National Skills Bulletin 2020

National Skills Council

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National Skills Bulletin 2020

A Report by the Skills and Labour Market Research Unit (SLMRU) in SOLAS on behalf of the National Skills Council

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Foreword by the Minister for Further and Higher Education, Research, Innovation and Science

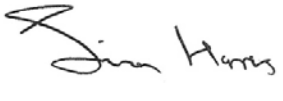
The National Skills Bulletin 2020 is the sixteenth in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in SOLAS and the fourth to be produced on behalf of the National Skills Council (NSC). The analysis presented in this report aims to both assess how Ireland's labour market stood in 2019 and how the restrictions imposed as a result of COVID-19 have impacted the outlooks across almost one hundred occupations. Using all available indicators to identify the skills needs of the labour market has never been so essential as Ireland continues to navigate through unprecedented times.

During 2019, the labour market continued to strengthen, with the unemployment rate falling to 5%, its lowest levels since before 2008. Ireland continued to have net inward migration, with those immigrating exceeding those emigrating by 33,700 persons. Over 14,000 new employment permits were issued, with the ICT and health sectors accounting for the highest share. Professional and administrative occupations saw employment grow by 26,800 persons each in the year since quarter 4 2018. The challenge facing policy makers by the end of 2019 was to ensure Ireland had sufficient skills to maintain this growth; key objectives of the Future Jobs strategy included finding ways to attract people back to the workforce and to retain those already employed through identifying upskilling/reskilling needs.

When the onset of COVID-19 resulted in significant restrictions being imposed in March 2020, the impact on the labour market in Ireland was severe. Certain sectors and occupations have been impacted more harshly than others, particularly in relation to those employed in hospitality and retail roles. Occupations such as sales assistants, cleaners, hospitality roles and those employed in leisure and travel-related jobs have seen a substantial fall in employment numbers. Drivers (particularly taxi drivers), construction workers, childcare workers, car mechanics and security guards have also been particularly impacted by the restrictions, while those employed in IT roles, and as engineers and teachers, to date, do not appear to have seen employment numbers negatively affected.

Many other skills challenges, such as those related to Brexit, automation, and sourcing skills from abroad, are likely to arise in the coming months and years as we rebuild the labour market but with each challenge comes opportunity. The accelerated transition to remote working during the initial stages of the crisis opened up not only additional digital skills training requirements but also the potential for new ways of working with technology.

While much remains unknown, the National Skills Bulletin is uniquely placed to identify the outlook across many occupations and analyse the profile of the people employed in these roles so as to assist with the direction of education and training interventions required over the coming months. This is a very valuable contribution as we all continue to work together towards our country's recovery.



Simon Harris T.D.

Minister for Further and Higher Education, Research, Innovation and Science

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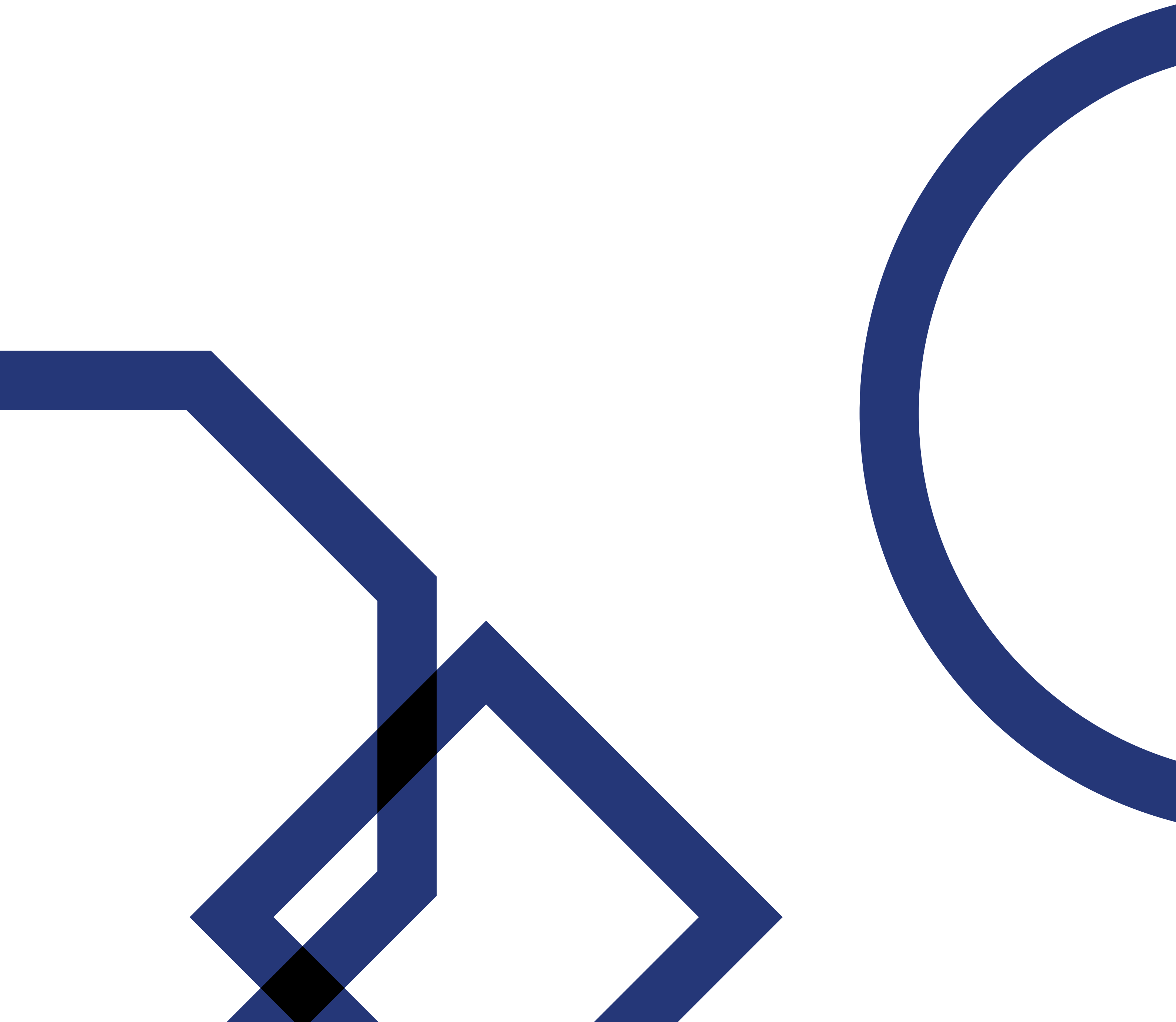

Executive Summary

The National Skills Bulletin 2020 is the sixteenth in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in SOLAS and the fourth to be produced on behalf of the National Skills Council (NSC). It presents an overview of the Irish labour market at occupational level.

The Bulletin aims to assist policy formulation in the areas of employment, education/training, and immigration (particularly the sourcing of skills which are in short supply in the Irish and EU labour market from the EEA); it also aims to inform career guidance advisors, students and other individuals making career and educational choices.

For the most part, the analysis presented in the Bulletin reflects the data gathered by the SLMRU across a range of labour market indicators; it spans 95 occupational groups and examines a range of labour market indicators.

Impact of COVID-19 on the Irish Labour Market

Since restrictions were introduced in March 2020 as a result of COVID-19, the impact on the labour market in Ireland has been immense. From an unemployment level of approximately 110,000 persons at the end of 2019, the number of people in Ireland in receipt of income support payments from the State had risen to over 1 million by May 2020. As the reopening of the economy continues, the number of persons receiving these payments has fallen, although many continue to be supported by the State.

For the most part, this Bulletin refers primarily to the situation in the Irish labour market prior to 2020, as its main purpose is to gather relevant data sources to report on activity in the labour market in the previous year. However, where appropriate, and allowing for available data, the analysis is provided in the context of the changing situation that was brought about as a result of COVID-19. As official data on the labour market, which reflects the impact COVID-19 restrictions have had at occupational level, is limited, an identification of potential shortages at occupational level was not possible for this edition of the Bulletin. However, employment outlooks by occupation, presented in Section 9, are framed within the labour market in Ireland as it stands in the second half of 2020.

Snapshot of the Irish Labour Market in 2019

The labour market in Ireland in 2019 was continuing to strengthen with further improvements in a number of labour market indicators:

- the labour force increased by 48,400 to reach 2.44 million (annual average)
- employment increased by over 64,900 to reach 2.32 million (annual average)
- the employment rate increased by 0.9 percentage points to 69.5% (annual average)
- the participation rate increased by 0.1 percentage points to 62.3% (annual average)
- the unemployment level declined by 16,500, standing at 121,000 persons (annual average)
- the unemployment rate declined by 0.8 percentage points to 5.0% (annual average)
- the long-term unemployment rate declined by 0.5 percentage points to 1.6% (quarter 4)
- the youth unemployment rate declined by 2.4 percentage points to 9.6% (quarter 4)
- the broad unemployment measure (combining unemployed and part-time underemployed persons) declined by one percentage points to 8.9% (quarter 4)
- inward migration continued to exceed outward migration resulting in positive net migration of 33,700 persons in 2019, a similar level to that of 2018.

Despite this, there remained areas of potential concern to note, including

- the old age dependency rate continued to increase, by 0.4 percentage points to 21.9%

- in terms of those aged 15-24 years, although the youth unemployment rate declined, the NEET[1] rate increased by 0.3 percentage points between quarter 4 2018 and quarter 4 2019
- the number of persons in part-time employment who were underemployed remained almost unchanged since quarter 4 2018, at 108,400 in quarter 4 2019
- average hourly earnings continued to increase across all sectors in the year since quarter 4 2018.

Sectoral Employment

In quarter 4 2019, the wholesale/retail sector accounted for the largest number of persons employed, followed by the health and industrial sectors.

Between quarter 4 2018 and quarter 4 2019, employment increased for all sectors, with the exception of wholesale and retail (which declined by less than 2,000 persons). The strongest growth in relative terms was observed for the ICT sector (13%), followed by public administration and defence (8%) and the financial activities sector (8%).

Employment by Broad Occupation

Between quarter 4 2018 and quarter 4 2019, employment grew by almost 80,000 persons; this growth occurred across all occupational groups with the exception of skilled trades and farmers. The largest growth in employment in absolute terms was for those employed in professional and administrative roles (both increasing by over 25,000 persons).

Between quarter 4 2018 and quarter 4 2019, the recent growth in employment resulted in an increase in a number of areas:

- Professionals (24,000) and administrators (12,800) with a third level education observed the greatest increase in terms of persons employed
- Across all occupations, persons working full-time increased, with the exception of sales workers.

Unemployment

In quarter 4 2019, there were 110,600 persons looking for employment; the greatest share of unemployed persons who had stated a previous occupation had previously worked in elementary occupations (12%), skilled trades (10%), and managers/professionals and sales at 9% each.

Between quarter 4 2018 and quarter 4 2019, unemployment declined by 18,200 persons. Of this decline,

- those with higher secondary or FET education observed the greatest decrease of approximately 11,400 persons
- the decrease in the number of those unemployed was greater for Irish nationals at 16,400 persons, compared to a decrease of 1,800 for non-Irish nationals
- those aged 25-54 years accounted for almost half (48%) of the decline; persons aged under 25 years observed the greatest relative change with a decrease of 2.4 percentage points.

Labour Market Transitions and Recent Job Hires

It is estimated that 1.4 million labour market transitions occurred in the labour market in 2019 (including transitions between employment states), which was broadly in line with that observed in 2018. The number of transitions into employment from both unemployment and inactivity exceeded transitions out of employment (by 100,000); there were 76,000 more transitions from inactivity to employment than in the opposite direction.

[1] Not in Employment, Education or Training (NEET)

The analysis of recent job hires (those hired within the previous three months) provides an indication of the level of job churn occurring, along with an examination of the profile of persons hired by occupational group. In 2019, there were over 445,000 recent job hires, a small decline on the previous year. They were mostly for those employed in the wholesale/retail and accommodation/food services sectors. Almost two-thirds (64%) were for those aged less than 35 years. Recent job hires were primarily in elementary, professional and sales occupations, including sales assistants, catering assistants, waiters, bar staff and cleaners.

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

In 2019, over 14,000 new employment permits were issued in 2019. The ICT sector continued to account for the largest number of new employment permits issued, at 4,700, followed by the health sector at almost 3,500. The majority of new permits issued were for professional roles, although 2019 saw a rise in the number of new permits issued for elementary occupations due to the recent inclusion of meat processing operatives in the list of eligible occupations.

Vacancies

The analysis presented in Section 8 comprises two sources of vacancy data, namely the Public Employment Service (PES) vacancy data (from Department of Employment Affairs and Social Protection's vacancy portal, Jobs Ireland) and a private online recruitment agency (IrishJobs.ie). In 2019, vacancies advertised through IrishJobs.ie were mostly concentrated in professional and associate professional occupations; newly advertised vacancies through DEASP Jobs Ireland were concentrated in skilled trades, elementary, and associate professional occupations.

The SLMRU Recruitment Agency Survey from October 2019 indicated that mentions of difficult-to-fill (DTF) vacancies continued to occur particularly for professional occupations (mostly IT programmers, but also engineers, accountants, nurses, doctors, etc.). Mentions arose across all other occupational groups, particularly for technician posts, multilingual sales and customer care.

Occupational Employment Outlook and Shortages

Due to the significant changes to the landscape of the Irish economy in 2020 as a result of COVID-19, an analysis of potential shortages at occupational level was not possible for this edition of the bulletin. This was for a number of reasons including:

- the availability of official data on the impact of COVID-19 restrictions at detailed occupational level is limited; income support payments data (available from the Department of Social Protection and Employment Affairs (DEASP) and Revenue) relates to sectors of employment only and does not provide detail of the occupation of the individual receiving payments; official employment data (from the CSO's Labour Force Survey) captures the period until the end of June 2020 only and is constrained by official definitions of employment and unemployment, thus potentially underestimating the full impact of COVID-19
- the SLMRU have conducted a bi-annual survey of recruitment agencies to assess which vacancies are proving difficult-to-fill for several years; as a result of the uncertainty facing many businesses at the time, it was decided to suspend the April 2020 survey. As such, it has not been possible to establish where issues, if any, in sourcing skills have arisen, since the introduction of COVID-19 restrictions.

Despite these issues, an outlook for each of the 97 occupations is provided in light of the impact of COVID-19. A number of sources were used to inform this analysis, as detailed in Section 9.

Science & Engineering Occupations

Employment in this occupational group grew strongly in the five-year period with demand for skills in these jobs particularly evident in 2019. The supply of graduates in science and engineering has, in the main, increased over the last number of years, with these people sought after across a variety of other sectors (e.g. education, finance, public administration). Despite this, science and engineering occupations are forecast to experience an annual average fall in employment of 9.9%, or 9,200 persons, between 2019 and 2020. However, this decline is primarily driven by an assumption of reduced activity in manufacturing as a result of COVID-19; a swift recovery in the manufacturing sector may mitigate any potential decline in employment numbers.

IT Occupations

Growth in employment in ICT occupations over the five-year period was driven primarily by an increase in employment for programmers and software developers. Demand for these skills was strong across all the economic indicators in 2019. The decline in employment in ICT occupations for 2020 (annual average), as a result of COVID-19, is expected to be relatively small in number (at approximately 3,000 persons); while increases in employment may occur for roles such as programmers/developers, this may be offset by declines in lower skilled roles such as technical support. These occupations have a higher share of non-Irish employed compared to the national average and the supply of skills may be impacted from reduced inward migration.

Business & Financial Occupations

Although overall employment growth over the five-year period for business and financial occupations was above the national average, some occupations experienced a contraction in numbers employed. The financial sector accounted for over a third of employment in these occupations in 2019, although business and financial skills are required across a range of economic sectors. Supply from business and finance related fields of education is strong (18,500 graduates in 2018) and is one of the largest fields in terms of number of graduates in the further and higher education sectors each year.

As a result of COVID-19, employment in these occupations is expected to fall by 6% in 2020 (annual average), representing 13,000 persons; recovery in employment will be dependent on the performance of the economy for many of these occupations. The future demand for business and financial skills is also likely to be affected by the impact of Brexit and by changes in the nature of the tasks required to fulfil these roles due to technological change, with financial administrative roles identified in particular as being at high risk of automation.

Healthcare Occupations

Employment growth for this occupational group was below the national average for the period 2014 to 2019. Despite significant demands for their services, particularly as a result of COVID-19, employment numbers are very much dependent on government funding. Demand for health services is expected to continue to grow due to Ireland's ageing demographics. A decline of 6%, or 7,900 persons, employed in healthcare occupations is forecast for 2020 (annual average) when compared to 2019; those negatively impacted in terms of employment numbers are likely to be based outside the hospital/nursing home setting. It is also important to note that with the exception of managerial roles, the majority of those employed in healthcare occupations are likely to have significant exposure levels to diseases and work in close proximity to others, according to the CSO research. Medical practitioners and nurses have a higher share of those employed who are non-Irish nationals; any fall in the supply of inward migration may have an impact on employment numbers.

Education Occupations

Education occupations experienced a stronger employment growth than the national average over the period between 2014 and 2019. Employment for these occupations is driven by government funding and policies along with the changing demographic profile of the population. The second level school population is growing with an expected peak to occur in 2024-2025; this will result in increased demand at second level within the next ten years, and later at third level as this cohort moves up through the education system. In addition, government initiatives in areas such as early childhood education and lifelong learning will impact on the demand for these occupations.

Those employed in this occupational group are estimated to experience one of the smallest percentage declines in employment on average annually in 2020, at 2.6%. Although permanently appointed teachers/lecturers are unlikely to see a decline in employment numbers, a fall may occur for teachers outside the formal education system (e.g. TEFL teachers etc.). The move to online/distance learning, which accelerated during the lockdown, may also have an impact on employment numbers for these occupations, although numbers involved are relatively small. Those employed in education occupations are very likely to work in close proximity to others and, thus, may be at a higher risk of exposure to COVID-19.

Social & Care Occupations

The changing demographics in Ireland, both the fall in the number of 0-4-year-olds and the increasing number of those aged 65 years and older in the population, will be the primary driver of employment for these occupations in the coming years. Government initiatives, including commitments to increase the quality of childcare provision and incentives to increase female labour force participation, may offset the decline in demand for childcare workers, while the demand for older care workers is likely to rise.

Overall employment in this occupational group is forecast to decline by 4.5%, or approximately 5,600 persons, for the year 2020 (annual average), when compared to 2019 as a result of COVID-19. Increases in employment in occupations such as care workers and other caring services (relating primarily to nursing assistants) will be offset by a decline for those employed in childminding roles. With the exception of nursing assistants, the exposure to diseases, while higher than average, is not as high as those in healthcare occupations. However, they are very likely to work in close proximity to others.

Legal & Security Occupations

Employment growth was low in these occupations and there was no evidence in the analysis for 2019 of difficulties sourcing candidates. The declines forecast for these occupations as a result of COVID-19 are small (-0.3% for the year 2020). While gardaí continue to be in significant demand, it is likely that security guards will experience the most significant falls in employment in absolute terms, due to the continued closure of a number of businesses and retail services.

Those working in protective services occupations (e.g. gardaí) had high scores in relation to exposure to diseases. Most of the occupations in this group are likely to work in close proximity to others.

Construction Occupations

Employment has grown strongly in recent years, although it slowed in the year since 2018. The forthcoming EGFSN report on the built environment[2] does not anticipate significant expansion in terms of numbers employed in the sector by 2030, although the nature of the tasks associated with construction occupations is likely to undergo substantial change, driven by both new technologies/materials and a demand for green construction and climate change mitigation.

The closure of construction sites as a result of COVID-19 had a significant impact on employment for these occupations. While many employed in the construction sector returned to work as restrictions eased, a significant number continued to receive income support payments. As such, employment for construction occupations in 2020 (annual average) is forecast to be 11% less than in 2019, representing 15,700 persons. Social distancing requirements are likely to have a knock-on effect on productivity while uncertainty in relation to finance and demand for services are all likely to have an impact on employment numbers in the coming months. Working in close proximity to others was highest for those in skilled trades and operative roles, and lowest for those in professional roles.

Other Craft Occupations n.e.c.

Employment numbers for this occupational group have remained relatively unchanged over the five-year period. The impact of COVID-19 restrictions, and the subsequent reopening of the economy, on employment numbers may vary depending on the sector of employment, with employment in these occupations primarily in industry, wholesale/retail and construction. A decline of approximately 6%, or 7,000 persons, is forecast for employment in other craft occupations on average annually between 2019 and 2020; this is driven by an expected fall in employment across industry, construction and the wholesale & retail sectors, particularly in relation to those employed as motor mechanics, electricians and

[2] Building Future Skills; The Demand for Skills in Ireland's Built Environment Sector to 2030, EGFSN 2020

other skilled trades (such as butchers/deboners). Other craft occupations have a low score in relation to exposure to diseases in their work but tend to have a higher score in relation to working in close proximity to others. This was particularly the case for metal machining, fitting and instrument making trades, electrical trades and butchers.

Agriculture & Animal Care Occupations

Employment in agriculture and animal care occupations has been declining in recent years, driven primarily by a fall in the number of farmers. These occupations are forecast to experience a fall in employment of 7%, or 8,000 persons, on average annually in 2020 when compared to 2019. The impact of both COVID-19 restrictions and Brexit are likely to affect those employed in elementary agricultural roles (e.g. mushroom and fruit pickers) and horticultural, agricultural and fishing trades (such as gardeners). Issues in terms of disincentives to engage in low paid work, availability of supply through inward migration and a fall in exports is likely to impact employment numbers for these occupations. Declines in employment numbers for farmers is more likely to relate to a demographic effect with a high share in the older age cohort.

Hospitality Occupations

Those employed in hospitality occupations were experiencing steady growth in employment in recent years in line with the strong performance of the economy. COVID-19 restrictions have resulted in significant disruption to employment in these occupations. As such, this occupational group is expected to experience the most significant declines in employment on average annually in 2020 when compared with 2019, with a forecasted fall of 40%, or 66,000 persons. While some restrictions are easing, many restaurants, hotels etc. continue to trade at a reduced capacity in line with social distancing requirements. The curtailment of international travel will also have a bearing on the speed and level of any recovery, as will any fall out as a result of Brexit. Kitchen assistants, waiters and bar staff combined accounted for over half of those employed in these occupations and are likely to see the largest fall in employment numbers; many of these would have been employed on a part-time basis prior to restrictions. Likely exposure to diseases was low for hospitality occupations but, with the exception of managerial positions, most worked in close proximity to others.

Arts, Sports & Tourism Occupations

Employment in arts, sports and tourism occupations was growing in line with the national average by the end of 2019. COVID-19 restrictions have had a significant impact on employment in these occupations. As such, a decline of 17.6%, or 16,000 persons, in employment is forecast for 2020 (annual average) when compared to 2019. A partial recovery in employment numbers is expected with the lifting of restrictions, although a full recovery will be dependent on the lifting of restrictions on overseas travel, along with consumer confidence and the disposable income levels of individuals in Ireland.

Transport & Logistics Occupations

Prior to the onset of COVID-19, employment in this occupational group was growing steadily. However, the restrictions imposed since March 2020 are expected to lead to a forecasted fall in employment of approximately 9,400 persons on average annually in 2020 when compared to 2019, driven primarily by the transport sector. The outlook for occupations within this group varies significantly; recovery in employment is likely to be dependent on numerous factors such as the lifting of international travel restrictions, a re-opening of businesses, the recovery of both the construction and wholesale & retail sectors, as well as the likely impact of Brexit. Additional skills may be required in the areas of customs clearance and documentation, depending on the nature of the UK's withdrawal from the EU. In addition, technological changes and automation of processes will result in a need for enhanced digital skills across all occupations in this field.

Administrative & Secretarial Occupations

Employment growth in this occupational group was driven primarily by growth for those employed in government administrative roles. The initial impacts of COVID-19 restrictions may not have had an immediate effect on employment in this group; however, a decline of 8.6%, or 15,500 persons, is forecast in the employment numbers for administrative roles on average annually in 2020 when compared to 2019. While the number of government administrative roles is expected to remain relatively unchanged, a fall in employment numbers is likely for office administrative roles and receptionists (particularly those in hotels). This occupational group is also one of the top six groups considered at high risk of automation; therefore, many of the job losses experienced for these occupational groups are unlikely to be replaced in the short-term at least. However, job opportunities will continue to arise as replacement (due to retirement, etc.) for such a large occupation will translate into job vacancies.

Sales, Marketing & Customer Service Occupations

Employment over the five-year period was growing at a rate below the national average. COVID-19 restrictions have had a significant impact on employment numbers for this occupational group; as such, employment is forecast to be approximately 12% lower (34,000 persons) in 2020 on average annually when compared to the previous year. Although all occupations within this group may see some decline in employment numbers as a result of COVID-19, the fall is expected to be most significant for those employed in the wholesale and retail sector, primarily sales assistants. A move to online shopping, social distancing requirements and the closure of many retail outlets would indicate that a return to the employment levels seen in 2019 is unlikely, particularly in the short-term.

Operatives & Elementary Occupations n.e.c.

Employment for the selected operative and elementary roles grew above the national average over the five-year period. As a result of COVID-19, a decline in employment of 11%, or 20,000 persons, is forecast across these operative and elementary roles on average in 2020 when compared with 2019. This decline is driven by expected falls in employment in industry (impacting occupations such as process operatives and assemblers) and the administrative services sector (relating to a fall in demand for cleaners). Many of these roles are considered at high risk of automation; therefore, a return to employment levels seen in 2019 is not expected. The availability of the future supply of skills may be an issue for some occupations, such as food processing operatives, while travel restrictions remain in place.

Introduction

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Changes to the CSO's Labour Force Survey

In quarter 3 2017, the CSO introduced a new Labour Force Survey (LFS), replacing the Quarterly National Household Survey (QNHS). As a result, there is a break in the time series for data before and after quarter 3 2017. Some occupations experienced a significant change in employment after quarter 3 2017 due to methodological changes introduced with the LFS; where possible, this change is highlighted in our occupational analysis, although any significant change in employment over the five-year period (2014-2019) may need to be interpreted with caution.

Impact of COVID-19 on the Irish Labour Market

Since restrictions were introduced in March 2020 as a result of COVID-19, the impact on the labour market in Ireland has been immense. From an unemployment level of approximately 110,000 persons at the end of 2019, the number of people in Ireland in receipt of income support payments from the State had risen to over 1 million by May 2020. As the reopening of the economy continues, the number of persons receiving these payments has fallen, although many continue to be supported by the State.

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Occupation-related Data

Occupations are classified using the Standard Occupational Classification (SOC 2010). In cases where the number of persons employed in an occupation is too small to allow for meaningful statistical analysis, two or more occupations were merged to form an occupational group. Details of the occupations included in each occupational group are available in Appendix B.

Each occupation is examined in terms of the following:

- employment level and recent employment trends; the analysis is based on the data from the Central Statistics Office (CSO) Labour Force Survey; when interpreting the employment data, the following should be borne in mind:
  - the employment level for each occupation is expressed as an annual average (i.e. the average of four quarters in a calendar year)
  - the trend analysis covers the five-year period 2014-2019, unless otherwise specified; growth over this period is calculated in terms of the annualised growth rate, sometimes referred to

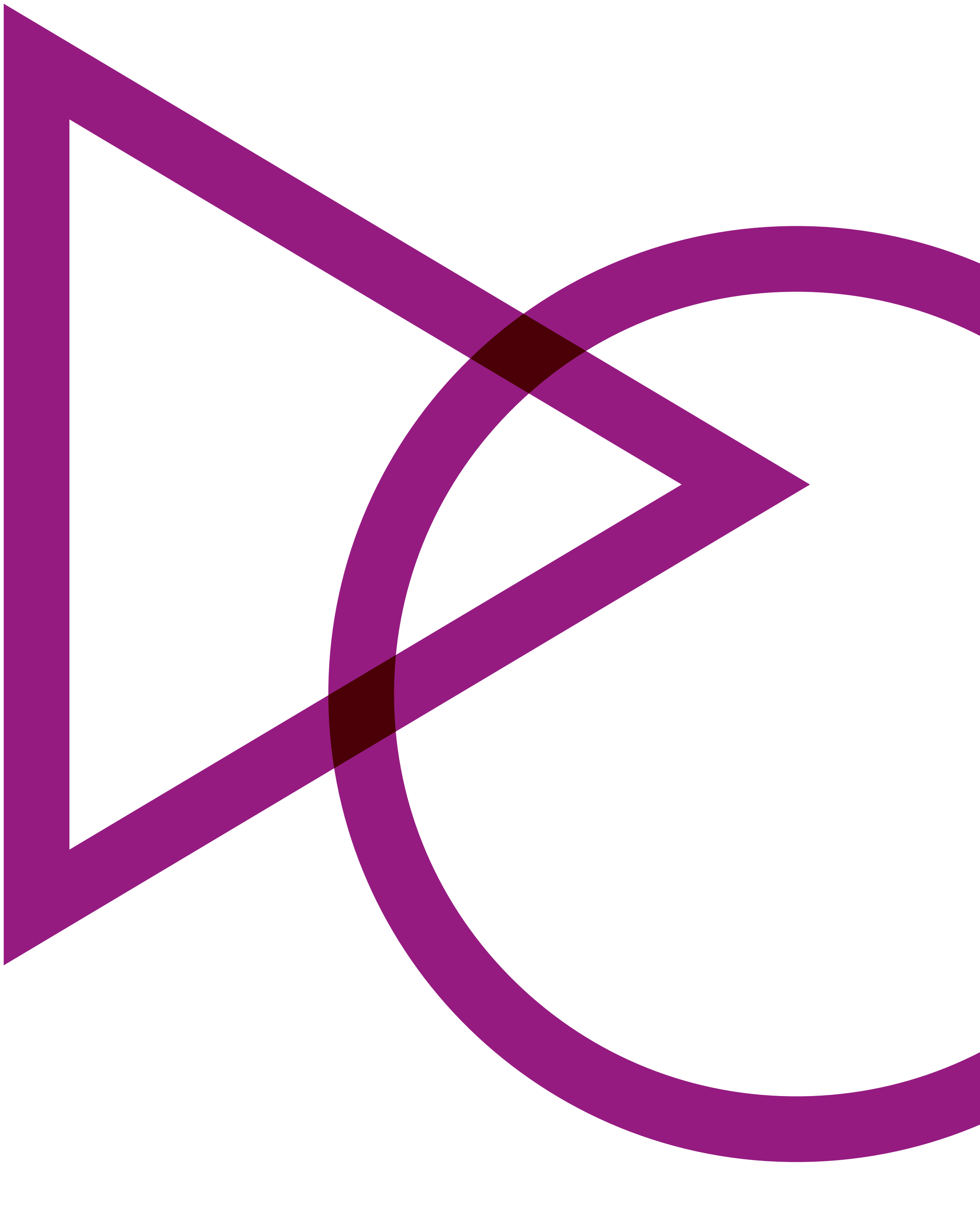
as the 'average annual growth rate' for ease of reading (although the two terms are not technically identical)

- an employment profile (i.e. age, gender, nationality, employment type and education level); the analysis is based on the LFS data for quarter 4 2019
- vacancies advertised through the Department of Employment Affairs and Social Protection's (DEASP) Jobs Ireland vacancy portal (i.e. the Public Employment Service (PES)) and IrishJobs.ie (a private on-line vacancy advertising service) in 2019
- the level of difficulty in filling vacancies; the analysis is based on data from the SLMRU Recruitment Agency Survey conducted in October 2019
- the number of new employment permits issued to non-EEA nationals by the Department of Business, Enterprise and Innovation (DBEI) in 2019.

The unemployment rate by occupation was excluded from the analysis in this edition of the Bulletin as the number of persons unemployed in 2019 who stated their previous occupation was too small to report.

The National Skills Bulletin 2020 is structured as follows:

- Section 1: sets the Irish labour market within the context of recent trends and developments in the macroeconomy, including the changed landscape as a result of COVID-19, and presents an overview of the economic and employment outlook for Ireland
- Section 2: examines trends in key labour market indicators (employment, unemployment and the labour force) and the composition of national employment (gender, age, nationality, education etc.)
- Section 3: examines employment trends in economic sectors (quarter 4 2019 is compared with the same period in 2014 and 2018)
- Section 4: analyses employment trends by broad occupational group (i.e. employment growth and the composition of employment) up to quarter 4 2019
- Section 5: examines recent trends in Irish unemployment (levels and rates), including the impact of COVID-19, and details the characteristics of the unemployed population (i.e. gender, age, educational attainment, nationality, occupation and sector) up to quarter 4 2019
- Section 6: presents analysis of labour market transitions between unemployment, employment and economic inactivity and an analysis of recent job hires in 2019 in terms of age, education level, sector and occupation
- Section 7: examines the inflow of labour from non-EEA countries through the various employment permit schemes
- Section 8: provides an overview of trends and the types of vacancies advertised through the DEASP Jobs Ireland vacancy portal and IrishJobs.ie in 2019; it also reports the findings of the October 2019 SLMRU Recruitment Agency Survey on difficult-to fill vacancies
- Section 9: provides labour market indicators for 97 occupations presented in 16 occupational groups and provides an outlook for each occupation in light of COVID-19.



Section 1
Macroeconomic Context

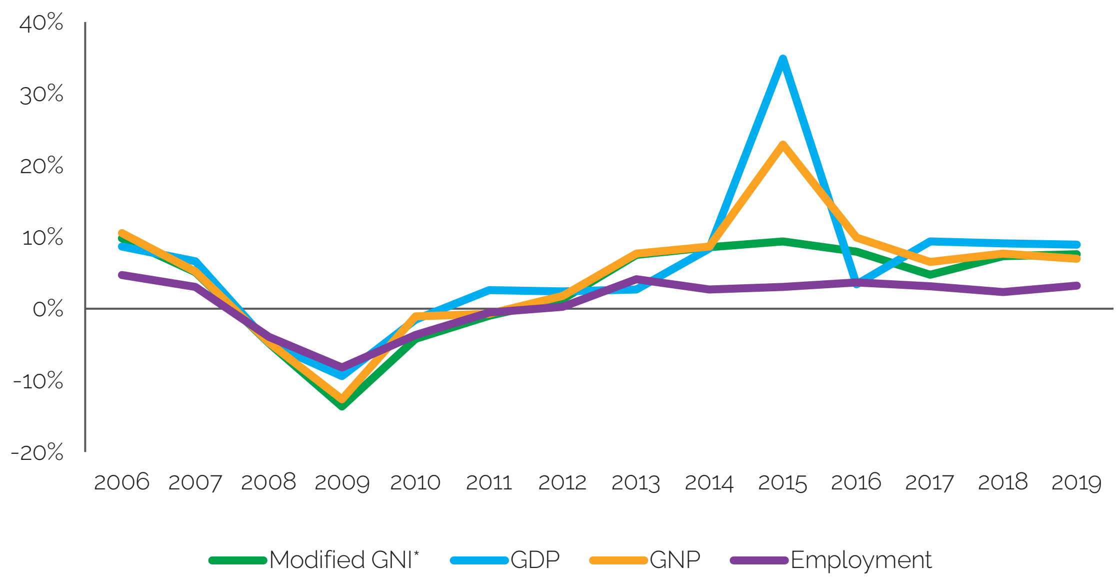
Introduction

The onset of COVID-19 has had an overwhelming impact not only on the Irish economy but also at a global level. This section will firstly provide an overview of Ireland's economic performance in 2019 and will then examine the macroeconomic outlook, both nationally and internationally, in light of the economic effects of the COVID-19.

Economic Performance in 2019

The Irish economy continued the theme of recent years with strong growth recorded in 2019. Based on current market prices, the Irish economy grew by 8.9% in gross domestic product (GDP) terms in 2019 compared to 2018, bringing GDP to over €356 billion. Gross national product (GNP) increased by 7.0% in 2019[3]. As measured by Modified GNI[4], the Irish economy showed positive growth of 7.6% between 2018 and 2019. (Figure 1.1)

Figure 1.1 GDP, GNP, Modified GNI (at current market prices) and Employment, Annual Change, 2008-2019



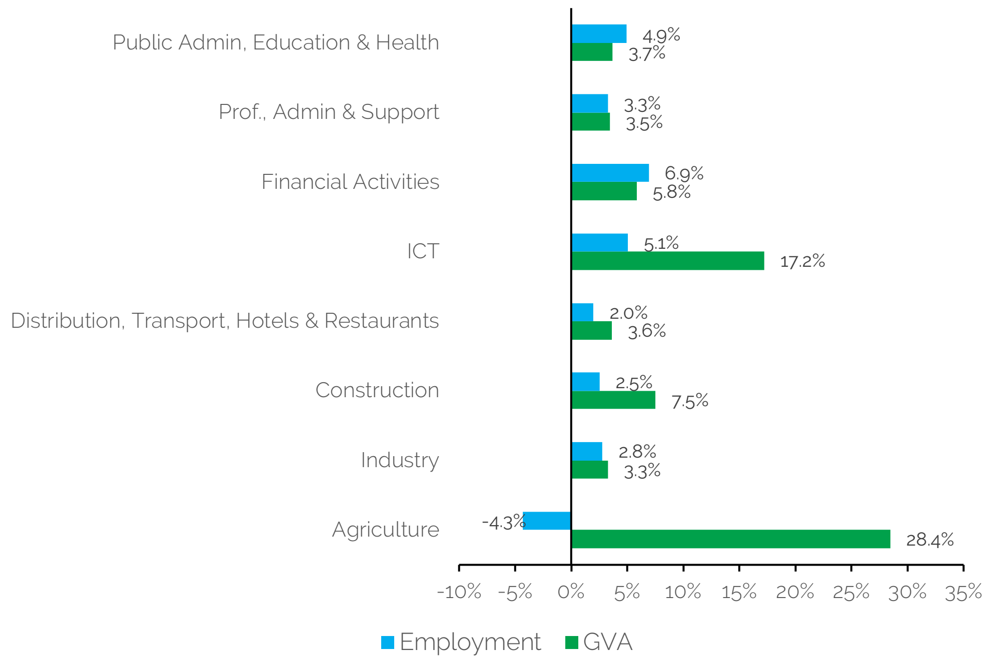
Source: SLMRU (SOLAS) analysis of CSO data

^ GNI* is based on GNI less depreciation of R & D related service imports and trade in IP, depreciation of aircraft for leasing, and net factor income of re-domiciled PLCs.

[3] CSO, National Income and Expenditure 2019.
[4] Modified Gross National Income (GNI) is an indicator that was recommended by the Economic Statistics Review Group and is designed to exclude globalisation effects that disproportionally impact the measurement of the size of the Irish economy.

At sectoral level, output growth was driven by a strong increase in gross value added (i.e. output) in the industry and information and communication (ICT) sectors in overall volume terms. Gross value added in 2019 increased by over 28% in the agricultural sector and over 17% in the ICT sector compared to 2018, although the agriculture sector experienced a decline in employment over the year (Figure 1.2).

Figure 1.2 Annual Percentage Change in Gross Value Added & Employment, 2018-2019



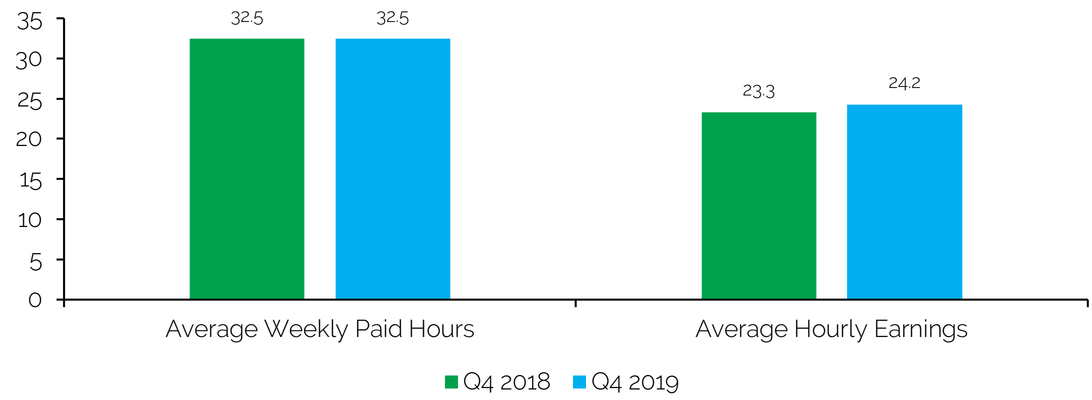
Source: SLMRU (SOLAS) analysis of CSO data

Note: Gross Value Added is based on constant basic prices

Hours Worked and Earnings

Figure 1.3 presents the average weekly paid hours and average hourly earnings for the overall economy. In quarter 4 2019, the number of average weekly paid hours was 32.5, which was unchanged when compared to quarter 4 2018. In quarter 4 2019, average hourly earnings were €24.2, which was 90 cents more than in quarter 4 2018.

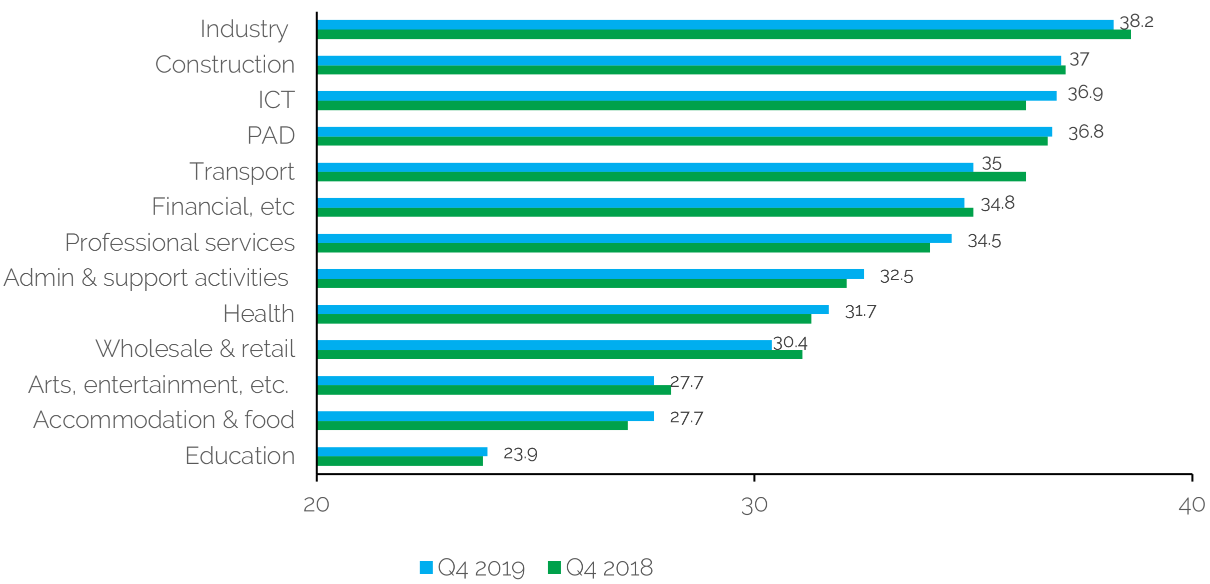
Figure 1.3 Average Weekly Paid Hours & Average Hourly Earnings



Source: CSO, Earnings, Hours and Employment Costs Survey

Figure 1.4 presents average weekly paid hours by broad sector. In quarter 4 2019, industry had the highest average weekly paid hours at 38.2. This was followed by construction (37 hours), public administration and defence (36.9 hours) and ICT (36.6 hours). The education sector recorded the lowest average hours worked within a week (23.9 hours), followed accommodation/food (27.7 hours). The average weekly paid hours declined in approximately half of the sectors, with the largest fall attributed to the transport sector at 1.2 hours; the largest increase in average weekly paid hours was for the ICT sector at 0.7 hours.

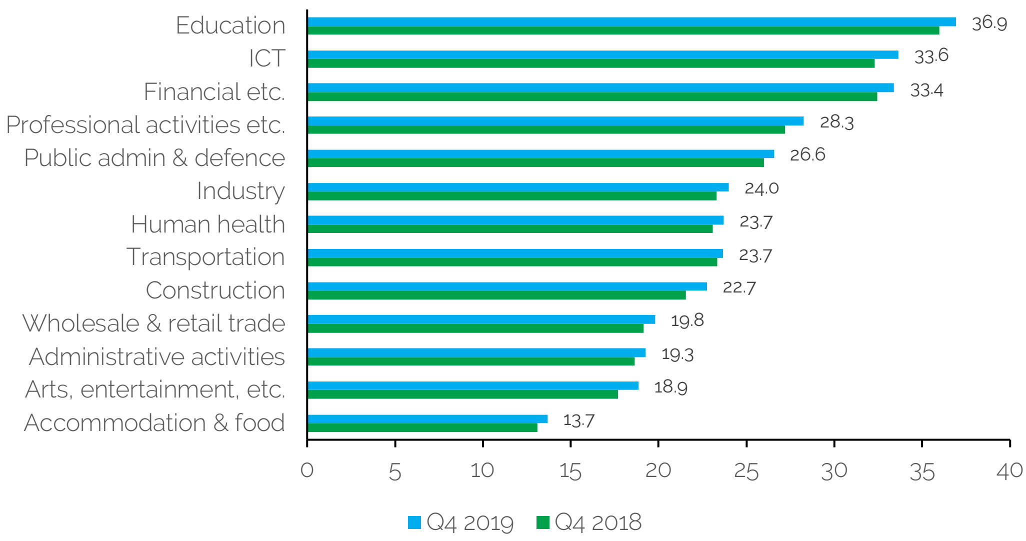
Figure 1.4 Average Weekly Paid Hours by Sector



Source: CSO, Earnings, Hours and Employment Costs Survey

In quarter 4 2019, average hourly earnings were highest in the education sector, at €36.91 per hour and lowest in the accommodation and food sector, at €13.67 per hour (Figure 1.5). This ranking is largely in line with previous years. Between quarter 4 2018 and quarter 4 2019, hourly earnings increased across all sectors; those employed in the arts, entertainment and others services sector had the largest increase in average hourly earnings at 6.6%, followed by the construction (5.5%) and accommodation and food sectors (4.4%).

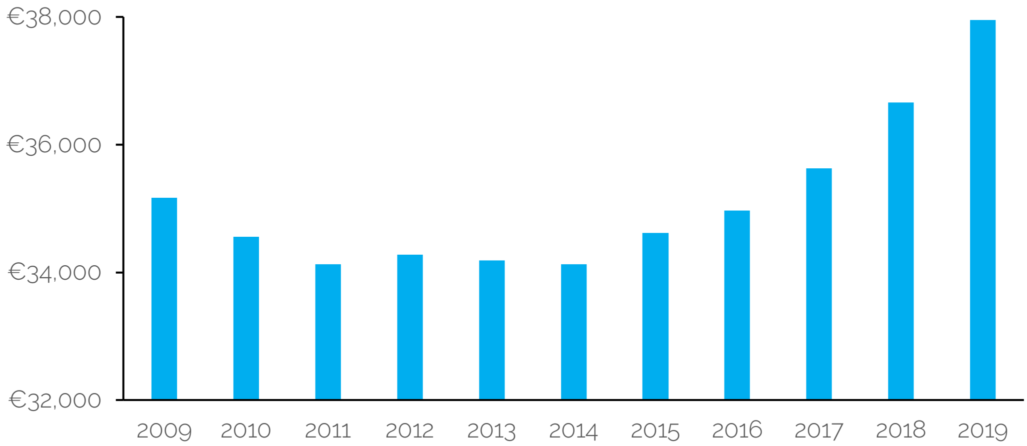
Figure 1.5 Average Hourly Earnings by Sector



Source: CSO, Earnings, Hours and Employment Costs Survey

As the Irish economy approached full employment, 2019 saw a significant increase in the average total earnings across all employment status (full-time and part-time). The average total earnings per person was €38,000 for the year, a 3.5% increase on 2018 (Figure 1.6).

Figure 1.6 Average Total Earnings per Person (excluding irregular earnings), 2009-2019



Source: CSO, Earnings, Hours and Employment Costs Survey

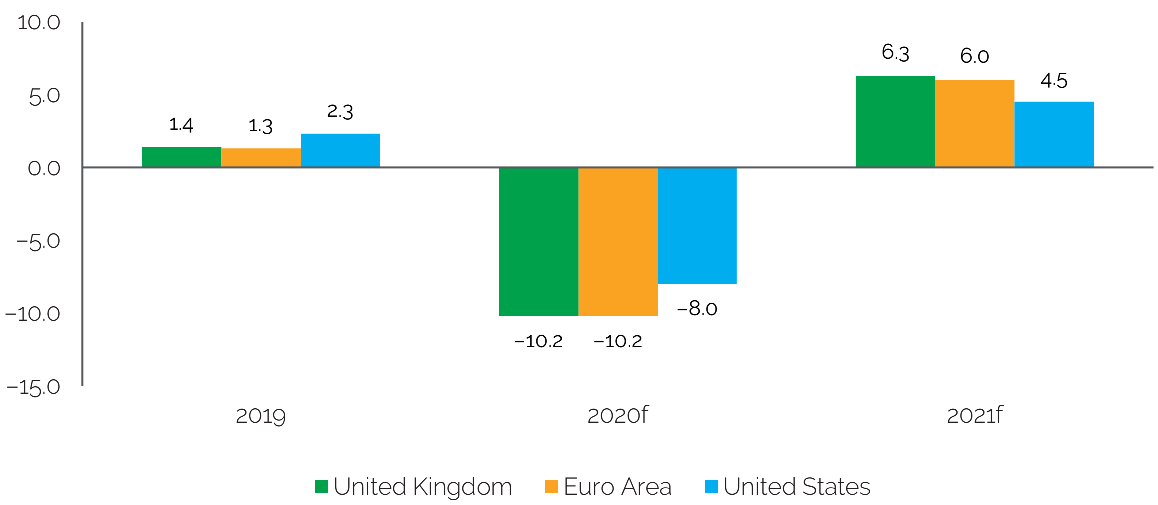
Redundancies

In 2019, 2,446 redundancies were registered with the DEASP, the lowest level since their peak in 2009. The annual number of redundancies has remained low in recent years, in stark contrast to the three-year period from 2009 to 2011 when over 185,000 redundancies were registered. While the number of redundancies registered with the DEASP up to May 2020 were broadly in line with the same period in 2019, an increase in registrations is expected in the coming months in light of the impact of COVID-19 on businesses in Ireland.

International and National Outlook

Although the full picture of the impact of COVID-19 on economies worldwide is yet to emerge, economic commentators expect a significant decline across most, if not all, economies. Figure 1.7 provides growth projections from the IMF for the UK, US and the Euro area. All three economies are expected to decline for the year 2020 with both the Euro area and the UK expected to decline by 10.2%. While the decline for the US economy in 2020 is not expected to be as severe (-8%), recovery is not forecast to be as high in 2021 as for the other two economies, with growth expected to be 4.5% for the US, 6.0% for the Euro area and 6.3% for the UK.

Figure 1.7 Growth projections (real GDP, annual percentage change)



Source: International Monetary Fund, World Economic Outlook, June 2020 Update.

Growth projections for Ireland are forecast to be of a similar magnitude to the Euro area with real GDP expected to decline by 10.5% in 2020 but to increase by 6.0% in 2021.[5]

[5] https://www.gov.ie/en/publication/43a6dd-stability-programme-update-2020/

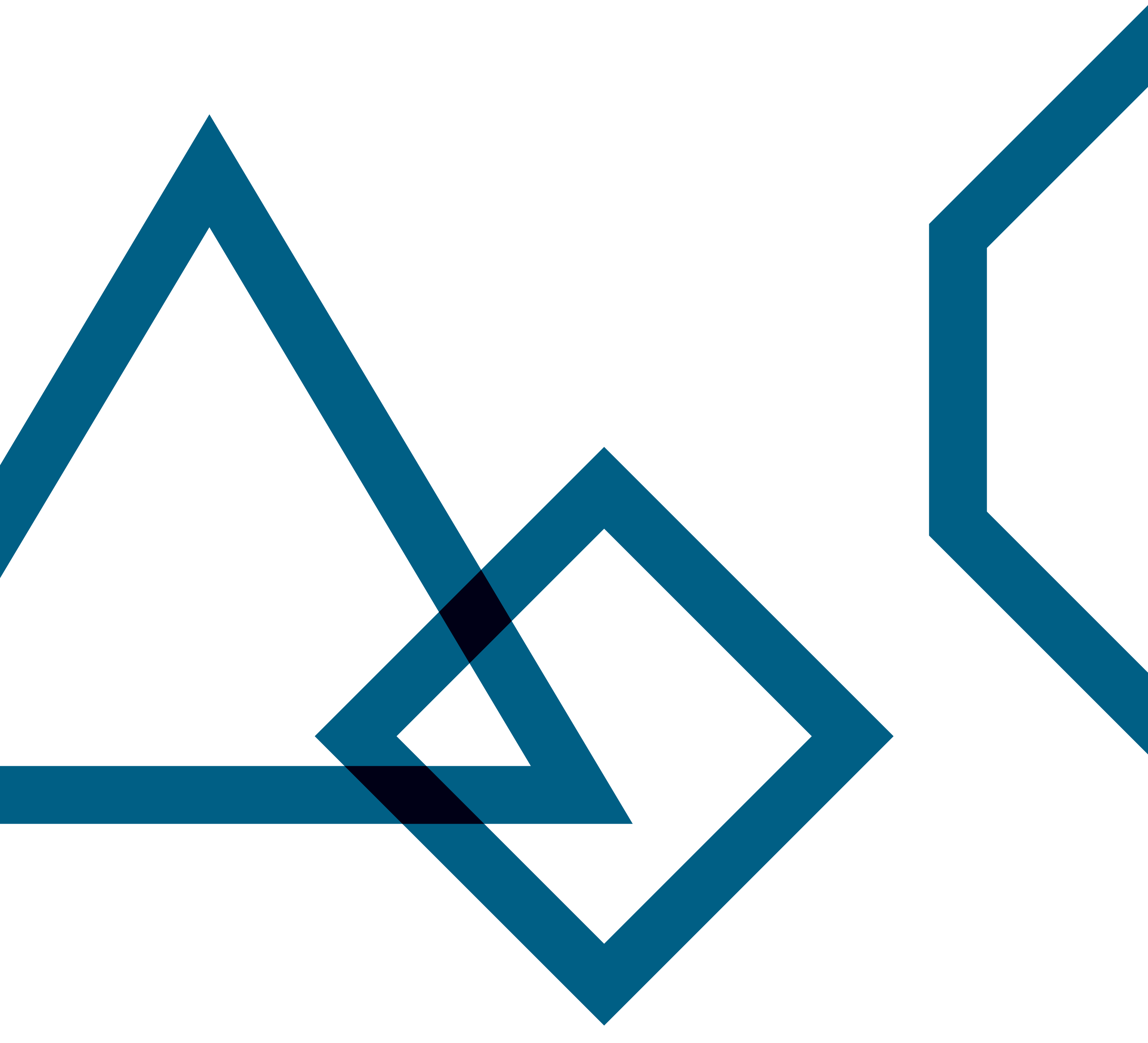
In terms of employment projections for Ireland, Table 1 summarises estimates made by the ESRI[6], Central Bank[7] and the Department of Finance[8]. The severe scenario projected by the ESRI could see employment fall to as low as 1,976 million on average annually for 2020, representing a decline of almost 350,000 persons employed compared to 2019. Forecasts for 2021 indicate that a recovery is expected in 2021, although employment levels are still expected to fall short of those in 2019. Further details on forecasts across the labour force, employment and unemployment measures in light of COVID-19 are available in Section 2.2.

Table 1: Employment forecasts (000s) by institution, 2020 and 2021

	2020 Forecast	2021 Forecast
Dept of Finance	2,110	2,221
Central Bank Baseline	2,047	2,203
Central Bank Severe	1,989	2,107
ESRI Baseline	2,026	-
ESRI Severe	1,976	-
ESRI Benign	2,081	-

Source: Dept of Finance, Central Bank, ESRI

[6] https://www.esri.ie/publications/quarterly-economic-commentary-summer-2020
[7] https://www.centralbank.ie/publication/quarterly-bulletins/quarterly-bulletin-q3-2020
[8] https://www.gov.ie/en/publication/43a6dd-stability-programme-update-2020/



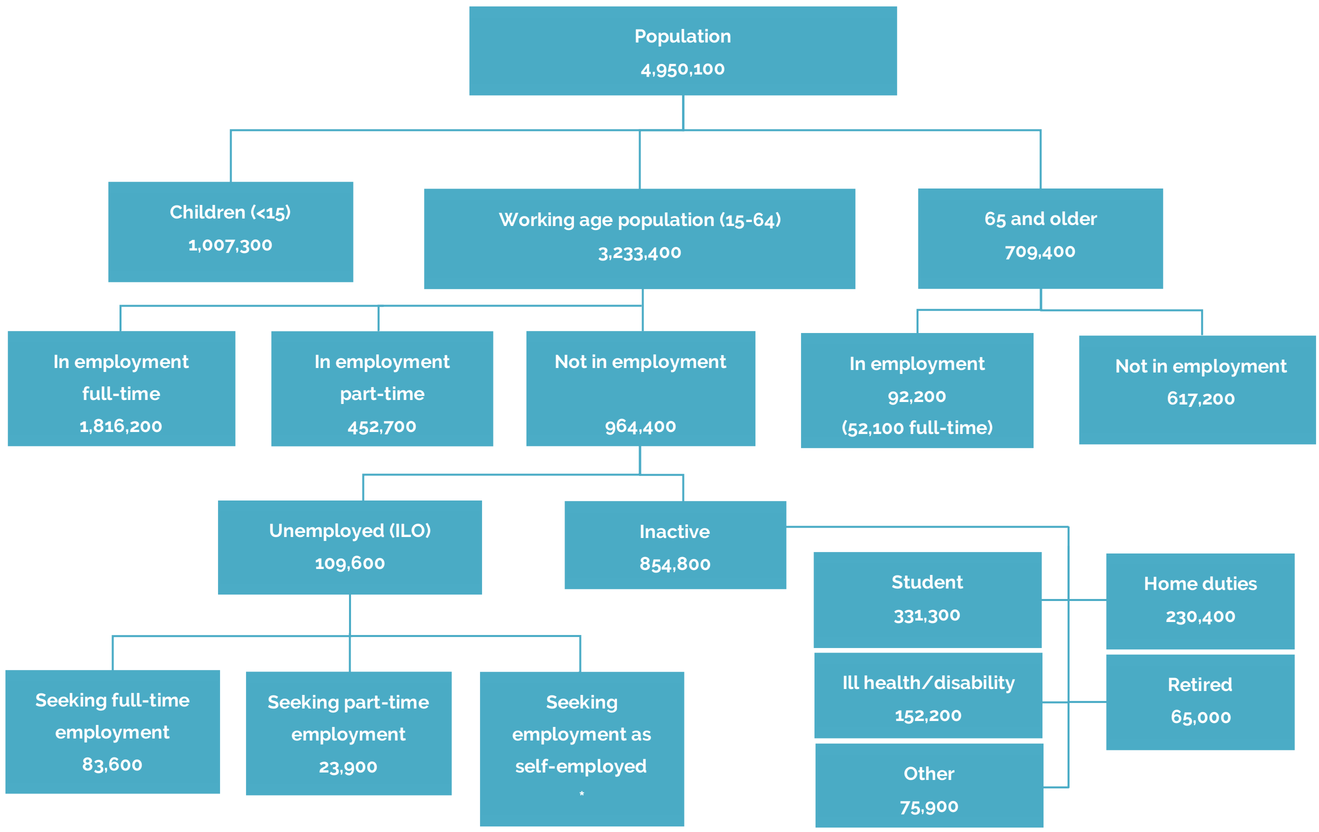
Section 2
Labour Market Overview

2.1 Population: Labour Market Status

In quarter 4 2019, Ireland's population was estimated at 4.95 million persons, 63,700 more than in quarter 4 2018 (Figure 2.1), while the working age population (persons aged 15-64) was 3.23 million, 41,500 more than in quarter 4 2018. Compared to quarter 4 2018, employment for that age group increased by 64,300 (both full-time and part-time employment increased), while the number of persons not in employment (unemployed or economically inactive) decreased.

The number of children (persons younger than 15 years) was 1.0 million (similar to the number observed in quarter 4 2018), while the number of persons aged 65 or older was 709,400, 24,100 more than in quarter 4 2018. The number of persons in employment in that age group was 92,200, 15,600 more than that observed in quarter 4 2018.

Figure 2.1 Population by Labour Market Status (ILO defined), Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data
Note: Discrepancies are due to rounding.
* Asterisk indicates that the number is too small to report

In quarter 4 2019, 2.3 million persons of working age (15-64 years) were in employment (64,300 more than in quarter 4 2018), and almost one million persons of working age were not in employment (22,800 fewer than in quarter 4 2018). Of the working age population not in employment, 109,600 persons were unemployed, while 854,800 persons were economically inactive.[9] Compared to quarter 4 2018, the number of unemployed persons decreased (18,200, or 14.2%), while the number of economically inactive remained relatively unchanged.

Within the economically inactive group of the working age population in quarter 4 2019, there were:

- 331,300 students – 2,700 fewer than in quarter 4 2018
- 230,400 persons engaged in home duties – 6,700 more than in quarter 4 2018
- 65,000 retired persons – 1,400 more than in quarter 4 2018
- 152,200 persons were inactive due to ill health/disability – 5,300 more than in quarter 4 2018
- 75,900 persons were inactive for other reasons – 4,500 more than in quarter 4 2018; of those inactive for other reasons, 9,300 were discouraged workers (3,600 fewer than in quarter 4 2018).

In quarter 4 2019, the total age dependency rate[10] (youth and older age) was 53.1% (the same as in quarter 4 2018). Over the same period, the youth age dependency rate decreased by 0.4 percentage points to 31.2%, while the older age dependency rate increased by 0.4 percentage points to 21.9% (Table 2.1).

In quarter 4 2019, the inactivity rate of the working age population[11] was 26.4%, 0.5 percentage points lower than in quarter 4 2018. The economic dependency ratio[12] was 1.00 in quarter 4 2019, similar to that observed in quarter 4 2018 (Table 2.1).

Table 2.1 Dependency and Inactivity Rates (Quarter 4)

	2018	2019
Total dependency rate (0-14 and 65+)	53.1%	53.1%
Youth dependency rate (0-14)	31.6%	31.2%
Old age dependency rate (65+)	21.5%	21.9%
Inactivity rate (15-64)	26.9%	26.4%
Economic dependency ratio	1.03	1.00

Source: SLMRU (SOLAS) analysis of CSO data

[9] Economically inactive are defined as persons who are not in employment or unemployed (actively seeking employment).
[10] The age dependency rate compares the non-working age population to those of working age.
[11] The inactivity rate is the proportion of the population that is not in the labour force. The inactivity rate for the 15-64 age group (headline inactivity rate) is lower than the general inactivity rate.
[12] The economic dependency ratio compares the total population not in the labour force to the number of those who are in the labour force.

2.2 Labour Market and Related Indicators

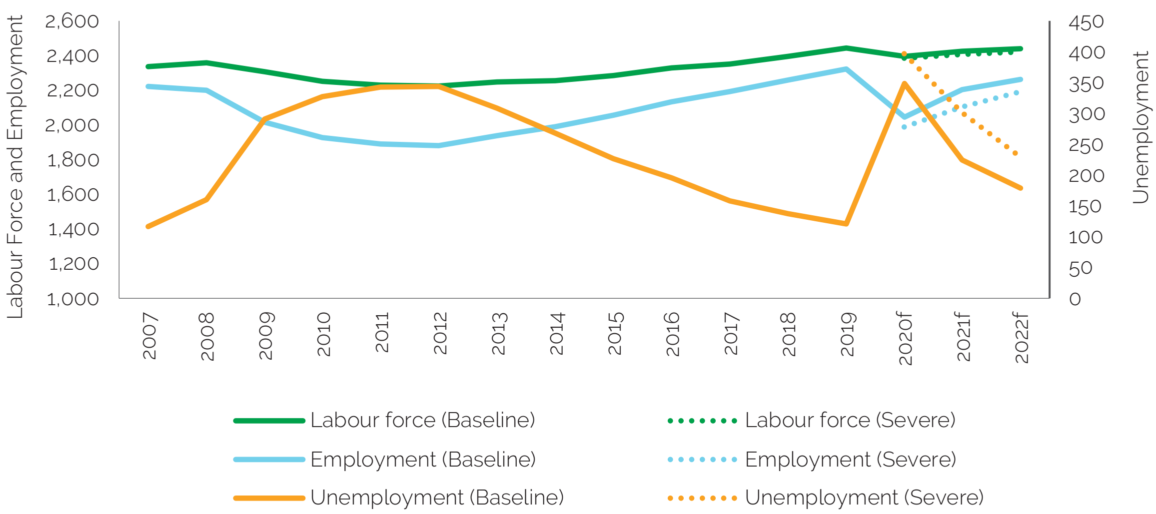
Many of the labour market and related indicators for 2019 are expected to have changed dramatically in 2020 with the onset of the COVID-19 pandemic. In this sub-section, therefore, we look both at the situation as it was in 2019, as well as the expected changes for the coming years based on projections from the Central Bank of Ireland.[13]

In 2019, there were 2.44 million persons in the labour force (annual average). Compared to 2018, this represented an increase of 48,400 persons or 2% (Figure 2.2). In 2019, the labour force participation rate was 62.3%, which remained almost unchanged from the 2018 rate (Table 2.2). Reflecting the impact of the COVID-19 pandemic crisis, the Central Bank of Ireland is projecting that the labour force will decline in 2020, followed by increases in both 2021 and 2022, based on its two forecast scenarios (baseline and severe). In the baseline, the labour force is projected to decline by 2%, followed by an increase of 1.3% in 2021 and 0.6% in 2022, returning to almost its 2019 level in 2022. In the severe scenario, the labour force is projected to decline by 2.4%, followed by increases of 0.9% in 2021 and 0.6% in 2022, with the labour force being 22,000 persons below its 2019 level in 2022.

In 2019, there were 2.32 million persons in employment (annual average), an increase of 64,900 persons or 2.9% compared to 2018. In 2019, the employment rate was 69.6%, compared to 68.7% in 2018 (Table 2.2). In the Central Bank baseline scenario, employment is projected to decline by 11.9% in 2020, before rebounding by 7.6% in 2021 and increasing by 2.7% in 2022. Projected employment in 2021 and 2022 is almost 121,000 (5.2%) and 61,400 (2.6%) below the 2019 level respectively. In the Central Bank severe scenario, employment is projected to decline by 14.4% in 2020, followed by increases of 5.9% in 2021 and 4.1% in 2022. The employment level in 2021 and 2022 is expected to be 217,000 and 131,000 below the 2019 level respectively (Figure 2.2).

In 2019, there were 121,000 persons unemployed (annual average), a decrease of 16,500 persons (or 12%) compared to 2018 (Figure 2.2). In 2019, the unemployment rate decreased to 5% (annual average), from 5.7% in 2018 (based on the CSO LFS). In the Central Bank baseline scenario, the unemployment rate is projected to increase to 14.5% in 2020 (reflecting the sharp increase in job losses in the second quarter of 2020 before the easing of COVID -19 containment measures), and to decline slowly to 9.2% in 2021 and 7.3% in 2022. In the severe scenario, the unemployment rate is projected to increase to 16.6% in 2020, before declining to 12.4% in 2021 and 9.4% in 2022 respectively.

Figure 2.2 Labour Force, Employment & Unemployment (000s), Annual Averages



Source: SLMRU (SOLAS) analysis of CSO data; Central Bank of Ireland, Quarterly Bulletin (July 2020)

[13] Central Bank of Ireland. Quarterly Bulletin, July 2020

Table 2.2 Participation, Employment and Unemployment Rates (Annual Averages)

	Participation rate (%) (15+)	Employment rate (%) (15-64)	Unemployment rate (%) (15-74)
2010	62.6	61.0	14.6
2011	62.0	60.0	15.4
2012	61.7	59.9	15.5
2013	62.0	61.7	13.8
2014	61.8	63.1	11.9
2015	61.9	64.8	10.0
2016	62.2	66.4	8.4
2017	62.0	67.7	6.8
2018	62.2	68.6	5.8
2019	62.3	69.5	5.0

Source: CSO

In quarter 4 2019, the long-term unemployment rate (i.e. those unemployed for one year or longer) declined to 1.6%, from 2.1% in quarter 4 2018 (Table 2.3). Those rates compare with the peak rate of 9.8% recorded in quarter 1 2012. In quarter 4 2019, 38,700 persons were classified as long-term unemployed, 11,400 persons fewer than in quarter 4 2018. Between quarter 4 2018 and quarter 4 2019, the share of long-term of total unemployment declined from 39% to 35%.

The broad unemployment measure (combining those unemployed and part-time underemployed) declined to 8.9% in quarter 4 2019, down from 9.9% in quarter 4 2018 (Table 2.3).

In quarter 4 2019, the youth unemployment rate (i.e. persons aged 15 to 24) was 9.6%, compared with 12% in quarter 4 2018 and the peak of 33.4% observed in quarter 2 2012. However, there was a considerable number of youths unemployed (28,000 persons) in quarter 4 2019, although this was a fall of almost 6,000 persons compared to quarter 4 2018. For the same period, the NEET rate (the share of 15 to 24-year olds who were not in employment, education or training) remained at approximately 9% (Table 2.3).

Table 2.3 Other Unemployment Indicators, Quarter 4 2019

	Long term UE rate (%) (15-74)	Broad UE rate (%) (15-74)	Youth UE rate (%) (15-24)	NEET* rate (%) (15-24)
Quarter 4 2018	2.1	9.9	12.0	8.8
Quarter 4 2019	1.6	8.9	9.6	9.1

Source: SLMRU (SOLAS) analysis of CSO data

*Not in employment, education or training; ILO defined; there is a discrepancy between ILO and PES (self-declared principal economic status) measure of participation in education with the former used in the NEET rate potentially overstating the non-participation in the case of Ireland.

Since 2015, inward migration has exceeded outward migration, resulting in positive net migration (Table 2.4). In 2019, net inward migration was 33,700, which was similar to the 2018 level (the highest recorded since 2008). Between 2013 and 2019, inward migration increased by 25,900 and outward migration decreased by 26,400.

Table 2.4 Migration Estimates (000s)

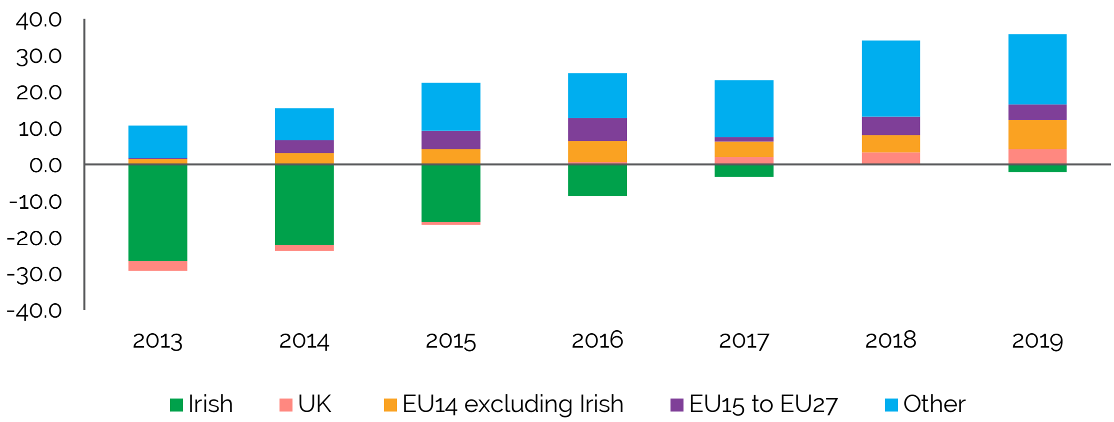
Year	Inward	Outward	Net migration
2013	62.7	81.3	-18.7
2014	66.5	75.0	-8.5
2015	75.9	70.0	5.9
2016	82.3	66.2	16.2
2017	84.6	64.8	19.8
2018	90.3	56.3	34.0
2019	88.6	54.9	33.7

Source: CSO
Note: 2016 is based on Census of Population.

In 2019,

- irish nationals experienced a return to net outward migration (29,000 Irish nationals emigrated from Ireland, while 26,900 Irish nationals returned from abroad to live in Ireland). (Figure 2.3)
- net inward migration among non-Irish nationals remained strong (increasing to 35,800 in 2019 from 34,000 in 2018)
- net migration was positive for all age groups and comprised mostly of those aged 25 to 44 (prime workers); a total of 53% of immigrants were in this age group, compared to 49% for emigrants
- of the 88,600 immigrants, Irish nationals accounted for 30%, while non-EU nationals and EU nationals accounted for 35% and 27% respectively
- of the 54,900 emigrants, Irish nationals accounted for 53%, while non-EU and EU nationals each accounted for approximately 20%
- 67% of immigrants (53,000 persons) had attained a third level qualification, compared to 58% of emigrants (28,300 persons); just over 20% of immigrants (16,900 persons) had attained at most a higher secondary qualification, while the corresponding share was 30% for emigrants (14,600 persons).

Figure 2.3 Net Migration Estimates 2013-2019 by Nationality (000s)

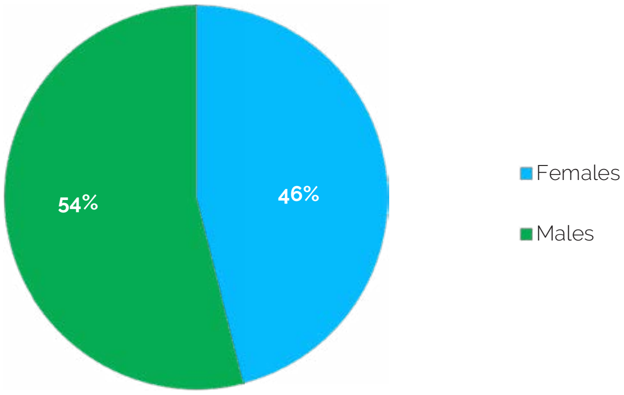


Source: CSO
Note: 2016 figures based on 2016 Census of Population.

2.3 Employment Composition

In quarter 4 2019, there were 2.36 million persons in employment (aged 15 or older). Males accounted for 54% (1.27 million persons). Compared to quarter 4 2018, the gender distribution of employment has remained unchanged (Figure 2.4).

Figure 2.4 Employment by Gender, Quarter 4 2019

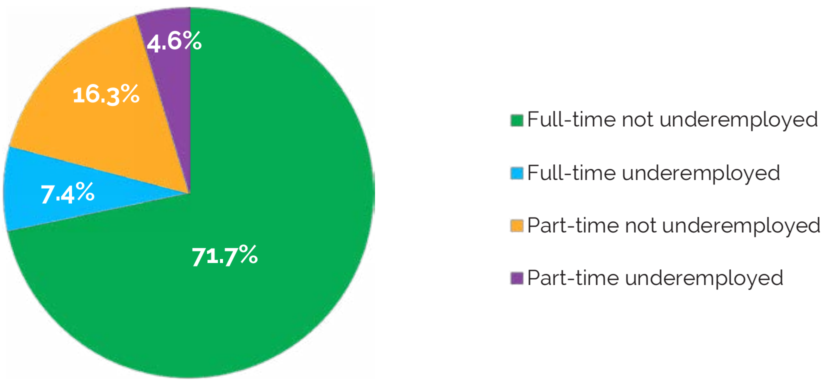


Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2019, full-time employment accounted for 79.1% (1.87 million persons) of total employment. Of those working full-time, 9.4% (or 176,200 persons) were underemployed (wished to work more hours and were available). Of those working part-time, 22%, or 108,400 persons, were underemployed (Figure 2.5).

Between quarter 4 2018 and quarter 4 2019, persons in full-time employment increased by 49,500 (2.7%), while those in part-time employment increased by 30,400 persons (6.6%). Over the same period, the number of persons in full-time employment who were underemployed increased by 7,400 persons (4.4%) to 176,200, while the number of persons in part-time employment who were underemployed remained almost unchanged (108,400 persons).

Figure 2.5 Employment by Employment Type, Quarter 4 2019

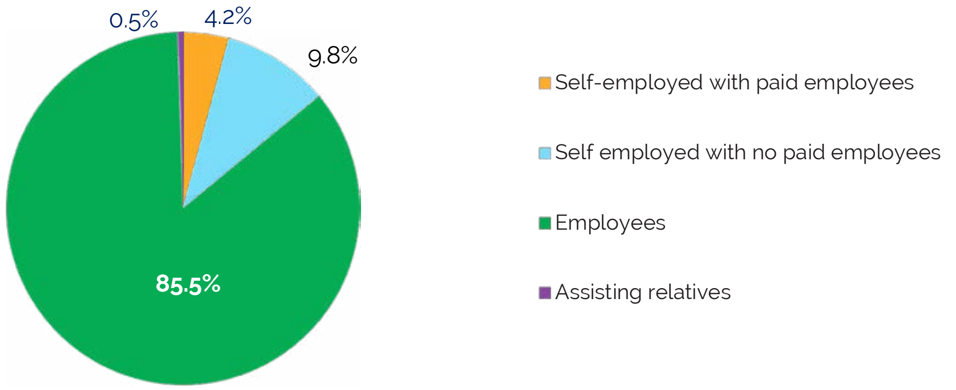


Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2019, 85.5% (2.02 million persons) in employment were employees (of which, 1.3% were employees on Government supported employment schemes). Those who were self-employed accounted for 14% (331,200 persons), of which 70.1% were self-employed with no paid employees (Figure 2.6). Compared to quarter 4 2018, there no change in the distribution of employment by employment status.

Between quarter 4 2018 and quarter 4 2019, the employment growth observed was predominantly due to an increase in the number of employees (68,000 persons). The number of self-employed persons increased (11,600 persons), while those assisting relatives remained relatively unchanged.

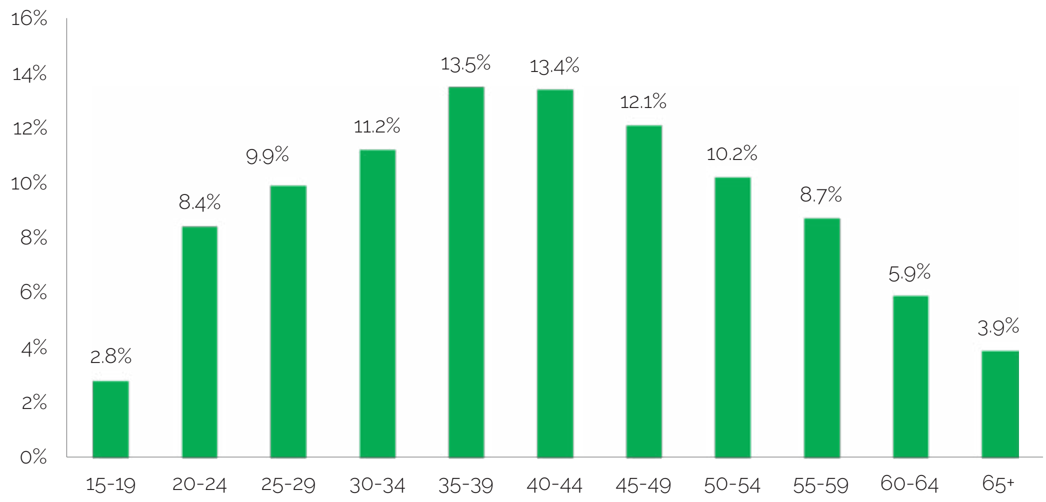
Figure 2.6 Employment by Employment Status, Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

Figure 2.7 presents the age profile of persons in employment. In quarter 4 2019, 70.3% (1.66 million persons) of employment was concentrated in the 25-54-year age group. Those aged under 25 years accounted for 11.2% (264,000 persons), while those aged 55 years or older accounted for 18.5% (436,600 persons). Between quarter 4 2018 and quarter 4 2019, the age distribution of employment remained broadly similar.

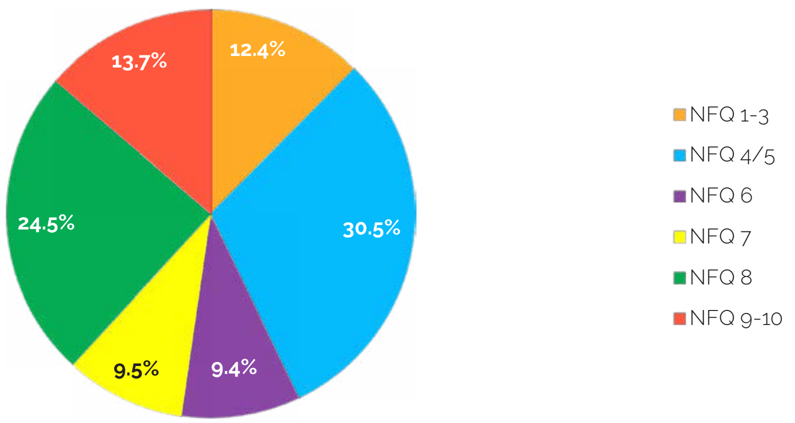
Figure 2.7 Employment by Age, Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

Figure 2.8 presents the education profile of those in employment in Ireland. In quarter 4 2019, 12.4% of persons in employment had attained at most qualifications at NFQ levels 1-3 (e.g. Junior Certificate); 30.5% had qualifications at NFQ levels 4-5 (e.g. Leaving Certificate); 9.4% had qualifications at NFQ level 6, while the remaining 47.6% had the equivalent of ordinary degree level or higher (NFQ 7-10). The education distribution of employment is broadly similar to that observed in quarter 4 2018.

Figure 2.8 Employment by Education (NFQ), Quarter 4 2019

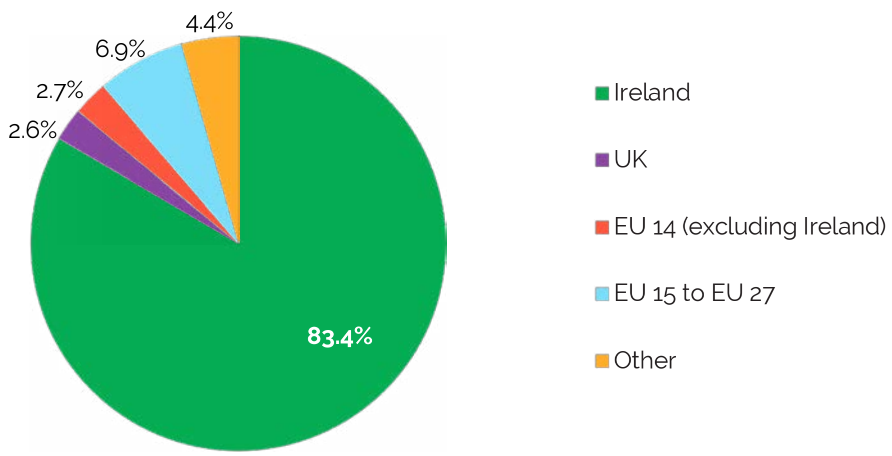


Source: SLMRU (SOLAS) analysis of CSO data

Note: excludes those who did not state their education level

Employment by nationality is detailed in Figure 2.9. In quarter 4 2019, non-Irish nationals accounted for 16.6% of total employment (391,300 persons). Of the non-Irish national employment, EU nationals accounted for 73.4% (287,200 persons). Between quarter 4 2018 and quarter 4 2019, the distribution of employment by nationality remained broadly unchanged.

Figure 2.9 Employment by Nationality, Quarter 4 2019

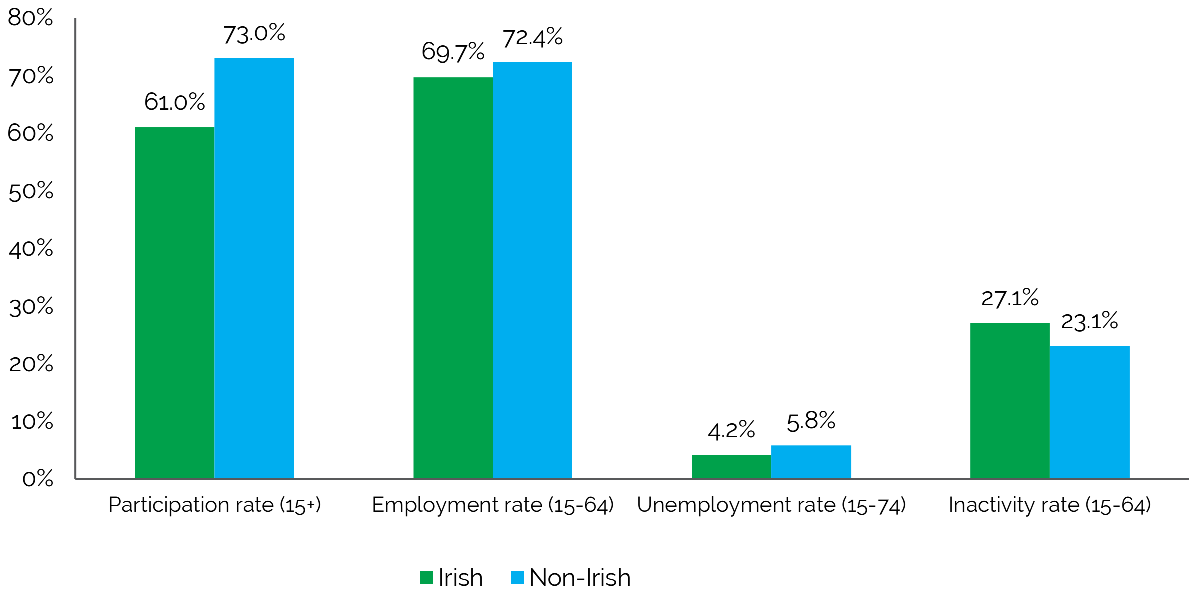


Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2019, non-Irish nationals had higher participation, employment rates and unemployment rates and lower inactivity rates compared to Irish nationals (Figure 2.10).

Between quarter 4 2018 and quarter 4 2019, the unemployment rate for both Irish and non-Irish nationals declined (each by less than one percentage point). The employment rate for Irish nationals increased (1.4 percentage points), while it decreased for non-Irish nationals (less than 1 percentage point). The participation rate for Irish nationals increased (0.8 percentage points), while it decreased for non-Irish nationals (1.5 percentage points). Over the same period, the inactivity rate for Irish nationals decreased (0.8 percentage points), while it increased for non-Irish nationals (1.4 percentage points).

Figure 2.10 Participation, Employment, Unemployment and Inactivity Rates by Nationality, Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

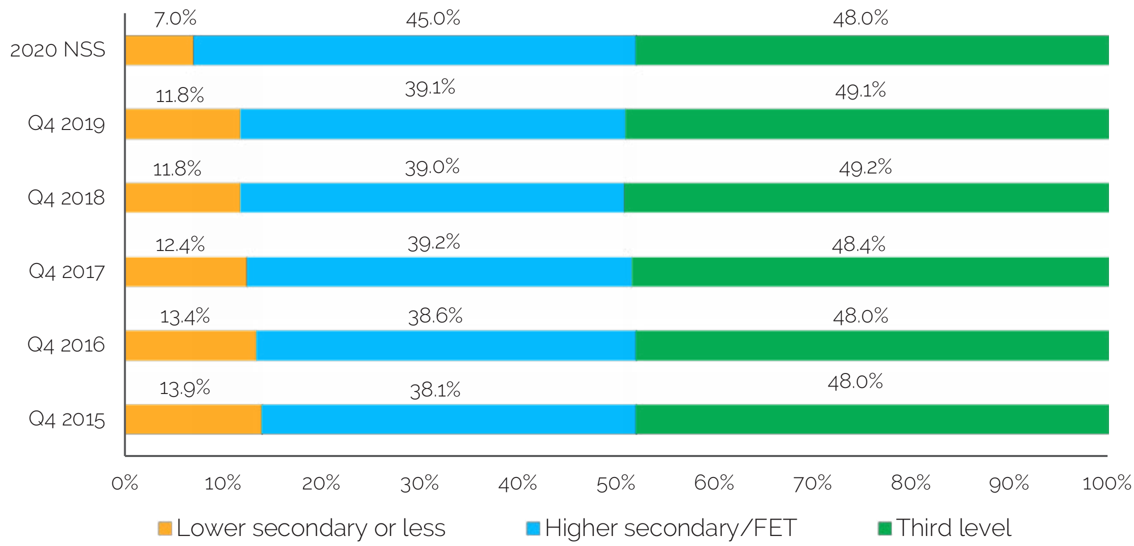
2.4 National Skills Strategy: Progress to Date

Figure 2.11 presents the educational attainment of the labour force (15-64 years) and the targets set out in the 2007 National Skills Strategy (NSS) and carried over in the National Skills Strategy 2025[14].

In quarter 4 2019, the share of working age third level graduates (those aged 15-64 years) in the labour force was 49.1% (exceeding the 2020 NSS target of 48%). At lower levels of education, the share who had attained lower secondary or less qualifications (as their highest level of education) was 11.8%, while the share was 39.1% for those who had attained higher secondary/FET qualifications. Those respective shares remained unchanged compared to those observed in quarter 4 2018.

The gap to the 2020 target was almost five percentage points for those who had attained lower secondary or less qualifications, and almost six percentage points for those with higher secondary/FET qualifications.

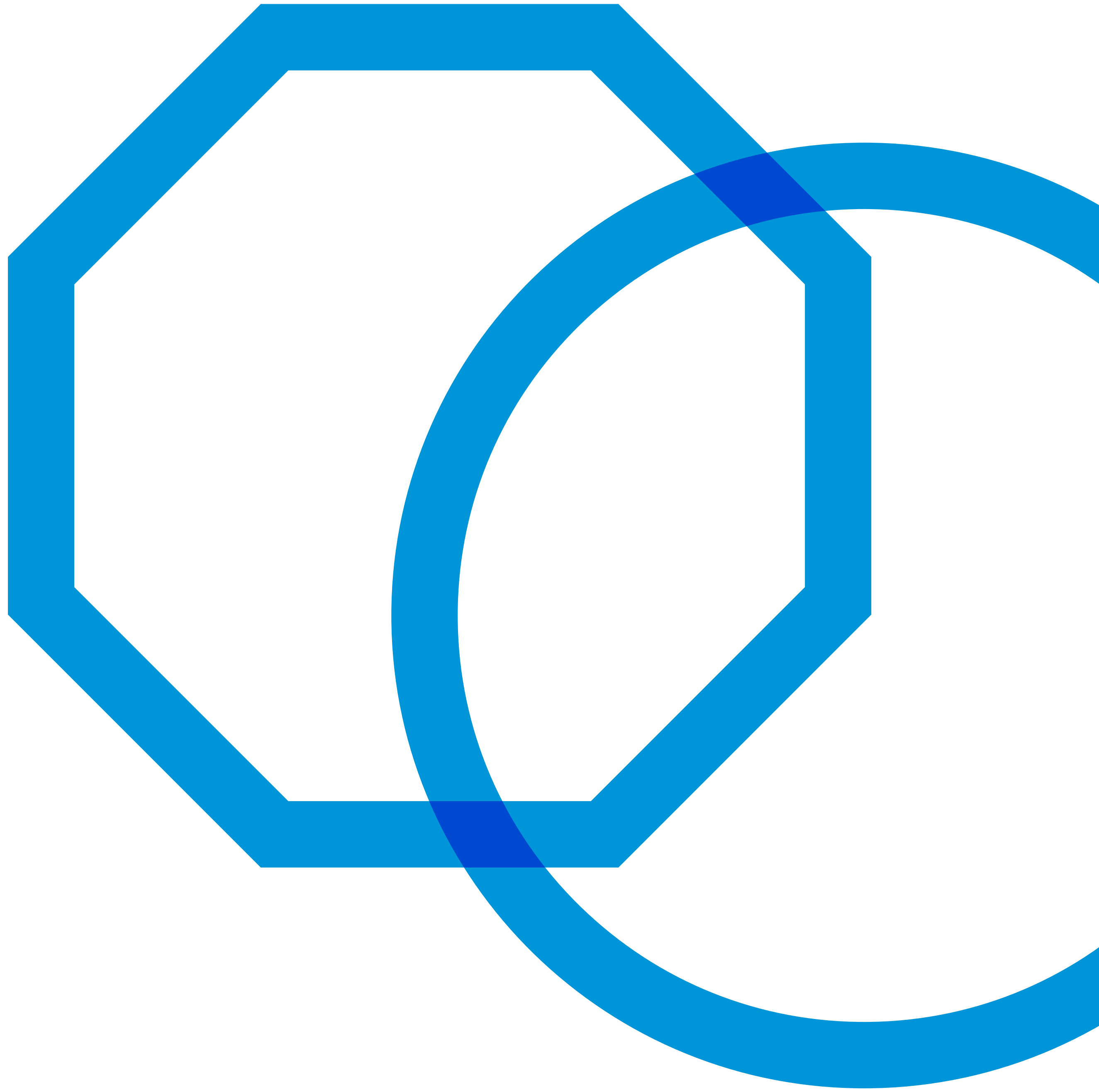
Figure 2.11 Labour Force (15-64 years) by Education (Quarter 4 2019) and the NSS Target



Source: SLMRU (SOLAS) analysis of CSO data

Note: excludes those who did not state their education level

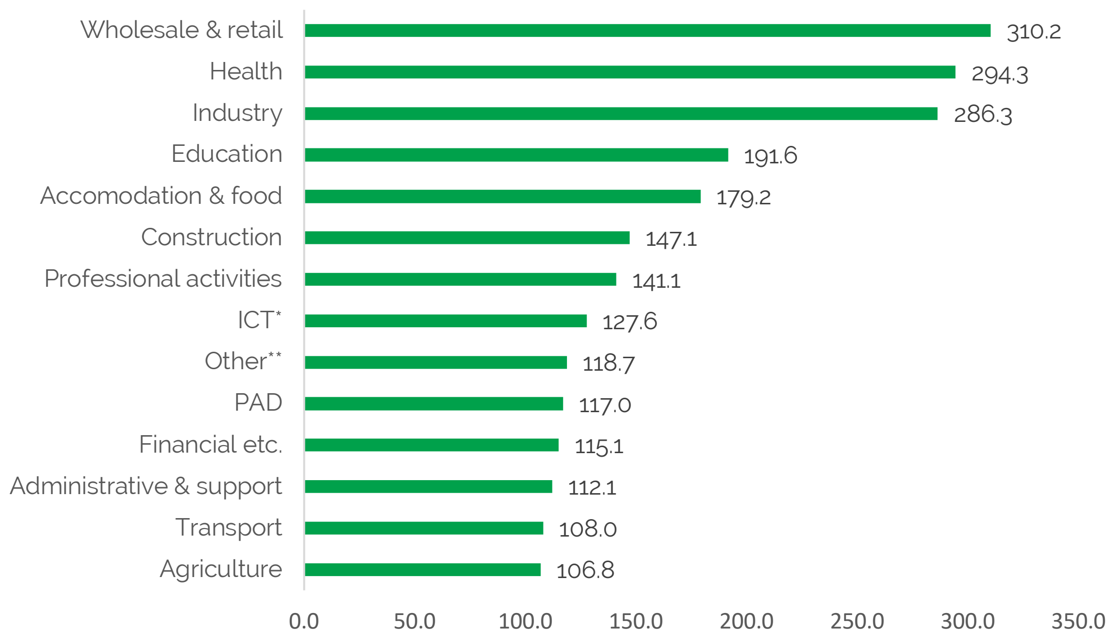
[14] Ireland's National Skills Strategy 2025, January 2016



Section 3
Employment by Economic Sector

Figure 3.1 presents national employment by broad economic sector (NACE Rev 2). In quarter 4 2019, the wholesale and retail sector was the largest employer followed by health and industry. These three sectors employed more than a quarter of a million people each, accounting for 13.1%, 12.5% and 12.1% of national employment respectively.

Figure 3.1 Employment by Sector (000s), Quarter 4 2019



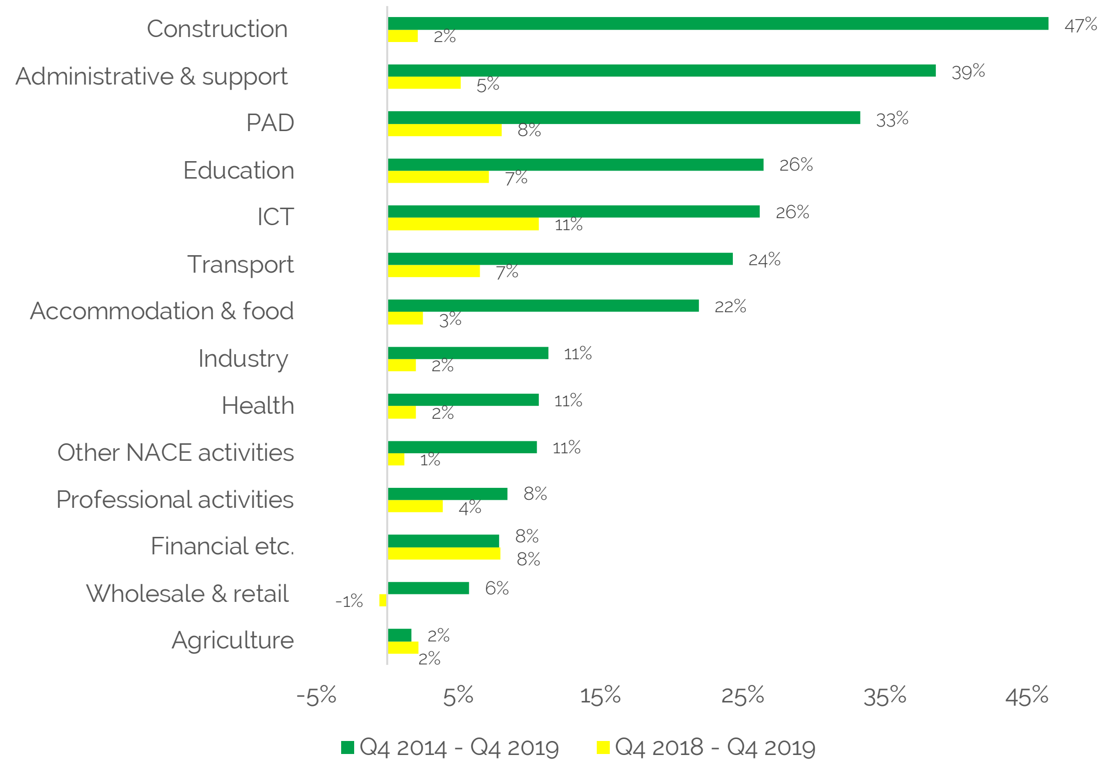
Source: SLMRU (SOLAS) analysis of CSO data

Excludes not stated
*The information and communication (ICT) sector includes computer programming telecommunications, information services, publishing and broadcasting. It does not include ICT equipment manufacturing of the wholesale of computers, computer peripheral equipment and software.
**Other Nace sectors includes activities such as entertainment, repair of goods, a range of personal services activities, etc.

Employment growth by sector is presented in Figure 3.2. Between quarter 4 2018 and quarter 4 2019, employment increased for all sectors, with the exception of wholesale and retail (declined by 1%). The strongest growth in relative terms was observed for the ICT sector (11%), followed by public administration and defence (PAD) (8%) and the financial activities sector (8%).

Over the five-year period from quarter 4 2014, all sectors experienced growth. The strongest relative growth was observed for the construction sector at 47%, with an additional 46,500 persons employed, followed by administrative support at 39% growth (with an additional 31,200 persons) and PAD at 33% (with 29,200 additional persons).

Figure 3.2 Employment Growth by Sector (%)



Source: SLMRU (SOLAS) analysis of CSO data

Excludes not stated

In this section we examine economic sectors within four broad categories:

1) industry, comprised of manufacturing, utilities and extraction/mining
2) construction
3) agriculture, forestry and fishing (abbreviated in this document to 'agriculture')
4) services, which include 11 NACE sectors; services are firstly analysed by knowledge intensive services and less knowledge intensive services, followed by a detailed breakdown by individual sector.

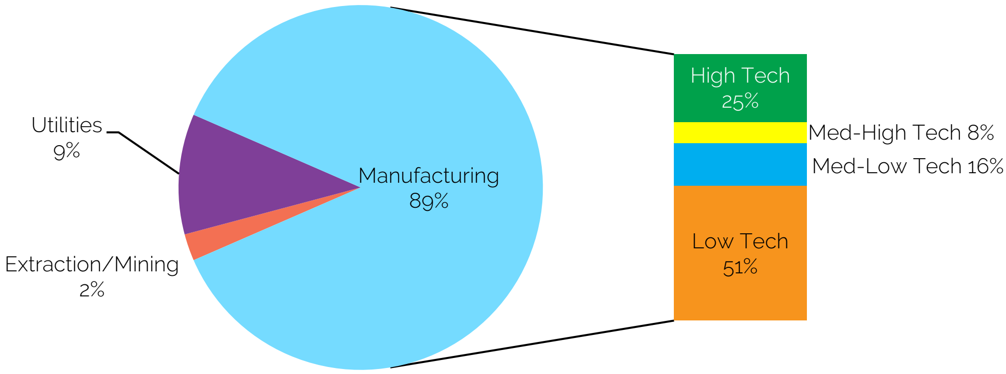
Industry

In quarter 4 2019, 286,000 persons were employed in the industrial sector. This accounted for a 12.1% share of overall total national employment. The industrial sector, between quarter 4 2018 and quarter 4 2019, observed an increase of 2%. Over the five-year period between quarter 4 2014 and quarter 4 2019, employment in industry increased by 29,100 persons, a growth of 11%.

Figure 3.3 presents industrial employment by sub-sector and technological intensity. In quarter 4 2019, 89.1% of industrial employment was in manufacturing (255,100), with utilities and extraction/mining accounting for 8.5% and 2.4% respectively. For the same time period, in terms of technological intensity, low technology manufacturing accounted for 51% of manufacturing employment (128,900) followed by high (25%) and medium-high tech (8%) and medium-low technology (16%).

Between quarter 4 2018 and quarter 4 2019, employment in high and medium-high technology remained the same while employment in medium-low technology increased by one percentage point which was offset by a decrease in low technology employment. Of those employed in high technology manufacturing in quarter 4 2019, two thirds were employed in pharmaceuticals, accounting for 43,400 persons.

Figure 3.3 Industrial Employment by Sector and Technological Intensity, Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

Construction

In quarter 4 2019, construction accounted for a 6% share of national employment with 147,100 persons employed in the sector. Of the total employment in the construction sector, 53% were in specialised construction activities (e.g. bricklaying, scaffolding, construction equipment renting), 36% in construction of buildings and the remainder in civil engineering. Between quarter 4 2018 and quarter 4 2019, construction employment grew by an additional 3,100 persons, a growth of 2%. The absolute growth over this period was attributed primarily to employment in the construction of buildings. Over the five-year period, construction had the strongest growth rate at 47%, when compared to all other sectors.

Agriculture, Forestry and Fishing

In quarter 4 2019, 107,000 persons were employed in the agriculture sector representing 4.5% of national employment. Employment in agriculture grew by 2,300 additional persons between quarter 4 2018 and quarter 4 2019. Over the five-year period agriculture, when compared to all other sectors, observed the smallest increase in terms of persons employed. Of the total employment in the sector, the majority was in crop and animal production with the remainder in forestry and fishing.

Services

In quarter 4 2019, 1.8 million persons were employed in service-related activities, accounting for almost three quarters of national employment. The composition of the services in terms of knowledge intensity is presented in Figure 3.4. Of the total employment, 59% (1,070,100) was in knowledge intensive services - KIS (ICT, financial, legal, accounting, engineering, R&D, education, health and arts), and the remainder was in less knowledge intensive services – LKIS (wholesale & retail, warehousing & transport, accommodation & food, office administration, real estate, travel, etc.). While both knowledge intensive services and less knowledge intensive services observed growth between quarter 4 2018 and quarter 4 2019, KIS observed a greater increase in terms of persons employed (an additional 58,000 persons) and a growth rate of 5% in comparison to 2% observed by LKIS.

Figure 3.4. Services Sector Employment, Quarter 4 2019

Source: SLMRU (SOLAS) analysis of CSO data

Wholesale and Retail

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
310,200	13.1%	69% - retail trade 18% - wholesale trade 12% - motor trade	-1%	6%
Between quarter 4 2018 and quarter 4 2019, the wholesale trade sub-sector experienced the greatest growth of almost 13%.				

Accommodation and Food Services

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
179,200	7.6%	70% - food & beverage services 30% - accommodation	3%	22%
Most growth in employment in the most recent period (quarter 4 2018 and quarter 4 2019) related to accommodation.				

Professional, Scientific and Technical Activities

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
141,100	6.0%	24% - engineering activities* 39% - legal and accounting 12% - other professional scientific & technical activities Remainder includes scientific R&D, advertising and management consultancy	4%	8%
*including architectural activities and technical testing				

Financial, Insurance and Real Estate Services

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
115,100	4.9%	59% - financial services (e.g. banking) 21% - insurance Remainder includes auxiliary and real estate activities	8%	8%

Transportation and Storage

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
108,000	4.6%	49% land transport 27% warehousing 15% postal activities 9% water/air transport	7%	24%

Information and Communications (ICT)

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
127,600	5.4%	65% computer programming Remainder includes broadcasting, publishing & motion picture production	11%	26%

Administrative and Support Service Activities

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
112,100	4.7%	39% buildings & landscape services 16% office administrative activities & security activities Remainder includes employment activities, travel services and renting/leasing	5%	39%

Health and Social Work

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
294,300	12.5%	54% human health activities 32% social work activities 14% residential care activities	2%	11%

Education

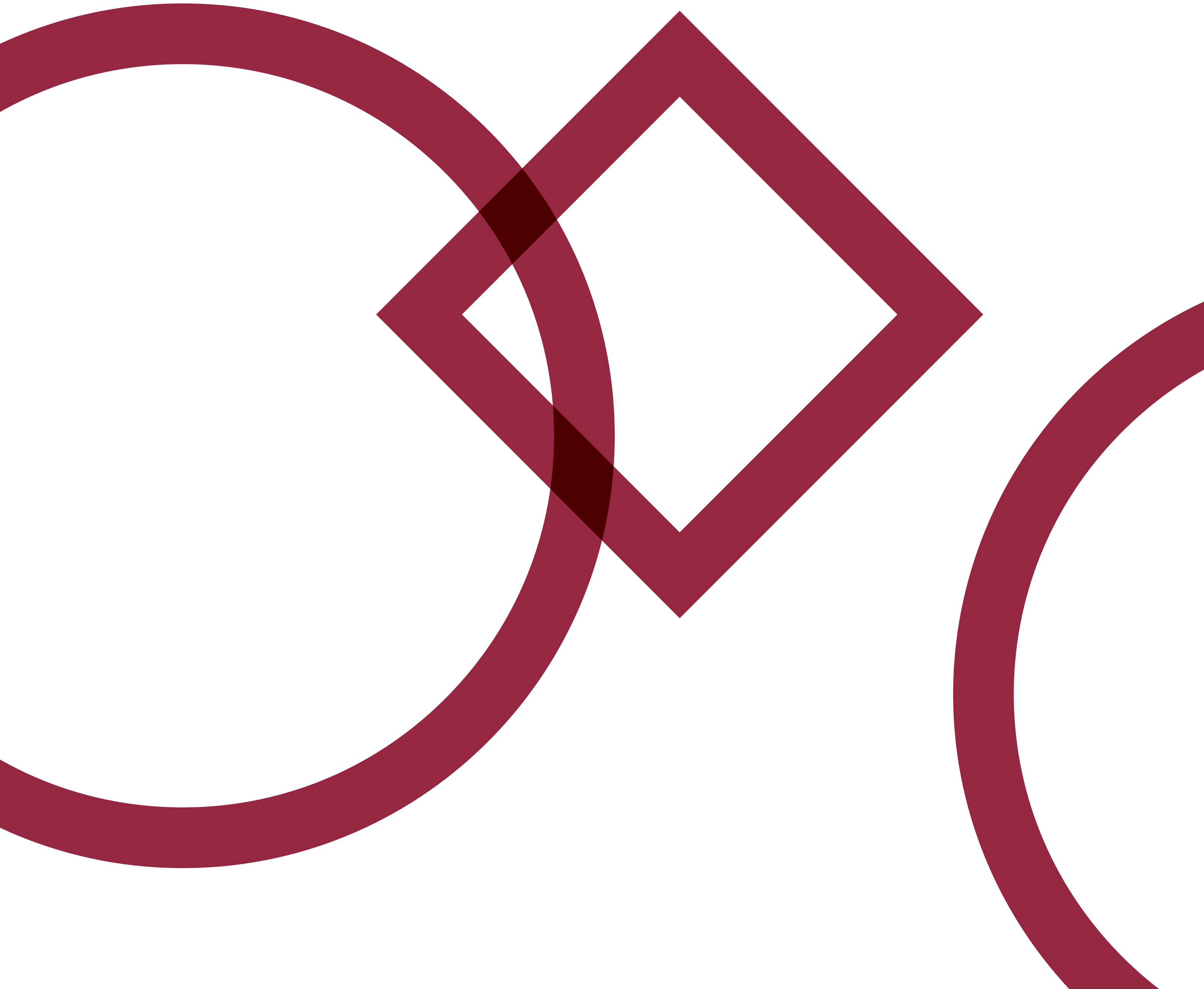
Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
191,600	8.1%	-	7%	26%

Public Administration and Defence (PAD)

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
117,000	5.0%	-	8%	33%

Other NACE Activities

Employment Q4 2019	% share of total employment Q4 2019	Sub-Sectors	% growth Q4 2018-2019	% growth Q4 2014-2019
118,700	5.0%	30% other personal services (e.g. hairdressing) 26% sports activities 15% activities of membership of organisations Remainder in creative arts, libraries, cultural activities & computer repair activities	1%	11%

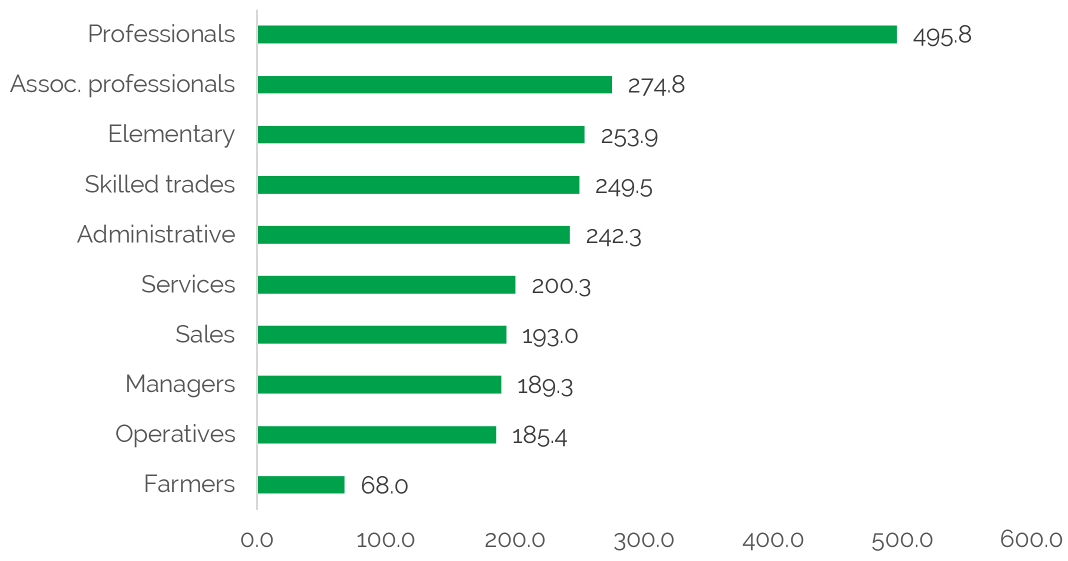


Section 4
Employment by broad occupation

4.1 Employment

Employment by broad occupational group is presented in Figure 4.1. In this section, farmers are presented as an occupation separately from other skilled trades. In quarter 4 2019, professionals had the highest level of employment at 496,000 persons followed by associate professionals (275,000). High skill occupations (professionals, associate professionals and managers) accounted for 41% of the total national workforce. Skilled trades and elementary workers each accounted for 11% of all persons employed while farmers accounted for 3%.

Figure 4.1 Employment by Broad Occupational Group (000s), Quarter 4 2019



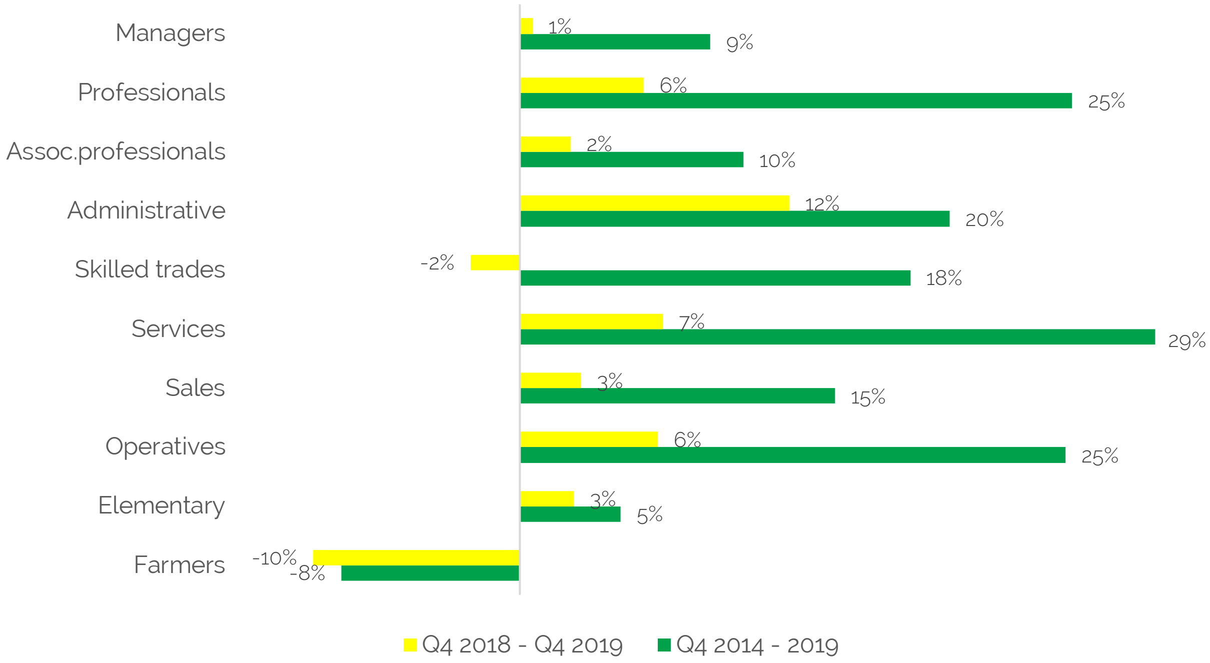
Source: SLMRU (SOLAS) analysis of CSO data

4.2 Employment Growth

Figure 4.2 presents employment growth by broad occupational group. Between quarter 4 2018 and quarter 4 2019, all occupations observed an increase in employment numbers with the exception of those working in skilled trades (which declined by 2%) and as farmers (-10% decline). The largest increases in employment were observed for administrative (12%) and services (7%) occupations. In terms of absolute numbers both administrative workers and professionals had the greatest increase in persons employed, each increasing by 26,800.

Between quarter 4 2014 and quarter 4 2019, all occupations observed growth with the exception of farmers (-8%). Those employed in personal services (29%), professionals (25%) and operative occupations (25%) had the greatest increases over the five-year period. In terms of absolute numbers, professionals had by far the greatest increase in persons employed at 100,700, followed by services (45,500).

Figure 4.2 Employment Growth by Broad Occupational Group (%). Quarter 4 2014 – Quarter 4 2019



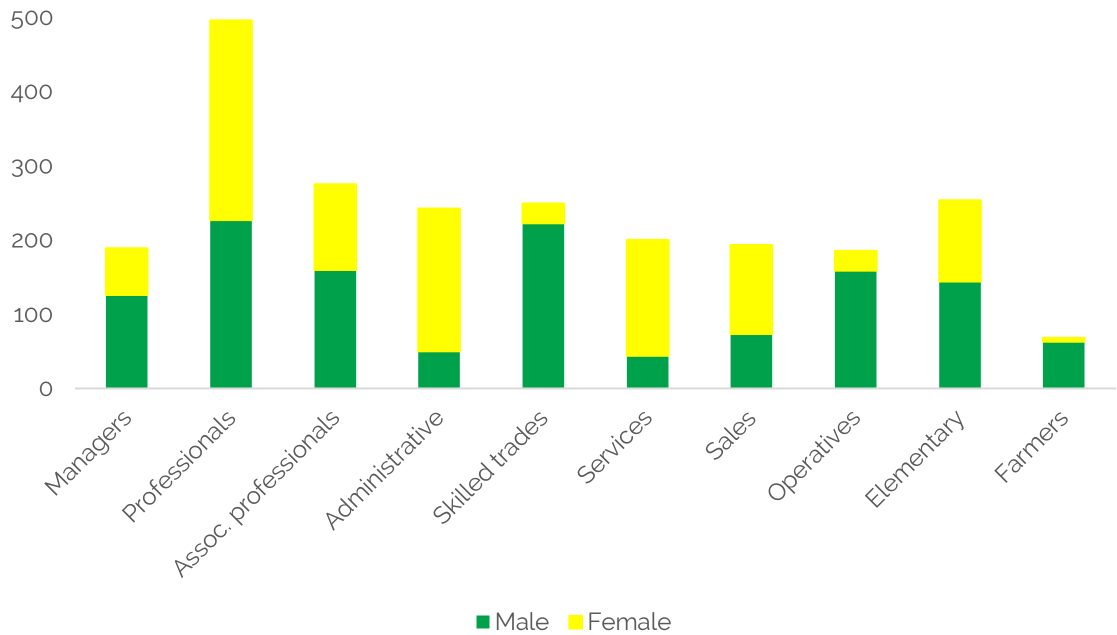
Source: SLMRU (SOLAS) analysis of CSO data

4.3 Employment by Gender and Age

Employment by gender for broad occupations is presented in Figure 4.3. In terms of numbers, the highest number of females were employed in professional (269,100), administrative (191,800) and services (156,000) occupations. Males made up at least four fifths of employment in farmers (92%), skilled trades (89%) and operative (86%) occupations. In terms of gender distribution, the share of females and males was closest to balanced amongst professional occupations.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019 was spread relatively evenly across both genders. For males, the largest increases occurred for those employed in professional and operative roles. For females, the largest increases in employment related to administrative roles, followed by professional and personal services occupations.

Figure 4.3 Employment by Gender and Broad Occupational Group (000s). Quarter 4 2019

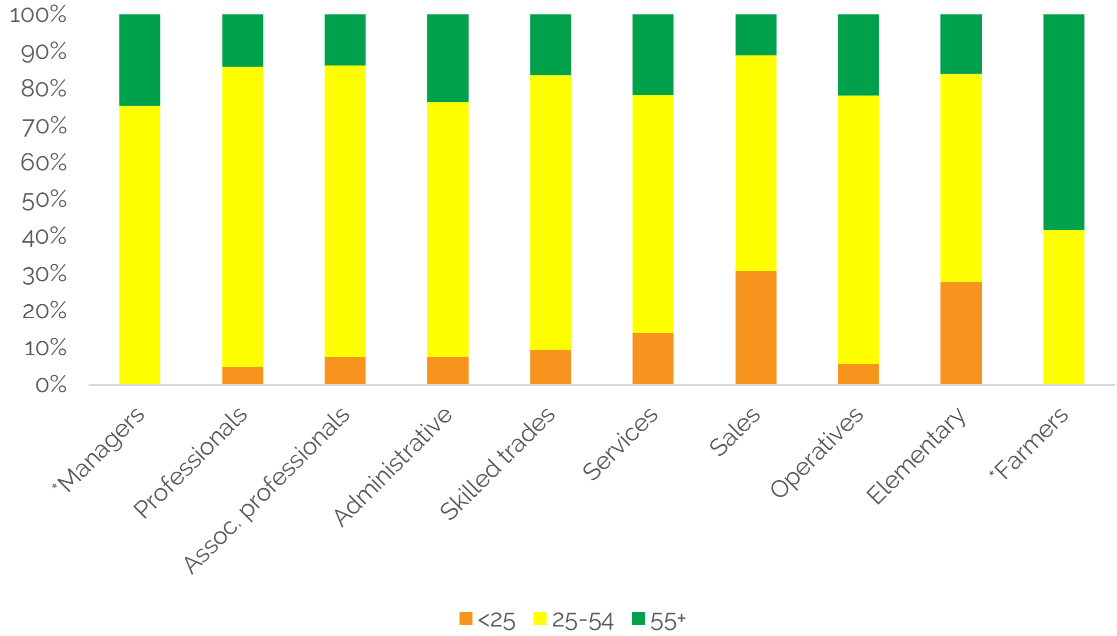


Source: SLMRU (SOLAS) analysis of CSO data

Figure 4.4 presents the age distribution of employment by broad occupational groups. In quarter 4 2019, with the exception of farmers, employment in all occupational groups was greatest in the 25-54 age cohort. Sales occupations had the greatest share of young persons aged below 25 years in employment, at 31%, followed by elementary workers (28%). At 58%, farmers had the greatest share of persons aged 55 years and over.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019, was greatest for those aged 55 years and older (34,000), followed by those aged between 25-54 years (29,000). In terms of shares, there was an increase in the share of those aged under 25 in services and elementary occupations (three percentage points each). Service workers aged 55 years and older observed an increase of three percentage points.

Figure 4.4 Employment by Age and Broad Occupational Group (%). Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

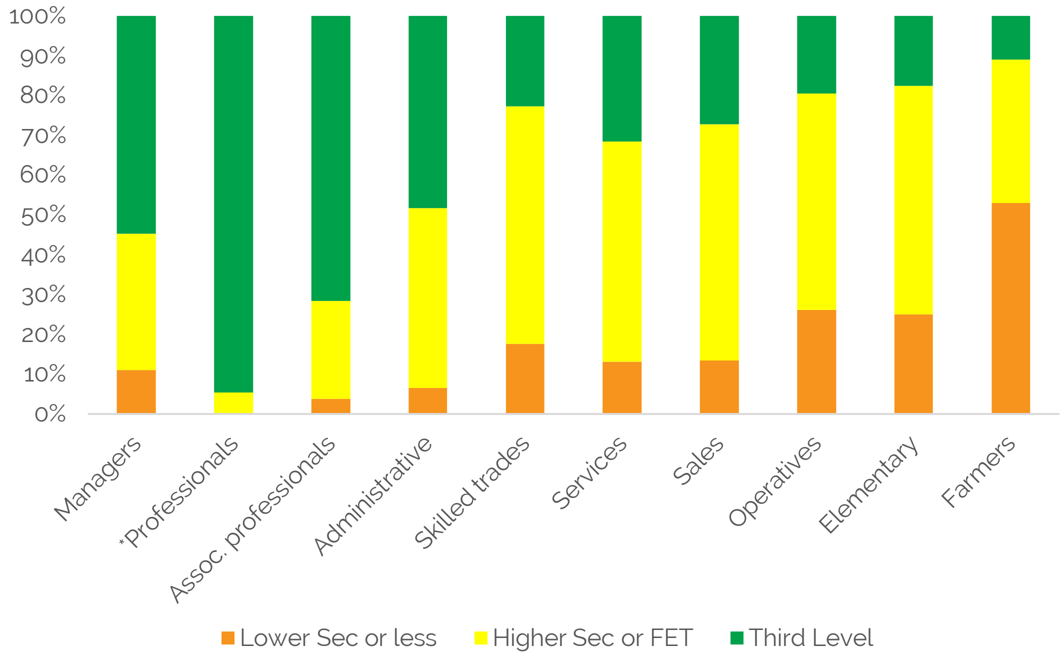
*Number of managers and farmers aged under 25 were too low to report

4.4 Employment by Education

Figure 4.5 presents the educational distribution of employment by broad occupational groups. In quarter 4 2019, professionals had the highest share of persons with a third level education (95%), followed by associate professionals (72%). Almost half of all administrative workers had a third level qualification (48%). Operatives and elementary workers had the highest share of persons with a lower secondary or less level of education.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019, was greatest for those with a higher secondary or FET qualification (39,000) followed by those with a third level qualification. Professionals (24,000) and administrators (12,800) with a third level education observed the greatest increase in terms of persons employed. Elementary workers with a higher secondary or FET level education observed the greatest share increase (four percentage points) across all occupations. Managers with a third level education observed the greatest decrease (four percentage points).

Figure 4.5 Employment by Education and Broad Occupational Group (%), Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

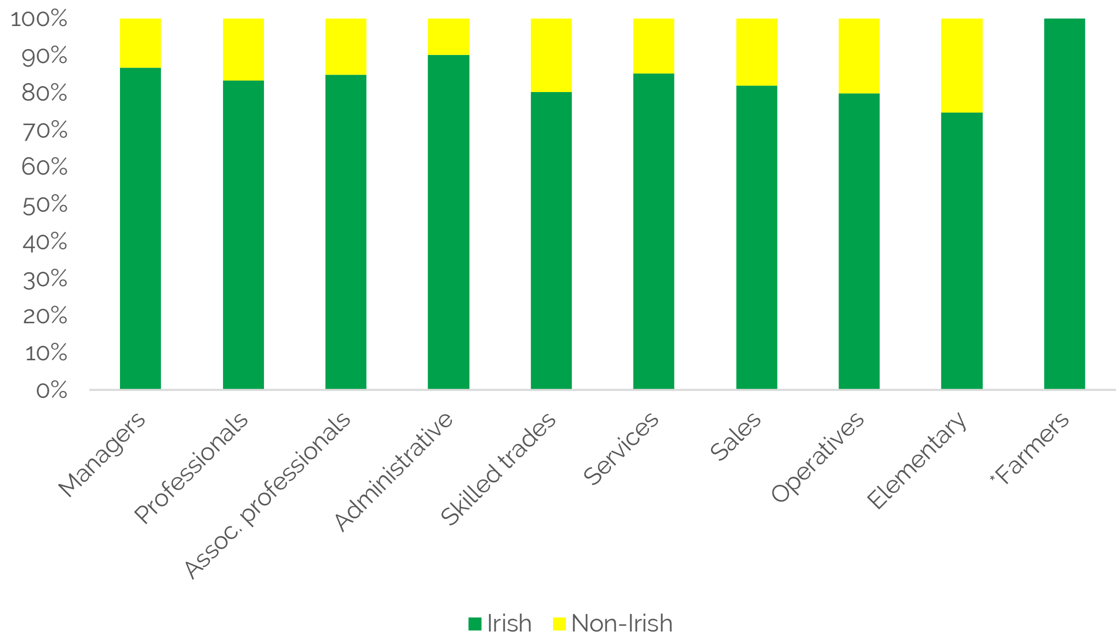
*Number of professionals with lower secondary or less education was too small to report

4.5 Employment by Nationality

The distribution of employment in broad occupational groups by nationality is presented in Figure 4.6. In quarter 4 2019, a quarter of all elementary workers were non-Irish nationals, with managers observing the lowest share of non-Irish nationals. Professionals and elementary occupations had the highest number of non-Irish national workers at 82,000 and 64,000 respectively.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019 was greatest for Irish workers (63,000). The share of non-Irish nationals working as professionals, observed the greatest increase of two percentage points, while Irish elementary workers observed the greatest share increase of four percentage points.

Figure 4.6 Employment by Nationality and Broad Occupational Group (%). Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO data

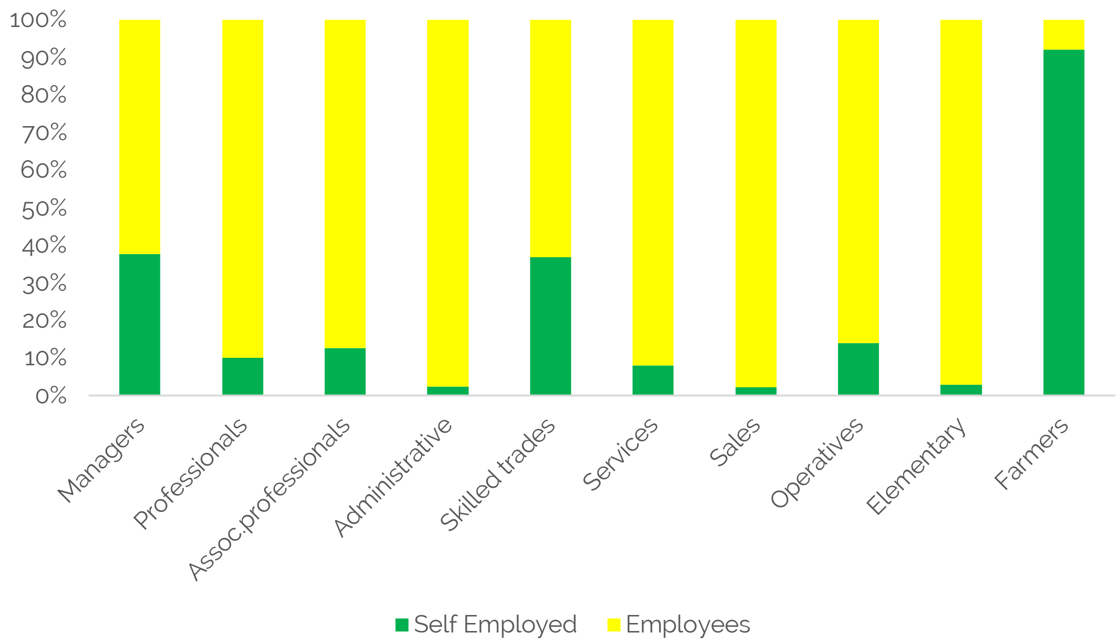
*Number of non-Irish farmers was too low to report

4.6 Employment Status

Figure 4.7 presents employment in broad occupational groups by employment status. In quarter 4 2019, the majority of workers across all occupations were employees with the exception of farmers. After farmers (where 90% were self-employed), the greatest share of self-employed workers was amongst managers (38%) and skilled trades workers.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019, was greatest for those working as employees (67,900). While overall, the share of employees (86%) and self-employed (14%) persons remained unchanged year-on-year, differences were observed across occupational groups. The share of operative, professional and service workers who were employees declined (by three, one and one percentage points respectively). In contrast, the share of skilled trades workers and associate professionals who were employees increased slightly (by one percentage point each).

Figure 4.7 Employment by Employment Status* and Broad Occupational Group (%), Quarter 4 2019



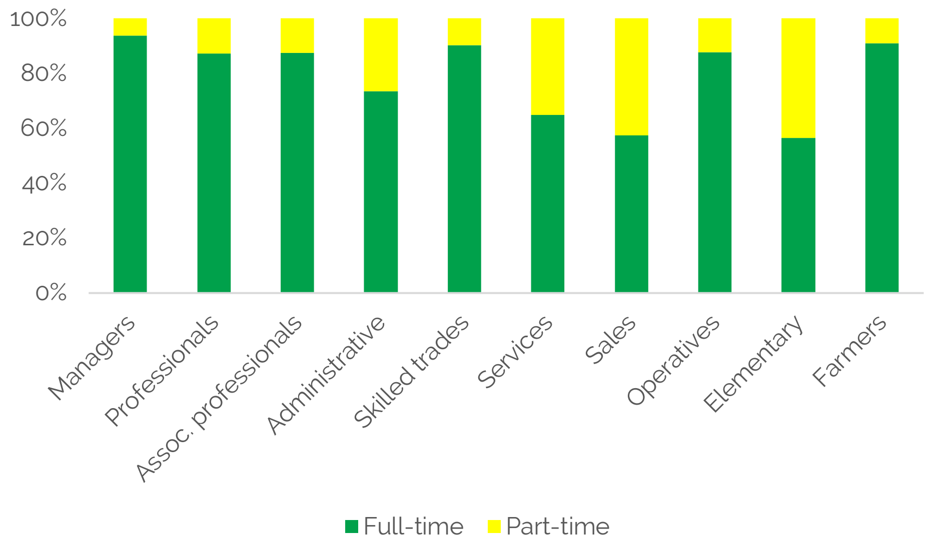
Source: SLMRU (SOLAS) analysis of CSO data

*Excludes those assisting relatives and on employment schemes

Figure 4.8 presents the breakdown of employment in broad occupational groups by full-time and part-time work. In quarter 4 2019, most workers across all occupational groups were in full-time employment. Managers, farmers and skilled trades workers had the greatest share of persons working full-time. Elementary (44%), sales (43%) and services (35%) occupations had the greatest shares of part-time workers.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019 was greatest for persons who were working full-time. Across all occupations, persons working full-time increased, with the exception of sales workers. The greatest share increases of persons working part-time was observed for elementary and sales occupations (four percentage points and two percentage points respectively).

Figure 4.8 Full-time and Part-time Employment by Occupational Group (%). Quarter 4 2019



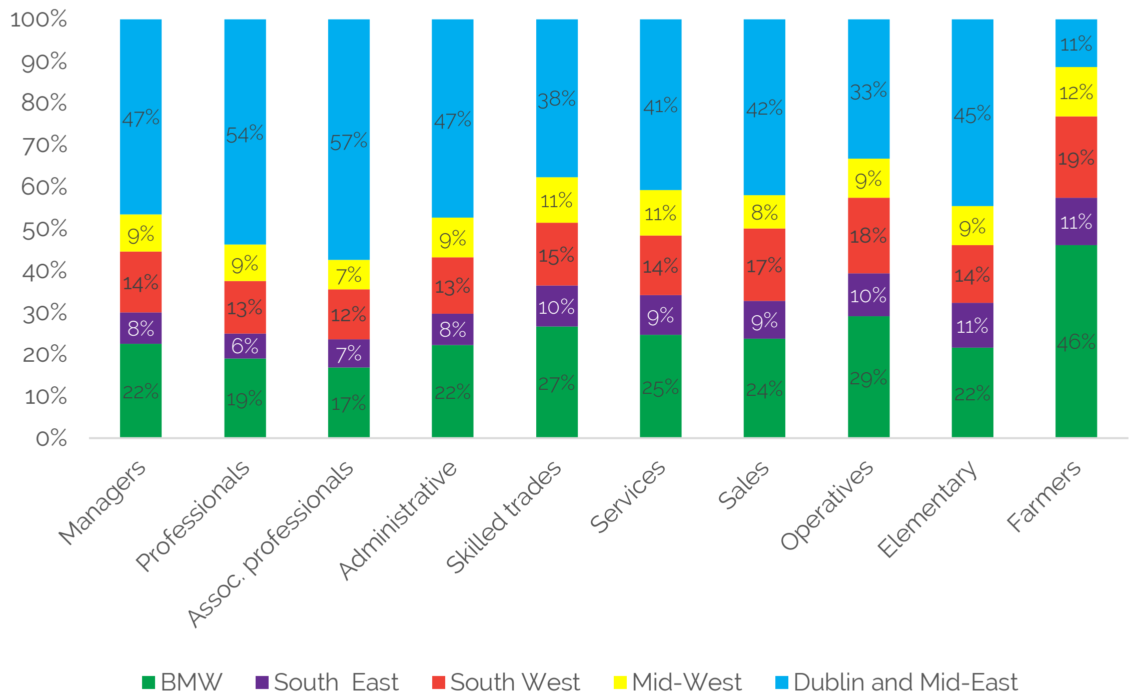
Source: SLMRU (SOLAS) analysis of CSO Data

4.7 Employment by Region

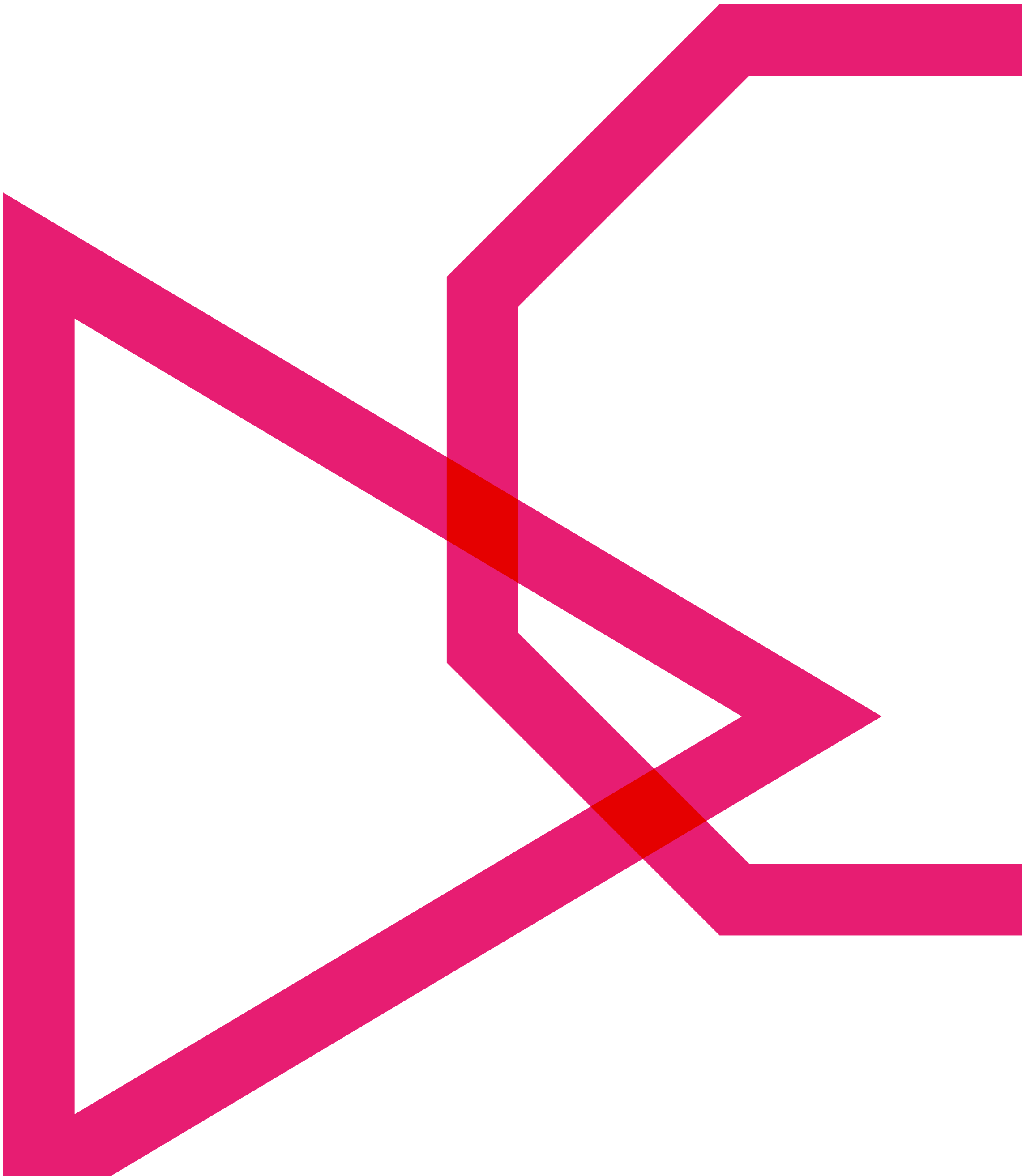
The regional distribution of employment in broad occupational groups is presented in Figure 4.9. In quarter 4 2019, Dublin and the Mid-East accounted for more than half of all those working in professional and associate professional occupations but accounted for just 11% and 33% of farmers and operatives. The Border, Midlands and West (BMW) region had the greatest share of farmers (46%) across all regions.

The increase of 80,000 persons employed between quarter 4 2018 and quarter 4 2019 was greatest for the Dublin and the Mid-East followed by the BMW region. While employment growth was observed for all regions, over half of this growth was observed in these two regions. Administrative workers observed employment growth across all regions except in Dublin and Mid-East region. The share of elementary workers in the BMW region observed a decrease, this region being the only region to observe a decrease in the number of elementary workers.

Figure 4.9 Employment by Region and Broad Occupational Group (%). Quarter 4 2019



Source: SLMRU (SOLAS) analysis of CSO Data



Section 5
Unemployment

5.1 Unemployment and Unemployment Rate

As detailed in Section 2, the restrictions imposed as a response to COVID-19 are likely to have had a significant impact on the number of people who are unemployed in Ireland, with the Central Bank forecasting unemployment to average 347,000 persons in 2020, based on its baseline scenario[15]. The CSO's monthly unemployment rate (MUR) detailed in Table 5.1 was 5.5% in July 2020 using the traditional methods but the upper bound measure (adjusted for COVID-19) was 16.7%, down from 28.8% in April 2020. The range was even greater for those aged under 25 years with the lower bound (traditional MUR) rate at 18.9% and the upper bound rate reaching 41.2% in July 2020, although this is a fall from 62% in May 2020.

Table 5.1 Monthly Unemployment Rates For Those Aged 15-74 years, March 2020–July 2020

	March 2020	April 2020	May 2020	June 2020	July 2020
Lower Bound (Traditional MUR)	4.9%	5.0%	5.2%	5.1%	5.5%
Upper Bound (COVID-19 Adjusted MUR)	15.6%	28.8%	26.8%	23.1%	16.7%

Source: CSO

Due to the limitations arising from ILO definitions, many of those receiving income support payments were captured in the CSO's Labour Force Survey as either in employment but currently "away from work" or outside of the labour force as they are not currently seeking and/or available for work. As a result, the unemployment rate using traditional methodologies has not, as yet, risen to the anticipated levels given the high number of people accessing income support payments.

Without a clear indication of the profile of those who have lost their jobs due to COVID-19, the remainder of this section focuses on the characteristics of those who were unemployed up to quarter 4 2019, prior to the onset of COVID-19 restrictions.

[15] Central Bank of Ireland. Quarterly Bulletin, July 2020

The unemployment levels and unemployment rates for quarter 4 over the period 2005 – 2019 are presented in Figure 5.1. Prior to March 2020, the number of unemployed persons had fallen since the peak in quarter 4 2011 by approximately 229,500 persons. In quarter 4 2019, there were 110,600 persons looking for employment, a decline of 18,200 since quarter 4 2018.

In quarter 4 2019, the unemployment rate was 4.5%, a decline of just over ten percentage points on the rate in quarter 4 2011. While unemployment numbers in this section refer to those aged 15 years and above, the unemployment rates refer to those aged 15-74 years.

Figure 5.1 Unemployment Levels (000s) and Unemployment Rate (%), Quarter 4

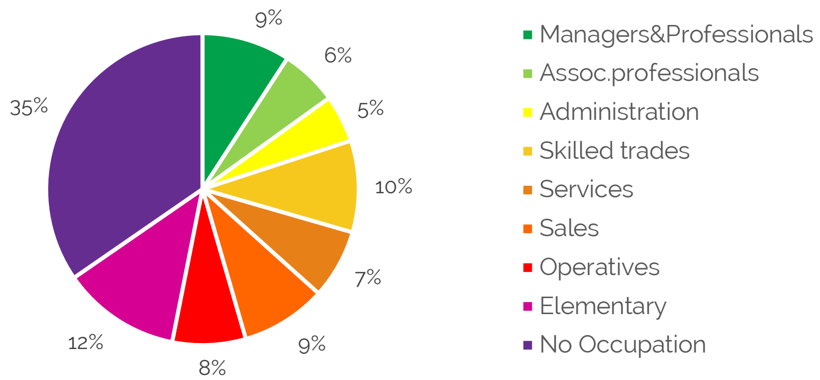
Source: SLMRU analysis of CSO data

5.2 Unemployment by Occupation

Figure 5.2 presents the distribution of unemployment by broad occupational groups. Unemployed persons who did not state their previous occupation (e.g. looking for work for the first time, entering employment from inactivity) accounted for 35% of all unemployed persons. In quarter 4 2019, the greatest share of unemployed persons who had stated a previous occupation had previously worked in elementary occupations (12%), skilled trades (10%), managers/professionals and sales at 9% each.

Between quarter 4 2018 and quarter 4 2019, the number of unemployed persons decreased for almost all occupations with the exception of those previously employed in skilled trades, services and operative roles. In terms of absolute numbers, those previously working in administrative roles observed the greatest decrease (3,800) followed by those in elementary occupations (2,200).

Figure 5.2 Unemployment by Previous Occupation (%), Quarter 4 2019

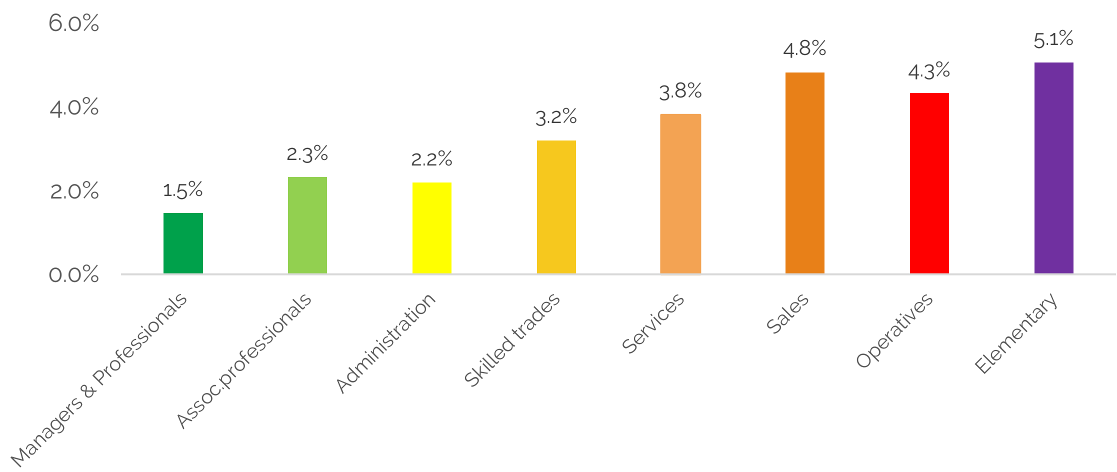


Source: SLMRU analysis of CSO data

The unemployment rate by broad occupation is presented in Figure 5.3. In quarter 4 2019, elementary workers (5.1%) observed the highest unemployment rates followed by sales (4.8%) and operative workers (4.3%).

Between quarter 4 2018 and quarter 4 2019, almost all occupations observed an unemployment rate decrease, with the exception of skilled trades and services occupations, while those working in elementary occupations observed no change in unemployment rates for the same time period.

Figure 5.3 Unemployment Rate by Previous Occupation (%), Quarter 4 2019

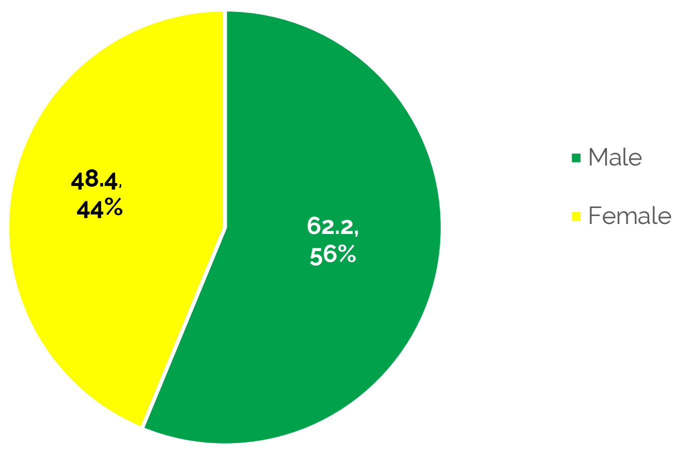


Source: SLMRU analysis of CSO data
Note: Excludes persons who did not state their previous occupation.

5.3 Unemployment by Gender

The gender distribution of unemployed persons is presented in Figure 5.4. In quarter 4 2019, the share of unemployed males, at 56% was greater than unemployed females. Between quarter 4 2018 and quarter 4 2019, in terms of absolute numbers, the number of unemployed persons decreased for both males and females; however, the share of unemployed males increased by two percentage points for the same time period, with a corresponding decrease in the share of females.

Figure 5.4 Unemployment by Gender (000s; %), Quarter 4 2019

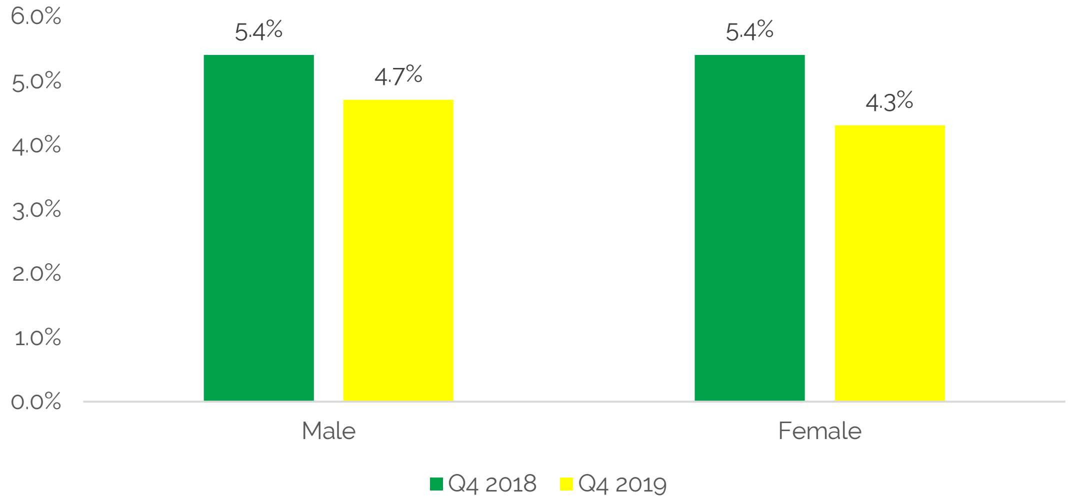


Source: SLMRU analysis of CSO data

Figure 5.5 presents unemployment rates for females and males. In quarter 4 2019, the unemployment rate for both males and females was below 5%. This was the first time since quarter 4 2006 when both males and females had an unemployment rate below 5%.

Between quarter 4 2018 and quarter 4 2019, the rate for both males and females observed a decrease; however, the decrease observed by females was greater (1.1 percentage points).

Figure 5.5 Unemployment Rate by Gender, Quarter 4 2018 & Quarter 4 2019



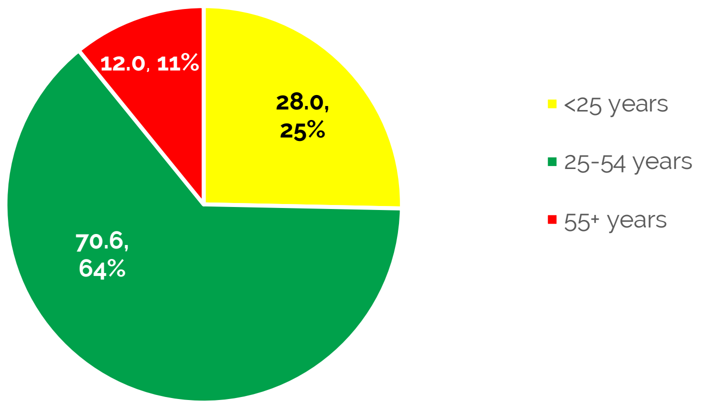
Source: SLMRU analysis of CSO data

5.4 Unemployment by Age

Figure 5.6 presents the age distribution of unemployed persons. In quarter 4 2019, at 64%, the greatest share of unemployed persons was observed for those aged between 25 and 54 years. One quarter of all those unemployed were aged under 25 years.

Between quarter 4 2018 and quarter 4 2019, the share of unemployed persons aged under 25 years and those aged 55 years and older decreased by one percentage point each. Of the total decrease of 18,200 unemployed persons between quarter 4 2018 and quarter 4 2019, those aged 25-54 years accounted for almost a half (48%) of the decline.

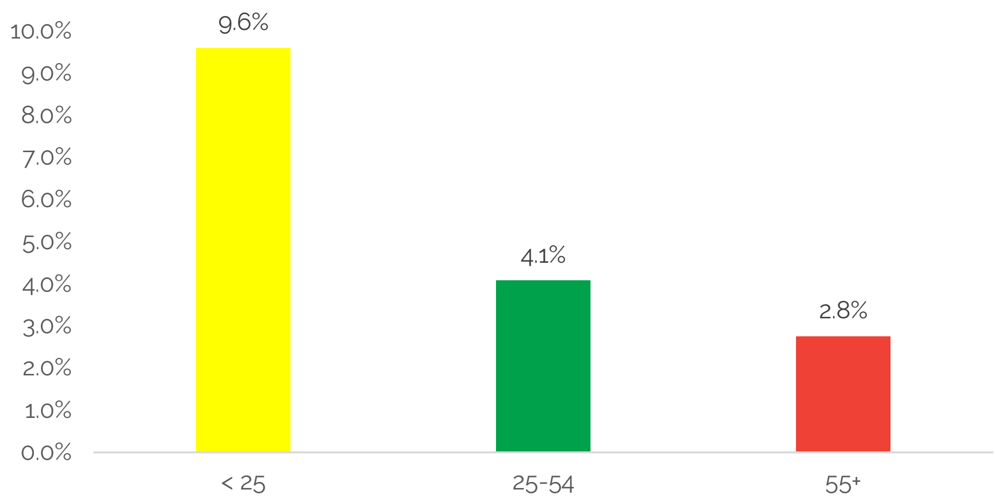
Figure 5.6 Unemployment by Age Group, Quarter 4 2019 (000s; %)



Source: SLMRU analysis of CSO data
*Excludes not stated

Unemployment rates by age are presented in Figure 5.7. In quarter 4 2019, the unemployment rate for those aged under 25 was 9.6%, more than double the unemployment rates observed for persons aged 25 -54 years (4.1%) and those aged 55 years and older (2.8%). Between quarter 4 2018 and quarter 4 2019, the unemployment rate for all age cohorts decreased; persons aged under 25 observed the greatest relative change with a decrease of 2.4 percentage points.

Figure 5.7 Unemployment Rate by Age Group, Quarter 4 2019



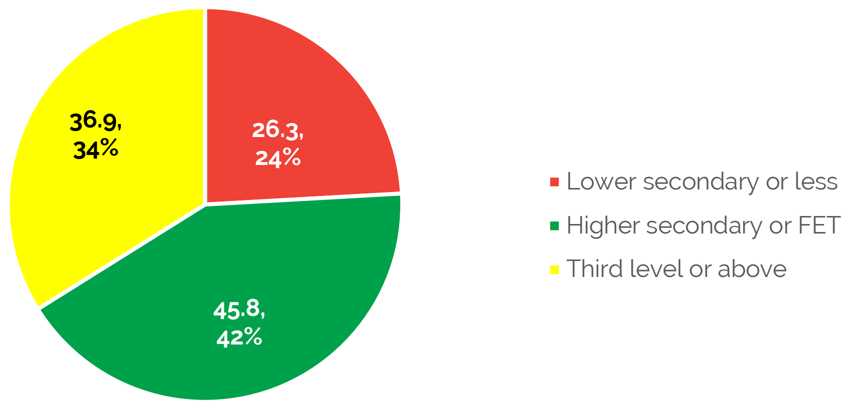
Source: SLMRU analysis of CSO data

5.5 Unemployment by Education

Unemployment by education is presented in Figure 5.8. In quarter 4 2019, 42% of all persons unemployed had a higher secondary education or FET qualification. At 24%, just under a quarter of all unemployed persons had a lower secondary education or less.

Between quarter 4 2018 and quarter 4 2019, the number of unemployed persons with higher secondary or FET education observed the greatest decrease of approximately 11,400 persons, followed by those with a lower secondary or less education (-4,700).

Figure 5.8 Unemployment by Education, Quarter 4 2019 (000s, %)

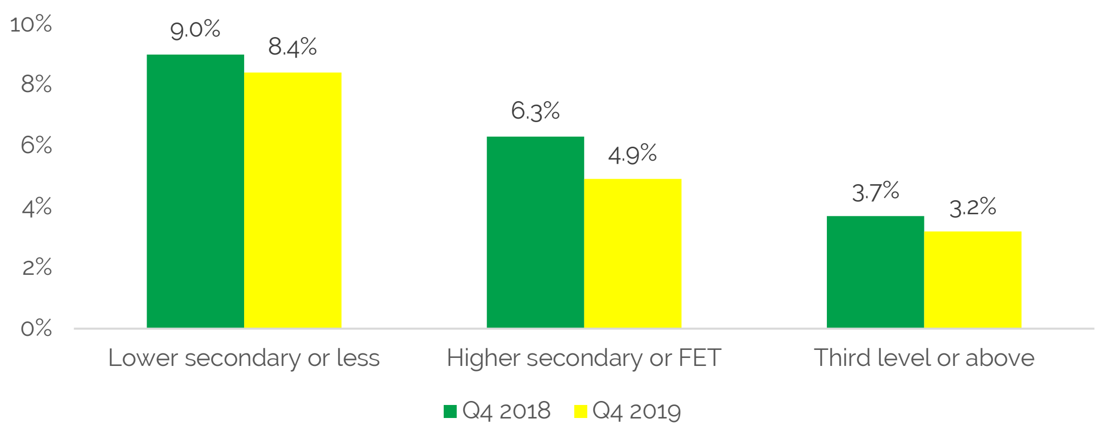


Source: SLMRU analysis of CSO data

Unemployment rates by education are presented in Figure 5.9. In quarter 4 2019, persons who had attained at most a lower secondary level of education had the highest unemployment rate at 8.4%. Persons with a third level education or above had the lowest unemployment rate (3.2%).

Between quarter 4 2018 and quarter 4 2019, the unemployment rate decreased across all educational attainment levels. Persons with a higher secondary or FET qualification observed the greatest decrease of 1.4 percentage points while persons with a third level education or above and those with a lower secondary or less education both observed a decrease of less than one percentage point each.

Figure 5.9 Unemployment Rate by Education, Quarter 4 2018 & Quarter 4 2019

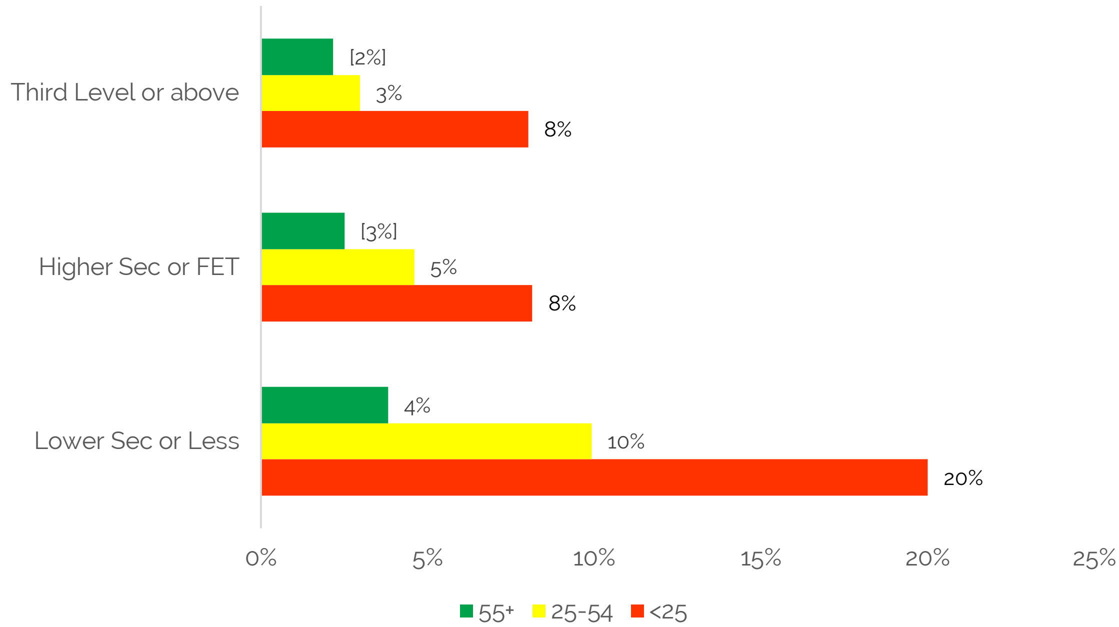


Source: SLMRU analysis of CSO data

Unemployment rates by education and age are presented in Figure 5.10. In quarter 4 2019, those aged under 25 years with a lower secondary or less level of education had the highest unemployment rates, at 20%; indeed, those aged under 25 years had the highest unemployment rates across all levels of education.

Between quarter 4 2018 and quarter 4 2019, the unemployment rate for those aged between 25-54 years remained the same for all persons with a higher secondary or FET qualification and above; persons in this age cohort with a lower secondary level of education or less observed a decrease of one percentage point. For those aged under 25 years with a lower secondary level of education or less, a five-percentage point decrease was observed.

Figure 5.10 Unemployment Rate by Education and Age, Quarter 4 2019



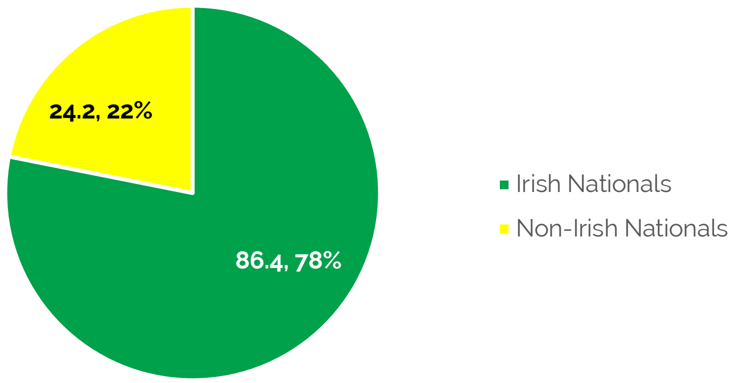
Source: SLMRU analysis of CSO data

Numbers in brackets are small and should be treated with caution.

5.6 Unemployment by Nationality

Figure 5.11 presents the distribution of unemployment by nationality. In quarter 4 2019, Irish nationals accounted for 78% of total unemployment. Between quarter 4 2018 and quarter 4 2019, the decrease in the number of those unemployed was greater for Irish nationals at 16,400 persons when compared to a decrease of 1,800 non-Irish nationals.

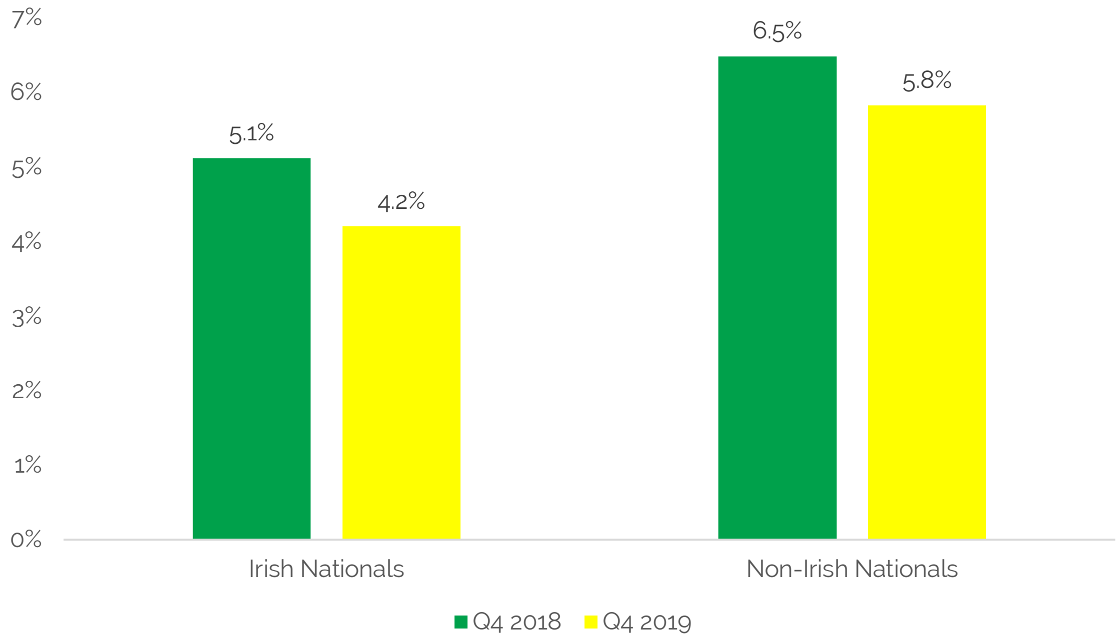
Figure 5.11 Unemployment by Nationality, Quarter 4 2019 (000s; %)



Source: SLMRU analysis of CSO data

Unemployment rates for Irish and non-Irish nationals is presented in Figure 5.12. In quarter 4 2019, the unemployment rate for non-Irish nationals was higher at 5.8% than Irish nationals at 4.2%. Between quarter 4 2018 and 2019, Irish nationals observed a greater decrease of almost one percentage point when compared to non-Irish nationals.

Figure 5.12 Unemployment Rate by Nationality (%), Quarter 4 2018 & Quarter 4 2019



Source: SLMRU analysis of CSO data

5.7 Unemployment by Sector

The number of persons unemployed has decreased significantly in recent years; as such, in 2019 the reporting of unemployment by previous sector was too small to report for the majority of sectors. In quarter 4 2019, of those who stated the previous sector of employment, the largest number of unemployed persons were those previously employed in industry (8,500), followed by the accommodation and food sector (8,400). Those previously employed in construction, administrative services and the health sector combined accounted for a further 17,500 persons.

Section 6
Labour Market Transitions and Recent Job Hires

6.1 Transitions

The change in the labour market status of individuals – employment, unemployment and economic inactivity – between two points in time is referred to as a 'labour market transition'. The analysis of labour market transitions is based on the CSO Labour Force Survey (LFS), which allows for the examination of survey participants who remain on the survey panel in two subsequent quarters.

Average quarterly labour market transitions for 2019 are presented in Table 6.1. As observed in preceding years, most individuals do not change their labour market status between successive quarters. In 2019, on average, 97% of individuals who were in employment remained employed; 90% of those economically inactive continued to be outside the labour force and 48% of those unemployed remained unemployed. However, some individuals changed their labour market status between quarters; 3% of individuals transitioned out of employment, 1% to unemployment and 2% to inactivity; 52% of individuals transitioned out of unemployment, 27% to inactivity and 25% to employment; 10% of individuals transitioned out of inactivity, 6% to employment and 4% to unemployment.

The overall distribution of transitions was broadly similar to that observed in 2018, with a decrease in the share of persons remaining in unemployment (from 50% to 48%) and an increase in the share of persons from unemployment to inactivity (from 25% to 27%).

Table 6.1 Labour Market Transitions by ILO Status (Persons Aged 15-74[16]), 2019

	ILO end quarter		
ILO start quarter	**Employed**	**Unemployed**	**Inactive**
Employed	97%	1%	2%
Unemployed	25%	48%	27%
Inactive	6%	4%	90%

Source: SLMRU (SOLAS) analysis of CSO data

Figure 6.1 shows estimated annual transitions in the labour market in 2019. It is estimated that 1.4 million transitions occurred in the labour market in that year, which was broadly in line with that observed in 2018.

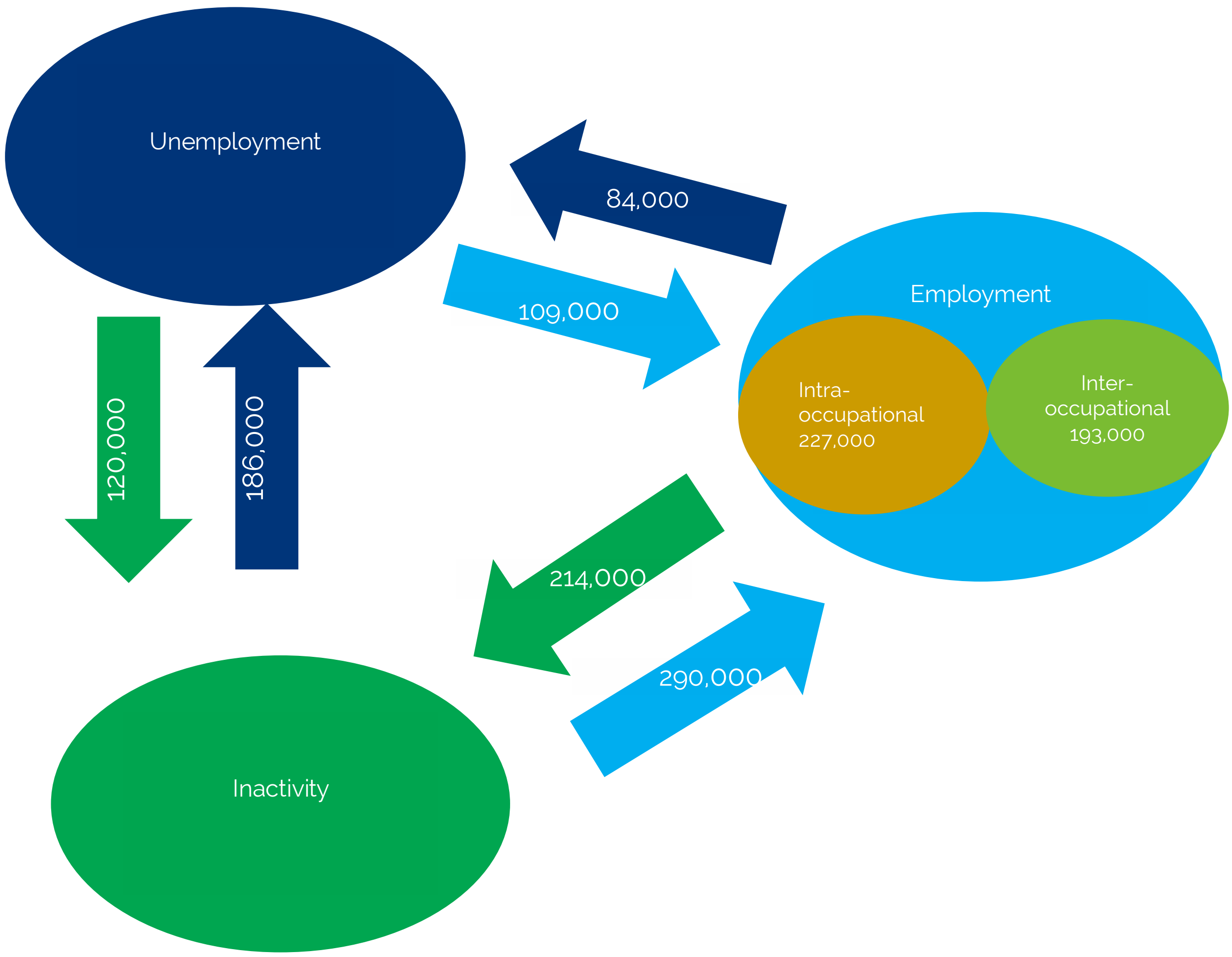
There were approximately 193,000 transitions between employment and unemployment, 500,000 between employment and inactivity and 306,000 between unemployment and inactivity. In addition, there were 420,000 transitions which occurred within employment, either due to a change of employer (intra-occupational transitions) or change of occupation (inter-occupational transitions).

The number of transitions into employment from both unemployment and inactivity exceeded transitions out of employment (by 100,000). There were 25,000 more transitions from unemployment to employment than in the opposite direction. Similarly, there were 76,000 more transitions from inactivity to employment than in the opposite direction.

[16] Sum of transitions between quarter 4 2018 to quarter 1 2019, quarter 1 2019 to quarter 2 2019, quarter 2 2019 to quarter 3 2019, and quarter 3 2019 to quarter 4 2019.

Compared to 2018, the most pronounced decrease in flows were observed between inactivity and unemployment and inactivity and employment. In contrast, there has been a significant change in movement for those already in employment, with increases in the number of intra-occupational transitions of almost 30,000 and inter-occupational transitions of almost 54,000.

Figure 6.1 Labour Market Transitions, 2019 (Sum of four quarters)



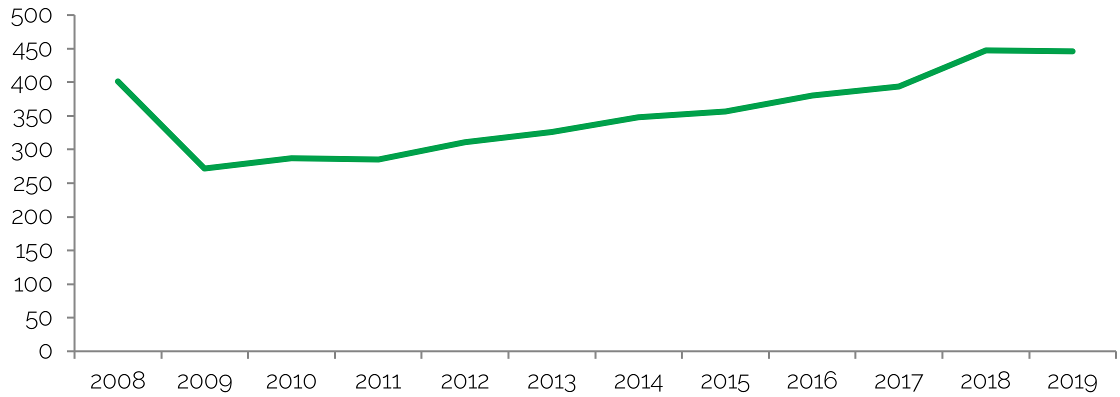
Source: CSO, LFS

Of total transitions from employment into inactivity, 28% was to study, 20% to home duties, 20% to retirements, 11% to disability and the remaining 21% to other forms of inactivity. In terms of transitions from inactivity to employment, over half (54%) was from study, 16% from home duties, 12% from retirements, 6% from disability, with the remaining 12% from other forms of inactivity.

6.2 Recent Job Hires

Recent job hires refers to those who commenced employment in the previous three months; for reporting purposes, the four quarters of each year are summed. As indicated in Figure 6.2 below, the number of recent job hires increased steadily between 2009 and 2018. In 2019, there were over 445,000 recent job hires, a small decline on the previous year.

Figure 6.2: Recent job hires in Ireland by year (000s)



Source: Eurostat

Key Findings:

Of those recently hired in 2019[17]

- in terms of gender, recent hires were divided equally
- 65% were hired for full-time positions
- almost two-thirds (64%) were for those aged less than 35 years (Figure 6.3)
- in terms of education level (Figure 6.4):
    - 43% were for those with higher secondary education or less
    - 44% held a third level qualification
    - 13% held a further education or training (FET) qualifications
- the wholesale & retail sector along with the accommodation & food sector accounted for the highest number of recent job hires (Figure 6.5)
- recent job hires were primarily in elementary, professional and sales occupations (Figure 6.6)
- the most frequently occuring occupations included
    - sales assistants (11% of total)
    - catering assistants, waiters and bar staff (combined account for 10% of all recent job hires)
    - administrative occupations (financial and other), at 6%
    - childminders and care workers, at 4%
    - cleaners and elementary construction and storage occupations (combined accounting for 7%).

[17] Based on analysis by the SLMRU of CSO LFS data for the four quarters in 2019.

Figure 6.3: Recent job hires by age, 2019

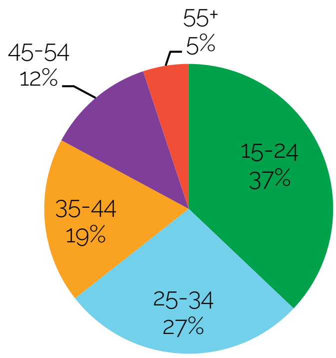
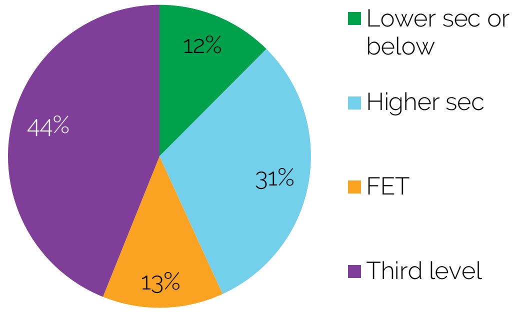
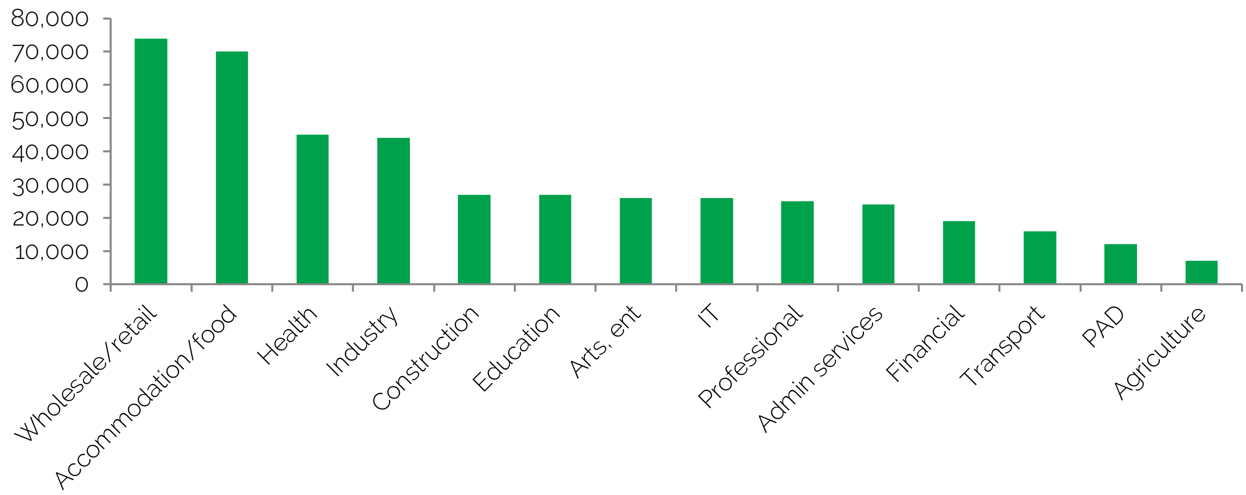


Figure 6.4 Recent job hires by education, 2019*



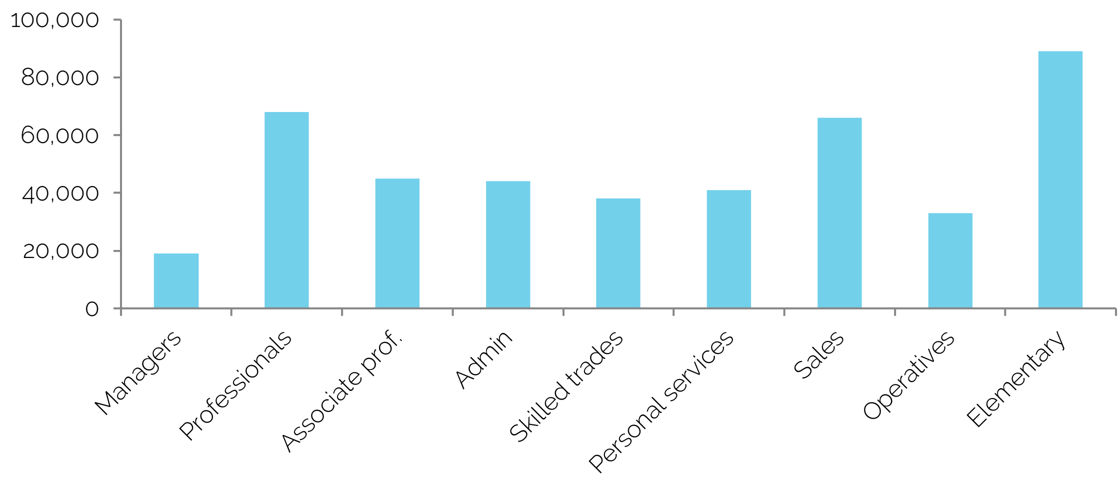
Source: SLMRU (SOLAS) analysis of CSO LFS data
**Excludes not stated*

Figure 6.5: Recent job hires by sector, 2019



Source: SLMRU (SOLAS) analysis of CSO LFS data

Figure 6.6: Recent job hires by occupation, 2019



Source: SLMRU (SOLAS) analysis of CSO LFS data

Managers (19,000 recent job hires):

- accounted for a 4% share of total recent job hires
- 62% of new hires held a third level qualification
- at 90%, this occupational group had the highest share of new hires for full-time roles
- 67% of recent hires were male
- the number of new hires for managers was too small to allow an analysis by age and sector.

Professionals (68,000 recent job hires):

- professionals accounted for 15% of total recent hires
- this occupational group had the highest share of new hires that held a third level qualification at 90%
- 56% were aged under 35 years, compared to 64% at a national level
- 81% of recent hires were for full-time positions, compared to 65% for the overall total
- 54% of recent hires were female
- in terms of sectors, new hires were concentrated in education, health, ICT and professional activities.

Associate professionals (45,000 recent job hires):

- associate professionals accounted for 10% of total recent hires
- almost three quarters (73%) held a third level qualification
- 62% were aged under 35 years, almost on a par with the overall national share of 64%
- 82% of new hires were for full-time roles
- 52% of recent hires were female
- the ICT sector accounted for over a fifth of recent hires.

Administrative (44,000 recent job hires):

- 10% of total recent hires were for administrative roles
- over a half (55%) held a third level qualification
- 56% were aged under 35 years, compared to 64% at a national level
- almost three quarters (73%) of roles were full-time
- 73% of recent hires were female
- in terms of sectors, public administration and defence accounted for the highest share of new hires at 18%.

Skilled trades (38,000 recent job hires):

- accounted for 9% of recent job hires
- the majority (60%) held either a higher secondary education or a FET qualification
- 54% were aged under 35 years, compared to 64% at a national level
- 80% of recent hires were for full-time roles
- 92% of all hires were male, the highest share of males across all occupations
- the construction sector accounted for the highest share of recent hires at 34%; this was followed by accommodation and food services (relating to chefs) and industry, combined accounting for a further 38%.

Personal services (41,000 recent job hires):

- personal services accounted for 9% of recent job hires
- over a half (54%) had attained a higher secondary/FET education, while a further third held a third level qualification
- 60% were aged under 35 years
- 48% of new hires were for part-time roles
- 81% were female, the highest share of females across all occupations
- the health sector accounted for the highest share of recent hires, at 44%, with a further 23% in arts, entertainment and other services (e.g. hairdressers).

Sales and customer services (66,000 recent job hires):

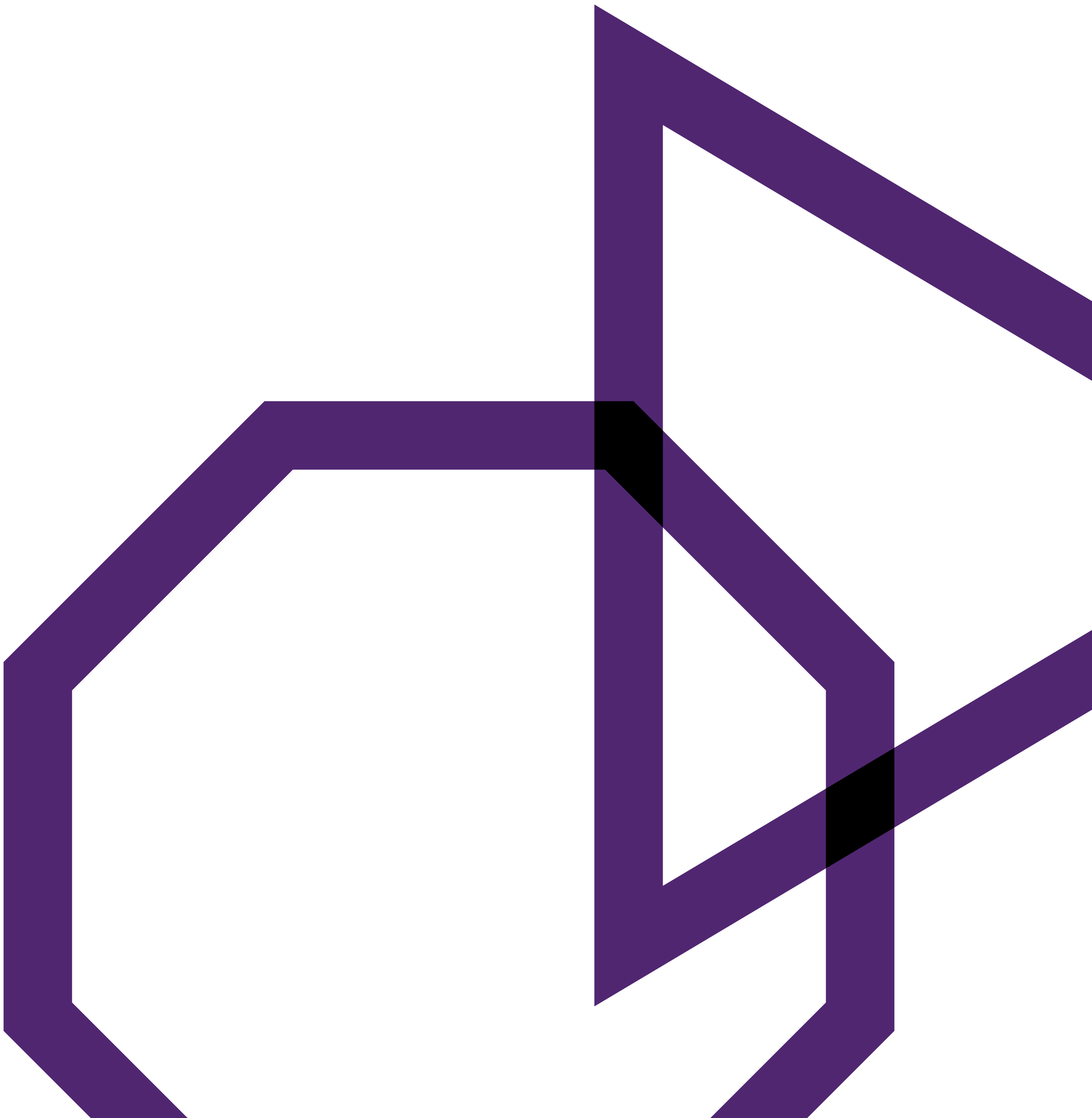
- this occupational group accounted for 15% of recent hires
- 58% of those hired in these occupations held a higher secondary/FET education, with a further 28% holding a third level qualification
- this group had by far the youngest age profile, with 83% aged under 35 years, compared to 64% at a national level
- less than half (46%) of positions were for full-time roles
- 61% of new hires were female
- three quarters of recent hires were for roles in the wholesale and retail sector (e.g. retail sales assistants).

Operatives (33,000 recent job hires):

- this occupational group accounted for 7% of recent job hires
- over half (54%) of those recently hired held a higher secondary/FET education qualification
- 53% of recent hires were for those aged under 35 years, the lowest share across all occupational groups (excluding managers)
- 82% of recent hires were for full-time roles
- 83% were male, the second highest share of males after skilled trades occupations
- almost a half (48%) were employed in industry (e.g. process operatives), followed by the transport sector (e.g. drivers), with a quarter of recent hires.

Elementary (89,000 recent job hires):

- at 20%, this occupational group accounted for the highest share of recent hires in 2019
- 55% held a higher secondary/FET education while a further 25% had attained lower secondary education or less
- those employed in these occupations tended to be young, with 57% aged 15-24 years
- 57% of recent hires were for part-time roles
- 53% of hires were male
- the accommodation and food services sector accounted for by far the highest share of recent hires, at 54% (e.g. waiters, bar staff, kitchen assistants); administrative services, construction, and wholesale and retail combined accounting for a further quarter.



Section 7
Employment Permits

7.1 Introduction

An employment permit is a requirement for all non-EEA nationals who wish to take up employment in Ireland (unless an exemption applies). An analysis of the occupations for which employment permits are issued allows policymakers to ascertain the areas where employers are having difficulty in sourcing suitably qualified candidates from the Irish and EU labour market.

In order to attain an employment permit, an individual must have a valid job offer from a prospective Irish employer who has proved there were no Irish or EA nationals available to fill the post. The Employment Permit Act in 2014 introduced nine classes of employment permits as detailed below:

1) **Critical skills:** designed to attract highly skilled people into the labour market and take up residence in the State.
2) **General:** designed to attract non-EEA nationals for occupations which are experiencing a labour or skills shortage in roles that pay at least €30,000* per year.
3) **Intra-company transfer:** designed to facilitate the transfer of key personnel, senior management and trainees who are non-EEA nationals from an overseas branch of a multinational corporation to its Irish branch. The annual salary of the applicant must be at least €40,000 and the person must have been with the parent company for at least 12 months prior to the application.
4) **Dependent/partner/spouse:** primarily used to support the attractiveness of Ireland as a location of employment for potential and current critical skills employment permit holders and researchers, it permits the dependents, civil partners, and spouses of certain categories of employment permit holder to live in Ireland and apply for an employment permit to work in the State.
5) **Contract for services:** where a foreign undertaking has won a contract to provide services to an Irish entity, this permit is designed to facilitate the transfer of non-EEA employees to work on the contract in Ireland.
6) **Reactivation:** this permit is designed to facilitate foreign nationals with a valid Employment Permit to work legally again if they fell out of the system or have been badly treated or exploited in the workplace.
7) **Sport and cultural:** designed for the employment of foreign nationals with the relevant qualifications, skills, experience or knowledge for the development, operation and capacity of sporting and cultural activities.
8) **Internship:** facilitates the employment of foreign nationals who are full-time students, enrolled in a third level institution outside the State, for the purpose of gaining work experience.
9) **Exchange agreement:** facilitates the employment of foreign nationals pursuant to prescribed agreements or other international agreements to which the State is a party.

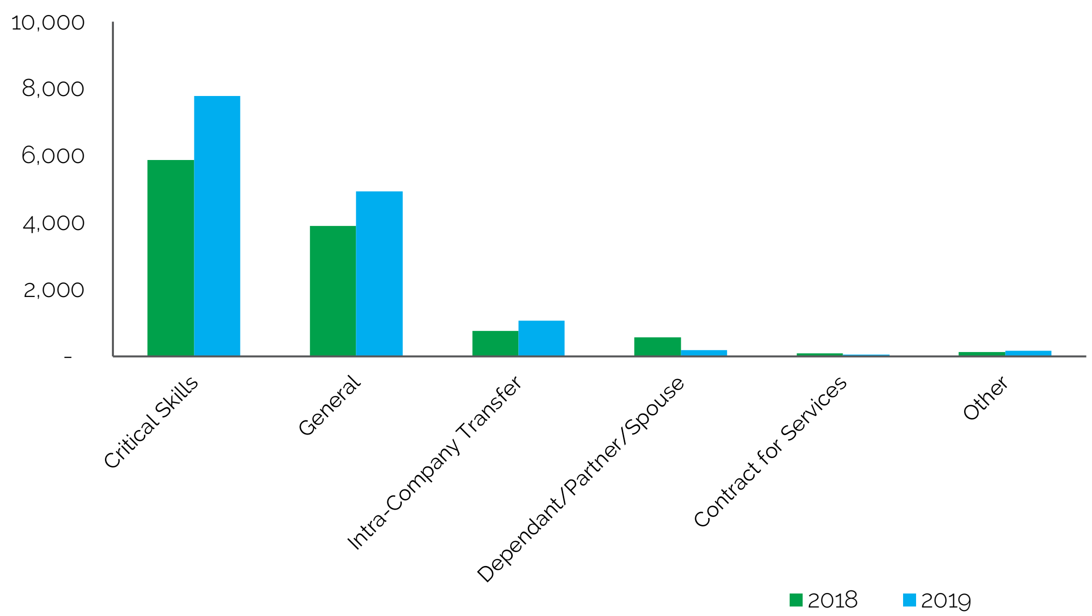
** some exceptions apply*

7.2 Overall Trends

Approximately 14,200 new employment permits were issued in 2019 as employers continued to source skills from abroad; this is a 25% increase on the previous year (Figure 7.1). New permits issued for critical skills accounted for over half (55%) of all new permits in 2019, with a further 35% for general permits and 7% for intra-company transfers.

Critical skill permits, which rose by 33%, and general permits, which rose by 26% from the previous year, accounted for the majority of growth in new permits issued since 2018. The growth in general permits was due to an increase in the number of permits issued for those employed in the agriculture, forestry and fishing sector, which rose by over two thirds since 2018. The increase was as a result of new regulations which came into effect in May 2018 that allowed employers and prospective employees to apply for a general employment permit for horticulture workers, meat processing operatives and dairy farm assistants.

Figure 7.1 New Employment Permits by Type, 2018-2019

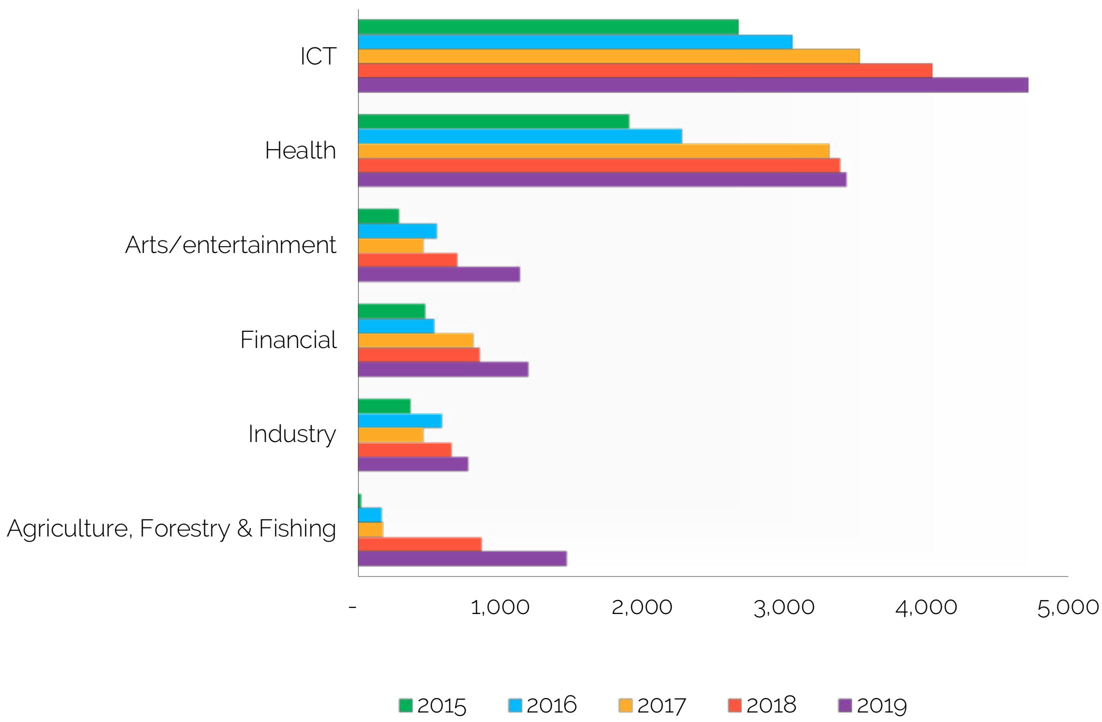


Source: DBEI

7.3 Employment Permits by Sector

Figure 7.2 illustrates a breakdown of new employment permits issued by sector. The number of permits issued has increased for most sectors in recent years, particularly in the health and ICT sectors. In 2019, the ICT sector accounted for 33% of all new permits issued, with the health sector accounting for 24%.

Figure 7.2: New Employment Permits for Selected Sectors*, 2015-2019



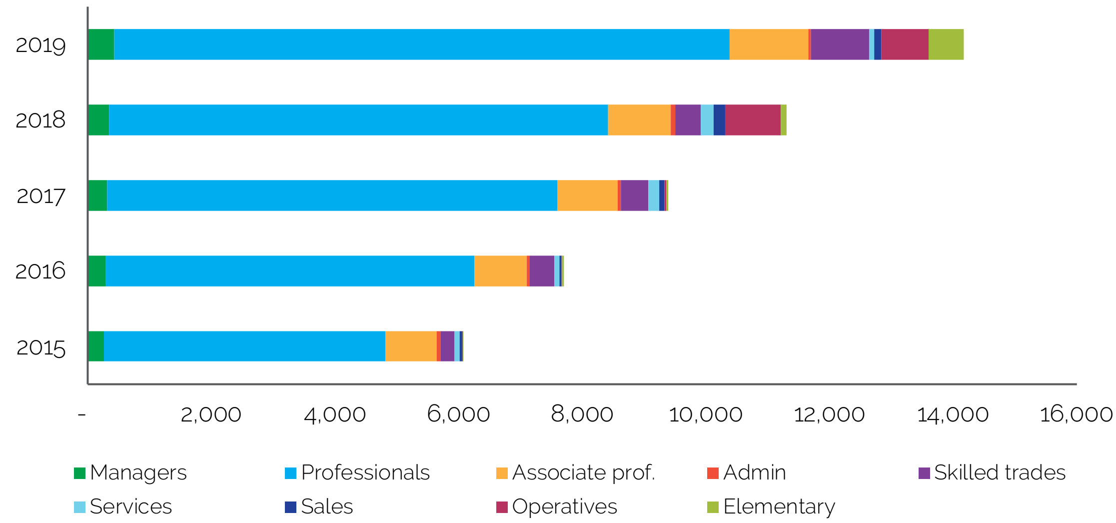
Source: DBEI

*In 2019, these six selected sectors account for 90% of all new permits issued.

7.4 Employment Permits by Occupation

Professional occupations accounted for the majority of new permits issued in each year between 2015 and 2019 (Figure 7.3). They also accounted for two thirds of the growth in the number of new permits issued over this time period. The increase in the number of new permits issued for elementary occupations between 2018 and 2019 relates primarily to the opening of the employment permit system to horticultural workers from May 2018.

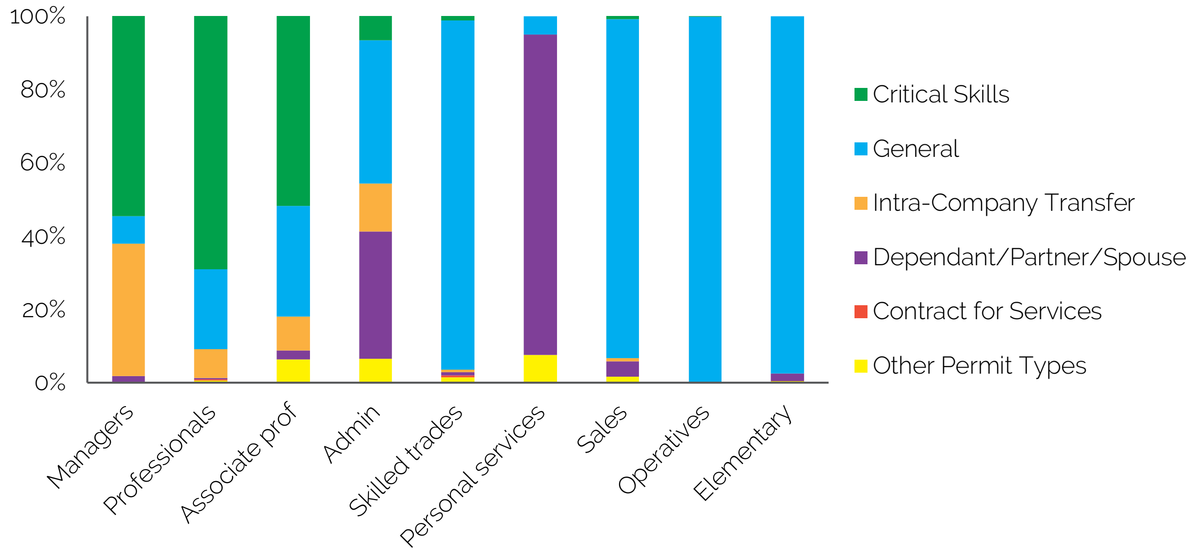
Figure 7.3 New Employment Permits by Broad Occupation, 2015-2019



Source: DBEI

The type of permit issued varied across occupational group (Figure 7.4). Over half of the new permits issued for managers, professionals and associate professionals were critical skills permits; the majority of permits issued for skilled trades, sales, operatives and elementary occupations were general permits, while the majority of permits issued for personal services occupations related to dependent/partner/spouse permits (Figure 7.4).

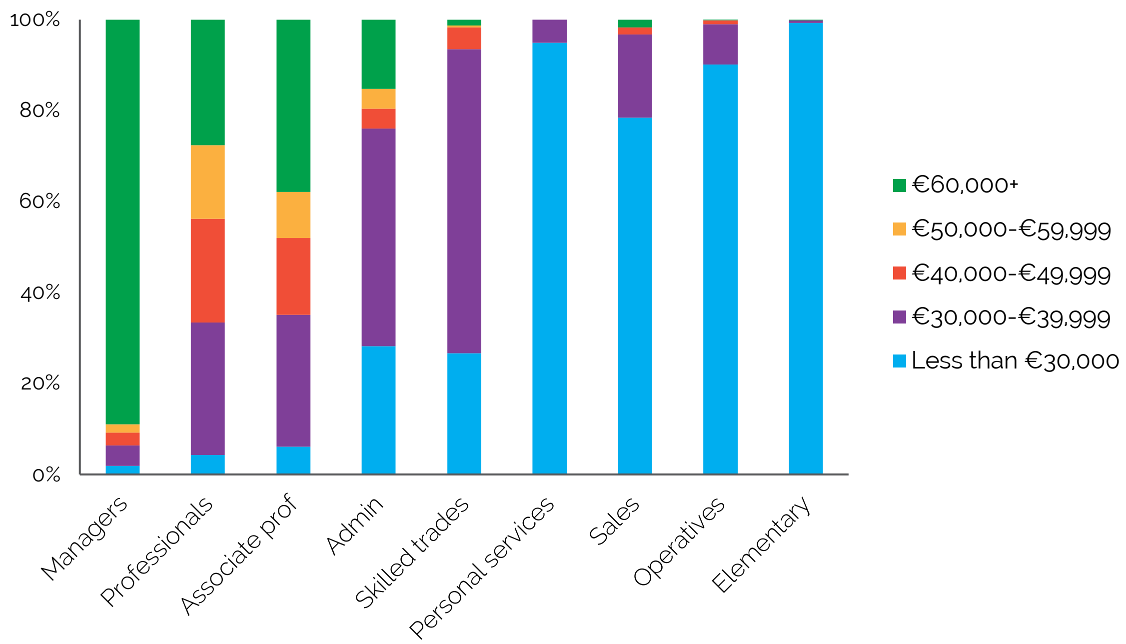
Figure 7.4 New Employment Permits by Permit Type, 2019



Source: DBEI

Of those new permits issued for managers, 89% were for roles which offered a salary of €60,000 or above; 44% of permits issued for professionals were for a salary of €50,000 or above (Figure 7.5). Almost all new permits issued in personal services, sales, operatives and elementary occupations had a salary of less than €30,000, the majority related to general employment permits and a small amount for dependants and spouse permits.

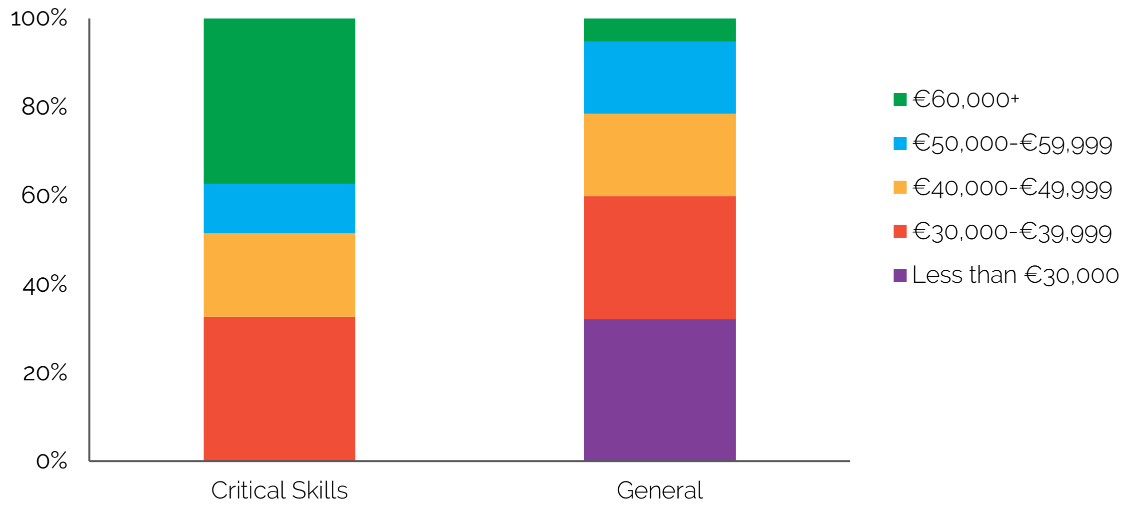
Figure 7.5 New Employment Permits by Occupation and Salary, 2019



Source: DBEI

Of the critical skills permits issued in 2019, a third were for salaries of €30,000-€39,999 with a further 37% for salaries of €60,000 or above (Figure 7.6). Of the general permits issued, 32% were for salaries of less than €30,000.[18]

Figure 7.6 New Employment Permits Type by Salary, 2019



Source: DBEI

Managers

- **Overall:** new employment permits for managerial positions accounted for 3% of all permits issued in 2019
- **Type:** critical skills accounted for over a half (54%) of the new permits issued for this occupation, with a further 36% for intra-company transfers
- **Salary:** 91% of new permits issued had a salary of €50,000 or more, by far the occupation with the largest share of permits offering salaries at this level
- **Sector:** employment permits were primarily issued for positions in IT (28%), financial services (25%) and industry (19%)
- **Nationality:** over a third (41%) of all permits issued for managers were for those originating from the USA
- **Occupations:** new employment permits were most frequently issued for
  - vice presidents/CEOs/CFOs, directors and managers in financial services
  - directors in marketing and business development
  - directors and managers in IT
  - HR/operations managers.

[18] While €30,000 is the stated minimum annual renumeration for general permits, exceptions apply as detailed at: https://dbei.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Permit-Types/General-Employment-Permit/

Professionals

- **Overall:** new employment permits for professionals accounted for almost three quarters (70%) of total permits issued in 2019
- **Type:** permits were primarily related to critical skills (69%) and general permits (22%)
- **Salary:** over half (52%) of new permits issued were for a salary of between €30,000 and €49,999 with a further 44% with a salary of €50,000 or more
- **Sector:** permits were mainly issued for positions in IT (39%), the health sector (33%) and financial services (10%)
- **Nationality:** almost two thirds (62%) of all new permits for professionals were issued to persons from India, the Philippines, Pakistan and Brazil
- **Occupations:** new employment permits were most frequently issued for
  - IT: software engineers/developers, IT business analysts/project managers, security/test/network (analysts, engineers), architects (software, systems, technical, solutions), UX/UI designers, systems engineers, data analysts/scientists, consultants (in SAP, Oracle, CRM), IT architects
  - health: medical doctors including senior house officers and registrars (general and emergency medicine), obstetrics & gynaecology, paediatrics, psychiatry, orthopaedics and anaesthesiology; nurses, (primarily staff nurses) and a small number of medial radiographers
  - financial: accountants, auditors, analysts (financial, risk, business, tax data)
  - industry: engineers (e.g. process, design, manufacturing, automation, electrical, validation, software), scientists (including analytical chemists), quality assurance/quality control and regulatory professionals, business analysts, data analysts/scientists
  - construction: civil engineers, quantity surveyors, project managers and other engineers (quality, design and mechanical) BIM was associated with a number of new permits across engineering disciplines including civil, mechanical and electrical.

Associate Professionals & Technical

- **Overall:** new employment permits for associate professionals accounted for 9% of total permits issued in 2019
- **Type:** at 52%, critical skills permits accounted for the highest share of new permits issued followed by general employment permits, at 30%
- **Salary:** 35% of new permits issued had a salary of less than €40,000 with a further 48% with a salary of €50,000 or more
- **Sector:** over a half (52%) of new permits issued were for the ICT sector, with a further 23% for arts, entertainment and sport, followed by 9% in financial services
- **Nationality:** persons from India, Brazil and the USA accounted for over a third (44%) of all new permits issued for this occupational group
- **Occupations:** new employment permits were most frequently issued for
  - sales & marketing: primarily account strategists/managers (with languages) but also marketing specialists, business development and online sales managers, inside sales reps and sales executives with languages
  - financial analysts, auditors, account managers
  - IT: technical support
  - animators (CG animation), recruitment consultants, sports professionals.

Administrative and Secretarial

- **Overall:** with 46 permits, administrative positions accounted for less than 1% of total new permits issued in 2019
- **Type:** permits for this occupational group were primarily for general permits and dependents/partners/spouses permits
- **Salary:** Over three quarters (76%) of new permits issued had a salary of less than €40,000
- **Sector:** new permits were primarily in the financial and transport and storage sectors
- **Occupations:** financial and general administration.

Skilled Trades

- **Overall:** new employment permits issued for those in skilled trades accounted for 7% of total permits issued in 2018
- **Type:** the majority (95%) of new permits issued were general employment permits
- **Salary:** the majority (93%) of permits issued were for employment with a salary of less than €40,000
- **Sector:** almost half (46%) of all new permits issued were for the accommodation and food services sector, with a further 24% in agriculture and 13% in the industry sector
- **Nationality:** persons from Brazil, China and India accounted for over a half (59%) of all new permits issued for this occupational group
- **Occupations:** new permits were most frequently issued for
  - chefs
  - meat deboners
  - shuttering carpenters
  - CNC machinists/programmers, welders.

Personal Services

- **Overall:** with 79 permits, administrative positions accounted for less than 1% of total new permits issued in 2019
- **Type:** the majority (87%) of permits issued for this occupational group were issued for dependents/partner/spouses
- **Salary:** over 95% of new permits issued had a salary of less than €30,000
- **Nationality:** persons from India and the Philippines accounted for the majority (81%) of all new permits issued for this occupational group
- **Occupations:** the majority of permits were most frequently issued for healthcare assistants.

Sales and Customer Services

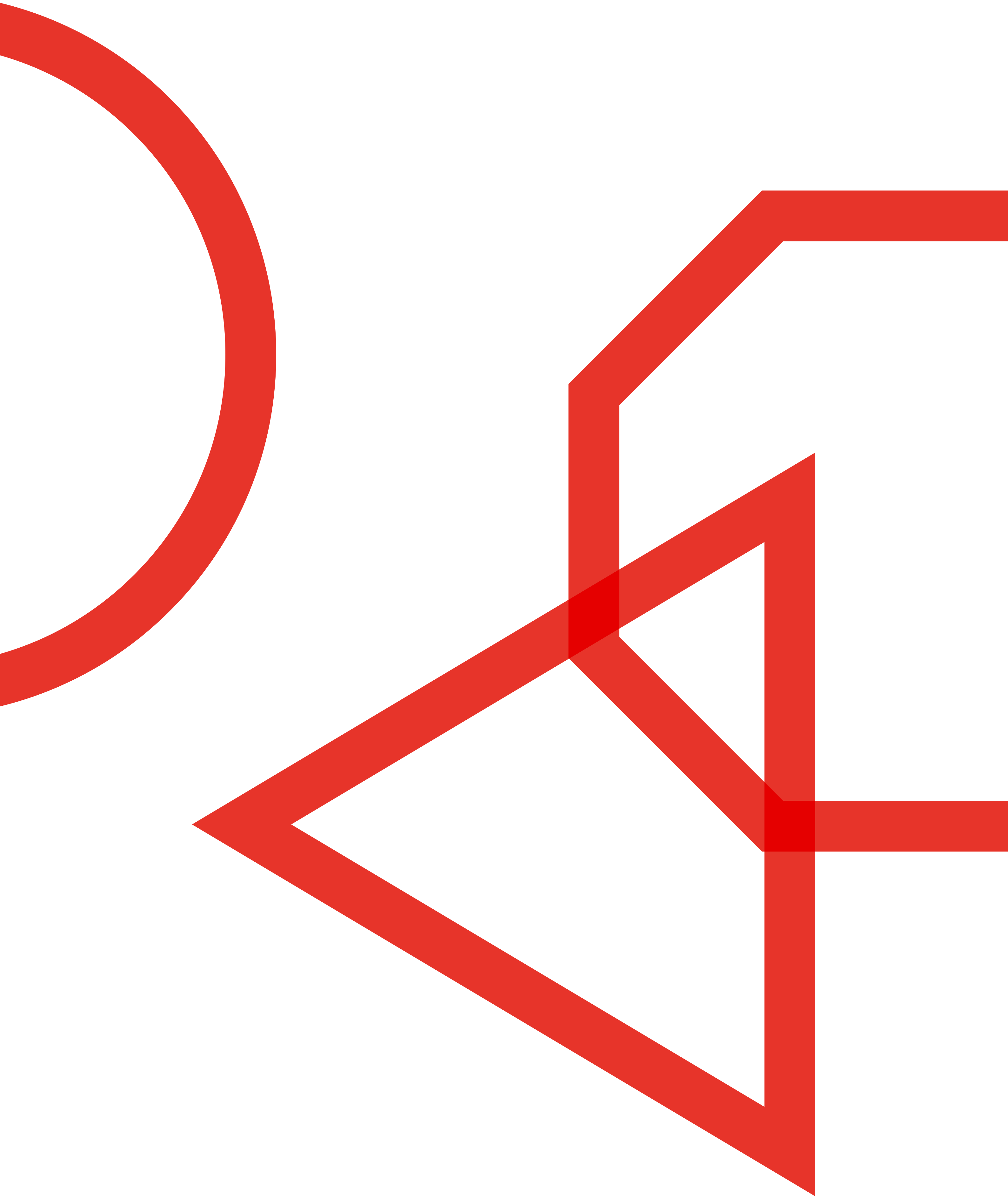
- **Overall:** new employment permits issued for those in sales related occupations accounted for just 1% of total permits issued in 2019; permits were most frequently issued for customer service occupations within the general employment permits
- **Salary:** over three quarters (78%) of new permits issued had a salary of less than €30,000
- **Sector:** 53% of new permits issued were for the ICT sector, 20% in arts, entertainment and other services with a further 12% each in the financial sector and wholesale & retail sector
- **Nationality:** persons from Japan and Indonesia accounted for almost half (47%) of all new permits issued for this occupational group.

Operatives

- **Overall:** new employment permits for operatives accounted for 5% of total permits issued in 2019; the majority (99%) of permits issued for this occupational group were issued for general employment permits and almost 90% had a salary of less than €30,000
- **Sector:** the majority (89%) of new permits issued were for the agriculture sector, with a further 7% in transport & storage sector.
- **Nationality:** persons from Brazil, the Ukraine and China accounted for the majority (80%) of all new permits issued for this occupational group
- **Occupations:** new permits were most frequently issued for general and meat processing operatives, and HGV drivers.

Elementary Occupations

- **Overall:** new employment permits for elementary occupations accounted for 4% of total permits issued in 2019; the majority (99%) had a salary of less than €30,000 with almost all of the permits issued for the agriculture sector in areas such as horticulture workers, mushroom pickers and dairy farm workers.



Section 8
Vacancies

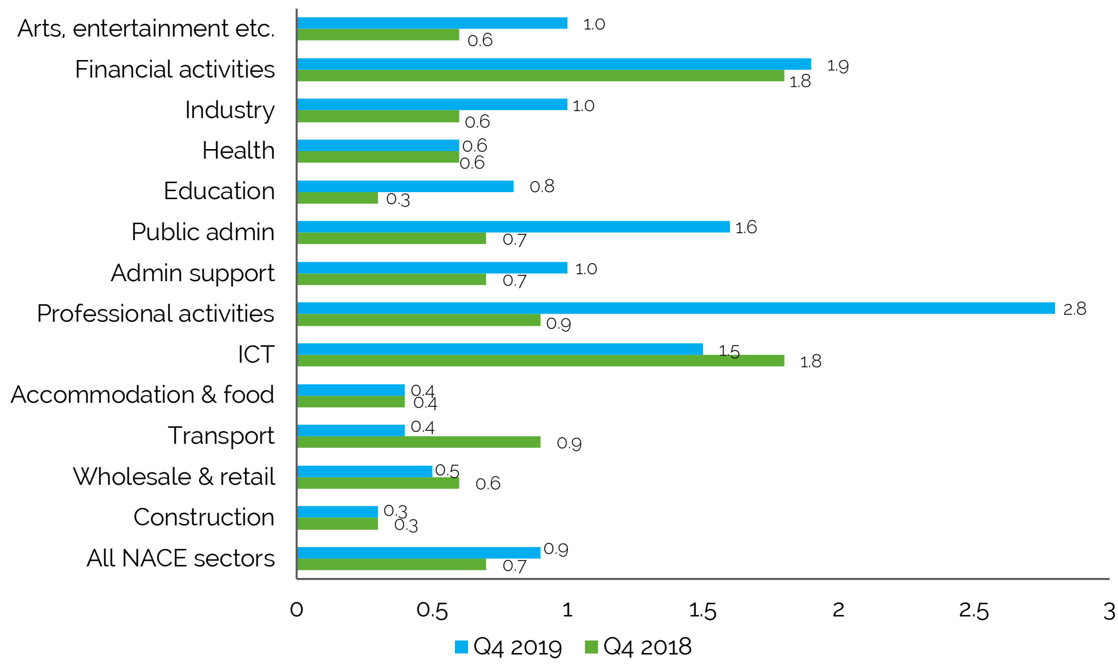
The annual Vacancy Overview report provides a detailed analysis of vacancies occurring in Ireland. The report examines two sources of vacancy data, namely the Public Employment Service (PES) vacancy data (from Department of Employment Affairs and Social Protection's vacancy portal Jobs Ireland) and a private online recruitment agency (IrishJobs.ie). Other indicators are also examined, including the CSO vacancy rates by sector, recent job hires (detailed earlier in Section 6) and the results of the Recruitment Agency Survey conducted in-house. Although an updated version of the report has not been produced thus far in 2020, this section provides a summary of analysis based on 2019 data with a focus on vacancies at occupational level.

8.1 CSO Vacancy Rates

The CSO's Earnings, Hours and Employment Costs Survey (EHECS) examines the number of open vacancies businesses have at the end of each quarter. There were 18,100 vacancies reported in quarter 4 2019, representing a job vacancy rate[19] of 0.9%; the number of vacancies has been increasing since quarter 4 2014 when 11,100 vacancies were reported giving a rate of 0.7%.

Figure 8.1 presents the vacancy rates by sector for quarter 4 2014 and quarter 4 2019. The professional activities sector recorded the highest rate in quarter 4 2019 at 2.8%. This sector also experienced the largest gain since quarter 4 2014. The lowest vacancy rates were recorded for the construction, accommodation and food, and transport sectors, each between 0.3% and 0.4% in quarter 4 2019.

Figure 8.1: CSO Vacancy Rate by Sector, Quarter 4 2014 and Quarter 4 2019



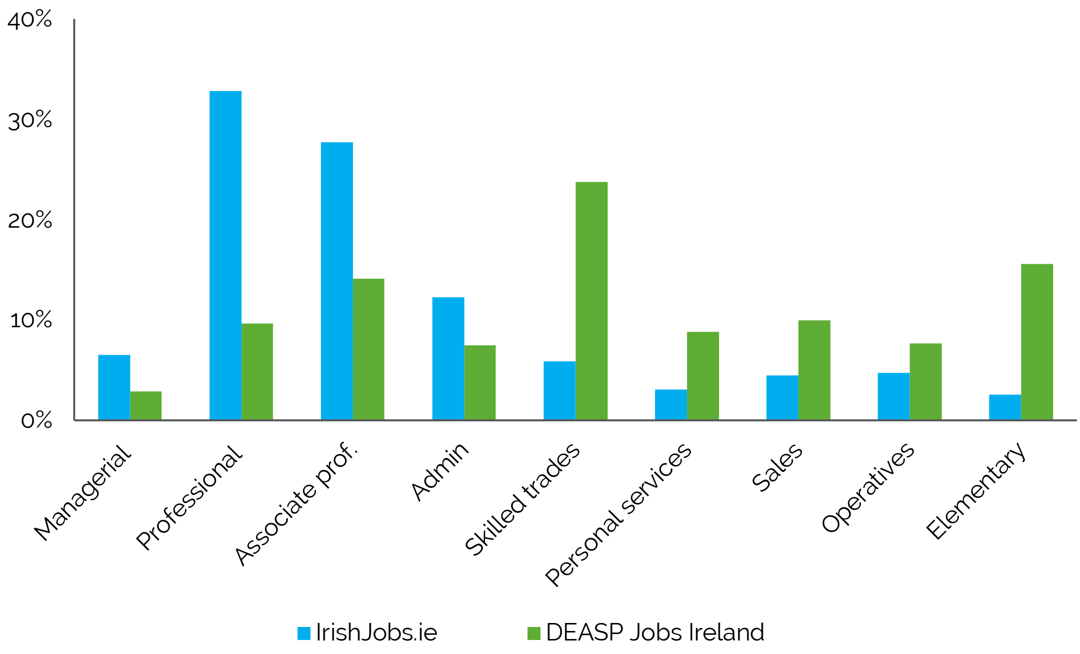
Source: CSO EHECS

[19] The job vacancy rate, as detailed in the CSO Earnings, Hours and Employment Costs Survey (EHECS), measures the proportion of total posts that are vacant as a proportion of total occupied posts combined with job vacancies.

8.2 Vacancies by Occupation

In 2019, vacancies advertised through IrishJobs.ie were mostly concentrated in professional and associate professional occupations (Figure 8.2). On the other hand, newly advertised vacancies through DEASP Jobs Ireland were primarily in skilled trades, elementary, and associate professional occupations.

Figure 8.2 Vacancies by Occupational Group (%), 2019



Source: IrishJobs.ie and DEASP Jobs Ireland

Table 8.1 provides a summary of the job titles that occurred most frequently in 2019 from the two data sources, namely IrishJobs.ie and DEASP Jobs Ireland by occupation.

Table 8.1: Summary of main job titles notified through DEASP Jobs Ireland and IrishJobs.ie, 2019

	DEASP Jobs Ireland	IrishJobs.ie
Managers	— Hotel and restaurant, retail — Operations & production	— Production, operations, engineering, health & safety — Retail/store, procurement/supply chain/logistics, marketing, HR, financial — Construction/site
Professionals	— Higher education lecturers (across all disciplines) — Software developers/engineers, network planners/engineers, web developers, content reviewers — Nurses (primarily staff) — Engineers (including project, process, quality, and design) — Structural/civil/site engineers, quantity surveyors, architects — Project managers (across sectors including construction) — Accountants (including part-qualified) — Pharmacists	— Software engineers/developers (with java, .NET, Front End, DevOps, Oracle PL/SQL) — Other IT (systems analysts/engineers, technical architects, test/network/security engineers, IT project managers/business analysts) — Engineering: project, process, quality, design, product, R&D, EHS, automation — Science: microbiologists, QA and QC chemists, scientists (medical, R&D, process, analytical) — Construction: quantity surveyors, project managers, civil/site engineers — Business & finance: business/risk analysts, project managers, compliance/regulatory affairs, financial accountants, data scientists — Nurses: staff and clinical nurses across all areas — Medical practitioners (registrars, SHOs), radiographers, pharmacists, psychologists, social workers, physiotherapists, dieticians, speech and language/occupational therapists — Lecturers, postdoctoral researchers
Associate professionals	— Community employment supervisors, trainers — Sales representatives (including field and inside sales), sales executives, account managers — Marketing specialists (including digital), business development executives — IT technical support (with languages), systems administrators — Technicians: field service, manufacturing, automotive, CAD — Recruitment consultants, HR advisors, employment advisors — Other: interpreters, graphic/UX designers, accounting technicians, health and safety officers, hearing aid dispensers, estimators	— Business/financial: analysts (business, financial, data, quality assurance), managers (account, audit, fund accounting, tax), compliance officers, underwriters, transfer agents — Sales and marketing: sales executives (including field and inside sales), sales accounts managers, marketing/brand managers, business/product development managers, marketing executives — Supply chain planners/analysts/co-ordinators, production planners, buyers, procurement specialists — HR: business partners, generalists, advisors and recruiters, onboarding specialists, learning and development specialists — IT: tech support (with language skills), administrators (systems, database), graphic designers (including UX/UI), technical writers — Other technicians: laboratory, quality, process, automation, CAD, electrical, — Other: health and safety officers, physiologists, community support worker

Administrative	— Office administrators/assistants — Receptionists (including hotel), secretaries, personal assistants — Accounts assistants/bookkeepers, payroll administrators — Stocktakers (mostly part-time) — Transport and distribution assistants	— Financial: fund accountants, accounts payable/receivable, accounts assistants, bookkeepers, payroll/financial administrators, claims handlers/pensions administrators, credit controllers — Administrators (office, HR), receptionists, PAs/executive assistants, legal/company/medical secretaries — Logistics/transport coordinators, document controllers, project schedulers/planners, sales/purchasing admin
Skilled trades	— Chefs: chef de partie, sous, head chefs, and commis; also ethnic chefs, mainly Indian and Chinese — Mechanics (car, HGV), panel beaters, spray painters — Carpenters (including shuttering carpenters), electricians, plumbers — Welders, fitters (mechanical, maintenance), CNC programmers/operators, fabricators (steel, sheet metal), service engineers — Butchers (retail/food processing), deboners/trimmers — Other trades: cabinet makers, bricklayers/stone masons, painters, roofers/tilers, steel fixers/erectors, plasterers	— Maintenance technicians/fitters — Engineering technicians (mechanical, electrical, service, instrumentation, calibration), validation and CQV engineers — Chefs (e.g. chef de partie, commis, head and sous), catering managers — Construction site supervisor
Personal services	— Care workers (relates to those providing care in both the home and in nursing homes), healthcare assistants — Childcare workers, early years educators, childminders — Other personal services: hairdressers/ barbers, pet care assistants, beauty therapists, nail technicians, cleaning supervisors	— Care workers, healthcare assistants
Sales & customer service	— Sales assistants (retail, counter, deli), merchandisers — Customer services representatives (with languages), call centre agents	— Customer service representatives and collections agents (with languages); contact centre/telesales agents — Retail sales assistants, sales advisors, merchandisers
Operatives	— Drivers: artic, HGV, rigid, machine drivers/operators, forklift — Production operatives (including meat processing) — Other drivers: delivery, van, bus and coach drivers — Other operatives: scaffolders (both basic and advanced), tyre fitters	— Production and manufacturing operatives, quality control supervisors — Drivers (delivery, van, rigid, artic, HGV)
Elementary	— Catering assistants, kitchen porters, waiting staff, bar persons, hotel/night porters — Cleaners, accommodation assistants — Dairy farm assistants, horticultural workers, mushroom pickers — Security guards (including retail and static) — Warehouse operatives, general operatives in food production, construction labourers, car valetors	— Warehouse operatives, general operatives in manufacturing — Kitchen and catering assistants — Security guards, cleaners

Source: DEASP Jobs Ireland/IrishJobs.ie

8.3 Recruitment Agency Survey (October 2019)

The SLMRU in SOLAS conducts a recruitment agency survey every six months to gather recruitment agencies' views on vacancies which in their experience are proving difficult-to-fill. Table 8.2 refers to the roles that were most frequently identified as difficult-to-fill when agencies were surveyed in October 2019.

Table 8.2: Summary of main job titles identified as difficult-to-fill, October 2019

Managers	— Production managers (MedTech/biopharma)
	— Project/site managers in construction
	— Logistics, procurement (mid-management)
	— Tax managers
	— R&D managers (niche)
	— Quality assurance, quality control managers
Professionals	— Software developers: web, Python, UX/UI, cloud, mobile, full stack, front end, JavaScript, Scala, Angular JS, C++, .Net, PHP, Ruby on Rails, Hadoop
	— Other IT: engineers (automation, DevOps), test, security analysts, Blockchain
	— Data architects, data scientists, big data analysts, (e.g. Hadoop, Pig, Cassandra, SQL), IT project managers (e.g. scrum master)
	— Engineering: process, design, quality control/quality assurance (including standards, compliance and regulatory affairs) EHS (environmental health and safety), automation, validation, chemical, manufacturing, mechanical, electrical, electronic
	— Data analytics (e.g. DB mining, statistics)
	— Business & finance: management accountants, tax specialists, regulatory accountants, part qualified accountants, practice accountants, financial controllers, internal audit
	— Quantity surveyors, building services/site engineers/civil engineers/BIM coordinator
	— Nurses (staff, oncology, cardiac, intensive care/theatre, mental health, paediatrics, elderly
	— Medical practitioners (GPs, Locum GPs), radiographers
Associate professionals	— Sales and marketing: technical sales, sales with languages, sales executives
	— Supply chain (junior roles), supply chain with languages, planners/forecasting (junior/mid-management roles)
	— HR generalists and specialists
	— IT technicians: tech support (with language skills, especially German, Nordic and French)
	— Other technicians: quality assurance/control, clean room technician, manufacturing technician
Administrative	— Accounts payable (with/without languages), payroll, administration
	— Procurement/supply chain/logistics administrative roles (many junior roles), freight forwarders
Skilled trades	— Welders: TIG, MIG, ARC
	— Construction craft: steel erectors/fixers, electricians, pipe layers, curtain wallers, carpenters (niche – shuttering), fitters & glazers, maintenance technicians
	— Meat deboners
Personal services	— Carers: homecare roles/nursing home care roles
Sales	— Customer service/care/representatives (with/without languages)
Operatives and Elementary	— Drivers: artic, HGV (E+, CI license), forklift drivers, reach truck, site dump drivers
	— Manufacturing, process, packaging, ground workers (in construction), warehouse operatives.

Source: Recruitment Agency Survey, October 2019

Section 9
Occupational Employment Profiles

This section provides a statistical analysis of employment at occupational level. Employment profiles are provided for over 95 occupations[20]. The occupations were based on the Standard Occupational Classification (SOC) 2010; in cases where estimated employment was too small to report for statistical reasons, two or more occupations were merged. All of the occupations were then grouped into 16 occupational groups. In general, occupations that were associated with the same sector of employment or occupations with similar duties were grouped together. The occupational groups were as follows:

- science and engineering occupations
- ICT occupations
- business and financial occupations
- healthcare occupations
- education occupations
- social and care occupations
- legal and security occupations
- construction occupations
- other craft occupations
- agriculture and animal care occupations
- hospitality occupations
- arts, sports and tourism occupations
- transport and logistics occupations
- administrative and secretarial occupations
- sales, marketing and customer service occupations
- operative and elementary occupations (labourers) n.e.c.

For each of the occupations, an analysis was conducted using the following indicators:

- **Employment:** An annual average of employment figures over the four quarters in 2019
- **Employment growth:** The annualised rate of employment growth for the period 2014-2019
- **Females:** The percentage of females employed in an occupation (based on quarter 4 2019 data from the LFS)
- **Full-time:** The percentage of persons who work full-time in an occupation (based on quarter 4 2019 data from the LFS)
- **Unemployment rate:** the numbers of unemployed persons who stated their previous occupation were too small to report in quarter 4 2019 in most instances; as such, this rate was excluded for this edition
- **Aged 55 years and over:** A higher than average share of persons aged 55 years and over indicates a higher expected retirement rate in the short to medium-term (based on quarter 4 2019 data from the LFS)
- **Non-Irish nationals:** A higher than average proportion of non-Irish nationals in an occupation indicates employers' reliance on sourcing skills/labour from abroad to fill vacancies (based on quarter 4 2019 data from the LFS)
- **Third level qualifications:** The percentage of persons who have attained a third level qualification (based on quarter 4 2019 data from the LFS)
- **Employment permits:** issued to non-EEA nationals in 2019. This is an indicator of the demand for skills that could not be met from domestic or EEA sources. (Based on 2019 data from the Department of Business, Enterprise and Innovation)
- **Recruitment Agency Survey:** presents the results of the SLMRU (SOLAS) Recruitment Agency Survey conducted in October 2019. The occupations with mentions of difficult-to-fill vacancies reported by recruitment agencies are indicated by an 'X'.

[20] The number of occupations analysed has been reduced from over 130 in previous editions of the Bulletin due to stricter reporting restrictions introduced in the Labour Force Survey. Appendix B details the revised categorisation of occupations.

The Skills for Growth data, where employers, working directly with Regional Skills Fora managers throughout 2019, identify job vacancies as difficult-to-fill, is also included in the analysis, where relevant.

In addition to these demand indicators, the supply of skills was approximated using the expected output from the formal education and training system. Supply data at occupational level was not reported due to the complexity of linking course output to specific occupations (e.g. business courses can be a source of supply for numerous occupations). Also, for the majority of occupations, there are no mandatory qualification requirements. Thus, the intention is not to provide an exact quantification of the supply for each occupation but rather to obtain a general approximation. It should be noted that it is possible that individuals do not work in the occupations for which they are educated/trained.

Due to the significant changes to the landscape of the Irish economy in 2020 as a result of COVID-19, an analysis of potential shortages at occupational level was not possible for this edition of the bulletin. This was for a number of reasons including:

- the availability of official data on the impact of COVID-19 restrictions at detailed occupational level is limited; income support payments data (available from the Department of Social Protection and Employment Affairs (DEASP) and Revenue) relates to sectors of employment only and does not provide detail of the occupation of the individual receiving payments; official employment data (from the CSO's Labour Force Survey) captures the period until the end of June 2020 only and is constrained by official definitions of employment and unemployment, thus potentially underestimating the full impact of COVID-19
- the SLMRU have conducted a bi-annual survey of recruitment agencies to assess which vacancies are proving difficult to fill for several years; as a result of the uncertainty facing many businesses at the time, it was decided to suspend the April 2020 survey. As such, it has not been possible to establish where issues, if any, in sourcing skills have arisen, since the introduction of COVID-19 restrictions.

Despite these issues, an outlook for each occupation is provided in light of the impact of COVID-19. The outlooks drew on a number of sources to inform their analysis:

- the SLMRU recently produced occupational forecasts for 2020 utilising LFS data for 2019, income support data from DEASP and Revenue and overall employment forecasts produced by the ESRI, Central Bank and the Department of Finance [21]
- the SLMRU also recently produced a report in relation to the future of work and the occupations expected to be most at risk of automation. Many of the jobs expected to be significantly impacted by Covid-19 are also those associated with a potentially high risk of automation[22]
- the CSO released a paper examining the potential exposure to COVID-19 at occupational level which also provided information on the jobs where people worked in close proximity to others[23]
- Regional Skills Fora managers nationwide gathered qualitative information, received from employers in their regions, in relation to the direct impact of COVID-19 on businesses.

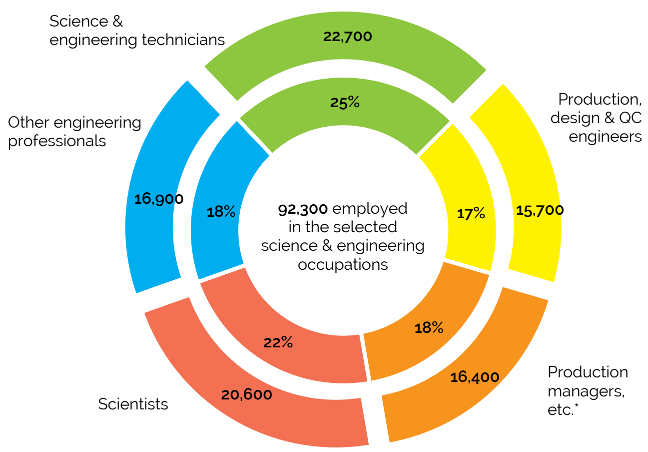
[21] Potential Occupational Impact of COVID-19 in 2020, SLMRU, July 2020
[22] Future of Jobs in Ireland – Automation Risk, SLMRU, May 2020
[23] https://www.cso.ie/en/releasesandpublications/br/b-cope/occupationswithpotentialexposuretocovid-19/

9.1 Science & Engineering Occupations

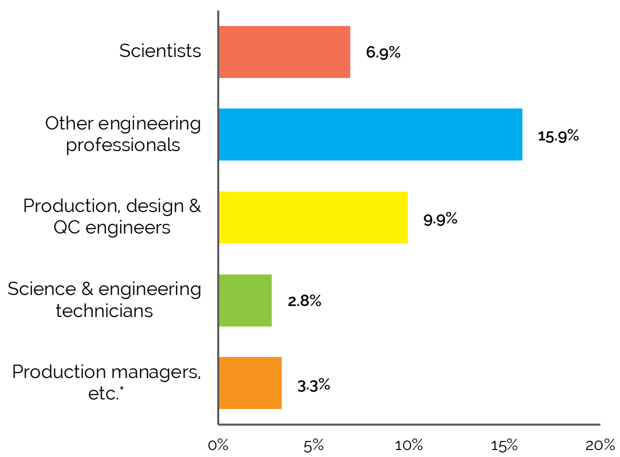
Overall employment: Approximately 92,000 persons (67% male) were employed in the selected science and engineering occupations, representing 3.8% of the national workforce.

- **Sector:** 50% of overall employment was concentrated in industry, followed by 16% in professional service activities
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 25,900 (6.8% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for other engineering professionals (15.9%) during the period
- **Age:** The 25-54 age group accounted for the majority of persons employed, at 81%. The share of persons employed aged 55 years and over was 14%, below the national average of 19%
- **Education:** The share who had attained third level qualifications (76%) was significantly above the national average share (48%), while a further 19% had attained a higher secondary/FET qualification
- **Full-time/part-time:** Over 93% of science and engineering workers were in full-time employment
- **Nationality:** The share of non-Irish workers was broadly in line with the national average of 17%, while 84% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 25,900 (6.8% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Overall Outlook for these Occupations

Employment in this occupational group grew strongly in the five-year period with demand for skills in these jobs particularly evident in 2019. The supply of graduates in science and engineering has, in the main, increased over the last number of years, with these people sought after across a variety of other sectors (e.g. education, finance, public administration). Despite this, science and engineering occupations are forecast to experience an annual average fall in employment of 9.9%, or 9,200 persons, between 2019 and 2020. However, this decline is primarily driven by an assumption of reduced activity in manufacturing as a result of COVID-19; a swift recovery in the manufacturing sector may mitigate any potential decline in employment numbers.

Occupation	Economic summary
Scientists	Employment growth for this occupation over the five-year period was double that of the national average. Over 100 new employment permits were issued in 2019 for scientists, indicating that employers were unable to source suitable candidates in Ireland for certain roles, most likely niche areas. Supply from the third level education system was strong, with over 1,400 science awards in medical or pharmaceutical-related areas. The COVID-19 crisis is more likely to have had an impact on the nature of the work rather than on employment levels for these high-skilled roles, at least initially.
Production, design & QC engineers	This occupation experienced strong employment growth over the five-year period. Demand for these skills in 2019 was evident through a high volume of vacancies, with some identified as difficult-to-fill, and over 400 new employment permits issued (particularly for quality and process engineers). There were nearly 900 NFQ level 8+ awards in 2018 in these areas, broadly similar to other years; however, supply for these occupations can come from a range of other engineering disciplines. With industry being the main employer for these occupations, the effect of COVID-19 on employment numbers would have varied according to the manufacturing sub-sector.
Other engineering professionals (e.g. mechanical, electrical and electronic engineers)	Employment growth was very strong for this occupation over the five-year period, although changes to the Labour Force Survey methodology in 2017 account for some of this change. A high demand for these skills was evident in the vacancy data (particularly for electrical, automation, validation and manufacturing engineers), along with a high number of new employment permits issued in 2019 (over 400). There were approximately 1,500 awards at NFQ level 8+ for these engineering fields but this has remained largely unchanged compared to 2014. While some jobs in industry may have been impacted by COVID-19 restrictions, a recovery is likely in the short-term with the reopening of the economy.
Science & engineering technicians	Employment growth over the five-year period was below the national average for this occupation, with a decline occurring between 2018 and 2019. Quality and process technician jobs appeared frequently in the vacancy data in 2019. There were over 3,200 awards at NFQ levels 6 and 7 related to these occupations, a slight increase on earlier years. With most of these occupations concentrated in industry, a recovery from the restrictions due to COVID-19 will be linked to a full resumption of activities in this sector.
Production managers in manufacturing	Employment growth over the five years was on a par with the national average. Job opportunities are likely to arise for those with experience, replacing those who leave due to retirement, etc. With most of these occupations concentrated in industry, the outlook post-COVID-19 will be dependent on a return to full activity in this sector.

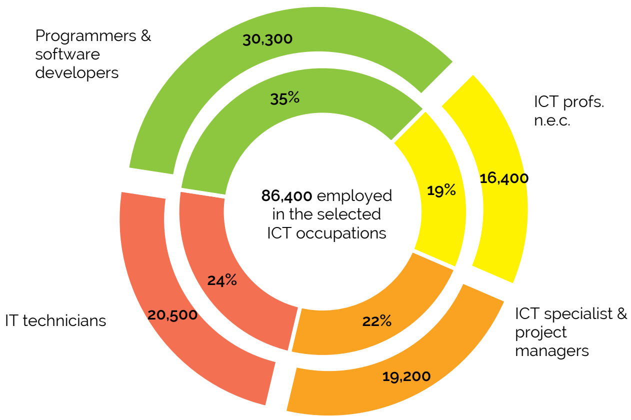
**For detailed table see Appendix A*

9.2 ICT Occupations

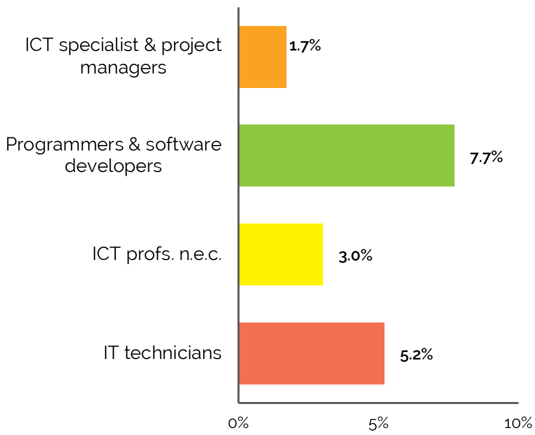
Overall employment: Approximately 86,400 persons (76% male) were employed in the selected ICT occupations, representing 3.8% of the national workforce.

- **Sector:** Two thirds of overall employment was concentrated in the ICT sector, with a further 10% employed in finance and 9% in industry
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 17,800 (4.7% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for programmers & software developers (7.7%) during the period
- **Age:** The 25-54 year age group accounted for the majority of persons employed, at 90%.
- **Education:** The share who had attained third level qualifications (87%) was significantly above the national average share (48%), while a further 10% had attained a higher secondary/FET qualification
- **Full-time/part-time:** Over 97% of ICT workers were in full-time employment
- **Nationality:** The share of non-Irish workers was well above the national level of 17%, while 64% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 17,800 (4.7% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Overall Outlook for these Occupations

Growth in employment in ICT occupations over the five-year period was driven primarily by an increase in employment for programmers and software developers. Demand for these skills was strong across all the economic indicators in 2019. The decline in employment in ICT occupations for 2020 (annual average), as a result of COVID-19, is expected to be relatively small in number (at approximately 3,000 persons); while increases in employment may occur for roles such as programmers/developers, this may be offset by declines in lower skilled roles such as technical support. These occupations have a higher share of non-Irish employed compared to the national average and the supply of skills may be impacted from reduced inward migration.

Occupation	Economic summary
ICT specialist & project managers	Employment growth was below the national average for this occupational group over the five-year period. However, over 400 new employment permits were issued for various IT managers in 2019, indicating that employers were unable to source candidates with the skills required from the Irish labour market. These occupations are not thought to have been negatively impacted in terms of employment numbers as a result of COVID-19.
Programmers & software developers	Programmers and developers experienced strong employment growth over the five-year period. These skills were in high demand in 2019, with over 2,000 employment permits issued, a high level of vacancies and frequent mentions in the Recruitment Agency Survey. Although most in this occupation are employed in the ICT sector, demand extends across almost all economic sectors. While supply from the education system has been rising steadily in recent years (1,400 awards at NFQ level 8+ in 2018), an issue may arise with the availability of skills due to reduced inward migration as a result of COVID-19; an increased uptake of remote working, however, may mitigate this difficulty.
ICT profs. n.e.c.	Although employment growth was slightly below the national average over the five-year period, a high demand for jobs (e.g. UX/UI developers/designers, IT architects, and network and security engineers) was evident in 2019 from the employment permits data, the vacancy analysis and the Recruitment Agency Survey. These occupations are not thought to have been negatively impacted in terms of employment numbers as a result of COVID-19, at least initially.
IT technicians	Employment growth was above the national average for IT technicians over the five-year period. Over 40% of those employed were non-Irish nationals, significantly above the national average. The vacancy analysis and employment permit data indicate that language skills were a requirement for many technical support roles. Although employment levels for this occupation were unlikely to have been impacted as a result of COVID-19, the availability of skills through inward migration may become an issue if global travel restrictions persist.

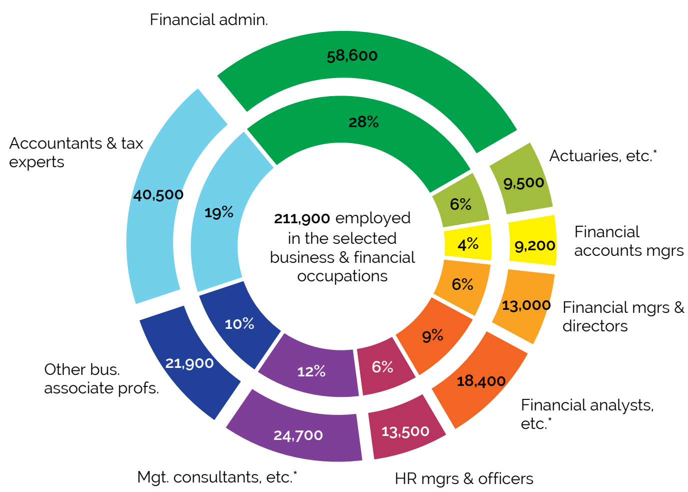
**For detailed table see Appendix A*

9.3 Business & Financial Occupations

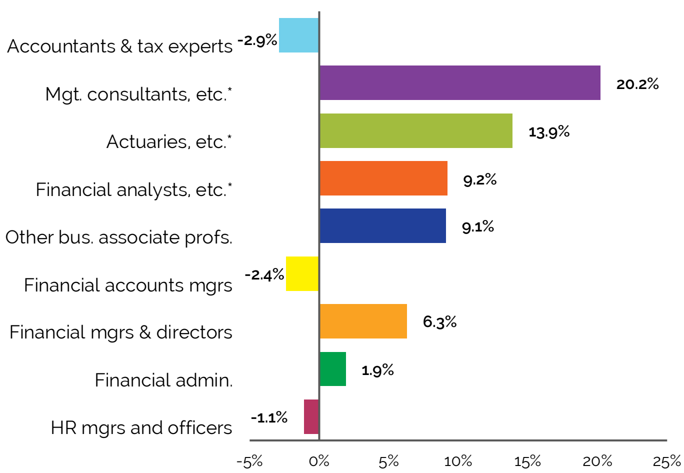
Overall employment: Approximately 212,000 persons (55% female) were employed in the selected business and financial occupations, representing 9.2% of the national workforce.

- **Sector:** These occupations were employed across all sectors, with 35% of overall employment concentrated in the financial sector and a further 20% in the professional services sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 35,000 (3.7% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for management consultants, etc. (20.2%) during the period
- **Age:** The 25-54 age group accounted for the majority of persons employed, at 78%. The share of employees aged 55 and over was 15%, below the national average of 19%
- **Education:** The share who had attained third level qualifications (77%) was significantly above the national average share (48%) while a further 18% had attained a higher secondary/FET qualification
- **Full-time/part-time:** Over 87% of business & financial workers were in full-time employment
- **Nationality:** The share of non-Irish workers was below the national average of 16%, while 86% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 35,100 (3.7% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data
*See detailed occupation description in table below

Overall Outlook for these Occupations

Although overall employment growth over the five-year period for business and financial occupations was above the national average, some occupations experienced a contraction in numbers employed. The financial sector accounted for over a third of employment in these occupations in 2019, although business and financial skills are required across a range of economic sectors. Supply from business and finance related fields of education is strong (18,500 graduates in 2018) and is one of the largest fields in terms of number of graduates in the further and higher education sectors each year.

As a result of COVID-19, employment in these occupations is expected to fall by 6% in 2020 (annual average), representing 13,000 persons; recovery in employment will be dependent on the performance of the economy for many of these occupations. The future demand for business and financial skills is also likely to be affected by the impact of Brexit and by changes in the nature of the tasks required to fulfil these roles due to technological change, with financial administrative roles identified in particular as being at high risk of automation.

Occupation	Economic summary
Accountants & tax experts	Employment fell in this occupation over the five-year period, although numbers have remained relatively static in the last two years. Despite this fall in employment, there were almost 6,000 recent job hires in 2019, indicating that job churn may be an issue for this occupation. However, replacement demand alone for such a large occupation will ensure job opportunities will continue even if an overall decline occurs. Demand exists for those with specific industry experience (particularly in the financial sector), as evidenced by the 300 new employment permits issued in 2019 and the numerous mentions in the Recruitment Agency Survey. The lack of commercial activity during quarter 2 of this year as a result of COVID-19 is likely to have seen a reduced demand for accountancy/tax services; however, a recovery, at least partial, is expected as business activity resumes.
Mgt. consultants, bus. analysts & project managers	This occupational group experienced strong employment growth over the previous five years, although this is in part related to changes in the Labour Force Survey methodology in 2017 (resulting in a significant increase for business project management professionals). Over 700 new employment permits were issued for this occupation in 2019 (for various analyst roles). The employment outlook for these occupations post COVID-19 is very much dependent on the performance of the economy as a whole.
Actuaries, economists & statisticians; other business profs.	Employment growth was strong for this occupation over the five-year period. Employment permits issued in 2019 related to actuarial analysts, and a difficulty in filling vacancies for data scientists was mentioned in the Recruitment Agency Survey. These occupations were unlikely to have been impacted by COVID-19 restrictions.
Financial analysts and insurance underwriters	Employment grew strongly over the five-year period. Vacancies that occurred for this occupation in 2019 related primarily to financial analysts as did many of the new employment permits issued. Those employed in these occupations are not expected to have been negatively impacted by COVID-19 restrictions.
Financial accounts managers	There was an overall decline in employment over the five-year period. The impact of COVID-19 for this occupation is unknown.
Other bus. associate profs. (e.g. financial/ accounting technicians, estimators, valuers)	This occupation had strong employment growth over the five-year period. Vacancies in 2019 related primarily to data analysts. Demand for these skills occurred across most economic sectors. Those employed as data analysts are not expected to have been negatively impacted by COVID-19 restrictions, although the outcomes for other roles within this group are less certain (e.g. estimators, valuers, accounting technicians).
Financial managers & directors	Employment grew at almost double the rate of the national average over the five-year period. Although there were over 100 new employment permits issued in 2019, a third are related to intra-company transfers and, therefore, not new job opportunities. The financial sector does not appear to have been negatively impacted by COVID-19 to date; as such, the number of those employed in these occupations is not expected to have been significantly affected.

Financial admin.	Although overall five-year employment growth was low when compared to the national average, year-on-year growth since 2018 was strong for this occupation. Financial administrative occupations have a slightly older age profile than the national average; they are also at high risk of automation and any plans to reduce the current workforce in the retail banking sector as a result of COVID-19 will likely have a significant impact on this occupation.
HR managers and officers	Employment in this occupation fell over the five-year period. However, demand for these skills continued in 2019 with a high number of vacancies occurring; new employment permits issued primarily related to those in senior roles. On the one hand, the work of those employed in HR roles is likely to have intensified during the COVID-19 crisis; however, a lower number of people in employment economy-wide could translate into reduced demand for these roles.

**For detailed table see Appendix A*

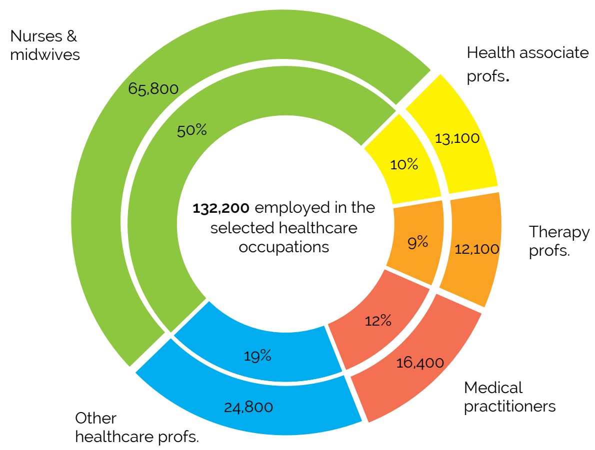
9.4 Healthcare* Occupations

Overall employment: Approximately 132,000 persons (75% female) were employed in the selected healthcare occupations, representing 5.6% of the national workforce.

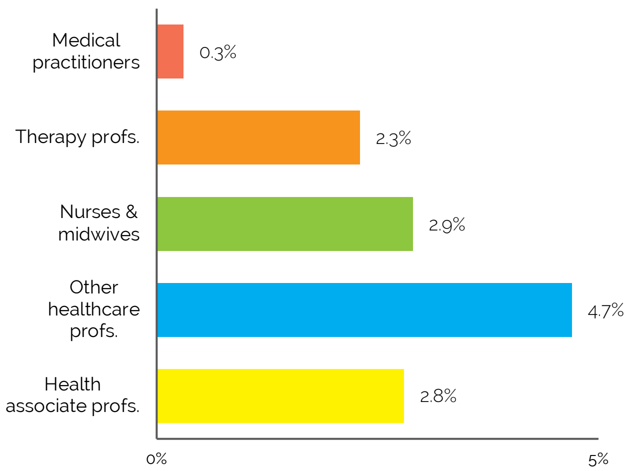
- **Sector:** 88% of overall employment was concentrated in the health sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 17,000 (2.8% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for other healthcare professionals (4.7%) during the period
- **Age:** The 25-54 year age group accounted for the majority of persons employed, at 80%. The share of employees aged 55 years and over (16%) was below the national average of 19%
- **Education:** Those who had attained third level qualifications (94%) was significantly above the national average share (48%), while 5% had attained a higher secondary/FET qualification
- **Full-time/part-time:** Approximately 79% of healthcare workers were in full-time employment
- **Nationality:** The share of non-Irish workers was broadly in line with the national average of 16%, while 84% of workers were Irish nationals.

*Carers are examined in Chapter 9.6 (Social and Care Occupations)

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 17,100 (2.8% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Overall Outlook for these Occupations

Employment growth for this occupational group was below the national average for the period 2014 to 2019. Despite significant demands for their services, particularly as a result of COVID-19, employment numbers are very much dependent on government funding. Demand for health services is expected to continue to grow due to Ireland's ageing demographics. A decline of 6%, or 7,900 persons, employed in healthcare occupations is forecast for 2020 (annual average) when compared to 2019; those negatively impacted in terms of employment numbers are likely to be based outside the hospital/nursing home setting. It is also important to note that with the exception of managerial roles, the majority of those employed in healthcare occupations are likely to have significant exposure levels to diseases and work in close proximity to others, according to the CSO research. Medical practitioners and nurses have a higher share of those employed who are non-Irish nationals; any fall in the supply of inward migration may have an impact on employment numbers.

Occupation	Economic summary
Medical practitioners	Prior to 2020, despite strong demand for medical practitioners as evidenced by employment permit data, employment levels had remained relatively unchanged. The impact of COVID-19 varied across types of doctors, with demand particularly strong for those in the frontline, while others may have seen a temporary drop in demand for services. Future employment growth will be largely dependent on government policy in this area.
Therapy profs.	The five-year annual average employment growth was below the national average. Those working outside the hospital setting, such as physiotherapists and occupational therapists, may have seen a fall in demand for routine services as a result of COVID-19 restrictions. Government policies, in part, will determine employment levels in these occupations in the short to medium term.
Nurses & midwives	Although the five-year employment growth was below the national average, demand for nurses has never been so strong as a result of COVID-19, particularly as this occupation has one of the highest risks of exposure to disease. Nurses accounted for 12% of all new employment permits issued in 2019 and appeared frequently in the vacancy data. With such a large number employed, replacement demand alone will result in continued job openings for this profession.
Other healthcare profs. (e.g. pharmacists, psychologists, dentists, radiographers, vets, & health services managers)	This occupation experienced above average employment growth over the last five years with recruitment demand relating primarily to radiographers. Increased output from the education and training system is unlikely to be sufficient to meet demand in the short-term with over 100 employment permits issued in 2019. Those working outside the hospital setting, such as psychologists, dentists, opticians, may have seen a fall in demand for routine services as a result of COVID-19 restrictions.
Health associate profs.	Employment growth was below the national average. Those working outside of the hospital setting, such as dental technicians/nurses, acupuncturists and sports therapists, may have seen a fall in employment as a result of COVID-19 restrictions.

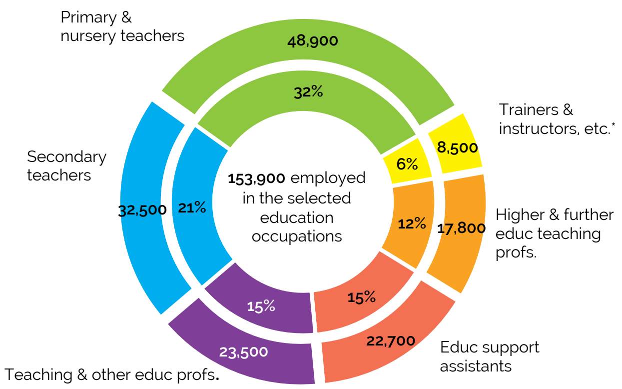
For detailed table see Appendix A

9.5 Education Occupations

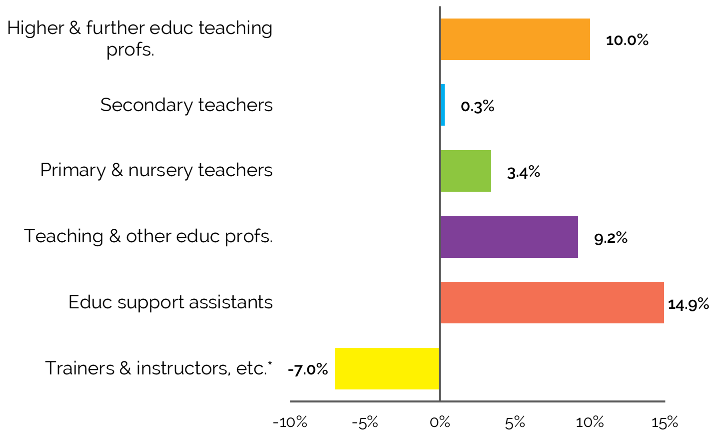
Overall employment: Approximately 154,000 persons (73% female) were employed in the selected education occupations, representing 6.8% of the national workforce.

- **Sector:** 93% of overall employment was concentrated in the education sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 30,700 (4.6% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for educational support assistants (14.9%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 74%. The share of employees aged 55 years and over, at 19%, was on par with the national average
- **Education:** The share who had attained third level qualifications (86%) was significantly above the national average share (48%), while 12% had attained a higher secondary/FET qualification
- **Full-time/part-time:** Over 82% of education workers were in full-time employment
- **Nationality:** The share of non-Irish workers was well below the national average of 16%, while 92% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 30,700 (4.6% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Overall Outlook for these Occupations

Education occupations experienced a stronger employment growth than the national average over the period between 2014 and 2019. Employment for these occupations is driven by government funding and policies along with the changing demographic profile of the population. The second level school population is growing with an expected peak to occur in 2024-2025; this will result in increased demand at second level within the next ten years, and later at third level as this cohort moves up through the education system. In addition, government initiatives in areas such as early childhood education and lifelong learning will impact on the demand for these occupations.

Those employed in this occupational group are estimated to experience one of the smallest percentage declines in employment on average annually in 2020, at 2.6%. Although permanently appointed teachers/lecturers are unlikely to see a decline in employment numbers, a fall may occur for teachers outside the formal education system (e.g. TEFL teachers etc.). The move to online/distance learning, which accelerated during the lockdown, may also have an impact on employment numbers for these occupations, although numbers involved are relatively small. Those employed in education occupations are very likely to work in close proximity to others and, thus, may be at a higher risk of exposure to COVID-19.

Occupation	Economic summary
Higher & further education teaching profs.	The strong employment growth over the five-year period may be in part due to classification issues as a result of the revision of the Labour Force Survey, with employment since 2017 remaining relatively unchanged. Demand for specialised skills mixes for researchers and lecturers in higher education is evident in the 75 new employment permits issued for these occupations in 2019. The expected decline in the inflow of international students may be, in the medium-term, partially offset by increasing numbers of Leaving Certificate students, although this will depend, to some extent, on government funding for places.
Secondary teachers	Employment numbers fell by almost 4,000 in the year since 2018 (annual average). Despite this, difficulties in sourcing those with specific subject specialisations are likely to continue to be an issue. The government has allocated additional hours to facilitate the reopening of schools which may impact employment numbers.
Primary & nursery teachers	Employment growth over the last five years was in line with the national average. Increases in employment are expected in the coming months as a result of schools adapting to new COVID-19 protocols. However, demographic factors may see a decline in demand for primary teachers in the coming years in the absence of any change in measures such as a reduction in class size.
Teaching & other educational profs.	This occupation (which includes special needs teachers, nursery managers/owners and school principals) saw strong employment growth in the five-year period, with most of the growth occurring since 2018. The impact of COVID-19 on employment levels for this occupation is as yet unknown.
Educational support assistants	Employment in this occupation has been growing strongly in recent years, as a result of both demographics of the relevant school-going age cohort and government allocations, both of which have increased. School closures may have had a short-term impact on employment in this occupation, but the reopening of schools should see a reversal of this.
Trainers & instructors, career guidance	Employment fell by 7% over the five-year period for this occupation, although numbers employed have remained relatively unchanged over the previous three years. The impact of COVID-19 on employment levels for this occupation is as yet unknown.

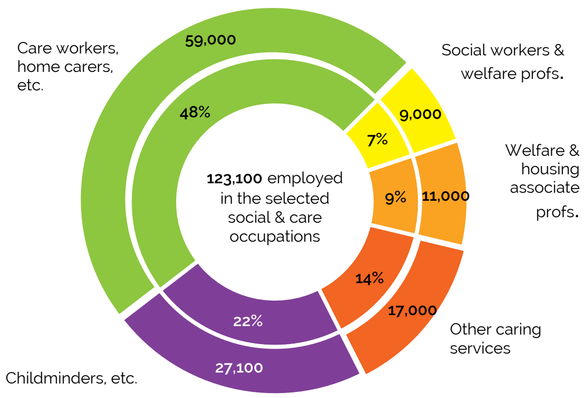
**For detailed table see Appendix A*

9.6 Social & Care Occupations

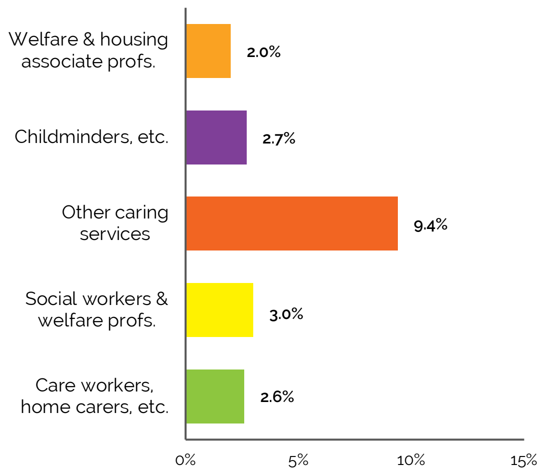
Overall employment: Approximately 123,000 persons (79% female) were employed in the selected social & care occupations, representing 5.4% of the national workforce.

- **Sector:** 82% of overall employment was concentrated in the health sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by almost 19,000 (3.4% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for other caring services (9.4%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 65%. The share of employees aged 55 years and over, at 25%, was above the national average of 19%
- **Education:** The share of persons employed in the selected social & care occupations who had attained higher secondary/FET qualifications was 50%, above the national average share of 38%. Those who had attained third level qualifications (39%) was below the national average share (48%)
- **Full-time/part-time:** Over 65% of social & care workers were in full-time employment
- **Nationality:** The share of non-Irish workers was below the national average of 16%, while 86% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 18,900 (3.4% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Overall Outlook for these Occupations

The changing demographics in Ireland, both the fall in the number of 0-4-year-olds and the increasing number of those aged 65 years and older in the population, will be the primary driver of employment for these occupations in the coming years. Government initiatives, including commitments to increase the quality of childcare provision and incentives to increase female labour force participation, may offset the decline in demand for childcare workers, while the demand for older care workers is likely to rise.

Overall employment in this occupational group is forecast to decline by 4.5%, or approximately 5,600 persons, for the year 2020 (annual average), when compared to 2019 as a result of COVID-19. Increases in employment in occupations such as care workers and other caring services (relating primarily to nursing assistants) will be offset by a decline for those employed in childminding roles. With the exception of nursing assistants, the exposure to diseases, while higher than average, is not as high as those in healthcare occupations. However, they are very likely to work in close proximity to others.

Occupation	Economic summary
Welfare & housing associate profs.	Employment growth over the last five years has been below the national average.
Childminders, etc.	Employment growth over the last five years has been below the national average. A high number of recent job hires without significant employment growth indicates that job churn is a factor for this occupation. The number of children born in Ireland has been declining over the last 10 years which may affect the future demand for childcare providers. The impact of COVID-19 has been significant with the closures of childcare facilities during the lockdown and many reopening with reduced capacity.
Social workers & welfare profs.	Employment growth for this occupation was in line with the five-year national average. COVID-19 is unlikely to have affected overall employment numbers, although it may have significantly impacted the nature of the work in this occupation.
Care workers, home carers, etc.	Although employment growth has been below the five-year national average, the demand for care workers is likely to be sustained given Ireland's ageing demographic. At 27%, the share of those working in this occupation aged 55 years and older is higher than the national average which may affect replacement demand. A high number of recent job hires without significant employment growth indicates that job churn is a factor for this occupation. The impact of COVID-19 is likely to have been significant, particularly as those in this occupation work in close proximity to others and have a high exposure to infection.
Other caring services	The high employment growth seen by this occupational group relates primarily to healthcare assistants, mainly in hospital settings. The impact of COVID-19 has meant that the demand for this occupation is likely to have been significant.

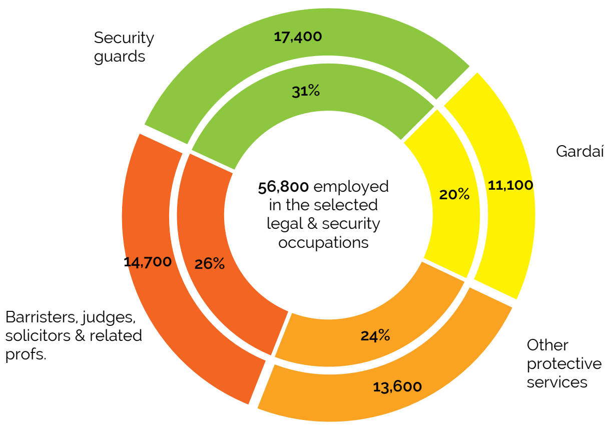
For detailed table see Appendix A

9.7 Legal & Security Occupations

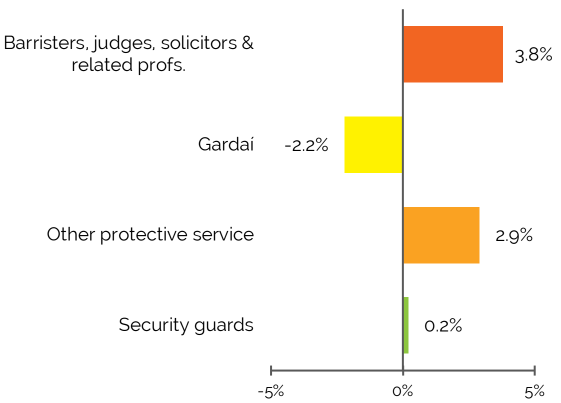
Overall employment: Approximately 57,000 persons (75% male) were employed in the selected legal and security occupations, representing 2.6% of the national workforce.

- **Sector:** 42% of overall employment was concentrated in the public administration and defence (PAD) sector, while administrative services and professional activities combined accounted for a further 43%
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 3,100 (1.1% on average annually compared to 3.2% nationally); the strongest employment growth rate was observed for barristers, judges, solicitors & related professionals (3.8%) over this period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 77%. The share of employees aged 55 years and over was 17%, below the national average of 19%
- **Education:** The share of persons employed in the selected legal & security occupations who had attained higher secondary/FET qualifications was 27%, below the national average share of 38%. Those who had attained third level qualifications (62%) was above the national average share (48%)
- **Full-time/part-time:** Over 93% of legal & security workers were in full-time employment
- **Nationality:** The share of non-Irish workers was below the national average of 17%, while 85% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rate (%) 2014-2019



Between 2014 and 2019, overall employment increased by 3,100 (1.1% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Overall Outlook for these Occupations

Employment growth was low in these occupations and there was no evidence in the analysis for 2019 of difficulties sourcing candidates. The declines forecast for these occupations as a result of COVID-19 are small (-0.3% for the year 2020). While gardaí continue to be in significant demand, it is likely that security guards will experience the most significant falls in employment in absolute terms, due to the continued closure of a number of businesses and retail services.

Those working in protective services occupations (e.g. gardaí) had high scores in relation to exposure to diseases. Most of the occupations in this group are likely to work in close proximity to others.

Occupation	Economic summary
Barristers, judges, solicitors & related profs.	Employment growth for this occupation was broadly in line with the five-year national average. Those employed in these occupations may have been impacted by the lack of commercial activity during COVID-19-related restrictions.
Gardaí	Although employment numbers in this occupation declined over the five-year period, employment has remained relatively unchanged in the previous two years. The onset of COVID-19 led to an accelerated progression of student gardaí to employment, with demand for increased garda presence.
Other protective service occupations (e.g. army personnel, fire/prison service officers)	Employment growth was just below the five-year national average. The impact on employment numbers in these occupations as a result of COVID-19 is expected to have been minimal.
Security guards	There was no overall employment growth for this occupation over the five-year period. At 35%, security guards had a higher share of non-Irish nationals in employment than the national average. Those employed in this occupation were likely to have been affected by the closure of businesses, shops, bars and nightclubs as a result of COVID-19 restrictions.

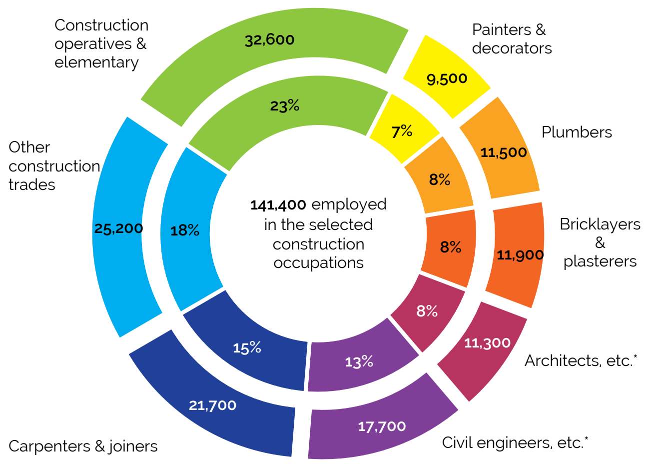
**For detailed table see Appendix A*

9.8 Construction Occupations

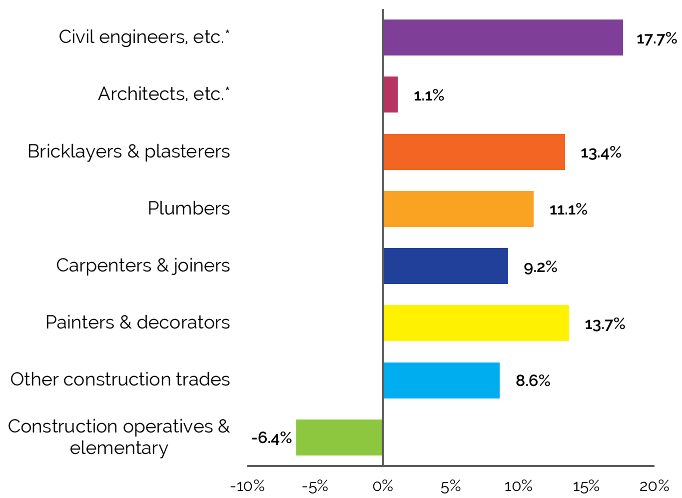
Overall employment: Approximately 141,000 persons (95% male) were employed in the selected construction occupations, representing 6% of the national workforce.

- **Sector:** 73% of overall employment was concentrated in the construction sector; a further 14% were employed in industry and professional activities combined
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 29,000 (4.6% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for civil engineers, etc. (17.7%) during the period
- **Age:** The 25-54 age group accounted for the majority of persons employed, at 73%. The share of employees aged 55 and over was in line with the national average of 19%
- **Education:** The share of persons employed in the selected construction occupations who had attained higher secondary/FET qualifications was 51%, above the national average share of 38%. Those who had attained third level qualifications (26%) was well below the national average share (48%)
- **Full-time/part-time:** Over 92% of construction workers were in full-time employment
- **Nationality:** The share of non-Irish workers was slightly below the national average of 17%, while 85% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 29,000 (4.6% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Overall Outlook for these Occupations

Employment has grown strongly in recent years, although it slowed in the year since 2018. The forthcoming EGFSN report on the built environment[24] does not anticipate significant expansion in terms of numbers employed in the sector by 2030, although the nature of the tasks associated with construction occupations is likely to undergo substantial change, driven by both new technologies/materials and a demand for green construction and climate change mitigation.

The closure of construction sites as a result of COVID-19 had a significant impact on employment for these occupations. While many employed in the construction sector returned to work as restrictions eased, a significant number continued to receive income support payments. As such, employment for construction occupations in 2020 (annual average) is forecast to be 11% less than in 2019, representing 15,700 persons. Social distancing requirements are likely to have a knock-on effect on productivity while uncertainty in relation to finance and demand for services are all likely to have an impact on employment numbers in the coming months. Working in close proximity to others was highest for those in skilled trades and operative roles, and lowest for those in professional roles.

Occupation	Economic summary
Civil engineers & construction project managers	Although employment grew strongly over the five-year period, this may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment numbers remained relatively unchanged between 2018 and 2019. Demand for this occupation was evident in 2019, with many new employment permits issued and frequent mentions in the vacancy data analysis. The number of civil/structural engineering awards at third level had been declining in recent years. However, the decline appears to have halted, and may even have reversed with a slight increase in the number of graduates in 2018 compared to 2017. The impact of COVID-19 is likely to have been less severe than those in the construction sector involved in skilled trades and operative occupations.
Architects & town planners, architectural technologists, & surveyors	Employment growth was below the five-year national average, with a decline occurring between 2018 and 2019. The supply from the education and training system had been declining in recent years, although there have been increases in the number of awards for both architects and quantity surveyors between 2017 and 2018. Similar to civil engineers, the impact of COVID-19 on employment numbers is expected to have been less significant than the more labour-intensive roles.
Bricklayers & plasterers	The high five-year employment growth in this occupation may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels remained relatively unchanged between 2018 and 2019. Although currently eligible for employment permits, uptake for bricklayers and plasterers was small (less than 10) in 2019. New apprenticeship registrations for these two occupations have seen strong increases since 2014, albeit from a small base. The shift away from physical labour in this sector is expected to continue, and this will affect employment levels. The impact of COVID-19 is likely to have been significant for these occupations with the closure of construction sites; reopening of sites, in particular those in the residential sector as outlined in Project Ireland 2040, should see a certain level of recovery for these occupations.
Plumbers	Employment numbers had been growing for this occupation over the last five years. New apprenticeship registrations have almost doubled in the period since 2014, to 628 in 2019. Although technological change, particularly in relation to renewable energy, will see upskilling/reskilling requirements for plumbers, this may not result in significant numbers of new jobs. The closure of construction sites as a result of COVID-19 is likely to have had a significant impact for these occupations, although demand for services may still have been required for essential works during the lockdown, both in residential and business properties.
Carpenters & joiners	Employment growth over the last five years has been strong for this occupation. Over 100 new employment permits were issued in 2019 (primarily related to shuttering carpenters). New apprenticeship registrations have more than tripled since 2014, standing at 597 in 2019. While the impact of COVID-19 may have been significant for this occupation, a full recovery in employment numbers is expected in line with a return to full activity in the construction sector.

[24] Building Future Skills; The Demand for Skills in Ireland's Built Environment Sector to 2030, EGFSN 2020

Painters & decorators	The high five-year employment growth in this occupation may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels remained relatively unchanged between 2018 and 2019. New apprenticeship registration numbers are small for this occupation (31 in 2019). Although potentially impacted by the COVID-19 restrictions, demand for this occupation may have continued in certain areas as business owners undertook remodelling work during this time.
Other construction trades	Although the five-year employment growth was strong, employment levels have been unchanged since 2017. These occupations would have been strongly impacted by the closure of construction sites as a result of COVID-19 restrictions. Assuming full commercial construction activity resumes, demand for glaziers, steel erectors, roofers and tilers is expected to be sustained.
Construction operatives & elementary	The sharp fall in employment numbers in this occupation over the last five years may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels remained relatively unchanged between 2018 and 2019. A high number of recent job hires without any employment growth indicates that job churn is an issue for these occupations. The impact of COVID-19 restrictions is likely to have been severe for this occupation with the closure of construction sites. Future demand for these occupations will be impacted in part by the Government's infrastructure plans such as the National Broadband Plan and the Water Supply Project.

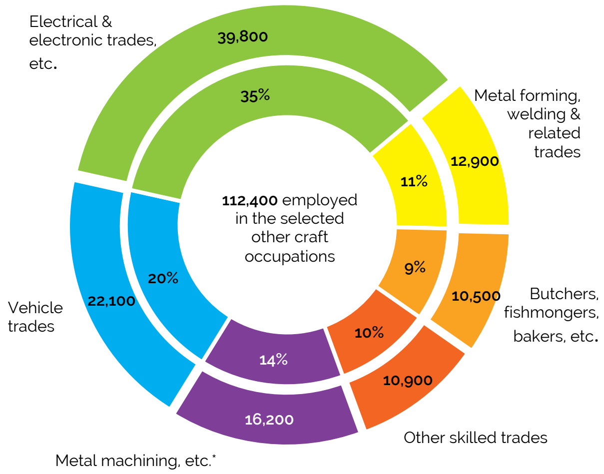
*For detailed table see Appendix A

9.9 Other Craft Occupations n.e.c.

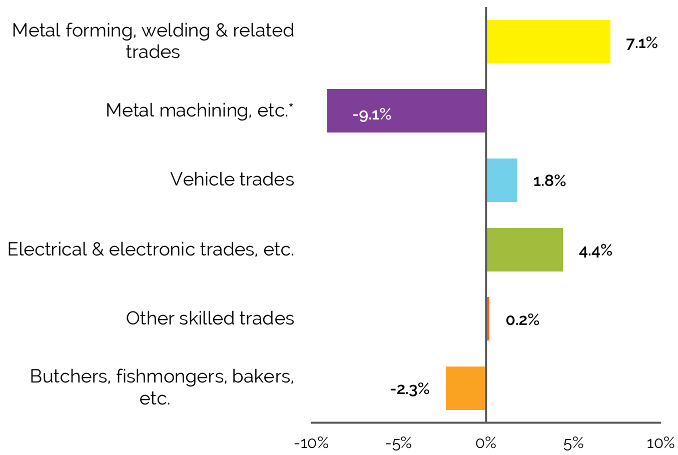
Overall employment: Approximately 112,000 persons (94% male) were employed in the selected other craft occupations n.e.c., representing 4.9% of the national workforce.

- **Sector:** 35% of overall employment was concentrated in the industry sector, followed by the wholesale/retail and construction sectors, which combined accounted for a further 36%
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 2,300 (0.4% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for metal forming, welding & related trades (7.1%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 73%. The share of employees aged 55 years and over, at 15%, was below the national average of 19%
- **Education:** The share of persons employed in the selected other craft occupations n.e.c. who had attained higher secondary/FET qualifications was 59%, was well above the national average share of 38%. Those who had attained third level qualifications (25%) was well below the national average share (48%)
- **Full-time/part-time:** Over 94% of other craft workers were in full-time employment
- **Nationality:** The share of non-Irish workers was broadly in line with the national average of 17%, while 84% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 2,300 (0.4% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Overall Outlook for these Occupations

Employment numbers for this occupational group have remained relatively unchanged over the five-year period. The impact of COVID-19 restrictions, and the subsequent reopening of the economy, on employment numbers may vary depending on the sector of employment, with employment in these occupations primarily in industry, wholesale/retail and construction. A decline of approximately 6%, or 7,000 persons, is forecast for employment in other craft occupations on average annually between 2019 and 2020; this is driven by an expected fall in employment across industry, construction and the wholesale & retail sectors, particularly in relation to those employed as motor mechanics, electricians and other skilled trades (such as butchers/deboners). Other craft occupations have a low score in relation to exposure to diseases in their work but tend to have a higher score in relation to working in close proximity to others. This was particularly the case for metal machining, fitting and instrument making trades, electrical trades and butchers.

Occupation	Economic summary
Metal forming, welding & related trades	There was strong employment growth in this occupation in the previous five years, with evidence of demand for welders due to the mentions in the vacancy analysis (including Recruitment Agency Survey and Skills for Growth) and new employment permits in 2019. Most of those in this occupation in 2019 were employed in manufacturing. The supply from the FET sector has grown to reach 1,200 awards in 2019. During the height of the restrictions as a result of COVID-19 these occupations would have been impacted by reduced manufacturing activity, although this is now thought to have been reversed with the easing of restrictions.
Metal machining, fitting & instrument making trades	The five-year decline in employment in this occupation may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels remained relatively unchanged between 2018 and 2019. Despite this fall in employment, demand continued in 2019 for CNC programmers. Any impact as a result of COVID-19 for these occupations would have related to changes in manufacturing activities.
Vehicle trades	Employment growth in this occupation was below the national average. There has been a 20% increase in the number of new apprenticeship registrations for HGV mechanics in the last five years and a 26% increase for motor mechanics. The closure of garages and reduced movements on the part of the public as a result of the COVID-19 restrictions is likely to have impacted the demand for this occupation.
Electrical & electronic trades, etc.	The five-year employment growth in this occupation was above the national average. There was some evidence of job churn as recent job hires outweighed employment growth in 2019, although there were indicators of demand from the Skills for Growth data and the Recruitment Agency Survey. There was a strong supply from the education and training system with almost 2,000 new apprenticeship registrations in 2019. Restrictions as a result of COVID-19 are likely to have had a significant impact for these occupations, although demand for services may still have been required for essential works during the lockdown both in residential and business properties.
Other skilled trades (e.g. printers, furniture makers, and textile trades)	The five-year employment growth for this occupation was below the national average. With most employment in industry, these occupations were likely to have been impacted by an overall fall in industrial activity during the COVID-19 restrictions.
Butchers, fishmongers, bakers etc.	Over the five-year period, this occupation experienced a decline in employment numbers. Employers have experienced difficulty in finding suitable candidates for this job, with over 200 new employment permits issued for meat deboners in 2019. As such, at 38%, the share of non-Irish in this occupation is more than double the national average. COVID-19 restrictions have resulted in a decline in the demand for meat products in the food services sector which may in turn have an impact on employment in this occupation.

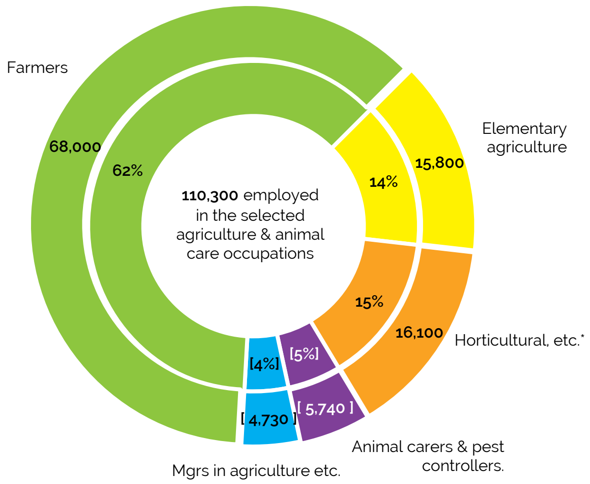
**For detailed table see Appendix A*

9.10 Agriculture & Animal Care Occupations

Overall employment: Approximately 110,000 persons (87% male) were employed in the selected agriculture and animal care occupations, representing 4.7% of the national workforce.

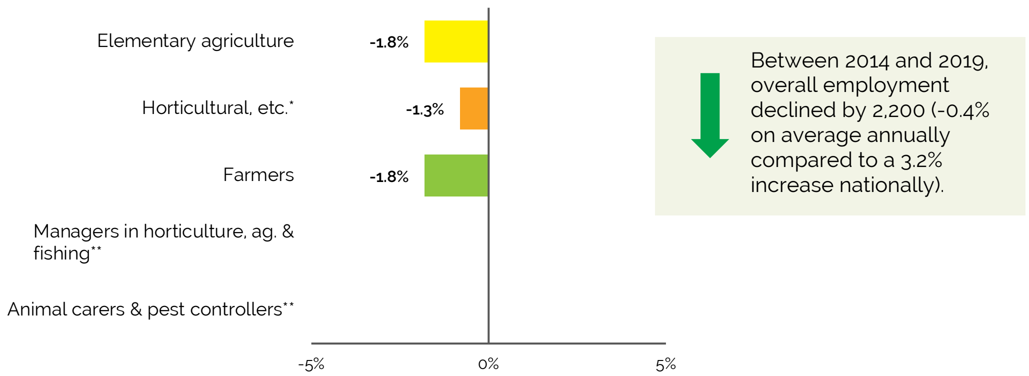
- **Sector:** 85% of overall employment was concentrated in the agriculture sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment declined by 0.4% (or 2,200 persons) on average annually
- **Age:** The 25-54-year age group accounted for 46% of persons employed. Almost half of those employed were aged 55 years and above, more than twice the national average of 19%
- **Education:** These occupations had the highest share of persons employed with a lower secondary education or less, at 45% compared to 12% nationally; 15% had attained a third level qualification
- **Full-time/part-time:** Over 80% of agriculture & animal care workers were in full-time employment
- **Nationality:** The share of non-Irish workers was well below the national average of 17%, while 95% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



[] Numbers in brackets are small and should be treated with caution

Average growth rates (%) 2014-2019



Source: SLMRU (SOLAS) analysis of CSO data
*See detailed occupation description in table below
**Animal carers & pest controllers and managers in horticulture, agriculture and fishing too small in the period 2014-2017 to calculate growth rate

Overall Outlook for these Occupations

Employment in agriculture and animal care occupations has been declining in recent years, driven primarily by a fall in the number of farmers. These occupations are forecast to experience a fall in employment of 7%, or 8,000 persons, on average annually in 2020 when compared to 2019. The impact of both COVID-19 restrictions and Brexit are likely to affect those employed in elementary agricultural roles (e.g. mushroom and fruit pickers) and horticultural, agricultural and fishing trades (such as gardeners). Issues in terms of disincentives to engage in low paid work, availability of supply through inward migration and a fall in exports is likely to impact employment numbers for these occupations. Declines in employment numbers for farmers is more likely to relate to a demographic effect with a high share in the older age cohort.

Occupation	Economic summary
Managers in horticulture, agriculture and fishing	Numbers employed in this occupation are too small to allow for any analysis.
Farmers	The number of farmers has been declining in recent years; this is expected to continue given the older age profile of this occupation (over half of farmers are aged 55 years or more). While COVID-19 restrictions have not affected farming activity levels, the reduced demand will likely lead to a knock-on effect on family farm incomes rather than employment levels.
Horticultural, agricultural & fishing trades n.e.c.	Employment in this occupation has declined over the five-year period. Gardeners, who account for the largest share of employment in this occupation, may have been impacted initially by COVID-19 restrictions, although they would have been one of the first to return to employment once restrictions were eased.
Elementary agriculture	Employment fell in this occupation over the five-year period, although increases occurred between 2018 and 2019. Despite this, employers have had difficulty in sourcing candidates in Ireland with over 500 new employment permits issued for this occupation in 2019, primarily for mushroom harvesters and fruit pickers. This occupation has been identified as being at high risk of automation although this may depend on businesses having the resources to invest in new technology. Supply of labour may be reduced due to global mobility restrictions as a result of COVID-19.
Animal carers & pest controllers	Numbers employed in this occupation are too small to allow for any analysis.

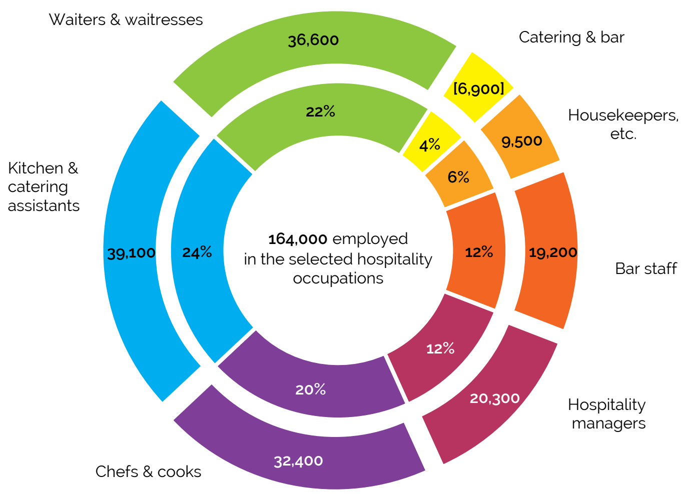
**For detailed table see Appendix A*

9.11 Hospitality Occupations

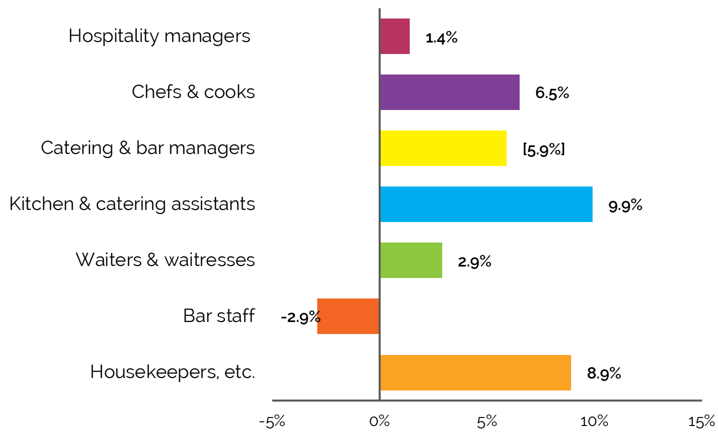
Overall employment: Approximately 164,000 persons (56% female) were employed in the selected hospitality occupations, representing 7.0% of the national workforce.

- **Sector:** 87% of overall employment was concentrated in the accommodation and food sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 31,500 (4.4% on average annually compared to 3.2% nationally)
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 58%. The share of workers under 25 years was 31%, significantly above the national average of 11%
- **Education:** The share of persons employed in the selected hospitality occupations who had attained higher secondary/FET qualifications was 52%, well above the national average share of 37%. Those who had attained third level qualifications (29%) was well below the national average share (48%)
- **Full-time/part-time:** Over 59% of hospitality workers were in full-time employment, this being the lowest share of all the occupational groups
- **Nationality:** The share of non-Irish workers, at 31%, was significantly above the national average of 16%, while 69% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 31,500 (4.4% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data
Numbers in square brackets are small and should be treated with caution

Overall Outlook for these Occupations

Those employed in hospitality occupations were experiencing steady growth in employment in recent years in line with the strong performance of the economy. COVID-19 restrictions have resulted in significant disruption to employment in these occupations. As such, this occupational group is expected to experience the most significant declines in employment on average annually in 2020 when compared with 2019, with a forecasted fall of 40%, or 66,000 persons. While some restrictions are easing, many restaurants, hotels etc. continue to trade at a reduced capacity in line with social distancing requirements. The curtailment of international travel will also have a bearing on the speed and level of any recovery, as will any fall out as a result of Brexit. Kitchen assistants, waiters and bar staff combined accounted for over half of those employed in these occupations and are likely to see the largest fall in employment numbers; many of these would have been employed on a part-time basis prior to restrictions. Likely exposure to diseases was low for hospitality occupations but, with the exception of managerial positions, most worked in close proximity to others.

<table>
<tr><th>Occupation</th><th>Economic summary</th></tr>
<tr><td>Hospitality managers</td><td>Employment growth over the last five years has been below the national average for this occupation. At 26%, the share of those aged 55 years and older was above the national average in quarter 4 2019. Although the initial impacts of COVID-19 restrictions would have been significant for this occupation, the re-opening of hotels and restaurants is likely to have seen many managers returning to work. However, the collapse in international tourist numbers, along with uncertainty in terms of the viability of some smaller hotels/restaurants means that a full recovery in employment numbers for this occupation is unlikely.</td></tr>
<tr><td>Chefs & cooks</td><td>Employment growth over the five-year period was double that of the national average. Employers have been experiencing difficulty in sourcing relevant candidates in Ireland with 450 new employment permits issued in 2019. As such, 44% of those employed as chefs in 2019 were non-Irish, far above the national average of 16%. Supply from the education and training system remains insufficient to meet demand. Many chefs would have been directly impacted by restaurant closures as a result of COVID-19; the re-opening of restaurants should have seen significant recovery for this occupation although they are unlikely to reach their pre-COVID-19 levels. There are indications that employment permits for chefs continued to grow in 2020, despite the restrictions imposed by COVID-19.</td></tr>
<tr><td>Catering & bar managers</td><td>Numbers employed in this occupation are too small to allow for analysis.</td></tr>
<tr><td>Kitchen & catering assistants</td><td rowspan="3">Kitchen assistants, waiters and bar staff combined accounted for over half of those employed in this occupational group. While employment growth was strong for kitchen/catering assistants, it was below the national average for waiters and saw a decline for bar staff. In 2019, the majority of those employed in these occupations (approx. 60%) were employed on a part-time basis; recent job hire data also indicates that a significant level of job churn occurred. These occupations have also been identified as being at high risk of automation. The impact of COVID-19 would have been severe for these occupations; while some recovery may have occurred once restrictions eased, a full recovery is unlikely as a result of reduced capacity, reduced demand and the need for social distancing.</td></tr>
<tr><td>Waiters & waitresses</td></tr>
<tr><td>Bar staff</td></tr>
<tr><td>Housekeepers & caretakers, etc.</td><td>This occupation experienced strong five-year employment growth, although numbers remained unchanged between 2018 and 2019. The impact of COVID-19 on employment is likely to have been significant for this occupation with the closure of hotels and reduced occupancy once restrictions were lifted.</td></tr>
</table>

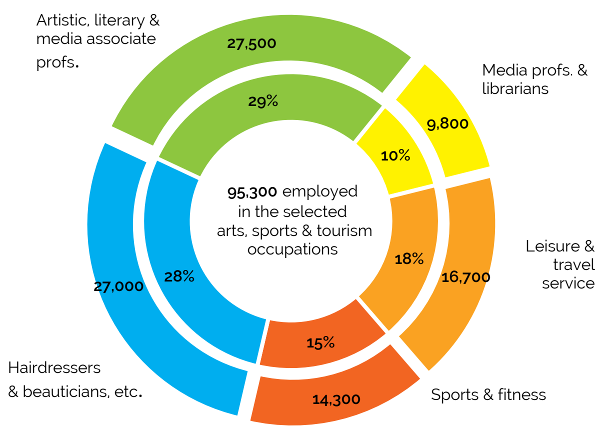
**For detailed table see Appendix A*

9.12 Arts, Sports & Tourism Occupations

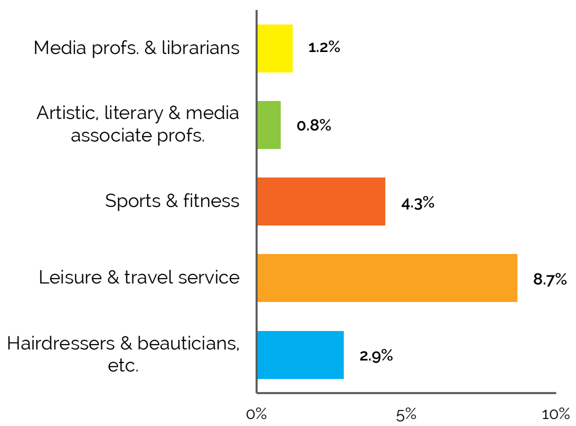
Overall employment: Approximately 95,000 persons (60% female) were employed in the selected arts, sports and tourism occupations, representing 4.2% of the national workforce.

- **Sector:** 52% of overall employment was concentrated in the arts and entertainment sector
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 13,600 (3.1% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for leisure and travel service occupations (8.7%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 70%. The share of employees aged 55 years and over was 13%, well below the national average of 19%
- **Education:** The share of persons employed in the selected arts, sports and tourism occupations who had attained higher secondary/FET qualifications was in line with the national average share of 38%. Those who had attained third level qualifications (50%) was slightly above the national average share (48%)
- **Full-time/part-time:** Over 69% of arts, sports and tourism workers were in full-time employment
- **Nationality:** The share of non-Irish workers was in line with the national average of 17%, while 82% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 13,600 (3.1% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Overall Outlook for these Occupations

Employment in arts, sports and tourism occupations was growing in line with the national average by the end of 2019. COVID-19 restrictions have had a significant impact on employment in these occupations. As such, a decline of 17.6%, or 16,000 persons, in employment is forecast for 2020 (annual average) when compared to 2019. A partial recovery in employment numbers is expected with the lifting of restrictions, although a full recovery will be dependent on the lifting of restrictions on overseas travel, along with consumer confidence and the disposable income levels of individuals in Ireland.

Occupation	Economic summary
Media profs. & librarians	Employment growth in the five-year period was below the national average. The decline in business activity as a result of COVID-19 would have resulted in a drop in advertising revenue which is likely to have had a knock-on effect on employment for journalists and other media professionals.
Artistic, literary & media associate profs.	Employment growth in the five-year period was below the national average. A number of new employment permits were issued in 2019, primarily related to animators. With the exception of those involved in animation and games, remote and socially distancing work practices are difficult to maintain. As a result, the outlook for these occupations, in light of COVID-19, is dependent on an almost full recovery of economic and social activity.
Sports & fitness occupations	Employment growth for this occupation in the five-year period was above the national average. Almost 40% of those employed were in part-time positions. The closure of fitness centres and the restriction on sporting events as a result of COVID-19 will have had an impact on employment levels and as such employment in these roles is unlikely to see a full recovery in the short-term.
Leisure & travel service occupations	This occupation experienced strong five-year employment growth, particularly between 2018 and 2019. However, recent job hires outweighed employment growth in 2019 indicating that a level of job churn occurs for this occupation. These occupations have been significantly impacted by COVID-19, particularly air travel assistants and those directly employed in the travel and leisure industry. Employment recovery will be slow and dependent on the lifting of restrictions both nationally and internationally.
Hairdressers & beauticians, etc.	Employment growth was below the national average over the five-year period. Those employed in these occupations had a higher share in part-time positions than the national share. A relatively high share of recent job hires, without signs of strong employment growth since 2018, suggest that job churn is an issue for this occupation. COVID-19 is likely to have had a significant impact on these occupations although it is also likely that most have returned to employment with the easing of restrictions. Physical distancing requirements will have led to reduced capacity in some businesses, which will have a knock-on effect for employment.

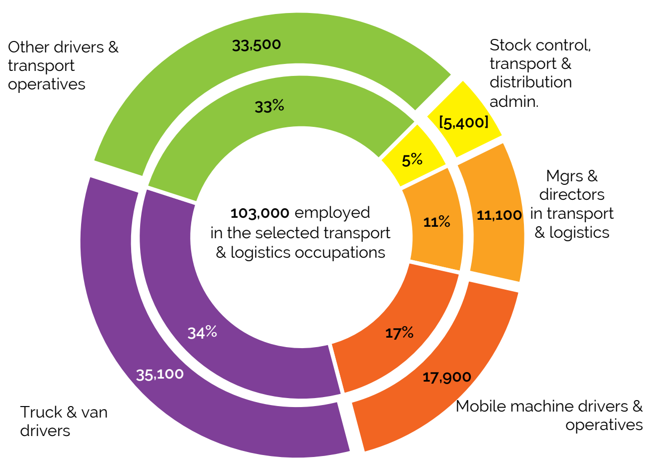
**For detailed table see Appendix A*

9.13 Transport & Logistics Occupations

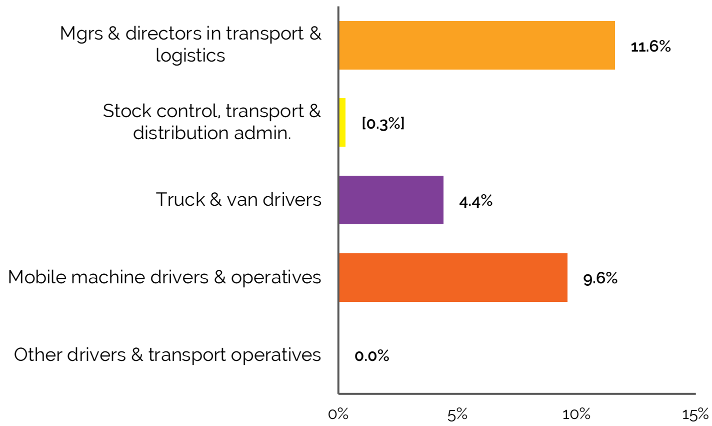
Overall employment: Approximately 103,000 persons (94% male) were employed in the selected transport and logistics occupations, representing 4.5% of the national workforce.

- **Sector:** 54% of overall employment was concentrated in the transport sector with industry and wholesale/retail combined accounting for a further 25%
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 18,000 (3.9% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for managers and directors in transport and logistics (11.6%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 68%. The share of employees aged 55 years and over was 28%, well above the national average of 19%
- **Education:** The share of persons employed in the selected transport and logistics occupations who had attained higher secondary/FET qualifications was 46%, above the national average share of 38%. One third of persons had a lower secondary education qualification or less
- **Full-time/part-time:** Over 85% of transport & logistics workers were in full-time employment
- **Nationality:** The share of non-Irish workers was broadly in line with the national average of 17%, while 84% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 18,000 (3.9% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data
Numbers in square brackets are small and should be treated with caution
Aircraft pilots, ship officers and air traffic controllers included in overall total but numbers too small to report

Overall Outlook for these Occupations

Prior to the onset of COVID-19, employment in this occupational group was growing steadily. However, the restrictions imposed since March 2020 are expected to lead to a forecasted fall in employment of approximately 9,400 persons on average annually in 2020 when compared to 2019, driven primarily by the transport sector. The outlook for occupations within this group varies significantly; recovery in employment is likely to be dependent on numerous factors such as the lifting of international travel restrictions, a re-opening of businesses, the recovery of both the construction and wholesale & retail sectors, as well as the likely impact of Brexit. Additional skills may be required in the areas of customs clearance and documentation, depending on the nature of the UK's withdrawal from the EU. In addition, technological changes and automation of processes will result in a need for enhanced digital skills across all occupations in this field.

Occupation	Economic summary
Managers & directors in transport & logistics	Employment grew strongly over the five-year period for this occupation, with growth particularly strong between 2018 and 2019. Both Brexit and COVID-19 are likely to impact future employment in these occupations due to travel restrictions, changes in customs regulations and consumer behaviour. While e-commerce has resulted in increased activity in this sector lately, the impact at occupational level is as yet unknown, and recovery will depend on the extent to which economies rebound. However, developments in technology in this sector are likely to require upskilling/reskilling for those already in these occupations.
Stock control, transport & distribution admin. occupations	Numbers employed in this occupation are too small to allow for any analysis.
Truck & van drivers	Employment growth was above the national average over the five-year period. New employment permits issued for HGV drivers indicates that in 2019 employers were having difficulty in sourcing suitable candidates from the Irish labour supply. With 27% aged 55 years and older, replacement demand alone will present a number of job openings in the short-term. Demand for domestic truck and van drivers most likely increased due to a surge in online shopping during the COVID-19 restrictions, although those involved in international transport may have been impacted by heightened restrictions on travel.
Mobile machine drivers & operatives	The five-year employment growth was strong for this occupation, and particularly evident between 2018 and 2019. Mobile machine drivers are primarily employed in the construction sector and would have been impacted by the closure of the construction sites as a result of COVID-19. Recovery in employment for this occupation will be dependent on the strength of the recovery of the construction sector.
Other drivers & transport operatives	There was no employment growth over the five years for this occupation. At 42%, this occupational group had one of the largest shares aged 55 years and older. Most work as taxi drivers, bus and coach drivers, each of which would have been impacted by the COVD-19 restrictions. The high proximity to others in their working environment poses a particular risk for this occupation. As activity continues at reduced capacity and the demand for services remain limited, the ability to sustain operations, particularly for private companies, will likely curtail employment numbers.

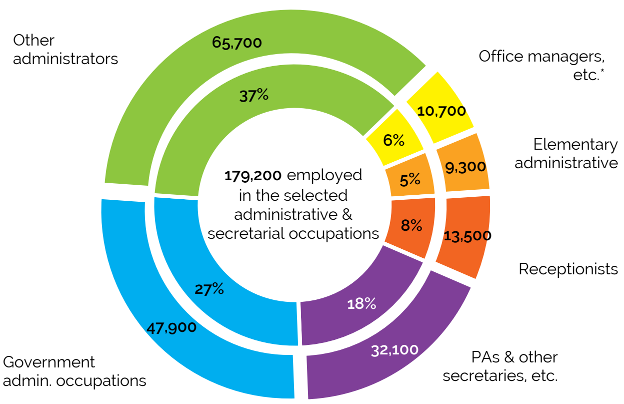
**For detailed table see Appendix A*

9.14 Administrative & Secretarial Occupations

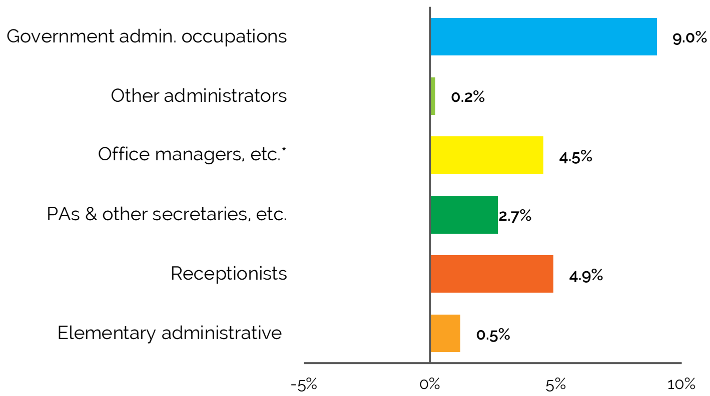
Overall employment: Approximately 179,000 persons (80% female) were employed in the selected administrative and secretarial occupations, representing 7.8% of the national workforce.

- **Sector:** These occupations are employed across all sectors, with employment concentrated in PAD (22%), health (15%), along with professional activities, transport, and wholesale/retail which combined accounted for a further 22% share
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by almost 27,000 persons (3.3% on average annually compared to 3.2% for the national average). The strongest rate of employment growth was observed for government administrative occupations (9.0%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 69%; the share of employees aged 55 years and over was 25%, above the national average of 19%
- **Education:** The share of persons employed in the selected administrative & secretarial occupations who had attained higher secondary/FET qualifications was 46%, above the national average share of 38%; those who had attained third level qualifications (43%) was below the national average share (48%)
- **Full-time/part-time:** Over 73% of administrative & secretarial workers were in full-time employment
- **Nationality:** The share of non-Irish workers was below the national average of 17%, while 91% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 26,900 (3.3% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Overall Outlook for these Occupations

Employment growth in this occupational group was driven primarily by growth for those employed in government administrative roles. The initial impacts of COVID-19 restrictions may not have had an immediate effect on employment in this group; however, a decline of 8.6%, or 15,500 persons, is forecast in the employment numbers for administrative roles on average annually in 2020 when compared to 2019. While the number of government administrative roles is expected to remain relatively unchanged, a fall in employment numbers is likely for office administrative roles and receptionists (particularly those in hotels). This occupational group is also one of the top six groups considered at high risk of automation; therefore, many of the job losses experienced for these occupational groups are unlikely to be replaced in the short-term at least. However, job opportunities will continue to arise as replacement (due to retirement, etc.) for such a large occupation will translate into job vacancies.

Occupation	Economic summary
Government admin. occupations	Employment grew strongly in this occupation over the five-year period. At 28%, the share of persons aged 55 years and older was above the national average of 18%, indicating that replacement demand alone may result in job opportunities in this occupation. However, administrative occupations are at high risk of automation of tasks and this may offset some of the replacement demand. It is unlikely that employment in this occupation was significantly impacted by COVID-19 as public services remained in operation.
Other administrators	There was no employment growth in this occupation over the five-year period. A high number of recent job hires in 2019 with no corresponding employment growth would indicate a high level of job churn for these roles. Those employed in these occupations were more likely to be in part-time roles than the national average (35% compared to 21% nationally), and worked across sectors, primarily in health, wholesale/retail, industry and education. Although employment in these occupations may have been impacted by business closures as a result of COVID-19 and may see reduced demand due to automation, the high volume of persons employed economy-wide indicates that job opportunities will continue to arise due to replacement demand alone.
Office managers & supervisors administrative occupations	Employment growth in this occupation was above the national average over the five-year period. Those employed may have been impacted by COVID-19 due to the closure of offices, although remote working options would have mitigated the severity in terms of employment.
PAs & other secretaries, etc.	Employment growth in this occupation was below the national average over the five-year period. At 31%, those employed had a higher share aged 55 years and older than the national average. The potential risk of automation may result in a reduced future demand for this occupation. Given the main sectors of employment for this occupation (including health, professional activities, and education), the impact of COVID-19 is likely to have been less severe than for other administrative occupations.
Receptionists	Employment growth in this occupation was above the national average over the five-year period. However, this occupation is one of those identified as being at high risk of automation, and therefore this growth rate is unlikely to be sustained. Almost half (45%) were employed in part-time roles in 2019. The impact of COVID-19 on this occupation may have depended on the sector of employment, with those employed in hotels likely to have been significantly affected.
Elementary administrative	Employment grew at a slower pace than the national average for this occupation over the five-year period. The closure of businesses as a result of COVID-19 is likely to have affected the demand for courier services, while the impact on postal workers in the long term is yet to be determined.

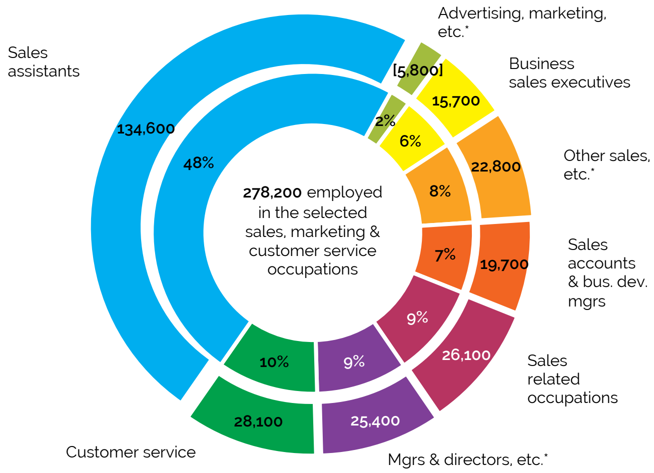
For detailed table see Appendix A

9.15 Sales, Marketing and Customer Service Occupations

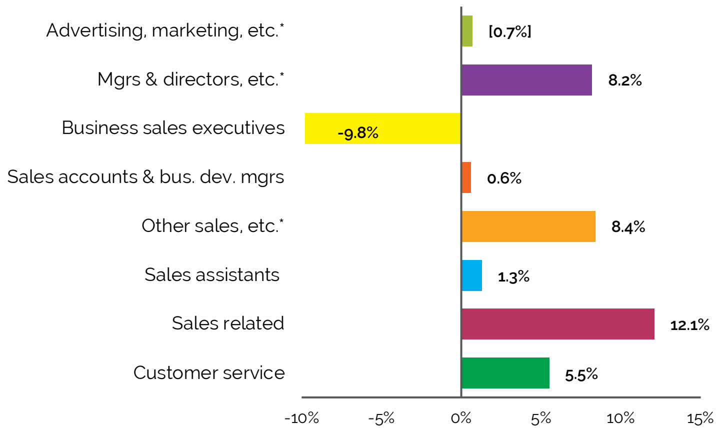
Overall employment: Approximately 278,000 persons (55% female) were employed in the selected sales, marketing and customer service occupations, representing 12% of the national workforce.

- **Sector:** 65% of overall employment was concentrated in the wholesale/retail sector, with ICT, industry and the administrative services sectors combined accounting for a further 18%
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 32,500 (2.5% on average annually compared to 3.2% nationally). The strongest rate of employment growth was observed for sales related occupations (12.1%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 65%. The share of employees aged under 25 years was 23%, significantly above the national average of 11%
- **Education:** The share of persons employed in the selected sales, marketing and customer service occupations who had attained higher secondary/FET qualifications was 49%, well above the national average share of 38%. Those who had attained third level qualifications (37%) was below the national average share (48%)
- **Full-time/part-time:** Over 69% of sales, marketing and customer service workers were in full-time employment
- **Nationality:** The share of non-Irish workers was broadly in line with the national average of 17%, while 82% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 32,500 (2.5% on average annually compared to 3.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

Numbers in square brackets are small and should be treated with caution

Overall Outlook for these Occupations

Employment over the five-year period was growing at a rate below the national average. COVID-19 restrictions have had a significant impact on employment numbers for this occupational group; as such, employment is forecast to be approximately 12% lower (34,000 persons) in 2020 on average annually when compared to the previous year. Although all occupations within this group may see some decline in employment numbers as a result of COVID-19, the fall is expected to be most significant for those employed in the wholesale and retail sector, primarily sales assistants. A move to online shopping, social distancing requirements and the closure of many retail outlets would indicate that a return to the employment levels seen in 2019 is unlikely, particularly in the short-term.

Occupation	Economic summary
Advertising, marketing & sales directors	Numbers employed in this occupation were too small to allow for any analysis.
Managers & directors in retail & wholesale	Employment grew at a stronger rate than the national average over the five-year period. While it is expected that those outside the grocery sub-sector were significantly impacted by COVID-19 restrictions, the overall effect on employment numbers is not expected to have been as severe as for sales assistants.
Business sales executives	The numbers employed in this occupation have been declining in recent years, although demand for specific skills, particularly in relation to language skills, persisted in 2019, as is evident in the employment permit figures. Those employed in the wholesale/retail sector (approximately 40%) may have been impacted by COVID-19 restrictions; those employed in other sectors, although smaller in number, may see demand for skills persist.
Sales accounts & bus. dev. Managers	There was almost no employment growth in this occupation over the five-year period. Any demand for these skills is likely to relate to those employed in the ICT sector, although the numbers involved may be small. While work practices for this occupation may have changed as a result of COVID-19, there is no evidence to date that employment numbers have been impacted.
Other sales & marketing assoc. professionals	Employment grew strongly in this occupation over the five-year period. With employment spread across all sectors of the economy, the impact of COVID-19 may have been less severe when compared to other sales related roles.
Sales assistants	Employment growth in this occupation was below the national average over the five-year period. Over half (54%) of those employed in 2019 were in part-time positions. There were over 50,000 recent job hires in 2019, indicating that a significant level of job churn was occurring. The restrictions due to COVID-19 have had a significant impact on employment levels in this occupation outside the grocery sub-sector; recovery will be hampered by factors such as staff cuts, the closure of number of stores, social distancing requirements for shoppers and staff, and the accelerated move to online shopping.
Customer service occupations	Employment growth was above the five-year national average, with growth particularly strong in the period between 2018 and 2019. New employment permits issued in 2019 for this occupation often stated language skills requirements, particularly for the Japanese market. Recent job hires outweighed employment growth indicating that job churn is an issue for this occupation. This occupation has also been identified as being at risk of automation. The nature of many customer service occupations, particularly those based in call centres, means that the impact of COVID-19 on employment levels was most likely limited.
Sales related occupations n.e.c.	This occupation experienced strong employment growth over the five-year period, particularly between 2018 and 2019. This group is very varied (e.g. window dressers, street traders and debt collectors); therefore, the outlook as a result of COVID-19 is difficult to determine, although it is likely to be in line with wholesale/retail trade.

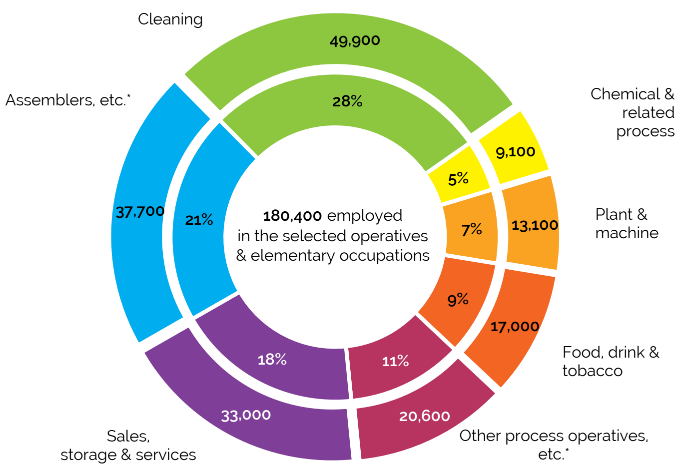
For detailed table see Appendix A

9.16 Operatives & Elementary Occupations n.e.c.

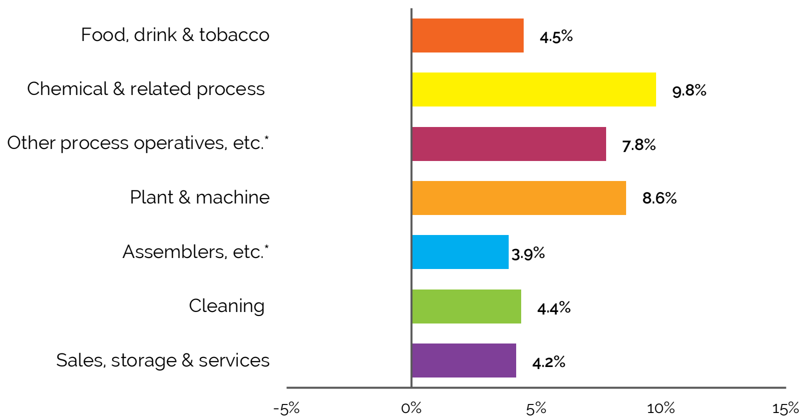
Overall employment: Approximately 180,000 persons (63% male) were employed in the selected operatives & elementary occupations n.e.c., representing 7.7% of the national workforce.

- **Sector:** 47% of overall employment was concentrated in industry, with the administrative services and wholesale/retail sector combined accounting for a further 27%
- **Employment growth (5-year):** Between 2014 and 2019, overall employment increased by 40,000 (5.1% on average annually compared to 3.2% nationally); the strongest rate of employment growth was observed for chemical & related process occupations (9.8%) during the period
- **Age:** The 25-54-year age group accounted for the majority of persons employed, at 74%; the share of employees aged 55 years and over was 16%, below the national average of 19%
- **Education:** The share of persons employed in the selected operatives & elementary occupations n.e.c. who had attained higher secondary/FET qualifications was 54%, well above the national average share of 38%; over a fifth of persons had a lower secondary education qualification or less
- **Full-time/part-time:** Over 76% of operatives & elementary occupations n.e.c. workers were in full-time employment
- **Nationality:** The share of non-Irish workers was well above the national average of 17%, while 71% of workers were Irish nationals.

Numbers employed, 2019 (annual average)



Average growth rates (%) 2014-2019



Between 2014 and 2019, overall employment increased by 40,000 (5.1% on average annually compared to 3.2% nationally).

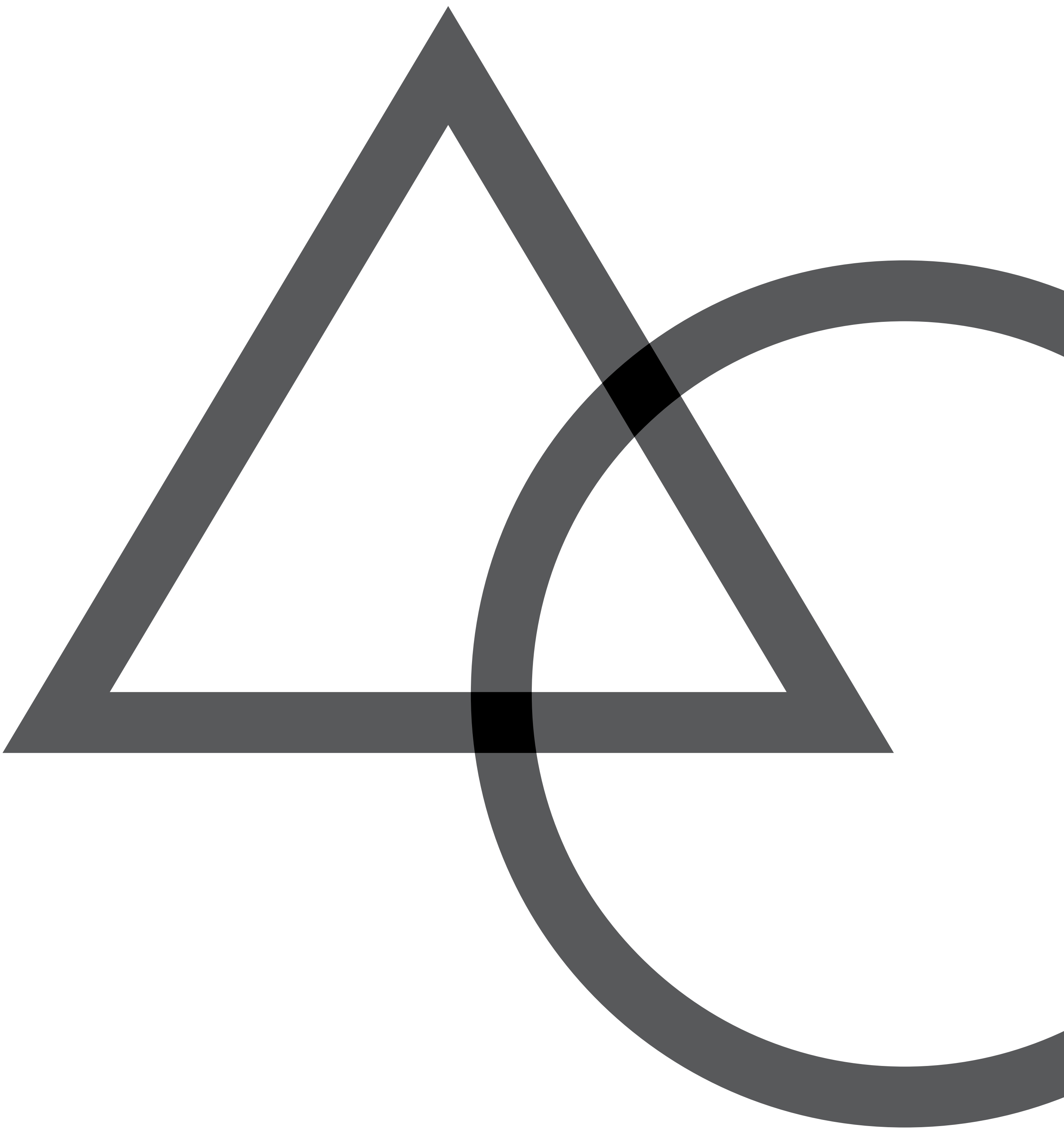
Source: SLMRU (SOLAS) analysis of CSO data
*See detailed occupation description in table below

Overall Outlook for these Occupations

Employment for the selected operative and elementary roles grew above the national average over the five-year period. As a result of COVID-19, a decline in employment of 11%, or 20,000 persons, is forecast across these operative and elementary roles on average in 2020 when compared with 2019. This decline is driven by expected falls in employment in industry (impacting occupations such as process operatives and assemblers) and the administrative services sector (relating to a fall in demand for cleaners). Many of these roles are considered at high risk of automation; therefore, a return to employment levels seen in 2019 is not expected. The availability of the future supply of skills may be an issue for some occupations, such as food processing operatives, while travel restrictions remain in place.

Occupation	Economic summary
Food, drink & tobacco	Employment growth was above the five-year national average. At 41%, this occupation had a higher share of non-Irish persons employed than the national share. Over 600 new employment permits were issued for this occupation in 2019 (particularly meat processing operatives), signalling difficulties in finding suitable candidates in the Irish labour market. This occupation has been significantly impacted by COVID-19, with some temporary closures and changes to work practices to comply with social distancing. Continuing to source new candidates may be challenging due to international travel restrictions.
Chemical & related process	Employment growth was strong for this occupation over the five-year period. However, these workers have been identified as being at high risk of automation. The impact of COVID-19 for this occupation is likely to have depended on the company product, with those in pharma-related areas likely to continue to be in high demand.
Other process operatives & process plant occupations (e.g. packers, bottlers and elementary process plant ops.)	Employment growth was strong for this occupation over the five-year period. At 32%, this occupation had a higher share of non-Irish persons employed than the national share. These workers, which include packers and bottlers, have been identified as being at high risk of automation. While this occupation is likely to have been affected by COVID-19, the nature of the impact is as yet uncertain and very much dependent on the area of manufacturing employment.
Plant & machine operatives (e.g. quarry workers, energy and sewerage plant operatives)	There was high employment growth for this occupation over the five-year period, particularly between 2018 and 2019. Both the high automation risk associated with these jobs and the impact of COVID-19 indicate that such high growth is unlikely to be sustained.
Assemblers & routine operatives	Employment growth was slightly above the national average for the five-year period. Both the high automation risk associated with these jobs and the impact of COVID-19 indicate that this growth is unlikely to be sustained.
Cleaning	Employment growth was above the five-year national average. Over half (54%) of those employed as cleaners were working part-time and over two thirds (69%) were female. The impact of COVID-19 is likely to have been severe for this occupation; a partial recovery may have occurred as the economy re-opened, particularly with stricter hygiene protocols, although a full recovery in employment numbers is unlikely as long as businesses continue to operate remotely.
Sales, storage & services	Employment growth was above the five-year national average. Recent job hires in 2019 outweighed employment growth indicating that job churn is an issue for this occupation. Both the high automation risk associated with these jobs and the impact of COVID-19, particularly in the wholesale/retail sector where the majority were employed, indicate that employment growth is unlikely to continue.

**For detailed table see Appendix A*



Appendix A:
Demand and Supply Indicators by Occupational Group

9.1 Science & Engineering Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey, Oct 2019
Chemical, biological & physical scientists	20,600	6.9%	50%	87%	-	75%	94%	146	X
Other engineering professionals	16,900	15.9%	-	99%	-	83%	82%	433	X
Production, design & QC engineers	15,700	9.9%	[37%]	90%	-	83%	87%	449	X
Science & engineering technicians	22,700	2.8%	39%	95%	-	89%	58%	34	X
Production managers in manufacturing, mining and energy	16,400	3.3%	-	98%	[25%]	91%	61%	45	X
Total	**92,300**	**6.8%**	**33%**	**93%**	**14%**	**84%**	**76%**	**1,107**	

9.2 ICT Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey, Oct 2019
ICT specialist & project managers	19,200	1.7%	[29%]	98%	-	73%	87%	432	X
Programmers & software developers	30,300	7.7%	[17%]	99%	-	59%	91%	2,030	X
ICT profs. n.e.c.	16,400	3.0%	[31%]	94%	-	67%	87%	1,681	X
IT technicians	20,500	5.2%	[28%]	94%	-	59%	80%	91	X
Total	**86,400**	**4.7%**	**24%**	**97%**	**[6%]**	**64%**	**87%**	**4,234**	

9.3 Business & Financial Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Accountants & tax experts	40,500	-2.9%	47%	90%	[12%]	85%	94%	323	X
Mgt. consultants, bus. analysts & project managers	24,700	20.2%	40%	93%	-	76%	87%	723	X
Actuaries, economists & statisticians; other business profs.	12,100	13.9%	[53%]	89%	-	97%	87%	70	X
Financial analysts and insurance underwriters	18,400	9.2%	42%	94%	-	87%	81%	47	X
Other bus. associate profs.	21,900	9.1%	56%	92%	-	83%	77%	112	X
Financial accounts managers	9,200	-2.4%	-	96%	-	87%	[81%]	33	
Financial managers & directors	13,000	6.3%	[38%]	98%	-	87%	90%	116	
Financial admin. occupations	58,600	1.9%	72%	75%	21%	88%	53%	24	X
HR managers and officers	13,500	-1.1%	69%	92%	-	91%	89%	83	X
Total	**211,900**	**3.7%**	**55%**	**87%**	**15%**	**86%**	**77%**	**1,531**	

9.4 Healthcare Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Medical practitioners	16,400	0.3%	44%	91%	-	74%	97%	1,566	X
Therapy profs.	12,100	2.3%	77%	81%	-	89%	100%	5	
Nurses & midwives	65,800	2.9%	88%	79%	17%	83%	96%	1,624	X
Other healthcare profs.	24,800	4.7%	67%	79%	[19%]	92%	94%	106	
Health associate profs.	13,100	2.8%	70%	65%	-	86%	71%	3	
Total	**132,200**	**2.8%**	**75%**	**79%**	**16%**	**84%**	**94%**	**3,304**	

9.5 Education Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Higher & further education teaching profs.	17,800	10.0%	41%	87%	-	80%	97%	75	
Secondary teachers	32,500	0.3%	69%	83%	[15%]	97%	97%	-	
Primary & nursery teachers	48,900	3.4%	85%	86%	[9%]	98%	96%	2	
Teaching & other educational profs.	23,500	9.2%	67%	64%	31%	85%	87%	13	
Educational support assistants	22,700	14.9%	93%	83%	28%	95%	46%	1	
Trainers & instructors, career guidance	8,500	-7.0%	-	86%	-	84%	[59%]	4	
Total	**153,900**	**4.6%**	**73%**	**82%**	**19%**	**92%**	**86%**	**95**	

9.6 Social & Care Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Welfare & housing associate profs.	11,000	2.0%	65%	62%	-	89%	78%	1	
Childminders, etc.	27,100	2.7%	96%	55%	-	82%	31%	3	
Other caring services	17,000	9.4%	74%	75%	[29%]	89%	[26%]	51	X
Social workers & welfare profs.	9,000	3.0%	[52%]	89%	[36%]	81%	89%	-	
Care workers, home carers, etc.	59,000	2.6%	80%	63%	27%	87%	31%	18	
Total	**123,100**	**3.4%**	**79%**	**65%**	**25%**	**86%**	**39%**	**73**	

9.7 Legal & Security Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Barristers, judges, solicitors & related profs.	14,700	3.8%	52%	93%	[22%]	92%	100%	12	
Gardaí	11,100	-2.2%	-	100%	-	99%	84%	-	
Other protective service occupations	13,600	2.9%	-	99%	-	92%	[46%]	-	X
Security guards	17,400	0.2%	-	82%	[21%]	65%	-	-	
Total	**56,800**	**1.1%**	**25%**	**93%**	**17%**	**85%**	**62%**	**12**	

9.8 Construction Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Civil engineers & construction project managers	17,700	17.7%	-	97%	[20%]	94%	71%	230	X
Architects & town planners, architectural technologists & surveyors	11,300	1.1%	-	92%	-	89%	95%	51	X
Bricklayers & plasterers	11,900	13.4%	-	95%	-	74%	-		
Plumbers	11,500	11.1%	-	96%	-	89%	-		
Carpenters & joiners	21,700	9.2%	-	96%	-	85%	-		X
Painters & decorators	9,500	13.7%	-	87%	-	88%	-		
Other construction trades	25,200	8.6%	-	94%	[19%]	81%	-	6	X
Construction operatives & elementary	32,600	-6.4%	-	84%	[16%]	83%	-	14	X
Total	**141,400**	**4.6%**	**-**	**92%**	**18%**	**85%**	**26%**	**301**	

9.9 Other Craft Occupations n.e.c.

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Metal forming, welding & related trades	12,900	7.1%	-	95%	-	70%	-	37	X
Metal machining, fitting & instrument making trades	16,200	-9.1%	-	94%	-	94%	33%	57	X
Vehicle trades	22,100	1.8%	-	92%	-	88%	-	45	
Electrical & electronic trades, etc.	39,800	4.4%	-	98%	15%	89%	[31%]	16	X
Other skilled trades	10,900	0.2%	-	87%	-	83%	-	1	
Butchers, fishmongers, bakers etc.	10,500	-2.3%	-	89%	-	[62%]	-	214	X
Total	**112,400**	**0.4%**	**6%**	**94%**	**15%**	**84%**	**25%**	**370**	

9.10 Agriculture & Animal Care Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Managers in horticulture, agriculture and fishing	[5,700]	-	-	-	-	-	-	5	
Farmers	68,000	-1.8%	[8%]	91%	56%	99%	11%	-	
Horticultural, agricultural & fishing trades n.e.c.	16,100	-0.8%	-	63%	[34%]	94%	-	-	X
Elementary agriculture	15,800	-1.8%	-	52%	[24%]	84%	-	551	X
Animal carers & pest controllers	[4,700]	-	-	-	-	-	-	-	
Total	**110,300**	**0.4%**	**13%**	**80%**	**45%**	**95%**	**15%**	**556**	

9.11 Hospitality Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduate (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Hospitality managers	20,300	1.4%	51%	92%	26%	79%	36%	2	
Chefs & cooks	32,400	6.5%	38%	77%	-	56%	31%	453	
Catering & bar managers	[6,900]	[5.9%]	-	[94%]	-	[74%]	-	-	
Kitchen & catering assistants	39,100	9.9%	61%	49%	[12%]	75%	[18%]	6	
Waiters & waitresses	36,600	2.9%	79%	34%	-	76%	[20%]	-	
Bar staff	19,200	-2.9%	37%	[35%]	-	88%	-	-	
Housekeepers & caretakers, etc.	9,500	8.9%	[84%]	-	-	[64%]	-	1	
Total	**164,000**	**4.4%**	**56%**	**58%**	**11%**	**73%**	**25%**	**462**	

9.12 Arts, Sports & Tourism Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Media profs. & librarians	9,800	1.2%	[48%]	83%	-	88%	84%	28	
Artistic, literary & media associate profs.	27,500	0.8%	47%	77%	[18%]	78%	74%	156	
Sports & fitness occupations	14,300	4.3%	43%	61%	-	87%	46%	29	
Leisure & travel service occupations	16,700	8.7%	64%	68%	-	83%	39%	2	
Hairdressers & beauticians, etc.	27,000	2.9%	89%	62%	-	80%	[23%]	2	
Total	**95,300**	**3.1%**	**60%**	**69%**	**13%**	**82%**	**50%**	**217**	

9.13 Transport & Logistics Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Managers & directors in transport & logistics	11,100	11.6%	-	98%	-	86%	[42%]	13	
Stock control, transport & distribution admin. occupations	[5,400]	-	-	[89%]	-	[79%]	-	11	X
Truck & van drivers	35,100	4.4%	-	85%	[27%]	78%	-	54	X
Mobile machine drivers & operatives	17,900	9.6%	-	94%	-	82%	-	-	X
Other drivers & transport operatives	33,500	0.0%	-	75%	[42%]	91%	[17%]	-	
Total	**103,000**	**3.9%**	**-**	**85%**	**28%**	**84%**	**19%**	**78**	

9.14 Administrative & Secretarial Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Government admin. occupations	47,900	9.0%	74%	89%	28%	95%	48%	1	
Other administrators	65,700	0.2%	85%	65%	22%	89%	47%	7	X
Office managers & supervisors	10,700	4.5%	69%	84%	-	88%	[56%]	3	
PAs & other secretaries, etc.	32,100	2.7%	96%	68%	31%	92%	32%	-	
Receptionists	13,500	4.9%	90%	55%	[25%]	87%	[38%]	-	
Elementary administrative	9,300	1.2%	-	92%	-	94%	-	-	
Total	**179,200**	**3.3%**	**80%**	**73%**	**25%**	**91%**	**43%**	**11**	

9.15 Sales, Marketing & Customer Service Occupations

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Advertising, marketing & sales directors	[5,800]	-	-	-	-	-	-	49	
Managers & directors in retail & wholesale	25,400	8.2%	37%	94%	[16%]	79%	37%	6	
Business sales executives	15,700	-9.8%	-	95%	-	82%	[49%]	248	X
Sales accounts & bus. dev. managers	19,700	0.6%	44%	96%	-	85%	79%	167	
Other sales and marketing assoc. prof.	22,800	8.4%	47%	86%	-	86%	74%	279	X
Sales assistants	134,600	1.3%	68%	46%	12%	86%	19%	3	
Sales related occupations n.e.c.	26,100	12.1%	43%	80%	[18%]	82%	32%	2	
Customer service occupations	28,100	5.5%	54%	85%	-	67%	49%	116	X
Total	**278,200**	**2.5%**	**55%**	**69%**	**12%**	**82%**	**37%**	**870**	

9.16 Operatives & Elementary Occupations n.e.c.

Bulletin description	Number Employed, 2019 (Annual Average)	Annualised Employment Growth Rate, 2014-2019	% Female (Q4 2019)	% Full-Time (Q4 2019)	Aged 55 years and over (Q4 2019)	% Irish Nationals (Q4 2019)	% Third Level Graduates (Q4 2019)	New Employment Permits Issued, 2019 (Number)	SLMRU Recruitment Agency Survey Oct 2019
Food, drink & tobacco	17,000	4.5%	[27%]	89%	-	59%	-	685	
Chemical & related process	9,100	9.8%	-	100%	-	82%	-	-	
Other process operatives and process plant occupations	20,600	7.8%	[33%]	84%	-	68%	-	7	
Plant & machine	13,100	8.6%	-	92%	-	78%	-	1	
Assemblers & routine operatives	37,700	3.9%	39%	94%	[11%]	81%	29%	1	
Cleaners	49,900	4.4%	69%	46%	23%	60%	[14%]	1	
Sales, storage & services	33,000	4.2%	-	74%	[16%]	76%	[17%]	5	X
Total	**180,400**	**5.1%**	**37%**	**76%**	**16%**	**71%**	**20%**	**700**	

Appendix B:

Breakdown of Occupational Groups

Occupational Groups	SOC Description
Science & Engineering Occupations	**Chemical, biological & physical scientists**
	Chemical scientists Biological scientists and biochemists Physical scientists Social and humanities scientists Natural and social science professionals n.e.c. Conservation professionals Environment professionals Research and development managers
	Production, design & QC engineers
	Design and development engineers Production and process engineers Quality control and planning engineers Quality assurance and regulatory professionals Environmental health professionals
	Other engineering professionals
	Mechanical engineers Electrical engineers Electronics engineers Engineering professionals n.e.c. Science & engineering technicians Laboratory technicians Electrical and electronics technicians Engineering technicians Quality assurance technicians Planning, process and production technicians Science, engineering and production technicians n.e.c.
	Science & engineering technicians
	Laboratory technicians Electrical and electronic technicians Engineering technicians Quality assurance technicians Planning, process and production technicians Science, engineering and production technicians n.e.c.
	Production managers in manufacturing, mining and energy
	Production managers and directors in manufacturing
IT Professional Occupations	**ICT specialist & project managers**
	Information technology and telecommunications directors IT specialist managers IT project and programme managers
	Programmers & software developers
	Programmers and software development professionals

	ICT profs. n.e.c.
	IT business analysts, architects and systems designers
	Web design and development professionals
	Information technology and telecommunications professionals n.e.c.
	IT technicians
	IT operations technicians
	IT user support technicians
Business and Financial Occupations	**Accountants & tax experts**
	Chartered and certified accountants and taxation experts
	Mgt. consultants, bus. analysts & project managers
	Management consultants and business analysts
	Business and financial project management professionals
	Actuaries, economists & statisticians; other business profs.
	Actuaries, economists and statisticians
	Business and related research professionals
	Business, research and administrative professionals n.e.c.
	Financial analysts and insurance underwriters
	Brokers
	Insurance underwriters
	Finance and investment analysts and advisers
	Other bus. associate profs.
	Estimators, valuers and assessors
	Importers and exporters
	Financial and accounting technicians
	Business and related associate professionals n.e.c.
	Legal associate professionals
	Financial accounts managers
	Financial accounts managers
	Financial managers & directors
	Financial managers and directors
	Financial institution managers and directors
	Financial admin. occupations
	Credit controllers
	Book-keepers, payroll managers and wages clerks
	Bank and post office clerks
	Finance officers
	Financial administrative occupations n.e.c.
	Pensions and insurance clerks and assistants
	HR managers and officers
	Human resource managers and directors
	Human resources and industrial relations officers

Healthcare Occupations	**Other healthcare profs.**
	Psychologists Pharmacists Opticians (including. dispensing opticians) Dental practitioners Veterinarians Medical radiographers Podiatrists Health professionals n.e.c. Health services and public health managers and directors Social services managers and directors Health care practice managers
	Medical practitioners
	Medical practitioners
	Therapy profs.
	Physiotherapists Occupational therapists Speech and language therapists Therapy professionals n.e.c.
	Nurses & midwives
	Nurses and midwives
	Health associate profs.
	Paramedics Dispensing opticians Pharmaceutical technicians Medical and dental technicians Health associate professionals n.e.c. Dental nurses
Education Occupations	**Higher & further education teaching profs.**
	Further and higher education teaching professionals
	Secondary teachers
	Secondary education teaching professionals
	Primary & nursery teachers
	Primary and nursery education teaching professionals
	Teaching & other educational profs.
	Senior professionals of educational establishments Education advisers and school inspectors Teaching, special needs, and other educational professionals n.e.c.
	Educational support assistants
	Teaching assistants Educational support assistants

Education Occupations continued	**Trainers & instructors, career guidance**
	Vocational and industrial trainers and instructors Careers advisers and vocational guidance specialists Driving instructors
Social and Care Occupations	**Welfare & housing associate profs.**
	Youth and community workers Child and early years officers Housing officers Counsellors Welfare and housing associate professionals n.e.c.
	Childminders, etc.
	Nursery nurses and assistants and playworkers Childminders and related occupations Playgroup leaders
	Other caring services
	Nursing auxiliaries and assistants Ambulance staff (excluding paramedics) Undertakers, mortuary and crematorium assistants
	Social workers & welfare profs.
	Social workers Probation officers Clergy Welfare professionals n.e.c.
	Care workers, home carers, etc.
	Houseparents and residential wardens Care workers and home carers Senior care workers Care escorts
Legal and Security Occupations	**Barristers, judges, solicitors & related profs.**
	Barristers and judges Solicitors Legal professionals n.e.c.
	Gardai
	Senior police officers Police officers (sergeant and below)
	Other protective service occupations
	Officers in armed forces Senior officers in fire, ambulance, prison and related services NCOs and other ranks Fire service officers (watch manager and below) Prison service officers (below principal officer) Police community support officers Protective service associate professionals n.e.c.

Legal and Security Occupations continued	**Security guards**
	Security guards and related occupations Parking and civil enforcement occupations School midday and crossing patrol occupations Elementary security occupations n.e.c.
Construction Occupations	**Civil engineers & construction project managers**
	Civil engineers Construction project managers and related professionals Production managers and directors in construction
	Architects & town planners, architectural technologists, & surveyors
	Architects and town planners Quantity surveyors Chartered surveyors Chartered architectural technologists
	Construction related technicians
	Building and civil engineering technicians Architectural and town planning technicians Draughtspersons
	Bricklayers & plasterers
	Bricklayers and masons Plasterers
	Plumbers
	Plumbers and heating and ventilating engineers
	Carpenters & joiners
	Carpenters and joiners
	Painters & decorators
	Painters and decorators
	Other construction trades
	Steel erectors Roofers, roof tilers and slaters Glaziers, window fabricators and fitters Construction and building trades n.e.c. Floorers and wall tilers Construction and building trades supervisors
	Construction operatives & elementary
	Elementary construction occupations Scaffolders, stagers and riggers Road construction operatives Rail construction and maintenance operatives Construction operatives n.e.c.

Other Craft Occupations	**Metal forming, welding & related trades**	Smiths and forge workers Moulders, core makers and die casters Sheet metal workers Metal plate workers, and riveters Welding trades Pipe fitters
	Metal machining, fitting & instrument making trades	Metal machining setters and setter-operators Tool makers, tool fitters and markers-out Metal working production and maintenance fitters Precision instrument makers and repairers Air-conditioning and refrigeration engineers
	Vehicle trades	Vehicle technicians, mechanics and electricians Vehicle body builders and repairers Vehicle paint technicians Aircraft maintenance and related trades Boat and ship builders and repairers Rail and rolling stock builders and repairers
	Electrical & electronic trades, etc.	Electricians and electrical fitters Telecommunications engineers TV, video and audio engineers IT engineers Electrical and electronic trades n.e.c. Skilled metal, electrical and electronic trades supervisors
	Other skilled trades	Weavers and knitters Upholsterers Footwear and leather working trades Tailors and dressmakers Textiles, garments and related trades n.e.c. Pre-press technicians Printers Print finishing and binding workers Glass and ceramics makers, decorators and finishers Furniture makers and other craft woodworkers Florists Other skilled trades n.e.c.
	Butchers, fishmongers, bakers etc.	Butchers Bakers and flour confectioners Fishmongers and poultry dressers
Agriculture & animal care	**Managers in horticulture, agriculture and fishing**	Managers and proprietors in agriculture and horticulture Managers and proprietors in forestry, fishing and related services Managers and proprietors in horse-racing and related industries

Agriculture & animal care continued	**Farmers**
	Farmers
	Horticultural, agricultural & fishing trades n.e.c.
	Horticultural trades Gardeners and landscape gardeners Groundsmen and greenkeepers Skilled workers in horse racing and related industries Agricultural and fishing trades n.e.c.
	Animal carers & pest controllers
	Veterinary nurses Pest control officers Animal care services occupations n.e.c.
	Agriculture
	Farm workers Forestry workers Elementary occupations in horse racing and related industries Fishing and other elementary agriculture occupations n.e.c.
Hospitality Occupations	**Hospitality managers**
	Hotel and accommodation managers and proprietors Restaurant and catering establishment managers and proprietors Publicans and managers of licensed premises
	Chefs & cooks
	Chefs Cooks
	Catering & bar managers
	Catering & bar managers
	Kitchen & catering assistants
	Kitchen & catering assistants
	Waiters & waitresses
	Waiters & waitresses
	Bar staff
	Bar staff
	Housekeepers & caretakers, etc.
	Housekeepers and related occupations Cleaning and housekeeping managers and supervisors
Arts, Sports and Tourism Occupations	**Media profs. & librarians**
	Librarians Archivists and curators Journalists, newspaper and periodical editors Public relations professionals Advertising accounts managers and creative directors

Arts, Sports and Tourism Occupations continued	**Artistic, literary & media associate profs.**
	Artists Authors, writers and translators Actors, entertainers and presenters Dancers and choreographers Musicians Arts officers, producers and directors Photographers, audio-visual and broadcasting equipment operators Graphic designers Product, clothing and related designers
	Sports & fitness occupations
	Leisure and sports managers Sports players Sports coaches, instructors and officials Fitness instructors
	Leisure & travel service occupations
	Sports and leisure assistants Travel agents Air travel assistants Rail travel assistants Leisure and travel service occupations n.e.c. Leisure and theme park attendants Travel agency managers and proprietors
	Hairdressers & beauticians, etc.
	Hairdressers, barbers, beauticians and related occupations
Transport and Logistics Occupations	**Managers & directors in transport & logistics**
	Managers and directors in transport and distribution Managers and directors in storage and warehousing
	Stock control, transport & distribution admin. occupations
	Stock control clerks and assistants Transport and distribution clerks and assistants
	Truck & van drivers
	Large goods vehicle drivers Van drivers
	Mobile machine drivers & operatives
	Crane drivers Forklift truck drivers Agricultural machinery drivers Mobile machine drivers and operatives n.e.c.

Transport and Logistics Occupations continued	**Other drivers & transport operatives**
	Bus and coach drivers
	Taxi and cab drivers and chauffeurs
	Train and tram drivers
	Marine and waterways transport operatives
	Air transport operatives
	Rail transport operatives
	Other drivers and transport operatives n.e.c.
	Aircraft pilots, ship officers, air traffic controllers [numbers too small to report]
	Air traffic controllers
	Aircraft pilots and flight engineers
	Ship and hovercraft officers
Administrative and Secretarial Occupations	**Government admin. occupations**
	National government administrative occupations
	Local government administrative occupations
	Officers of non-governmental organisations
	Other administrators
	Records clerks and assistants
	Library clerks and assistants
	Human resources administrative occupations
	Sales administrators
	Other administrative occupations n.e.c.
	Office managers & supervisors administrative occupations
	Office managers
	Office supervisors
	PAs & other secretaries, etc.
	Medical secretaries
	Legal secretaries
	Personal assistants and other secretaries
	Typists and related keyboard occupations
	Receptionists
	Receptionists
	Elementary administrative
	Postal workers, mail sorters, messengers and couriers
	Elementary administration occupations n.e.c.
Sales and Customer Service Occupations	**Advertising, marketing & sales directors**
	Marketing and sales directors
	Purchasing managers and directors
	Advertising and public relations directors
	Managers & directors in retail & wholesale
	Managers and directors in retail and wholesale
	Business sales executives
	Business sales executives

Sales and Customer Service Occupations continued	**Sales accounts & bus. dev. managers**
	Sales accounts and business development managers
	Other sales and marketing assoc. prof.
	Buyers and procurement officers Marketing associate professionals Estate agents and auctioneers Conference and exhibition managers and organisers Property, housing and estate managers
	Sales assistants
	Sales and retail assistants, cashiers and checkout operators Telephone salespersons Pharmacy and other dispensing assistants Vehicle and parts salespersons and advisers
	Sales related occupations
	Collector salespersons and credit agents Debt, rent and other cash collectors Roundspersons and van salespersons Market and street traders and assistants Merchandisers and window dressers Sales related occupations n.e.c. Sales supervisors
	Customer service occupations
	Call and contact centre occupations Telephonists Communication operators Market research interviewers Customer service occupations n.e.c. Customer service managers and supervisors
Operatives & elementary occupations n.e.c.	**Food, drink & tobacco**
	Food, drink and tobacco process operatives
	Chemical & related process
	Chemical and related process operatives
	Other process operatives and process plant occupations
	Glass and ceramics process operatives Textile process operatives Rubber process operatives Plastics process operatives Metal making and treating process operatives Electroplaters Process operatives n.e.c. Industrial cleaning process occupations Packers, bottlers, canners and fillers Elementary process plant occupations n.e.c.

Operatives & elementary occupations n.e.c. continued	**Plant & machine**
	Paper and wood machine operatives Coal mine operatives Quarry workers and related operatives Energy plant operatives Metal working machine operatives Water and sewerage plant operatives Printing machine assistants Plant and machine operatives n.e.c.
	Assemblers & routine operatives
	Assemblers (electrical and electronic products) Assemblers (vehicles and metal goods) Routine inspectors and testers Weighers, graders and sorters Tyre, exhaust and windscreen fitters Sewing machinists Assemblers and routine operatives n.e.c.
	Cleaning
	Window cleaners Street cleaners Cleaners and domestics Launderers, dry cleaners and pressers Refuse and salvage occupations Vehicle valeters and cleaners Elementary cleaning occupations n.e.c.
	Sales, storage & services
	Shelf fillers Elementary sales occupations n.e.c. Elementary storage occupations Hospital porters Other elementary services occupations n.e.c.

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