Vacancy Overview 2017

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

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Executive summary

The key aim of this report is to utilise available vacancy data sources to provide qualitative information on the job titles (and associated skills) in which vacancies are occurring most frequently.

Before undertaking an analysis of vacancy data, however, it is essential to first examine the labour market situation underpinning the potential causes of these vacancies occurring. Is there evidence of expansion in this sector, and if so, in what occupations? Do recent recruitment patterns signify a high level of churn in the absence of employment growth? In order to inspect this further, it is also of use to examine the vacancies which are proving difficult to fill and the possible reasons for this. Finally, in order to gain some insight into potential growth in sectors, an examination of job announcements in the media indicates the sectors that are likely to experience a level of expansion in the short to medium term.

This section will first summarise the main findings from key labour market indicators, namely:

- employment growth
- transitions and recent job hires
- employment permits
- vacancy data sources
- difficult to fill vacancies
- job announcements in the media.

Furthermore, the outlook for each sector, based on these indicators, is provided.
**Employment growth**

The construction, accommodation and food sectors along with industry have experienced the most significant growth in employment over the five year period from quarter 4 2012 to quarter 4 2017. For construction, those employed in skilled trades (including plumbers, carpenters and painters) accounted for the majority of this increase. While chefs contributed to some of the expansion in the employment in the accommodation and food services sector, most of the increase related to elementary occupations (such as waiters, catering assistants etc.). In industry, increases in employment were primarily attributed to an increase in both professional and operative roles (e.g. engineers and food/process operatives).

**Transitions and recent job hires**

The analysis of the transitions in and out of sectors, along with where recent job hires have been occurring,\(^1\) assists in highlighting if churn is a significant factor in the occurrence of vacancies in particular sectors. For example, while employment in wholesale/retail grew by 5,600 in the most recent time period (from quarter 4 2016 to quarter 4 2017), over 70,000 recent job hires (those employed in the previous three months) occurred over the same period. Indeed, this sector accounts for the highest share of transitions (movements in the labour market) with a large volume entering from unemployment or inactivity. Industry and the accommodation and food services sector also feature strongly in both of these datasets indicating that a high level of churn may be the main factor contributing to a high volume of vacancy notifications.

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\(^1\) Further details on the methodologies used for these analyses are provided in Section 2: Data Sources
**Employment permits**

Employment permits provide an indication of where employers are having difficulty in sourcing suitably qualified personnel from the Irish or EU labour market. Where relevant, information on the type of permits, the salary bands and the regions in Ireland where employment permits are issued is provided. The number of employment permits has been increasing in recent years with over 9,000 new permits issued in 2017. The IT and health and welfare sectors combined accounted for three quarters of all new permits issued. New permits were primarily issued for professional occupations with two thirds of all new permits issued for the Dublin region.

**Vacancy data sources**

The methods used to advertise vacancies vary across sectors. In order to capture as comprehensive a picture as possible, this report utilises a number of sources.

- **The CSO vacancy rates** are collected through the Earnings Hours and Employment Cost Survey (EHECS) which provides details on the number of open vacancies at the end of each quarter by sector. As such, this provides for a reliable vacancy rate across sectors over a significant timeline which is comparable at a European level, although it is not possible to derive the occupations within the sector where the vacancies are occurring. The analysis from the EHECS shows that the number of vacancies in Ireland has been rising steadily since 2009, although the vacancy rate, at 1% in quarter 4 2017, was one of the lowest rates in the EU. The professional and financial activities sectors, along with IT, had the highest vacancy rates in Ireland in 2017.

- **DEASP Jobs Ireland**: vacancies advertised through this medium are primarily in the areas of skilled trades, personal services, operatives and elementary roles. Analysis of this vacancy source allows for a comprehensive examination of the job titles occurring most frequently, the level of experience and education required and the location in Ireland of the advertised vacancy.
IrishJobs.ie: most vacancies from this source relate to professional and associate professional positions. Similar to the DEASP Jobs Ireland data, this data provides details on job titles, experience, education and location.

Difficult to fill vacancies

The number of vacancies identified as difficult to fill in the SLMRU Recruitment Agency Survey, conducted in October 2017, has been increasing, particularly in relation to positions in the IT sector. This sector, along with industry, accounts for the highest share of difficult to fill vacancies. For the most part, an insufficient number of skilled candidates was the reason for the vacancies being difficult to fill, with more than five years’ experience being required for almost half (45%) of these. According to the recruitment agencies, demand for these skills and wage rates have both risen when compared to the situation one year previously. Professional occupations accounted for three quarters of all vacancies identified as difficult to fill.

Job announcements

An examination of job announcements in the media provides key information on where growth areas are likely to occur in the short to medium term. There were announcements for approximately 20,000 jobs in 2017, primarily in IT, industry and the wholesale and retail trade sectors.
# Key findings by sector

## Industry

The labour market indicators related to this sector paint a conflicting picture. While CSO vacancy rates are low and recent employment growth has been slow, occupations in this sector feature strongly in the notified vacancies and over a quarter of all identified difficult to fill vacancies are in this sector. Growth in this sector relates primarily to professionals and operatives, but with slightly different patterns for each of these occupational groups. For professional occupations, such as engineers and scientists, filling vacancies is proving extremely difficult although the numbers involved are relatively small and the skills required are niche. On the other hand, for operatives (such as food and process), churn is a significant factor, resulting in an inflated number of vacancy notifications when compared to actual growth in the area. The high volume of job announcements in this sector indicates that both growth and vacancy notifications will continue to be strong in the short to medium term.

## Wholesale & retail

The majority of employment opportunities in this sector are arising due to replacement rather than expansion demand. While employment grew by almost 6,000 persons in the year since quarter 4 2016, there were over 70,000 recent job hires over the same period. Most vacancies relate to sales assistants and sales executive roles with no minimum qualifications or experience required for a large share of positions advertised.

## Construction

This sector is continuing to experience significant growth, with 12,000 additional jobs created in the year since quarter 4 2016. Most of this growth relates to skilled trades roles such as plumbers, carpenters and painters. Issues with the supply of suitable candidates are
emerging, although at present this is limited to professional occupations such as quantity surveyors and engineers with a high level of experience. If employment growth continues at this pace, and in particular if growth occurs in the more labour intensive residential sector, difficulties in filling vacant posts will be expected to intensify particularly for skilled tradespersons.

**Accommodation & food services**

This sector has experienced strong employment growth in recent years, although the labour market indicators also point to a high level of churn occurring (both the transitions analysis and the recent job hires data). While chefs contributed to some of this growth, most of the increase related to elementary occupations (such as waiters, catering assistants etc.). Most notified vacancies in this sector in 2017 related to chefs and hospitality staff. The changes to the legislation in relation to employment permits for chefs may see shortages alleviate somewhat in this area, although vacancy notifications in this sector are expected to continue to be high in volume due to the high level of churn occurring.

**Information & communications**

Although recent employment growth for this sector has been relatively slow (+3,700 persons between quarter 4 2016 and quarter 4 2017), we should be cognisant that employment of IT personnel occur across numerous sectors, as evidenced in the vacancy analysis. All labour market indicators for this sector point to significant activity – a relatively high vacancy rate (reported by the CSO), a high share of difficult to fill vacancies, along with a high volume of vacancy notifications on IrishJobs.ie. Job announcements in the media also indicate that demand for IT professionals will continue in the short to medium term. However, with over 23,000 recent job hires in 2017, it should be noted that churn is a significant factor in this sector and may be inflating the volume of vacancy notifications. This sector also continues to be dependent on the employment permit system, with the
number of new permits issued increasing annually, with 3,500 new permits issued in 2017.

Financial, insurance & real estate

Employment growth in associate professional roles in the financial sector in recent years has been offset by a decline in the numbers employed in administrative roles. Despite this, the CSO vacancy rate is one of the highest in Ireland and a large volume of vacancies were notified in 2017 through IrishJobs.ie. Some level of churn is in evidence with transitions being highest for those moving jobs within the sector, with 4,000 recent job hires on average per quarter in 2017. Occupations in this sector featured strongly in the employment permit data and job announcements in the media indicate that vacancy notifications for positions in this sector are likely to continue.

Health & social work

Although employment growth has been small in absolute terms, demand for healthcare workers remains strong with all indicators pointing to a demand for these skills. Employment permits continue to be required to bridge the skills gap for professionals in this sector. For care workers, demand is more difficult to determine as the data is skewed by a high volume of vacancy notifications through recruitment agencies that may not represent real job opportunities. The high number of recent job hires in 2017 (34,000) indicate that job churn is a significant contributor to the number of vacancies notified in this sector.

Professional, scientific & technical activities

Despite recent declines in employment numbers, the five year growth was strong for this sector (+26,000 persons). The vacancy rate has been rising steadily since the beginning of 2016, with this sector having the highest rate by the end of 2017. This sector features strongly in the IrishJobs.ie data primarily for professional and associate professional roles. 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 difficult to fill vacancy analysis or the employment permit data, these occupations have been identified as being in high demand in other sectors.

### Administrative & support services

This sector had one of the highest rates of employment growth between quarter 4 2016 and quarter 4 2017, with growth across most occupational groups (excluding administrative roles). Overall, this is a relatively small sector with most of the vacancies arising in occupations which tended to have a high level of churn such as cleaning, security and sales representatives; as such, a high level of activity (particularly in the DEASP Jobs Ireland 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.

### Transportation & storage

When all labour market indicators are examined, no significant issues were identified for this sector. Most vacancies are for HGV drivers, administrative roles (including stocktakers) and warehouse operatives.

### Public admin. & defence

Following many years of restrictions on recruitment, this sector experienced employment growth of over 7,000 persons in the year since quarter 4 2016, relating primarily to associate professional and administrative roles. Despite this, vacancy notifications remain small in numbers and this sector did not register as having any vacancies which were difficult to fill.
<table>
<thead>
<tr>
<th><strong>Education</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Despite recent employment growth (primarily related to teachers), vacancy notifications for this sector remain limited to a small number of roles such as lecturers, TEFL teachers, and instructors/trainers.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Agriculture</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>This sector has not registered significant activity in terms of employment growth and vacancy notifications in recent years.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Arts, entertainment &amp; other services</strong></th>
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</thead>
<tbody>
<tr>
<td>Relatively few vacancies have been notified for positions within this sector, with most opportunities occurring for roles including hairdressing and fitness instructors/coaches.</td>
<td></td>
</tr>
</tbody>
</table>
1 Introduction

Aim of the report

This report is produced annually by the Skills and Labour Market Research Unit (SLMRU) in SOLAS. The key aim of this report is to utilise available vacancy data sources to provide qualitative information on the job titles (and associated skills) in which vacancies are occurring most frequently.

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 DEASP Jobs Ireland (Public Employment Services) and IrishJobs.ie (a private recruitment agency)
- CSO Quarterly National Household Survey (QNHS) and Labour Force Survey: analysis of transitions in the labour market along with overall employment trends
- CSO Job Vacancy data: collected from the Earnings, Hours and Employment Costs Survey (EHECS) providing vacancy numbers and rates across sectors since 2008
- Eurostat: European job vacancy rates and Ireland’s recent job hires²
- The Recruitment Agency Survey, conducted by the SLMRU biannually, which seeks to identify difficult to fill vacancies

²Due to recent changes in the CSO’s Labour Force Survey, it was not possible for the purposes of this report, to analyse recent job hires through the CSO data; however, this data is available for Ireland through the EUROSTAT website.
Employment permit data, provided by the Department of Business, Enterprise and Innovation (DBEI), which highlights occupations for which 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 where future demand is likely to occur 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 3.21 in Section 3 provides a breakdown of all relevant indicators by sector. Finally, possible future opportunities that are likely to occur by sector are provided through an analysis of job announcements in the media.

This analysis also provides a wealth of information in terms of the job titles and relevant skills associated with the vacancies, which, in turn, can be utilised by the education and training providers when matching course provision to the needs of the employer.
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 3.21 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 provide comprehensive details on the vacancies occurring and to establish the nature of the vacancy.
2 Data Sources

2.1 Estimates of demand

CSO Labour Force Survey (LFS)

The SLMRU utilises the CSO’s Labour Force Survey (LFS) in order to examine employment trends in the labour market. The LFS was introduced in quarter 3 2017, replacing the previous Quarterly National Household Survey, which was first introduced in quarter 4 1997. While a backcasting exercise was carried out, this was limited to a number of variables, such as employment status, age, gender and sector, and therefore any examinations of time series should be treated with caution. Employment data is examined through the following:

- **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**

  The transitions analysis reported here is based on previously published Quarterly National Household Survey (QNHS) data for the reference year 2016. It should be noted that this data has since been revised with the introduction of the CSO’s new Labour Force Survey. 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.
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. However, it should be borne in mind that this analysis only represents one point in time for each quarter. The CSO warns that due to one-off recruitments by individual firms and a low number of firms reporting vacancies, this data series can be volatile and should be interpreted with caution.

Eurostat

Comparisons of job vacancy rates across EU countries are available through the EU’s statistics office, Eurostat. In addition, due to recent changes to the CSO’s LFS (as detailed above) it was not possible to replicate the recent job hires analysis produced in the previous edition of this report. However, this data is available through Eurostat by sector, although it is not possible to provide data on the age, education level and occupation of the recent hires as had previously been done. It should be borne in mind, however, that due to the changes in the LFS a break in series occurred in quarter 3 2017, so any changes over the time series should be treated with caution.

2.2 Vacancy data

This report analyses vacancy notifications from two sources, namely the DEASP Jobs Ireland 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.
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<th><strong>IrishJobs.ie</strong></th>
<th><strong>DEASP Jobs Ireland</strong></th>
</tr>
</thead>
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<tr>
<td><strong>Scope</strong></td>
<td>Most vacancies relate to professional and associate professional positions</td>
</tr>
<tr>
<td><strong>Employer/Agency</strong></td>
<td>Includes vacancies advertised by employers only</td>
</tr>
<tr>
<td><strong>Posts</strong></td>
<td>Reports vacancies without detailing the number of posts attached to each vacancy</td>
</tr>
<tr>
<td><strong>Administration of vacancy websites</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Occupations</strong></td>
<td>Occupations coded to SOC2010 by SLMRU using CASCOT software based on the job title given</td>
</tr>
<tr>
<td><strong>NACE sector</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Level of experience</strong></td>
<td>Available for 48% of the vacancies in 2017 by the number of years of experience required</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
<td>Available for 49% of the vacancies in 2017 with a detailed breakdown of the education level required</td>
</tr>
</tbody>
</table>

³ ISCED is the International Standard Classification of Education
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 DEASP 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 DEASP 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 2017, 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 2017 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.

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 DBEI, may be used to highlight occupations for which employers experience difficulty in sourcing staff domestically, it should be interpreted with caution as

- new employment permits may be issued to persons already residing in Ireland but who have changed employer

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\(^4\) Only those recruitment agencies who reported having difficult to fill vacancies (37 of the respondents) are included in the analysis in this report.
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

The purpose of this section is to provide an overview of the main findings from the relevant labour market indicators before focusing on vacancy notification activity in each of the sectors. This includes overall employment by sector, transitions, recent job hires and CSO vacancy data. Overall findings from the analysis of vacancy notifications through the DEASP Jobs Ireland and IrishJobs.ie are also detailed along with an overview of the employment permit data, the identification of difficult to fill vacancies through the Recruitment Agency Survey and the analysis of job announcements in the media.

3.1. Employment levels (Figure 3.1)

In quarter 4 2017, the sector with the largest numbers employed was the wholesale and retail sector, followed by industry and the health sector. In absolute terms, between quarter 4 2016 and quarter 4 2017, the largest growth occurred for the accommodation and food services sector, with an additional 13,700 persons employed, and the construction sector (+12,000 persons). The administrative and support services sector experienced the largest relative annual growth, at 12%, in the same time period, followed by construction at 10%; declines occurred for the financial sector (-1%), professional activities (at -4%) and the arts, entertainment, recreation and other services sector (-2%).
3.2. Transitions

In 2016, the wholesale and retail sector accounted for the largest share of transitions (at 16%) followed by industry (14%) and the accommodation and food service sector (11%). (Figure 3.2)

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

- **Employment from inactivity**: the largest volume of transitions into employment from inactivity occurred in the wholesale/retail and accommodation/food sectors

- **Transitions within employment but from a different sector (Inter)**: movement into industry from other sectors accounted for the highest number of transitions followed by wholesale/retail and accommodation; many of the transitions were for movements between sectors but remaining in the same occupation

Source: SLMRU analysis of CSO LFS
• **Transitions within employment but from the same sector (Intra):** a large volume of movement occurred in 2016 for those changing employers but remaining in the same sector, particularly in wholesale/retail, industry, accommodation/food and health/welfare.

*Figure 3.2: Transitions by sector, 2016*

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, with a peak of 130,000 new hires in quarter 3 2017.

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5 It should be noted that a break in series occurred in the Labour Force Survey in quarter 3 2017 and the CSO advise that caution should be exercised when comparing data from before and after this period.
In quarter 4 2017, in line with the evidence from the transitions analysis, the wholesale/retail and accommodation/food services sectors recorded the highest number of recent hires (Figure 3.4). The number of recent job hires in these sectors far outweighs employment growth indicating that job churn is likely to be a significant contributory factor in vacancy notifications in these areas.

**Figure 3.3: Recent hires (000s) by quarter, 2014-2017**

![Graph showing recent hires by quarter from 2014 to 2017.](image)

*Source: Eurostat (*a break in series occurred in quarter 3 2017)*

**Figure 3.4: Recent hires by sector, quarter 4 2017**

![Bar chart showing recent hires by sector in quarter 4 2017.](image)

*Source: Eurostat*
### 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 3.5). The numbers have since increased steadily, and have surpassed the level recorded in 2008 to reach 18,900 in the second quarter of 2017.

**Figure 3.5: CSO vacancy numbers, quarter 1 2008 - quarter 3 2017**

![Graph showing CSO vacancy numbers from quarter 1 2008 to quarter 3 2017]

**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\(^6\). In terms of sectors, in quarter 4 of 2017, four sectors had a higher vacancy rate than the overall average of 1%, with professional activities having the highest rate at 2.9% (Figure 3.6).

\[^6\) Job Vacancy Rate = \(\frac{\text{Number of job vacancies}}{\text{Number of occupied jobs} + \text{Number of job vacancies}} \times 100\)
Between quarter 4 2012 and quarter 4 2017, the vacancy rates increased across all sectors, excluding the information and communication sector and administrative services (Figure 3.7). The largest increase occurred for professional activities which rose by 1.9 percentage points.
EU vacancy rates

According to Eurostat data, Ireland has one of the lowest vacancy rates across Europe, although this may be a reflection on the varied methods of data collection across the EU. In 2017, Ireland’s vacancy rate stood at 1.0% compared to a rate of 2.0% for the EU-28 countries overall (Figure 3.8). While the vacancy rate in Ireland increased since 2012 by 0.4 percentage points, the increases were higher in many European countries over the same period, such as the Netherlands, Hungary, Sweden and the UK.

Figure 3.8: Annualised vacancy rates across selected EU countries, 2012 and 2017

Source: Eurostat

*data is provisional for some countries

In terms of the vacancy rates by sector, the rates in the EU-28 countries overall were higher than in Ireland for a number of sectors, particularly in construction, administrative services and the accommodation and food services sectors. However, at 2.7%, the vacancy rate for the professional, scientific and technical activities sector was higher for Ireland than that of the EU-28 (at 2.5%).
Figure 3.9: Annualised vacancy rates in selected sectors in EU28 and Ireland, 2017*

Source: Eurostat
*data is provisional

3.5. Vacancy data

**IrishJobs.ie**

Professional, scientific and technical activities accounted for the highest share of vacancy notifications with IrishJobs.ie in 2017 followed by the financial activities, health and social work and information and communication sectors. As indicated in Figure 3.10, these notifications were primarily for professional and associate professional roles across these sectors.

**DEASP Jobs Ireland**

In 2017, vacancy notifications through DEASP Jobs Ireland were primarily in industry, administrative services, accommodation and food, along with the wholesale and retail sector (Figure 3.11). Vacancies were most likely to be in occupations such as skilled trades (e.g. welders, chefs, construction trades, butchers), elementary (cleaning, catering, general operatives), operatives (e.g. production operatives, drivers) and sales. While a large volume of vacancy notifications were for care workers (over a quarter of the total), further examination revealed that the vast majority of these vacancy notifications related to two
recruitment agencies. As such, these vacancies were excluded from further analysis as it was not possible to determine if these represented real job opportunities.

Figure 3.10: Vacancy notifications through IrishJobs.ie by sector and occupational group, 2017

Source: IrishJobs.ie
Figure 3.11: DEASP Jobs Ireland vacancy notifications by sector and occupational group, 2017

Source: DEASP Jobs Ireland

Sector
- Industry
- Administrative services
- Accommodation & food
- Wholesale & retail
- Construction
- Health & welfare
- Transport & storage
- Professional services
- Information & communications
- Education
- Financial activities
- Arts, ents & other services
- Public sector
Vacancies with language requirements

Vacancies with specific language requirements represented 2% of all DEASP Jobs Ireland notifications and 3% for IrishJobs.ie in 2017. For both data sources, the highest number of vacancies with language specifications occurred in the administrative and support services sector (mainly call centre activities). Language skills were also required in financial activities (e.g. account managers, underwriters, claims officers) and in ICT (e.g. tech support) (Figure 3.12). German was the most frequently mentioned language requirement followed by French, Dutch, and the Nordic languages (Figure 3.13).

Figure 3.12: Language skills requirements in vacancies by selected sector, 2017

Source: DEASP Jobs Ireland/IrishJobs.ie

Figure 3.13: Top language skills requirements, 2017

Source: DEASP 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 and are therefore not directly comparable. Only sectors which had a large enough volume of vacancy notifications to allow for meaningful analysis were included in this section.

**IrishJobs.ie:** Less than half (48%) of vacancy notifications stated the level of experience required in 2017; of these, almost two thirds required 2-6 years’ experience. Of the selected sectors in Figure 3.14, the wholesale and retail sector along with the health and administrative services sectors had the highest share of vacancy notifications 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.

**DEASP Jobs Ireland:** For all sectors in Figure 3.15, at least a half required experience of one year or less. This rose to 96% for vacancies in the health and social work sector. The accommodation and food sector had the largest share of vacancies which required 2-5 years’ experience, primarily related to vacancies for chefs.
IrishJobs.ie: The level of education required was stated in 49% of the notifications in 2017. Where level of education was stated, almost 60% of vacancies required a third level qualification; this was particularly the case in vacancies in ICT, industry and professional activities (Figure 3.16). The financial activities sector had the highest share of vacancies where postgraduate/professional qualifications were sought. The wholesale/retail sector had the highest share of vacancies requiring no minimum level of education.

DEASP Jobs Ireland: Third level qualifications were required in a limited share of vacancies, with the highest share in industry, at 7% (Figure 3.17). For most vacancy notifications, the highest level of education required was a FET qualification, with two thirds of vacancies in the transport and storage sector requiring no qualifications (relating primarily to stocktakers).
3.6. Recruitment Agency Survey of Difficult to Fill Vacancies (DTF)

Of the 120 recruitment agencies contacted, a total of 37 reported having vacancies which were proving difficult to fill in October 2017, with an insufficient number of skilled candidates the overarching reason for the difficulty. The main findings were as follows:

- demand for these skills and wage rates have both risen when compared to the situation one year previously
- difficult to fill vacancies in the information and communication sector continues to account for a significant share of overall DTF vacancies, at 42%, followed by posts in industry at 28% and the health and social work sector at 10%
- in terms of occupations, almost three quarters of all DTF mentions were for vacancies in professional posts; associate professional roles accounted for approximately 7%, and skilled trades for 5%
- experience was a key element of DTF vacancies, with 45% relating to posts requiring more than 5 years’ experience.

3.7. Job announcements

This report analyses approximately 20,000 jobs announced in the media in 2017 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 IT, industry, retail and financial activities.

3.8. Employment permits

The number of new employment permits issued has been increasing steadily in recent years, with a 22% increase in the year since 2016 (Figure 3.18). New permits issued for professional occupations accounted for the majority of this increase (Figure 3.19). In terms of sectors (Figure 3.20),
- the IT and health sectors accounted for the largest numbers of new permits in the period examined
- the rise in the number of new permits issued since 2016 were primarily related to increased demand in the IT and health/social work sectors, although growth was also observed for the financial sector
- the large increase 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 permits7, although the number of permits issued continues to grow strongly.

---

7 Over the period 2010 to 2013, non-EEA doctors entered the Irish labour market through channels other than the employment permit scheme.
*in 2017, these five sectors account for 91% of all new permits issued

Source: DBEI
Table 3.21: Key indicators of vacancy trends

<table>
<thead>
<tr>
<th>Professional, scientific &amp; technical</th>
<th>Numbers employed</th>
<th>Quarter 4 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3,700</strong></td>
<td><strong>-3%</strong></td>
<td><strong>3,700</strong></td>
</tr>
<tr>
<td><strong>3,600</strong></td>
<td><strong>-3%</strong></td>
<td><strong>3,600</strong></td>
</tr>
<tr>
<td><strong>7,300</strong></td>
<td><strong>4%</strong></td>
<td><strong>7,300</strong></td>
</tr>
<tr>
<td><strong>12,700</strong></td>
<td><strong>3%</strong></td>
<td><strong>12,700</strong></td>
</tr>
<tr>
<td><strong>23,600</strong></td>
<td><strong>6%</strong></td>
<td><strong>23,600</strong></td>
</tr>
<tr>
<td><strong>19,500</strong></td>
<td><strong>15%</strong></td>
<td><strong>19,500</strong></td>
</tr>
<tr>
<td><strong>12,600</strong></td>
<td><strong>42%</strong></td>
<td><strong>12,600</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Process &amp; project engineers</th>
<th>Key vacancies 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality roles – Q/A/QC</td>
<td><strong>135,100</strong></td>
</tr>
<tr>
<td>Financial accountants/analysts, data analysts</td>
<td><strong>-4%</strong></td>
</tr>
<tr>
<td>Recruitment requirement (Expansion + exits) - % of total/ number</td>
<td><strong>0%</strong></td>
</tr>
<tr>
<td>(Inter + Intra transitions, 2016) - % of total/ number</td>
<td><strong>8%</strong></td>
</tr>
<tr>
<td>Recruitment Agency Survey – DTF; October 2017</td>
<td><strong>6%</strong></td>
</tr>
<tr>
<td>CSO Job Vacancy rate Q4 2017</td>
<td><strong>2.9%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information &amp; communications</th>
<th>Key vacancies 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>116,500</strong></td>
<td><strong>3%</strong></td>
</tr>
<tr>
<td><strong>6,000</strong></td>
<td><strong>5%</strong></td>
</tr>
<tr>
<td><strong>31,500</strong></td>
<td><strong>8%</strong></td>
</tr>
<tr>
<td><strong>25,200</strong></td>
<td><strong>6%</strong></td>
</tr>
<tr>
<td><strong>19,500</strong></td>
<td><strong>0.4%</strong></td>
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<table>
<thead>
<tr>
<th>Key vacancies 2017</th>
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<tbody>
<tr>
<td>Process &amp; project engineers</td>
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<tr>
<td>Quality roles – Q/A/QC</td>
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<tr>
<td>Financial accountants/analysts, data analysts</td>
</tr>
<tr>
<td>Recruitment requirement (Expansion + exits) - % of total/ number</td>
</tr>
<tr>
<td>(Inter + Intra transitions, 2016) - % of total/ number</td>
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<tr>
<td>Recruitment Agency Survey – DTF; October 2017</td>
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<tr>
<td>CSO Job Vacancy rate Q4 2017</td>
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<td>Process &amp; project engineers</td>
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<tr>
<td>Quality roles – Q/A/QC</td>
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<tr>
<td>Financial accountants/analysts, data analysts</td>
</tr>
<tr>
<td>Recruitment requirement (Expansion + exits) - % of total/ number</td>
</tr>
<tr>
<td>(Inter + Intra transitions, 2016) - % of total/ number</td>
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<tr>
<td>Recruitment Agency Survey – DTF; October 2017</td>
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<tr>
<td>CSO Job Vacancy rate Q4 2017</td>
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<tr>
<td>Financial, insurance &amp; real estate</td>
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<tr>
<td>Health &amp; social work</td>
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<tr>
<td>Administrative &amp; support service</td>
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<tr>
<td>Wholesale &amp; retail trade</td>
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<td>Industry</td>
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<td>Industry</td>
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<td></td>
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<tr>
<td>Accommodation &amp; food services</td>
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<tr>
<td>Construction</td>
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<td>Education</td>
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<td>Transportation &amp; storage</td>
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<td>Public administration &amp; defence</td>
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<tr>
<td>Key vacancies: 2017</td>
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<tr>
<td>DSAP Jobs Ireland Vacancies 2017</td>
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<tr>
<td>Job Churn</td>
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</tr>
<tr>
<td>Recent Job hires 2017</td>
</tr>
<tr>
<td>IrishJobs.ie Vacancies 2017</td>
</tr>
<tr>
<td>Hiring Agency Survey – DTF;</td>
</tr>
<tr>
<td>Recruitment Agency Survey – DTF;</td>
</tr>
<tr>
<td>Employment change y-o-y - % of total/ number</td>
</tr>
<tr>
<td>Exits to inactivity 2016 - % of total/ number</td>
</tr>
<tr>
<td>Recruitment requirement (Expansion + exits) - % of total/ number</td>
</tr>
<tr>
<td>Inter &amp; Intra transitions, 2016 - % of total/ number</td>
</tr>
<tr>
<td>Share of vacancies</td>
</tr>
<tr>
<td>Shares of vacancies</td>
</tr>
<tr>
<td>Agriculture, forestry &amp; Fishing</td>
</tr>
<tr>
<td>Arts, entertainment, recreation &amp; other service</td>
</tr>
<tr>
<td>* refers to manufacturing only</td>
</tr>
</tbody>
</table>

* * refers to manufacturing only
4 Industry

Employment change: in quarter 4 of 2017, this sector had the second highest share of employment across all sectors, at 282,300 persons employed; the increase in employment since quarter 4 of 2016 was relatively modest (at 2%), whereas the five year growth since quarter 4 2012 has resulted in an additional 42,200 persons employed. (Figure 4.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>282,300</td>
<td>+4,500 (2% growth)</td>
<td>+42,200 (18% growth)</td>
</tr>
</tbody>
</table>

Vacancy rate: according to the Earnings Hours and Employment Cost Survey (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 0.5% in quarter 4 2017, after a peak of 0.8% in the second quarter of 2016. (Figure 4.2)

Transitions: at 14%, this sector had one of the highest shares of transitions in 2016, across all categories; furthermore, this sector had a higher share of transitions than the average for those moving into this sector (inter-occupational transitions) although further analysis suggests that for many of these transitions, the occupations remained unchanged. (Figure 4.3)

Recent job hires: according to Eurostat, there were approximately 10,000 recent job hires per quarter over the period between 2015 and 2017 in manufacturing (data was not available for the overall industry sector); with expansion in employment of less than 5,000 persons annually, this would suggest that a high level of churn is occurring in this sector. (Figure 4.5)

Employment permits: this sector accounted for 5% of all new employment permits issued in 2017, a fall from an 8% share in 2016; a half of all new permits issued were for critical skills (Figure 4.4), with most (72%) relating to professional occupations including:  

---

8 Recent job hires refer to those who have been with their employer for less than three months.
- engineers (automation, product development, validation, software)
- quality manager
- scientists (including research, chemists), technologists.

A quarter of permits were issued for posts with a salary of €70,000 or above; a further 35% for salaries less than €40,000.

**DEASP Jobs Ireland:** industry accounted for 11% of all DEASP Jobs Ireland vacancies in 2017. A quarter of all vacancies were for positions in Dublin, with a further 12% each in the Border, Mid East and South West regions. In addition, 8% were for outside of Ireland (primarily New Zealand).

<table>
<thead>
<tr>
<th>Professionals</th>
<th>(6% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engineers (including quality, and design)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate professionals</th>
<th>(7% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technicians (electronic/electrical, quality), purchasing/buyers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skilled trades</th>
<th>(36% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Welders (MIG/TIG), fitters (mechanical, maintenance), CNC programmers/ operators, fabricators (steel, sheet metal), service engineers, toolmakers</td>
</tr>
<tr>
<td></td>
<td>Cabinet makers, confectioners/bakers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operatives</th>
<th>(24% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production operatives (including food, boners/trimmers)</td>
</tr>
<tr>
<td></td>
<td>Truck and forklift drivers (with Reach and Rigid)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elementary</th>
<th>(24% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General operatives/labourers (primarily in the agri-food sector)</td>
</tr>
</tbody>
</table>

**IrishJobs.ie:** 5% of all IrishJobs.ie vacancies in 2017 were for this sector, with a 9% increase on the previous year (primarily related to professional and skilled trades roles).

<table>
<thead>
<tr>
<th>Managers</th>
<th>(10% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production, manufacturing, and operations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professionals</th>
<th>(30% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primarily engineers (quality but also process, project, manufacturing, production)</td>
</tr>
<tr>
<td></td>
<td>Regulatory affairs specialists, scientists, technologists (including NPD and NPI)</td>
</tr>
</tbody>
</table>
**Associate professionals**  
(26% of vacancies)  
- Technicians (quality, process, manufacturing, systems, laboratory)  
- Planners (supply chain/production), buyers

**Skilled trades**  
(10% of vacancies)  
- Maintenance technicians

**Operatives**  
(9% of vacancies)  
- Production, manufacturing, process, quality control

**Other**  
- Production supervisors, supply chain administration, warehouse operatives

**DTF:** 28% of all difficult to fill vacancies were for this sector, primarily for professional roles:  
- engineers (quality control and assurance, process, validation, chemical and design) and scientists (chemical, biological and R&D)  
- supply chain (managers, administrators and analysts), software developers  
- other: welders (TIG/MIG and Arc), accounts clerks, customer services/technical support (with languages), general operatives in high tech manufacturing, deboners, forklift drivers.

**Job announcements:** this sector accounted for one of the most frequently occurring sectors for job announcements in the media in 2017, with the majority of announcements relating to pharmaceutical manufacturing and to a lesser degree, to the manufacture of steel, electronics, pharma equipment, food and chemicals. The positions announced spanned a range of occupations including  
- scientists/chemists, quality assurance/control  
- engineers (including mechanical, electrical, systems, quality)  
- roles in finance, HR, IT (including data analysts and software designers), supply chain and sales and marketing  
- aircraft technicians and mechanics.
Conclusions: the labour market indicators related to this sector paint a conflicting picture. While CSO vacancy rates are low and recent employment growth has been slow, occupations in this sector feature strongly in the notified vacancies and over a quarter of all identified difficult to fill vacancies were in this sector. Growth in this sector relates primarily to professionals and operatives, but with slightly different patterns for each of these occupational groups. For professional occupations, such as engineers and scientists, filling vacancies is proving extremely difficult although the numbers involved are relatively small and the skills required are niche. On the other hand, for operatives (such as food and process), churn is a significant factor, resulting in an inflated number of vacancy notifications when compared to actual growth in the area. The high volume of job announcements in this sector indicates that both growth and vacancy notifications will be strong in the short to medium term.

Key trends in Industry

Figure 4.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS

Figure 4.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data
**Figure 4.3: Transitions, 2016**

Source: SLMRU analysis of CSO QNHS

**Figure 4.4 Employment permits in industry, 2017**

Source: DBEI

**Figure 4.5: Recent hires in manufacturing (000s), 2015 - 2017**

Source: Eurostat (Ireland data)
5 Wholesale and retail trade

**Employment change:** this sector had the largest number of employees across all sectors over the period examined since 2008; the numbers employed increased by 2% in the year since quarter 4 2016 (compared to 3% nationally), representing an increase of 5,600 persons. (Figure 5.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>308,900</td>
<td>+5,600 (2% growth)</td>
<td>+30,500 (11% growth)</td>
</tr>
</tbody>
</table>

**Vacancy rates:** the vacancy rate stood at 0.7% in quarter 4 2017 (Figure 5.2), 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 16%, this sector accounted for the highest share of all employment transitions in 2016; in absolute terms this sector accounted for the highest number of transitions across each transition type (excluding inter); the sector had a higher share entering employment from inactivity than the average for all sectors. (Figure 5.3)

**Recent job hires:** at 18%, this sector accounted for the highest share of recent job hires with over 70,000 new hires over the four quarters of 2017, compared to 60,000 in 2015 (Figure 5.4). When compared to an annual expansion of employment of 5,600 since quarter 4 2016, this indicates that a significant level of churn is occurring in this sector.

**Employment permits:** this sector accounted for 1% of all new permits issued in 2017 (e.g. business sales executives, contact centre agents).

**DEASP Jobs Ireland:** this sector accounted for 8% of all vacancies notified to DEASP Jobs Ireland in 2017, with vacancies occurring nationwide. Overall the vacancies in this sector required relatively little job experience (67% required 0-1 years’ experience) with over 40% of vacancies not requiring any level of qualification.
### Sales & customer service (53% of vacancies)
- Sales assistants (retail (e.g. convenience stores, petrol stations, supermarkets), counter, including deli and pharmacy)
- Sales representatives (including field and inside sales), telesales agents

### Skilled trades (31% of vacancies)
- Butchers (retail and food processing), boners/trimmers
- Mechanics (HGV, car), vehicle body repairers/panel beaters
- Florists

**IrishJobs.ie:** 6% of all IrishJobs.ie vacancies in 2017 were relating to this sector.

### Managers (11% of vacancies)
- Retail/store managers, procurement managers

### Professionals (5% of vacancies)
- Pharmacists, scientists (food technology)

### Associate professionals (53% of vacancies)
- Sales executives/representatives, sales/business developers, account managers, field/area sales agents, inside sales
- Employment advisors, buyers, supply chain analysts

### Administrative (8% of vacancies)
- Sales/purchasing administrators

### Sales & customer service (17% of vacancies)
- Retail sales assistants
- Telesales/customer service executives, collection agents

**DTF:** this sector accounted for 2% of all difficult to fill vacancies, limited to marketing and sales executives, telesales agents, supply chain administration and accounts clerks.

**Job announcements:** this sector accounted for the third highest share of job announcements in 2017 after IT and industry; job announcements were nationwide, primarily for sales assistants and those involved in food preparation, along with sales and marketing roles.
Conclusions: the majority of employment opportunities in this sector are arising due to replacement rather than expansion demand. While employment grew by almost 6,000 persons in the year since quarter 4 2016, there were over 70,000 recent job hires over the same period. Most vacancies relate to sales assistants and sales executive roles with no minimum qualifications or experience required for a large share of positions advertised.

Key trends in the wholesale and retail sector

Figure 5.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS
Figure 5.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 5.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 5.4: Recent hires in wholesale and retail trade, 2015 - 2017

Source: Eurostat (Ireland data)
6 Construction

Employment change: employment in this sector continues to grow steadily, with a 10% growth in the year between quarter 4 2016 and quarter 4 2017 (compared to 3% nationally), resulting in an additional 12,000 persons employed. While employment numbers grew by almost 50,000 over the previous five year period, employment levels still remain significantly below pre-recession levels. (Figure 6.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>133,200</td>
<td>+12,000 (10% growth)</td>
<td>+48,100 (57% growth)</td>
</tr>
</tbody>
</table>

Vacancy rate: despite the recent employment growth in this sector, the vacancy rate remains below the overall vacancy rate for all sectors, at 0.5% in quarter 4 2017. (Figure 6.2)

Transitions: 9% of all transitions in 2016 were in this sector; at 27%, the share entering employment from unemployment was the highest for all sectors; the share (and volume) of transitions moving into this sector from other sectors (inter) has grown considerably since 2014, from 12% to 31%, indicating increased confidence in the sector with migration from other sectors. (Figure 6.3)

Recent job hires: this sector accounted for 7% of all recent job hires over the four quarters in 2017, with approximately 26,000 new hires, similar to that of 2016. (Figure 6.4)

Employment permits: were limited in this sector, accounting for only 0.5% of new permits in 2017, with skilled trades occupations remaining on the list of ineligible occupations⁹, although they did occur for a small number of professional occupations such as quantity surveyors and project managers.

**DEASP Jobs Ireland:** this sector accounted for 8% of notified vacancies in 2017, although almost a third of vacancies were for positions outside of Ireland (primarily New Zealand); the analysis below focuses only on those vacancies for positions based in Ireland.

- Recruitment agencies continue to have a significant presence for vacancies in this sector; therefore, it is difficult to gauge the exact level of demand.
- Over 50% of vacancies advertised required 0-1 years’ experience and only 20% required a Level 6 or higher qualification (equivalent to a National Craft Certificate).
- Almost all vacancies were for full-time positions.

<table>
<thead>
<tr>
<th>Skilled trades</th>
<th>Operatives</th>
<th>Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(63% of all vacancies)</td>
<td>(15% of all vacancies)</td>
<td>(18% of all vacancies)</td>
</tr>
<tr>
<td>Electricians (40% were vacancies for apprentices)</td>
<td>Scaffolders (basic/advanced), pavers, maintenance workers</td>
<td>General operatives/labourers primarily on construction sites (requiring safe pass cards)</td>
</tr>
<tr>
<td>Carpenters (including shuttering carpenters and kitchen/shop fitters)</td>
<td>Drivers: mobile/tower crane, digger/dumper</td>
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<tr>
<td>Plumbers (including industrial plumbers)</td>
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<tr>
<td>Other trades: bricklayers/stone masons, painters/decorators, roofers/tilers, steel fabricators/fixers/erectors, plasterers</td>
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<td></td>
</tr>
</tbody>
</table>

**IrishJobs.ie:** this sector accounted for 3% of notifications in 2017 for positions including quantity surveyors, project managers, site/structural engineers, BIM/Revit technicians, electrical engineers/supervisors, mechanical engineers and facilities engineers.

**DTF:** 7% of all difficult to fill vacancies were for this sector, primarily for professional and skilled trades roles, in areas including:

- quantity surveyors
- engineers (structural, site, building services, electrical), construction project managers
- steel erectors/fixers, shuttering carpenters, pipe layers, curtain wallers
- drivers (forklift, site dumper), scaffolders.
Job announcements: Construction jobs announced in the media in 2017 were limited, and related to temporary positions due to the construction or expansion of buildings related to the pharmaceutical sector. 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 is continuing to experience significant growth, with 12,000 additional jobs created in the year since quarter 4 2016. Most of this growth relates to skilled trades roles such as plumbers, carpenters and painters. Issues with the supply of suitable candidates are emerging, although at present this is limited to professional occupations such as quantity surveyors and engineers with a high level of experience. If employment growth continues at this pace, and in particular if growth occurs in the more labour intensive residential sector, difficulties in filling vacant posts will be expected to intensify, particularly for skilled tradespersons.

Key trends in the construction sector

Figure 6.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS
Figure 6.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 6.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 6.4: Recent hires in construction, 2015 - 2017

Source: Eurostat (Ireland data)
7 Accommodation and food services

Employment change: this sector has experienced steady employment growth in the five years since quarter 4 2012, with an additional 46,400 persons employed. More recently, this sector experienced a 9% growth in the numbers employed in the year since quarter 4 2017. (Figure 7.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>169,200</td>
<td>+13,700 (9% growth)</td>
<td>+46,400 (38% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: while the vacancy rate for this sector remains below that for all sectors, at 0.6% in quarter 4 2017, the number of vacancies recorded has been increasing since the beginning of 2017. (Figure 7.2)

Transitions: at 11%, this sector had the third highest share of transitions in 2016; over a third of transitions into the sector occurred for those previously classified as inactive, above the overall share for all sectors (24%), while the share of those entering employment from other sectors (inter) has grown strongly from 11% in 2015 to 27% in 2016. (Figure 7.3)

Recent job hires: this sector had the second highest share of recent new hires in 2017, with an average of 14,300 recent hires reported each quarter; this compares to an average of 12,300 per quarter in 2016.(Figure 7.4)

Employment permits: this sector accounted for 3% of all new permits issued in 2017, most of which were general permits and were primarily related to ethnic chefs; 97% of new permits issued for this sector were for positions with salaries of less than €40,000. The Employment Permits (Amendment) Regulation 2018, effective from the end of March 2018, will allow for chefs outside of ethnic chefs to avail of the employment permit system; this will most likely result in an increase in the number of permits issued in this sector.
DEASP Jobs Ireland: this sector accounted for 9% of notified vacancies in 2017.

- The vacancies were spread across the country; while Dublin accounted for a quarter of all vacancies, there was also a high share in Cork, Kerry and Galway.
- The level of experience required varied across occupations; at least 50% of vacancies for head/sous chef and chef de partie required at least 3 years’ experience, compared to 5% for commis chefs.
- A third of all vacancies in this sector did not require any specific qualification level.

<table>
<thead>
<tr>
<th>Chefs &amp; cooks (47% of vacancies)</th>
<th>- Head chefs were the most frequently mentioned type of chef, followed by sous, chef de partie and commis chefs; there were also vacancies for general cooks and breakfast/pizza/pastry chefs; many ethnic chefs were required, mainly Indian and Chinese</th>
</tr>
</thead>
</table>
| Elementary (47% of vacancies)    | - Kitchen and catering assistants and porters, but also baristas  
- Waiters/waitresses, bar staff  
- Night porters |
| Managers (5% of vacancies)       | - Restaurant and F&B (food & beverage) managers |

IrishJobs.ie: this sector accounted for 2% of notified vacancies in 2017, with positions including:

- chefs (head, chef de partie, sous, commis)
- catering assistants/baristas.

DTF: 2% of all difficult to fill vacancies reported in October 2017 were for this sector in areas including:

- chefs
- management (e.g. hotel, restaurant, facilities, leisure, bar)
- sales executives, receptionists.
**Job announcements:** there were comparatively few job announcements in the media for positions in accommodation, fast food establishments and cafés in 2017; the jobs announced were chiefly for hotel staff and catering assistants.

**Conclusions:** this sector has experienced strong employment growth in recent years, although the labour market indicators also point to a high level of churn occurring (both the transitions analysis and the recent job hires data). While chefs contributed to some of this growth, most of the increase related to elementary occupations (such as waiters, catering assistants etc.). Most notified vacancies in this sector in 2017 related to chefs and hospitality staff. The changes to the legislation in relation to employment permits for chefs may see shortages alleviate somewhat in this area, although vacancy notifications in this sector are expected to continue to be high in volume due to the high level of churn occurring.

**Key trends in the accommodation and food service sector**

**Figure 7.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017**

![Graph showing employment trends](image)

*Source: SLMRU analysis of CSO LFS*
Figure 7.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 7.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 7.4: Recent hires in accommodation and food services, 2015 - 2017

Source: Eurostat (Ireland data)
8 Information and communications

Employment change: there was a 3% increase in employment in this sector between quarter 4 2016 and quarter 4 2017, representing an additional 3,700 persons; this increase was in line with the national level of growth. (Figure 8.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>116,500</td>
<td>+3,700 (3% growth)</td>
<td>+18,900 (19% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: the vacancy rate for this sector continues to be far higher than that for all sectors, although the rate fell to 1.5% in quarter 4 2017, from a peak of 2.9% in the third quarter of 2015. (Figure 8.2)

Transitions: this sector accounted for 3% of all transitions in 2016; the share of transitions was broadly in line with that for all sectors combined, although the share of transitions for those already employed in the sector (intra) was higher at 32% (compared to 27% overall), indicating a propensity to move between jobs in this sector. (Figure 8.3)

Recent job hires: a total of 23,600 recent job hires were recorded over the four quarters of 2017, accounting for 6% of overall recent hires; there was on average 5,900 recent hires each quarter in 2017 compared to 4,400 hires per quarter in 2016. (Figure 8.5)

Employment permits: at 38%, this sector accounted for the highest share of new employment permits in 2017; the number of permits issued has been increasing steadily in recent years, with a 16% increase in the year since 2016. Of those issued in 2017

- 70% were for critical skills permits, a further 13% were general permits and 10% for intra-company transfers (Figure 8.4) in the following occupations
  - professional occupations (e.g. software engineers/developers, data analysts/scientists, business analysts (including IT, systems), test/network engineers, consultants in SAP, Oracle, CRM)
• associate professional roles (e.g. a number of sales roles such as account managers/strategists and marketing specialists, many with language skills required such as Arabic, Russian and Turkish)

- over 80% of permits were issued for employment in the Dublin area with a further 6% issued for Cork
- over a half of new employment permit holders held a third level degree with a further third being holders of postgraduate qualifications
- two fifths were for positions earning between €30,000 and €49,999 with a further 37% earning €60,000 or above
- almost a half of new permit holders originated from India, with a further 35% from a combination of USA, Brazil, Egypt, Turkey, Russia and China.

**IrishJobs.ie:** this sector accounted for 14% of notified vacancies in 2017, an increase of 12% on the previous year, primarily related to vacancies for professional roles.

<table>
<thead>
<tr>
<th>Professionals (55% of vacancies)</th>
<th>Associate professionals (27% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Software engineers/developers (with Java, Oracle, SQL, UX/UI, .NET)</td>
<td>• Systems/database administrators</td>
</tr>
<tr>
<td>• Architects (solutions, technical, data, cloud)</td>
<td>• Data analysts</td>
</tr>
<tr>
<td>• Security (engineer, analysts, managers, cyber)</td>
<td>• Automation (engineer, test, software, technical)</td>
</tr>
<tr>
<td>• Other engineers (systems, support, infrastructure, test, QA)</td>
<td>• Product managers</td>
</tr>
<tr>
<td>• Business analysts (with SAP, Agile, Scrum)</td>
<td>• Technical/helpdesk support (language skills often a requirement)</td>
</tr>
<tr>
<td>• IT project managers; applications/web developers; delivery managers (programme/ service)</td>
<td>• UX/UI designers</td>
</tr>
</tbody>
</table>
DEASP Jobs Ireland: this sector accounted for 3% of all vacancies advertised through the DEASP Jobs Ireland website in 2017. Of these,

- over a half of the vacancies were for positions in Dublin
- almost all vacancies were for full-time positions
- experience was key for professional roles with 54% requiring at least 2 years’ experience, compared to 14% for all other IT related vacancies
- only 20% of vacancies did not require a level of qualification, with over a quarter requiring a third level qualification.

<table>
<thead>
<tr>
<th>Professionals (33% of vacancies)</th>
<th>Associate professionals (67% of vacancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software developers (web, Ruby, PHP, Stack, .NET, JavaScript) graphic/web designers, IT managers, video games testers (with languages)</td>
<td>Technical support (with languages) Administrators (systems, network)</td>
</tr>
</tbody>
</table>

DTF: 42% of all difficult to fill vacancies in October 2017 were for this sector, with professional roles in software development accounting for the majority. A detailed list of roles is provided in Appendix A; in summary:

- software developers: database (with Oracle/SQL), web, UX/UI, cloud, mobile (iOS/Android); with skills in Java, JavaScript, C++, and .Net the most frequently mentioned
- engineers: network (Linux, Open Source), QA automation, test, CVS, internet protocol engineers, information security analysts
- systems/solutions architects, IT project/business development managers
- business intelligence: BI solutions, big data analysts (e.g. Hadoop, SQL), accountants
- technical support and sales with languages.

Job announcements: this sector accounted for over a quarter of all job announcements made in 2017; most were for positions based in Dublin and while most of the job mentions were for IT skills, there were also a substantial number of jobs announced across a range of roles including:
• software engineers/developers, data analytics, systems integration, robotics, R&D, project managers, roles in animation

• business analysts, business development, finance roles, sales and marketing (including inside sales)

• customer/technical support.

**Conclusions:** although recent employment growth for this sector has been relatively slow (+3,700 persons between quarter 4 2016 and quarter 4 2017), we should be cognisant that employment of IT personnel occurs across numerous sectors, as evidenced in the vacancy analysis. All labour market indicators for this sector point to significant activity – a relatively high vacancy rate (reported by the CSO), a high share of difficult to fill vacancies, along with a high volume of vacancy notifications on IrishJobs.ie. Job announcements in the media also indicate that demand for IT professionals will continue in the short to medium term. However, with over 23,000 recent job hires in 2017, it should be noted that churn is a significant factor in this sector and may be inflating the volume of vacancy notifications. This sector also continues to be dependent on the employment permit system, with the number of new permits issued increasing annually, and 3,500 new permits issued in 2017.
Key trends in the information and technology sector

**Figure 8.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017**

![Graph showing employment by sector from 2008 to 2017.]

**Source:** SLMRU analysis of CSO LFS

**Figure 8.2: CSO Job Vacancies Rates, 2008-2017**

![Graph showing job vacancies rates from 2008 to 2017.]

**Source:** SLMRU analysis of CSO EHECS data

**Figure 8.3: Transitions, 2016**

![Graph showing transitions in employment from 2016.]

**Source:** SLMRU analysis of CSO QNHS

**Figure 8.4: Employment permits by type, 2017**

![Pie chart showing employment permits by type.]

**Source:** DBEI
Figure 8.5: Recent hires in information and communications, 2015 - 2017

Source: Eurostat (Ireland data)
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 2012 and quarter 4 2017, employment grew by 2%, although a decline occurred in the most recent time period (in the year since quarter 4 2016). This decline is due to a fall in the number of persons employed in administrative roles and is offsetting increases in employment particularly in associate professional roles. (Figure 9.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>106,300</td>
<td>-1,600 (1% decline)</td>
<td>+1,800 (2% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: this sector has had one of the highest vacancy rate across all sectors in recent years; in quarter 4 2017, this rate stood at 2.4%, compared to 1.0% for all sectors (Figure 9.2); it also had the third highest number of vacancies in 2017 after the health sector and professional activities.

Transitions: this sector accounted for 3% of all transitions in 2016; there was a lower share of transitions entering employment from unemployment/inactivity than the total for all sectors, and at 41%, the highest share of those transitioning within the same sector, indicating a high level of churn. (Figure 9.3)

Recent job hires: the number of recent job hires was too small to report a timeseries for this sector over the time period from 2015 to 2017, with approximately 3,200 new hires recorded in quarter 4 2017.

Employment permits: this sector accounted for 9% of new permits issued in 2017 with a 50% increase since 2016. Of these:

- over two-thirds were for critical skills employment permits (Figure 9.4)
- permits were issued primarily for professional and associate professional roles in:
  - financial: accountants/auditors, analysts (financial, risk, business, data)
  - IT: developers (application, java), engineers (software, test)
- a half of all new permits were issued for holders of degrees with a further 46% holding postgraduate qualifications
- 95% were for positions in Dublin
- 30% were for persons from India with a further third for those from USA, Philippines and South Africa combined
- almost all new permits for managers were for salaries of €50,000 or more, compared to approximately 45% for professional and associate professional positions.

**DEASP Jobs Ireland:** this sector accounted for 1% of all notified vacancies in 2017, primarily for accounts managers (with Nordic languages), but also for various financial administrative roles and customer care with languages.

**IrishJobs.ie:** this sector accounted for 12% of all notified vacancies in 2017; a 5% increase was observed on the previous year, relating to increases for administrative roles.

<table>
<thead>
<tr>
<th>Professionals (22% of vacancies)</th>
<th>Analysts/managers – risk, operations (mainly CIB*), business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compliance/regulatory reporting managers</td>
</tr>
<tr>
<td></td>
<td>Financial accountants, actuarial associates</td>
</tr>
<tr>
<td></td>
<td>Software developers/engineers, data architects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate professionals (35% of vacancies)</th>
<th>Data analysts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compliance officers</td>
</tr>
<tr>
<td></td>
<td>Underwriters, insurance advisor/broker, claims officers (with languages), financial advisors (in insurance companies)</td>
</tr>
<tr>
<td></td>
<td>Mortgage specialists, credit analysts, investment analysts, tax specialists</td>
</tr>
<tr>
<td></td>
<td>Transfer agency managers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative (23% of vacancies)</th>
<th>Fund accountants, internal auditors, financial/payroll administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pensions administrators, claims handlers</td>
</tr>
<tr>
<td></td>
<td>Sales advisor (in banking/insurance)</td>
</tr>
<tr>
<td></td>
<td>AML** administrators, transfer agency administrators</td>
</tr>
</tbody>
</table>
Other
- Vice presidents, financial managers
- Customer/client services advisors, collection specialists (with languages)

*CIB = corporate & investment bank; **AML = anti-money laundering

**DTF**: this sector accounted for 4% of all difficult to fill vacancies in October 2017, primarily in professional and associate professional roles including:
- accountants (corporate finance, compliance)
- legal (corporate solicitors, data protection)
- recruitment specialists, risk analysts
- fund accountants, debt collection agents
- telesales with languages.

**Job announcements**: this sector accounted for approximately 15% of the job announcements that appeared in the media in 2017; the roles were across a number of areas including:
- financial managers (middle and back office, wealth, asset), compliance and risk, fund accounting, financial analysts
- high end IT, tech specialists, programmers/developers
- sales, legal, HR, customer support

Almost a half of the announcements were Dublin based with the remainder spread around the country including Limerick, Galway, Louth and Kilkenny.
**Conclusions:** employment growth in associate professional roles in the financial sector in recent years has been offset by a decline in the numbers employed in administrative roles. Despite this, the CSO vacancy rate is one of the highest in Ireland and a large volume of vacancies were notified in 2017 through IrishJobs.ie. Some level of churn is in evidence: transitions being highest for those moving jobs within the sector, with 4,000 recent job hires on average per quarter in 2017. Occupations in this sector featured strongly in the employment permit data and job announcements in the media indicate that vacancy notifications for positions in this sector are likely to continue.
Key trends in the financial, insurance and real estate sector

Figure 9.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS

Figure 9.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 9.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 9.4: Employment permits by type, 2017

Source: DBEI
10 Health and social work

Employment change: at 281,000 persons employed, this sector accounted for 13% of all employment in Ireland in quarter 4 2017; although employment numbers grew in the five years since quarter 4 2012, this sector experienced just a 1% growth in employment in the year since quarter 4 2016. (Figure 10.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>281,000</td>
<td>+2,100 (1% growth)</td>
<td>+22,700 (9% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: vacancy rates for this sector have been above or equal to the rate for all sectors since the end of 2015, with a rate in quarter 4 2017 of 1.2%. The number of vacancies recorded has also increased with this sector accounting for the highest number of vacancies according to the EHECS data. (Figure 10.2)

Transitions: this sector accounted for 8% of all transitions in 2016; 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. (Figure 10.3)

Recent job hires: this sector accounted for 9% of all recent hires in 2017 with on average 8,600 new hires each quarter, similar to that of 2016. (Figure 10.5)

Employment permits: in 2017, 35% of all new employment permits were issued for this sector, with an increase of 46% since 2016. Of these:

• almost all (94%) were for professional occupations: doctors (including registrars and senior house officers) in surgery, emergency medicine, anaesthesiology, paediatrics, psychiatry and orthopaedics; nurses (primarily staff nurses)

• a half were general permits (primarily doctors), 45% were critical skills permits (mainly nurses) with dependant/partner/spouse permits accounting for 5% (for healthcare assistants) (Figure 10.4)

• over half were for positions with a salary of between €30,000 and €39,999

• two thirds were degree holders with a further 19% for postgraduate qualifications holders
• new permit holders were primarily from India (32%), the Philippines (18%) and Pakistan (13%)
• 40% of new permits issued were for positions in Dublin with the remainder spread across all other regions.

**DEASP Jobs Ireland:** this sector accounted for 32% of all vacancies advertised through the DEASP Jobs Ireland website in 2017; however, two companies alone accounted for four fifths of these notifications in roles including healthcare assistants and care workers; these companies are excluded from any further analysis as it was not possible to determine the extent to which these vacancies represented tangible job opportunities. Of the remainder, accounting for 7% of total notifications:

| Personal services (73% of vacancies) | • Care workers/healthcare assistants (providing care both in the home and in nursing homes); at least half were part-time positions, with 0-1 years' experience specified in 92% of notifications and a minimum of NFQ level 5 qualification required for half of the positions
• Childcare workers and childminders
• Dental nurses |
| Professionals (22%) | • Nurses (staff, registered, midwives), doctors |
| Associate professionals (4%) | • Massage/spa therapists, community/youth support workers |

**IrishJobs.ie:** this sector accounted for 10% of all vacancies advertised in 2017, an increase of 18% on the previous year, primarily for positions in nursing.

| Professionals (51% of vacancies) | • Nurses, primarily for staff and clinical nurses, and to a lesser extent, theatre, mental health, oncology and community nurses
• Doctors, radiographers, pharmacists, physiotherapists, medical scientists, psychologists, occupational therapists, speech & language therapists, social workers, dieticians |
| Associate professionals (13% of vacancies) | • Support workers, physiologists (cardiac, respiratory), radiation therapists, pharmacy/pharmaceutical technicians, fundraisers |
| Personal services (19%) | • Care workers, healthcare assistants |
DTF: the health and social work sector accounted for 10% of all difficult to fill vacancy mentions in October 2017, primarily for professional roles:

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

Job announcements: job announcements in the media were limited for this sector and related primarily to registered nurses and healthcare assistants, with a small number of IT roles for a digital health service.

Conclusions: although employment growth has been small in absolute terms, demand for healthcare workers remains strong with all indicators pointing to a demand for these skills. Employment permits continue to be required to bridge the skills gap for professionals in this sector. For care workers, demand is more difficult to determine as the data is skewed by a high volume of vacancy notifications through recruitment agencies that may not represent real job opportunities. The high number of recent job hires in 2017 (34,000) indicate that job churn is a significant contributor to the number of vacancies notified in this sector.
Key trends in the health and social work sector

Figure 10.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS

Figure 10.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 10.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 10.4: Employment permits by type, 2017

Source: DBEI
Figure 10.5: Recent hires in health and social work, 2015 - 2017

Source: Eurostat (Ireland data)
11 Professional, scientific and technical activities

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

**Employment change:** this sector experienced a 4% decline in employment numbers in the year since quarter 4 2016, resulting in a net loss of 5,700 persons employed; however, over the five year period from quarter 4 2012, this sector grew by 24%. (Figure 11.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>135,100</td>
<td>-5,700 (4% decline)</td>
<td>+25,900 (24% growth)</td>
</tr>
</tbody>
</table>

**Vacancy rates:** this sector has consistently had a higher vacancy rate than that for all sectors, and has seen considerable growth since the beginning of 2016; this has resulted in a rate of 2.9% in quarter 4 2017, the highest rate across all sectors (Figure 11.2). The number of reported vacancies has also risen from an average of approximately 1,000 per quarter in 2014 to over 2,000 per quarter in 2017.

**Transitions:** this sector accounted for 7% of all transitions in 2016, with a high share (41%) entering employment from other sectors (although further analysis suggests that for the most part, it was for the same occupation). (Figure 11.3)

**Recent job hires:** this sector accounted for 6% of all recent job hires in 2017 with a total of 25,200 new hires over the four quarter; this indicates that recruitment is occurring despite an overall decline in the employment numbers over the same period. (Figure 11.4)

**Employment permits:** in 2017, only a small number of new permits were issued for this sector, although employment permits have been issued for other sectors for many of the job titles detailed in the vacancy analysis below.

**IrishJobs.ie:** at 36%, this sector accounted for the highest share of vacancies reported through IrishJobs.ie in 2017 and indeed over the previous five years. In terms of sub-sectors, the vacancies were distributed as detailed below.
<table>
<thead>
<tr>
<th>Sub-sectors</th>
<th>Share of vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering &amp; Utilities</td>
<td>26%</td>
</tr>
<tr>
<td>Science, Pharmaceutical &amp; Food</td>
<td>24%</td>
</tr>
<tr>
<td>Accountancy &amp; Finance</td>
<td>29%</td>
</tr>
<tr>
<td>HR &amp; Recruitment</td>
<td>8%</td>
</tr>
<tr>
<td>Marketing</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Managers** (6% of vacancies)
- Operations, finance, HR, engineering
- Engineering: primarily project and process engineers but also R&D, quality, validation, design, manufacturing, mechanical and structural
- Science: QA and QC chemists/analysts/scientists in pharma; validation, regulatory affairs and compliance; microbiologists; technologists (food, NPD*, RD&A, product)
- Accountancy & finance: accountants (mainly financial but also management), business analysts, risk managers
- Misc: learning and development managers, legal counsel

**Professionals** (33% of vacancies)
- HR: generalists, specialists, and executives; recruiters; learning and development managers/advisors
- Science: technical specialists, supply chain planners, quality technicians
- Engineering: commissioning & qualification (C&Q) engineers, field service technicians, technicians (CAD, process, electrical)
- Financial: financial analysts/controllers, audit managers, tax managers
- Other: marketing managers (digital marketing, brand, product), health & safety officers

**Associate professionals** (33% of vacancies)
- Financial – accounts assistants, fund accountants, accounts payable/receivable, financial administrators, payroll administrators, credit controllers
- HR administrators, quality officers, document controllers, legal secretaries
**Skilled trades**
(7% of vacancies)
- Validation and maintenance engineers
- Technicians (calibration, maintenance, instrumentation), maintenance fitters

**Operatives (5%)**
- Automation engineers, process specialists/supervisors

*NPD=New Product Development

**DEASP Jobs Ireland:** this sector accounted for 4% of all vacancies in 2017; of these, a fifth were for positions outside of Ireland (mainly New Zealand) which are excluded from the analysis below.

<table>
<thead>
<tr>
<th>Associate professionals</th>
<th>Professionals</th>
<th>Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>(52% of vacancies)</td>
<td>(19% of vacancies)</td>
<td>(25%)</td>
</tr>
<tr>
<td>- Sales and marketing (fundraisers, business development, marketing)</td>
<td>- Accountants, project managers</td>
<td>- Accounts assistants, payroll administrators, bookkeepers</td>
</tr>
<tr>
<td>- CAD technicians/kitchen designers, graphic designers</td>
<td>- Structural/civil/site engineers, quantity surveyors, architects</td>
<td></td>
</tr>
<tr>
<td>- Recruitment consultants, employment advisors, HR generalists</td>
<td>- Interpreters, accounting technicians</td>
<td></td>
</tr>
<tr>
<td>- Interpreters, accounting technicians</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DTF:** this sector accounted for less than 1% of all difficult to fill vacancies in October 2017. Most mentions were in accountancy and sales.

**Job announcements:** announcements in the media in 2017 for this sector were limited to one company with jobs for food scientists/technologists and those with culinary experience.
Conclusions: despite recent declines in employment numbers, the five year growth was strong for this sector (+26,000 persons). The vacancy rate has been rising steadily since the beginning of 2016, with this sector having the highest rate by the end of 2017. This sector features strongly in the IrishJobs.ie data primarily for professional and associate professional roles. Many of the vacancy notifications for this sector are for occupations which span a number of other sectors such as engineers, HR, financial analysts, accountants and financial administrators. As such, although this sector does not feature strongly in the difficult to fill vacancy analysis or the employment permit data, these occupations have been identified as being in high demand in other sectors.

Key trends in the professional, scientific and technical activities sector

Figure 11.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS
**Figure 11.2: CSO Job Vacancies Rates, 2008-2017**

Source: SLMRU analysis of CSO EHECS data

**Figure 11.3: Transitions, 2016**

Source: SLMRU analysis of CSO QNHS

**Figure 11.4: Recent hires in professional, scientific and technical activities, 2015 - 2017**

Source: Eurostat (Ireland data)
12 Administrative and support services

Employment change: this sector accounted for 4% of overall employment in Ireland in quarter 4 2017; employment grew by 12% since quarter 4 2016 (compared to 3% nationally) resulting in an additional 10,000 persons employed. (Figure 12.1) Over a third of persons employed in this sector were in elementary occupations (e.g. cleaners, security).

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>94,800</td>
<td>+9,900 (12% growth)</td>
<td>+18,600 (24% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: the vacancy rate for this sector has been broadly similar to that of all NACE sectors since 2012, although the rate has been below the average since the start of 2017, standing at 0.7% in quarter 4 2017. (Figure 12.2)

Transitions: this sector accounted for 6% of all transitions in 2016, with one of the highest shares entering employment from other sectors (44%) and a lower share entering from inactivity (12%); this may be a reflection of the fact that many of the occupations in this sector are employed across numerous sectors (e.g. cleaners). (Figure 12.3)

Recent job hires: at 19,400 recent job hires over the four quarters in 2017, this sector accounted for 5% of all new hires; despite the growth in overall employment numbers since 2016, the average quarterly new hires declined slightly from 5,600 in 2016 to 4,900 in 2017. (Figure 12.4)

DEASP Jobs Ireland: this sector accounted for 9% of all vacancies notified in 2017.
- approximately two fifths of the vacancies were for positions in Dublin with the remainder spread nationwide
- 80% of the notifications were for positions requiring 0-1 years’ experience and over a third did not specify any qualification requirements
- Just less than half the positions advertised were part-time
- Many of the vacancies were notified through agencies, thus masking the number of actual open posts.
Administrative
(31% of vacancies)
- Receptionists (including hotel), office administrators/assistants, community employment supervisors, secretaries (including legal, medical)

Sales
(17% of vacancies)
- Customer service agents/representatives and collections specialists (language requirements for many of these roles)

Elementary
(40% of vacancies)
- Cleaners, housekeeping/accommodation assistants
- Security officers including event stewards, door, static and retail security guards

Other
- Landscaper/gardener

IrishJobs.ie: 8% of all vacancies notified in 2017 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 almost a half (45%) of all advertised vacancies which specified a requirement for foreign language skills, primarily in German and French, but also Spanish, Italian, and Dutch.

Associate Professionals
(20% of vacancies)
- Technical support (with languages); project coordinators

Administrative
(33% of vacancies)
- Administrators (office, sales, payroll), receptionists, personal assistants/executive assistants, document controllers

Sales
(25% of vacancies)
- Customer service/care/representatives, telesales/call centre agents (with languages)

DTF: this sector accounted for 1% of all difficult to fill vacancies in October 2017, primarily for administrative roles such as office administration, HR admin, customer service and sales.

Job announcements: the vast majority of job announcements were for sales/customer care and technical support, mostly in IT, financial services and high-tech manufacturing, but there were also announcements for roles in HR, finance, production managers, engineers and garda staff. Most announcements were for roles in Dublin and Dundalk.
Conclusions: this sector had one of the highest rates of employment growth between quarter 4 2016 and quarter 4 2017, with growth across most occupational groups (excluding administrative roles). Overall, this is a relatively small sector with most of the vacancies arising in occupations which tended to have a high level of churn such as cleaning, security and sales representatives; as such, a high level of activity (particularly in the DEASP Jobs Ireland vacancy data) may be representative of retention issues rather than new opportunities. Many of the vacancies were for part-time positions, with low levels of experience and education required. 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 2017

Source: SLMRU analysis of CSO LFS
Figure 12.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 12.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS

Figure 12.4: Recent hires in administrative & support services, 2015 - 2017

Source: Eurostat (Ireland data)
13 Transportation and storage

Employment change: this sector accounted for 4% of total employment in Ireland in quarter 4 2017; since quarter 4 2016, the numbers employed in this sector grew by 2%, compared to 3% nationally. (Figure 13.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>95,200</td>
<td>+1,500 (2% growth)</td>
<td>+12,600 (15% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: the vacancy rates for this sector have been below the average for all sectors since the end of 2014, standing at 0.5% in quarter 4 of 2017. (Figure 13.2)

Transitions: this sector accounted for 4% of all transitions in 2016, with those taking up employment from within the sector (intra) accounting for the highest share of transitions at 31%, four percentage points above the share for all sectors combined. (Figure 13.3)

Recent job hires: the number of recent job hires was too small to report on a quarterly basis over the period from 2015 to 2017.

Employment permits: in 2017, 1% of all new employment permits were issued for this sector.

DEASP Jobs Ireland: this sector accounted for 6% of all vacancies advertised through DEASP Jobs Ireland in 2017, primarily for stocktakers, drivers and warehouse operatives; the jobs advertised were across all regions (Dublin accounted for a third), a quarter were part-time (primarily stocktakers), 80% required only 0-1 years’ experience and no qualification was required for two thirds of the vacancies.

<table>
<thead>
<tr>
<th>Administrative (43% of vacancies)</th>
<th>Stocktakers (with two companies accounting for most of the notifications), mostly part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operatives (38% of vacancies)</td>
<td>Drivers: HGV (including international), artic (E+C licences required), van, bus/coach</td>
</tr>
</tbody>
</table>
**IrishJobs.ie vacancies:** this sector accounted for 2% of all vacancies notified in 2017, primarily for:
- drivers (multi-drop, truck, HGV)
- logistics (managers, planners, administrators, warehouse operatives).

**DTF:** this sector accounted for 1% of all difficult to fill vacancies in October 2017, primarily for HGV drivers (with C1+E licence).

**Job announcements:** jobs announced in the media for this sector in 2017 related to airlines with roles for pilots and cabin crew the most frequently mentioned.

**Conclusions:** when all labour market indicators are examined, no significant issues were identified for this sector. Most vacancies are for HGV drivers, administrative roles (including stocktakers) and warehouse operatives.
Key trends in the transportation and storage sector

**Figure 13.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017**

![Graph showing employment trends by sector](source)

*Source: SLMRU analysis of CSO LFS*

**Figure 13.2: CSO Job Vacancies Rates, 2008-2017**

![Graph showing job vacancies rates](source)

*Source: SLMRU analysis of CSO EHECS data*

**Figure 13.3: Transitions, 2016**

![Graph showing transitions](source)

*Source: SLMRU analysis of CSO QNHS*
14 Public administration and defence

Employment change: there was an 8% increase in employment in this sector in the year since quarter 4 2016, representing an additional 7,600 persons employed. (Figure 14.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>101,600</td>
<td>+7,600 (8% growth)</td>
<td>+15,400 (18% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: the vacancy rate for this sector has been increasing since the end of 2014, with the rate above or equal to the average rate for all sectors, standing at 1% in quarter 4 2017. (Figure 14.2)

Transitions: this sector accounted for 5% of transitions in 2016 and had the highest share of transitions for those entering employment from other sectors at 64%, primarily related to administrative roles. (Figure 14.3)

Recent job hires: the number of recent job hires was too small to report on a quarterly basis over the period from 2015 to 2017.

DEASP Jobs Ireland: this sector accounted for less than 1% of all vacancy notifications in 2017 and primarily related to clerical officers in the civil service.

IrishJobs.ie: this sector accounted for 1% of notifications in 2017 primarily for professionals (researchers, lecturers, nurses).

Job announcements: there were no job announcements in the media in 2017 for this sector.

Conclusions: following many years of restrictions on recruitment, this sector experienced employment growth of over 7,000 persons in the year since quarter 4 2016, relating primarily to associate professional and administrative roles. Despite this, vacancy notifications remain small in numbers and this sector did not register as having any vacancies which were difficult to fill.
Key trends in the public administration and defence sector

**Figure 14.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017**

Source: SLMRU analysis of CSO LFS

**Figure 14.2: CSO Job Vacancies Rates, 2008-2017**

Source: SLMRU analysis of CSO EHECS data

**Figure 14.3: Transitions, 2016**

Source: SLMRU analysis of CSO QNHS
15 Education

Employment change: employment in this sector grew by 7% in the year since quarter 4 2016, representing an additional 11,100 persons employed. (Figure 15.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>167,600</td>
<td>+11,100 (7% growth)</td>
<td>+28,400 (20% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: the rate for this sector has been showing signs of growth in recent years with the rate equalling that for all sectors in quarter 4 2017 at 1%. (Figure 15.2)

Transitions: in 2016, this sector accounted for 5% of all transitions into employment, with a higher share than the overall entering employment from inactivity (28% compared to an overall share of 24%). (Figure 15.3)

Recent job hires: the number of recent job hires was too small to report on a quarterly basis over the period from 2015 to 2017, although the numbers have increased in the latter part of 2017 with over 9,000 recent job hires in quarter 4 2017.

Employment permits: this sector accounted for 1% of all new permits issued in 2017, most of which were for professional roles (e.g. lecturers, professors).

DEASP Jobs Ireland: this sector accounted for 2% of notifications in 2017; the main occupations included lecturers, early years educators/pre-school teachers, TEFL teachers, English language instructors (for positions overseas) and childcare workers.

IrishJobs.ie: this sector accounted for 1% of notifications in 2017, primarily for professionals (lecturers, researchers) and associate professionals (instructors/trainers).

Job announcements: announcements in the media in 2017 were limited to sales, technology, marketing, and finance roles in an e-learning company.
Conclusions: despite recent employment growth (primarily related to teachers), vacancy notifications for this sector remain limited to a small number of roles such as lecturers, TEFL teachers, and instructors/trainers.

Key trends in the education sector

Figure 15.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS

Figure 15.2: CSO Job Vacancies Rates, 2008-2017

Source: SLMRU analysis of CSO EHECS data

Figure 15.3: Transitions, 2016

Source: SLMRU analysis of CSO QNHS
16 Agriculture, forestry & fishing

Employment change: this sector did not experience significant growth over the previous five years to quarter 4 2017, with a net increase of 4,400 persons employed. Most employment in this sector relates to farmers and farm workers. (Figure 16.1)

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>111,500</td>
<td>+1,300 (1% growth)</td>
<td>+4,400 (4% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: vacancy rates are not produced for this sector.

Transitions: in 2016, this sector accounted for 3% of all transitions into employment, with one of the highest shares for all sectors entering employment from inactivity, at 53%. (Figure 16.2)

Recent job hires: the number of recent job hires was too small to report on a quarterly basis over the period from 2015 to 2017.

Employment permits: this sector accounted for 2% of all new permits issued in 2017, most of which were for roles in meat processing (e.g. meat deboner/trimmer).

DEASP Jobs Ireland: this sector accounted for 1% of notifications in 2017; the main occupations included mushroom harvesters, general operatives/farm workers (primarily for pig and dairy farms), tree surgeons, and machine drivers (track, 360).

IrishJobs.ie: there were no vacancy notifications for this sector through this source.

Job announcements: announcements in the media in 2017 were limited to one company with no occupations specified.
Conclusions: this sector has not registered significant activity in terms of employment growth and vacancy notifications.

Key trends in the agriculture, forestry and fishing sector

Figure 16.1: Employment (000s) by sector, quarter 1 2008-quarter 4 2017

Source: SLMRU analysis of CSO LFS

Figure 16.2: Transitions, 2016

Source: SLMRU analysis of CSO QNHS
17  Arts, entertainment & other services

Employment change: in quarter 4 of 2017, there were almost 110,000 persons employed in this sector; while there was little change in the numbers employed in the year since quarter 4 2016, an increase of 20% occurred in the five years since 2012 resulting in a net increase of 18,300 persons employed (Figure 17.1). In 2017, those employed in this sector were primarily in services (primarily hairdressers/barbers) and associate professional roles (e.g. sports coaches/instructors).

<table>
<thead>
<tr>
<th>Total employed (Q4 2017)</th>
<th>1 year change</th>
<th>5 year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>109,700</td>
<td>-2,200</td>
<td>+18,300 (20% growth)</td>
</tr>
</tbody>
</table>

Vacancy rates: rates fluctuated over the period examined but were broadly in line with the rate for all NACE sectors in recent years, dropping to 0.8% in quarter 4 2017. (Figure 17.2)

Transitions: this sector accounted for 6% of all transitions in 2016, and had the highest share, along with the accommodation and food sector, of transitions from inactivity at 34%. (Figure 17.3)

Recent job hires: the number of recent job hires was too small to report on a quarterly basis over the period from 2015 to 2017, although the number of new hires reached over 5,000 in quarter 4 2017.

Employment permits: this sector accounted for 5% of all new permits issued in 2017, in a variety of roles including a number of IT roles, engineers, animation, sports players and coaches, along with sales and marketing.

DEASP Jobs Ireland: 1% of notifications in 2017 were in this sector in occupations including:
- hairdressers/barbers
- beauty therapist, nail technician
- fitness instructor, leisure centre attendant.
IrishJobs.ie: this sector accounted for 1% of notifications in 2017 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.

**Key trends in the arts, entertainment, recreation and other services sector**

![Graph showing employment by sector from Q1 2008 to Q4 2017](image1)

**Source:** SLMRU analysis of CSO LFS

![Graph showing CSO Job Vacancies Rates, 2008-2017](image2)

**Source:** SLMRU analysis of CSO EHECS data

![Graph showing Transitions, 2016](image3)

**Source:** SLMRU analysis of CSO QNHS
Appendix A. Recruitment Agency Survey October 2017: 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) |
|          | 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, LLC design, electrical safety engineer (medical electrical safety testing and design assessments in MedTech)) |
|           | chemical engineers (production process 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 |
|              | 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. |

<p>| Accountants | industry experts in specific ERP System &amp; 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) |</p>
<table>
<thead>
<tr>
<th>Job Category</th>
<th>Job Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technicians</td>
<td>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</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>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 &amp; SCADA programming &amp; fault-finding) and mechanical maintenance fitters</td>
</tr>
<tr>
<td>Operatives</td>
<td>CNC and SMT/PTH Rework operators, forklift drivers (with VNA and/or turret license; Reach Truck, Stand-up and Electric Pallet Jack operators)</td>
</tr>
</tbody>
</table>

**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 with relevant experience
- 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)  
| 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
- 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/JSQuery 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 (German, 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

<table>
<thead>
<tr>
<th>Medical doctors</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiographers</td>
<td>clinical specialists; MRI and CT radiographers</td>
</tr>
<tr>
<td>Nurses</td>
<td>general nurses, especially for older people care (including nursing home managerial roles); advanced nursing practitioners in intensive care &amp; operation theatre, especially cardiovascular care, but also in oncology care; roles in paediatrics, renal/dialysis, fertility, and intellectual disability care</td>
</tr>
<tr>
<td>Specialised medical technicians</td>
<td>cardiac technicians</td>
</tr>
<tr>
<td>Care workers</td>
<td>carers / home carers</td>
</tr>
</tbody>
</table>

### Professional, technical and scientific

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

### 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)