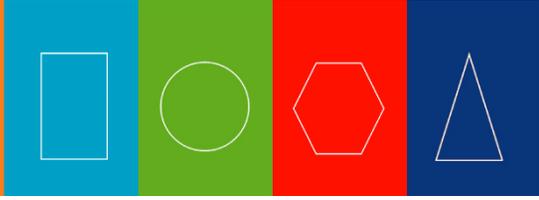# Vacancy Overview 2016

May 2017

SOLAS
An tSeirbhís Oideachais Leanúnaigh agus Scileanna
Further Education and Training Authority

Expert Group on
Future Skills Needs

Vacancy Overview 2016

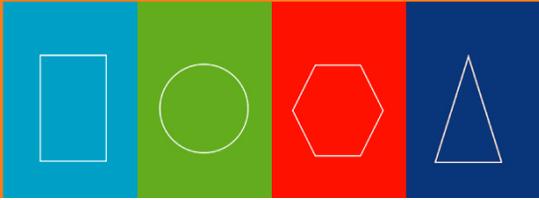A report produced by the Skills and Labour Market Research Unit (SLMRU) in SOLAS

May 2017

Authors

Joan McNaboe

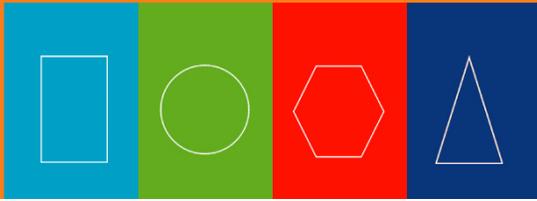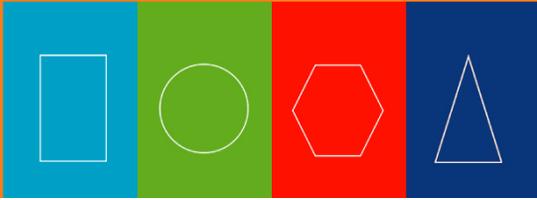Ivica Milicevic

Annemarie Hogan

Nina Burke

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Executive summary

Making sense of vacancy data can be a difficult task. An increase in the volume of vacancy notifications for a particular occupation can signal a number of possible factors not necessarily relating to an increased demand for this occupation; these include a high retirement rate leading to a higher demand to fill current positions, the same vacancy being advertised across a number of platforms on a regular basis by recruitment agencies in order to attract interest, or the same vacancy occurring a number of times over a period due to a difficulty in the retention of staff.

In order to contextualise the vacancy data in this report, a number of labour market indicators relating to each sector in the economy are observed. Firstly, employment numbers are examined to determine if any expansion has occurred. Next, transitions data is analysed to determine where entry into the sector is occurring most frequently, e.g. from those previously unemployed or already employed within the sector. An analysis of the latest job hires for the sector details the volume of persons hired and their relevant characteristics, such as age, education level and occupations. From this, it is possible to determine the nature of the vacancies occurring in each of the sectors, in terms of expansion, churn and replacement. In addition, the vacancy analysis is enhanced by the identification of difficult to fill vacancies through the Recruitment Agency Survey and by an examination of the sectors which have been issued most frequently with employment permits.

This detailed analysis of labour market indicators, vacancy trends and identifying difficult to fill vacancies produced numerous findings detailed in the report. The following is a summary of some of the key findings.

A high level of churn identified in certain sectors

Many of the vacancies which are occurring in high volumes are indicative of a significant level of churn, where a high number of recent job hires are occurring with little or no expansion identified. Issues with retention appear to be the main factors involved for occupations across a variety of sectors including:

- health: care workers
- wholesale & retail: sales assistants
- accommodation and food services: waiters, bar staff, catering assistants
- administrative services: security staff, cleaners
- construction: labourers.

These occupations accounted for 29% of all recent hires in 2016 and 40% of all DSP Jobs Ireland vacancies in the first half of 2016.

The transitions data would also suggest significant movement for those already employed within certain sectors, leading to a possible inflation of vacancy numbers. This is particularly the case for those employed in the information and communication and financial activities sectors. Although expansion and difficult to fill vacancies are occurring in these sectors, a propensity to move
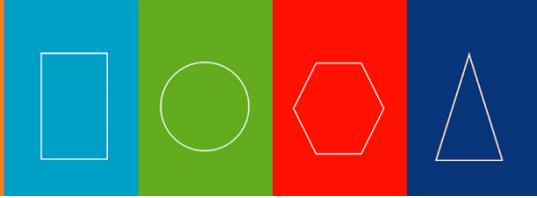
frequently between positions within the sector is responsible for a significant share of the vacancies notified.

Tightening of supply evident in the construction sector

Increasing demand for skills in the construction sector was evident from the indicators examined for this report. Employment has been growing steadily and an increasing number of recent job hires were reported in line with a higher volume of vacancies, particularly in skilled trades and operative roles. The analysis of the Recruitment Agency Survey indicates a number of occupations already proving difficult to fill including quantity surveyors, engineers, steel fixers, carpenters and drivers. The transitions data from 2015 shows that although those unemployed represented a significant pool of supply, the volume of movement from unemployment to employment was declining; indeed, a noticeable increase in the number of inter-occupational transitions that occurred compared to 2014 indicates that those already employed were moving from other sectors of the economy into construction.

The vacancy data reveals the occupations occurring most frequently are in:

- skilled trades e.g. electricians, carpenters, plumbers, painters, steel fixers, bricklayers
- operatives e.g. various drivers, groundsworkers, scaffolders, crane operators
- professionals (to a lesser extent, in terms of volume) e.g. quantity surveyors, site engineers.

## Opportunities for those with higher secondary/further education and training qualifications

There were almost 130,000 job hires in 2016 for those with higher secondary/further education and training qualifications. While a large share were in occupations that have been identified as experiencing a high level of churn (such as sales assistants, waiters, care workers), opportunities were arising for skilled trades (mainly in construction and industry), hairdressers, operatives and various administrative roles across sectors.

## Opportunities for those with third level education

The education profile of recent job hires indicates that while a share of persons with third level qualifications were entering what would typically be considered lower skilled occupations, such as waiters, sales assistants and care workers, this tended to relate to the younger age cohorts. High skilled opportunities, identified in the vacancy data, were resulting in a relatively high share of hires for third level graduates in sectors such as education (primary/secondary school teachers), professional activities (accountants), health (nurses) and ICT (IT programmers).

Skills identified as emerging, difficult to fill or in high demand

The analysis of the vacancy data and the labour market indicators indicate that demand continues to exist for a number of key occupations such as nurses, doctors, ICT professionals, chefs and HGV drivers. Language skills are also frequently mentioned particularly for roles in accounts receivable, call centre agents, customer service and technical support. In addition to these occupations, this report has identified a number of key job titles which are considered in high demand, representing emerging skills, and/or difficult to fill roles including:
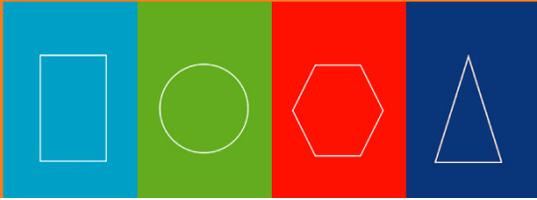
- data analysts/scientists
- quality control and quality assurance specialists in professional activities and industry
- process engineers in industry; also NPD technologists/NPI engineers (new product development/introduction)
- scientists, particularly chemists
- risk analysts in ICT and financial activities
- compliance and regulatory reporting in financial activities
- cardiac technicians/physiologists.
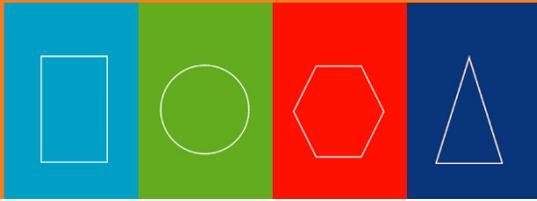
1. Introduction

Aim of the report

This report is produced annually by the Skills and Labour Market Research Unit (SLMRU) in SOLAS in order to provide an overview of the demand for labour through identifying trends associated with advertised job vacancies.

In order to ascertain the nature of the vacancies occurring, i.e. if they are arising due to expansion demand, job churn or due to difficulty sourcing suitably qualified/experienced personnel, a number of other relevant data sources are also examined.

What data is examined?

- Vacancy data: newly advertised vacancies through DSP Jobs Ireland (Public Employment Services) and IrishJobs.ie (a private recruitment agency)
- CSO Quarterly National Household Survey (QNHS): employment trends, transitions and recent job hires
- CSO Job Vacancy data: collected from the Earnings, Hours and Employment Costs Survey (EHECS) survey of employers, providing vacancy numbers and rates across sectors since 2008
- The Recruitment Agency Survey, conducted by the SLMRU biannually, which seeks to identify difficult to fill vacancies
- Employment permit data, provided by the Department of Jobs, Enterprise and Innovation (DJEI), which indicates where employers were unable to find suitable candidates within the Irish labour market and the broader European Economic Area (EEA)
- Job announcements in the media which indicate future demand in the short to medium term.

## What conclusions can be drawn from the findings?

An examination of vacancy data provides an insight into occupations which have vacancies occurring most frequently in the labour market. These findings should not be treated in isolation, but instead examined alongside other labour market data sources in order to assess if these vacancies are occurring due to expansion demand, replacement demand and/or turnover and the extent to which they indicate shortages of labour and skills. In some cases, there are sufficient skilled persons available in the labour market to meet any open vacancies; on the other hand, the Recruitment Agency Survey and the employment permit data give clear indications of where vacancies may be proving difficult to fill due to a lack of suitable candidates. Table 3.20 in Section 3 provides a breakdown of all relevant indicators by sector. Finally, the examination of job announcements in the media signpost where future opportunities are likely to occur.

This analysis allows us to contextualise any emerging vacancy trends within the broader labour market situation, thus providing significant insights for stakeholders in areas where education and training should be focused, where sourcing from abroad through employment permits is required, or where an examination of working conditions should be monitored.
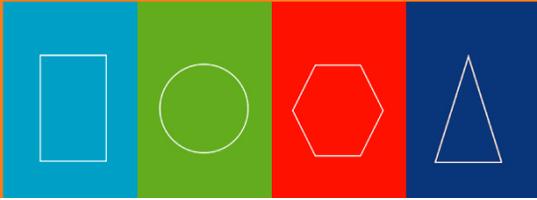
What is the structure of the report?

- Section 2 details the data sources utilised, along with the limitations of these sources
- Section 3 provides an overview of the main findings by data source and sector
- Table 3.20 provides a breakdown of all the indicators utilised in the report by sector
- Sections 4 to 16 provide vacancy trends by sector; the analysis of vacancies is set in the context of the other data sources in order to establish the nature of the vacancy.
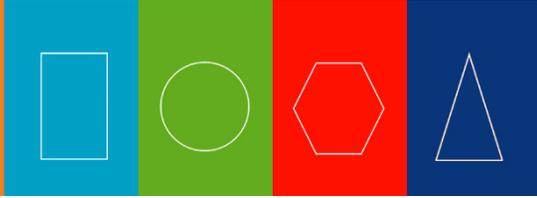
2. Data Sources

2.1 Estimates of demand

CSO QNHS

The SLMRU analyses the CSO's Quarterly National Household Survey (QNHS) to examine movement in the labour market, and for the purposes of this report examines three key areas:

- **Employment growth**

An examination of changes in employment levels by sector gives an indication of the level of expansion that is occurring. For some sectors, large numbers of vacancies are occurring without any corresponding growth in the sector, suggesting that movement relates primarily to turnover rather than expansion.

- **Labour market transitions**

Labour market transitions refer to the change in the labour market status of individuals between two points in time. An analysis of the transitions that occurred in the previous year by sector shows that even without employment growth many job openings may be occurring due to replacement demand and/or churn. Each sector varies in this respect, with the findings detailed throughout the report. The latest available data for transitions is 2015.

- **Recent job hires**

By examining the QNHS data for those recently hired[1] (within the previous three months), we can ascertain the sectors where most recent recruitment has been occurring; we can also establish some of the characteristics of the persons most recently employed (e.g. age, education attainment), as well as the occupations where these job openings are occurring where possible. This data, however, does not ascertain the cause, expansion or replacement, of these openings.

CSO EHECS

The CSO publishes both vacancy numbers and rates, collected from the quarterly Earnings, Hours and Employment Costs Survey (EHECS). This information provides a robust time series of where vacancies are occurring at a sectoral level. EU comparisons are also available through the EU's statistics office, Eurostat. However, it should be borne in mind that this analysis only represents one point in time for each quarter. Also, while the EHECS survey examines all companies with 50 or more employees, it includes only a sample of enterprises with 3-49 employees which may impact sectors such as construction, accommodation/food services and professional activities where the share of companies with more than 50 employees is small[2].

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[1] Job hirings refer to employees who were employed in a 'reference week' and had started working for their employer at most three months earlier.

[2] Source: CSO Business Demography, 2012
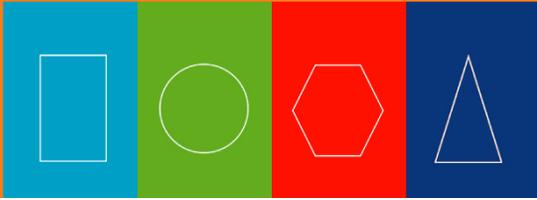
2.2   Vacancy data

This report analyses vacancy notifications from two sources, namely the DSP Jobs Ireland[3] portal (public employment service) and IrishJobs.ie (private recruitment agency). While both vacancies sources provide vital information on the type of vacancies arising in the labour market, they are not directly comparable for a number of reasons, as detailed below.

	IrishJobs.ie	DSP Jobs Ireland
Scope	Most vacancies relate to professional and associate professional positions	Most vacancies are for skilled trades, personal services, operatives and elementary occupations
Employer/Agency	Includes vacancies advertised by employers only	Includes vacancies by both employers and recruitment agencies
Posts	Reports vacancies without detailing the number of posts involved for each vacancy	Reports the number of posts for each vacancy advertised
Administration of vacancy websites	Employers administer the vacancies advertised directly and as such can refresh a previously advertised vacancy to occur as a new vacancy in the same or following month, which may lead to an overestimation of the true number of new vacancies	The DSP administer the portal and are responsible for when vacancies are advertised and for how long; each vacancy only occurs once
Occupations	Occupations coded to SOC2010 by SLMRU using CASCOT software based on the job title given	The data is pre-coded with MANCO occupational coding by DSP staff, which is then matched to SOC2010 codes by SLMRU
NACE sector	Data already assigned a sectoral classification which is linked by SLMRU to a NACE sectoral classification; therefore, it is possible for one occupation to appear in a number of NACE sectors	As the data did not include a sectoral classification, each SOC2010 code was linked by SLMRU to a NACE sectoral code based on the sector where that occupation is most often associated with; therefore, each occupation only appeared in **one** sector analysis
Level of experience	Available for 53% of the vacancies in 2016 and broken down by the number of years of experience required	Information on experience available for 98% of the vacancies, but grouped into three categories: no experience, some experience and fully experienced
Level of education	Available for 53% of the vacancies in 2016 with a detailed breakdown of the education level required	Not provided

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[3] In the summer of 2016, the DSP Jobs Ireland portal was suspended in order to introduce a new system. As such, no data was available for the remainder of the year but it is envisaged that some of the issues with the vacancy data listed above will be resolved with the new system.
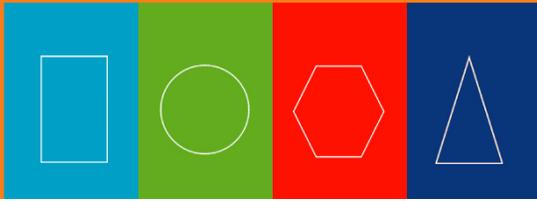
General vacancy data limitations

- Vacancies may be advertised through channels not captured in the analysis (e.g. social media, recruitment agencies, employer websites), leading to an underestimation of the true demand; this may be particularly true in the case of certain foreign languages (e.g. Mandarin) where employers may prefer to advertise the vacancy in the language being sought or in countries where fluency in that language is commonplace

- Vacancies may be advertised simultaneously through several channels, leading to multiple counting and an overestimation of the true demand

- The extent to which vacancies are arising due to expansion demand (the creation of a new position by an employer), replacement (a person leaving an already existing position), turnover (the rate at which an employer gains and loses employees), or other reasons cannot be inferred from the available data

- While it was possible to identify and exclude work placement vacancies from the DSP Jobs Ireland data, it was not possible to do so from the IrishJobs.ie vacancy data; however, as the work placement schemes are administered and advertised through DSP Jobs Ireland, their occurrence in other data sets is likely to be low and therefore unlikely to skew the data unduly.

> Given the above data limitations, the analysis focuses on the **qualitative** aspects of newly advertised vacancies. The objective is **not to quantify** the number of vacancies but rather to examine the types of jobs and skills most frequently appearing in the data sources captured. When vacancy trends are presented, they are included merely as an indication of movement in the vacancies from the two sources rather than the overall vacancy market.

2.3   Recruitment Agency Survey

The Skills and Labour Market Research Unit (SLMRU) in SOLAS has conducted a recruitment agency survey every six months since January 2008. It is designed to gather the views of recruitment agencies in respect of the occupations for which vacancies, in their experience, are proving difficult to fill. Almost 120 recruitment agencies were contacted and asked to participate in a telephone interview. The findings of the most recent survey[4], which took place in October 2016, are presented for each sector with a detailed breakdown available in Appendix A.

2.4   Job Announcements

Announcements in the media (national newspapers) indicating the creation or loss of jobs have been documented by the SLMRU since 2010. Job announcements over the period January to December 2016 are summarised and presented for each sector, thereby highlighting areas in which job opportunities are arising as well as those where expansion activities may occur in the short-medium term.

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[4] Only those recruitment agencies who reported having difficult to fill vacancies (38 of the respondents) are included in the analysis in this report.
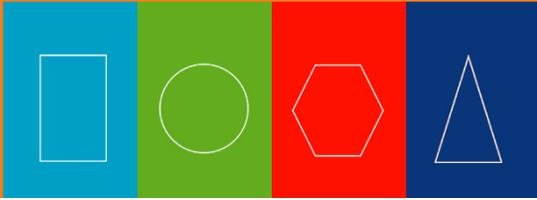
2.5   Employment permits

Employers, where necessary, employ workers from non-EEA countries through employment permit schemes. While the data on newly issued employment permits, provided by the DJEI, may be used to highlight occupations for which employers experience difficulty in sourcing staff domestically, it should be interpreted with caution:

- new employment permits may be issued to persons already residing in Ireland but who have changed employer
- new employment permits may be issued to spouses/dependants of existing employment permit holders although the incidences of this occurring have declined in recent years.
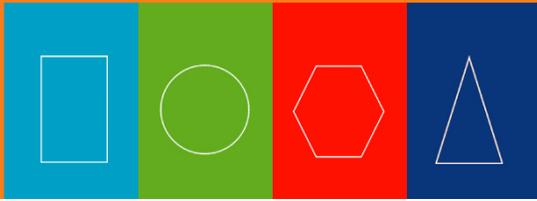
3. Main findings

This section provides an overview of the key data findings from the labour market indicators examined in this report, including overall employment by sector, transitions, recent job hires and CSO vacancy data. Recent trends by sector for vacancy notifications through the DSP Jobs Ireland and IrishJobs.ie are also detailed along with an overview of the employment permit data, the findings from the most recent Recruitment Agency Survey and the analysis of job announcements in the media.

3.1. Employment levels (Figure 3.1)

- The wholesale and retail sector along with industry and the health sector account for the highest numbers employed in quarter 4 2016

- Between quarter 4 2015 and quarter 4 2016, construction experienced the largest growth in absolute terms, with an additional 11,600 persons employed, followed by industry with an additional 10,700 persons

- The construction sector experienced the largest relative annual growth, at 9%, in the same time period, followed by professional activities at 6%.

Figure 3.1: Employment by sector (000s) in quarter 4 2016 and employment change (%), quarter 4 2015 - quarter 4 2016
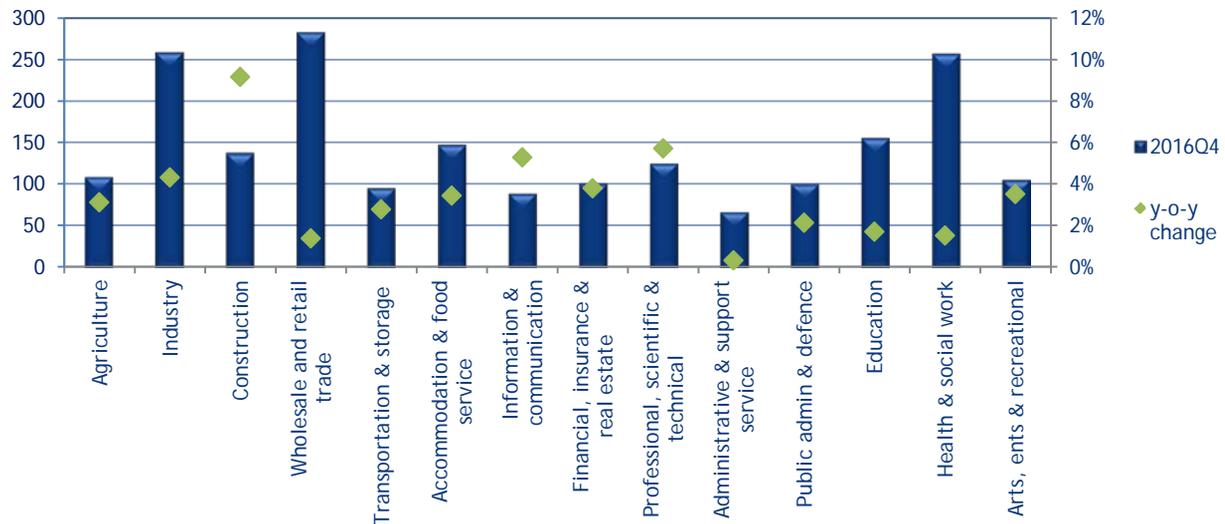

Source: SLMRU analysis of CSO QNHS

3.2. Transitions

In 2015, the wholesale and retail sector accounted for the largest share of transitions followed by industry and the accommodation and food service sectors (Figure 3.2).

- **Employment from unemployment**: transitions from unemployment were most frequent for those entering the wholesale & retail, industry and construction sectors

- **Employment from inactivity:** mainly occurred in the wholesale and accommodation sectors
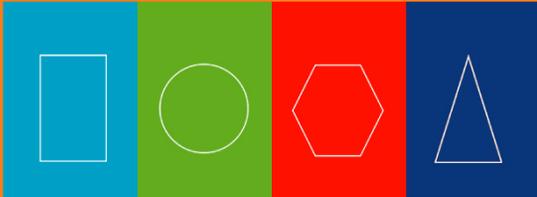
- **Transitions within employment but from a different sector (Inter):** movement into wholesale/retail and industry from other sectors accounted for the highest number of transitions for this group
- **Transitions within employment but from the same sector (Intra):** a large volume of movement occurred in 2015, particularly in wholesale/retail, industry, accommodation and health.

Figure 3.2: Transitions by sector, 2015
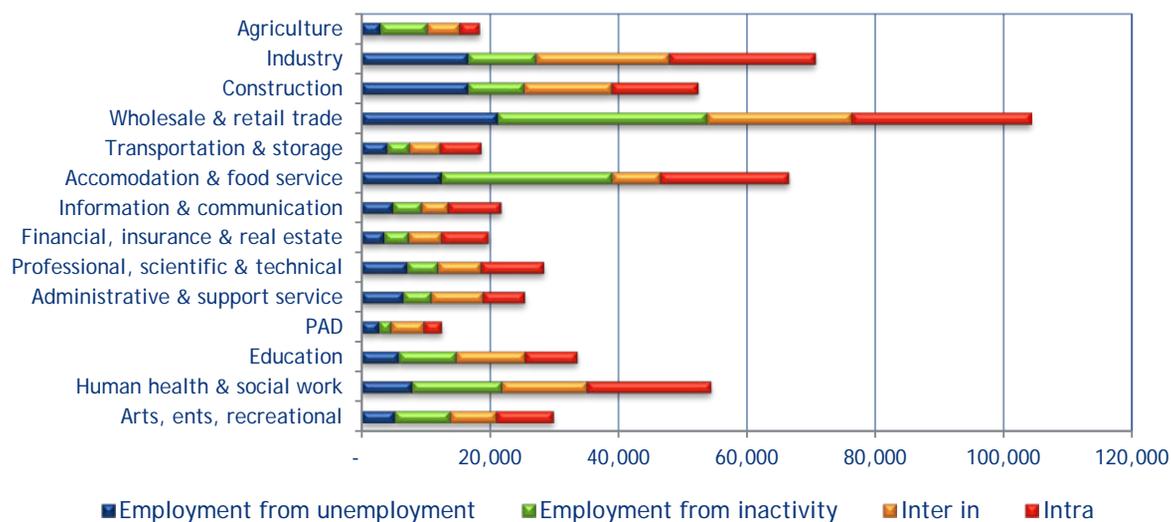
Source: SLMRU Analysis of CSO QNHS data

3.3. Recent job hires

The number of persons recently hired (within three months of being surveyed) tends to fluctuate depending on the quarter reported. As shown in Figure 3.3, however, the number of recent hires reported has been growing in each quarter since 2013 (with the exception of the fourth quarter of 2015) reaching over 95,000 in the third quarter of 2016, their highest level in recent years. For the purposes of this report, the four quarters, from quarter 4 2015 to quarter 3 2016, have been summed to provide an annual summary; henceforth these will be referred to as the 2016 recent job hires.

In 2016, (Figure 3.4 and Figure 3.5):
- in line with transitions data, the wholesale/retail sector, accommodation/food services and industry recorded the highest number of recent hires
- most hires were for those with third level (43%) or higher secondary/FET (40%) education
- over a third of recent hires were for those aged 15-24 years, with a further 31% aged 25-34
- recent hires were spread across all occupational groups although with 20%, the largest share was for those in elementary occupations (e.g. waiters, construction, cleaners, catering)
- three fifths of recent job hires were for full-time positions.
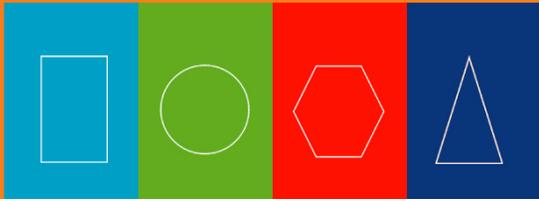
Since 2015,

- some overall increases were observed in the health and construction sectors, with small declines in industry and the information and communication sector
- increases occurred in the number of recent hires for those in the 15-24 and 35-44 age categories, with declines for those in the 25-34 age cohort
- all increases related to recent hires for third level graduates and for part-time workers
- there was a fall in the number of recent hires for administrative and operative roles, with the largest increases for elementary occupations.

Figure 3.3: Recent hires by quarter, 2013-2016
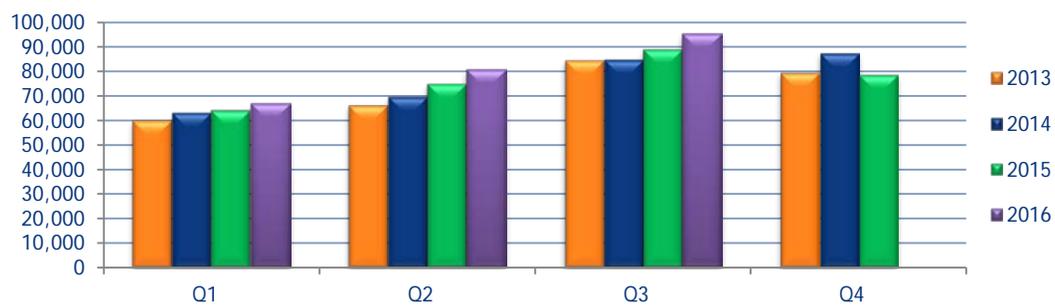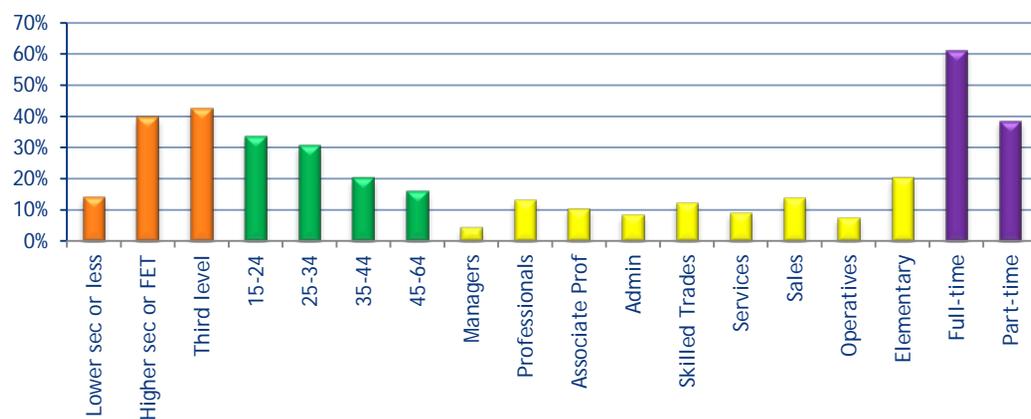

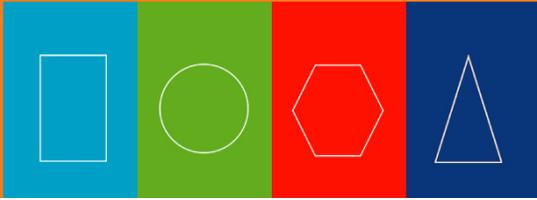Figure 3.4: Recent hires by sector, 2016
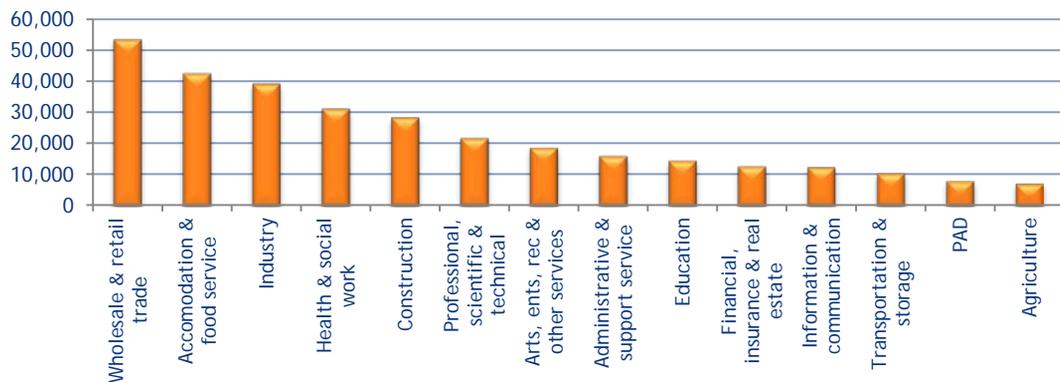
Figure 3.5: Recent hires by education, age, occupation and employment type, 2016

Source: SLMRU Analysis of CSO QNHS data

3.4. CSO reported vacancies

The number of vacancies reported through the Earnings, Hours and Employment Costs Survey (EHECS) fell from a peak of 18,000 in 2008 to just over 5,000 at the end of 2009 (Figure 3.6). The numbers have since increased steadily, reaching a peak of 17,600 in the third quarter of 2016.

Figure 3.6: CSO vacancy numbers, quarter 1 2008 - quarter 4 2016
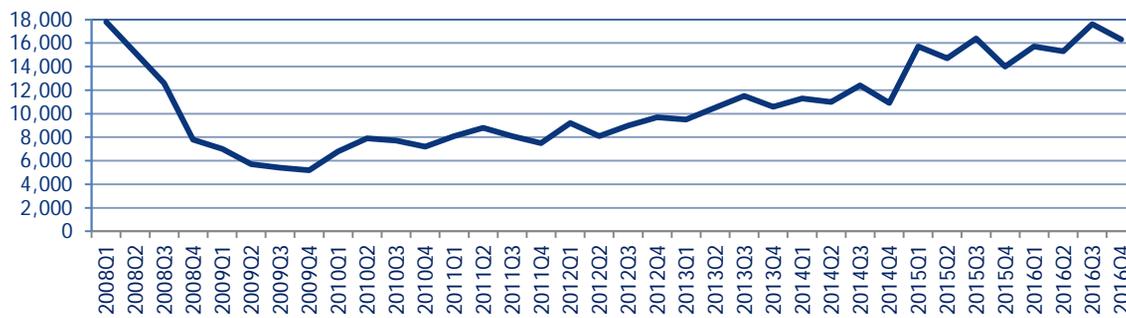

Source: CSO EHECS

Vacancy rates by sector

The job vacancy rate, as detailed in the EHECS, measures the proportion of total posts that are vacant as a proportion of total occupied posts combined with job vacancies[5]. In terms of sectors, in the fourth quarter of 2016, five sectors had a higher vacancy rate than the overall average of 1%, with professional and financial activities having rates higher than 1.5% (Figure 3.7).

Figure 3.7: CSO vacancy rate by sector, quarter 4 2016
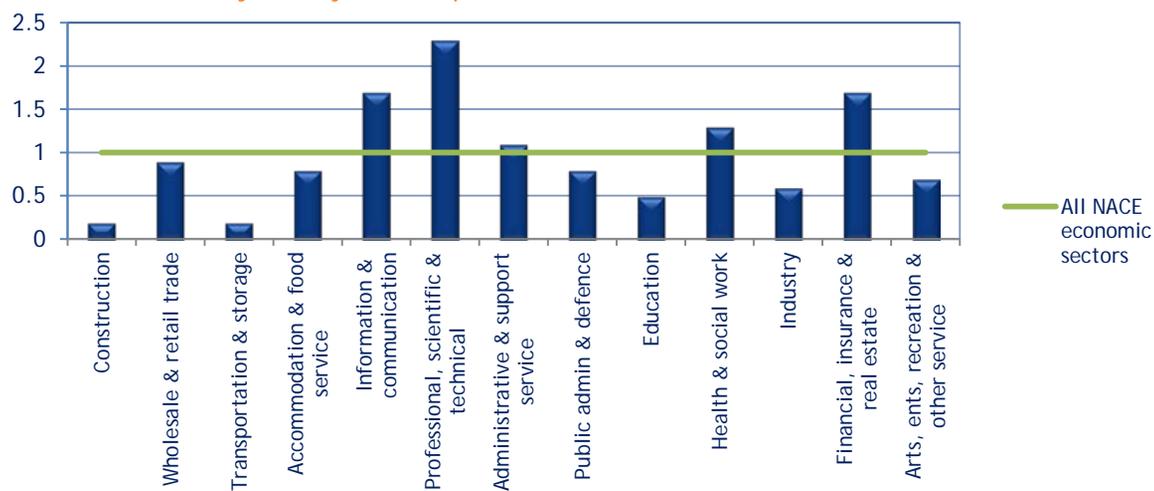
Source: CSO EHECS

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[5] Job Vacancy Rate = (Number of job vacancies / Number of occupied jobs + Number of job vacancies) * 100
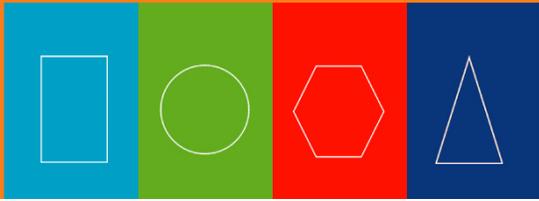
Between quarter 4 2011 and quarter 4 2016, the vacancy rates increased across all sectors, excluding transportation/storage and the information and communication sector (rates remained unchanged) and construction, which declined by 0.5 percentage points (Figure 3.8). The largest increase occurred for professional activities which saw an increase of 1.4 percentage points.

Figure 3.8: CSO vacancy rate by sector, quarter 4 2011 and quarter 4 2016
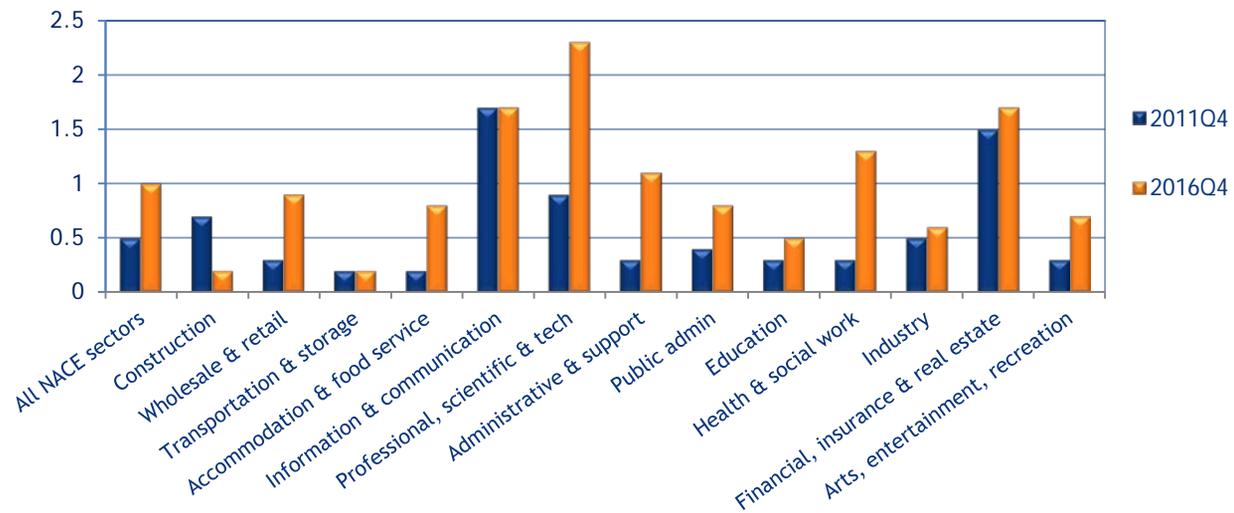

Source: CSO EHECS

EU vacancy rates

An EU comparison of vacancy rates is also available through the EU's statistics office, Eurostat (Figure 3.9). In 2015, the Irish annual vacancy rate stood at 0.9%. While this rate is below the EU-28 rate of 1.7%, this may be a reflection on the varied methods of data collection across the EU. Ireland's vacancy rate increased since 2011 by 0.4 percentage points, whereas the rate fell for many European countries including Spain, Cyprus, Norway and Finland.

Figure 3.9: Annualised vacancy rates across EU countries, 2011 and 2015
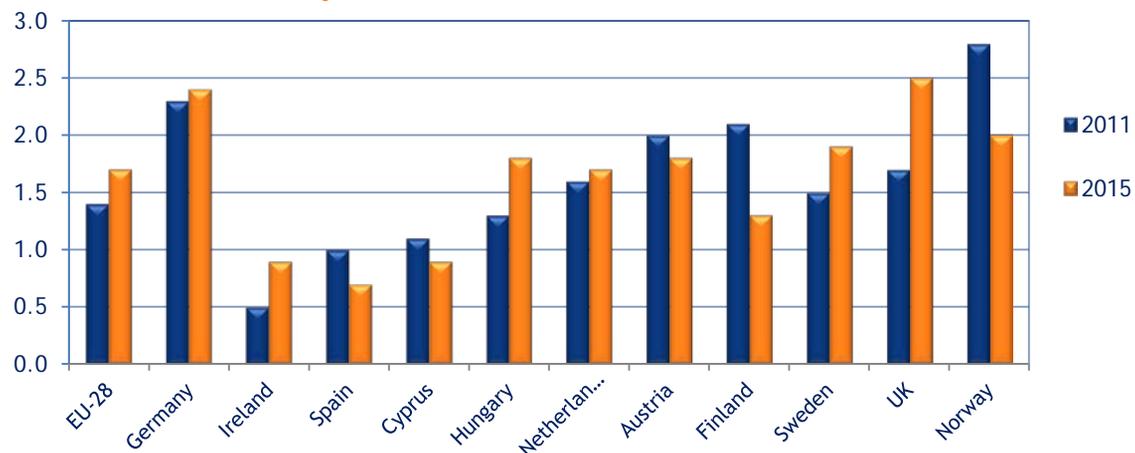

Source: Eurostat
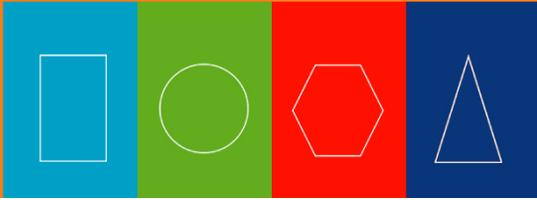
3.5. Vacancy data

IrishJobs.ie

The number of vacancies notified through IrishJobs.ie has been increasing since 2013, although the pace of growth slowed in 2016 with an annual increase of 8% compared to a 25% increase the previous year. Figure 3.10 shows that:

- the professional, scientific and technical activities sector accounts for by far the largest share of vacancies notified to IrishJobs.ie and has shown high levels of growth in recent years

- vacancy notifications for the ICT sector have remained relatively static in recent years, although this sector remains the second highest in terms of notifications

- the financial activities and health sectors have both seen continued growth in the volume of vacancies notified.

Figure 3.10: IrishJobs.ie vacancies, 2012 to 2016
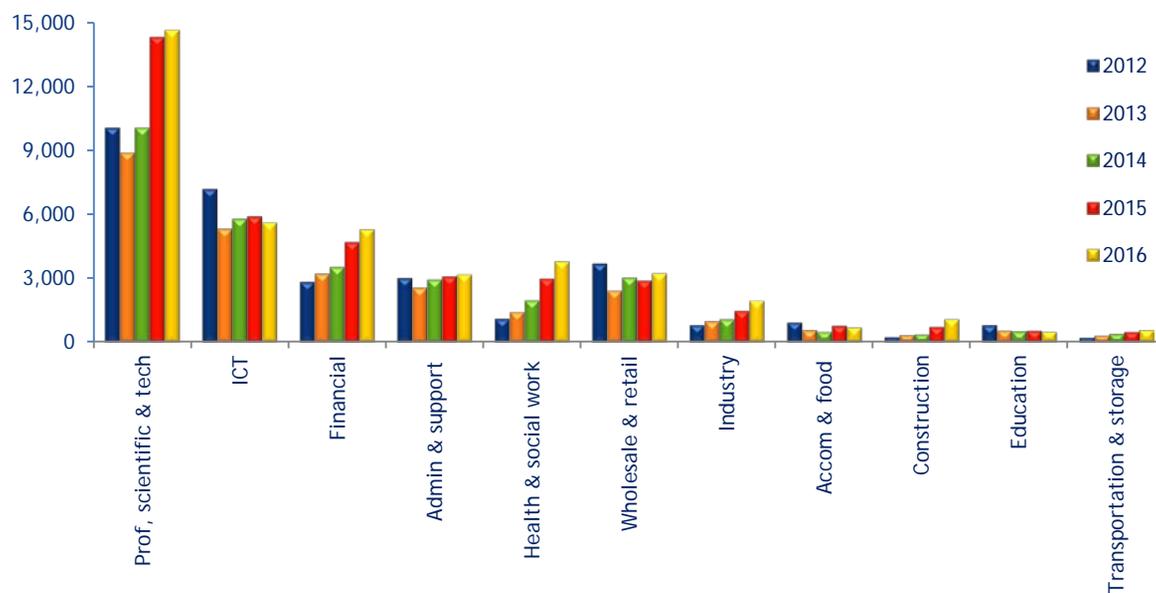
Source: IrishJobs.ie

DSP Jobs Ireland

The overall number of vacancies notified through DSP Jobs Ireland has been increasing since 2012. Figure 3.11 shows that:

- the largest numbers of vacancy notifications in the first half of 2016 were for the health (almost entirely for care workers), administrative services (cleaners, security guards and general admin), accommodation and wholesale/retail sectors;

- when compared with January – June 2015, increases in the number of vacancy notifications occurred across a number of sectors including health & social work (due to care worker vacancies), construction (e.g. drivers, carpenters) and wholesale and retail (e.g. sales assistants).
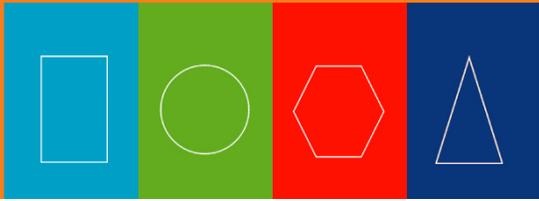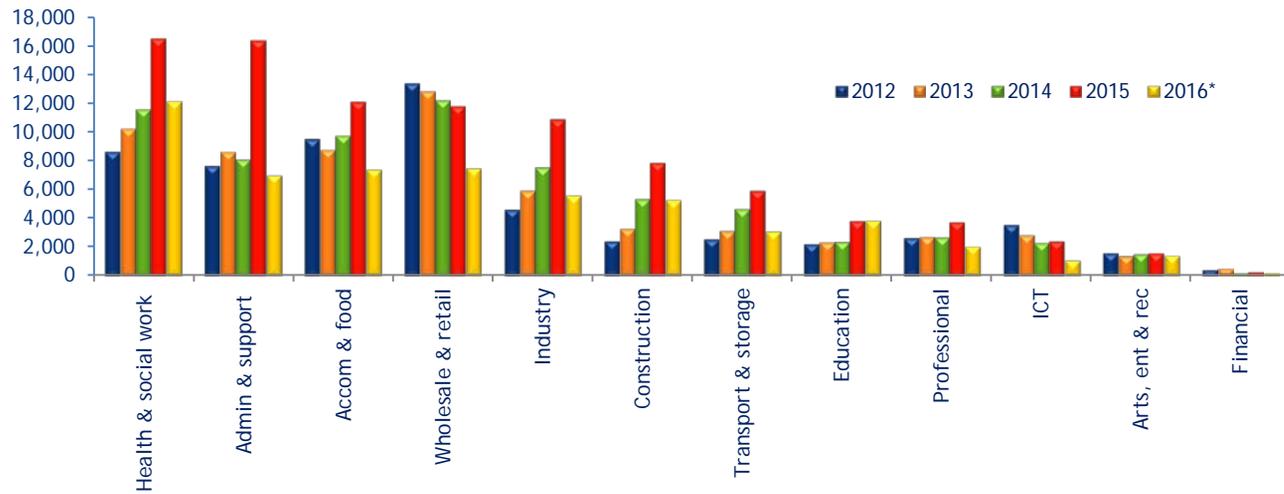
Vacancies with language requirements

Figure 3.12 and Figure 3.13 represent all the vacancies collated from both vacancy sources where specific language requirements were detailed. These vacancies represented 2% of all DSP Jobs Ireland notifications in the first half of 2016 and 3% for IrishJobs.ie in 2016. For IrishJobs.ie most vacancies with languages occurred in the administrative and support service sector (mainly call centre activities) whilst for DSP Jobs Ireland these vacancies related primarily to the information and communications sector (e.g. tech support). German was the most frequently mentioned language requirement for both data sources followed by French, Dutch, Norwegian and Italian.

Figure 3.12: Language skills requirements in vacancies by selected sector, 2016

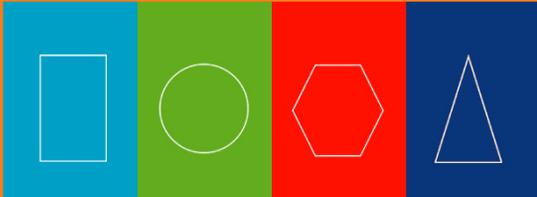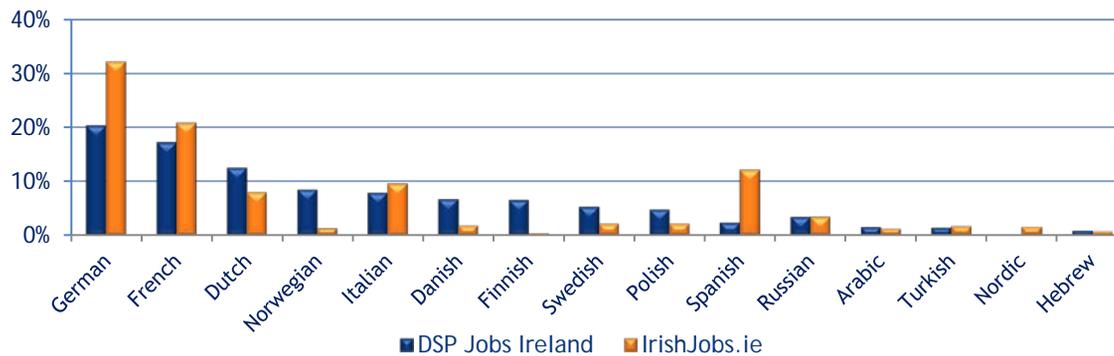Source: DSP Jobs Ireland/IrishJobs.ie

Figure 3.13: Language skills requirements, 2016

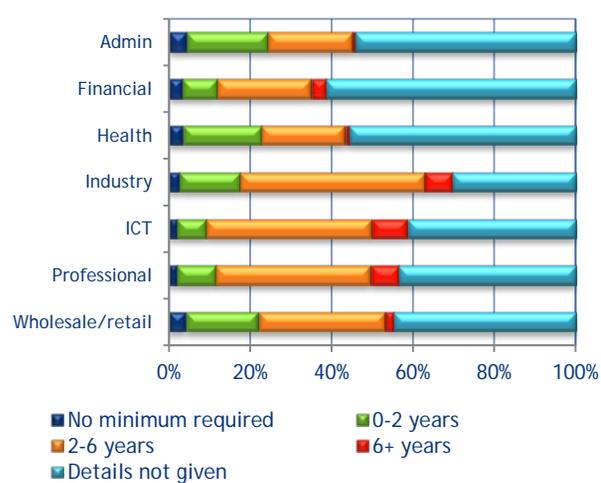Source: DSP Jobs Ireland/IrishJobs.ie

Level of experience and education required

As detailed in the Data Sources section, the level of experience and education provided in the vacancy data differs for each source.

IrishJobs.ie: The level of experience required was detailed in 53% of IrishJob.ie vacancy notifications in 2016; of these, almost two thirds required 2-6 years' experience. Of the selected sectors in Figure 3.14, admin services, health and wholesale had the highest share of vacancy notification which required either no minimum level of experience or 0-2 years. Experience of six or more years was most in demand in the IT sector.

DSP Jobs Ireland: Approximately 40% of vacancies in wholesale/retail (e.g. field sales representatives) had no minimum level of experience required with a quarter of health vacancies (e.g. care workers) requiring no experience (Figure 3.15). At 69%, the construction sector had the highest share of vacancies requiring candidates to be fully experienced.

Figure 3.14: IrishJobs.ie experience by sector, 2016 | Figure 3.15: DSP experience by sector, 2016*

Source: IrishJobs.ie
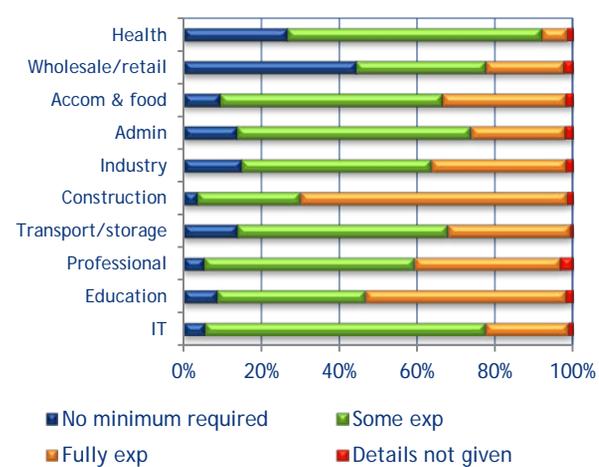
Source: DSP Jobs Ireland

*2016 refers to January to June only

The education level required was only available for the IrishJobs.ie vacancy data (Figure 3.16). The level of education required was stated in 53% of the notifications in 2016. 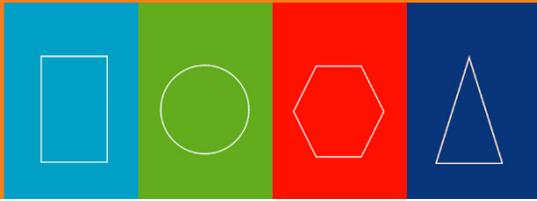Where level of education was stated, over 60% of vacancies required a third level qualification, and was particularly the case in vacancies in industry, ICT and professional activities. The wholesale/retail sector had the highest share of vacancies requiring no minimum level of education.

Figure 3.16: IrishJobs.ie level of education by sector, 2016


Source: IrishJobs.ie

3.6. Recruitment Agency Survey of Difficult to Fill Vacancies (DTF)

A total of 36 recruitment agencies contacted reported having vacancies which were proving difficult to fill in October 2016. The main findings were as follows:

- when compared to the situation one year previously, the demand for DTF vacancies increased for almost 6-in-10 of the posts associated with these; consistent with this, the wages or contract rates for the jobs associated with DTFs have increased for almost a half of them

- candidates possessing cross-disciplinary skills remained in strong demand, in particular those with science/engineering skills combined with supply chain, production planning, and regulatory compliance, along with ICT skills applicable to business/financial services and IT/programming skills combined with analytical skills

- in terms of occupations, professional vacancies accounted for almost three quarters of all DTF mentions, while associate professional posts accounted for approximately 9%, skilled trades and sales/customer services each accounted for 5%

- over a third of DTF mentions were related to positions in the information and communication sector, 31% to posts in industry, while 11% were for positions in health and social care.

3.7. Job announcements

There were approximately 40,000 jobs announced in the media in 2016 for positions to be created in the Irish labour market in the short to medium term. The majority of job announcements were for roles in business, IT, industry, construction, retail and administrative services (contact centres).
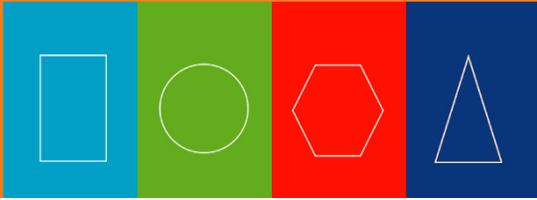
3.8. Employment permits

The number of new employment permits issued has been increasing steadily in recent years, with a 27% increase in the year since 2015 (Figure 3.17). New permits issued for professional occupations accounted for the majority of this increase (Figure 3.18). In terms of sectors (Figure 3.19),

- the IT and health sectors accounted for the largest numbers of new permits in the period examined
- there were increases across all the selected sectors between 2015 and 2016, but particularly so for the IT and health/social work sectors
- the large rise in the number of permits issued for those employed in the health sector between 2013 and 2014 primarily relates to a change in the methods used for health workers to gain employment permits[6].

Figure 3.17: New employment permits, 2012-2016
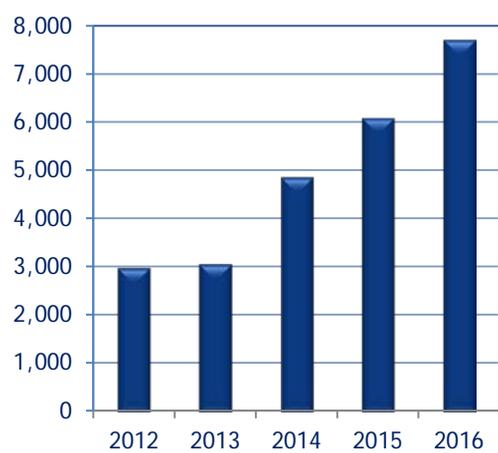

Figure 3.18 New employment permits by broad occupation, 2012-2016
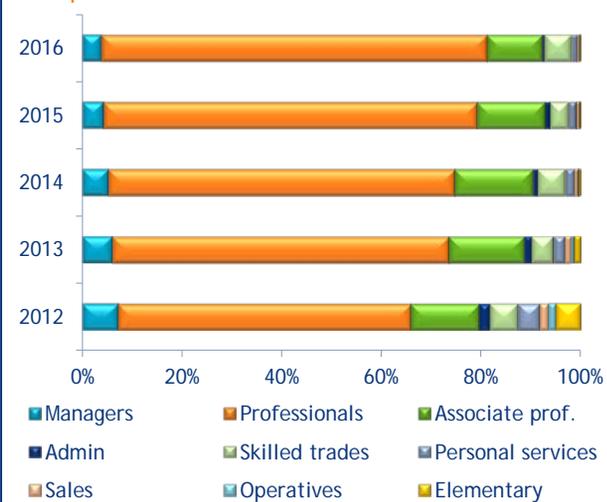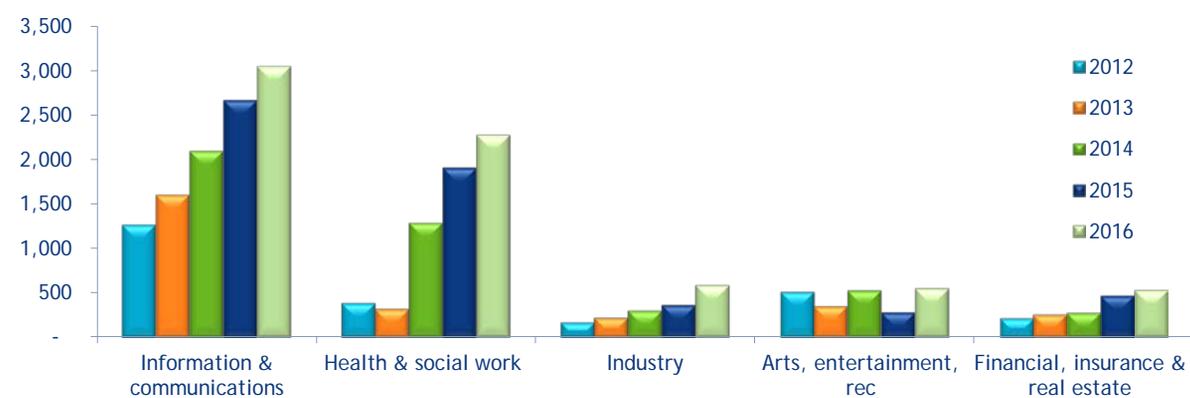

Figure 3.19: New employment permits for selected sectors*, 2012-2016

*in 2016, these five selected sectors account for 91% of all new permits issued

Source: DJEI

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[6] Over the period 2010 to 2013, doctors entered the Irish labour market through channels other than the employment permit scheme.

	Numbers employed	Expansion demand	Replacement demand		Job Churn	Recent job hires 2016 - % of total/number	CSO Job Vacancy rate Q4 2016	Recruitment Agency Survey - DTF; October 2016	IrishJobs.ie Vacancies 2016		DSP Jobs Ireland Vacancies (Jan-Jun 2016)	
	Quarter 4 2016	Employment change y-o-y - % of total/ number	Exits to inactivity 2015; % of total/ number	Recruitment requirement (Expansion + exits) - % of total/ number	(Inter + Intra transitions, 2015) - % of total/ number				Share of vacancies	Key vacancies 2016	Share of vacancies	Key vacancies 2016
Professional, scientific & technical	126,100	6%	5%	7%	6%	7%	2.3%	1%	35%	▪ Process/project engineers ▪ Financial accountants/analysts, data analysts ▪ Quality roles - QA/QC engineers/chemists, regulatory affairs, compliance, risk ▪ HR roles ▪ Marketing (brand management, business development) ▪ Technicians (lab, engineering, quality assurance) ▪ Accounts assistants/administrators	4%	▪ Accountants ▪ Sales & marketing (brand ambassadors/promotional staff) ▪ Interpreters, recruitment consultants ▪ Civil engineers, quantity surveyors ▪ CAD technicians
		6,800	5,600	12,400	16,500	22,000						
Information & communications	89,900	5%	2%	4%	5%	4%	1.7%	35%	14%	▪ IT programmers (with Java, Oracle/SQL, .net) ▪ Systems analysts, engineers (systems, security, network) ▪ Web developers, analysts (data, technical, business) ▪ Architect (technical, business intelligence etc.) ▪ Technicians - tech support, administrators (database, systems, support)	2%	▪ Tech support (with languages) ▪ Software developers
		4,500	2,700	7,200	12,400	12,600						
Financial, insurance & real estate	101,500	4%	4%	4%	4%	4%	1.7%	7%	13%	▪ Analyst (business, risk, financial, data, operations) ▪ Financial managers; compliance/regulatory reporting ▪ IT: software developers, data scientists, IT audit ▪ Financial administrators (fund accountants, pensions)	0%	
		3,700	4,100	7,800	12,500	12,900						
Health & social work	257,500	1%	12%	10%	12%	11%	1.3%	11%	9%	▪ Nurses (staff, clinical nurses, theatre) ▪ Doctors, pharmacists, radiographers, medical scientists ▪ Social workers, psychologists, occupational therapists, physiotherapists ▪ Radiation therapists, cardiac physiologist, pharmacy/lab technician ▪ Care workers, healthcare assistants	22%	▪ Care workers; nurses
		3,800	14,100	17,900	31,700	32,250						

	Numbers employed	Expansion demand	Replacement demand		Job Churn	Recent job hires 2016	CSO Job Vacancy rate Q4 2016	Recruitment Agency Survey - DTF; October 2016	IrishJobs.ie Vacancies 2016		DSP Jobs Ireland Vacancies (Jan-Jun 2016)	
	Quarter 4 2016	Employment change y-o-y - % of total/ number	Exits to inactivity 2015; % of total/ number	Recruitment requirement (Expansion + exits) - % of total/ number	(Inter + Intra transitions, 2015) - % of total/ number	- % of total/number			Share of vacancies	Key vacancies 2016	Share of vacancies	Key vacancies 2016
Administrative & support service	67,300	0%	3%	2%	5%	5%	1.1%	6%	8%	▪ Customer/ technical/business support with languages ▪ Office administrators, receptionists, medical secretary	13%	▪ Security guards, cleaning ▪ Receptionists; administrators (office, accounts, sales)
		-	3,900	4,100	14,600	16,200						
Wholesale & retail trade	283,200	1%	20%	15%	17%	17%	0.9%	1%	8%	▪ Sales representatives, field/inside/ area sales agents, business development ▪ Sales assistants, retail managers, procurement	14%	▪ Field sales representatives, fundraisers, sales assistants ▪ Mechanics, boners/trimmers, stocktakers
		3,800	23,300	27,100	50,500	53,700						
Industry	259,100	4%	9%	12%	15%	12%	0.6%	31%	5%	▪ Engineers (process, manufacturing, quality) ▪ Production/manufacturing managers ▪ Technicians (quality, process, laboratory) ▪ Process operatives	10%	▪ Operatives (general, production, process, food) ▪ Forklift drivers ▪ Fitters, welders, fabricators ▪ Engineers (process, mechanical)
		10,700	10,700	21,400	43,400	39,300						
Accommodation & food services	148,000	3%	15%	12%	9%	13%	0.8%	3%	2%	▪ Chefs, sales and deli assistants, catering assistants	13%	▪ Chefs ▪ Kitchen & catering assistants ▪ Waiters/waitresses
		4,900	17,100	22,000	27,500	42,700						
Construction	138,200	9%	5%	9%	9%	9%	0.2%	4%	3%	▪ Quantity surveyors, project managers site/structural engineers, facilities engineers and health/safety officers	8%	▪ Electricians, carpenters, plumbers, steel fixer, painters ▪ Drivers (machine, dumper, excavator, teleporter) ▪ Scaffolders, groundsworkers
		11,600	5,700	17,300	27,100	28,500						
Education	156,100	2%	7%	6%	6%	5%	0.5%	0%	1%	▪ Lecturers, researchers, tech/student support	3%	▪ Childcare workers ▪ English language teachers
		2,600	8,700	11,300	18,900	14,800						
Transportation & storage	96,400	3%	3%	3%	4%	3%	0.2%	1%	1%	▪ Drivers (artic, multi-drop, HGV) ▪ Logistics (managers, planners, administrators)	6%	▪ Large goods vehicle drivers (artic, HGV, rigid, multidrop) ▪ Warehouse operatives
		2,560	3,500	6,100	11,200	10,700						
Public administration & defence	101,200	2%	2%	3%	3%	3%	0.9%	0%	1%	▪ Researchers, lecturers, HR officers, lab technicians	0%	
		2,100	2,700	4,800	7,900	8,200						
Arts, entertainment, recreation & other service	99,600	9%	7%	9%	5%	6%	0.7%	0%	1%	▪ Graphic designers, sports instructors	2%	▪ Hairdressers/barbers ▪ Beauticians, spa therapists
		7,900	8,200	16,100	16,100	18,900						
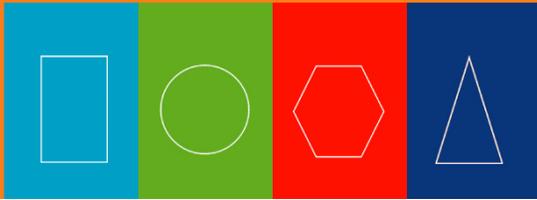
4. Industry

Employment change: at 259,000 persons employed in the fourth quarter of 2016, this sector has one of the highest numbers employed across all sectors and has been growing steadily in recent years; the 4% increase since the fourth quarter of 2015 resulted in an additional 10,700 persons employed. (Figure 4.1)

Vacancy rate: according to EHECS, the vacancy rate for this sector has been below the rate for all NACE economic sectors for most of the period since the start of 2013, standing at 0.6% in quarter 4 2016, after a peak of 0.8% in the second quarter of 2016. (Figure 4.2)

Transitions: at 13%, this sector had one of the highest shares of transitions in 2015, across all categories; the highest volume of transitions in this sector was for those in employment (both inter and intra, both above the overall share for all sectors), indicating a relatively high degree of churn. (Figure 4.3)

Recent job hires: this sector reported a high number of recent job hires with almost 40,000 reported in 2016, similar to that of 2015 (Figure 4.5):

- in terms of education level, those with higher secondary/FET education and third level qualifications each accounted for 40% of recent job hires
- those recently hired in this sector tended to be younger with 60% aged at most 34 years
- over a quarter of new hires were for operative roles (e.g. process operatives, assemblers), a fifth for skilled tradespersons (e.g. fitters), 16% for associate professionals (e.g. engineering technicians) and 15% for elementary roles (e.g. construction)
- the majority (82%) of filled positions were for full-time roles.

Employment permits: this sector experienced a 60% increase in the number of new permits issued in 2016 when compared to 2015, primarily related to an increase in the number of critical skills permits issued to engineering professionals (mostly process engineers, but also in software and validation). (Figure 4.4)

DSP Jobs Ireland: industry accounted for **10%** of all DSP Jobs Ireland vacancies in the first half of 2016.

Professionals (7% of vacancies)	- Engineers (including process, validation, quality, manufacturing, mechanical, refrigeration and air conditioning)
Associate professionals (7% of vacancies)	- Technicians (manufacturing, mechanical, services, lab), purchasing/buyer, production manager
Skilled trades (24% of vacancies)	- Primarily for fabricators (steel, sheet metal), welders (MIG/TIG, electro fusion) and fitters (maintenance, mechanical) but also includes bakers, security engineers/installers and cabinet makers
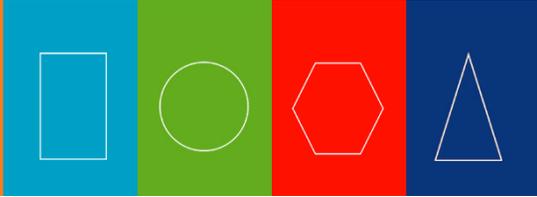
Operatives (36% of vacancies)	▪ Mainly general/production/processing operatives but also food operatives (meat factory, boners/trimmers, mushroom pickers) and forklift drivers (with Reach and Counter Balance)
Elementary (25% of vacancies)	▪ Construction labourers and ground workers

IrishJobs.ie: 5% of all IrishJobs.ie vacancies in 2016 were for this sector, with a 33% increase on the previous year (primarily related to professional and associate professional roles).

Managers (11% of vacancies)	▪ Production, manufacturing, operations and supply chain management
Professionals (27% of vacancies)	▪ Engineers (primarily quality but also process, project, manufacturing) ▪ Scientists, chemists, technologists (including NPD and NPI)
Associate professionals (27% of vacancies)	▪ Technicians (quality, process, manufacturing, systems, laboratory) ▪ Logistics/supply chain planners, buyers
Operatives (10% of vacancies)	▪ Manufacturing, process, production, quality control
Other	▪ Maintenance technician, production supervisor, logistics coordinator

DTF: 31% of all difficult to fill vacancies were for this sector, primarily for professional roles:

- engineers (quality control and assurance, production and process, validation, chemical engineers) and scientists (chemical, biological, R&D, analytical)
- supply chain: managers, administrators and analysts
- technicians: biotech and extrusion, usually for medical devices
- skilled trades: welders (TIG/MIG and ARC), toolmakers, electricians
- operatives: general and manufacturing operatives, forklift drivers.

Job announcements: this sector accounted for one of the most frequently occurring sectors for job announcements in the media in 2016, primarily located in the manufacture of medical devices, biotech, pharmaceutical food/beverages and machinery/equipment industry with the positions announced spanning a range of occupations and including

- professionals: engineers (R&D design, quality control, process), programme managers and scientists (food, R&D, chemical)
- associate professionals: food science technicians, engineering technicians (testers), sales and marketing, business developers, HR personnel
- skilled trades: butchers/de-boners; food/beverage preparation
- operatives: production team leader, food/beverage processing operatives, warehouse operatives.
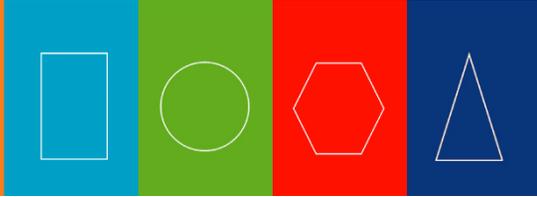
Conclusions:

Almost all relevant indicators point to this being a sector with significant job opportunities. With high employment numbers, even a small percentage increase in employment would produce significant job openings in absolute terms. This sector has been showing signs of steady employment growth and a relatively high volume of vacancies; the increase in the number of employment permits issued and the frequency of difficult to fill vacancies indicate that demand is high particularly for engineers and skilled trades. However, this sector accounts for a high share of recent job hires and transitions indicating that churn is a major contributor to the volume of vacancies arising.
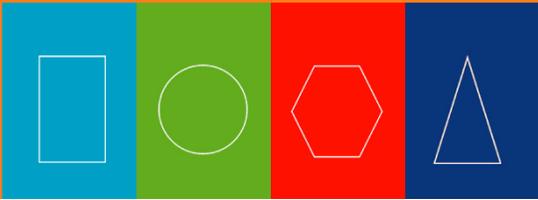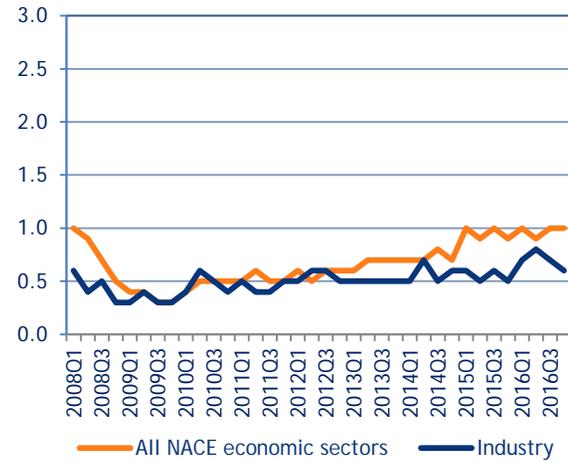
Key trends in Industry

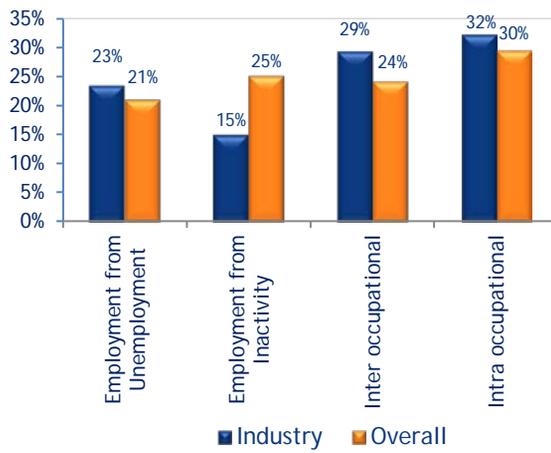### Figure 4.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: Industry, Other sectors
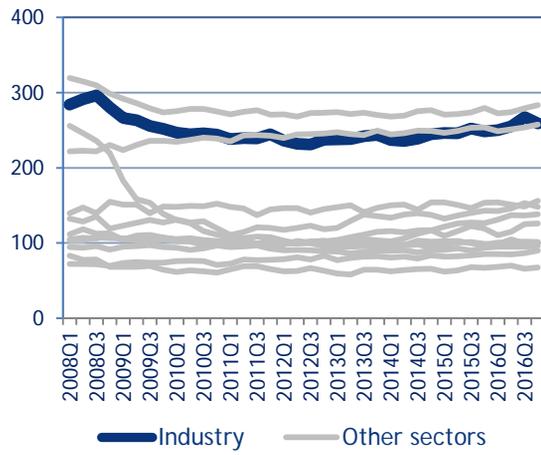
Source: SLMRU analysis of CSO QNHS

Figure 4.2: CSO Job Vacancies Rates, 2008-2016

Legend: All NACE economic sectors, Industry

Source: SLMRU analysis of CSO EHECS data

Figure 4.3: Transitions, 2015

	Industry	Overall
Employment from Unemployment	23%	21%
Employment from Inactivity	15%	25%
Inter occupational	29%	24%
Intra occupational	32%	30%

Source: SLMRU analysis of CSO QNHS

Figure 4.4 Employment permits, 2016

- Critical Skills — 52%
- Intra-Company Transfer — 30%
- General — 11%
- Dependant/Partner/ Spouse — 4%
- Other — 3%
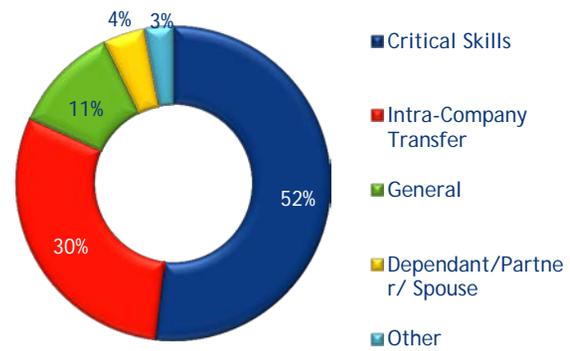
Source: DJEI

Figure 4.5: Recent hires, 2016

Categories: Overall share, Lower sec or less, Higher sec or FET, Third level, 15-24, 25-34, 35-44, 45-64, Managers, Professionals, Associate Prof, Admin, Skilled Trades, Services, Sales, Operatives, Elementary, Full-time, Part-time
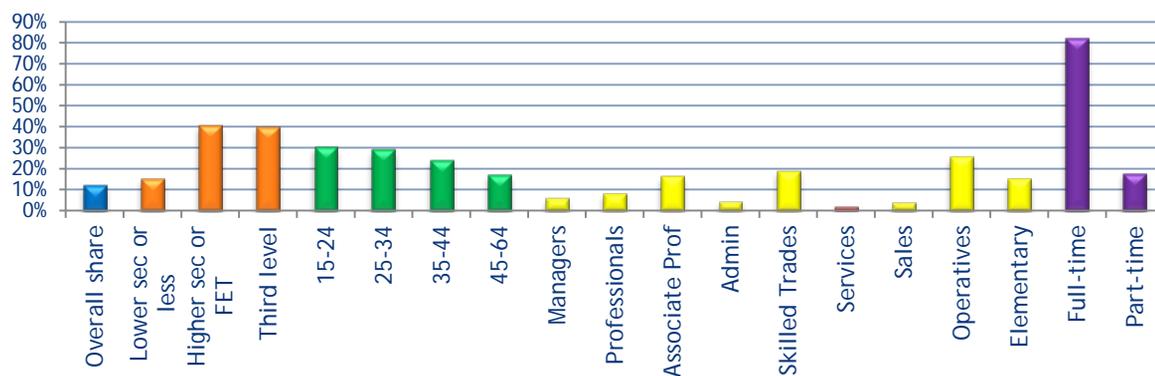
Source: SLMRU analysis of CSO QNHS
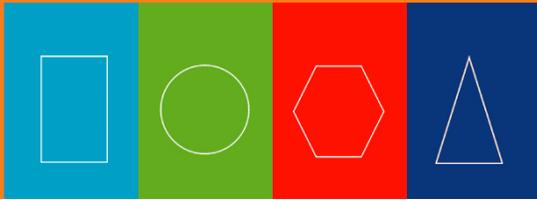
5. Wholesale and retail trade

Employment change: this sector has the largest number of employees across all sectors over the period examined since 2008; the numbers employed increased by 1% in the year since quarter 4 2015, representing an increase of 3,800 persons. (Figure 5.1)

Vacancy rates: the vacancy rate stood at 0.9% in quarter 4 2016 (Figure 5.2), slightly below the rate recorded for all sectors; indeed, the rate for this sector has been below the rate for all sectors since the last quarter of 2011.

Transitions: at 19%, this sector accounted for the highest share of all employment transitions in 2015; in absolute terms this sector accounted for the highest number of transitions across each transition type; the sector had a higher share entering employment from inactivity than the average for all sectors. (Figure 5.3)

Recent job hires: at 17%, this sector accounted for the highest share of recent job hires with over 50,000 new hires in 2016, similar to 2015 levels; of these (Figure 5.4):

- a half of those recently hired held higher secondary/FET education
- those aged 15-24 years accounted for over a half of recent hires
- the majority (61%) were employed in sales (retail sales assistants), with the remainder spread across the other occupational groups
- at 54%, recent hires were most likely to be part-time positions; indeed, this sector accounted for the highest number of part-time hires across all sectors.

Employment permits: this sector accounted for 1% of all new permits issued in 2016 (e.g. web developers, business analysts).

DSP Jobs Ireland: this sector accounted for 14% of all vacancies notified to DSP Jobs Ireland in the first six months of 2016, primarily in sales and customer service roles. Many of the vacancies advertised were through recruitment agencies with a quarter for part-time posts.

Sales & customer service (79% of vacancies)	- Sales assistants (retail (e.g. convenience stores, petrol stations, supermarkets), counter, including deli and pharmacy); over half were for part-time positions
	- Fundraisers, field sales representatives and door to door salespersons; personal financial advisor
	- Stocktakers, merchandisers
Skilled trades (17% of vacancies)	- Butchers (retail and food processing), boners/trimmers
	- Mechanics (car, HGV), fitters (including tyres), valeters, panel beaters, spray painters
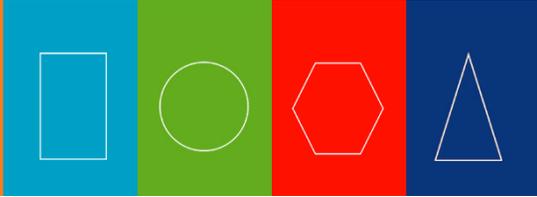
IrishJobs.ie: 8% of all IrishJobs.ie vacancies in 2016 were relating to this sector; some fluctuations in the number of vacancies advertised in the period since 2010 have occurred, with an 11% increase since 2015.

Managers (11% of vacancies)	▪ Retail/store managers, procurement managers
Professionals (7% of vacancies)	▪ Technologists (regulatory, R&D, NPI)
	▪ Pharmacists, accountants
Associate professionals (54% of vacancies)	▪ Sales representatives, field/area sales agents, inside sales, account managers, business development (with languages required across many of these)
	▪ Buyers, procurement officers, employment advisors
Administrative (8% of vac)	▪ Sales administrators, sales support
Sales & customer service (14% of vacancies)	▪ Retail sales assistants, telesales advisors
	▪ Telesales/customer service executives, collections specialists

DTF: less than 1% of all difficult to fill vacancies were for this sector, primarily for professional roles

▪ limited to marketing and sales executives, supply chain administration and telesales agents.

Job announcements: this sector accounted for over a tenth of job announcements in 2016, mainly for retail assistants, supervisors and managers across a range of retail outlets (e.g. grocery, food outlets and clothing stores). Other positions announced related to security staff and financial roles.

Conclusions: the transitions and recent job hire data indicate that a significant number of job openings in this sector are occurring, even though there was little employment growth and the CSO vacancy rate remains low; there is little evidence of difficulty in sourcing candidates with the retention of staff presenting a greater issue for this sector.
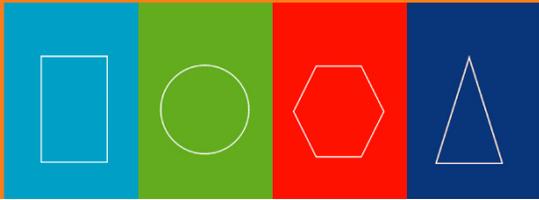
Key trends in the wholesale and retail sector

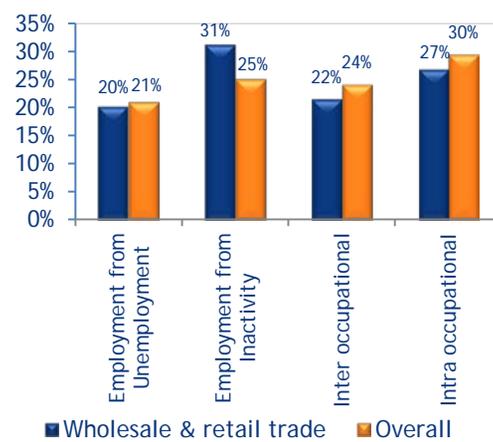### Figure 5.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: Wholesale and retail trade — Other sectors
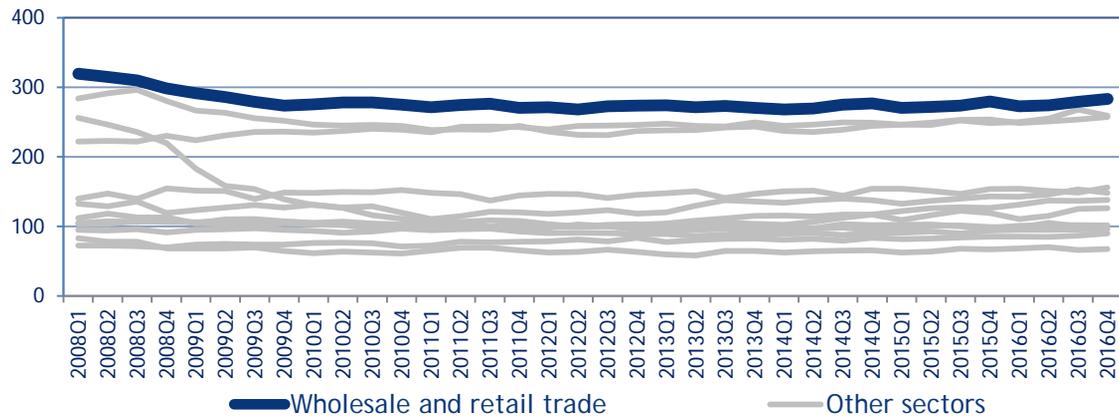
Source: SLMRU analysis of CSO QNHS

Figure 5.2: CSO Job Vacancies Rates, 2008-2016

Legend: All NACE economic sectors — Wholesale & retail trade

Source: SLMRU analysis of CSO EHECS data

Figure 5.3: Transitions, 2015

Employment from Unemployment 20% 21%
Employment from Inactivity 31% 25%
Inter occupational 22% 24%
Intra occupational 27% 30%

Legend: Wholesale & retail trade — Overall

Source: SLMRU analysis of CSO QNHS

Figure 5.4: Recent hires, 2016
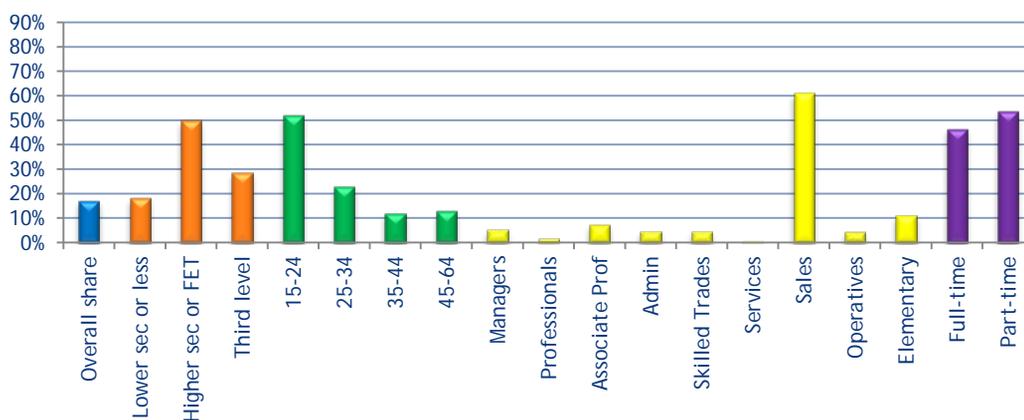
Source: SLMRU analysis of CSO QNHS
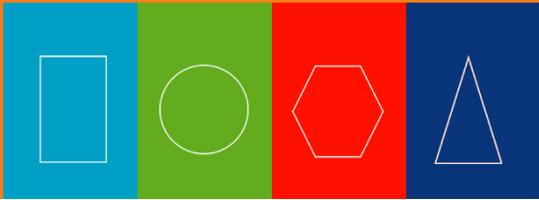
6. Construction

Employment change: employment in this sector continues to grow steadily, with an additional 11,600 persons employed in the year since quarter 4 2015 (primarily in skilled trades), the highest employment growth across all sectors in absolute and relative terms; however, employment levels still remain significantly below pre-recession levels. (Figure 6.1)

Vacancy rate: despite the recent employment growth, the vacancy rate has been declining since a peak of 1.3% in the first quarter of 2015, falling to 0.2% in quarter 4 2016. (Figure 6.2)

Transitions: 9% of all transitions in 2015 were in this sector; at 32%, the share entering employment from unemployment was the highest for all sectors, although this share has fallen since 2014 suggesting that sourcing personnel for construction jobs from the pool of unemployed is weakening; the share (and volume) of inter-occupational transitions in this sector have grown considerably since 2014, from 12% to 26%, indicating increased confidence in the sector with migration from other sectors. (Figure 6.3)

Recent job hires: this sector accounted for 9% of all recent job hires in 2016, with approximately 28,000 new hires, an 8% increase on the previous year. Of the recent hires in 2016 (Figure 6.4)
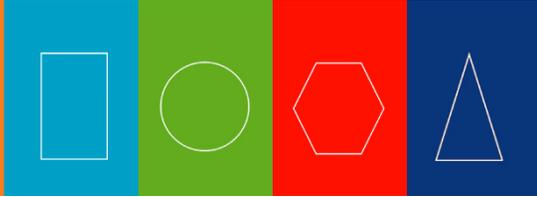
- more than a half had attained higher secondary education/FET
- the age of those recently hired was spread across all age categories
- almost a half (49%) were in skilled trades (e.g. carpenters, electricians, painters) with the remainder divided mostly between operative and elementary (e.g. construction labourers) positions
- full-time positions accounted for over three quarters of all recent hires.

Employment permits: were limited in this sector, with skilled trades occupations remaining on the list of ineligible occupations[7], although they did occur for a small number of professional occupations such as quantity surveyors and civil/site engineers.

DSP Jobs Ireland: this sector accounted for 10% of notified vacancies in the first six months of 2016, a 56% increase on the same period in 2015, primarily due to a rise in vacancies for operatives and skilled trades. Due to the significant presence of recruitment agencies for these vacancies, it is difficult to gauge the exact level of demand. Experience was considered key with almost 70% of vacancies requiring candidates to be fully experienced, the highest share across all sectors.

Electricians (19% of all vacancies)	▪ Including commercial, industrial and domestic; the occurrences of vacancies for apprentice electricians continues to increase and accounts for three quarters of all vacancies for apprentices

Carpenters (12%)	▪ Including shuttering carpenters, and to a lesser extent, joiners
Plumbers (6%)	▪ Including industrial, domestic/commercial, pipe fitters
Other trades (19%)	▪ Painters/decorators, steel fixers/erectors, plasterers, bricklayers/stonemasons, roofers (inc. felt), forepersons/site managers, tilers
Drivers (14%)	▪ Dumper (site/artic), teleporter, excavator driver/operator, machine drivers
Other operatives (16%)	▪ Groundworkers/pavers, scaffolders (basic and advanced), crane operators (mobile, tower)
Elementary (13%)	▪ General/construction labourers

IrishJobs.ie: this sector accounted for 3% of notifications in 2016 for positions including quantity surveyors, project managers, site/structural engineers, facilities engineers and health/safety officers; the number of vacancies increased by over 50% when compared to 2015 primarily relating to vacancies for professionals and skilled trades.

DTF: 4% of all difficult to fill vacancies were for this sector, primarily for professional roles, in areas including:

- quantity surveyors
- engineers (structural, site, building services)
- steel erectors/fixers, shuttering carpenters, pipe layers, curtain wallers
- drivers (forklift, site dumper), crane operators.

Job announcements: Construction jobs accounted for approximately a fifth of jobs announced in the media throughout 2016. The majority of these jobs were temporary; most were associated with expanding and new activities in manufacturing such as IT, pharmaceuticals, food/beverage manufacturing, utilities, transport and IT and, to a lesser extent, health/education and retail. The positions announced were not specified, but are likely to require mainly construction professionals (civil engineers, design engineers, architects and surveyors), skilled tradespersons (e.g. electricians, steel erectors) and elementary construction workers.

Conclusions: this sector continues to show momentum. Employment is growing steadily, particularly for skilled trades occupations, and the volume of vacancy notifications has increased. The transitions data indicates that while skilled trades occupations are still being sourced from the Live Register, this occurred less in 2015 than in 2014; the growth in the share of inter-sectoral transitions indicates growing confidence in the sector. In line with this, the Recruitment Agency Survey has signalled difficult to fill vacancies emerging for professional, skilled trades and operative roles.
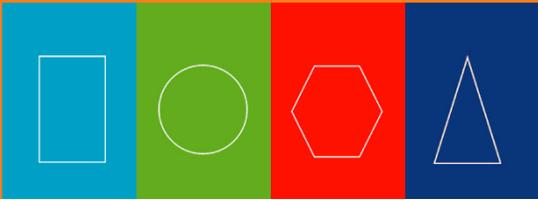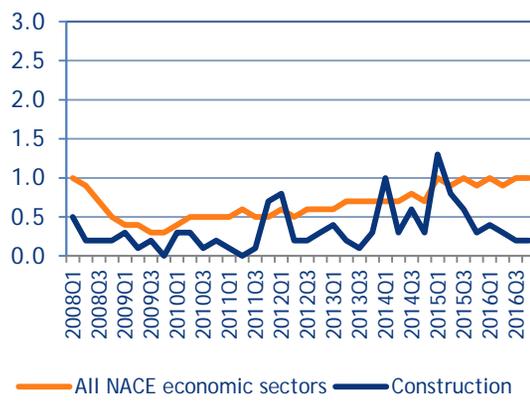
Key trends in the construction sector

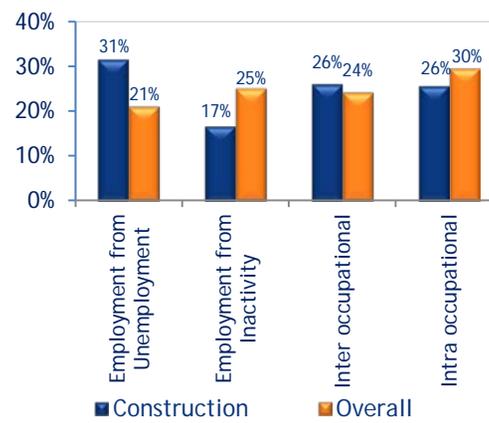Figure 6.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: Other sectors, Construction
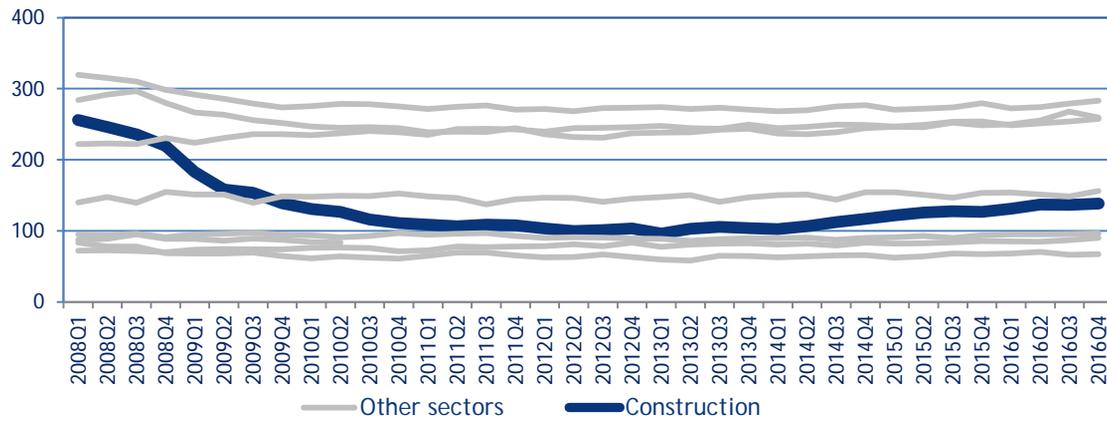
Source: SLMRU analysis of CSO QNHS

Figure 6.2: CSO Job Vacancies Rates, 2008-2016

Legend: All NACE economic sectors, Construction

Source: SLMRU analysis of CSO EHECS data

Figure 6.3: Transitions, 2015

Employment from Unemployment: 31%, 21%
Employment from Inactivity: 17%, 25%
Inter occupational: 26%, 24%
Intra occupational: 26%, 30%

Legend: Construction, Overall

Source: SLMRU analysis of CSO QNHS

Figure 6.4: Recent hires, 2016

Categories: Overall share, Lower sec or less, Higher sec or FET, Third level, 15-24, 25-34, 35-44, 45-64, Managers, Professionals, Associate Prof, Admin, Skilled Trades, Services, Sales, Operatives, Elementary, Full-time, Part-time
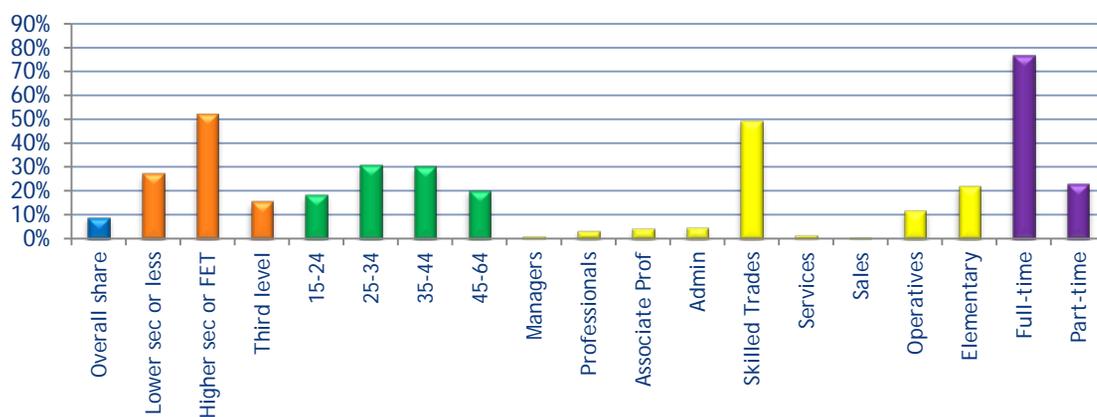
Source: SLMRU analysis of CSO QNHS
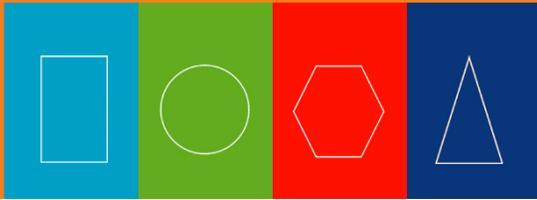
7. Accommodation and food services

Employment change: this sector experienced a 3% growth in the numbers employed in the year since quarter 4 2016, with an additional 4,900 persons employed; increases occurred in occupations such as waiters, chefs, hospitality managers, and receptionists. (Figure 7.1)

Vacancy rates: the rate for this sector has been below the vacancy rate for all sectors since the first quarter of 2013, although fluctuations have occurred, with a rate of 0.8% in quarter 4 2016. (Figure 7.2)

Transitions: at 12%, this sector had the third highest share of transitions in 2015; two fifths of transitions into the sector occurred for those previously classified as inactive, far above the overall share for all sectors (25%), while those entering employment from other sectors (inter) was lower than average at 11%. (Figure 7.3)

Recent job hires: this sector had the highest share of recent new hires after the wholesale/retail sector in 2016, with an average of 10,000 recent hires reported each quarter; in 2016, of the 42,700 recent hires (Figure 7.4):

- almost a half (45%) had higher secondary education/FET while a further 34% held third level qualifications
- over a half (54%) were for those aged 15-24 years with only a small share of new hires recorded for those aged 35+
- almost two-thirds were for elementary occupations (e.g. waiters, kitchen assistants, bar staff, cleaners) with chefs and housekeepers accounting for 12% and 7% of new hires respectively
- three fifths of recent hires were for part-time positions.

Employment permits: this sector accounted for 3% of all new permits issued in 2016, most of which were general permits and were primarily related to ethnic chefs; 95% of new permits issued for this sector were for positions with salaries of less than €40,000.

DSP Jobs Ireland: this sector accounted for 13% of notified vacancies in 2016 (January-June).

Chefs (33% of vacancies)	- Chef de partie was the most frequently mentioned type of chef, followed by commis, sous and head chefs; there were also vacancies for general cooks, breakfast/pizza/pastry chefs; many ethnic chefs were required, mainly Indian, Chinese and Thai - Almost a half of vacancies required chefs who were fully experienced, with some experience required for the remainder
Kitchen and catering assistants (28% of vacancies)	- Many vacancies were for those working in catering, but also for porters, deli/counter staff and baristas - Two thirds were full-time positions; two thirds required some experience
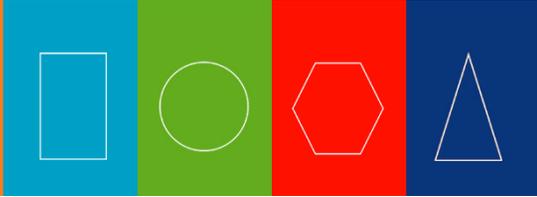
Waiters/waitresses (17% of vacancies)	▪ Recruitment agencies and catering companies accounted for a large share of the vacancies advertised
	▪ Part-time positions accounted for 45% of vacancies in this occupation and most required at least some experience
Managers	▪ Restaurant and hotel managers

IrishJobs.ie: this sector accounted for 2% of notified vacancies in 2016, with positions including:

- chefs (head, chef de partie, sous, commis)
- sales and deli assistants
- catering assistants.

DTF: 3% of all difficult to fill vacancies reported in October 2016 were for this sector in areas including:

- management (e.g. hotel revenue manager, operations managers in hospitality, bar manager)
- chefs
- sales executives.

Job announcements: there were comparatively few job announcements in the media for positions in the accommodation, fast food establishments and cafés; the jobs announced were chiefly for bar and catering staff, chefs and customer service roles.

Conclusions: this sector continues to have a large volume of vacancy notifications, primarily through DSP Jobs Ireland. The high numbers employed, in combination with occupations which appear to experience a high level of churn, such as waiters, catering assistants and bar staff, are the main factors leading to this high volume, rather than expansion. Some level of churn is also occurring for chefs although a demand for fully experienced chefs is evident from both the vacancy data and the responses from the Recruitment Agency Survey. While opportunities exist in this sector, retention of staff appears to be the larger issue.
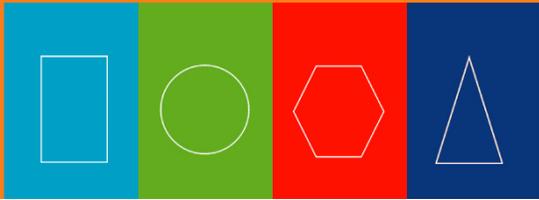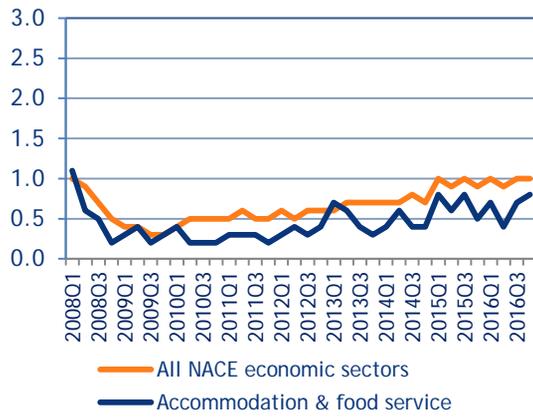
Key trends in the accommodation and food service sector

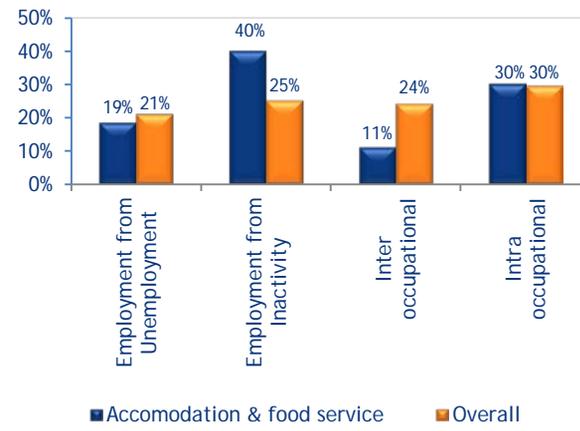**Figure 7.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016**

— Accommodation and food service   — Other sectors
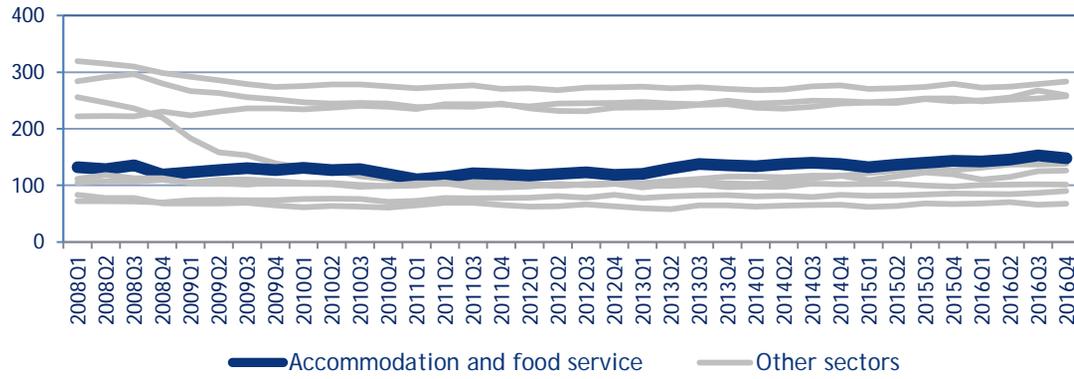
Source: SLMRU analysis of CSO QNHS

Figure 7.2: CSO Job Vacancies Rates, 2008-2016

— All NACE economic sectors
— Accommodation & food service

Source: SLMRU analysis of CSO EHECS data

Figure 7.3: Transitions, 2015

■ Accomodation & food service   ■ Overall

Source: SLMRU analysis of CSO QNHS

Figure 7.4: Recent hires, 2016
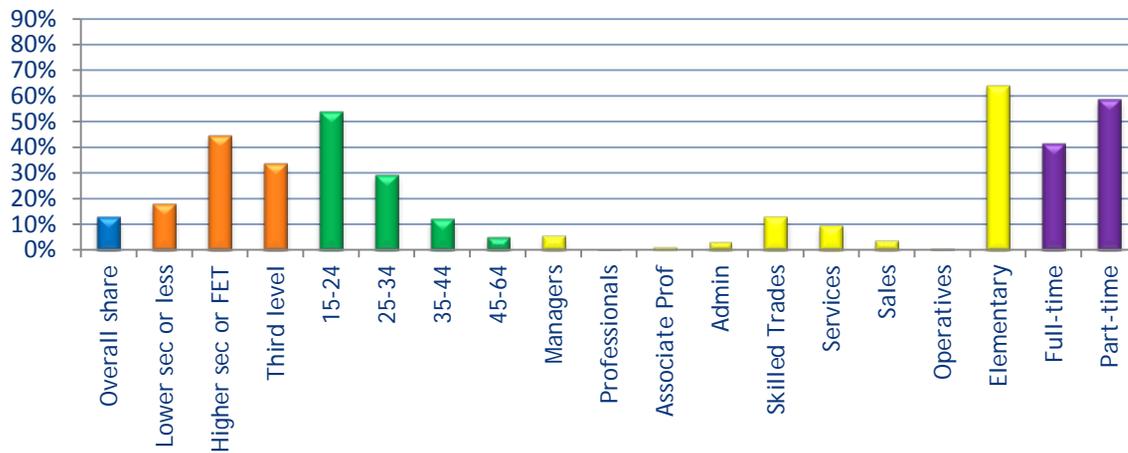
Source: SLMRU analysis of CSO QNHS
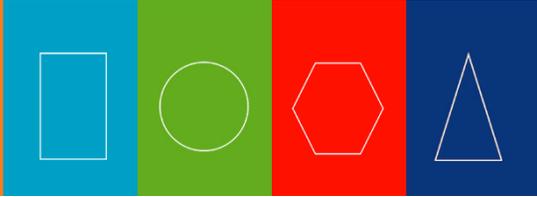
8. Information and communications

Employment change: there was a 5% increase in employment in this sector between quarter 4 2015 and quarter 4 2016, representing an additional 4,500 persons; most of the increases related to the computer programming sub-sector and in film/TV production. (Figure 8.1)

Vacancy rates: along with the financial sector, this sector consistently had one of the highest vacancy rate across all sectors; the rate fell to 1.7% in quarter 4 2016, from a peak of 2.9% in the third quarter of 2015, although the rate still remains above that for all sectors. (Figure 8.2)

Transitions: this sector accounted for 4% of all transitions in 2015; the highest share of transitions occurred for those already employed in the sector (intra), a higher share than all other sectors, indicating a high propensity to move between jobs in this sector. (Figure 8.3)

Recent job hires: on average 3,500 recent job hires are recorded each quarter; of the combined 12,600 new hires in 2016 (Figure 8.5):

- three quarters were for persons with third level qualifications
- in terms of age, 42% of new hires were aged 25-34, with the remainder spread across all other age categories
- professionals accounted for 40% of new hires (e.g. IT programmers) with associate professional roles accounting for a further 27%
- the majority (91%) of new hires were for full-time roles.

Employment permits: this sector accounted for the highest share of new employment permits in 2016; the number of permits issued has been increasing steadily in recent years, with a 14% increase in the year since 2015. In 2016, this sector accounted for:

- 40% of all new employment permits, primarily for
  - professional occupations (e.g. software engineers/developers, data analysts/scientists, business analysts (including IT, systems), test/process/network engineers)
  - associate professional roles (e.g. a number of sales roles such as account managers/strategists and market specialists, many with language skills required such as Arabic, Turkish, Russian and Hebrew)
- over three quarters were issued for employment in the Dublin area with permits also issued in Cork and Kildare
- most new employment permit holders had a degree or masters qualification
- almost a half (48%) were for positions earning between €30,000 and €49,999 with a further 31% earning €60,000 or above
- 60% were critical skills permits, with a further 15% for intra-company transfers. (Figure 8.4)
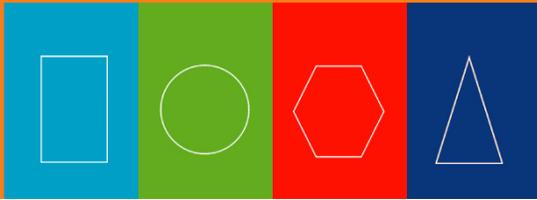
IrishJobs.ie: this sector accounted for 14% of notified vacancies in 2016, slightly down on the previous year.

Professionals (56% of vacancies)	▪ Software engineers (with Java, Oracle/SQL, .Net, SAP), applications/web developer ▪ Other IT (systems analysts/engineers, technical architects, test engineers, web developers, applications developers/support, IT security analysts) ▪ Business professionals – business analysts (e.g. with skills in SAP, Agile, Scrum), risk, business intelligence, project managers
Associate professionals (27% of vacancies)	▪ IT technicians – tech support (language skills often a requirement), administrators (database, systems) ▪ Analysts (data, business systems, technical), account managers

DSP Jobs Ireland: this sector accounted for 2% of all vacancies advertised through the DSP Jobs Ireland website in the first six months of 2016.

Associate professionals (64% of vacancies)	▪ Technical support (with languages)
Professionals (30% of vacancies)	▪ Software developers (web, Ruby, PHP, Stack, .NET, JavaScript) graphic/web designers, IT managers, video games testers (with languages)

DTF: 35% of all difficult to fill vacancies in October 2016 were for this sector, primarily for professional roles in software development:

- software developers: mobile (iOS/Android), database (with Oracle/SQL), web, cloud; with skills in Java, JavaScript, C++, and .Net the most frequently mentioned
- engineers: network (Linux, Open Source), QA, test, internet protocol
- systems/solutions architects
- business intelligence: BI solutions, big data analysts (e.g. Hadoop, SQL), ERP with SAP; information security analyst, accountants
- tech support and sales: with languages, particularly German
- other: digital commerce manager.

Job announcements: this sector accounted for approximately a quarter of all job announcements made in the 2016; the most frequently mentioned roles were in IT security, data analytics, cloud computing, e-commerce (financial transactions/payments), telecommunications and Software as a Service (SaaS) along with a significant number of roles in IT contact centres; IT positions most frequently mentioned included:

- IT professionals: data & business analysts, R&D specialists; IT project managers, engineers (quality assurance, product development), software developers, testers.
- IT associate professionals: IT user support technicians
- Skilled trades persons: telecommunication and other IT engineers.
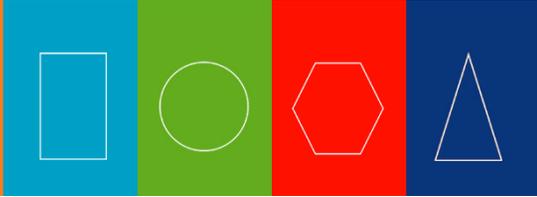
While most of the job mentions were for IT skills, there were also a substantial number of jobs announced for managers, business developers, business analysts, data analysts and marketing and sales account executives. Many roles were also cross-disciplinary, requiring skills that span two or more sectors, e.g. IT software development skills, data and business analytics, cyber security within the financial sector and to a lesser extent, high tech manufacturing (medical devices, pharmaceuticals).

Conclusions: the overall employment growth in this sector in recent years has been steady with some of the main indicators examined here (recent job hires, DTF, IrishJobs.ie etc.) pointing to a vibrant jobs market, with demand particularly occurring for young, high skilled persons. While expansion was evident, a share of the vacancy notifications were occurring due to churn, with transitions data showing significant movement for those already employed within the sector. The Recruitment Agency Survey and employment permit data indicate significant shortages of persons with specific IT skills, with the analysis of job announcements in the media suggesting demand for skills in the ICT sector is expected to continue.
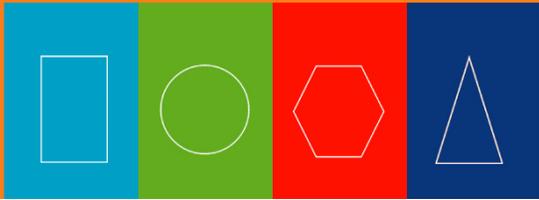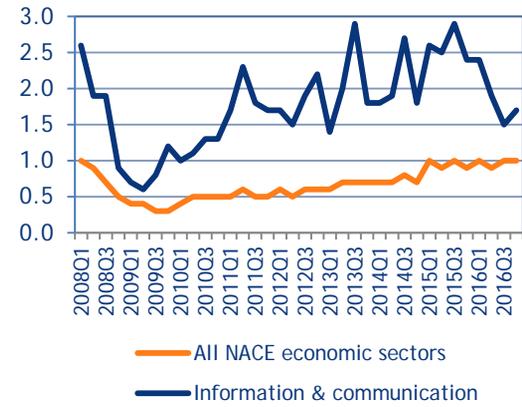
Key trends in the information and technology sector

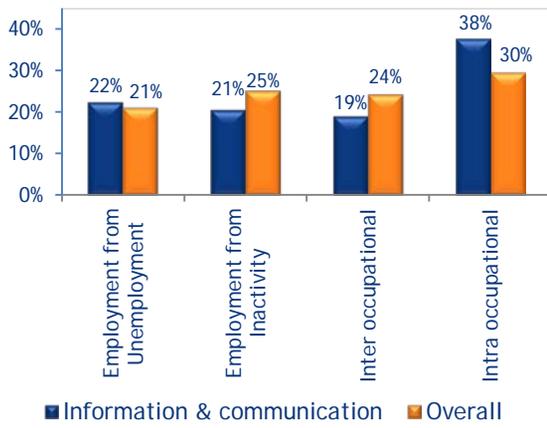### Figure 8.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016
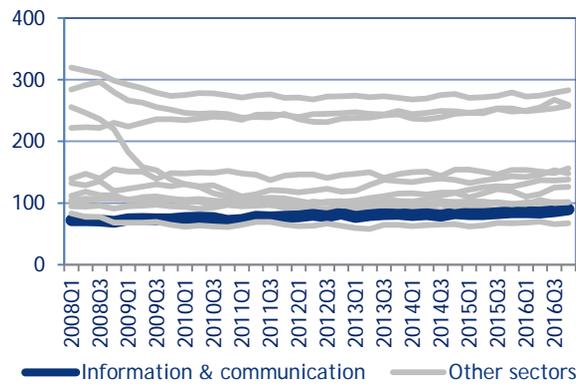
Source: SLMRU analysis of CSO QNHS

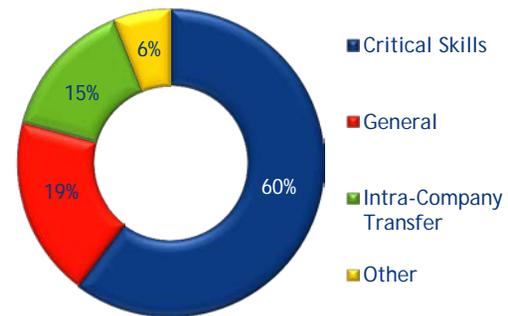### Figure 8.2: CSO Job Vacancies Rates, 2008-2016

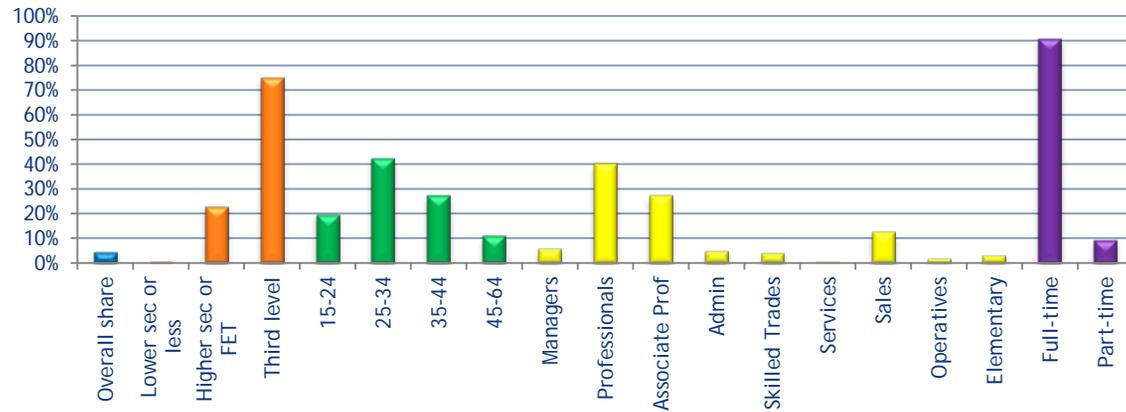Source: SLMRU analysis of CSO EHECS data

Figure 8.3: Transitions, 2015

Source: SLMRU analysis of CSO QNHS
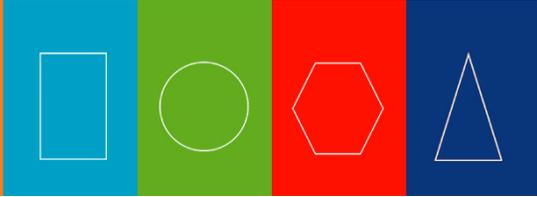
Figure 8.4: Employment permits by type, 2016

Source: DJEI

Figure 8.5: Recent hires, 2016

Source: SLMRU analysis of CSO QNHS

9. Financial, insurance and real estate

Employment change: overall employment levels in this sector have remained relatively unchanged over the period examined; between quarter 4 2015 and quarter 4 2016, employment grew by 4%, or an additional 3,700 persons, reversing the decline experienced in the previous year. The recent growth related to associate professional and sales occupations with a decline occurring for administrative roles. (Figure 9.1)

Vacancy rates: despite fluctuation in the vacancy rate, this sector, along with the IT sector, consistently had the highest vacancy rate across all sectors; in quarter 4 2016, this rate stood at 1.7%, compared to 1.0% for all sectors. (Figure 9.2)

Transitions: this sector accounted for 4% of all transitions in 2015; a high share of transitions was for those already employed in the sector (37% compared to a rate of 30% for all sectors), indicating that vacancies may be occurring due to churn more so than to expansion. (Figure 9.3)

Recent job hires: in 2016, this sector accounted for 4% of all recent job hires; of the 12,900 new hires (Figure 9.5):
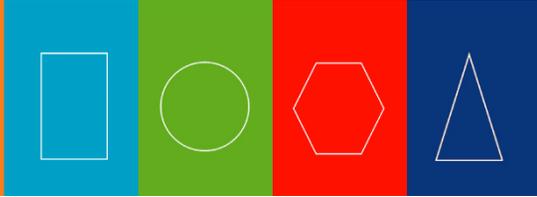
- three quarters of those recently hired held third level qualifications, with a further 22% holding higher secondary or FET qualifications
- those aged 25-34 accounted for the largest share of recent hires at 40%, with the remainder divided between the other age categories
- most were engaged in associate professional (26%), administrative (23%) and professional (21%) positions
- the majority of new hires were for full-time posts (91%).

Employment permits: this sector accounted for 7% of new permits issued in 2016:

- almost two-thirds were for critical skills employment permits (Figure 9.4)
- permits were issued primarily for professional and associate professional roles in:
  - IT: software engineers/developers, analysts (IT support, cyber-security, data)
  - financial: accountants/auditors, analysts (financial, risk)
- almost all (92%) held a degree or higher
- a third were for positions earning salaries of €60,000 or more.

DSP Jobs Ireland: there were no notified vacancies for this sector in the first six months of 2016.

IrishJobs.ie: 13% of all vacancies notified in 2016 were for this sector; a small increase was observed on the previous year, relating to increases for professional and associate professional roles.

Professionals (23% of vacancies)	• Analysts - primarily business, risk, operations • Software developers/engineers, data architects/scientists, IT audit managers • Financial project managers, compliance/regulatory reporting, financial accountants
Associate professionals (36% of vacancies)	• Analysts (data, credit/risk), compliance officers • Underwriters, tax advisors, claims officers (with languages), transfer agents, audit managers • Financial services advisors, product development/managers
Administrative (20% of vacancies)	• Fund accountants • Pensions administrators, claims handlers • Bank officials, financial administrators
Other	• Managers (financial, banking etc.) • Customer/client services

DTF: this sector accounted for 7% of all difficult to fill vacancies in October 2016 in roles including:

- solicitors/lawyers (financial services, compliance etc.)
- accountants (corporate finance, compliance)
- analysts (financial, credit risk, treasury)
- fund accountants, custodian relationship manager, trustee supervisory, debt collection agent
- financial admin (payroll, accounts payable/receivable); telesales with languages.

Job announcements: this sector accounted for approximately 5% of the job announcements that appeared in the media including positions for compliance, financial and risk analysts, accountants, tax advisors, qualified financial advisors, sales and support associate professionals; many roles were also cross-disciplinary, requiring skills that span two or more sectors, e.g. IT software development skills, data and business analytics, cyber security within the financial sector.

Conclusions: the overall employment levels in this sector have not changed significantly in recent years; any growth in the number of professional/associate professional roles has been offset by a fall in the number of administrative positions. The CSO vacancy rate remains higher than average, with financial occupations reported as difficult to fill, and entry through the employment permit system showing a continued demand for key high skilled roles. In particular, roles such as risk, compliance and data analytics are appearing frequently. There is evidence of significant movement for those already employed in the sector which may be inflating the number of vacancy notifications, particularly in areas such as fund accounting.
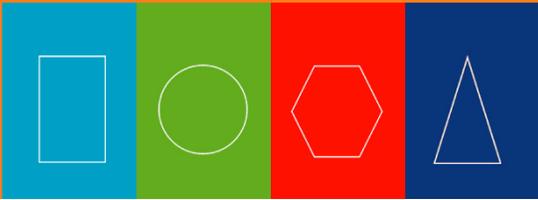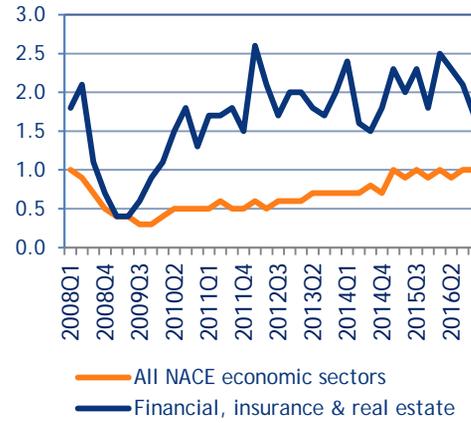
Key trends in the financial, insurance and real estate sector

### Figure 9.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Financial, insurance and real estate
Other sectors
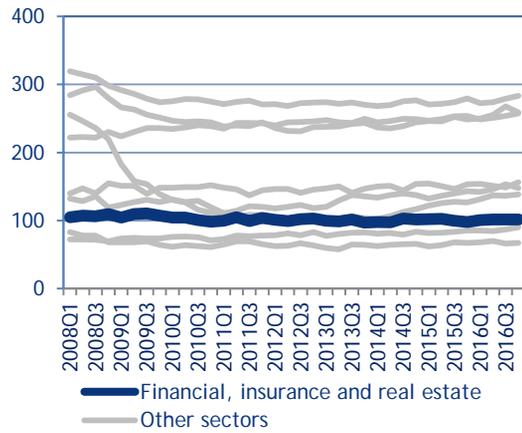
Source: SLMRU analysis of CSO QNHS

Figure 9.2: CSO Job Vacancies Rates, 2008-2016

All NACE economic sectors
Financial, insurance & real estate

Source: SLMRU analysis of CSO EHECS data

Figure 9.3: Transitions, 2015

Financial, insurance & real estate ▪ Overall
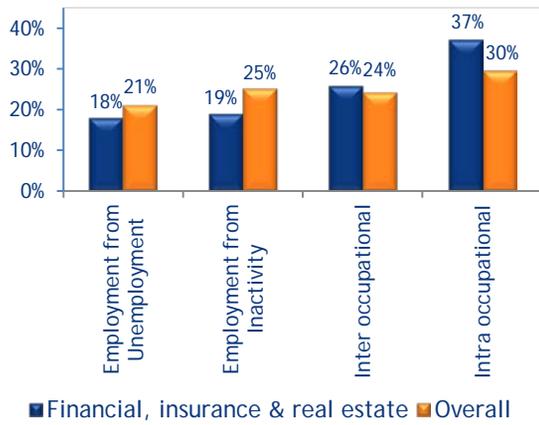
Source: SLMRU analysis of CSO QNHS

Figure 9.4: Employment permits by type, 2016

- Critical Skills
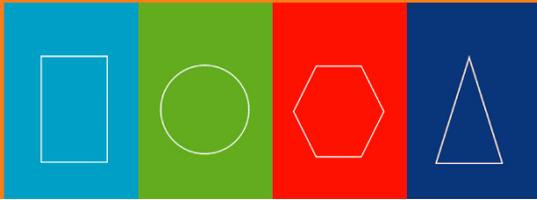- General
- Intra-Company Transfer
- Other
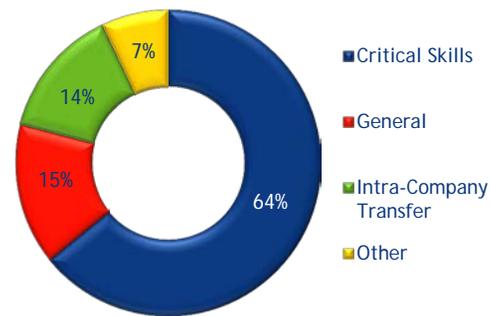
Source: DJEI

Figure 9.5: Recent hires, 2016
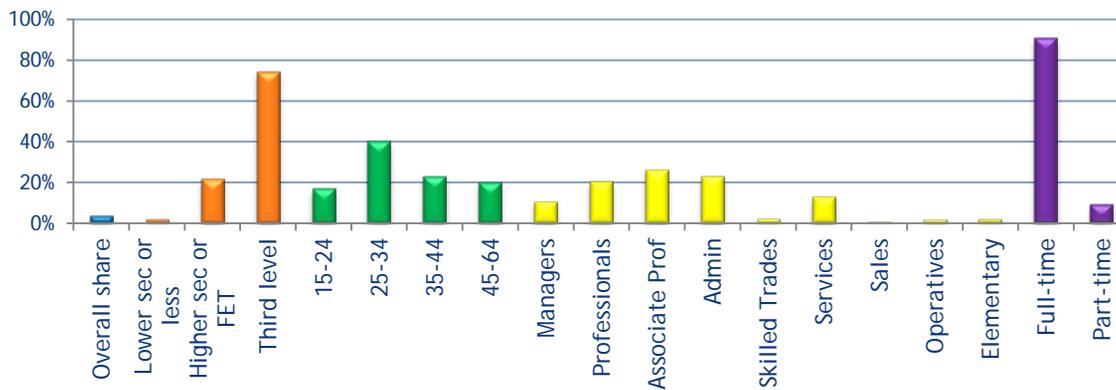
Source: SLMRU analysis of CSO QNHS

10.   Health and social work

Employment change: at 258,000, this sector accounted for a significant share of employment in Ireland in quarter 4 2016; there was a 1% increase in employment levels since the previous year, resulting in an additional 3,800 persons employed, with gains for personal services occupations (e.g. care workers) partially offset by declines at administrative and professional levels. (Figure 10.1)

Vacancy rates: vacancy rates for this sector have been broadly in line with that of all sectors for most of the period examined although it has been above the overall rate for the latest observed quarters, standing at 1.3% in quarter 4 2016. (Figure 10.2)

Transitions: this sector accounted for 10% of all transitions in 2015; over a third of all transitions related to movements for those already employed within the sector, a higher share than the overall for all sectors; this sector had the lowest share of persons entering employment from unemployment. (Figure 10.3)

Recent job hires: this sector accounted for 10% of all recent hires in 2016; of the 31,200 hires reported in 2016 (Figure 10.5):

- those who held third level qualifications accounted for 58% of new hires, with a further 29% holding higher secondary or FET qualifications
- over a third (39%) of recent hires were aged 25-34
- recent hires were mainly for personal services occupations (e.g. care and childcare workers) and for professionals (e.g. nurses and doctors)
- almost two thirds (57%) had attained full-time posts, although there was significant differences between occupational groups, where 78% of professionals roles were full-time compared to 51% for those in personal services (e.g. care workers).

Employment permits: in 2016, 30% of all new employment permits were issued for this sector, with an increase of 19% since 2015 (Figure 10.4):

- almost all (96%) were for professional occupations, with doctors accounting for two thirds (including registrars, senior house officers) and nurses for a further 29%; most held a minimum of a third level qualification
- half of those issued new permits were paid between €30,000 and €39,999
- Dublin accounted for 37% of new permits issued; the remainder were spread across all other regions.

DSP Jobs Ireland: this sector accounted for 22% of all vacancies advertised through the DSP Jobs Ireland website in the first six months of 2016.

Care workers[*] (88% of vacancies)	▪ Accounted for a fifth of total vacancies through DSP Jobs Ireland ▪ Relates to both those providing care in the home and in nursing homes
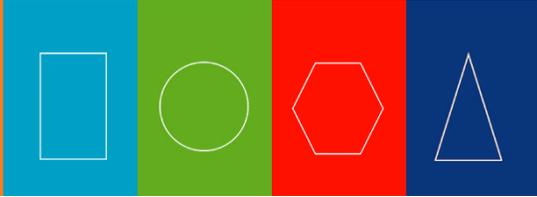
Professionals (6%)	▪ Nurses (staff, registered)
Associate professionals (1%)	▪ Youth workers, dental technicians

*Care workers: recruitment agencies accounted for a large share of the vacancies posted; almost two thirds of vacancies were for part-time work and only a small share (4%) required persons to be fully experienced (a further 67% required some experience and 28% required no experience).

IrishJobs.ie: this sector accounted for 9% of all vacancies advertised in 2016, an increase of 28% on the previous year, primarily for positions in nursing and for care workers.

Professionals (48% of vacancies)	▪ Nurses, primarily for staff and clinical nurses, and to a lesser extent, theatre, community, oncology, psychiatric, paediatric ▪ Doctors, pharmacists, radiographers, medical scientists, social workers, physiotherapists, psychologists, occupational therapists, dieticians
Associate professionals (15% of vacancies)	▪ Support workers, fundraisers, radiation therapists, cardiac physiologists, pharmacy technicians, lab technicians
Personal services (19%)	▪ Care workers, healthcare assistants

DTF: the health and social work sector accounted for 11% of all difficult to fill vacancy mentions in October 2016, primarily for professional roles:

- nurses: advanced nursing practitioners (intensive care, operating theatre, oncology, renal); general/senior nurses in areas such as older people care and fertility
- medical doctors: locum/NCHD doctors and registrars/SHOs in general and emergency medicine, anaesthetists, and paediatrics; doctors for GP practices
- radiographers: clinical specialists; MRI and CT radiographers
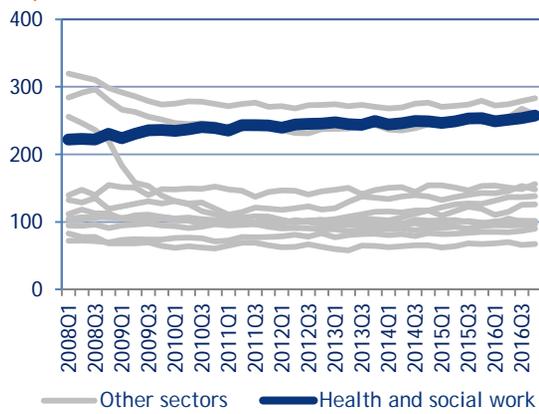- cardiac technicians
- care workers: nursing homes and homecare.

Job announcements: job announcements in the media were primarily for healthcare assistants along with nurses, radiographers, registrars and administrative support staff. The National Ambulance Service also announced positions for paramedics and emergency technicians over the coming 2-5 years.

Conclusions: the vacancy notifications for this sector are being skewed by a high volume of notifications for care workers, primarily through recruitment agencies. Although there is evidence of employment growth for care workers, retention of staff appears to be a larger issue. Despite the fact that overall expansion levels in this sector are not high, demand continues to be strong for professional occupations, particularly nurses and doctors, along with a number of technician roles. Most new hires in 2016 were for care workers, nurses and doctors.
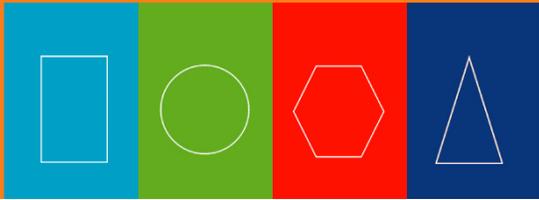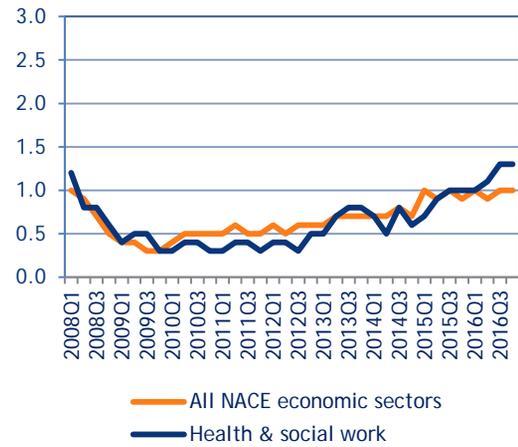
Key trends in the health and social work sector

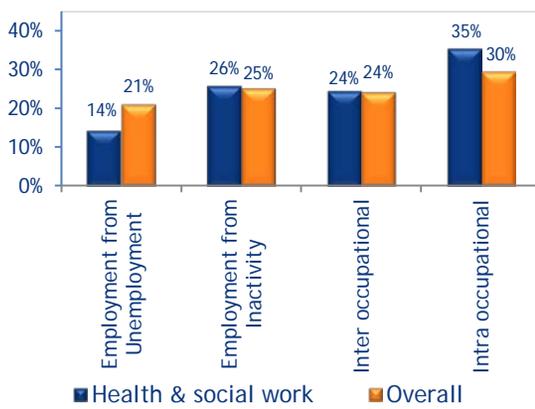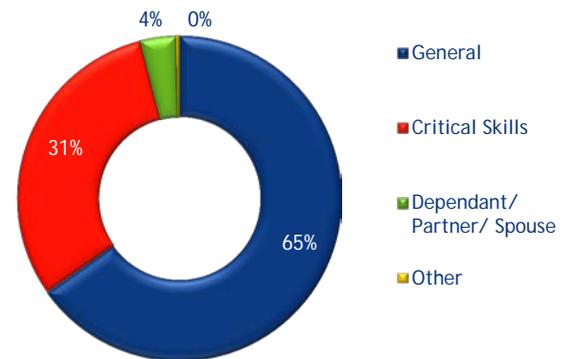| Figure 10.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016	Figure 10.2: CSO Job Vacancies Rates, 2008-2016

Source: SLMRU analysis of CSO QNHS

Source: SLMRU analysis of CSO EHECS data

Figure 10.3: Transitions, 2015	Figure 10.4: Employment permits by type, 2016

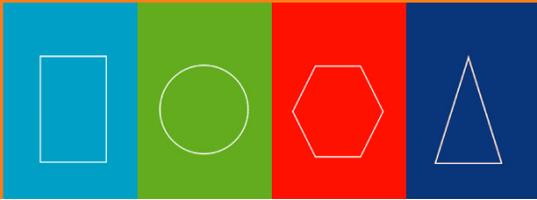Source: SLMRU analysis of CSO QNHS

Source: DJEI

Figure 10.5: Recent hires, 2016
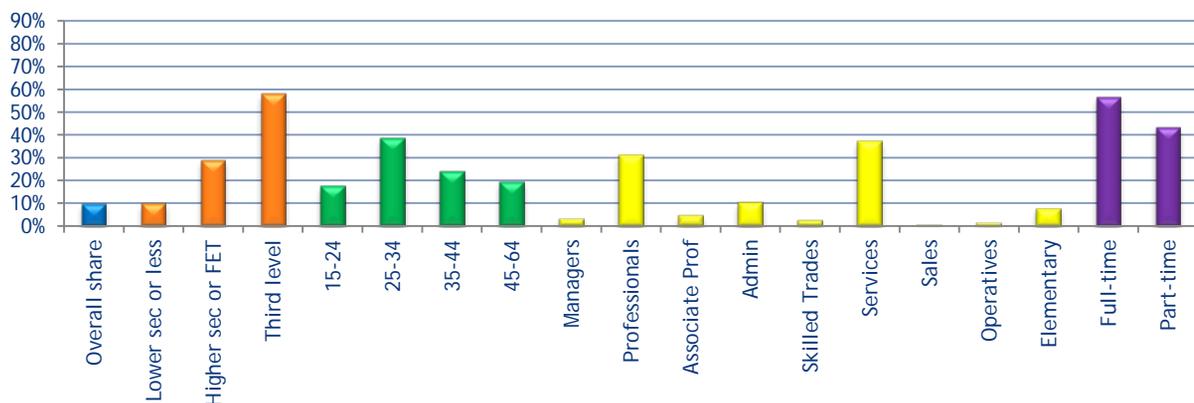
Source: SLMRU analysis of CSO QNHS

11.   Professional, scientific and technical activities

(includes legal, engineering activities, scientific, advertising, design)

Employment change: this sector experienced a 6% increase in employment numbers in the year since quarter 4 2015, resulting in an additional 6,800 persons employed, with gains spread across almost all occupational groups. (Figure 11.1)

Vacancy rates: the rate for this sector has been consistently higher than that for all sectors, and has seen considerable growth in the most recent two quarters; this has resulted in a rate of 2.3% in quarter 4 2016, the highest rate across all sectors. (Figure 11.2)

Transitions: this sector accounted for 5% of all transitions in 2015, with the highest share for those transitioning within the sector (34%); it had a lower than average share of persons transitioning into this sector from inactivity. (Figure 11.3)
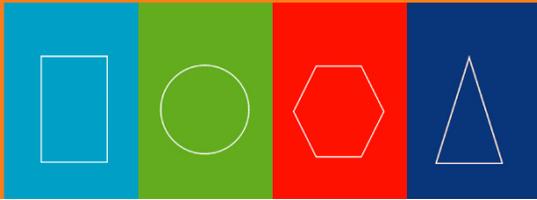
Recent job hires: this sector accounted for 7% of all recent job hires in 2016; of the 22,000 new hires (Figure 11.4):

- two thirds (67%) of recent hires in this sector held third level qualifications
- most were in the younger age cohorts, primarily aged 15-34 years (combined accounting for 62% of recent hires)
- recent hires were concentrated in professional (39%, e.g. accountants), associate professional (20%) and administrative (13%) roles
- at 77%, most were in full-time positions.

Employment permits: in 2016, 1% of all new employment permits were issued for this sector, primarily for professional roles such as engineering (including process, R&D and mechanical).

IrishJobs.ie: at 35%, this sector accounted for the highest share of vacancies reported through IrishJobs.ie in 2016 and indeed over the previous five years.

Managers (6% of vacancies)	▪ Operations, HR, finance
Professionals (34% of vacancies)	▪ Engineering - primarily project and process engineers but also chemical, quality, mechanical, design, structural and R&D ▪ Science: QC chemists/analysts in pharma, microbiologists, environmental specialists ▪ Business – accountants (mainly financial but also management), project managers, business analysts ▪ IT – engineers (validation, software, systems) ▪ Quality roles – quality assurance managers, regulatory affairs, compliance, risk ▪ Misc: quantity surveyors, legal counsel

Associate professionals (30% of vacancies)	▪ HR generalists, advisors, recruitment coordinators and health and safety officers
	▪ Financial - financial analysts/controllers, tax managers, audit managers, accounts managers, AR analysts (accounts receivable) with languages
	▪ Sales and marketing – brand management, business development, marketing executives, sales managers, supply chain analysts
	▪ Technicians – laboratory, engineering (commissioning & qualification, manufacturing, mechanical), quality assurance, field service
Administrative (14% of vacancies)	▪ Financial – accounts assistants, payroll administrators, fund accountants, accounts payable/receivable, credit controllers
	▪ General admin (schedulers, document controllers, billing, HR)
	▪ Legal secretaries, personal assistants
Skilled trades (9% of vacancies)	▪ Validation and C&Q (commissioning & qualification) engineers
	▪ Technicians (maintenance, instrumentation, calibration)
Operatives (5%)	▪ Automation engineers

DSP Jobs Ireland: this sector accounted for 4% of all vacancies in the first six months of 2016 primarily in associate professional roles; the number of notifications was similar in magnitude when compared to the same period in 2015.

Associate professionals (48% of vacancies)	▪ Sales and marketing (brand ambassadors/promotional staff, sales executives, digital, market research)
	▪ Interpreters, recruitment consultants/employment advisors, CAD technicians/draughtspersons, graphic designers
Professionals (31% of vacancies)	▪ Accountants (mainly financial but also management, senior audit)
	▪ Civil/site/setting out engineers, quantity surveyors
Administrative (18%)	▪ Accounts technicians, payroll administrators, credit controllers, bookkeepers

DTF: this sector accounted for 1% of all difficult to fill vacancies in October 2016:

- accountants – in corporate finance (audit, financial restructuring, and solvency) and taxation
- statisticians
- banking collection agents.

Job announcements: the jobs announced for this sector spanned a number of areas including business process management (e.g. management consultants, project managers), legal services (solicitors and legal assistants), accountants, marketing, and recruitment specialists.

Conclusions: many of the vacancy notifications for this sector are for occupations which span a number of sectors such as engineers, HR, financial analysts, accountants and financial administrators. As such, although this sector does not feature strongly in the analysis from the Recruitment Agency Survey and
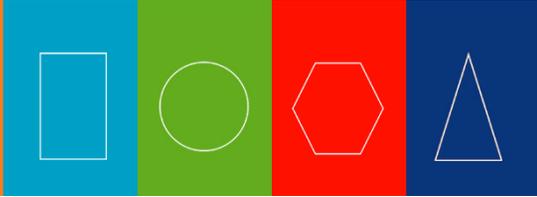
employment permit data, these occupations have been identified as being in high demand in other sectors. There is strong evidence that this is a sector experiencing growth, with employment numbers increasing, a strong vacancy rate reported in the CSO data, and a high level of vacancy notifications through IrishJobs.ie. It should be noted, however, that some of the vacancies are occurring due to a high degree of churn for those already employed in the sector, according to the transitions data.
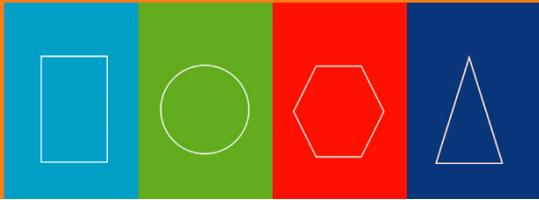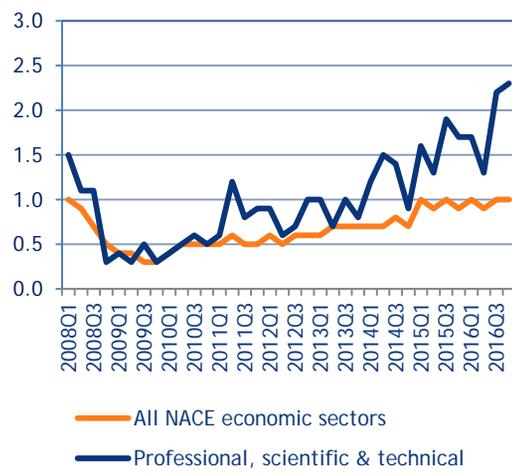
Key trends in the professional, scientific and technical activities sector

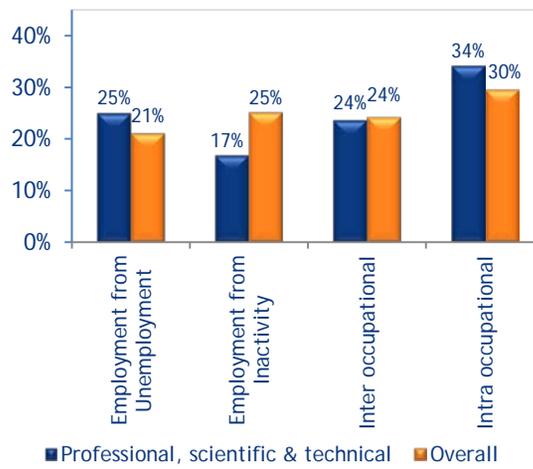Figure 11.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016
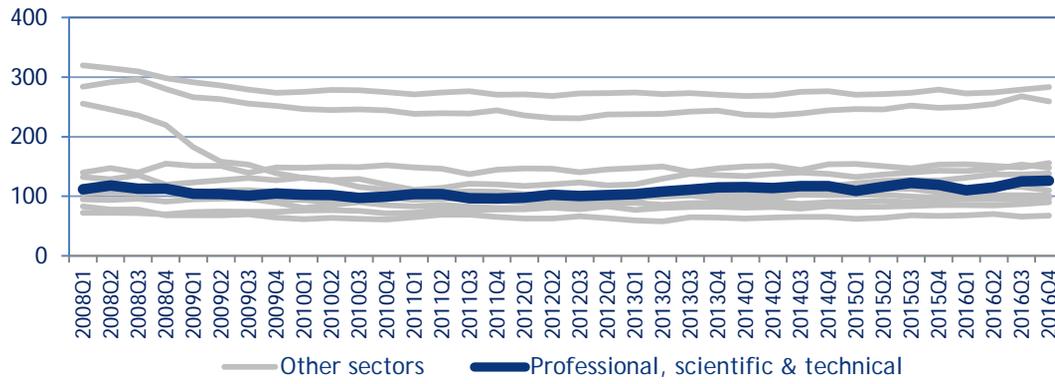
Source: SLMRU analysis of CSO QNHS

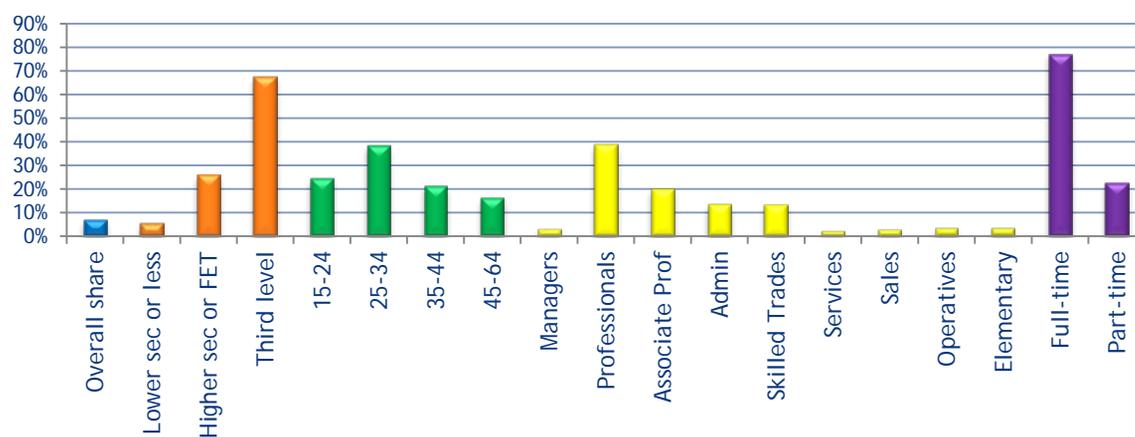Figure 11.2: CSO Job Vacancies Rates, 2008-2016

Source: SLMRU analysis of CSO EHECS data
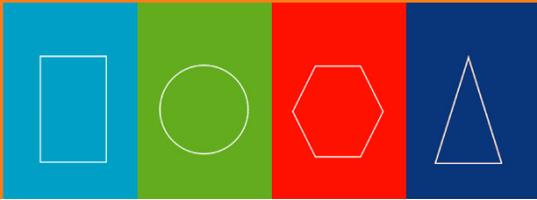
Figure 11.3: Transitions, 2015

Source: SLMRU analysis of CSO QNHS

Figure 11.4: Recent hires, 2016

Source: SLMRU analysis of CSO QNHS

12 Administrative and support services

Employment change: at 67,300 in quarter 4 2016, this sector accounted for 3% of overall employment in Ireland; there was no change in the numbers employed since quarter 4 2015. (Figure 12.1)

Vacancy rates: the vacancy rate has been consistently equal to or higher than the average for all NACE sectors since 2012, standing at 1.1% in quarter 4 2016. (Figure 12.2)

Transitions: this sector accounted for 5% of all transitions in 2015, with a higher than average share entering employment from other sectors (32%) and a lower share entering from inactivity (17%). (Figure 12.3)

Recent job hires: at 16,200 recent job hires in 2016, this sector accounted for 5% of all new hires broken down as follows (Figure 12.4):

- over a half of new hires were for persons who held higher secondary/FET (53%) education with a further 30% with third level qualifications
- most were young, with almost two thirds aged 15-34 years
- elementary positions accounted for almost a half (46%) of new hires (e.g. cleaners, security guards) with the remainder spread across all other occupational groups (primarily in customer service and general admin)
- over a half of new hires were part-time, primarily related to part-time cleaning hires.

DSP Jobs Ireland: this sector accounted for 13% of all vacancies notified in the first half of 2016. Cleaning and security positions accounted for three fifths of all notifications; these were primarily notified through recruitment agencies, thus masking the number of actual open posts.

Administrative (27% of vacancies)	▪ Receptionists (including hotel), office administrators/assistants, community employment supervisors, stocktakers, secretaries (including legal, medical)
Sales (6% of vacancies)	▪ Customer service agents/representatives, telesales, call centre agents (bilingual requirements for many of these roles)
Security guards* (26% of vacancies)	▪ Event security accounted for half of the notifications, followed by door, static and retail security guards ▪ Two thirds of the jobs advertised were for part-time positions, half of notifications required candidates to be fully experienced, with a fifth not requiring any experience; many vacancies were advertised through recruitment agencies
Cleaning (36% of vacancies)	▪ Primarily part-time positions advertised, over half were based in Dublin, with some experience a requirement for three quarters of the vacancies.
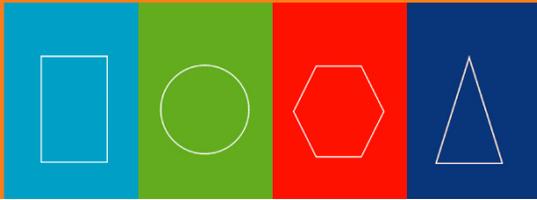
IrishJobs.ie: 8% of all vacancies notified in 2016 were for this sector, mainly in the areas of customer service and call centres. The number of jobs advertised has remained relatively steady in recent years. This sector accounted for two fifths of all advertised vacancies which required specific foreign language skills, primarily in German and French, but also Spanish, Italian, Dutch, Russian and Turkish.

Associate Professionals (20% of vacancies)	▪ Customer/technical/business support (with languages)
Administrative (30% of vacancies)	▪ Office administrators, receptionists, executive assistants, document controllers, medical secretaries (Grade IV)
Sales (26% of vacancies)	▪ Customer service/care/representatives, call centre agents (with languages)

DTF: this sector accounted for 6% of all difficult to fill vacancies in October 2016, primarily for administrative roles:

- Recruitment consultants
- Customer support, telemarketing/telesales, with languages (e.g. Nordic, German, Dutch, Turkish)
- Accounts clerks, some with languages
- Medical secretaries.

Job announcements: contact centre roles accounted for a significant share of the jobs announced for this sector; the vast majority of positions were for sales/customer care and technical support, mostly in IT, financial services and high-tech manufacturing, but also in utilities (e.g. energy sales). Languages were mentioned in a number of announcements for call centre roles.

Conclusions: overall, this is a relatively small sector with little employment growth and a relatively small share of recent job hires (most of which were for elementary occupations). Most of the vacancies arising were in occupations which tended to have a high level of churn such as cleaning, security and sales reps; as such, a high level of activity (particularly in the DSP vacancy data) may be representative of retention issues rather than new opportunities. Job announcements in this sector were arising in the areas of technical support and call centre activities, mainly with foreign language requirements.
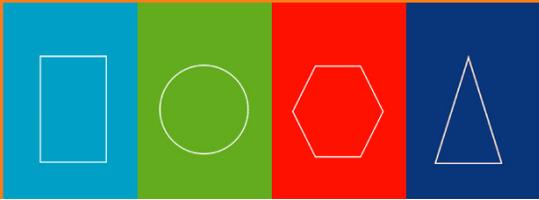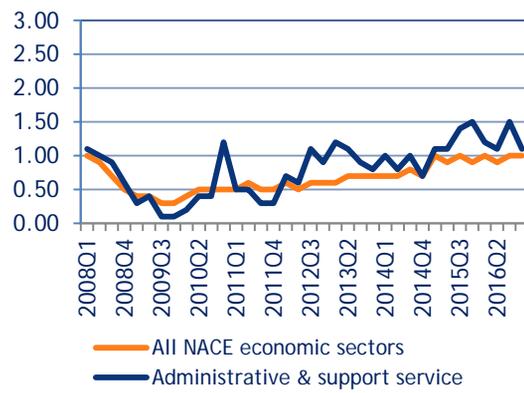
Key trends in the administrative and support services sector

### Figure 12.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: Other sectors — Administrative and support service
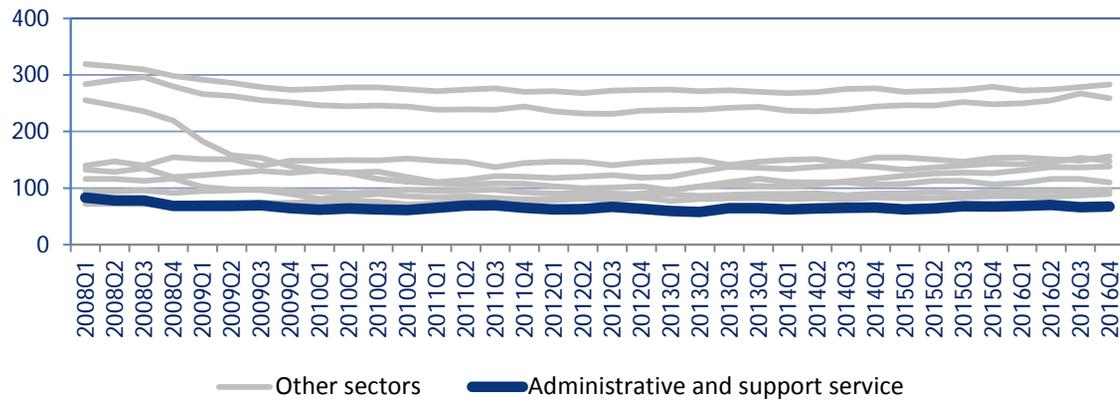
Source: SLMRU analysis of CSO QNHS

Figure 12.2: CSO Job Vacancies Rates, 2008-2016

Legend: All NACE economic sectors — Administrative & support service

Source: SLMRU analysis of CSO EHECS data

Figure 12.3: Transitions, 2015

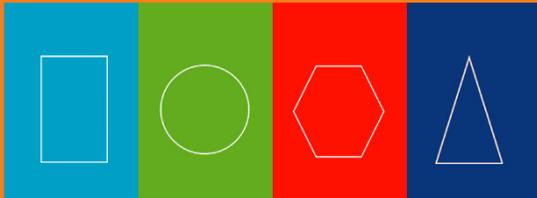Legend: Administrative & support service — Overall
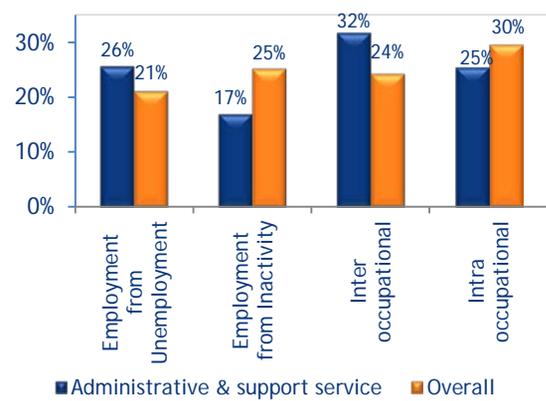
Source: SLMRU analysis of CSO QNHS

Figure 12.4: Recent hires, 2016
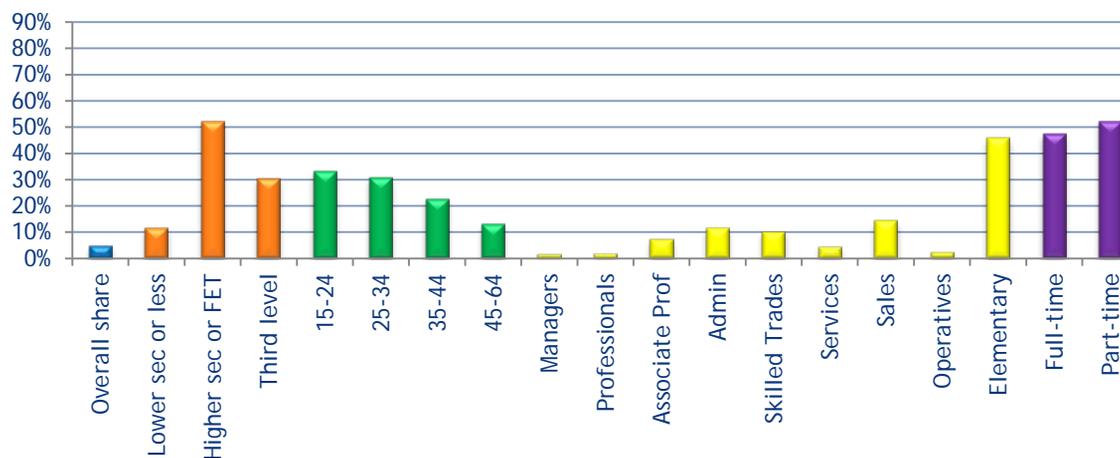
Source: SLMRU analysis of CSO QNHS

13 Transportation and storage

Employment change: this sector accounted for 5% of total employment in Ireland in quarter 4 2016; since quarter 4 2015, the numbers employed in this sector grew by 3%, representing an additional 2,600 persons. (Figure 13.1)

Vacancy rates: despite rates showing signs of growth since the middle of 2013, they have been in decline since the fourth quarter of 2014, dipping to 0.2% in the fourth quarter of 2016. (Figure 13.2)

Transitions: this sector accounted for 3% of all transitions in 2015, with those taking up employment from within the sector (intra) accounting for the highest share of transitions at 34%, four percentage points above the share for all sectors combined. (Figure 13.3)

Recent job hires: there were approximately 10,700 new job hires in 2016, representing 3% of all recent hires (Figure 13.4)

- over a half (51%) of new hires held higher secondary or FET education
- almost a third of new hires were aged 45-64, the second highest share of older workers after PAD (public admin and defence)
- operatives accounted for almost a half (45%) of new hires with large goods vehicle drivers accounting for a fifth of all new hires in 2016
- three quarters of the new hires were for full-time positions.

Employment permits: in 2016, less than 1% of all new employment permits were issued for this sector.

DSP Jobs Ireland: in the first six months of 2016, this sector accounted for 6% of all vacancies advertised through DSP Jobs Ireland, slightly less than the same period in 2015.

Large goods vehicle drivers (40% of vacancies)	▪ artic, HGV, rigid, multidrop (C+E licences required)
Other drivers (16% of vacancies)	▪ delivery, van, bus and coach drivers
Elementary storage (38% of vacancies)	▪ warehouse operatives, general operative, order picker, bankspersons, storepersons, stock-takers (with some of these positions in retail)
Air transport (3% of vacancies)	▪ ramp agents and baggage handlers

IrishJobs.ie vacancies: this sector accounted for 1% of all vacancies notified, primarily for:

- drivers (artic, multi-drop, HGV)
- logistics (managers, planners, administrators, warehouse operatives).
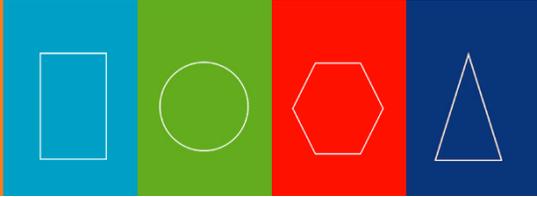
DTF: this sector accounted for 1% of all difficult to fill vacancies in October 2016, primarily for operative roles:

- DTFs were limited to HGV drivers (with C1+E licence).

Job announcements: jobs announced in the media for this sector related to lorry drivers and taxi drivers; there were also support roles announced, including security, customer service and IT roles for transport and distribution related activities.

Conclusions: this is a sector which is not registering significant activity, in terms of employment growth. Drivers, particularly HGV drivers, appear to be accounting for most of the vacancy activity in this sector. They account for a significant share of all recent job hires, with transitions data indicating a high level of churn occurring, with sourcing and retaining staff in this area proving difficult for the sector.
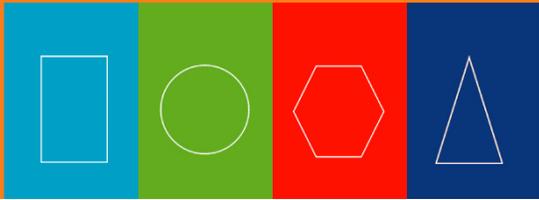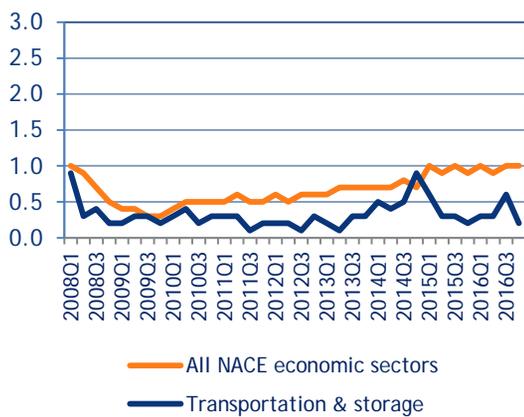
Key trends in the transportation and storage sector

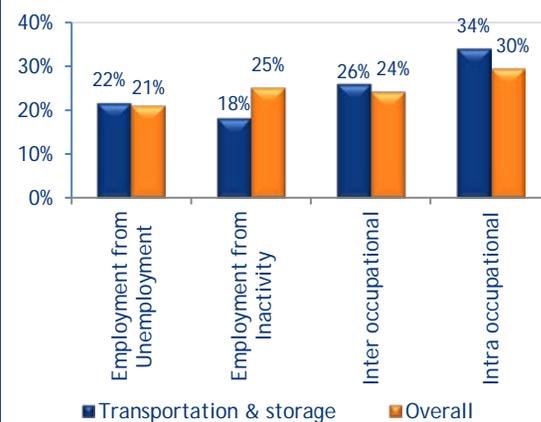### Figure 13.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: — Transportation and storage — Other sectors
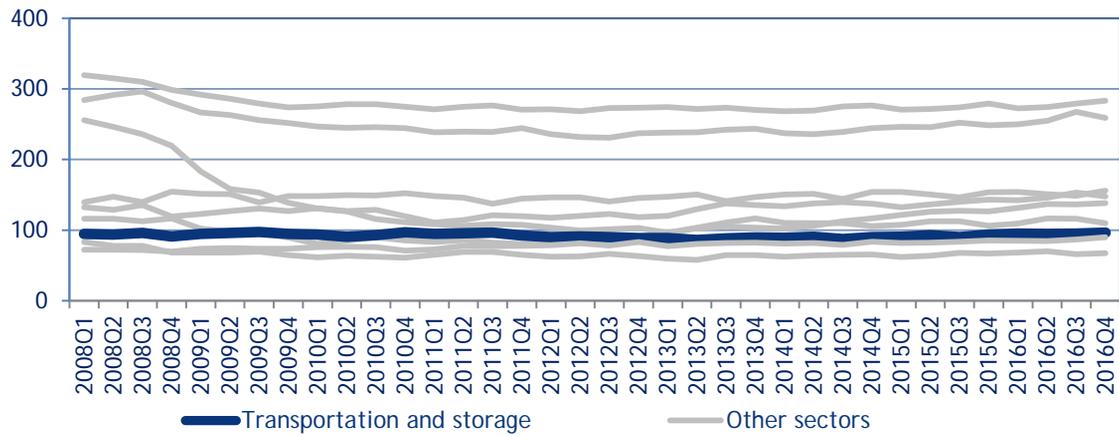
Source: SLMRU analysis of CSO QNHS

Figure 13.2: CSO Job Vacancies Rates, 2008-2016

Legend: — All NACE economic sectors — Transportation & storage

Source: SLMRU analysis of CSO EHECS data

Figure 13.3: Transitions, 2015

Employment from Unemployment: 22% 21%
Employment from Inactivity: 18% 25%
Inter occupational: 26% 24%
Intra occupational: 34% 30%

Legend: ■ Transportation & storage ■ Overall

Source: SLMRU analysis of CSO QNHS

Figure 13.4: Recent hires, 2016

Categories: Overall share, Lower sec or less, Higher sec or FET, Third level, 15-24, 25-34, 35-44, 45-64, Managers, Professionals, Associate Prof, Admin, Skilled Trades, Services, Sales, Operatives, Elementary, Full-time, Part-time
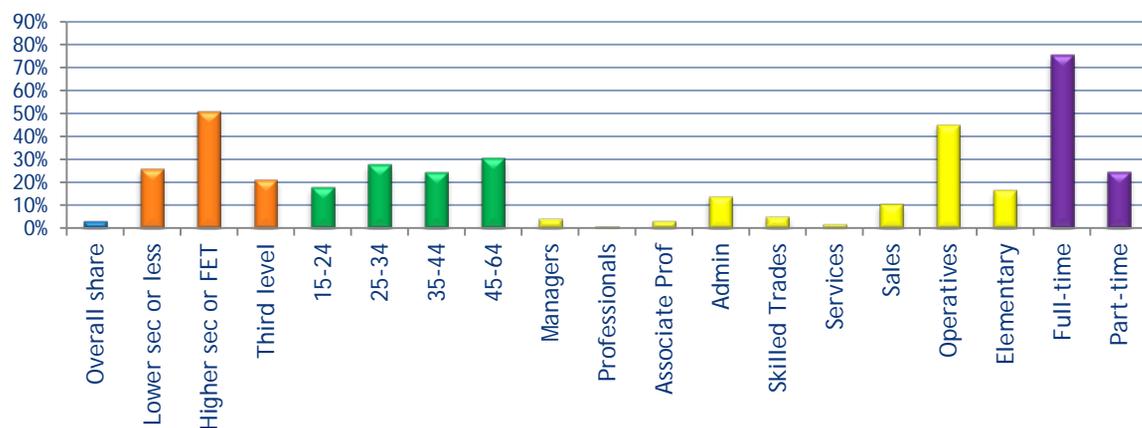
Source: SLMRU analysis of CSO QNHS
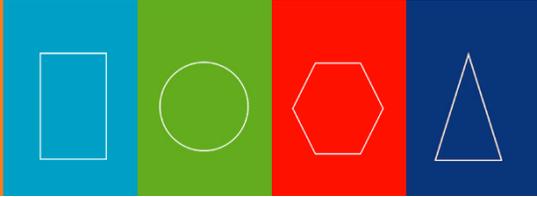
14   Public administration and defence

Employment change: there was a 2% increase in employment in this sector in the year since quarter 4 2016, representing an additional 2,100 persons. (Figure 14.1)

Vacancy rates: the vacancy rate for this sector peaked in the first quarter of 2016 at 1.5%; despite declining in each proceeding quarter, dipping to 0.8% in quarter 4 2016, this still represents higher rates than that experienced in the period between 2009 and 2014. (Figure 14.2)

Transitions: this sector had the lowest share of transitions in 2015, at 2%; the highest share of transitions was for those entering employment from other sectors, seventeen percentage points more than the overall share for all sectors. (Figure 14.3)

Recent job hires: this sector has seen a rise of 57% in the number of new job hires in 2016 when compared to the previous year; at 8,200, this sector represented 3% of new hires in 2016: (Figure 14.4)

- 70% of new hires held third level qualifications
- at 37%, this sector had the highest share of new hires who were older workers (aged 45-64 years)
- a half were employed in administrative roles
- two-thirds were employed full-time.

DSP Jobs Ireland – there were no notifications for this sector in the first six months of 2016.

IrishJobs.ie – this sector accounted for 1% of notifications in 2016 primarily for professionals (researchers, lecturers) and associate professionals (HR officers, lab technicians).

Job announcements: these jobs accounted for a relatively smaller proportion of all announcements made, with jobs announced in the media in 2016 including positions with the Irish Defence Forces and the Gardaí.

Conclusions: this sector does not register much activity in the vacancy data. However, following years of restrictions on recruitment, there is evidence of an increase in recruitment activities, albeit on a small scale, primarily for administrative roles.
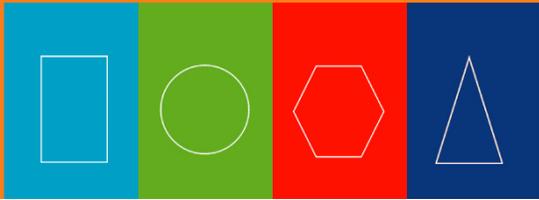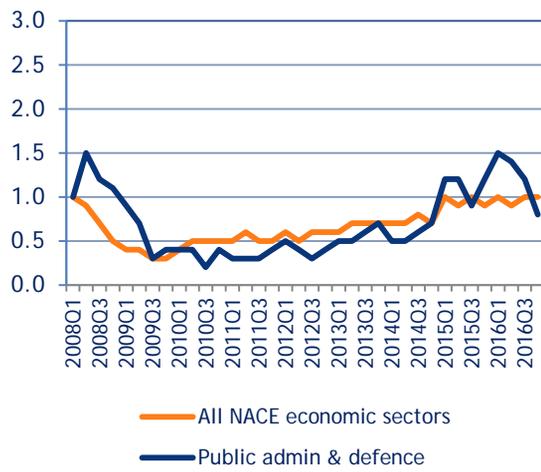
Key trends in the public administration and defence sector

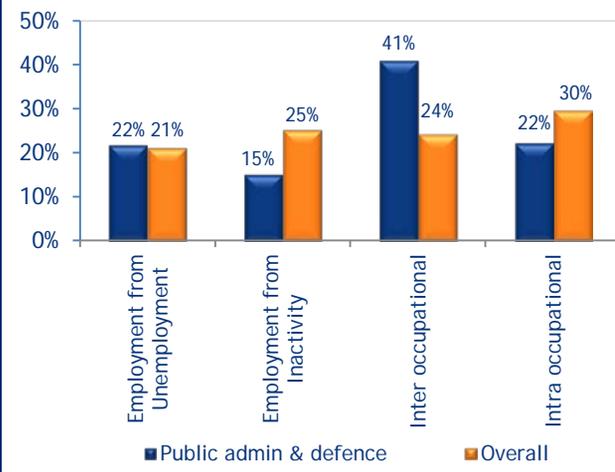### Figure 14.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Legend: Public admin and defence — Other sectors
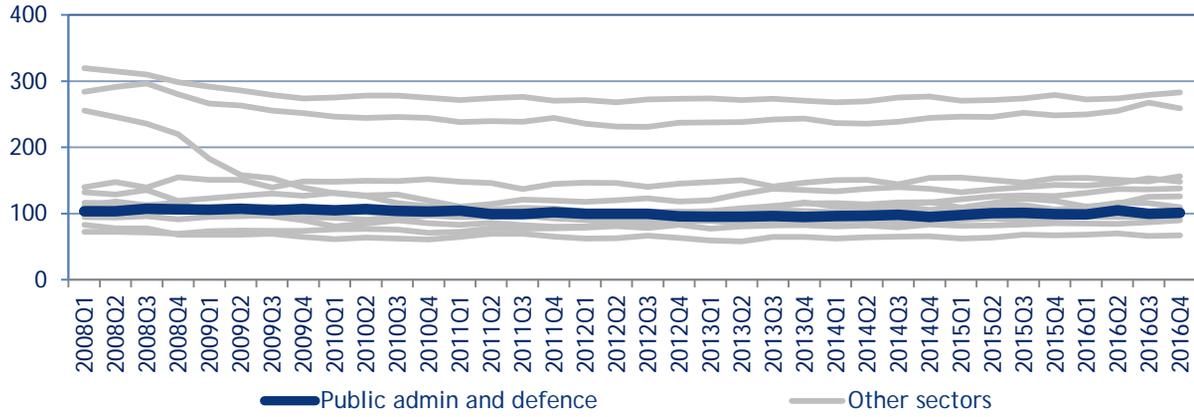
Source: SLMRU analysis of CSO QNHS

Figure 14.2: CSO Job Vacancies Rates, 2008-2016

Legend: All NACE economic sectors — Public admin & defence

Source: SLMRU analysis of CSO EHECS data

Figure 14.3: Transitions, 2015

Legend: Public admin & defence — Overall

Source: SLMRU analysis of CSO QNHS

Figure 14.4: Recent hires in public admin & defence, 2016
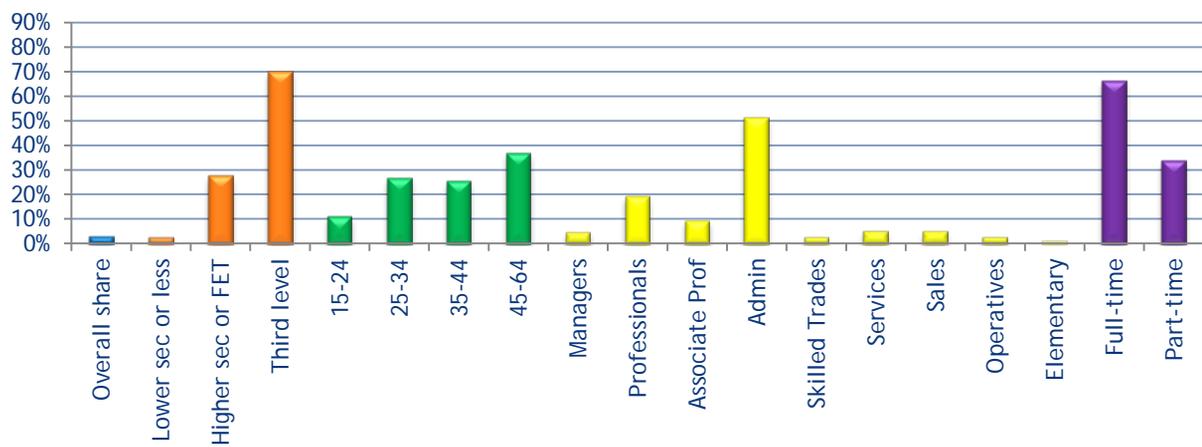
Source: SLMRU analysis of CSO QNHS
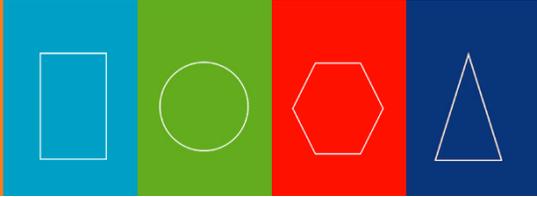
15   Education

Employment change: there was a 2% increase in employment in the year since quarter 4 2015, representing an additional 2,600 persons. (Figure 15.1)

Vacancy rates: the rate for this sector was consistently below the rate for all NACE sectors over the period examined, most likely related to economic and budgetary restraints, although some signs of growth were in evidence. (Figure 15.2)

Transitions: in 2015, this sector accounted for 6% of all transitions, with a higher share than average taking up employment from other sectors (32% compared to an overall share of 24%), while the share (and absolute number) entering from unemployment or inactivity has declined since 2014. (Figure 15.3)

Recent job hires: this sector accounted for 5% of overall new hires, with 14,800 hires in 2016, a fall on 2015 (Figure 15.4):

- over three quarters of new hires held third level education
- a third were aged 25-34 years with the remainder divided equally across all other age categories
- professional occupations (e.g. primary and secondary teachers) accounted for 57% of new hires
- over a half (56%) were for full-time positions.

Employment permits: this sector accounted for 1% of all new permits issued in 2016, most of which were for professional roles (e.g. lecturers, researchers).

DSP Jobs Ireland – this sector accounted for 3% of notifications in the first six months of 2016; half of the notifications were for personal services roles with a further third of professional roles. The main occupations included:

- Childcare workers (primarily advertised through recruitment agencies), caretakers
- English language teachers, lecturers, tutors/trainers across many disciplines.

IrishJobs.ie – this sector accounted for 1% of notifications primarily for professionals (lecturers, researchers) and associate professionals (assistant lecturers, teachers & tech/student support services). Just over half of all vacancy notifications were for full-time positions.

Job announcements: announcements in the media in 2016 were limited to lecturers in one university due to a campus expansion.

Conclusions: this sector has been experiencing slow growth, with most opportunities occurring due to replacement demand.

Key trends in the education sector

Figure 15.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

Other sectors ——— Education ———

Source: SLMRU analysis of CSO QNHS

Figure 15.2: CSO Job Vacancies Rates, 2008-2016

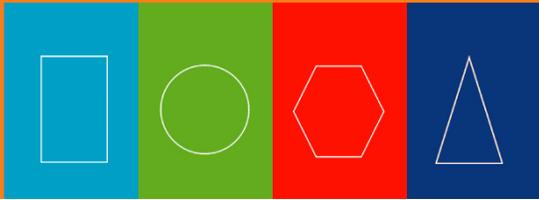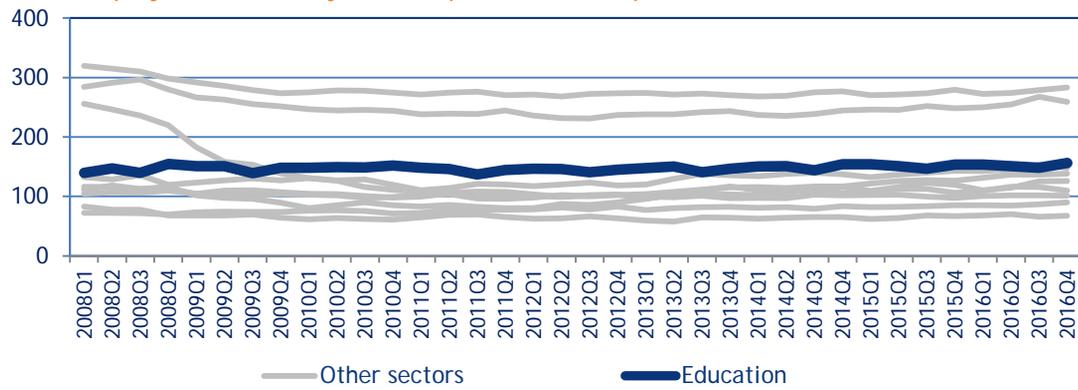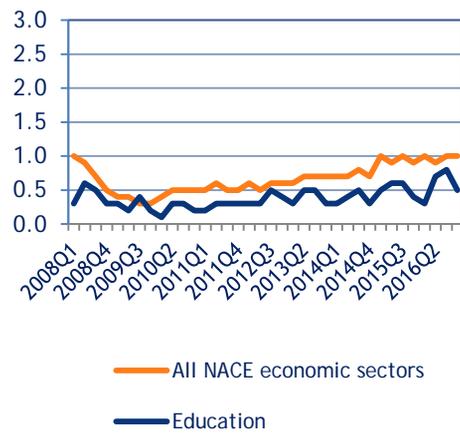

——— All NACE economic sectors

——— Education

Source: SLMRU analysis of CSO EHECS data

Figure 15.3: Transitions, 2015

■ Education ■ Overall
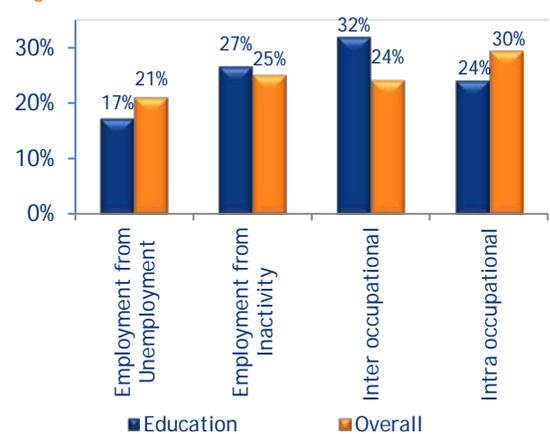
Source: SLMRU analysis of CSO QNHS

Figure 15.4: Recent hires in education, 2016
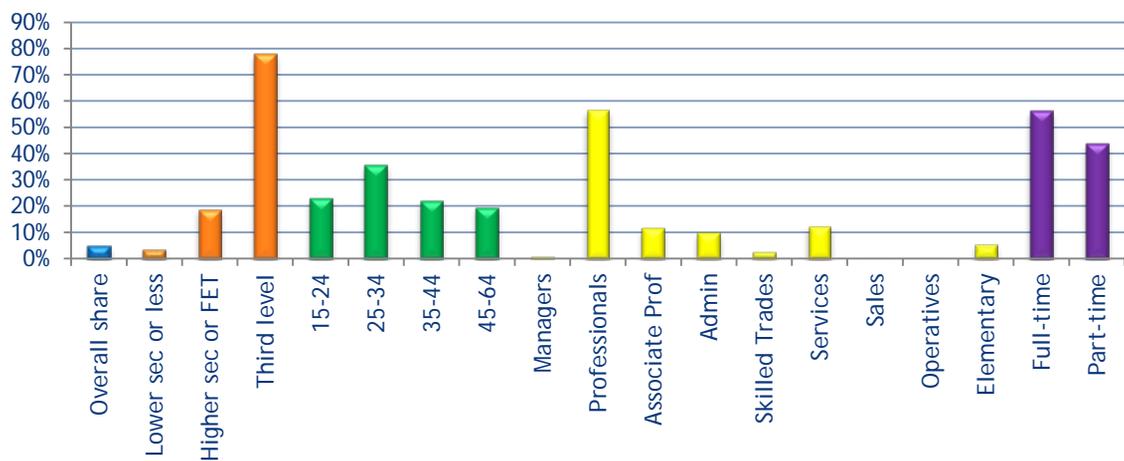
Source: SLMRU analysis of CSO QNHS
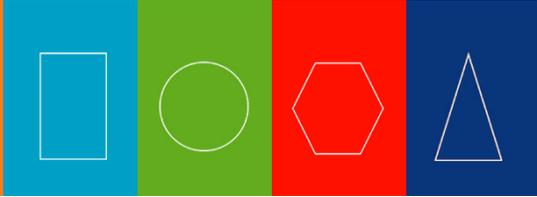
16   Arts, entertainment & other services

Employment change: there was a 9% increase in employment in the year since quarter 4 2015, particularly for hairdressers, representing an additional 7,900 persons. (Figure 16.1)

Vacancy rates: rates fluctuated over the period examined but were broadly in line with the rate for all NACE sectors in recent years. (Figure 16.2)

Transitions: this sector accounted for 5% of all transitions in 2015, with shares across transitions type broadly in line with the overall for all sectors. (Figure 16.3)

Recent job hires: at 18,900 new job hires in 2016, this sector accounted for 6% of all recent hires, and saw an increase of 24% on the previous year. Of the new hires (Figure 16.4):

- most held higher secondary or FET education (42%) or third level qualifications (43%)
- three quarters were aged under 35 years
- almost a third were for personal services roles (e.g. hairdressers, barbers), with associate professionals accounting for the largest share of the increase since 2015 (e.g. sports coaches, fitness instructors)
- over a half (57%) were employed in part-time positions.

Employment permits: this sector accounted for 7% of all new permits issued in 2016

- 42% were for critical skills permits, with a further 22% for general employment permits
- 45% of new permits issued were for professional occupations including software engineers[8] and business analysts with a further 34% for associate professionals in sales (account managers, marketing), sports players and coaches.

DSP Jobs Ireland: 2% of notifications in the first six months of 2016 were in this sector in occupations including:

- hairdressers/barbers
- beautician, spa therapist, nail technician
- fitness instructor, leisure centre attendant.

IrishJobs.ie: this sector accounted for 1% of notifications in 2016 primarily in associate professional roles (graphic designers) along with media and sports-related roles.

Conclusions: relatively few vacancies have been notified for positions within this sector, with most opportunities occurring for roles including hairdressing and fitness instructors/coaches.

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[8] This sector includes the repair of computers and personal and household goods.

Key trends in the arts, entertainment and other services sector

Figure 16.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2016

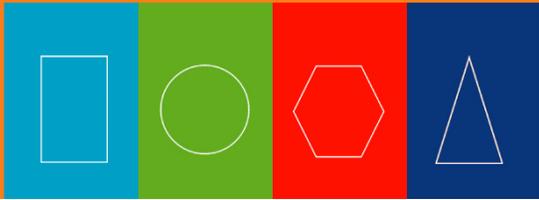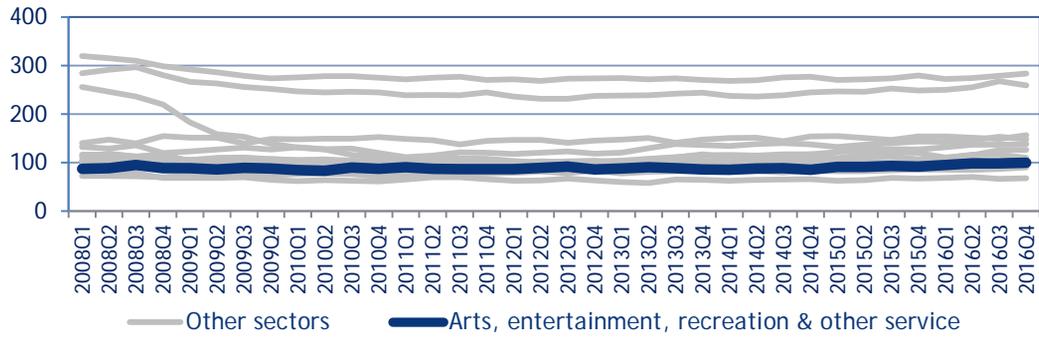Legend: Other sectors — Arts, entertainment, recreation & other service

Source: SLMRU analysis of CSO QNHS

Figure 16.2: CSO Job Vacancies Rates, 2008-2016

Legend:
All NACE economic sectors
Arts, entertainment, recreation & other service
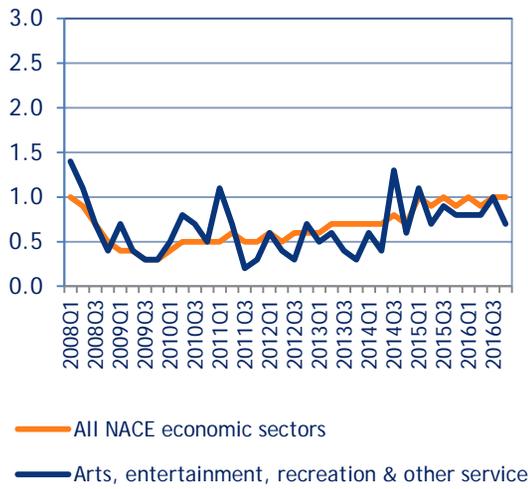
Source: SLMRU analysis of CSO EHECS data

Figure 16.3: Transitions, 2015

Legend:
■ Arts, entertainment, recreational & other services
■ Overall
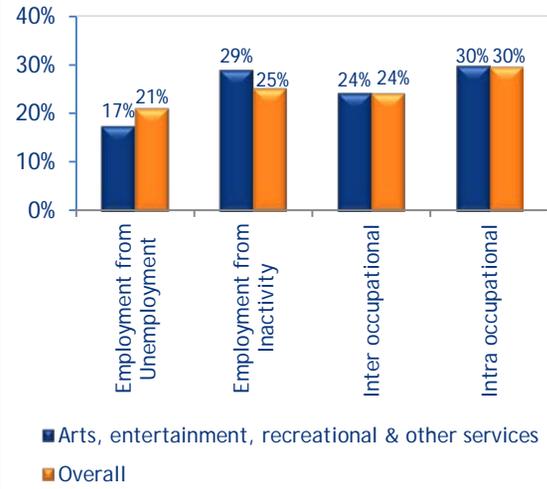
Source: SLMRU analysis of CSO QNHS

Figure 16.4: Recent hires, 2016
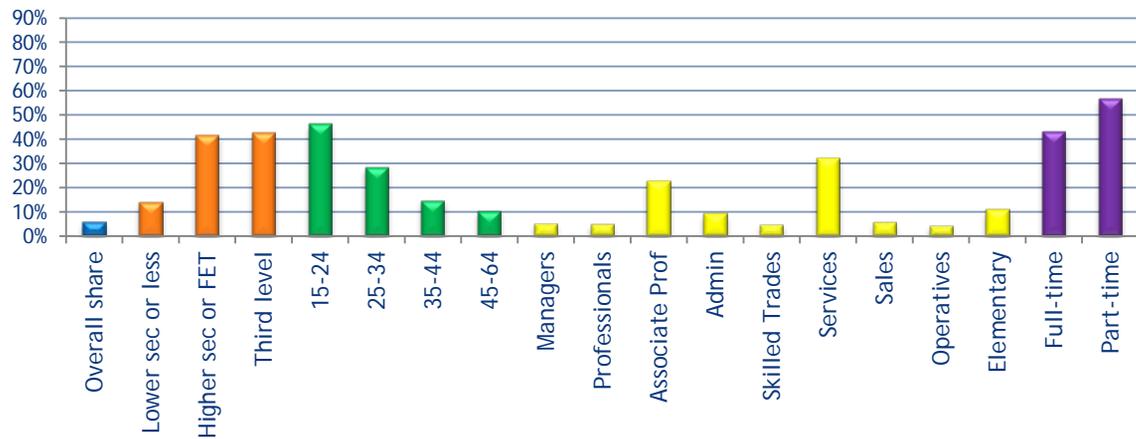
Source: SLMRU analysis of CSO QNHS

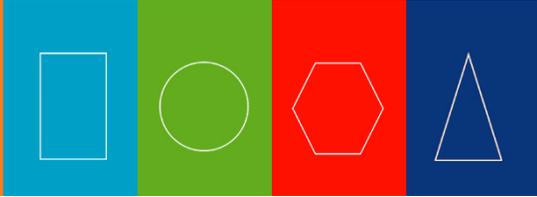# Appendix A. Recruitment Agency Survey October 2016: detailed results

Industry

Managers	• production planning managers in high tech manufacturing (mostly in biopharma); technology transfer managers • managers/directors of quality (knowledge of quality systems and regulatory/compliance, e.g. QC managers in pharmaceuticals (GLP/GMP & EU regulatory compliance) • human resource managers (with specialist industry knowledge, e.g. biopharma, with project management skills) • digital/ecommerce manager (B2B, affiliate marketing and interface optimisation) • supply chain managers, especially with inventory control/planning/ERP skills, APICS, and IIPMM
Engineers	• production and process engineers, automation & system control (e.g. process optimisation utilising software control systems, lean manufacturing), CSV (computer validation system / system requirement) engineers, control & instrumentation engineers, and process safety engineers (esp. Chemical Process Hazard Analysis (with HAZID, HAZOP, FTA, ETA SIL, PHA actions etc.), OPEX engineers • quality control and assurance (including standards and regulatory compliance), validation (e.g. Six-Sigma Black-Belt, CQE certification - Statistical Engineering) and CQV engineer roles • design and development engineers - especially for medical devices sector and associated R&D activities as well as electrical design engineers (power generation & transmission, LCC design, electrical safety engineer (medical electrical safety testing and design assessments in MedTech) • chemical engineers (production process & supply chain planning and integration for roles in biotech/pharmaceutical industry) • mechanical engineers including maintenance/reliability specialist (e.g. preventative maintenance, asset/capacity/reliability/process optimisation); injection moulding engineer
Scientists	• chemical and biological scientist, research and design scientists • analytical scientists and quality control analysts, mostly for roles in biopharma and MedTech • scientists for niche areas (pharmacovigilance scientists - legislation and processes specialists), food scientists, validation & process scientists
Supply chain	• specialist roles, in trade and distribution usually requiring both technical (e.g. e-Sourcing solutions, SAP, supplier relations management, inventory control with ERP systems, etc.), and business skills and relevant industry certification (e.g. APICS) • demand planning & forecasting (APICC cert. & MRP logic) • supply chain administrative roles for supporting supply chain activities, e.g. EDI/SAP administration with languages, freight forwarding etc.
Accountants	• industry experts in specific ERP System & Reporting Tools including Oracle, Hyperion, OBIEE: business and financial management accountants (including interaction of financial management with IT systems e.g. Oracle Financials Applications; ORACLE/ERP migration to SAP)
Technicians	• especially biotech technicians (e.g. computerised processes, SOPs/EWI and GMP Engineering systems technicians, and 'cleanroom' technicians) and extrusion technicians, usually for MedTech/medical devices
Skilled trades	• toolmakers, butcher/deboner, TIG/MIG (Tungsten/Metal Inert Gas) and ARC welding, heat and ventilation engineers, electricians with specific skills (e.g. electrical maintenance, computer based industrial control systems - PLC & SCADA programming & fault-finding) and mechanical maintenance fitters
Operatives	• CNC and SMT/PTH Rework operators, forklift drivers (with VNA and/or turret license; Reach Truck, Stand-up and Electric Pallet Jack operators)

Wholesale and retail

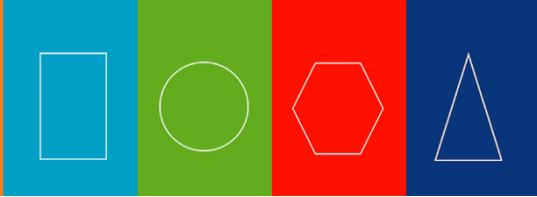| |
|---|
| ▪ Limited to highly specialised roles in sales and marketing and in procurement/management of purchasing operations in retail |
| ▪ Fork lift operators/drivers (niche areas – VNA/turret/Reach truck) |

Construction

Project managers	▪ niche areas, with specific skill set and relevant experience
Professionals	▪ quantity surveyors, structural/site engineers
Skilled trades	▪ steel fixers, steel erectors, pipe layers, shuttering carpenters
Operatives	▪ tower crane operator / banksman, site dumper truck drivers

Accommodation and food

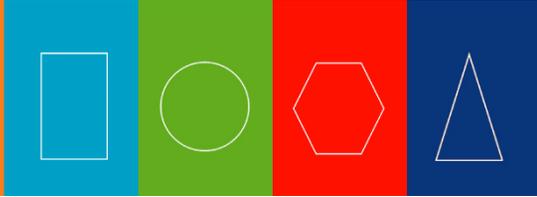| Management	▪ restaurant manager, sales & marketing roles (e.g. hotel sales director, hotel revenue manager, operations managers in hospitality) ▪ bar managers
Administrative	▪ financial admin: sales account managers and sales executives
Chefs	▪ Head chefs, chef du partie, pastry chefs etc.

Information and communication

IT specialist managers	▪ project managers ▪ digital marketing (e.g. customer acquisition & engagement via SEO/SEM, email marketing, social media) ▪ recruiter/consultant IT team lead/IT business development manager
Programmers and software designers and developers	▪ web applications (e.g. Java, Summit, JavaScript and CSS); object oriented AD client computing (JSP, Ruby on Rails, FLEX, and PHP); web development, design and publishing (e.g. CSS, HTML), open source scripting language specialists for web applications (especially Python), front end/ user online experience (UX) and user interaction (UI) related applications IT software development:.net c sharp java; .NET 4.0/4.5; .NET WPF apps; with front-end/UI technologies, SDLC (e.g. ASP skills complemented with JSP, AJAX, Jscript, HTML), .Net MVC Developer (ASP skills complemented by HTML, CSS, JavaScript, JQuery) ▪ database/data warehouse architecture - for financial services/business analysis - extraction, transformation, and loading (ETL) tools (e.g. ORACLE ETL design/tools, SQL, MSSQL; PL/SQL developers, data migration and management and related infrastructure solutions) ▪ data analyst/business intelligence roles: (BI solutions, Oracle OBIEE, ODI, ETL Design), big data analysts (e.g. Hadoop & MapReduce), Micro Strategy Specialist (e.g. Websphere); demand remains strong for analysts with programming, modelling, and DB skills, including big data and real-time web applications (e.g. SQL, Hadoop, NoSQL, Cassandra, Storm, Node.js, R); ORACLE apps (e.g. Oracle Process Manufacturing Modules, Oracle EBS SQL loader, etc.); metadata management; niche area of interest is big data visualisation for web/web application/mobile eCommerce) ▪ cloud developers and related (SaaS – software as a service, but also web-based services and APIs (e.g. RESTfull and SOAP) ▪ IT solutions architect including cross-sectoral solutions (e.g. financial software technology environment: MS.Net technologies (Visual Studio, C#, ASP.Net), mobile e-commerce solutions) ▪ DevOps developers - distributed computing architecture, interoperability, workflow-enabled applications, DevOps tools (Ansible, Chef and Puppet, Docker, OpenStack) and Virtualisation (vMware,Proxmox) as well as .NET Framework / SharePoint, and interdependence of software

	and IT operations (Agile); dynamic programming language (e.g. Perl, Python, Ruby, etc.) and distributed monitoring (e.g. Sensu, Prometheus, Graphite, Statsd) solutions; DevOps big data for financial services (webscripting JA, Apache, noSQL/hive/Impala)
	▪ IT and business resource planning roles (ERP with SAP, Azure, CRM), CRM developer (Microsoft Dynamics CRM, Microsoft SSIS/SSAS; IT system accountant/analyst (e.g. ORACLE financial applications, ORACLE/ER migration to SAP, SAP Business Objects and SAP BPC)
	▪ backend engineer - business/enterprise infrastructure software - application programming interface API (RESTful web services APIs - e.g. SOAP with JSON)
	▪ internet/network protocols engineers – data centre operations, and network protocols – TCP/IP, Ethernet, inventory management, security, AWS); web filtering, vulnerability analysis, and anti-virus/malware (IDPS, SIEM, OWASP)
	▪ software quality assurance/software testing engineers (security, malware, digital forensics, incident response); IT internal audit systems testing, performance & reliability testing of commercial/eCommerce software with Pearl, Bash and Python); IT systems QA - IT system testing of performance & reliability especially for commercial software applications
	▪ telecom networks engineers/developers - embedded software developers, primarily for telecommunications (Java C/C++ for embedded software solutions for telecoms)
	▪ Mobile technology applications - Apple iphone iOS and android platforms (Objective-C and xCode for OS X and iPhone applications and Java script & SenchaTouch/JQuery mobile//Java C++, PhoneGap & Eclipse for Android apps development)
	▪ IT/ICT infrastructure – senior network engineers for telecoms (CISCO CCNP/CCIE and/ or SGSN, RCN, RAN)
Sales	▪ telemarketing / telesales with languages (Nordic languages, mainly Danish and Swedish); lead generation with languages and basic DB related skills – updates of sales leads
	▪ technical sales (software B2B and SaaS products)
Technical/ customer support	▪ often with both technical and language skills for supporting multinational operations (e.g. German / French Cloud apps related support roles, SAP on demand portfolio skills); IT platforms including network and server infrastructure support roles

Financial and insurance

Accounting	▪ corporate finance (revenue management, internal audit/solvency, financial reporting experts e.g. qualified ACA, knowledge of IFRS, senior compliance /regulatory roles (e.g. AIFMD (alternative investment fund managers (European) directive))
	▪ actuarial specialists (risk/reserving/pricing)
	▪ fund industry - accounting and administration related (financial accountants, fund accounting supervisory roles (e.g. NAV, transfer agency client services, etc.), and administrative and technical support roles for the fund industry
Other professionals	▪ solicitors/corporate lawyers (M&A, taxation / AITI compliance)
	▪ niche area: life insurance/assurance (compensation, benefits, and validation)
	▪ senior compliance /regulatory roles (e.g. AIFMD (alternative investment fund managers (European) directive))
Sales/call centre roles	▪ multilingual sales/customer support agents
Financial clerks	▪ accounts payable/account management (with languages)
	▪ debt collection - banking collection agent (arrears, consumer debt recovery, including multilingual roles in this area)
	▪ payroll management
Management	▪ deposit and treasury management roles
	▪ senior lending roles (corporate & personal lending)

Health and social care

| Medical doctors	▪ specialists (e.g. general, emergency medicine, psychiatry) and non-specialists e.g. locum/NCHD doctors and registrars/SHO in general and emergency medicine, anaesthetists, and paediatrics); doctors for GP practices
Radiographers	▪ clinical specialists; MRI and CT radiographers
Nurses	▪ general nurses, especially for older people care (including nursing home managerial roles); advanced nursing practitioners in intensive care & operation theatre, especially cardiovascular care, but also in oncology care; roles in paediatrics, renal/dialysis, fertility, and intellectual disability care
Specialised medical technicians	▪ cardiac technicians
Care workers	▪ carers / home carers

Professional, technical and scientific

Accountants (ACCA/ACA)	▪ corporate finance (audit, financial restructuring, and solvency), taxation and regulatory compliance (e.g. BEPS)
Professionals	▪ experienced regulatory and compliance professionals (with skills in ALM, BAEL, MiFID, IAFID etc.)
Business/ financial	▪ debt collecting roles, including multilingual roles

Administrative services

▪ recruitment consultants/specialist with industry knowledge, multiple channel sourcing, performance management and bespoke solutions
▪ call centre, customer support, and CRM roles requiring European languages (Nordic, Dutch and German); contact centre customer support roles, requiring foreign languages and relevant product/service knowledge
▪ business/financial and related – debt collecting roles, including multilingual roles

Transport and storage

▪ limited to HGV drivers (with E+, CI licence)
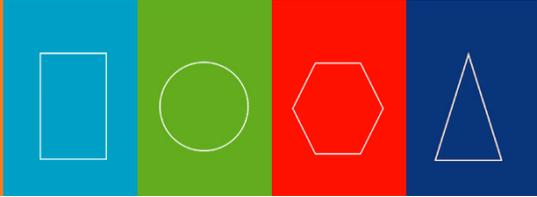
Appendix B. Members of the Expert Group on Future Skills Needs

Mr. Tony Donohue	**Chairperson, IBEC**
Mr. Kevin Daly	Head of EGFSN Secretariat, Department of Jobs, Enterprise and Innovation
Mr. Peter Baldwin	Assistant Secretary, Department of Education and Skills
Ms. Kathleen Gavin	Skills Planning and Enterprise Engagement Unit, Department of Education and Skills
Mr. Ray Bowe	IDA Ireland
Mr. Mark Christal	Manager, Client Development, Mentoring and Skills, Enterprise Ireland
Dr. Bryan Fields	Director, Curriculum Development / Programme Innovation, SOLAS
Mr. John McGrath	Manager, Skills & Labour Market Research Unit, SOLAS
Mr. Declan Hughes	Assistant Secretary, Department of Jobs, Enterprise and Innovation
Dr. Vivienne Patterson	Head of Skills and Engagement, Higher Education Authority
Dr. Peter Rigney	Industrial Officer, ICTU

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Further Education and Training Authority