic etc.	6%	90%	4%	100%

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

Table 8.16.2 Education Profile of Selected Operatives and Related Occupations, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Assembly/lineworkers	25%	50%	25%	100%
Food, drink and tobacco	29%	52%	19%	100%
Plant and machine	43%	42%	15%	100%
Other operatives	14%	50%	36%	100%
Chemical, paper, plastic etc.	17%	59%	24%	100%

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

Shortage Indicators

There are currently no shortages of operatives in Ireland.

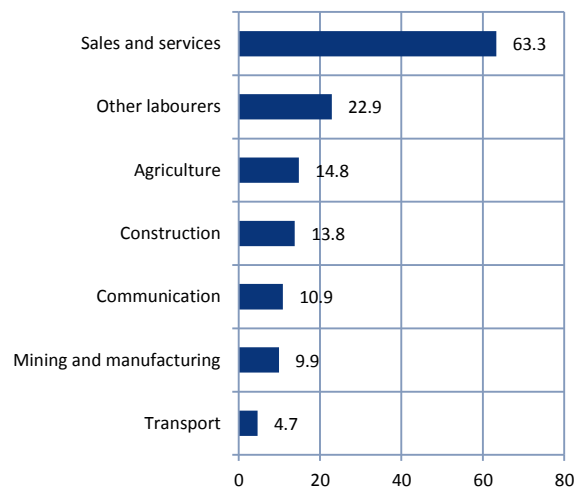
Despite significant job losses (e.g. Intel, Kerry foods, Pfizer, EI Electronics), there have been significant job announcements for operative posts (e.g. Alps Electric, Inspirations Biopharma, Zagg, GRS & Optivia, Biomedical). Further jobs for operatives have been announced by the IDA in 2010 which will be rolled-out over the medium term, primarily in the high technology manufacturing sector (e.g. pharmaceutical and medical devices sectors).

Although there has been significant job creation, further job losses are expected for operatives as outsourcing continues, sectors move to higher value activities and manufacturing becomes leaner and more automated. As a result and as already observed in some areas (e.g. bio-pharma chemical sector) the demand is expected to continue shifting from operatives to super-operatives (candidates with a greater understanding of ICT, science and engineering).

8.17 Labourers and Occupations Not Elsewhere Classified (N.E.C.)[3]

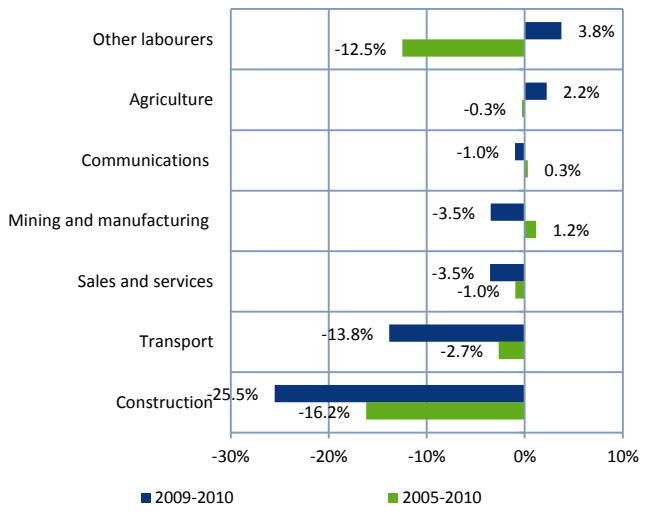
- There were approximately 140,000 persons employed as labourers, representing 8% of Ireland's workforce
- Approximately 45% of those employed in this group were working as labourers in sales and services, primarily as cleaners/domestics and catering assistants
- Employment in the selected occupations contracted by 5% on average annually over the period 2005-2010; at 16.2%, the greatest fall was observed for labourers employed in construction
- Between 2009 and 2010, over 7,000 net job losses were recorded in this occupational group; the largest decline in employment was recorded for labourers in construction and sales and services – almost 5,000 and just over 2,000 respectively
- One fifth of those employed as labourers in agriculture were younger than 25 – the youngest age profile among the selected occupations; in contrast, labourers in communication had the most mature workforce – one quarter were at least 55 years
- The education profile of all employed labourers was skewed towards lower education levels: approximately one half of labourers held qualifications below upper secondary level and just over 10% held third level qualifications
- Over 70% of the workforce of labourers in sales in services was female (particularly for cleaners and catering assistants); in contrast, it was almost exclusively male for labourers in construction
- One third of those employed as labourers in sales and services (two fifths of kitchen and hotel porters) was non-Irish – one of the highest shares among occupations economy-wide; the share for labourers in agriculture and transport was also higher than the national average
- Three fifths of employed labourers in sales and services and over 70% of employed cleaners/domestics worked part-time.

Figure 8.17.1 Numbers Employed (000s) Labourers, 2010



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

Figure 8.17.2 Average Annual Growth (%) Labourers



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

[3]There are a number of occupations discussed in this section which, for simplicity purposes, are referred to as labourers; these include cleaners, porters, sorters, various types of mates and other occupations not elsewhere classified.

Table 8.17.1 Age Profile of Labourers, 2010

	15-24	25-54	55+	Total
Sales and services	11%	71%	18%	100%
Other labourers	14%	65%	21%	100%
Agriculture	18%	66%	16%	100%
Construction	6%	74%	20%	100%
Communication	3%	70%	27%	100%
Manufacturing	8%	83%	9%	100%
Transport	5%	86%	9%	100%

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

Table 8.17.2 Education Profile of Labourers, 2010

	Lower secondary or less	Upper secondary or FET	Third level	Total
Sales and services	46%	41%	13%	100%
Other labourers	46%	40%	14%	100%
Agriculture	45%	42%	13%	100%
Construction	55%	39%	6%	100%
Communication	38%	55%	7%	100%
Manufacturing	43%	49%	8%	100%
Transport	39%	55%	6%	100%

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

Shortage Indicators

There are currently no shortages of labourers in Ireland.

Section 9 Unemployment

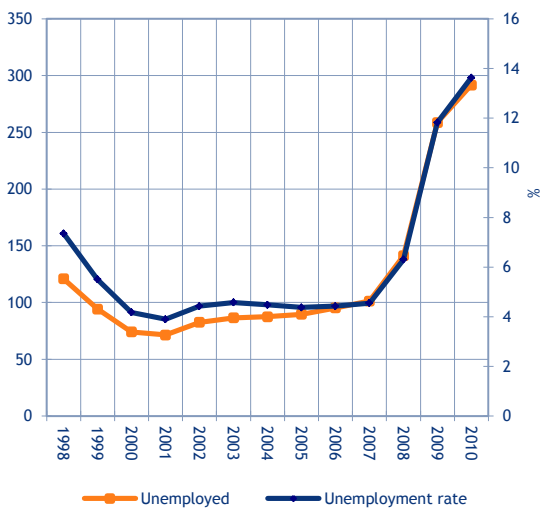
9.1 Unemployment and Unemployment Rate

Following sharp increases in 2009, both the unemployment level and unemployment rate further increased during 2010, albeit at a slower rate than the previous year (Figure 9.1).

The unemployment level hovered just below 300,000 during the second half of 2010 and averaged 292,000 for the year. This was an increase of over 30,000 on 2009.

The unemployment rate averaged 13.6% for 2010, although it increased continuously during the year, reaching over 14% by the last quarter.

Figure 9.1 Annual Average Unemployment Level (000s) and Unemployment Rate (%)

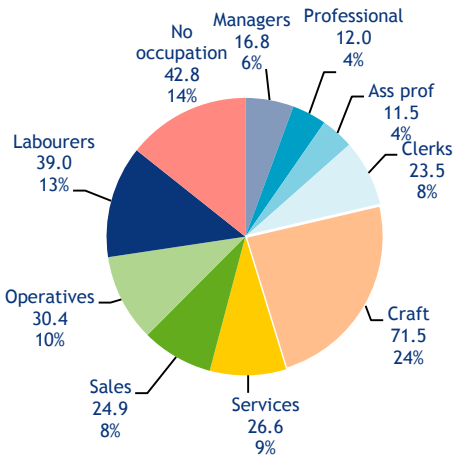


Source: CSO

9.2 Unemployment by Occupation

The occupational distribution of unemployment is presented in Figure 9.2.[4] In quarter 4 2010, craftspersons accounted for the greatest share of the total unemployment (24%). However, the share of craftspersons declined somewhat compared to quarter 4 2009, as the absolute number of unemployed craftspersons remained almost unchanged.

Figure 9.2 Unemployment by Occupation (000s), Quarter 4 2010

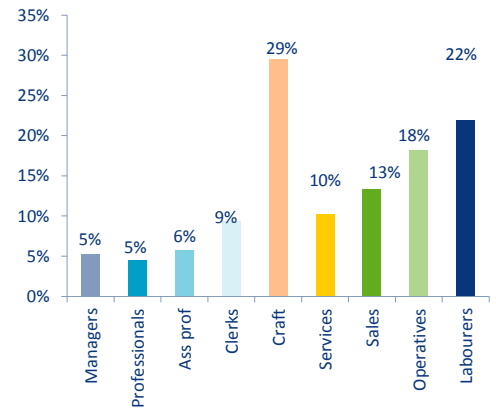


Source: Analysis by FÁS (SLMRU) based on CSO data

As in quarter 4 2009, craftspersons and labourers remained at the greatest risk of unemployment during 2010, with unemployment rates in these occupations significantly exceeding those recorded for other occupations. In quarter 4 2010, professionals (4.6%), managers (5.3%) and associate professionals (5.7%) had the lowest unemployment rates.

[4] Classified using occupation code of the previous employment (if any) of the respondent.

Figure 9.3 Unemployment Rate by Occupation, Quarter 4 2010

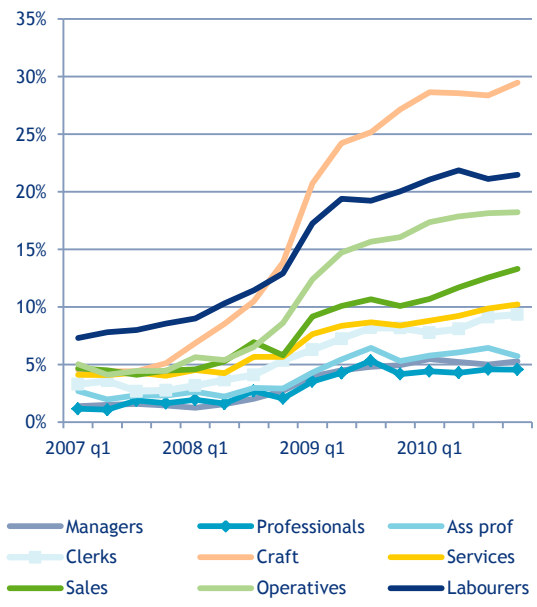


Source: Analysis by FÁS (SLMRU) based on CSO data

Note: Persons whose occupation was not stated are not included

While the unemployment rate increased for all occupations between quarter 4 2007 and quarter 4 2010, the increase for high skilled occupations (managers, professionals and associate professionals) was not as pronounced as that for other occupations (Figure 9.4). The greatest rise was observed for craftpersons, labourers and operatives: the unemployment rate for these occupations rose by between 13 and 24 percentage points over the period quarter 4 2007 to quarter 4 2010.

Figure 9.4 Unemployment Rate by Occupation

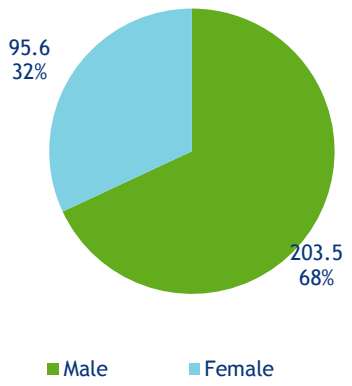


Source: Analysis by FÁS (SLMRU) based on CSO data

9.3 Unemployment by Gender

The gender distribution of unemployed persons in quarter 4 2010 is presented in Figure 9.5. Of the total 299,000 unemployed persons in the last quarter of 2010, 68% were male. The share of males decreased by three percentage points compared to quarter 4 2009.

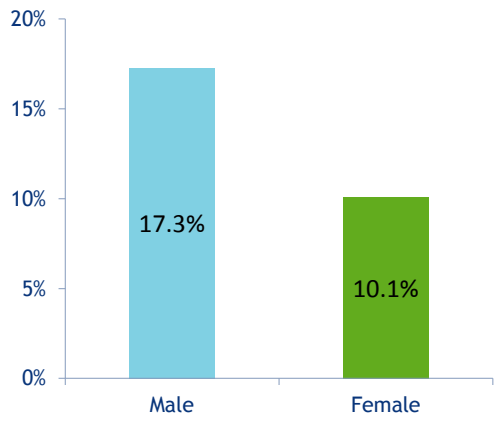
Figure 9.5 Unemployment by Gender, Quarter 4 2010



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

Females continued to be at a lower risk of unemployment relative to males, with an unemployment rate of 10.1%, compared to 17.3% for males (Figure 9.6). However, the unemployment rate increased for females (by 1.9 percentage points), as it did for males (by 1.6 percentage points) compared to quarter 4 2009.

Figure 9.6 Unemployment Rate by Gender, Quarter 4 2010

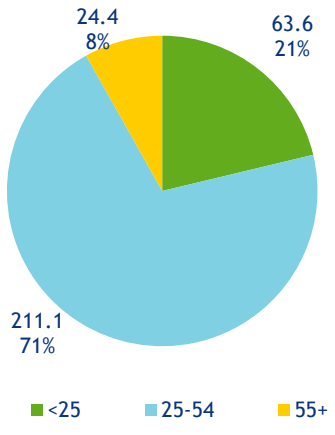


Source: Analysis by FÁS (SLMRU) based on CSO data

9.4 Unemployment by Age

The age distribution of unemployed persons is presented in Figure 9.7. In quarter 4 2010, 71% of unemployed persons were aged 25-54, compared to 68% one year previously. The share of under 25s declined from 25% to 21% over the same period.

Figure 9.7 Unemployment by Age (000s), Quarter 4 2010

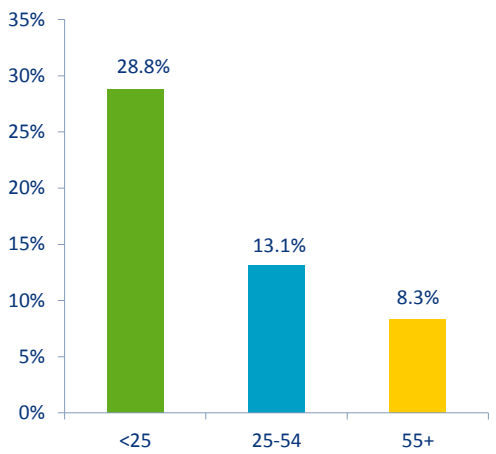


Source: Analysis by FÁS (SLMRU) based on CSO data

During 2010, the under 25s continued to be at a greater risk of unemployment compared to the other age cohorts. In quarter 4 2010, the unemployment rate for the under 25s was more than twice that recorded for those aged 25-54 and more than three times that of the over 55s (Figure 9.8).

Between quarter 4 2009 and quarter 4 2010, the unemployment rate for each age cohort increased by two-to-three percentage points.

Figure 9.8 Unemployment Rate by Age, Quarter 4 2010



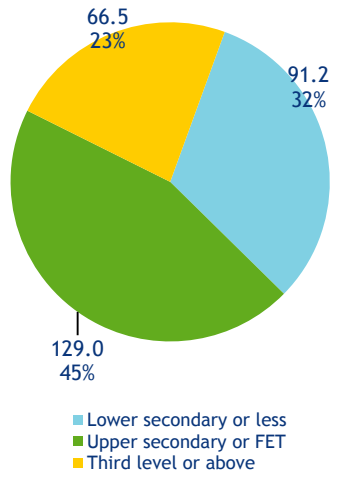
Source: Analysis by FÁS (SLMRU) based on CSO data

9.5 Unemployment by Education

Figure 9.9 presents the distribution of unemployment by education attainment. In quarter 4 2010, one third of all unemployed persons were early school leavers, 45% had a Leaving Certificate or an FET qualification and 23% were third level graduates.

While the number of unemployed persons increased in all education categories between quarter 4 2009 and quarter 4 2010, the share of those with upper secondary/FET and third level graduates increased slightly (by 2 and 1 percentage points respectively).

Figure 9.9 Unemployment by Education, Quarter 4 2010

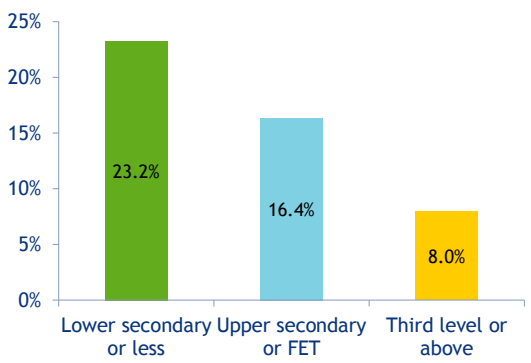


Source: Analysis by FÁS (SLMRU) based on CSO data

Persons holding less than upper secondary qualifications continued to be at the greatest risk of unemployment. The unemployment rate for early school leavers was almost three times greater than the unemployment rate of third level graduates (Figure 9.10).

Although the unemployment rate for all educational categories increased compared to quarter 4 2009, the greatest increase was observed for persons holding less than upper secondary qualifications (five percentage points). The unemployment rate for third level graduates continued to be less than 10%.

Figure 9.10 Unemployment Rate by Education, Quarter 4 2010

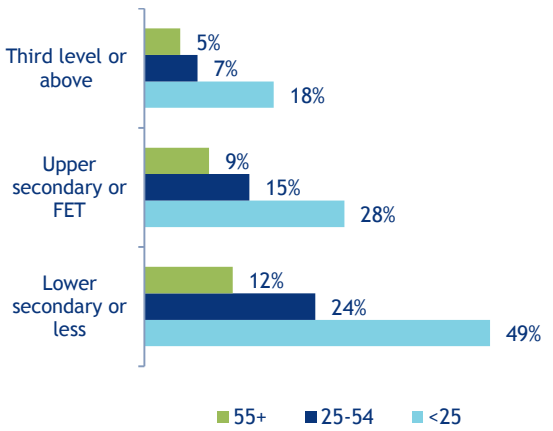


Source: Analysis by FÁS (SLMRU) based on CSO data

Figure 9.11 shows that the negative relationship between the education attainment and the unemployment rate holds for all age cohorts. In quarter 4 2010, persons under 25 were at the greatest risk of unemployment at each level of education attainment. Even third level graduates who were under 25 (most likely new entrants into the labour market) had an unemployment rate of 18%.

However, young persons with low levels of education had the poorest labour market prospects: one in two under 25s who were in the labour force and holding less than upper secondary level qualifications were unemployed in quarter 4 2010.

Figure 9.11 Unemployment Rate by Education and Age, Quarter 4 2010



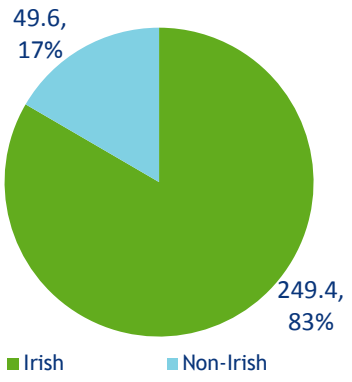
Source: Analysis by FÁS (SLMRU) based on CSO data

9.6 Unemployment by Nationality

The distribution of unemployed persons by nationality is presented in Figure 9.12. In quarter 4 2010, the number of Irish nationals seeking employment was just under one quarter of a million, or 30,000 more than in quarter 4 2009; the number of unemployed non-Irish nationals increased by 2,000 to 50,000. The distribution of unemployment by nationality remained broadly in line with that of

quarter 4 2009, with the Irish share increasing slightly by 1.3 percentage points.

Figure 9.12 Unemployed by Nationality (%), Quarter 4 2010

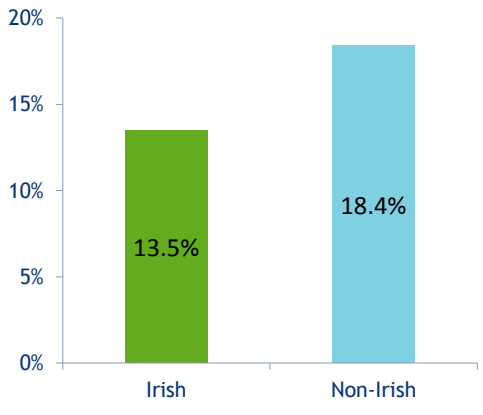


Source: Analysis by FÁS (SLMRU) based on CSO data

During 2010, non-Irish nationals continued to be at a greater risk of unemployment compared to Irish nationals: at 18.4%, the unemployment rate of non-Irish nationals was five percentage points above that of Irish nationals in quarter 4 2010 (Figure 9.13).

Between quarter 4 2009 and quarter 4 2010, the unemployment rate increased for both Irish and non-Irish nationals: from 11.8% to 13.5% and from 15.8% to 18.4%, respectively.

Figure 9.13 Unemployment Rate by Nationality, Quarter 4 2010



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

9.7 Unemployment by Sector

Table 9.1 presents the distribution of unemployment by sector. As in quarter 4 2009, the highest number of unemployed persons in quarter 4 2010 had previously been employed in the construction sector. This was followed by the wholesale and retail and industry (including manufacturing) sectors.

Although their share in total employment declined compared to quarter 4 2009 (by four percentage points to 27%), unemployed persons who had previously worked in construction remained at the greatest risk of unemployment compared to those previously employed in other sectors. At 42%, their unemployment rate was the highest of all sectors. Other sectors with a higher than average unemployment rate were administrative services, and accommodation and food.

Table 9.1 Unemployment by Sector, Quarter 4 2010

Sector	Unemployed	Unemployment rate
Agriculture, forestry, fishing	<3.0	
Industry	37.3	13.5%
Construction	81.0	42.4%
Wholesale and retail trade	40.9	13.3%
Transportation and storage	10.0	9.5%
Accommodation and food	18.8	14.3%
Information & communication	6.6	8.8%
Financial, insurance, real estate	6.2	6.0%
Professional, scientific, technical	9.8	9.1%
Administrative service s	11.6	16.5%
PAD	<3.0	
Education	7.3	4.6%
Human health & social work	11.2	4.6%
Other activities	10.3	9.9%
Sector not stated	43.2	
Grand Total	299.0	14.1%

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

Section 10 Income

Since quarter 4 2007, the CSO, in its Quarterly National Household Survey (QNHS) publication, has been collecting data on incomes. This data became available to the SLMRU in March 2011. The analysis of income data for quarter 4 2010 is presented in this section. It is envisaged that the income analysis will become a permanent feature of future issues of the National Skills Bulletin.

Income is defined as respondents' weekly take home pay after PRSI and tax deductions, but before deductions for items such as health insurance, trade union dues, income continuance etc. The data also includes income from regular overtime, tips and commissions.

The income data is presented in the form of income bands. The income bands used in the QNHS are taken from the CSO Survey of Income and Living Conditions (SILC), which defines bands as deciles of the generated income distribution. They are updated with each new issue of SILC. While the CSO provides data for ten income bands[5], for presentation purposes, they are grouped here into four. Groups were formed to broadly relate past income bands to current income bands for comparison purposes (e.g. the first income band in quarter 4 2010 is less than €324, compared to less than €301 for quarter 4 2007).

In the QNHS, only persons who are direct employees were requested to respond to the income question; self-employed persons were omitted. Although both full-time and part time employees were asked the income question, to allow for comparisons between different labour market groups, the analysis focuses on full-time employees only.

Responding to the income question is not mandatory and therefore not all survey respondents stated their income. In quarter 4 2010, just fewer than 5,000 respondents who were full-time employees stated their income, (implying a response rate of 35%), grossing up to approximately 400,000 persons in Ireland.

10.1 Income Estimates by Occupational Group

Table 10.1 presents income estimates of full-time employees across occupational groups in quarter 4 2010. Higher managers and professionals had the highest median income in that quarter, with higher managers' median income placed somewhere above €890 a week. Amongst professionals, health, finance/legal and engineering professionals had the highest median income. At less than €400 a week, those working in catering occupations, sales assistants and agricultural occupations had the lowest median income.

While a number of occupations have a similar median income, the dispersion around the median may vary greatly. Other sales workers and metal engineering craftpersons both have an estimated median income of €460 per week. However, the income distribution of other sales workers is more concentrated around the median, with the 20th percentile estimated at €390 compared to €430 for metal engineering craftpersons and the 80th percentile at €560 compared to €750.

The income distributions of higher earners (professionals, managers and associate professionals) tend to be more dispersed compared to those for lower earners. The difference between the 20th and 80th percentile income points exceeds €300 for managers and almost all professionals and

[5] It should be noted the SILC deciles do not coincide with the QNHS deciles: for instance, only 2% of the QNHS observations fall into the second income band, while 17% fall into the sixth income band.

associate professionals, while the difference for lower earners is in the range of €200 or less.

The difference between the top and bottom earners was striking, with the median income of higher managers more than two and a half times greater than the median income of catering occupations.

Table 10.1 Income Estimates by Occupational Group, Quarter 4 2010

Occupational group	Total number of observations	Median income	20th percentile income	80th percentile income
Higher managers	33,700	>890	510	>890
Health professionals	3,000	810	670	>890
Business/finance/legal prof.	15,200	730	490	>890
Other engineering prof.	7,700	690	560	>890
Software engineering prof.	3,200	670	460	870
Science professionals	4,800	660	480	790
Education professionals	34,000	660	550	820
Electricians, el. fitters	4,400	650	500	830
Computer associate prof.	5,700	650	500	840
Other managers	5,100	630	500	810
Science associate prof.	5,000	620	500	830
Health associate prof.	23,200	620	500	780
Engineering associate prof.	2,000	600	480	780
Other associate professionals	11,100	600	440	750
Other professions	8,500	590	430	750
Fitters and mechanics	4,700	540	440	690
Sales agents	9,700	540	420	700
Army/Gardai/prison officers	11,400	530	430	650
Metal/eng. operatives	2,000	520	370	600
Other transport workers	4,500	520	420	620
Skilled building workers	3,900	500	400	610
Drivers	10,100	500	400	660
Electrical/electronic oper.	3,600	490	400	660
Clerks/typists/telephonists	57,500	490	400	650
Other security workers	4,200	480	330	600
Wood craft workers	1,900	470	380	540
Other sales workers	1,800	460	390	560
Metal/eng. craft workers	2,000	460	430	750
Other production operatives	15,500	460	370	600
Catering associate prof.	5,300	440	320	550
Care assistants	12,400	440	320	570
Food/drink operatives	5,500	430	340	530
Unskilled manual	16,700	420	340	540
Childcare services	7,600	410	300	480
Other personnel services	4,300	400	300	510
Agricultural	2,600	390	330	540
Retail sales assistants	17,000	380	290	480
Catering occupations	6,400	350	270	430

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

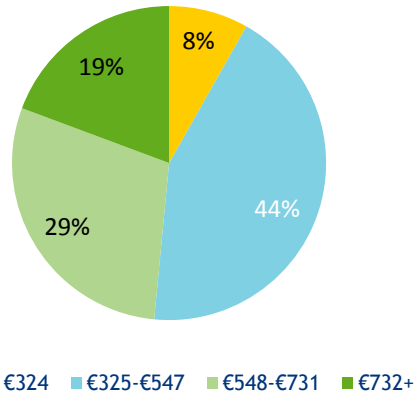
Note: All income figures are rounded to the nearest 10; income points higher than 890 cannot be identified because the upper bound of the last income class is unknown.

10.2 Income Distribution of Full-Time Employees

Figure 10.1 shows the income distribution of full-time employees in quarter 4 2010. The data suggests that in that quarter, 44% of full-time employees earned between €325 and €547 per week, while 8% earned less than €324 a week and almost one in five or 20% earned over €732 per week.

The income distribution in quarter 4 2010 remained broadly in line with that recorded in quarter 4 2007 (approximately 7% and 18% earned less than €301 and over €721 respectively), despite the decline in the number of full-time employees over that period (from 1.4 million persons in quarter 4 2007 to 1.1 million persons in quarter 4 2010).

Figure 10.1 Full-Time Employees by Income Category, Quarter 4 2010



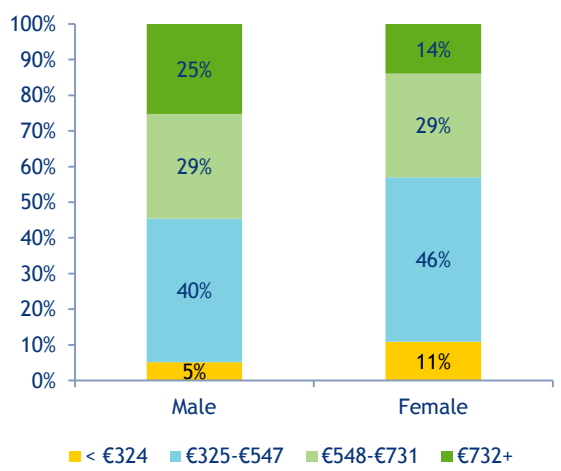
Source: Analysis by FÁS (SLMRU) based on CSO data

10.3 Employment by Gender and Income Category

Figure 10.2 presents the income distribution of full-time employees by gender in quarter 4 2010. There was a greater representation of females relative to males in the lower income bands in quarter 4 2010. A greater share of females earned less than €324 per week and between €325 and €547 per week, while a greater share of males earned over €732 per week. This is broadly in line with the income distribution in

quarter 4 2007, when 11% of females earned less than €301 a week compared to 4% of males, and 13% of females earned over €721 a week compared to 22% of males.

Figure 10.2 Full-Time Employees by Gender and Income Category, Quarter 4 2010



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

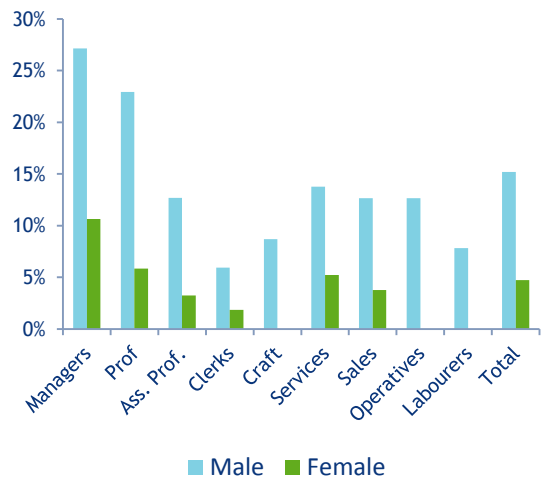
The lower representation of females in the higher income categories can, *inter alia,* be explained by:

- the gender occupational bias, and
- the difference in the hours worked.

Although a greater share of female full-time employees were working in managerial, professional and associate professional occupations relative to males (47% combined compared to 39% for males), the types of occupations they work in tend to be associated with relatively lower levels of remuneration. For instance, although 13% of all female full-time employees were managers, a smaller share relative to males were employed as general managers in large companies, production, computing and banking. In contrast, a greater share of females relative to males were employed as civil service managers at Executive Officer grade, personnel, public relations managers, credit controllers and restaurants and hotels managers. Similarly, while one in five female full-time employees were professionals (compared to 15% of males), over 60% of these were working as teaching professionals and social science professionals (e.g. social workers), with a smaller share employed as engineers and financial professionals (where over 50% of full-time male employees work). Over 50% of associate professional full-time employee females were working as nurses, while over 40% of males were working as scientific technicians, computer programmers or financial analysts.

Female income is also likely to be lower than males because a greater share of males work overtime. Of the total number of female full-time employees, 5% usually worked more than 40 hours per week, compared to 15% of males. For instance, 27% of male managers worked overtime, compared to 10% of female managers; 21% of male professionals compared to 6% of female professionals, 13% of male technicians, compared to 6% for female technicians (Figure 10.3).

Figure 10.3 Share of Full-Time Employees Who Usually Work Over 40 Hours per Week, Quarter 4 2010

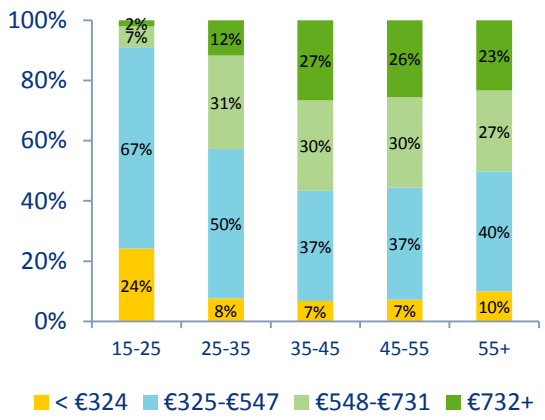


Source: Analysis by FÁS (SLMRU) based on CSO data

10.4 Employment by Age and Income Category

Figure 10.4 presents the income distribution of full-time employees by different age cohorts in quarter 4 2010. The greatest share of top earners was concentrated in the 35-55 age cohort – more than one in four persons earned over €732 per week. The lower share of top earners amongst the older workers may be due to a lesser number of hours worked. The greatest share of low earners was concentrated amongst younger workers – one in four under 25s earned less than €324 per week.

Figure 10.4 Full-Time Employees by Age and Income Category, Quarter 4 2010

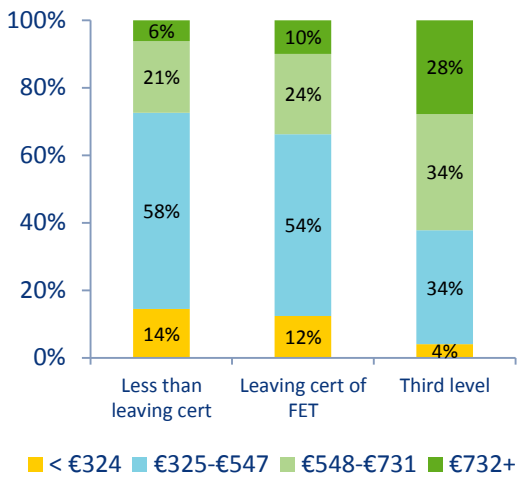


Source: Analysis by FÁS (SLMRU) based on CSO data

10.5 Employment by Education and Income Category

Figure 10.5 presents the income distribution of full-time employees by education level in quarter 4 2010. Unsurprisingly, the greatest share of top earners was amongst third level graduates. The shares at the tail ends of the income distribution have remained relatively unchanged since quarter 4 2007.

Figure 10.5 Full-Time Employees by Education and Income Category, Quarter 4 2010



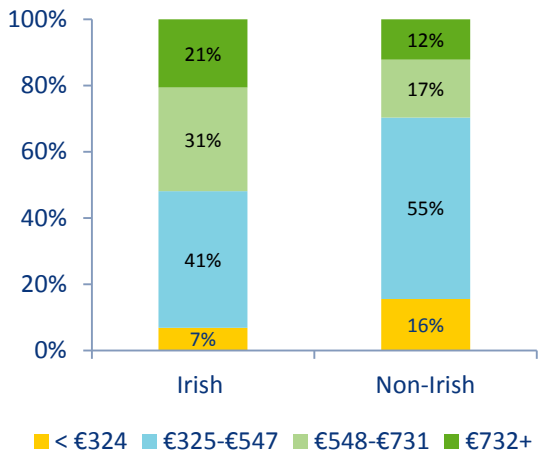
Source: Analysis by FÁS (SLMRU) based on CSO data

10.6 Employment by Nationality and Income Category

Figure 10.6 compares the income distributions of Irish and non-Irish full-time employees in quarter 4 2010. One in five Irish nationals earned over €732 per week in that quarter, compared to 12% of non-Irish nationals.

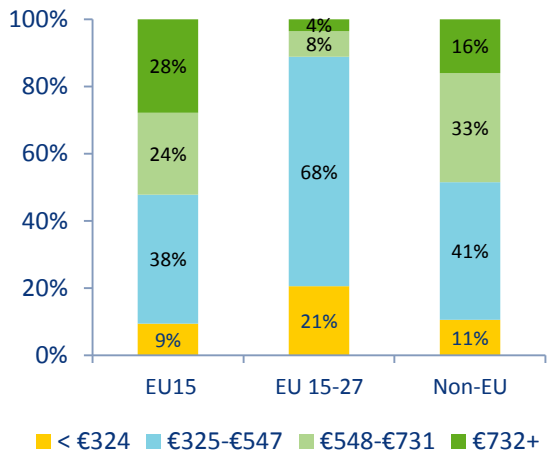
While, for Irish nationals, the share of top earners has not changed since quarter 4 2007, it increased from 8% to 12% for non-Irish nationals. Given that the total number of non-Irish national full-time employees decreased over this period (from over 270,000 persons in quarter 4 2007 to just over 160,000 persons in quarter 4 2010), such an increase in the share of top earners suggests that non-Irish nationals in lower paid jobs were worse affected by lay-offs than non-Irish nationals in higher paid jobs.

Figure 10.6 Full-Time Employees by Nationality and Income Category, Quarter 4 2010



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

Figure 10.7 Non-Irish Full-Time Employees by Income Category, Quarter 4 2010



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

The share of top earners was greater amongst EU15 full-time employees compared to other non-Irish nationals – the share increased from 15% in quarter 4 2007 to 28% in quarter 4 2010.

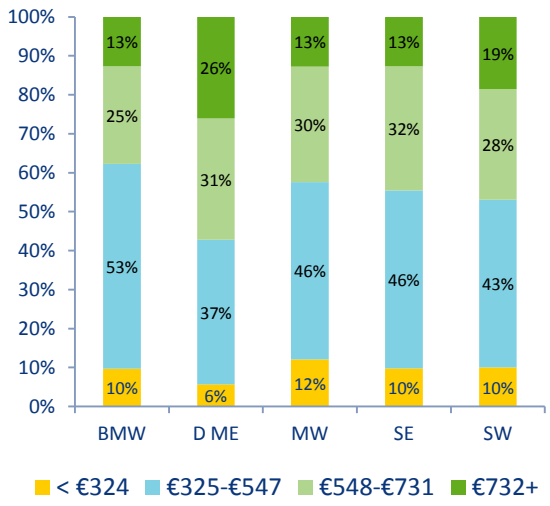
Amongst non-Irish national full-time employees, those originating from the accession states, including Romania and Bulgaria, had the lowest share of persons who earned over €732 per week, and the highest share who earned less than €324 per week. The income distribution of full-time employees originating from the accession states changed since the peak of the boom – the share of those at the bottom of the income distribution increased by almost ten percentage points to 21% by quarter 4 2010.

10.7 Employment by Region and Income Category

Figure 10.8 presents the income distribution of full-time employees across regions in quarter 4 2010. Dublin and the Mid-East combined had the lowest share of low earners and the highest share of top earners compared to all other regions, at 6% and 26% respectively. The income distributions of the other regions were broadly similar. The South-West had a relatively higher share of top earners while the BMW region had a higher share of persons who earned €325-€547 per week. Over 60% of full-time employees in the BMW region earned less than €547 per week, compared to 43% in Dublin and the Mid-East.

The regional income distributions of full-time employees has not changed significantly since quarter 4 2007.

Figure 10.8 Full-Time Employees by Region and Income Category, Quarter 4 2010



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

10.8 Employment by Sector and Income Category

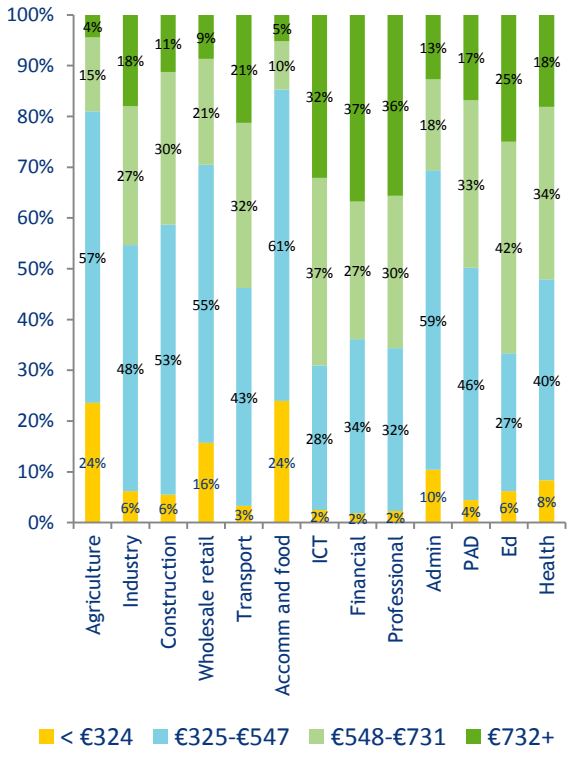
Figure 10.9 presents the income distribution of full-time employees by sector of employment in quarter 4 2010. One third or over of all full-time employees in the ICT, financial and professional services sectors earned over €732 per week at that point in time, compared to less than 10% in agriculture, wholesale and retail or accommodation and food. Not only did these sectors have the lowest share of top earners, they also had the greatest share of persons who earned less than €324 per week.

The share of top earners in the financial, professional services and transportation sectors increased since quarter 4 2007 (by seven, six and six percentage points respectively), while the absolute number of full-time employees in these sectors declined.

In contrast, the share of top earners in the PAD and education sectors declined, while the absolute number of full-time employees increased. This may suggest that retirements were proportionately greater amongst higher grades in the public sector and/or that income cuts introduced by the Government had an effect on the income distribution[6].

The share of full-time employees who earned less than €324 per week changed most markedly in the wholesale and retail and accommodation and food sectors between quarter 4 2007 and quarter 4 2010 – increasing by five and seven percentage points respectively.

Figure 10.9 Full-Time Employees by Sector and Income Category, Quarter 4 2010



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

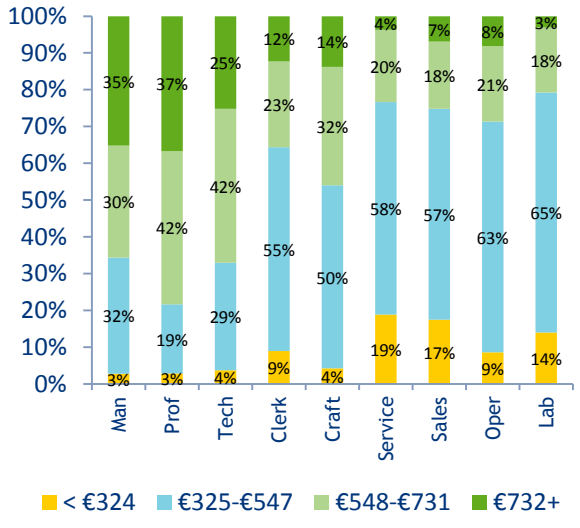
[6] It may also be the case that the share of full-time employees within the PAD sector increased over the same period.

10.9 Employment by Occupation and Income Category

Figure 10.10 presents the income distributions of full-time employees across broad occupational groups in quarter 4 2010. Unsurprisingly, the greatest share of top earners was amongst managers (35%), professionals (37%) and associate professionals (25%). The greatest share of full-time employees who earned less than €324 per week was amongst service workers (19%), sales persons (17%) and labourers (14%).

The most marked change in distributions since quarter 4 2007 was a decrease in the share of top earners amongst professionals (six percentage points) and an increase in the share of full-time employees who earned less than €324 per week amongst sales persons and operatives (four and five percentage points respectively).

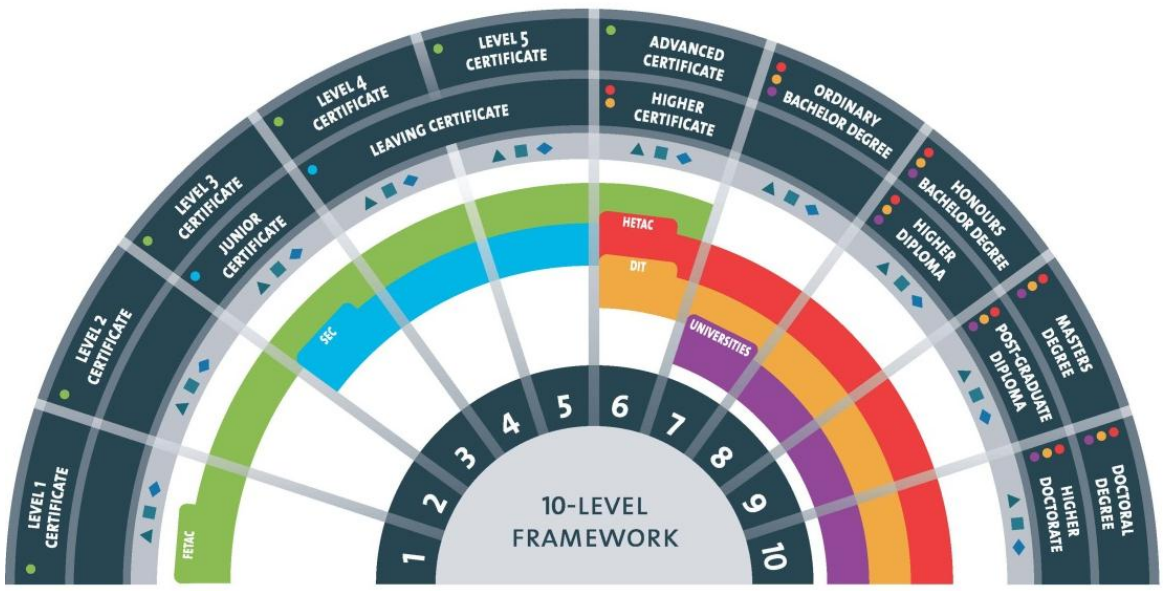
Figure 10.10 Full-Time Employees by Occupation and Income Category, Quarter 4 2010



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

Appendix A

Figure A: National Framework of Qualifications



Source: NQAI

The structure of the Framework is based on levels and award types, which are outlined in Figure A above. There are ten award levels, which indicate the standard of learning (ranging from the most basic to doctoral awards). The learning outcomes associated with each NFQ level are provided in Appendix A. There are also four award-type categories, which serve as an indicator of the purpose, volume and progression opportunities associated with a particular award[7].

- **A major award** is the main class of award made at any given level; examples of major awards include the Leaving Certificate, a FETAC major certificate or an honours bachelor degree.
- **A minor award** provides recognition for learners who achieve a range of learning outcomes but not the specific combination of learning outcomes required for a major award. A minor award is linked to a major award.
- **A Special Purpose award** is made for very specific purposes; an example of a special-purpose award is site suitability for wastewater treatment.
- **A Supplemental Award** is for learning which is additional to a previous award; it could, for example, relate to updating and refreshing knowledge or skills, or to continuing professional development.

[7] Source: National Qualifications Authority of Ireland (NQAI).

Appendix B

HETAC data in chapter 5 includes awards made for courses in the following colleges

Carlow College
Clanwilliam Institute
Dublin Business School
Dublin Business School (Joint Awards)
Fidelity Investment
Griffith College
Griffith College (Joint Awards)
Hibernia
IBAT
ICD Business School
Irish Management Institute
Independent Colleges
Institute of Physical Therapy & Applied Science
Institute of Purchasing and Materials Management
Irish Academy of PR
Kimmage Development Centre
Miltown Institute
National College of Ireland
Newpark Music Centre
St Nicholas Montessori College
The American College
The Open Training College

Professional bodies included in the awards data in Chapter 5 include

Institute of Bankers
Irish Tax Institute
Irish Management Institute (for short courses)
Association of Chartered Certified Accountants
Association of International Accountants
Institute of Chartered Accountants in England & Wales
Institute of Chartered Accountants in Ireland
Institute of Chartered Accountants of Scotland
Institute of Certified Public Accountants in Ireland
Institute of Incorporated Public Accountants
Chartered Institute of Management Accountants
Chartered Institute of Public Finance and Accountancy

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Margaret Cox	Managing Director, I.C.E. Group
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Garry Keegan	Director, Acumen
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Jacinta Stewart	Chief Executive, City of Dublin VEC

Publications by the Expert Group on Future Skills Needs

Report	Date of Publication
Developing Recognition of Prior Learning: The Role of RPL In the Context of the National Skills Strategy Upskilling Objectives	April 2011
Vacancy Overview 2010	March 2011
Future Skills Needs of Enterprise within the Green Economy in Ireland	November 2010
Future Skills Requirements of the Biopharma-Pharmachem Sector	November 2010
Monitoring Ireland's Skills Supply - Trends in Education and Training Outputs 2010	July 2010
National Skills Bulletin 2010	July 2010
Future Skills Needs of the Wholesale and Retail Sector	May 2010
The Expert Group on Future Skills Needs Statement of Activity 2009	April 2010
Future Skills Requirements of the Food and Beverage Sector	November 2009
Skills in Creativity, Design and Innovation	November 2009
Monitoring Ireland's Skills Supply: Trends in Education/Training Outputs 2009	November 2009
National Skills Bulletin 2009	July 2009
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	July 2006

Report	Date of Publication
Ireland	
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
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

Report	Date of Publication
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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