National Skills Bulletin 2021



National Skills Council



National Skills Bulletin 2021

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

October 2021

Authors

Joan McNaboe

Nina Burke

Nora Condon

Anne Marie Hogan

Caroline Shally

David Walls

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

The work of the National Skills Council is needed now more than ever. COVID-19 wreaked havoc in all our lives and its impact on the economy has been severe. Since the beginning of 2020, many have lost their jobs while the number of people relying on emergency supports was significant.

However, the effects of the restrictions have not been evenly distributed. Those working in sectors such as accommodation and food, wholesale and retail, and construction have been the more significantly impacted with those working as cleaners, sales assistants, waiters, and kitchen assistants seeing substantial falls in employment, with many in receipt of income support payments.

While full-time employment remained relatively unchanged, part-time employment fell; the number of persons employed with third level qualifications grew while those with lower levels of education saw a decline in employment levels. The increase in average earnings across most sectors in 2020 could be seen as a positive indicator, but it may also be a reflection of the lower paid jobs being most affected by COVID-19.

Despite the many issues faced in 2020, employment remained buoyant in some areas. Sectors such as ICT, financial and professional activities, public administration and industry (particularly high and medium-high tech manufacturing) all saw employment gains. The transitions and recent job hire data detailed in this report indicate that movements into and within employment along with hirings still continued, albeit at a reduced rate. Vacancy notifications were evident across all sectors, difficult-to-fill vacancies persisted, and the number of new employment permits issued continued to grow. Shortages of skills have been identified across a number of areas including IT, science and engineering, health and skilled crafts.

As we emerge from the pandemic, there are many challenges to be faced. Providing those who found themselves unemployed due to COVID-19 with the skills required to re-enter the workforce is a priority.

In addition, further actions to upskill and reskill the existing workforce will also be essential to ensure Ireland meets the challenges faced by COVID-19, Brexit, automation and those brought about by our need to address climate change.

Remote working and new hybrid working models will bring both challenges and opportunities in terms of addressing digital skills needs and being able to attract more people back into the workforce due to increased flexibility.

The analysis in the National Skills Bulletin aims to assist with meeting these challenges by detailing the outlook across many occupations. The identification of the type of people employed across these roles will assist with the direction of education and training interventions required over the coming months. This Bulletin forms a key evidence base to inform labour market policy decisions as Ireland moves to a new phase in its recovery from the pandemic.

in Harry

Simon Harris T.D. Minister for Further and Higher Education, Research, Innovation and Science

Table of Contents

Execut	ive Summary	1	
Introdu	ction	10	
Section 1 Macroeconomic Context			
Sectior	a 2 Labour Market Overview	21	
Sectior	a 3 Employment by Economic Sector	34	
Sectior	4 Employment by Broad Occupation	45	
Sectior	n 5 Regional Profiles	54	
Sectior	n 6 Unemployment	65	
Sectior	7 Labour Market Transitions and Recent Job Hires	77	
Sectior	8 Employment Permits	86	
Sectior	9 Vacancies	95	
Sectior	10 Occupational Employment Profiles	108	
10.1	Science & Engineering Occupations	110	
10.2	ICT Occupations	113	
10.3	Business & Financial Occupations	115	
10.4	Healthcare Occupations	118	
10.5	Education Occupations	120	
10.6	Social & Care Occupations	122	
10.7	Legal & Security Occupations	124	
10.8	Construction Occupations	126	
10.9	Other Craft Occupations n.e.c.	129	
10.10	Agriculture & Animal Care Occupations	132	
10.11	Hospitality Occupations	134	
10.12	Arts, Sports & Tourism Occupations	136	
10.13	Transport & Logistics Occupations	138	
10.14	Administrative & Secretarial Occupations	140	
10.15	Sales, Marketing & Customer Service Occupations	142	
10.16	Operatives & Elementary Occupations n.e.c.	145	
Append	dix A: Demand and Supply Indicators by Occupational Group	149	
Append	Appendix B: Breakdown of Occupational Groups 159		



Executive Summary

The National Skills Bulletin 2021 is the seventeenth in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in SOLAS and the fifth 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 data sources, including the CSO's Labour Force Survey; it spans 95 occupational groups and examines a range of labour market indicators.

Impact of COVID-19 on the Irish Labour Market

COVID-19 continues to cause substantial disruption to the Irish labour market. In 2020, with the introduction of public health-related restrictions on activity, at its peak in May 2020, over 1 million people in Ireland were in receipt of income support payments from the State. As restrictions eased, the numbers receiving payments fell; subsequent lockdowns saw numbers surge again, although not to the levels seen in May 2020.

For the most part, this Bulletin refers primarily to the situation in the Irish labour market during 2020 in keeping with its standard format of gathering relevant data sources relating to activity in the labour market in the previous year. However, where appropriate, and allowing for available data, the analysis takes into consideration the situation as it stood in the summer of 2021 to allow for swift changes occurring as a result of COVID-19; this relates primarily to up-to-date information on income support payment data.

Although shortages have been identified for some occupations in this edition, they are primarily limited to roles in sectors which have been largely unaffected by COVID-19 restrictions. As occupational data is not available for those in receipt of income support payments, it is difficult to assess the available supply of skills and/or labour in sectors which have been particularly impacted by COVID-19 such as accommodation and food, wholesale and retail, construction and administrative support services. In addition, those in receipt of income support payments, in particular the EWSS, are often classified as employed in the CSO's Labour Force Survey; the true extent of the employment change at occupational level will not be fully apparent until the income support payments are removed and restrictions in the economy have ceased.

Snapshot of the Irish Labour Market in 2020

Since the completion of this report, the CSO have produced a revised LFS dataset due to the introduction of new Integration of European Social Statistics (IESS) regulations. The nature of these changes and how they relate to the analysis are detailed in the Introduction. The data reported here refers to the pre-IESS dataset.

The onset of COVID-19 had a significant impact on Ireland's labour market in 2020 evident across a number of labour market indicators:

- the labour force decreased by 12,400, standing at 2.43 million (annual average)
- employment fell by over 28,200 to 2.29 million (annual average)
- the employment rate decreased by 1.8 percentage points to 67.8% (annual average)
- the participation rate decreased by 1.2 percentage points to 61.1% (annual average)

- the unemployment level increased by 15,800, standing at 136,700 persons (annual average) using traditional methods of calculating unemployment; the COVID-19 adjusted unemployment stood at 444,200 in 2020, an increase of 323,300 (or 267.3%) compared to the standard LFS estimate in 2019
- the unemployment rate (using traditional methods) increased by 0.7 percentage points to 5.7% (annual average); the COVID-19 adjusted unemployment rate reached 18.5% in 2020
- the youth unemployment rate increased by 4.2 percentage points to 13.8% (quarter 4)
- in terms of those aged 15-24 years, the NEET¹ rate increased by 1.0 percentage points between quarter 4 2019 and quarter 4 2020
- the broad unemployment measure (combining unemployed and part-time underemployed persons) increased by one percentage points to 9.9% (quarter 4)
- the old age dependency rate continued to increase, by 0.5 percentage points to 22.4%.

However, there was positive change in a small number of areas including

- average hourly earnings increased across all sectors apart from the transport sector; the
 accommodation and food sector had the largest percentage increase in earnings over the year,
 despite the fall in average weekly paid hours for this sector
- inward migration continued to exceed outward migration resulting in positive net migration of 28,900 persons in 2020, approximately 5,000 fewer than 2019
- the long-term unemployment rate declined by 0.1 percentage points to 1.5% (quarter 4).

Sectoral Employment

In quarter 4 2020, the wholesale/retail sector accounted for the largest number of persons employed, followed by the health and industrial sectors.

Between quarter 4 2019 and quarter 4 2020, COVID-19 restrictions had a varying impact on sectoral employment. Employment declined in a number of sectors where economic activity was curtailed during the pandemic including administrative support services (-27%), accommodation and food (-26%), other NACE sectors (-15%), and construction (-7%). In contrast, the strongest relative growth was for ICT (9%), finance etc. (8%), and public administration and defence (PAD) (5%).

Employment by Broad Occupation

While employment increased for some occupations including managers, associate professionals and administrative roles between quarter 4 2019 and quarter 4 2020, other occupations experienced significant declines, with employment in elementary and skilled trades occupations falling by approximately 65,000 persons combined.

Between quarter 4 2019 and quarter 4 2020,

- the number of 15-24-year-olds employed in elementary occupations declined by 27% (18,900 persons)
- for those aged 25-54 years, employment grew for some occupations such as associate professionals (+16,800 persons) and administrative occupations (+14,700 persons) and declined for skilled trades workers (-23,900 persons) and elementary workers (-17,600)
- 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.

¹Not in Employment, Education or Training (NEET)

Regional analysis

This year's report includes a regional analysis of employment and unemployment which has not been reported in the National Skills Bulletin in recent years. The main findings include the following: between quarter 4 2019 and quarter 4 2020

- employment decreased in all regions apart from the Midland region
- only the West and South East regions experienced a decrease in the unemployment rate.

Unemployment

Using traditional methods of calculation, the unemployment rate rose by one percentage point to 5.7% between quarter 4 2019 and quarter 4 2020. The COVID-19 adjusted rate (which includes those in receipt of Pandemic Unemployment Payments) stood at 21% in quarter 4 2020, having reached a high of 30.5% in quarter 1 2020. Females had a higher monthly unemployment rate than males in June 2021 (using both methodologies); persons aged 15-24 years had higher rates than the 25-74-year-old cohort.

Between quarter 4 2019 and quarter 4 2020, the number of unemployed persons increased for all occupations. In terms of absolute numbers, unemployed persons previously working in operative and elementary roles observed the greatest increase (8,400), followed by administrative (6,700) and managerial and professional occupations (4,500).

Labour Market Transitions and Recent Job Hires

There were 1.52 million transitions recorded in the labour market in 2020, an increase of approximately 100,000 transitions since 2019. The most significant change between 2019 and 2020 related to the movements from employment, particularly those leaving employment and becoming economically inactive. In 2019, the inflows into employment from unemployment and inactivity combined were larger than the outflows from employment. In 2020 this was reversed, with outflows from employment greater than the inflows, driven by an increase in the number of transitions from employment to inactivity (in 2020 there was an additional 127,000 transitions from employment into inactivity compared to 2019). There has also been a significant change in movement for those already in employment, with decreases observed for both the number of intra- and inter-occupational transitions.

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 2020, there were 330,000 recent job hires, a decline of 26% on the previous year. The wholesale/retail sector accounted for the highest share of recent job hires, followed by the health sector. Recent job hires were primarily in elementary, professional and sales occupations in 2020; elementary and sales occupations experienced the largest declines in hires between 2019 and 2020.

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

In 2020, approximately 14,000 new employment permits were issued, a fall of 1.5% on the previous year. The ICT sector continued to account for the largest number of new employment permits issued, at 4,300, despite a decline since 2019. The health sector experienced a 24% increase in the number of new permits issued since the previous year, reaching almost 4,300; this was one of only two sectors which had an increase over this period.

The majority of new permits issued in 2020 were for professional roles. Since 2019, there was a significant decline in the number of new permits issued for elementary occupations, most likely related to the filling of quotas for certain occupations.

Vacancies

The CSO vacancy rates data examined in Section 9 shows that although the number of vacancies fell in 2020, the numbers reported in quarter 4 were the highest across the four quarters and were broadly in line with quarter 4 2018. Between quarter 4 2019 and quarter 4 2020, the largest declines occurred for the financial and professional activities sectors, by 0.9 and 0.8 percentage points respectively, while the largest increase (at 0.5 percentage points) was for the public administrative and defence (PAD) sector.

The analysis of online job vacancy advertisements is based on two data sources: the Ireland subset of CEDEFOP's OVATE (online vacancy analysis tool for Europe) system and the Public Employment Service (PES) vacancy data (from Department of Social Protection's vacancy portal, Jobs Ireland). In 2020, online job vacancies captured through OVATE were concentrated in professional and associate professional occupations. When compared to 2019, the number of online job vacancies declined for almost all occupations, except health professionals, caring personal services and health associate professionals. Newly advertised vacancies through DSP Jobs Ireland were concentrated in operative, skilled trades, elementary, and personal services occupations.

The SLMRU Recruitment Agency Survey from October 2020 indicated that mentions of difficult-to-fill (DTF) vacancies continued to occur particularly for professional occupations (with the majority for IT programmers, and engineers). Mentions arose across all other occupational groups, albeit in smaller numbers.

Occupational Employment Outlook and Shortages

Although shortages have been identified for some occupations in this edition, these are primarily limited to roles in sectors which have been largely unaffected by COVID-19 restrictions. As occupational data is not available for those in receipt of income support payments, it is difficult to assess the available supply of skills and/or labour in sectors which have been particularly impacted by COVID-19 such as accommodation and food, wholesale and retail, construction and administrative support services. In addition, those in receipt of income support payments, in particular the EWSS, are often classified as employed in the CSO's Labour Force Survey; the true extent of the employment change at occupational level will not be fully apparent until the income support payments are removed and restrictions in the economy have ceased.

Science & Engineering Occupations

Employment in this occupational group grew strongly over the five-year period with employment continuing to grow in 2020. Growth in employment was particularly driven by high-tech manufacturing, including the pharma segment. Strong export growth in pharmaceutical products in 2020 was primarily driven by COVID-19 products.² As such, employment may continue to grow in future years for these occupations, albeit at a more moderate pace than that observed in 2020. Demand for many of these roles continued to be evident during 2020 through the employment permit data, vacancy data and appearing frequently in the Recruitment Agency Survey and the Skills for Growth data as roles which are proving difficult-to-fill.

Provision from the third level education system remains strong overall: in 2019 there were over 12,800 science and engineering graduates from the third level education system (2,000 more than in 2015).

² https://www.gov.ie/en/publication/20b2f-economic-insights-economic-statistics-during-covid-19/

However, the skillsets (critical analysis, problem solving, etc.) of scientists and engineers are highly sought after in a range of other occupations (e.g. public administration professionals, teachers, among others).

The shift towards a low carbon economy is expected to result in a demand for certain skills amongst scientists (e.g. ecology, environmental, conservation), electrical engineers (e.g. renewable and high voltage) and technicians (e.g. solar/wind), in addition to their existing skills profiles. Future demand for these occupations is anticipated to be strong, with shortages likely to continue. The shortages are expected to be small in number and, for some, will relate to those with experience in niche areas.

IT Occupations

ICT occupations had both the highest annual average growth over the five-year period compared to all other occupational groups along with the highest growth since 2019. The growth was driven primarily by those employed as programmers and software developers. With over 3,500 new employment permits issued, these occupations had the second highest share in 2020, after healthcare occupations. Supply from the education/training system has been growing steadily over the last number of years, with almost 7,000 graduates emerging from the third level system in 2019.

While some employed in the ICT sector have been in receipt of income support payments since the onset of COVID-19, this does not appear to have impacted those in ICT-specific occupations. As such, the growth seen in recent years is likely to be sustained with potential shortages continuing to occur. With the significant take-up of working from home amongst those in ICT occupations,³ accessing skills from outside of Ireland without the requirement to be located here, may alleviate some of the issues in sourcing suitably qualified staff.

Business & Financial Occupations

Employment increased in the overall business and financial occupational group in the year since 2019 despite the onset of COVID-19. Although a number of those in the financial sector were in receipt of income support payments in 2020, this does not appear to have impacted on these occupations. While the highest share of employment was concentrated in the financial sector, these skills are also required across a range of other economic sectors. Supply from business and finance related fields of education has continued to grow, with over 24,000 persons gaining third level and/or professional qualifications in 2019.

The financial sector has been identified by the ESRI as a sector which is expected to be significantly impacted by Brexit, although this has yet to be evident from the employment data.⁴ The closure of retail banks/branches announced in 2021 (e.g. AIB, BOI, KBC and Ulster Bank) will have an impact on staffing requirements in future years. The future demand for skills will also be impacted by changes in the nature of the tasks required to fulfil these financial roles due to technological change, with financial administrative roles identified in particular as being at high risk of automation.

Healthcare Occupations

Despite considerable demand for those employed in healthcare occupations as a result of COVID-19, overall employment growth for this group was below the national average for the period 2015 to 2020. However, demand has been evident, with these occupations accounting for 30% of all new employment permits issued in 2020 (primarily related to nurses and doctors). A recently announced expansion of the occupations in the employment permit system encompasses further therapists and healthcare professional roles.⁵ It is also the intention of the HSE to create 16,000 whole time equivalent (WTE) posts in 2021.⁶ However, despite

³ https://www.solas.ie/f/70398/x/0313655eeb/summer-skills-bulletin-2021.pdf

⁴ https://www.esri.ie/publications/examination-of-the-sectoral-overlap-of-covid-19-and-brexit-shocks

⁵ https://enterprise.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Latest-updates/

⁶ https://www.hse.ie/eng/services/publications/serviceplans/national-service-plan-2021.pdf

this demand, at least 5,000 persons employed in the health sector were in receipt of income support payments (PUP and EWSS combined) in June 2021; without any occupational breakdown available it is not possible to determine who this relates to although it is likely that the majority are based outside the hospital/nursing home setting. Due to Ireland's ageing demographics demand for health services is expected to continue to grow in future years.

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

Employment in education occupations grew strongly over the period 2015-2020. Employment of persons in education related occupations is affected by demographic factors as well as developments in EU/Government policy and funding for education. The number of children in the primary school-age cohort is declining, while the number of second level pupils has been growing in recent years, with an expected peak in 2024-2025. Implicit in these demographic changes is a shift in the demand away from primary teachers towards second level teachers, with further potential changes for the FET and third level sectors as the second level cohort moves up through the education system.

EU targets for lifelong learning among adults and the upskilling and re-skilling required as part of the green and digital transitions are also likely to create demand for places (and education occupations) in the FET and third level sectors, extending the demand for education and training beyond the traditional school-leaving cohorts to all people of working age.

Social & Care Occupations

Those employed in social and care occupations provide care typically for the very young and the older age cohorts. While COVID-19 had a significant impact on employment in 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.

Although the five-year employment growth for this occupation was below the national average, it was particularly strong for other caring services occupations (e.g. healthcare assistants) and social workers, more than offsetting declines in the number of care workers employed. Changes to government funded health services will give rise to increased demand for some of these occupations. In the medium to long term, additional demand for childcare may occur with any increased labour force participation by females, once the effects of COVID-19 on the labour market recede. This may partially offset the decline in demand as a result of changing demographics.

Legal & Security Occupations

Employment growth for the five-year period was slightly above the national average for this occupational group. The impact of COVID-19 was most evident for security guards (where employment fell), with growth in all other occupations offsetting this decline. Future growth for these occupations will depend on a resumption of economic activities, especially in the areas of hospitality and entertainment (for security guards in particular), and on Government policies for those reliant on public sector funding.

Construction Occupations

The closure of construction sites as a result of COVID-19 has had a significant impact on employment for construction occupations. Employment growth over the five-year period was below the national average as a direct result of a fall in employment between 2019 and 2020. As restrictions have eased, many employed

in the construction sector have returned to work, although a significant number continue to receive income support payments. Also associated with COVID-19, the number of new apprenticeship registrations fell across all construction trades in 2020 and remained far below pre-recession levels.

The Climate Action Plan (2019) and Programme for Government (2020) set targets to reduce carbon emissions by 2030 with activities such as the installation of renewable energy heating sources in residential premises (400,000 buildings) as well as the retrofit to B2 BER of housing stock (c500,000 buildings) by 2030. These targets, along with ambitious Government plans to address housing supply, through delivery of an average of 33,000 homes annually over the next decade,⁷ are expected to increase demand for construction-related skills across a variety of occupations (operatives, skilled trades/supervisors, engineers) and may lead to future skills and labour shortages. Upskilling and reskilling of those already employed will also be required as the recent EGFSN report on the built environment⁸ notes that the nature of the tasks associated with construction occupations is likely to undergo substantial change.

In the short-term, the recovery in employment for these occupations will depend on a return to full construction (and other economic) activity, as well as resolving issues with the supply of construction-related materials which have been accentuated as a result of factors such as COVID-19 and Brexit.

Other Craft Occupations n.e.c.

The five-year annual average employment growth for this occupational group was below the national average, despite recording a growth of 3.6% in the year since 2019. Employment in these occupations was spread across industry, construction and wholesale and retail, with each of these sectors impacted by COVID-19 at varying levels. A significant share of persons from these sectors remain in receipt of income support payments (both EWSS and PUP) indicating that these sectors have yet to fully recover from the impact of the pandemic. Nonetheless, some skills are proving difficult to source, resulting in shortages.

Agriculture & Animal Care Occupations

The decline in employment in agriculture and animal care occupations over recent years continued in 2020, driven primarily by a fall in the number of farmers.

A recent ESRI paper points to the agricultural sector as being one of the most severely impacted sectors as a result of Brexit.⁹ Issues in terms of disincentives to engage in low paid work, availability of supply through inward migration and Government targets in the <u>Climate Action Plan (2019)</u> are also likely to impact employment numbers for these occupations. Demographic effects alone will likely result in a continued decline in employment numbers in the coming years.

Hospitality Occupations

Employment fell across all occupations in this group between 2019 and 2020 with the pandemic continuing to cause significant disruption to employment. While overall employment numbers fell sharply in the accommodation and food sector (where the majority were employed) in the year since 2019, this may not be the full extent of the fall. Of those who were classified as employed in this sector, approximately 40% were 'away from work' in quarter 4 2020, compared to 11% in quarter 1 2020, indicating that the 2020 figures do not reflect the full impact of COVID-19. This is borne out in the fact that the accommodation and food sector also accounted for the highest share of persons in receipt of income support payments (both EWSS and

⁷ https://www.gov.ie/en/publication/ef5ec-housing-for-all-a-new-housing-plan-for-ireland/#for-low-income-households

⁸ Building Future Skills; The Demand for Skills in Ireland's Built Environment Sector to 2030, EGFSN 2020

⁹ https://www.esri.ie/publications/examination-of-the-sectoral-overlap-of-covid-19-and-brexit-shocks

PUP). The increase in average hourly earnings for this sector (as detailed in Section 1) indicates that the lower paid roles were most impacted as a result of COVID-19.

Future demand for these occupations will depend on the speed and extent of the recovery in this sector along with increased international travel.

Arts, Sports & Tourism Occupations

Employment for these occupations was growing broadly in line with the national average in recent years but declined by 7% in the year since 2019 as a result of the pandemic. Due to the restrictions faced by those working in these roles, including the closure of beauty/hair salons, leisure centres, entertainment venues and the limited foreign travel, there was a significant share of persons working in the arts, entertainment and other services sector who were in receipt of income support payments (both PUP and EWSS). The pace of recovery for many of these occupations will be dependent on the relaxing of social distancing requirements and the lifting of restrictions on overseas travel.

Transport & Logistics Occupations

Employment growth in these transport occupations was on a par with the national average; the fall in employment for drivers between 2019 and 2020 was offset by an increase in the numbers employed in administrative roles. The transport sector, in which many of these workers were employed, continues to have a relatively high share of persons who are in receipt of income support payments, in particular the EWSS. COVID-19 has also impacted on sectors of employment such as construction and wholesale and retail, and this in turn affects demand for transport-related occupations. Combined with the effects of Brexit, future growth for these occupations will be dependent on the extent of the economic recovery across sectors. In addition, technological changes, automation of processes and the implementation of the Climate Action Plan will result in a need for upskilling/reskilling across all occupations in this field (e.g. enhanced digital skills, green skills for business).

Administrative & Secretarial Occupations

Employment growth in this occupational group was driven primarily by growth for those employed in government and other administrative roles. Recent growth for these occupations occurred primarily for those employed in the public administrative and defence and health sectors, most likely related to the Government's COVID-19 actions, such as contact tracing centre operations, along with annual recruitment activity in the Civil Service.

A recent SLMRU report highlighted the high share of persons employed in administrative roles who are considered over-qualified, with almost half holding third level qualifications.¹⁰ While supply continues to draw from both the FET and third level sectors, there are few issues with sourcing skills for these roles. Furthermore, the high risk of automation associated with these roles is likely to result in reduced demand, although job opportunities will continue to arise as replacement (due to retirement, etc.) for such a large occupational group will translate into job vacancies.

Sales, Marketing & Customer Service Occupations

Employment over the five-year period grew at a rate below the national average, due to a fall in employment that occurred between 2019 and 2020. Almost two-thirds of persons employed in these occupations were in the wholesale and retail sector which has been particularly impacted by COVID-19. This sector continues to account for a high share of persons in receipt of income support payments (both EWSS and PUP). A move to online shopping, social distancing requirements and the closure of many retail

¹⁰ https://www.solas.ie/f/70398/x/32c0cebdf4/solas_spring-skills-bulletin-2021.pdf

outlets will impact on the recovery in employment for those occupations particularly exposed to the downturn in the wholesale and retail sector.

Demand persists for those outside of the wholesale and retail sector (e.g. industry) who have a skills profile that combines sales skills with specific industry knowledge and technical expertise; as such, cross-sectoral mobility of some skillsets may be limited and difficult to source. The demand for those with both sales and language skills is primarily related to the ICT sector, evidenced in the employment permit data, although the numbers employed in this sector are comparatively small.

Operatives & Elementary Occupations n.e.c.

Employment grew strongly in this occupational group up to 2019, but declined by 10% in 2020, with overall growth for the five-year period broadly in line with the national average. Three quarters of all employment in 2020 was in industry, wholesale and retail and the administrative and support services sectors, all of which have seen significant numbers of persons employed accessing income support payments (both EWSS and PUP).

Many of these roles are considered at high risk of automation; therefore, a return to employment levels seen in 2019 is not expected. However, labour supply issues may arise for some of these occupations due in part to the attractiveness of the roles and the ability to source skills from outside of Ireland given the curtailments in travel due to COVID-19 restrictions.

Introduction

The National Skills Bulletin 2021 is the seventeenth in an annual series of reports produced by the Skills and Labour Market Research Unit (SLMRU) in SOLAS and the fifth 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, 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.

Changes to the CSO's Labour Force Survey

In quarter 1 2021, the CSO introduced new Integration of European Social Statistics (IESS) regulations for the Labour Force Survey. This has resulted in changes to the LFS questionnaire from Q1 2021 with the addition of new questions, the removal of certain questions and a change in relation to response options or frequency. The CSO has undertaken a revision of the historic LFS series, which has resulted in changes to the numbers employed reported earlier (i.e. pre-IESS employment data).

This report continues to use the pre-IESS employment data with Table 1.1 detailing the magnitude of the changes. The annual average employment numbers for 2020 were revised to 2,253,000 persons, 41,400 fewer than the data used in this report. While the quarter 4 2019 employment data has been revised downwards by 3,900, the fall was 29,400 for quarter 4 2020.

	Q4 2019	Q4 2020	2020 (annual average)
Pre-IESS	2,361.2	2,306.2	2,294.4
Post-IESS	2,357.3	2,276.8	2,253.0
Change	-3.9	-29.4	-41.4

Table 1.1 Pre- and post-IESS employment numbers, Q4 2019, Q4 2020 and 2020 annual average

Source: CSO

The change primarily relates to a change in the way those who were considered employed but away from work was captured; the number in this category rose considerably in 2020 as a result of COVID-19 restrictions. In the pre-IESS data, many of those who had been identified as away from work were classified as employed; however, in the post-IESS data, of those previously identified as away from work, approximately two thirds were classified as employed, 10% unemployed and almost a quarter as inactive.

At a sectoral level, the largest change relates to the accommodation and food sector with 9,600 fewer people employed in 2020 (annual average) post-IESS when compared with the pre-IESS figure. In terms of occupations, the IESS regulations has resulted in a revising downwards of employment numbers across all occupations, but particularly for those employed in elementary (-9,600) and personal services (-7,900) occupations.

Unemployment revisions for quarter 4 2020 amounted to an additional 3,000 people unemployed when compared to the pre-IESS figures.

As noted, this report continues to use pre-IESS data but will revise all data to reflect the post-IESS figures for future publications.

It should also be noted that 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 (2015-2020) may need to be interpreted with caution.

Impact of COVID-19 on the Irish Labour Market

COVID-19 continues to cause substantial disruption to the Irish labour market. In 2020, with the introduction of public health-related restrictions on activity, at its peak in May 2020, over 1 million people in Ireland were in receipt of income support payments from the State. As restrictions eased, the numbers receiving payments fell; subsequent lockdowns saw numbers surge again, although not to the levels seen in May 2020.

For the most part, this Bulletin refers primarily to the situation in the Irish labour market during 2020 in keeping with its standard format of gathering relevant data sources relating to activity in the labour market in the previous year. However, where appropriate, and allowing for available data, the analysis takes into consideration the situation as it stood in the summer of 2021 to allow for swift changes occurring as a result of COVID-19; this relates primarily to up-to-date information on income support payment data.

Although shortages have been identified for some occupations in this edition, they are primarily limited to roles in sectors which have been largely unaffected by COVID-19 restrictions. As occupational data is not available for those in receipt of income support payments, it is difficult to assess the available supply of skills and/or labour in sectors which have been particularly impacted by COVID-19 such as accommodation and food, wholesale and retail, construction and administrative support services. In addition, those in receipt of income support payments, in particular the EWSS, are often classified as employed in the CSO's Labour Force Survey; the true extent of the employment change at occupational level will not be fully apparent until the income support payments are removed and restrictions in the economy have ceased.

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 2015-2020, 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 (e.g. age, gender, nationality, employment type and education level); the analysis is based on the LFS data for quarter 4 2020

- vacancies advertised through the Department of Social Protection's (DSP) Jobs Ireland vacancy portal (i.e. the Public Employment Service (PES)) and the Ireland subset of CEDEFOP's OVATE (online vacancy analysis tool for Europe) system in 2020
- the level of difficulty in filling vacancies; the analysis is based on data from the SLMRU Recruitment Agency Survey conducted in October 2020 and from skills audits conducted by Regional Skills Fora managers and employers through the Skills For Growth initiative
- the number of new employment permits issued to non-EEA nationals by the Department of Enterprise, Trade and Employment (DETE) in 2020.

The unemployment rate by detailed occupation was excluded from the analysis in this edition of the Bulletin as the number of persons unemployed in 2020 who stated their previous occupation was too small to report.

The National Skills Bulletin 2021 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 2020 is compared with the same period in 2015 and 2019)
- Section 4: analyses employment trends by broad occupational group (i.e. employment growth and the composition of employment) up to quarter 4 2020
- Section 5: re-introduces an examination of employment trends by region up to quarter 4 2020
- Section 6: 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 2020
- Section 7: presents an analysis of labour market transitions between unemployment, employment and economic inactivity and an analysis of recent job hires in 2020 in terms of age, education level, sector and occupation
- Section 8: examines the inflow of labour from non-EEA countries through the various employment permit schemes
- Section 9: provides an overview of trends and the types of vacancies advertised through the DSP Jobs Ireland vacancy portal and the Ireland subset of CEDEFOP's OVATE (online vacancy analysis tool for Europe) system in 2020; it also reports the findings of the October 2020 SLMRU Recruitment Agency Survey on difficult-to fill vacancies
- Section 10: 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

1.1 Introduction

The COVID-19 pandemic has had a severely negative impact on economic growth at a global level. The true extent of the economic fallout across individual economies may not be fully quantified for several years to come. This section will firstly provide an overview of Ireland's economic performance in 2020 and will then examine the macroeconomic outlook, both globally and nationally.

1.2 Economic performance in 2020

In light of the global and domestic economic challenges of 2020, the Irish economy performed adequately, with growth of 3.4% in gross domestic product (GDP) terms recorded in 2020 compared to 2019. Gross national product (GNP) increased marginally by 0.6% over the period. However, when measured by Modified GNI*, the Irish economy showed negative growth of 4.2% between 2019 and 2020.¹¹ 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 (Figure 1.1).





Source: SLMRU (SOLAS) analysis of CSO & Department of Finance 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.

¹¹ Department of Finance, Stability Programme Update, April 2021.

At sectoral level, gross value added in 2020 increased in only two sectors when compared to 2019, industry (15.2%) and the information and communication (ICT) sector (13.1%). Both of these sectors showed annual growth in employment, along with the public admin, education & health, and financial activities sectors (Figure 1.2). The significant decline in gross value added in several sectors, is to be largely expected given the extended closures in many areas of the economy over the course of the year.



Figure 1.2 Annual Percentage Change in Gross Value Added & Employment, 2019-2020

Source: SLMRU (SOLAS) analysis of CSO data

Note: Gross Value Added is based on constant basic prices

1.3 Foreign Direct Investment

Many FDI projects provide benefits such as significant capital investment, job creation and increased exports. According to the IDA Ireland Results for 2020, in excess of 20,000 new jobs were created in 2020 with a net increase of almost 9,000 over the year. Employment growth of 3.6% in IDA Ireland supported companies was achieved during the year, bringing overall employment in IDA Ireland client companies domestically to almost 257,400.

In terms of attractiveness as an FDI location, A.T. Kearney's Foreign Direct Investment Confidence Index placed Ireland in 23rd place in the opening half of 2021, down from 19th place in 2020. In terms of attitudes towards the economic outlook, investors were least confident on Brazil, Ireland, Portugal, Finland and Italy, citing that the Irish economy was likely to face continued uncertainty from the EU–UK Trade and Cooperation Agreement, which was signed in late 2020.

In 2020, on the back of the challenges facing the domestic economy, there was a slight decline in growth among the indigenous firms. Between 2019 and 2020, total employment in Enterprise Ireland (EI) client companies decreased slightly to over 220,600 jobs, the loss of just under 900 net jobs to the economy.¹²

¹² Enterprise Ireland, 2020 End of Year Statement.

1.4 Competitiveness

The IMD World Competitiveness ranking 2020 saw Ireland move down five places in overall competitiveness from 7th in 2019 to 12th place among 63 countries benchmarked. In its Competitiveness Challenge 2020 report, the National Competitiveness and Productivity Council has identified four key challenges (based on the best available domestic and international evidence) that need to be addressed to put the Irish economy on a sound competitiveness footing, namely; to support Ireland's workers and leverage opportunities for upskilling, to address climate action in a competitiveness context, to invest strategically in Ireland's physical infrastructure, and to resolve any long-standing issues.

1.5 Hours worked and earnings

Figure 1.3 presents the average weekly paid hours and average hourly earnings for the overall economy. In quarter 4 2020, the number of average weekly paid hours was 32.7, which was a 12-minute increase when compared to quarter 4 2019. In quarter 4 2020, average hourly earnings were €25.60, which was €1.40 more than in quarter 4 2019.



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 2020, industry had the highest average weekly paid hours at 38.3. This was followed by construction (38.1 hours), public administration and defence (37 hours) and ICT (36.8 hours). The education sector recorded the lowest average hours worked within a week (24 hours), followed by accommodation & food (25 hours). The average weekly paid hours declined in four sectors over the year; accommodation & food, which was 2.7 hours lower, admin. & support activities (0.5 hours), health (0.3 hours) and ICT which had declined by 0.2 hours.

Figure 1.4 Average Weekly Paid Hours by Sector



Source: CSO, Earnings, Hours and Employment Costs Survey

In quarter 4 2020, average hourly earnings were highest in the education sector at €37.44 per hour and lowest in the accommodation & food sector at €15.66 per hour, a ranking which is largely in line with previous years (Figure 1.5). Between quarter 4 2019 and quarter 4 2020, hourly earnings increased across all sectors apart from the transport sector, where average hourly earnings fell by 7%. The accommodation & food sector had the largest percentage increase in earnings over the year, despite the fall in average weekly paid hours for this sector.

Figure 1.5 Average Hourly Earnings by Sector, \in



Source: CSO, Earnings, Hours and Employment Costs Survey

1.6 Redundancies

In 2020, 4,157 redundancies were registered with the DSP, the highest level since 2016. The annual number of registered redundancies increased by 70% since 2019, with the true impact of COVID-19 on businesses in Ireland starting to emerge. The estimated average redundancy payment registered with the DSP in 2020 was approximately €8,925 (Table 1.1).

Year	Registered redundancies	Redundancy payment scheme expenditure	Average registered redundancy payment
2016	4,372	€30.99m	€7,088
2017	3,056	€23.49m	€7,687
2018	2,845	€18.91m	€6,647
2019	2,446	€26.82m	€10,965
2020	4.157	€37.10m*	€8,925

Table 1.1 Annual DSP Registered Redundancies and Expenditure, 2016-2020

Source: DSP

*Estimated expenditure, 2020. Account not finalised

1.7 Global and national outlook

Although the full picture of the impact of COVID-19 on economies worldwide is yet to emerge, economic commentators expect a return to growth across most developed economies in the short to medium term. Figure 1.6 provides growth projections from the IMF for the United Kingdom, United States, and the Euro area. All three economies are expected to show strong economic growth for 2021 with the US economy expected to improve by 6.4% over the period. The decline in economic output was most severe in 2020 in the UK (-9.9%); however, growth is forecast to be higher in the UK than the Euro area for both 2021 and 2022.

The IMF forecast growth for the Irish economy of 4.2% in 2021 and 4.8% in 2022, which compares to 4.4% and 3.8% for the Euro area in 2021 and 2022, respectively.



Figure 1.6 Growth Projections (Real GDP, Annual Percentage Change)

Source: International Monetary Fund, World Economic Outlook, April 2021



Section 2 Labour Market Overview

2.1 Population: Labour Market Status

In quarter 4 2020, Ireland's population was estimated at 4.99 million persons (Figure 2.1), 43,200 more than in quarter 4 2019, while the working age population (persons aged 15-64) was 3.26 million, 27,100 more than in quarter 4 2019. Compared to quarter 4 2019, employment for that age group decreased by 58,400 persons (part-time employment decreased, while full-time employment remained relatively unchanged), and the number of persons not in employment (unemployed or economically inactive) increased by 85,600.

The number of children (persons younger than 15 years) was 1 million (a fall of 5,600 when compared to quarter 4 2019), while the number of persons aged 65 or older was 731,100, 21,700 more than in quarter 4 2019. The number of persons in employment aged 65 or older was 95,700 in quarter 4 2020, 3,500 more persons than observed in quarter 4 2019.



Figure 2.1 Population by Labour Market Status (ILO defined), Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Note: Discrepancies are due to rounding.

* Indicates that the number is too small to report.

In quarter 4 2020, 2.21 million persons of working age (15-64 years) were in employment (58,400 fewer than in quarter 4 2019), and 1.05 million persons of working age were not in employment (85,700 more than in quarter 4 2019). Of the working age population not in employment, 137,500 persons were unemployed, while 912,500 were economically inactive.¹³ Compared to quarter 4 2019, the number of unemployed persons increased (27,900, or 25.5%), as did the number of persons classified as economically inactive (57,700, or 6.8%).

Within the economically inactive group of the working age population in quarter 4 2020, there were:

- 362,600 students 31,300 more than in quarter 4 2019
- 205,200 persons engaged in home duties 25,200 fewer than in quarter 4 2019
- 56,900 retired persons 8,100 fewer than in quarter 4 2019
- 151,900 persons were inactive due to ill health/disability similar to the number observed in quarter 4 2019
- 135,900 persons were inactive for other reasons 60,000 more than in quarter 4 2019; of those inactive for other reasons, 15,500 were discouraged workers. Also, the large increase of 60,000 persons was primarily related to those who were available, but not seeking work (which increased by 36,000 persons compared to quarter 4 2019).

In quarter 4 2020, the total age dependency rate¹⁴ (youth and older age) was 53.1% (the same as in quarter 4 2019). Over the same period, the youth age dependency rate decreased by 0.5 percentage points to 30.7%, while the older age dependency rate increased by 0.5 percentage points to 22.4% (Table 2.1). In quarter 4 2020, the inactivity rate of the working age population¹⁵ was 28%, 1.6 percentage points higher than in quarter 4 2019 (at 26.4%). The economic dependency ratio¹⁶ was 1.04 in quarter 4 2020, similar to that observed in quarter 4 2019 (Table 2.1).

	2019	2020
Total dependency rate (0-14 and 65+)	53.1%	53.1%
Youth dependency rate (0-14)	31.2%	30.7%
Old age dependency rate (65+)	21.9%	22.4%
Inactivity rate (15-64)	26.4%	28.0%
Economic dependency ratio	1.00	1.04

Table 2.1 Dependency and Inactivity Rates (Quarter 4)

Source: SLMRU (SOLAS) analysis of CSO data

¹³ Economically inactive are defined as persons who are not in employment or unemployed (actively seeking employment).

¹⁴ The age dependency rate compares the non-working age population to those of working age.

¹⁵ 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.

¹⁶ 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

The impact of the pandemic is particularly evident in the labour market. In this sub-section, the results of many labour market and related indicators in 2020 are compared with those in 2019, as well as the expected changes for the next few years based on projections from the Central Bank of Ireland.¹⁷

In 2020, there were 2.43 million persons (annual average) in the labour force. Compared to 2019, this represents a decrease of 12,400 persons, or 0.5% (Figure 2.2). In 2020, the labour force participation rate averaged 61.1%, which was below the 2019 average rate of 62.3% (Table 2.2). As a result of increased levels of worker discouragement from a lengthy period of inactivity (particularly amongst younger and female cohorts). the Central Bank expects that there may be a structurally lower participation rate in the coming years relative to the pre-pandemic average (at least until the widespread roll-out of the vaccination programme and economic recovery can support job growth across a range of sectors).

	Participation rate (%) (15+)	Employment rate (%) (15-64)	Unemployment rate (%) (15-74)
2015	61.9	64.8	10.0
2016	62.2	66.4	8.4
2017	62.0	67.7	6.8
2018	62.2	68.7	5.8
2019	62.3	69.6	5.0
2020	61.1	67.8	5.7

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

Source: CSO

In 2020, there were 2.29 million persons in employment (standard LFS measure based on ILO criteria), a decrease of 28,200, or 1.2% compared to 2019. This figure does not reflect the full impact of the COVID-19 pandemic as it has been determined using strict classification criteria set by the ILO. To address this issue, the CSO produced a COVID-19 adjusted measure of employment, estimated at 1.98 million persons in 2020.¹⁸ This figure represents a decrease of 346,800 persons or 14.9% compared to the 2019 standard measure (2,322,500 persons). In 2020, the employment rate (persons aged 15-64) associated with the standard LFS measure of employment averaged 67.8%, compared with 69.6% in 2019 (almost two percentage points lower). However, the COVID-19 adjusted employment rate for the same age group was much lower at 58% in 2020 (almost 10 percentage points below the unadjusted rate). The Central Bank predicts that employment will decline by 1.3% in 2021 followed by growth of 0.6% in 2022. While gradual employment recovery is expected to occur in 2022, employment may not reach pre-pandemic levels until beyond 2022 (partly reflecting a slower rate of job matching due to a return to education, worker retraining programmes and difficulties in finding work due to prolonged periods of inactivity).

In 2020, of those employed, almost 348,000 persons were classed as 'Away from Work', almost double the average of 174,000 persons in 2019. In the LFS, such individuals are classified as employed if they consider themselves to be temporarily away from work and expect to return to work within a period of three months

¹⁷ Central Bank of Ireland. Quarterly Bulletin, April 2021.

¹⁸ The COVID-19 adjusted estimate of employment at the end of each quarter in 2020 is calculated by subtracting those in receipt of the Pandemic Unemployment Payment (PUP) at the end of the last month of each of the four respective calendar quarters from those in employment during the quarters. For example, the COVID-19 estimate of employment at the end of quarter 4 2020 is calculated by subtracting those in receipt of the PUP at the end of December 2020 from those in employment during quarter 4 2020 (months including October, November and December).

and/or continue to be paid at least half their wage or salary by their employer. The number of persons 'Away from Work' as a percentage of the numbers employed was 15.2% in 2020 compared to 7.5% in 2019. The increase in the number of persons 'Away from Work' led to a reduction in the number of actual hours work per week in 2020 (by 9.6% to 70.0 million hours per week).

	Employment	'Away from Work': Not working, but classified as employed	Actual hours worked per week (millions)
Quarter 1 2019	2,301.9	138.2	77.7
Quarter 2 2019	2,300.0	146.6	78.4
Quarter 3 2019	2,326.9	220.5	76.9
Quarter 4 2019	2,361.2	190.6	77.4
Quarter 1 2020	2,353.5	214.5	76.2
Quarter 2 2020	2,222.5	552.7	61.0
Quarter 3 2020	2,295.2	298.9	72.7
Quarter 4 2020	2,306.2	324.9	70.8

Table 2.3 Number of persons classified as 'Away from Work' ('000s); Actual Hours Worked per Week (millions)

Source: SLMRU (SOLAS) analysis of CSO data

In 2020, based on the standard LFS methodology, there were 136,700 persons unemployed (aged 15-74), an increase of 15,700 persons (or 13%) compared to 2019. The COVID-19 adjusted estimate indicates that there were 444,200 persons unemployed in 2020, an increase of 323,300 (or 267%) compared to the standard LFS estimate in 2019. In 2020, the unemployment rate (standard LFS methodology estimate) averaged 5.7% for those aged 15-74 (just above the rate of 5% in 2019). The COVID-19 adjusted estimate indicates that the unemployment rate was as high as 18.5% in 2020.¹⁹ The ILO unemployment rate measure remained subdued because individuals in receipt of the PUP can be classed as employed if they consider themselves to be temporarily away from work and expect to return to work within a period of three months.

The Central Bank predicts that the unemployment rate will increase to 6.6% in 2021 and 8.1% in 2022. The unwinding of Government supports such as the PUP later this year, will likely result in a rise in the unemployment rate. However, the COVID adjusted rate, which includes PUP recipients, is forecast to decline sharply in line with the reopening of the economy in the second and third quarters of 2021.

¹⁹ A more in-depth analysis of unemployment in Ireland is presented in chapter 6.



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

Source: SLMRU (SOLAS) analysis of CSO data; Central Bank of Ireland, Quarterly Bulletin (April 2021)

In quarter 4 2020, the long-term unemployment rate (i.e. those unemployed for one year or longer) was 1.5% (almost on par with the rate observed in quarter 4 2019). In quarter 4 2020, 36,800 persons were classified as long-term unemployed, 1,900 fewer than in quarter 4 2019. Between quarter 4 2019 and quarter 4 2020, long-term unemployment as a share of total unemployment declined from 35% to 26%.

The broad unemployment measure (combining those unemployed and part-time underemployed) increased to 9.9% in quarter 4 2020 from 8.9% in quarter 4 2019 (Table 2.4).

In quarter 4 2020, the youth unemployment rate (i.e. persons aged 15 to 24) was 13.8%, compared with 9.6% in quarter 4 2019 and the peak of 33.4% observed in quarter 2 2012. In quarter 4 2020, youth unemployment stood at 36,200 persons; this represents a decline of 8,200 compared to quarter 4 2019 and a fall of 24,200 compared to quarter 3 2020 (when 60,400 youths were unemployed). In quarter 4 2020, the NEET rate (the share of 15-24-year olds who were not in employment, education or training) was 9.8%, above the rate of 8.8% observed in quarter 4 2019 (Table 2.4).

	Long term UE rate (%) (15-74)	Broad UE rate (%) (15-74)	Youth UE rate (%) (15-24)	NEET* rate (%) (15-24)
Quarter 4 2019	1.6	8.9	9.6	8.8
Quarter 4 2020	1.5	9.9	13.8	9.8

Table 2.4 Other Unemployment Indicators, Quarter 4 2019 and Quarter 4 2020

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 2.5). In 2020, net inward migration was 28,900, which was below the 2019 level (33,700). Between 2014 and 2020, inward migration increased by 18,900 and outward migration decreased by 18,500.

Year	Inward	Outward	Net migration
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
2020	85.4	56.5	28.9

Table 2.5 Migration Estimates (000s)

Source: CSO

Note: 2016 is based on Census of Population.

ln 2020,

- Irish nationals experienced net inward migration (although the number is small); 28,900 Irish nationals returned from abroad to live in Ireland, while 28,300 Irish nationals emigrated from Ireland (Figure 2.3)
- of the 85,400 immigrants to Ireland, Irish nationals accounted for 33.8% (this is the highest number of returning Irish nationals since 2007); non-EU nationals (excluding the UK) and EU nationals (excluding Ireland) accounted for 35.6% and 24.1% respectively and UK nationals accounted for 6.4%
- of the 56,500 emigrants from Ireland, Irish nationals accounted for 50% (28,300), EU nationals (excluding Ireland) accounted for 25.4% (14,400 persons), while non-EU nationals (excluding the UK) accounted for 20.1% (11,400 persons) and UK nationals accounted for 4.4% (2,500)
- net inward migration among non-Irish nationals remained strong, but decreased to 28,300 in 2020 from 35,800 in 2019 (a 20.9% decrease); an estimated 56,500 non-Irish nationals arrived to live in Ireland and 28,200 non-Irish nationals emigrated
- almost 75% of immigrants aged 15 years or older (56,900 persons) had attained a third level qualification, compared to 53% of emigrants (26,300 persons); almost 20% of immigrants (14,300 persons) had attained at most a higher secondary qualification, while the corresponding share was 34% for emigrants (16,900 persons)
- net migration was positive for all age groups and comprised mostly of those aged 25 to 44 years (prime working age group); a total of 57% of immigrants were in this age group, compared to 53% of emigrants.



Figure 2.3 Net Migration Estimates 2014-2020 by Nationality (000s)

Source: CSO

Note: 2016 figures based on 2016 Census of Population.

2.3 Employment Composition

In quarter 4 2020, 2.3 million persons were in employment (aged 15 or older). Males accounted for 54% (1.25 million persons). Compared to quarter 4 2019, the gender distribution of employment has remained unchanged (Figure 2.4).



Figure 2.4 Employment by Gender, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2020, full-time employment accounted for 81.1% (1.87 million persons) of total employment (Figure 2.5). Of those working full-time, 10% (or 187,400 persons) were underemployed (wished to work more hours and were available). Of those working part-time (434,900 persons), 23% (or 101,400 persons) were underemployed.

Between quarter 4 2019 and quarter 4 2020, the number of persons in full-time employment remained relatively unchanged, while those in part-time employed decreased by 58,000 (or 11.8%). Over the same period, the number of persons in full-time employment who were underemployed increased by 11,200 (or 6.4%), while the number of persons in part-time employment who were underemployed decreased by 7,000 persons (or 6.5%).

4.4% 14.5% 8.1% 73.0% • Full-time not underemployed • Part-time not underemployed • Part-time underemployed

Figure 2.5 Employment by Employment Type, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2020, 85.3% (1.97 million persons) in employment were employees (of which, 1% were employees on Government supported employment schemes). Self-employment accounted for 14.1% (or 326,000 persons) of total employment, of which 68.9% were self-employed with no paid employees (Figure 2.6). Compared to quarter 4 2019, the employment status distribution of employment remained unchanged.

Between quarter 4 2019 and quarter 4 2020, the decline in employment was predominantly due to a decrease in the number of employees (51,000 persons or 2.5%). The number of self-employed decreased by 1.6% (5,200 persons), while those assisting relatives remained relatively unchanged.

Figure 2.6 Employment by Employment Status, Quarter 4 2020



Source: SLMRU (SOLAS) analysis of CSO data

Figure 2.7 presents the age profile of persons in employment. In quarter 4 2020, 71% (1.64 million persons) of employment was concentrated in the 25-54-year age group. Those aged under 25 years accounted for 9.9% (266,600 persons), while those aged 55 years or older accounted for 19.1% (441,500 persons). Between quarter 4 2019 and quarter 4 2020, the age distribution of employment remained broadly similar.



Figure 2.7 Employment by Age, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Figure 2.8 presents the education profile of those in employment in Ireland. In quarter 4 2020, 11.1% of persons in employment had attained at most qualifications at NFQ levels 1-3 (e.g. Junior Certificate); 28.1% had qualifications at NFQ levels 4-5 (e.g. Leaving Certificate); 9.4% had qualifications at NFQ level 6, while the remaining 51.4% had the equivalent of ordinary degree level or higher (NFQ 7-10).

Between quarter 4 2019 and quarter 4 2020, the education distribution of employment shifted towards higher education levels: the share of persons with qualifications at NFQ levels 7 and above increased by 4 percentage points, with a concomitant decline in the share who had attained qualifications below NFQ level 7.



Figure 2.8 Employment by Education (NFQ), Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Note: excludes those who did not state their education level

Employment by nationality is presented in Figure 2.9. In quarter 4 2020, non-Irish nationals accounted for 16.5% of total employment (or 380,800 persons). Of the non-Irish national employment, EU nationals accounted for 58.3% (222,100 persons), UK nationals accounted for 14.8% (56,500 persons), while those classified as other accounted for the remainder.

Figure 2.9 Employment by Nationality, Quarter 4 2020



Source: SLMRU (SOLAS) analysis of CSO data

In quarter 4 2020, 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 2019 and quarter 4 2020, the unemployment rate for both Irish and non-Irish nationals increased (one and 2.2 percentage points respectively), while the employment rate for both Irish and non-Irish nationals decreased (2.2 and 3.1 percentage points respectively). The participation rate for both Irish and non-Irish nationals decreased (1.4 and 1.5 percentage points respectively), while the inactivity rates for both Irish and non-Irish nationals increased (1.6 and 1.5 percentage points respectively).



Figure 2.10 Participation, Employment, Unemployment and Inactivity Rates by Nationality, Quarter 4 2020

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 2025.²⁰

In quarter 4 2020, the share of working age third level graduates (those aged 15-64 years) in the labour force was 53% (exceeding the 2025 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 10%, while the share was 37% for those who had attained higher secondary/FET qualifications.

Between quarter 4 2019 and quarter 4 2020, the share of third level graduates increased by almost 4 percentage points, while both the shares with lower secondary or less qualifications and higher secondary/FET qualifications decreased (1.8 and 2.0 percentage points respectively).

The gap to the 2025 target was 3 percentage points for those who had attained lower secondary or less qualifications, and 8 percentage points for those with higher secondary/FET qualifications.

Figure 2.11 Labour Force (15-64 years) by Education (Quarter 4 2020) and the NSS Target





Note: excludes those who did not state their education level.

²⁰ Ireland's National Skills Strategy 2025, January 2016.



Section 3 Employment by Economic Sector

This section presents an analysis of employment in Ireland at sectoral level, outlining the sectors in which Ireland's 2.3 million persons were employed in quarter 4 2020. It should be borne in mind that the effects of economic restrictions associated with COVID-19 are not fully reflected in official employment data because some persons in employment may have been 'absent from work 'over this period, as discussed in Section 2. Of those who were classified as 'absent from work', some may have been in receipt of income supports during the pandemic but believed they would resume employment in their former jobs once restrictions were lifted. As a result, such persons were captured in the employment rather than unemployment data.

3.1 Employment by sector

Figure 3.1 presents national employment by broad economic sector (NACE Rev 2). In quarter 4 2020, the wholesale and retail sector was the largest employer followed by industry and health. These three sectors employed well over a quarter of a million people each, accounting for 13.7%, 13.0% and 12.7% of national employment, respectively.

The accommodation and food, wholesale and retail, other NACE²¹, administrative services, and construction sectors have been particularly impacted by COVID-19 restrictions. Combined these sectors accounted for 33% of employment nationally and made up a significant share of Pandemic Unemployment Payment (PUP) recipients in 2020, as detailed in Section 6.



Figure 3.1 Employment by Sector (000s), Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Excludes instances where sector was not stated.

²¹Other NACE includes activities such as arts, entertainment & recreation, other service activities (e.g. repair of goods), etc.

3.2 Employment growth by sector

Employment growth by sector is presented in Figure 3.2. Between quarter 4 2019 and quarter 4 2020, the impact of COVID-19 restrictions varied by sector. The strongest impacts were reflected in the declines in the numbers employed in administrative support services (-27%), accommodation and food (-26%), other NACE sectors (-15%), and construction (-7%), all sectors where economic activity was curtailed during the pandemic. In contrast, the strongest relative growth was for ICT (9%), finance etc. (8%), and public administration and defence (PAD) (5%).

Over the five-year period, quarter 4 2015-quarter 4 2020, the strongest relative growth was observed for ICT (34%), public administration and defence (PAD) (33%) and education (29%); again, these are sectors largely unaffected by COVID-19 restrictions. The only sectors to experience declines over the five-year period were accommodation and food (-13%), other NACE (-12%), and administrative support (-2%), reflecting the particularly strong impact of COVID-19 in the most recent year for these sectors.



Figure 3.2 Employment Growth by Sector, Q4 2015-Q4 2020 and Q4 2019-Q4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Excludes not stated

3.3 Employment by economic sub-sector

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

- industry, comprised of manufacturing, utilities and extraction/mining
- construction
- agriculture, forestry and fishing (abbreviated in this document to 'agriculture')
- 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 2020, 298,200 persons were employed in industry, accounting for 13% of total national employment. Employment in this sector rose by 4% (with 11,900 additional persons) between quarter 4 2019 and quarter 4 2020, and by 13% (or 33,700 additional persons) over the five-year period, quarter 4 2015-quarter 4 2020.

Figure 3.3 presents industrial employment by sub-sector and technological intensity. In quarter 4 2020, 90% of industrial employment was in manufacturing (268,500 persons), with utilities accounting for 8% (24,200 persons) and extraction/mining, 2% (I5,6001 persons). In terms of technological intensity, low-technology manufacturing accounted for nearly one half (48% or 129,300 persons) of total manufacturing employment; this was followed by high technology and medium-low technology, at 79,000 persons and 36,800 persons (or 29% and 14% of manufacturing employment) respectively; the smallest component of manufacturing was medium-high technology, at 23,900 persons (or 9%). Of the 79,000 persons employed in high technology manufacturing in quarter 4 2020, two thirds were employed in pharmaceuticals.

Between quarter 4 2019 and quarter 4 2020, manufacturing employment grew by 5% (or 13,400 persons); the number of persons employed in utilities grew by 20% although the numbers involved are very small, while the numbers employed in mining/extraction remained unchanged. Within manufacturing, the numbers working in high and medium-high technology grew by 14,100 (or 22%) and 3,000 (or 8%) respectively. While the numbers in low-technology manufacturing remained almost unchanged year-on-year, employment fell by 10% in medium-low technology manufacturing, resulting in 4,100 fewer persons employed.



Figure 3.3 Industrial Employment by Sector and Technological Intensity, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

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

Construction

In quarter 4 2020, construction accounted for a 6% share of national employment with 136,400 persons employed in the sector. Approximately one half of construction activity was in specialized construction activities, with a further 43% in the construction of buildings and the remaining 10% in civil engineering.

The restrictions imposed due to COVID-19 had a strong effect on this sector, particularly in quarter 2 2020 when almost all construction activity was stopped. By quarter 4 2020, however, some recovery had occurred resulting in an overall decline of 10,700 persons employed in the construction sector when compared with quarter 4 2019. Not all components were equally affected: employment grew by 12% for those working in the construction of buildings, while it declined by a fifth each for those working in specialised construction activities and civil engineering. It should be borne in mind, however, that the construction sector accounted for a relatively large share of PUP recipients in 2020, and this may mask the true extent of the fall in employment observed year-on-year.

Over the five-year-period quarter 4 2015-quarter 4 2020, the numbers employed in construction grew by 26,500 additional persons, or 24%.

Agriculture, forestry and fishing

In quarter 4 2020, 106,400 persons were employed in the agriculture sector representing 4.6% of national employment. Of the total employment in the sector, the majority was in crop and animal production, with the remainder in forestry and fishing. In terms of employment levels, this sector was largely unaffected by the COVID-19 economic restrictions, with the numbers working remaining relatively stable between quarter 4 2019 and quarter 4 2020. While this sector has been identified (ESRI 2020²²) as among those that are most exposed to shocks in trade with the UK as a result of Brexit, it is, as yet, too early for any impact to be visible in the data.

Employment levels between quarter 4 2015 and quarter 4 2020 also remained broadly unchanged.

Services

In quarter 4 2020, there were 1.76 million persons employed in services-related activities, accounting for approximately three quarters of national employment. The composition of the services sector in terms of knowledge intensity is presented in Figure 3.4. Of the total services employment, 61% (1,074,000) was in knowledge intensive services - KIS (e.g. ICT, finance, legal, accounting, engineering, R&D, education, health and arts etc.). The remainder was in less knowledge intensive services – LKIS (e.g. wholesale & retail, transport, accommodation & food, office administration, real estate, travel, etc.).

Between quarter 4 2019 and quarter 4 2020, employment levels in the services sector fell by nearly 54,000 persons, a decline of 3%. However, the decline was confined to the LKIS segment, where the numbers employed fell by nearly 58,000 persons; in contrast, the numbers working in KIS grew, albeit only slightly (at 0.4%).

²² Daly, L., and M. Lawless. Examination of the sectoral overlap of Covid-19 and Brexit Shocks. ESRI Working Paper No. 77. September 2020.

Figure 3.4. Services Sector Employment, Quarter 4 2020



Source: SLMRU (SOLAS) analysis of CSO data

Wholesale and retail

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
316,100	14%	73% - retail trade 17% - wholesale trade	2%	6%
		10% - motor trade		
The impact of COVID-19 differed across the various segments of this sector. Between quarter 4 2019 and quarter 4 2020, employment in retail trade grew strongly, at 7%, resulting in more than 15,000 additional persons. On the other hand, employment in the motor trade declined sharply, by almost a fifth; employment in the wholesale trade also fell, although less sharply, with a 4% drop.				
This wholesale and retail accounted for a large share of income support recipients (PUP and EWSS) some of whom may also be captured in the employment data, thereby masking the full extent of the fall in employment in this sector due to the pandemic.				

Accommodation and food services

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
133,100	6%	72% - food & beverage services	-26%	-13%
		28% - accommodation		
Employment in this sector was amongst those most severely impacted by COVID-19, with strong declines in				
the numbers working in both segments of this sector: between quarter 4 2019 and quarter 4 2020,				
employment fe	ell by 29% in food & b	everages services and by 24% in accom	modation service:	S.

In addition, the accommodation and food services sector accounted for the largest share of income support recipients (PUP and EWSS) in 2020; some of these recipients may also be captured in the employment data, thereby masking the full extent of the fall in employment in this sector due to the pandemic.

Professional, scientific and technical activities

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
145,700	6%	 38% - legal and accounting 25% - architectural & engineering activities; technical testing/analysis 9% - advertising & market research activities Remainder includes, for example, scientific R&D, management consultancy, and other professional activities 	3%	9%
The overall growth that occurred between quarter 4 2019 and quarter 4 2020 was mainly due to the almost 3,000 additional persons employed in the architectural/engineering activities & technical testing/analysis segment, a rise of 9%.				

Financial, insurance and real estate services

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
124,500	5.4%	55% - financial services (e.g., banking) 19% - insurance	8%	21%
		Remainder includes almost equal shares in auxiliary financial services and real estate activities		
The 8% growth in employment numbers between quarter 4 2019 and quarter 4 2020 masks a 4% decline in insurance activities; employment in all other segments of this sector grew.				

Transportation and storage

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
107,800	5%	51% - land transport 20% - warehousing	-0.2%	18%
		20% - postal & courier activities 9% - water & air transport		

Between quarter 4 2019 and quarter 4 2020, the number of persons working in this sector remained almost unchanged. However, the economic restrictions imposed due to COVID-19 affected segments of this sector differently: in particular, the fall in employment in warehousing (28%, or 8,200 fewer workers) was partially offset by the 35% increase (5,600 additional people) in the numbers working in postal and courier activities.

There was little change in absolute terms in the numbers employed in the air transport sector. However, as this sector was particularly impacted by restrictions on travel, many may have been classified as employed but were in receipt of income support payments (PUP or EWSS), thereby potentially over-estimating the numbers employed in this segment.

Information and communications (ICT)

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
139,400	6.1%	63% - computer programming 16% - telecommunications	9%	34%
		8% - information service activities		
		Remainder includes broadcasting, publishing & motion picture production		
Compared to other economic sectors, the nature of tasks associated with work in the ICT sector allowed much of the activity to be carried out remotely. At 9%, ICT had the highest growth rate of all economic sectors between quarter 4 2019 and quarter 4 2020. The strongest employment growth was in the telecommunications segment, where there was a 31% increase (or 5,100 additional workers). There were also an additional 4,700 persons working in the computer programming segment when compared to one year earlier.				

Administrative and support service activities

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
82,100	4%	 43% - buildings & landscape services 15% - security activities 14% - office administrative activities Remainder includes employment activities, travel services and renting/leasing activities 	-27%	-2%

The administrative support sector was one of the most severely impacted by COVID-19, with the 27% decline in employment being greater than any other economic sector between quarter 4 2019 and quarter 4 2020. The largest absolute falls in employment were in services to buildings/landscape activities (e.g. cleaners) with a fall of 8,000 persons (18%), security activities (7,800 fewer persons or -39%), and office administration activities (e.g. contact centres), with a fall of 6,900 persons (-38%).

Health and social work

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020	
293,000	13%	55% - human health activities	-0.4%	8%	
		30% - social work activities			
		15% - residential care activities			
The 0.4% decline in this sector between quarter 4 2019 and quarter 4 2020 was due to a 6% fall in the numbers employed in residential care activities (the smallest sub-sector in health & social work). Employment levels grew for the remaining two subsectors.					

Education

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
196,500	9%	-	3%	29%
The nature of ta of schools and 2020.	asks associated with colleges due to COV	work carried out in the education sector 'ID-19, employment levels grew betweer	meant that desp n quarter 4 2019 a	ite the closure and quarter 4

Public administration and defence (PAD)

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
122,400	5.3%	-	5%	33%
Employment levels in PAD grew by 5% between quarter 4 2019 and quarter 4 2020.				

Other NACE activities

Employment Q4 2020	% share of total employment Q4 2020	Sub-Sectors	% growth Q4 2019-2020	% growth Q4 2015-2020
100,500	4.4%	 35% - other personal services (e.g. hairdressing) 20% - sports activities 20% - activities of membership of organisations 8% - creative, arts & entertainment activities Remainder in libraries, repair of computers/household equipment, and gambling activities. 	-15%	-12%
At 15%, the decline observed in this sector was greatest after the accommodation and food and administrative and support activities sectors in the most recent period (quarter 4 2019 and quarter 4 2020). Employment levels in most segments of this sector fell between quarter 4 2019 and quarter 4 2020, most notably with a 36% decrease in sports activities (11,300 fewer persons employed). Only the activities of membership organisations observed an increase in employment (by 11%).				



Section 4 Employment by broad occupation

This section examines employment by broad occupation across several variables. The impact of COVID-19 restrictions is evident across a number of occupations. In particular, the closures of some sectors in the economy as a result of COVID-19 restrictions has had a disproportionately negative effect on elementary and skilled trades occupations and, to a lesser extent, operative and services occupations.

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 2020, professionals had the highest level of employment at 498,200 persons followed by associate professionals (290,200). Combined, the high skilled occupations (professionals, associate professionals, and managers) accounted for nearly 1 million persons or 43% of the total national workforce. With 226,100 persons and 212,300 persons respectively, skilled trades and elementary workers accounted for approximately 10% of the workforce each. Farmers, at 69,600 persons employed, accounted for 3%.



Figure 4.1 Employment by Broad Occupational Group (000s). Quarter 4 2020

4.2 Employment growth

Figure 4.2 presents employment growth by broad occupational group. Between quarter 4 2019 and quarter 4 2020, the numbers in employment declined by 55,000 (or 2%). Employment growth was above the national average for managers, associate professionals and administrative occupations, and at the national average for farmers. Many of those working in occupations where employment increased were largely unaffected by the impact of COVID-19 restrictions or were able to move to online or remote working environments (e.g. ICT or business/admin professionals).

In contrast, the largest decreases in employment between quarter 4 2019 and quarter 4 2020 were observed for elementary (-16%) and skilled trades (-9%) occupations, followed by operative (-8%) and personal services occupations (-5%); persons working in these occupations were heavily impacted by COVID-19 restrictions, as roles included cleaners, chefs/cooks, drivers (e.g., taxi and coach drivers) and, to a lesser extent, hairdressers/barbers and leisure-related occupations. In absolute terms, elementary and skilled trades had the greatest decreases in the number of persons employed, decreasing by approximately 42,000 and 23,000 persons respectively.

With the exception of farmers (-13%) and elementary workers (-10%), all occupations observed growth over the five-year period, quarter 4 2015 and quarter 4 2020. Those employed in administrative (28%), professional (21%) and personal services occupations (+16%) had the greatest relative increases over the five-year period. In terms of absolute numbers, professionals had by far the greatest increase, with 85,200 additional persons employed, followed by administrative workers (+56,000 persons employed).



Figure 4.2 Employment Growth by Broad Occupational Group, Quarter 4 2015 - Quarter 4 2020

4.3 Employment by gender and age

Gender

Employment by gender for broad occupations is presented in Figure 4.3. In terms of gender distribution, the share of females and males was closest to balanced amongst professional and associate professional occupations. In contrast, males made up at least four fifths of employment for farmers (90%), skilled trades (90%) and operative (85%) occupations, while females made up the greater shares of employment in services (81%) and administrative (77%) occupations.

In absolute terms, the highest numbers of females were employed in professional (261,200) and administrative (197,300) occupations, while the highest numbers of males were employed in professional (237,100) and skilled trades (265,800) occupations.

The decrease of 55,000 persons employed between quarter 4 2019 and quarter 4 2020 was spread relatively evenly across both genders. For males, the fall in employment was primarily spread across three occupational groups: skilled trades, operatives and elementary roles, which combined fell by 47,000 persons, although the falls were partially offset by increases in other occupations, such as professional (+10,000 persons) and administrative (+8,000 persons) occupations. The fall in employment for females was largest in absolute terms in elementary occupations (with almost 27,000 fewer persons year-on-year). In contrast the number of females working in associate professional, managerial, administrative and farming occupations grew (by approximately 26,000 across the four occupations combined). Declines occurred for all other occupations.

The decreases for both male and female employment reflect the fact that elementary occupations (such as cleaners, bar/waiting staff and kitchen staff and elementary construction workers) and skilled trade occupations (such as chefs/cooks, construction trades) were heavily impacted by COVID-19 restrictions.



Figure 4.3 Employment by Gender and Broad Occupational Group (000s). Quarter 4 2020

Age

Figure 4.4 presents the age distribution of employment by broad occupational groups. In quarter 4 2020, 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 32%, followed by elementary workers (24%). At 58%, farmers had the greatest share of persons aged 55 years and over, a share that is almost three times the national average of 19%.

Over the period quarter 4 2019–quarter 4 2020, the impact of COVID-19 restrictions on the working lives of young persons is reflected in the strong falls in employment compared to their older counterparts.

Amongst **the under 25-year-olds**, employment levels either fell or remained broadly unchanged across most occupational groups between quarter 4 2019 and quarter 4 2020, resulting in a 15% decrease in the number of young persons in employment year-on-year. With a 27% decrease (representing 18,900 fewer persons in employment), elementary occupations accounted for by far the largest decline of 15-24-year-olds in employment. In fact, approximately one half of the total fall in employment for this age cohort is attributable to the decline in employment in elementary occupations.

For those **aged 25-54 years**, while employment grew for some occupations such as associate professionals (+16,800 persons) and administrative occupations (+14,700 persons), there were declines for skilled trades workers (-23,900 persons) and elementary workers (-17,600).

Despite the slight growth in employment between quarter 4 2019 and quarter 4 2020 in the number of persons **aged 55 years and older**, employment levels fell slightly for some occupations: the strongest declines were for farming, elementary and operative occupations, which fell by 10%, 8% and 7% respectively, resulting in a combined decrease in employment of 7,000 persons. In contrast, employment grew for other occupations, most notably for administrative and managerial occupations which grew by 2,500 and 4,700 persons respectively, or by 5% and 14%.



Figure 4.4 Employment by Age and Broad Occupational Group, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

*The numbers 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 2020, professionals had the highest share of persons with a third level education (95%), followed by associate professionals (75%) and managers (60%). Just over half of all administrative workers had a third level qualification (52%). Occupations with the highest shares of higher secondary/FET qualification holders were skilled trades (at 60%) and sales and elementary occupations (58% each). Farmers and operative occupations had the highest shares of persons with a lower secondary or less level of education (at 42% and 30% respectively).

When examined by education attainment level, the impact of economic restrictions imposed by COVID-19 varied by occupation. Those most affected were persons with, at most, lower secondary educational attainment working in administrative, managerial and elementary occupations, where employment fell by 40%, 25% and 22% respectively over the period quarter 4 2019 to quarter 4 2020. However, the largest absolute decline over the same period was observed for persons with higher secondary/FET education working in elementary or personal services occupations, where the numbers fell by 23,200 (17%) and by 17,200 (or 16%) respectively.

In a pattern contrary to that observed for other educational attainment types, the number of persons with third level education in employment grew between quarter 4 2019 and quarter 4 2020, with rises observed in most occupational groups, most notably for those working in associate professional occupations (+19,200 persons or 10%). Occupations where the number of third level qualification holders fell were elementary workers (a fall of 12%), operatives (a 5% drop) and skilled trades occupations (-5%).



Figure 4.5 Employment by Education and Broad Occupational Group, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

*Number of professionals with lower secondary or less level of education attainment was too low to report. *Excludes those who did not state their level of education.

4.5 Employment by Nationality

The distribution of employment in broad occupational groups by nationality is presented in Figure 4.6. In quarter 4 2020, at 27%, elementary workers had the highest share of non-Irish nationals; this was followed by skilled trades occupations, where the share of non-Irish workers was 20%. In contrast, administrative (10%) workers observed the lowest share of non-Irish nationals.

Between quarter 4 2019 and quarter 4 2020, for both Irish and non-Irish workers, the greatest falls occurred in elementary occupations, where the number of Irish workers declined by 34,700 persons (or 18%) and the number of non-Irish workers by 7,500 persons or 12%; this reflects the impact of COVID-19 economic restrictions on roles such as waiting staff, kitchen/catering staff and cleaners.



Figure 4.6 Employment by Nationality and Broad Occupational Group. Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

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

4.6 Employment Status

Self-employed/employee

Figure 4.7 presents employment in broad occupational groups by employment status. In quarter 4 2020, the majority of workers across all occupations were employees, with the exception of farmers. After farmers (where almost all were self-employed²³), the greatest share of self-employed workers was amongst managers (37%) and skilled trades workers (22%).

The decrease of 55,000 persons employed between quarter 4 2019 and quarter 4 2020, was greatest for those working as employees and in particular for those working in elementary and skilled trades occupations, where the numbers of employees fell by 18% and 10% respectively.



Figure 4.7 Employment by Employment Status* and Broad Occupational Group (%). Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

*Excludes those assisting relatives and on employment schemes. **Number of employee farmers were too low to report.

²³ The share of farmers who were employees was too small to report.

Full-time/Part-time

Figure 4.8 presents the breakdown of employment in broad occupational groups by full-time and part-time work status. In quarter 4 2020, most workers across all occupational groups were in full-time employment. Managers (93%), associate professionals (89%) and skilled trades workers (89%) had the greatest share of persons working full-time. Sales (40%), elementary (36%) and service workers (31%) had the greatest shares of part-time workers.

The decrease of 55,000 persons employed between quarter 4 2019 and quarter 4 2020 was due to a decline of 58,000 (or 19%) in the number persons who were working part-time. Over the same period, the number of full-time employed remained almost stable, growing by just 0.2%. The decrease in part-time employment differed across occupations, with the number of part-time employed elementary workers falling by almost a third (resulting in 34,600 fewer persons), and the number of part-time employed services workers falling by 16% (or 11,100 fewer persons). The fall in part-time employment for these workers is a reflection of the economic restrictions imposed as a result of the pandemic where occupations, such as cleaners, waiting/bar staff, hairdressers, etc, which have higher than average shares of part-time employed, were particularly impacted in terms of employment.



Figure 4.8 Full-time and Part-time Employment by Occupational Group. Quarter 4 2020



Section 5 Regional Profiles

5.1 Employment and Employment Growth

Employment levels in Ireland's eight NUTS3²⁴ regions are presented in Figure 5.1. In quarter 4 2020, approximately 693,000 employed persons were located in the Dublin region, accounting for 30% of total national employment. Combined, Dublin and the Mid-East made up 45% of total employment. In absolute terms, the employment level was lowest in the Midland region at just over 140,000.



Figure 5.1 Employment by Region, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Between quarter 4 2019 and quarter 4 2020, employment decreased in all regions apart from the Midland region, where employment increased by 5,900 or 4.4% over the period (Figure 5.2). The greatest absolute decline in employment was recorded in the Dublin region, followed by the South West. In relative terms, the greatest decline was recorded in the Dublin region, where employment contracted by 4.4%, followed by the South West (-2.9%) and Border (-2.7%) regions.

²⁴ Nomenclature of Territorial Units for Statistics (NUTS) is a geocode standard, developed and regulated by the EU, for referencing the subdivisions of Ireland for statistical purposes.



Figure 5.2 Employment Change by Region, Quarter 4 2019 – Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

5.2 Unemployment and Participation Rates

In quarter 4 2020, the Dublin region had the greatest number of persons unemployed (45,800), followed by the South West (21,800) and Mid-East (18,300). The Border region had the least number of persons unemployed, at 7,900 (Figure 5.3).





Table 5.1 presents unemployment rates from quarter 4 2019 to quarter 4 2020 for the eight regions across each quarterly period. Six of the regions showed a decrease in the unemployment rate from quarter 3 2020 to quarter 4 2020, with only the Mid-West and South West showing a rate increase over the quarter. On an annual basis, only the West and South East regions have seen a decrease in the unemployment rate between quarter 4 2019 and quarter 4 2020.

	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
Border	3.9	5.5	5.2	6.9	4.2
West	4.0	3.0	5.5	6.4	3.6
Mid-West	4.9	5.0	5.3	6.8	7.2
South East	6.8	6.7	6.1	7.7	5.8
South West	3.7	4.0	4.2	5.7	6.3
Dublin	4.5	4.6	5.3	8.2	6.2
Mid-East	4.3	4.3	4.3	6.8	5.1
Midland	4.5	5.2	5.7	6.9	6.0

Table 5.1 Unemployment Rates (%) by Region, Quarter 4 2019 – Quarter 4 2020

Quarterly unemployment rate increase

Quarterly unemployment rate decrease

Source: SLMRU (SOLAS) analysis of CSO data

Figure 5.4 Unemployment Rates (%) by Region, Quarter 4 2020



In quarter 4 2020, the unemployment rate was highest in the Mid-West region at 7.2% (Figure 5.4). The rate was also higher than the national rate of 5.7% in the South West, Dublin, Midland, and South East regions. Three regions had unemployment rates lower than the national rate; the Mid-East (5.1%), the Border (4.2%) and the West (3.6%).

Source: SLMRU (SOLAS) analysis of CSO data

Table 5.2 presents the participation rates for each of the eight regions for quarter 4 2019 and quarter 4 2020. In quarter 4 2020, the lowest participation rate in the labour market was in the Border and South East regions, at 57.4%. Between quarter 4 2019 and quarter 4 2020, the greatest increase in labour market participation was observed in the Midland region (+3.4 percentage points), while the greatest decrease was observed in the South East region (-3.2 percentage points).

	Q4 2019	Q4 2020	
Border	59.3%	57.4%	Labour market participation decrease
West	62.2%	60.6%	Labour market participation decrease
Mid-West	58.2%	58.6%	Labour market participation increase
South East	60.6%	57.4%	Labour market participation decrease
South West	61.9%	60.8%	Labour market participation decrease
Dublin	66.4%	63.9%	Labour market participation decrease
Mid-East	63.8%	62.5%	Labour market participation decrease
Midland	59.5%	62.9%	Labour market participation increase

Table 5.2 Participation Rates by Region, Quarter 4 2019, and Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

5.3 Employment by Gender

The share of employment by gender in each region and the State average is presented in Figure 5.5. The gender distribution shows that the State average for females in employment was 46%, with only three regions, Dublin, the Mid-West and South West, having shares above this rate. The share for females in employment was lowest in the South East.



Figure 5.5 Regional Employment by Gender, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

5.4 Employment by Age

Figure 5.6 presents the age profile of regional employment for quarter 4 2020. All regions had similar age distributions, with approximately 70% of employment in the 25–54-year-old age bracket, largely in line with the State average of 71% for this group. At 23%, the West had the highest share of employment in the 55 years and over age cohort, while Dublin had the lowest, at 16%. In the under 25 years age cohort, all regions were within a 1% differential of the State average of 10%.



Figure 5.6 Regional Employment by Age, Quarter 4 2020

5.5 Employment by Education

Regional employment by the level of education attained is presented in Figure 5.7. In quarter 4 2020, Dublin had the highest share of third level attainment at 62%, with the Midland region having the lowest share at 42%. The State average for third level educational attainment was 53%. The share of persons holding further education and training (FET) qualifications was highest in the South East (19%) and lowest in Dublin (10%), with the State average being 14% for this level of educational attainment. For those who had attained upper secondary education or less, the State average was 33%, with the Midland region having the highest share for this group, at 41%.





5.6 Employment by Nationality

Figure 5.8 presents regional employment by nationality. In quarter 4 2020, the highest share of non-Irish in employment was recorded in Dublin (22%), with the lowest in the Border region (9%). The State average for the share of non-Irish workers in employment was 17%.



Figure 5.8 Regional Employment by Nationality, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

5.7 Employment by Status and Type

Figure 5.9 presents regional employment by employment status. In quarter 4 2020, self-employment accounted for between 11% and 19% of total employment across regions, with the State average being 14%. The highest share of self-employed was in the Border region (19%); the lowest in Dublin (11%). Those who were self-employed with no employees made up over two thirds of total self-employment in each region. Employees made up over 80% of total employment in all regions, with the State average for this employment status being 86%.



Figure 5.9 Regional Employment by Employment Status, Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Regional employment by employment type is presented in Figure 5.10. In quarter 4 2020, approximately 80% of employed persons in each region were working full-time. The highest share of part-time employment was recorded in the South West, at 22%. The State average for part-time workers stood at 19%.



Figure 5.10 Regional Employment by Employment Type, Quarter 4 2020

5.8 Employment by Sector

Figure 5.11 presents sectoral employment by region. In quarter 4 2020, at least 50% of persons employed in the ICT and financial sectors were located in Dublin. The South West (20%) had the highest share of employment in agriculture, followed by the Border region (18%).



Figure 5.11 Sectoral Employment by Regions, Quarter 4 2020

5.9 Employment by Occupation

Figure 5.12 presents regional employment by broad occupational group. In quarter 4 2020, professionals accounted for 27% of employment in Dublin, above the State average of 22% for this group. Employment in skilled trades occupations accounted for the largest share in the Border region, at 19%, while the South East had the largest share of employment in sales and customer service occupations (10%). The Midland region had the largest share employed in elementary occupations, at 13%.





Source: SLMRU (SOLAS) analysis of CSO data



Section 6 Unemployment

6.1 The impact of COVID-19 on unemployment

The restrictions imposed as a response to COVID-19 have had a significant impact on the number of people who are unemployed in Ireland. However, this has not been fully reflected in the unemployment figures produced by the CSO's Labour Force Survey (LFS) as the CSO have been constrained by international (ILO) standard definitions and methodologies for reporting on unemployment.²⁵ To compensate for this, the CSO have also produced a COVID-19 adjusted measure of unemployment since March 2020 alongside the official unemployment figures using traditional methods.

As the LFS only provides COVID-19 adjusted measures of unemployment at an aggregate level, this chapter adopts additional sources of data so as to capture the full extent of unemployment in Ireland. These include monthly unemployment estimates and data relating to those in receipt of Pandemic Unemployment Payments (PUP). As the unemployment figures are changing at a faster pace than would normally be the case due to the ongoing COVID-19 restrictions, the analysis of these additional sources covers the period up to and including June 2021. For each of the variables examined here, the data sources which best captured the situation as it stood in the summer of 2021 was used.

The chapter is laid out as follows:

- Sections 6.2: overall unemployment figures utilising both traditional and COVID-19 adjusted rates (quarterly data)
- Sections 6.3 and 6.4: age and gender are examined using monthly unemployment estimates
- Sections 6.5 and 6.6: nationality and sectoral analysis are examined using a combination of LFS and PUP data
- Sections 6.7 and 6.8: no occupational or educational attainment information is available in the monthly unemployment or PUP data; as such, the analysis is solely based on the official quarterly unemployment figures from the LFS using traditional methods.

6.2 Unemployment and Unemployment Rate

Figure 6.1 presents quarterly unemployment rates using lower bound (traditional methods of calculations) and upper bound (COVID-19 adjusted) rates. Observing the lower bound rates, unemployment increased to 7.1% in quarter 3 2020, falling to 5.7% in quarter 4 2020, one percentage above the rate observed in quarter 4 2019. In terms of the COVID-19 adjusted estimates (upper bound), unemployment rates rose to a high of 30.5% in quarter 1 2020 falling to 21.0% in quarter 4 2020.

²⁵ In order to be deemed unemployed, an individual must be not working, actively seeking work in the previous four weeks and available for work in the two weeks after the interview. Some individuals displaced from employment, therefore, are more likely to fall into the inactive category purely because they were not seeking work due to the public health restrictions.



Figure 6.1 Unemployment Rates (%), (Lower bound and Upper bound) (LFS), Quarterly 2018 – 2020

Source: SLMRU analysis of CSO data

*Upper Bound refers to the last month in each quarter in 2020.

6.3 Unemployment by Gender

Table 6.1 presents the gender distribution of unemployed persons, using both lower and upper bound methods of calculation, in the period between January and June 2021. The number of unemployed persons increased across both genders in the lower bound estimates over the six-month period and declined significantly for both genders in the upper bound estimates.

While the gap between the genders in terms of numbers unemployed decreased across both methodologies, the gap was particularly significant in the upper bound estimates; there were 70,100 more unemployed males than females in January 2021, with the gap falling to 29,400 in June 2021.

	Januai	January 2021		June 2021	
	Male	Female	Male	Female	
Lower Bound (Traditional)	88,800	71,200	94,600	85,500	
Upper Bound (COVID-19 Adjusted)	357,800	287,700	218,700	189,300	

Table 6.1 Monthly Unemployment by Gender (000s) (Lower bound and Upper bound), January & June 2021

Source: SLMRU analysis of CSO data

Figure 6.2 presents unemployment rates by gender using the lower bound (traditional) and upper bound (COVID-19 adjusted) method of calculation for January and June 2021. Unemployment rates using the lower bound methodology increased for both genders between January and June 2021 with females observing the greatest increase (1.9 percentage points compared to 0.9 percentage points for males). Females had a higher unemployment rate (8.4%) in June 2021 when compared to males (7.8%).

Observing the upper bound methodology, unemployment rates fell for both males and females between January and June 2021. The restrictions imposed as a response to COVID-19 had a significant impact on construction, a sector with a high proportion of males in employment. As a result of these restrictions, there were more males in receipt of a pandemic unemployment payment, resulting in higher unemployment rates for males using upper bound methodology. However, as the restrictions eased, unemployment rates for males observed a greater decrease (9.8 percentage points) in comparison to females (7.6 percentage points).



Figure 6.2 Monthly Unemployment Rate (%) by Gender (Lower bound and Upper bound), January & June 2021

Source: SLMRU analysis of CSO data
6.4 Unemployment by Age

Table 6.2 presents the number of unemployed persons, using both lower and upper bound methods of calculation. In January and June 2021, persons in the 25-74 year age category accounted for the greatest number of unemployed persons across both methods.

Between January and June 2021, using the lower bound estimates, the number of persons unemployed increased across both age cohorts. However, using the upper bound methodology, the number of unemployed persons decreased across both age cohorts, with those aged 25–74 years observing the greatest decrease of almost 180,000 persons.

Table 6.2 Monthly Unemployment Numbers by Age, (Lower bound and Upper bound), January & June 2021

	January 2021		June 2021		
	15-24	25-74	15-24	25-74	
Lower Bound (Traditional)	37,500	122,500	43,000	137,100	
Upper Bound (COVID-19 Adjusted)	153,000	492,500	95,300	312,800	

Source: SLMRU analysis of CSO data

Figure 6.3 presents unemployment rates by age using the lower bound (traditional) and upper bound (COVID-19 adjusted) rates in January and June 2021. The lower bound unemployment rates increased for both age groups, with persons aged under 25 years observing the greater rate increase (5.1 percentage points). In terms of the upper bound rate for the same period, the rates for both age groups decreased with those aged under 25 years observing the greatest decrease (16.2 percentage points). Unemployment rates for those aged under 25 years (44.2%) in June 2021 remained significantly higher than those aged 25-74 years (15.5%).



Figure 6.3 Monthly Unemployment Rates (%) by Age (Lower bound and Upper bound), January & June 2021

Source: SLMRU (SOLAS) analysis of CSO data

6.5 Unemployment by Nationality

As monthly unemployment data is not available by nationality, this section examines unemployment trends relating to the LFS (only the lower bound method of calculation is available) and those in receipt of Pandemic Unemployment Payments (PUP).

In quarter 4 2020, there were 33,100 unemployed non-Irish nationals accounting for 24% of all unemployed persons. This is an increase of 8,900, or 37%, compared to quarter 4 2019. Unemployment rates for Irish and non-Irish nationals are presented in Figure 6.4. In quarter 4 2020, the unemployment rate for non-Irish nationals was 8.0%, 2.8 percentage points higher than the rate for Irish nationals (5.2%). Between quarter 4 2019 and quarter 4 2020, the unemployment rates for both Irish and non-Irish nationals increased with non-Irish nationals observing a greater increase (2.2 percentage points for non-Irish, compared to a one-percentage point rise for Irish nationals).



Figure 6.4 Unemployment Rate by Nationality (%), Quarter 4 2019 & Quarter 4 2020

Source: SLMRU (SOLAS) analysis of CSO data

Figure 6.5 presents PUP recipients by nationality. In June 2021, there were over 70,000 non-Irish nationals in receipt of PUP. Of these, persons from EU15-27 countries accounted for 47%, with those from non-EU countries (excluding UK) accounting for a further 35%.

Between January and June 2021, the number of Irish and non-Irish nationals in receipt of PUP observed a significant decrease. The decrease for Irish nationals, at 55% (192,700 persons), was greater when compared to non-Irish nationals, at 47% (64,700 persons). As a result, the share of non-Irish nationals in receipt of PUP increased from 28% in January 2021 to 32% in June 2021.



Figure 6.5 Pandemic Unemployment Payment recipients by nationality, January & June 2021

Source: SLMRU (SOLAS) analysis of CSO data

6.6 Unemployment by Sector

Using the traditional method of calculation, the number of persons unemployed has decreased significantly in recent years; as such, in quarter 4 2020 unemployment levels by previous sector from the LFS was too small to report for the majority of sectors.

Figure 6.6 presents those in receipt of PUP by sector. There have been a number of sectors which have consistently accounted for the majority share of persons in receipt of PUP since its inception in March 2020. In June 2021, the accommodation and food sector had the greatest share of persons in receipt of PUP (21%), followed by wholesale and retail (11%), administrative services (8%), arts, entertainment, and other services (5%) and construction (5%). These five sectors accounted for half of all persons in receipt of a PUP in June 2021. The remaining NACE sectors made up a further fifth, while it was not possible to determine the sector of employment for 30% of PUP recipients.



Figure 6.6 Pandemic Unemployment Payment recipients by Sector, June 2021

Source: SLMRU analysis of CSO data

Figure 6.7 presents the change in the number of persons in receipt of PUP in the selected sectors between January and June 2021. Over this period, the number of people in receipt of a payment decreased across all sectors. Those employed in the accommodation and food sector observed the greatest absolute decrease (-46,900), falling by almost half over the six-month period. At 70%, the largest relative decline was for those in the construction sector. Those recipients from the administrative and support services sector (e.g. cleaners, security officers) saw the smallest decline over the period, at 43%.



Figure 6.7 Pandemic Unemployment Payment recipients by selected sectors, January & June 2021

Source: SLMRU (SOLAS) analysis of CSO data

6.7 Unemployment by Occupation

The number of unemployed persons in this section refers only to those identified using the lower bound estimates of unemployment (traditional methods of calculation) in the LFS.

Figure 6.8 presents the distribution of unemployment by broad occupational groups in quarter 4 2020. Unemployed persons who did not state their previous occupation (e.g., looking for work for the first time, entering employment from inactivity) accounted for 27% of all unemployed persons. In quarter 4 2020, the greatest share of unemployed persons who had stated a previous occupation had previously worked in operative and elementary occupations (22%), managers/professionals (11%) and sales (10%).

Between quarter 4 2019 and quarter 4 2020, the number of unemployed persons increased for all occupations. In terms of absolute numbers, unemployed persons previously working in operative and elementary roles observed the greatest increase (8,400), followed by administrative (6,700) and managerial and professional occupations (4,500). This increase in the numbers unemployed likely relates to the high share of these occupations working in sectors most impacted by COVID-19 such as the accommodation and food and wholesale and retail sectors.

Figure 6.8 Unemployment by Previous Occupation (%), Quarter 4 2020



Source: SLMRU analysis of CSO data

The unemployment rate by broad occupation is presented in Figure 6.9. In quarter 4 2020, unemployment rates were highest for those working in lower skilled occupations, including operative and elementary (8.0%) and sales occupations (7.2%).

Between quarter 4 2019 and quarter 4 2020, unemployment rates increased across all occupations. The greatest increases were observed for those who had worked in operative and elementary occupations (3.2 percentage points) and those previously employed in sales roles (2.4 percentage points), highlighting the significant impact that restrictions imposed as a response to COVID-19 had on lower skilled occupations.



Figure 6.9 Unemployment Rate by Previous Occupation (%), Quarter 4 2020

Source: SLMRU analysis of CSO data

Note: Excludes persons who did not state their previous occupation.

6.8 Unemployment by Education

The number of unemployed persons in this section refers only to those identified using the lower bound estimates of unemployment (traditional methods of calculation) in the LFS.

Unemployment by education is presented in Figure 6.10. In quarter 4 2020, at 58%, over half of all persons unemployed had a higher secondary education/FET qualification or below. Between quarter 4 2019 and quarter 4 2020, the number of unemployed persons with higher secondary education/FET or third level qualifications increased while the number of unemployed persons with a lower secondary or less level of education decreased (-8,000 persons).



Figure 6.10 Unemployment by Education* (000s & %), Quarter 4 2020

Source: SLMRU analysis of CSO data

*Excludes not stated.

Unemployment rates by education are presented in Figure 6.11. In quarter 4 2020, persons who had attained at most a lower secondary level of education had the highest unemployment rate at 7.1%. Persons with a third level education or above had the lowest unemployment rate (4.5%).

Between quarter 4 2019 and quarter 4 2020, those with a higher secondary or FET qualification observed the greatest increase in unemployment rates (1.8 percentage points) followed by persons with a third level education (1.3 percentage points). Those with a lower secondary or less education observed a decrease over the same period.



Figure 6.11 Unemployment Rate by Education, Quarter 4 2019 & Quarter 4 2020

Source: SLMRU analysis of CSO data

Unemployment rates by education and age are presented in Figure 6.12. In quarter 4 2020, those aged under 25 years had the highest unemployment rates across all levels of education. Across all age cohorts for which data is available, persons with a lower secondary or less level of education had the highest unemployment rates.

Between quarter 4 2019 and quarter 4 2020, unemployment rates increased across all age cohorts and educational levels with the exception of persons aged 25-54 years with a higher secondary or FET qualification (decrease of three percentage points). The greatest rate increases were observed for those aged under 25 years.



Figure 6.12 Unemployment Rate by Education and Age, Quarter 4 2020

Source: SLMRU analysis of CSO data

* Numbers are too small to report for persons under 25 with lower secondary or less level of education.



Section 7 Labour Market Transitions and Recent Job Hires

7.1 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 2020 are presented in Table 7.1. As observed in preceding years, most individuals do not change their labour market status between successive quarters. In 2020, on average, 95% of individuals who were in employment remained employed; 89% of those economically inactive continued to be outside the labour force and 44% of those unemployed remained unemployed. Nonetheless, some individuals changed their labour market status between quarters: 5% of individuals transitioned out of employment, 4% to inactivity and 1% to unemployment; 56% of individuals transitioned out of unemployment: 31% to inactivity and 25% to employment; 11% of individuals transitioned out of inactivity: 7% to employment and 4% to unemployment.

While the overall distribution of transitions in 2020 was broadly similar to that observed in 2019, there was a decrease in the share of persons remaining in unemployment (from 48% in 2019 to 44% in 2020), and an increase in the share of persons moving from unemployment to inactivity (from 27% in 2019 to 31% in 2020).

	ILO end quarter				
ILO start quarter	Employed	Unemployed	Inactive		
Employed	95%	1%	4%		
Unemployed	25%	44%	31%		
Inactive	7%	4%	89%		

Table 7.1 Labour Market Transitions by ILO Status (Persons Aged 15-74²⁶), 2020

Source: SLMRU (SOLAS) analysis of CSO data

Figure 7.1 shows estimated annual transitions in the labour market in 2020. It is estimated that 1.52 million transitions occurred in the labour market in 2020, which was somewhat higher than that observed in 2019 (1.42 million).

There were approximately 226,000 transitions between employment and unemployment, 675,000 between employment and inactivity and 357,000 between unemployment and inactivity. In addition, there were 257,000 transitions which occurred within employment, either due to a change of employer (intra-occupational transitions) or change of occupation (inter-occupational transitions).

²⁶ Sum of transitions between quarter 4 2019 to quarter 1 2020, quarter 1 2020 to quarter 2 2020, quarter 2 2020 to quarter 3 2020, and quarter 3 2020 to quarter 4 2020.

At 447,000, the number of transitions into employment from both unemployment and inactivity was broadly similar to the number of transitions out of employment (454,000). The number of transitions from unemployment to employment was almost on par with the number in the opposite direction, while the number from inactivity to employment was just below the number in the opposite direction.

Compared to 2019, the most pronounced increase in flows was observed between employment and inactivity (approximately 128.000 from employment to inactivity and 43,000 in the opposite direction) and inactivity and unemployment (28,000 from inactivity to unemployment and 23,000 in the opposite direction). In contrast, there has been a significant change in movement for those already in employment, with decreases observed for both the number of intra-occupational transitions (approximately 60,000) and inter-occupational transitions (approximately 100,000).



Figure 7.1 Labour Market Transitions, 2020 (Sum of four quarters)

Source: CSO, LFS

Of total transitions from employment into inactivity, 20% was to study, 10% to home duties, 12% to retirements, 6% to disability and the remaining 52% was due to other reasons. In terms of transitions from inactivity to employment, 34% was from study, 13% from home duties, 10% from retirements, 5% from disability, while the remainder was from other forms of inactivity.

Compared with 2019, there were notable changes in the distribution of transitions from employment to inactivity, with decreases observed for exits from employment to home duties, study, retirements or disability (by 10 percentage points for home duties, 8 percentage points each for study or retirements and 6 percentage points for disability). There was a considerable decline observed for exits from inactivity to study (19 percentage points).

7.2 Recent Job Hires

Recent job hires refers to those who commenced employment in the previous three months. The overall number of recent job hires in both 2018 and 2019 was broadly comparable (Figure 7.2). The impact of COVID-19 on hirings in 2020 is evident with a sharp decline occurring in quarter 2. However, there was a marked recovery in quarters 3 and 4 2020, although numbers remained below levels seen in previous years. Overall, there was a total of 330,000 recent job hires in 2020 when the four quarters are summed, a decline of 26%, or almost 115,000, on the previous year.



Figure 7.2: Recent job hires in Ireland 2018-2020 by quarter (000s)

Source: Eurostat

Key Findings:

Of those recently hired in 2020²⁷

- in terms of gender, recent hires were divided equally
- 69% were hired for full-time positions
- almost two-thirds (63%) were for those aged less than 35 years; these age cohorts also accounted for the largest fall in the number of hires since 2019 (Figure 7.3)
- in terms of education level:
 - o 36% were for those with higher secondary education or less
 - o 13% held further education or training (FET) qualifications
 - o 48% held third level qualifications
 - since 2019, the largest fall in hires was for those with higher secondary education (Figure 7.4)
- the wholesale & retail sector along with the health sector accounted for the highest number of recent job hires in 2020; the largest fall in the number of hires between 2019 and 2020 was in the accommodation & food sector (Figure 7.5)
- recent job hires were primarily in elementary, professional and sales occupations in 2020; elementary and sales occupations experienced the largest declines in hires between 2019 and 2020 (Figure 7.6)
- the most frequently occurring occupations in 2020 included
 - o sales assistants (10% of total)
 - elementary service occupations (e.g. catering assistants, waiters and bar staff), accounting for 7% of all recent job hires
 - teaching and education professionals, at 5%
 - o caring personal services (e.g. care workers, healthcare assistants), at 4%
 - o administrative occupations, at 3%.



Figure 7.3 Recent job hires by age, 2019 and 2020

Source: SLMRU (SOLAS) analysis of CSO LFS data

²⁷ Based on analysis by the SLMRU of CSO LFS data for the four quarters in 2020.



Figure 7.4 Recent job hires by education, 2019 and 2020 *

Source: SLMRU (SOLAS) analysis of CSO LFS data

*Excludes not stated.



Figure 7.5 Recent job hires by sector, 2019 and 2020

Source: SLMRU (SOLAS) analysis of CSO LFS data



Figure 7.6 Recent job hires by occupation, 2019 and 2020

Source: SLMRU (SOLAS) analysis of CSO LFS data

Managers (11,000 recent job hires in 2020):

- $\,$ accounted for a 3% share of total recent job hires in 2020 $\,$
- 67% of new hires held a third level qualification
- at 90%, this occupational group had the highest share of new hires for full-time roles
- 62% of recent hires were male
- 69% of new hires for managers were aged 25-44 years
- between 2019 and 2020, the number of recent job hires for managers fell by 45%.

Professionals (58,000 recent job hires in 2020):

- at 18%, this occupational group accounted for the highest share of recent hires in 2020
- professionals had the highest share of new hires that held a third level qualification, at 87%
- 52% were aged between 25 and 44 years, compared to 43% at a national level
- 82% of recent hires were for full-time positions
- 55% of recent hires were female
- in terms of sectors, the education and health sectors combined accounted for over half of new hires, with ICT and professional activities also featuring
- between 2019 and 2020, the number of recent job hires for professionals fell by 14%.

Associate professionals (39,000 recent job hires in 2020):

- associate professionals accounted for 12% of total recent hires in 2020
- over three quarters (77%) held a third level qualification
- a half were aged between 25 and 44 years
- 85% of new hires were for full-time roles
- recent job hires were split equally across genders
- between 2019 and 2020, the number of recent job hires for associate professionals fell by 13%, the lowest relative fall across all occupations.

Administrative (35,000 recent job hires in 2020):

- 11% of total recent hires were for administrative roles in 2020
- over a half (56%) held a third level qualification
- 78% were aged under 45 years, compared to 81% at a national level
- almost three quarters (72%) of hires were for full-time roles
- 68% of recent hires were female
- in terms of sectors, health and public administration and defence combined accounted for 32% of new hires
- between 2019 and 2020, the number of recent job hires for administrative occupations fell by 20%.

Skilled trades (28,000 recent job hires in 2020):

- skilled trades occupations accounted for 8% of recent job hires in 2020
- the majority (58%) had attained higher secondary education or a FET qualification
- a quarter were aged 45 years or older, the highest share in this age cohort across all occupations
- 81% of recent hires were for full-time roles
- 89% 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 40%
- between 2019 and 2020, the number of recent job hires for skilled trades fell by 27%.

Personal services (34,000 recent job hires in 2020):

- personal services accounted for 10% of recent job hires in 2020
- 46% had attained a higher secondary/FET education, while a further 42% held a third level qualification
- 79% were aged under 45 years, below the overall national share of 81%
- 47% of new hires were for part-time roles
- 82% were female, the highest share of females across all occupations
- the health sector accounted for half of recent job hires, with arts, entertainment and other services
 (e.g. hairdressers) accounting for a further quarter
- between 2019 and 2020, the number of recent job hires for personal services occupations fell by 18%.

Sales and customer services (44,000 recent job hires in 2020):

- this occupational group accounted for 13% of recent hires in 2020
- 58% of those hired in these occupations held a higher secondary education/FET qualification, with a further 27% holding a third level qualification
- this group had by far the youngest age profile, with 59% aged under 25 years, compared to 38% at a
 national level
- just over half (51%) of hires were for full-time roles
- 64% of new hires were female
- over four fifths of recent hires were for roles in the wholesale and retail sector (e.g. retail sales assistants)
- between 2019 and 2020, the number of recent job hires for sales occupations fell by 33%.

Operatives (26,000 recent job hires in 2020):

- this occupational group accounted for 8% of recent job hires in 2020
- 45% of those recently hired held a higher secondary education/FET qualification
- 77% of recent hires were for those aged under 45 years, below the overall national share of 81%
- 84% of recent hires were for full-time roles
- 86% were male, the second highest share of males after skilled trades occupations
- almost a half (47%) were for recent job hires in industry
- between 2019 and 2020, the number of recent job hires for operative roles fell by 22%.

Elementary (56,000 recent job hires in 2020):

- elementary occupations accounted for 17% of recent job hires in 2020
- 53% held a higher secondary/FET education while a further 21% had attained lower secondary education or less
- those employed in these occupations tended to be young, with 49% aged 15-24 years
- 51% of recent hires were for full-time roles
- 59% of hires were male
- the accommodation and food services sector accounted for by far the highest share of recent hires, at 40% (e.g. waiters, bar staff, kitchen assistants); administrative services and agriculture combined accounted for a further 23%
- between 2019 and 2020, elementary occupations saw the largest fall in the number of recent job hires, representing a fall of 37%.



Section 8 Employment Permits

8.1 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 EEA labour market.

In order to obtain 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 three most common employment permits issued in Ireland include:

- Critical skills: designed to attract highly skilled people into the labour market and take up residence in the State
- 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
- 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.

* some exceptions apply The details of the other six permit types are available on the DETE website.²⁸

From the January 1st 2020, subject to some limited exceptions, applications for General Employment Permits and Contract for Services Employment Permits were subject to the Labour Markets Needs Test. Employers were also required to advertise the position with the Department of Employment Affairs and Social Protection Employment Services/EURES employment network for at least 28 days (4 weeks); this is an increase from the previous two-week requirement.

Approximately 14,000 new employment permits were issued in 2020 as employers continued to source skills from abroad; this is a 1.5% decrease on the previous year. Figure 8.1 shows that new permits issued peaked in April 2020. The number of new permits issued subsequently fell below 2019 levels from July to November but there was evidence of a limited recovery by December 2020. The significant fall in the summer months may be due to COVID-19 travel restrictions which were announced by the Immigration Service Delivery of the Department of Justice and Equality in late March 2020, temporarily ceasing the processing of new visa applications due to a travel ban of non-EEA nationals from visa-required countries entering Ireland. The impact of COVID-19 also had a significant negative impact on the Irish economy which is likely to have driven down demand for employment permits in certain sectors such as accommodation, food, arts and entertainment.

²⁸ https://enterprise.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Permit-Types/



Figure 8.1 New Employment Permits Issued Monthly 2019 - 2020

Source: DETE

8.2 Overall Trends

New permits issued for critical skills accounted for over half (59%) of all new permits in 2020, with a further 34% for general permits and 5% for intra-company transfers. The only permit type to see an increase in the number of permits issued between 2019 and 2020 was critical skills, with 6% growth.



Figure 8.2 New Employment Permits by Type, 2019-2020

Source: DETE

8.3 Employment Permits by Sector

Figure 8.3 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 2020 however, the impact of COVID-19 restrictions affected certain sectors of the domestic economy causing possible job losses in areas such as accommodation, food, arts and entertainment. The number of permits issued in 2020 grew in only two sectors, the health sector which grew by 24% and industry which grew by 3%.

The ICT sector and health sector each accounted for 31% of the total new permits issued in 2020. Despite restrictions on new visa applications due to COVID-19 by the Department of Justice and Equality, new permits continued to be processed for critical skill permits such as healthcare professionals, ICT professionals, professional engineers etc. reflecting job opportunities and difficulties in filling these roles nationally continues despite the ongoing issues arising due to COVID-19.



Figure 8.3: New Employment Permits for Selected Sectors*, 2016-2020

Source: DETE

*In 2020, these six selected sectors account for 88% of all new permits issued.

8.4 Employment Permits by Occupation

Professional occupations accounted for the majority of new permits issued in each year between 2016 and 2020 (Figure 8.4). They also accounted for over two thirds (69%) 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 related primarily to the opening of the employment permit system to horticultural workers from May 2018, however new permits for these occupations which were predominantly general employment permits, decreased significantly in 2020. This may be due to the fact that by July 2020 employment permit quotas were filled for these permits. The increase in the number of new permits for operative roles between 2019 and 2020 relates primarily to meat processing operatives.



Figure 8.4 New Employment Permits by Broad Occupation, 2016-2020

Source: DETE

The type of employment permit issued varied across occupational group in 2020 (Figure 8.5). Over half (57%) of new permits issued for managers and almost three quarters (74%) of new permits issued for professionals were for critical skills permits, while the majority of new permits issued for administrative, skilled trades, personal services, sales, operatives and elementary occupations were general permits.



Figure 8.5 New Employment Permits by Permit Type, 2020

Source: DETE

Of those new permits issued for managers, 86% were for roles which offered a salary of €60,000 or above; 40% of permits issued for professionals were for a salary of €50,000 or above (Figure 8.6). Almost all new permits issued in operatives and elementary occupations had a salary of less than €30,000.



Figure 8.6 New Employment Permits by Occupation and Salary, 2020

Source: DETE

Of the new critical skills permits issued in 2020, over a third (37%) were for salaries of €30,000-€39,999 with a further 32% for salaries of €60,000 or above (Figure 8.7). Of the general permits issued, over a quarter (27%) were for salaries of less than €30,000.²⁹ From the 1st of January 2020, as advised by the Department of Enterprise Trade and Employment, the salary on the critical skills occupations list increased from €30,000 to €32,000 per annum and from €60,000 to €64,000 for all other occupations that are not on the critical skill list but are eligible for an employment permit.





Source: DETE

Managers

- Overall: new employment permits for managerial positions accounted for 2% of all permits issued in 2020
- Type: critical skills accounted for over a half (57%) of the new permits issued for this occupation, with a further 31% for intra-company transfers
- Salary: 89% 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 (27%), financial services (18%) and industry (18%)
- Nationality: a third (33%) of all permits issued for managers were for those originating from the USA with a further 18% of permits issued for those originating from India
- Occupations: new employment permits were most frequently issued for vice presidents/CEOs, directors and managers in financial services and IT.

Professionals

- Overall: new employment permits for professionals accounted for almost three quarters (73%) of total permits issued in 2020
- **Type**: almost three quarters (74%) were related to critical skills and a further 21% to general permits
- Salary: over half (57%) of new permits issued were for a salary of between €30,000 and €49,999
 with a further 40% with a salary of €50,000 or more

²⁹ While €30,000 is the stated minimum annual renumeration for general permits, exceptions apply as detailed at: <u>General Employment Permit - DETE (enterprise.gov.ie)</u>

- Sector: new permits were mainly issued for positions in the health (41%), IT (35%), and financial services sectors (8%)
- Nationality: almost two thirds (63%) of all new permits for professionals were issued to persons from India, Pakistan, the Philippines and Brazil
- **Occupations**: new employment permits were most frequently issued for
 - health: the majority of permits were issued for nurses, primarily staff nurses and medical doctors, including senior house officers and registrars (general and emergency medicine). There were further permits issued for medical specialists such as obstetrics & gynaecology, paediatrics, orthopaedics and anaesthesiology, emergency medicine and a small number of medial radiographers
 - IT: software engineers/developers, IT business analysts/project managers, security/test/network (analysts, engineers), architects (software, systems, technical, solutions), consultants (in SAP, cyber-security, CRM), systems engineers, data analysts/scientists, UX/UI designers
 - o financial: accountants, analysts (financial, risk, business, tax data), auditors
 - industry: engineers (e.g. process, design, automation, electrical, validation), scientists (including analytical chemists), quality assurance/quality control and regulatory professionals, business analysts
 - construction: civil engineers, project managers and other engineers (design and mechanical), quantity surveyors; 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 8% of total permits issued in 2020
- Type: at 47%, critical skills permits accounted for almost half the share of new permits issued followed by general employment permits, at 41%
- Salary: 43% of new permits issued had a salary of less than €40,000 with a further 44% with a salary of €50,000 or more
- Sector: over half (53%) of new permits issued were for the ICT sector, with a further 23% for arts, entertainment and other sector and 7% in financial services
- Nationality: persons from India, the USA and Brazil accounted for over a third (46%) 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
 - o other: financial analysts, technical support, animators, recruitment consultants, sports professionals.

Administrative and Secretarial

- Overall: with 24 permits, administrative positions accounted for less than 1% of total new permits issued in 2020
- **Type:** permits for this occupational group were primarily general permits (at 92%)
- Salary: over three quarters (83%) of new permits issued had a salary of less than €40,000
- Occupations: new employment permits were most frequently issued for administrative roles in transport and distribution.

Skilled Trades

- Overall: new employment permits issued for those in skilled trades accounted for 7% of total new permits issued in 2020
- **Type**: the majority (92%) of new permits issued were general employment permits

- Salary: over three quarters (88%) of permits issued were for employment with a salary of less than €40,000
- **Sector**: over half (57%) of all new permits issued were for the accommodation and food services sector, with a further 21% in construction and 9% in the agriculture sector
- Nationality: persons from China, Brazil and India accounted for almost half (48%) of all new permits issued for this occupational group
- Occupations: new permits were most frequently issued for
 - o chefs
 - o shuttering carpenters, drywall plasterers
 - o welders/fabricators.
 - o meat deboners.

Personal Services

- **Overall:** personal services accounted for less than 1% of total new permits issued in 2020
- Type: all new permits issued for this occupational group were general employment permits
- Salary: all new permits issued had a salary of less than €40,000
- Occupations: the majority of permits issued were 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 2020; permits were most frequently issued for customer service and sales support occupations within the general employment permits
- Salary: the majority (96%) of new permits issued had a salary of less than €40,000
- Sector: over two thirds of new permits issued were for the ICT sector

Operatives

- Overall: new employment permits issued for those in operative occupations accounted for 8% of total permits issued in 2020; the majority (99%) of permits issued for this occupational group were issued for general employment permits and almost all (96%) had a salary of less than €30,000
- Sector: the majority (95%) of new permits issued were for the agriculture sector
- Nationality: persons from Brazil, China, Kosovo and the Ukraine accounted for 85% of all new permits issued for this occupational group
- Occupations: new permits were most frequently issued for meat processing and general operatives and HGV drivers.

Elementary Occupations

Overall: with 52 permits, elementary occupations accounted for less than 1% of total new permits issued in 2020; the majority (92%) of which, were issued for general employment permits and almost all (94%) had a salary of less than €30,000. The majority of the new permits were issued for the agriculture sector in areas such as dairy farm workers.



Section 9 Job Vacancies

This section provides an analysis of job vacancy data in Ireland. It examines a number of indicators including

- CSO job vacancy numbers and rates by sector
- advertised job vacancies (two sources: OVATE (CEDEFOP) and jobsireland.ie (DSP) by occupation
- results of the SLMRU's own Recruitment Agency Survey.

9.1 CSO Vacancy Rates

The CSO's Earnings, Hours and Employment Costs Survey (EHECS) examines the number of open job vacancies businesses have at the end of each quarter. There were 16,800 vacancies reported in quarter 4 2020, representing a job vacancy rate³⁰ of 0.9%. Although the number of vacancies fell in 2020, the numbers reported in quarter 4 were the highest across the four quarters; the levels in quarter 4 2020 were broadly in line with the number of vacancies reported in quarter 4 2018 (Figure 9.1).



Figure 9.1 CSO Vacancies, Quarter 1 2018 - Quarter 4 2020

Source: CSO EHECS

Figure 9.2 presents the vacancy rates by sector for quarter 4 2019 and quarter 4 2020. Overall, there was no change in the vacancy rate between the two time periods, with both standing at 0.9%. In terms of the sectors which experienced a decline in the rate since quarter 4 2019, the largest declines occurred for the financial and professional activities sectors, by 0.9 and 0.8 percentage points respectively. The public administrative and defence sector experienced the largest increase (0.5 percentage points) and accounted for the largest vacancy rate in quarter 4 2020. Some sectors which have been significantly impacted by COVID-19, such as construction, wholesale and retail and the accommodation and food sectors saw little change in the overall vacancy rates.

³⁰ 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.



Figure 9.2 CSO Vacancy Rate by Sector, Quarter 4 2019 and Quarter 4 2020

Source: CSO EHECS

9.2 Advertised job vacancies

While not all jobs are advertised online, an analysis of online job vacancy adverts nonetheless provides an insight into the roles for which employers are currently seeking to fill, examining a range of variables, depending on the source, including occupation, job title, and skills.

CEDEFOP Vacancy Adverts (OVATE)

Over the last number of years, CEDEFOP has developed an online vacancy analysis tool for Europe (OVATE), a pan-European system for online job vacancy analysis.³¹ It collects data relating to vacancies advertised across a range of public (e.g. jobsireland.ie) and private (e.g. irishjobs.ie) online recruitment portals as well as job search engines (e.g. Monster). To minimise the occurrence of duplication, where the same job vacancy may be advertised on more than one portal, the vacancy data undergoes a de-duplication process.

³¹ CEDEFOP's skills intelligence based on online job vacancy adverts is being continuously improved. While the data undergo extensive cleaning and processing, sound analysis and contextualisation help avoid interpretation errors and biases. An analysis of Skills-OVATE data is best used as a complement to other data, including employment levels. Further information on using online job vacancy adverts for skills intelligence is available from CEDEFOP: *Online job vacancies and skills analysis* | *Cedefop (europa.eu)* or *Perspectives on policy and practice* | *Cedefop (europa.eu)*.

In 2020, the OVATE database held over a quarter of a million job vacancy adverts for posts in Ireland, approximately 26% fewer than the total number observed in 2019, the first full year for which data is available.

Figure 9.3 shows an index highlighting the relative changes in the number of online job vacancy adverts between quarter 1 2019 and quarter 4 2020 (base = quarter 1 2019). The index shows that while the number of job vacancy adverts in quarter 1 2020 was almost on a par with the level observed in quarter 1 2019, job vacancy adverts declined sharply in quarter 2 2020 (relative to the base). The decline is a reflection of the effects of the COVID-19 related measures on the labour market. Although the number of job vacancies has recovered somewhat since then, it remains almost 40% lower than in quarter 1 2019.





Source: CEDEFOP

Figure 9.4 shows the OVATE online job vacancies for Ireland, by broad occupational group.³² Where numbers are sufficiently large, occupational sub-groups are also shown. In 2020, online job vacancies captured through OVATE were concentrated in professional and associate professional occupations, making up approximately 60% of the total. In contrast, lower skilled occupational groups (elementary and operative occupations) made up less than 10% of the total.

³² Based on a map created by the Office of National Statistics (UK), the SLMRU has mapped OVATE data, which is categorised according to ISCO (International Standard Classification of Occupations) to SOC (Standard Occupation Classification) and is therefore compatible with other datasets used in the analysis of skills demand in Ireland.

Figure 9.4 OVATE online job vacancy adverts by broad occupational group, 2020

Professionals		Associate professionals			Managers		
			Science, en	g. & tech.			
		Business	Health	Other associate prof.			
Science, engineering & technology		Admin	Operatives	Skilled T	rades Food preparation	Sales	
			Process,	Metal, electric etc	Other (Agri, const, etc)		
	Health professionals		plant & machine operatives	Elementary			
Business, media & public service professionals	Teaching & education		Drivers				

Source: CEDEFOP

Figure 9.5 shows the percentage change in the number of job vacancy adverts by occupational sub-groups (based on SOC 2-digit categories³³) between 2019 and 2020. In relative terms, the number of job vacancy adverts grew for health professionals, caring personal service and health associate professionals, reflecting the demand for health workers (especially nurses and carers) during the pandemic. The strongest relative decline was observed for elementary service workers (e.g. waiting staff, cleaners), at 72%, although it should be borne in mind that elementary occupations make up a relatively small share of the total number of online vacancy adverts.

³³ Most sub-group occupation in Figure 9.5 are SOC 2010 two-digit groups, with the following exceptions: 'Other associate professionals' comprise protective services and culture media and sports occupations. Administrative occupations comprise administrative occupations and secretarial and related occupations. The 'other skilled trades' category includes construction trades (SOC53), agriculture trades (SOC 51), and textile, printing and other skilled trades (SOC 54), minus food preparation trades. (SOC 543). Food preparation trades (e.g. butchers, bakers, chefs, cooks etc) are presented separately.

Figure 9.5 Percentage change in job vacancy adverts by occupational sub-groups, 2019-2020



Source: CEDEFOP

Figure 9.6 shows the most frequently mentioned skills,³⁴ in online job vacancy adverts in quarter 4 2020. Combined, the skills shown in Figure 9.6 account for over 50% of all skill mentions. The most frequently occurring skill was personal skills and development (e.g. argumentation, presentation, communication skills, etc), making up more than 6% of all skill mentions; this was followed by planning and scheduling events/activities, adapting to change, and working in teams, each making up between 4% and 5% of all skill mentions.

³⁴ In OVATE skills are classified according to ESCO. ESCO is a classification of European skills/competencies, qualifications and occupations. There are almost 13,5000 concepts in the skills/competences pillar of the ESCO classification. These concepts can be categorised into one of 24 subclassifications, spanning, attitudes and values, knowledge, languages, and skills. The analysis presented in Figure 9.6 is based on ESCO Skills Level 3. The subsequent sections, providing an occupational analysis of online job vacancy adverts, summarise skills first by ESCO Skills Level 1, with additional information from ESCO Skills Level 3.

	work in teams		management & admin		use digital tools for collaboration & productivity			
personal skills & dev.	accessing & analysing digital	performing general admin tasks		software dev analysis	re dev & alysis re		assume responsibility	
planning & scheduling	wholesale and retail sales			marketing & advertising	соо	rdinate	complying	
	Total Salos						ivities with legal & with legal & organisatio hers guidelines	
adapt to change	developing solutions	demoi enthu	nstrate siasm	cope with pressure	leading and motivating		nd g	

Figure 9.6: Most frequently mentioned skills in online job vacancy adverts, quarter 4 2020

Source: CEDEFOP

Professional occupations made up approximately 40% of all vacancy adverts in 2020. Approximately two thirds of professional vacancy adverts were for ICT or engineering roles. The highest numbers were for

- ICT professionals, mostly software developers or systems analysts
- engineering professionals (e.g. electrical/electronic, industrial/production, mechanical engineers, civil engineers)
- research and development managers.

Other frequently occurring occupations included accountants, nurses and advertising/marketing professionals, which combined made up almost a fifth (18%) of vacancy adverts for professional occupations.

Skills: the top skills/competences mentioned in posts for professional occupations included

- communication, collaboration and creativity skills, such as teamwork, problem solving, creative and analytical thinking
- management skills, such as leadership, using office systems
- ICT skills, such as programming, ICT business systems and online analytical processing.

Compared to 2019 the largest absolute growth^{*} was for nurses and midwives, followed by engineering professionals n.e.c. (e.g. quality control engineers); in relative terms, online job vacancy adverts for these occupations grew by 21% and 5% respectively.

*Based on occupations that comprised at least **1.5%** of the total number of **professional** vacancies advertised in 2020.

Associate professional occupations made up almost a fifth of all job vacancy adverts in 2020. Of these, the highest numbers were for

- business related roles (e.g. sales executives and financial advisers/analysts, HR associate professionals), making up almost a half of all vacancy adverts in this occupational group
- science, engineering and technology (e.g. ICT technicians, civil engineering technicians, draughtspersons), making up nearly one third of associate professional adverts.

Skills: the top skills/competences mentioned in posts for professional occupations included

- communication, collaboration and creativity (e.g. teamwork, problem solving, and co-ordinating with others)
- management skills (e.g. planning and scheduling events/activities, performing admin tasks, leading and motivating)
- attitudes and values (e.g. adapt to change, responsibility, and tolerate stress).

Compared to 2019, despite a 26% decline in posts for associate professional jobs, the number of online job vacancies advertised for medical (e.g. lab) technicians grew by 18% and those for health/welfare associate professionals n.e.c by 10%. The strongest decrease, at 44%, was for human resource staff.

*Based on occupations that comprised 1.5% of the vacancies for associate professional occupations advertised in 2020.

Manager occupations comprised approximately 12% of job vacancy adverts in 2020. The largest share of managerial adverts was for

- sales & marketing managers (16% of all managerial posts)
- retail and wholesale trade managers (12%)
- ICT managers, health service managers, and financial managers, combined accounting for a quarter of all managerial online job vacancy adverts.

Skills: the top skills/competences mentioned in posts for managerial occupations included

- management skills (e.g. planning and scheduling events/activities, leading and motivating, supervising teams)
- business knowledge (e.g. management and administration, marketing and advertising, sales)
- communication, collaboration and creativity skills (e.g. co-ordinating with others, developing solutions, working in teams, developing professional relationships or networks).

When compared to 2019, posts for managerial occupations declined by 28%; nonetheless, the number of vacancies advertised for sales and marketing managers grew by approximately a quarter, while those for health services managers grew by nearly a third. The largest relative fall was for restaurant managers, where the number of job vacancies advertised declined by more than a half (53%).

*Based on occupations that comprised **1.5%** of the vacancies advertised for managers in 2020.

Administrative occupations made up approximately 8% of job vacancy adverts in 2020. The highest number of administrative vacancy adverts were for personal assistants and other secretaries, government administrative occupations, and book-keepers.

Skills: the top 3 skills mentioned in posts for administrative occupations included

communication, collaboration and creativity skills (e.g. teamwork, present information, problem solving)

- management skills (e.g. performing general admin tasks, planning and scheduling events/activities, identifying opportunities)
- attitudes (e.g. adapt to change, tolerate stress, show responsibility).

When compared to 2019, vacancy adverts for administrative roles declined by nearly two fifths.

Skilled trades occupations accounted for approximately 5% of the total online job vacancy adverts in 2020. Of these,

- almost one half were for skilled metal, electrical and electronic trades (e.g. vehicle mechanics and electricians)
- food preparation trades (e.g. chefs, cooks) made up 30% of skilled trades vacancy adverts.

Skills: the top skills/competences mentioned in posts for skilled trades occupations included

- attitudes (e.g. adapt to change, apply quality standards, demonstrate enthusiasm)
- communication, collaboration and creativity skills (e.g. teamwork, problem solving, presenting general information)
- engineering, etc. knowledge (e.g. engineering, electricity and energy, food processing)
- management skills (e.g. planning and scheduling events/activities, leading and motivating, assigning work to others).

When compared to 2019, the strongest absolute decline was for food preparation trades, where the number of job vacancy adverts fell by more than a third. The largest relative decrease, at -45%, was for skilled metal, electrical and electronic trades supervisors (e.g. manufacturing supervisors).

Personal and caring services occupations accounted for approximately 3% of all job vacancy adverts in 2020. Of these, the largest numbers were for

- carers (e.g. health care assistants and home carers), which made up two fifths
- childcare workers and educational support assistants, which, combined, made up 15% of all personal services vacancies.

Skills: the top skills mentioned in posts for personal and caring services occupations included

- attitudes (e.g. adapt to change, apply quality standards, assume responsibility)
- communication, collaboration and creativity skills (e.g. teamwork)
- generic knowledge (e.g. personal development skills)
- management skills (e.g. planning and scheduling events/activities).

Compared to 2019, the largest absolute growth amongst personal and caring services occupations was for health care assistants (+52%); the largest relative growth^{*}, however, was for caretakers, which rose by more than 80%. In contrast, the strongest decline^{*} was observed for posts relating to travel agents (-65%), although this occupation represents a small share of the total number of online job vacancies and should be interpreted with caution.

*Based on occupations that comprised at least **1.5%** of the total number of caring and personal service vacancies advertised in 2020.

Sales occupations accounted for 3% of all job vacancies advertised online in 2020. Of these, the occupations with the highest numbers were

- sales and retail sales assistants
- contact centre roles (e.g. telephone sales and customer service)
- customer service occupations, n.e.c.

Skills: the top skills mentioned in relation to sales vacancy adverts were

- communication, collaboration and creativity (teamworking, selling and promoting products/services, problem solving)
- attitudes (adapt to change, demonstrate enthusiasm, cope with pressure, assume responsibility)
- business knowledge (sales, marketing, management/admin (including customer relationship management)).

When compared to 2019, vacancy adverts for sales roles declined by 30%. All sales related occupations observed declines in the number of vacancy adverts.

Operative occupations made up 6% of job vacancy adverts in 2020. Of these, four fifths were for process, plant and machine operatives, with a further 8% for HGV and 10% for forklift drivers.

Skills: the top skills mentioned in association with operative occupations include

- communication, collaboration and creativity (teamwork, problem solving)
- attitudes (adapt to change, apply quality standards, assume responsibility)
- management skills (planning and scheduling events/activities, including adjusting priorities)

When compared to 2019, adverts for operative vacancies fell by 16%; the largest relative decline (-35%) was for process operatives. In contrast, there were increases for adverts related to construction operatives and forklift drivers, representing growth of 3% and 19% respectively.

Elementary occupations accounted for 4% of job vacancy adverts in 2020.

- Over a third of job vacancy adverts for this occupational group were for food services (e.g. bar staff, waiters and catering assistants).
- Elementary storage occupations made up a further 15%, followed by cleaning occupations at 13%.

Skills: the top skills/competences mentioned in relation to elementary occupations included

- attitudes (adapt to change, cope with pressure, show responsibility)
- communication, collaboration and creativity (team & shift work, present general information/facts)
- handling and moving skills (loading/unloading goods, cleaning of buildings, follow safety standards, follow company standards).

When compared to 2019, job vacancy adverts for elementary occupations declined by more than two thirds. The decrease was even stronger, at 90%, for bar and waiting staff, followed by a 37% decline in the number of adverts for kitchen and catering assistants.

*Based on occupations that comprised **1.5%** of the total number of vacancies advertised in 2020.
DSP JobsIreland.ie Vacancy Adverts

DSP Jobs Ireland vacancies are a subset of OVATE data. However, they contain additional detail in terms of job title that offers useful insights into the type or roles employers are recruiting through this portal. The vacancies detailed in Figure 9.7 below relate to paid positions only.

ln 2020,

- Managers accounted for 2% of vacancies with job titles relating primarily to managers in retail and hospitality
- Professionals accounted for 7% of vacancies with job titles including lecturers, engineers, nurses, ICT specialists, and accountants
- Associate professional vacancies (6% of total) included interpreters, community employment supervisors, business sales executives, digital marketing specialists and sales account managers
- Administrative vacancies (7% of total) were primarily related to temporary clerical officer roles in the civil service
- Skilled trades vacancies (15% of total) were primarily for chefs but also for carpenters, welders, mechanics, electricians, plasterers, and spray painters
- Personal services vacancies (14% of total) were mainly for healthcare assistants and care workers, with
 a small share for early years teachers along with hairdressers, barbers and spa therapists
- Sales roles accounted for 8% of vacancies, in roles such as sales assistants, stocktakers, and call centre/customer service agents
- Operative roles accounted for a quarter of all vacancies advertised, with the majority relating to meat processing operatives; there was also a small share of vacancies for drivers (HGV, forklift, van, delivery, bus, machine) and traffic management operatives
- Elementary occupations (15% of total) were primarily for agricultural roles (horticultural/dairy), but also for warehouse operatives, security officers, hospitality roles (kitchen assistants, waiters, bar staff) and cleaners.

Figure 9.7 DSP Jobs Ireland vacancies (paid positions only) by occupational group and key job titles, 2020

Operatives							Skille	d tra	des								
						HG		ers									
						Var	n/deliv drivers	very S	Chefs								
						Ot	ther era	Fork lift driver				Mech	anic	cs	Eleo	ctricia	ans
									Carpent	ers (inc				Spray painters		Cl oper	NC rators
						Tri n opi	affic ngt ierat	Bus driver	shutte	ering)		Othe skille trade	r d s	Priekl	She	et	Pipe
						Ger	neral							Dhum	mete		
						ope Ma	erat achi							Plum Windo			
Meat processing operatives						dri Sale			Welders			Plaste	er	fitters			
Lionically						Suit								Torreat			
											Lecturers			Engineers			
	Ki Security officers as			Kitcł assist	hen tants												
						Sales	Sales assistants		Stockt		akers	Nurses		Othe		sr	ICT peciali
													Т			Pro	oiect
Horticulture operatives	Cleaners		Othe elemer	er ntary	Waiting staff							C	A engine	ers	mar	agers	
						Call c	entre a	agents	Myste shop	ery ⊃er №	lerch	Accou	te	Other eachi	Oth healt	er h	Legal
				Dairy assis	/ farm stants	Custo	more	nico		pr	=ood omoti						
Warehouse operatives	Grou	Indworkers	General ops	Car valete	Bar er staff	cusio	agents		Reta super	ul ∨i…		Instruc	d	oftwar levelo		C	
Personal services						Adn	nin c	occup	ations	5	Ass	ociate	e p	rofess	ion	als	
											Interp	oreters		¢	CE sup	pervis	ors
												0	ther				6-1
											Busir sale	ness as es F	soc. prof	. ma sp	arketin ecialis	a t	bales ccou mgrs
											execu	utiv	IT	ort HP			
												ai	nalys	s rol			
		Care worker	′S			Civil			Othe techni		er (nici ar)the nalys	r 5				
		Early	Hair barb	Work riders	Lite guard	Civits	service	clencal	oncers		Mai	nagers			Hotel	,	
Healthcare assistants		years teachers	spa thera		r	Othea	admin	Recep	oti		Othe	r mgrs		ore grs		F	

Source: DSP Jobs Ireland

9.3 Recruitment Agency Survey (October 2020)

The SLMRU in SOLAS conducts a recruitment agency to gather recruitment agencies' views on vacancies which in their experience are proving difficult-to-fill. Table 9.1 refers to the roles that were most frequently identified as difficult-to-fill when agencies were surveyed in October 2020.

	— Production managers (MedTech/biopharma)					
Managers	 Project/site managers in construction 					
	— Logistics, transport managers, procurement (mid-management)					
	— Quality assurance, quality control managers					
Professionals	 Software developers: web, Python, UX/UI, cloud (AZURE/AWS), mobile, full stack, front end, back end, JavaScript, Scala, react, angular JS, C++, .Net, PHP, Ruby on Rails, Hadoop IT engineers (automation, DevOps, data, test, security, Blockchain) Other IT: data architects, data scientists, big data analysts (e.g. Hadoop, Pig, Cassandra, SQL), IT project managers, solution payment architects Engineering: process, design, quality control/quality assurance (including standards, compliance & regulatory affairs) EHS (environmental health & safety), automation (including RPA), validation, chemical, manufacturing, mechanical, electrical, R&D, IT managers 					
	 Business & finance: tax specialists, accountants (cost, financial, practice, revenue), project managers 					
	— Quantity surveyors, site/civil engineers					
	 Nurses (staff, oncology, cardiac, intensive care/theatre, mental health, paediatrics, general, cardiac cath lab); medical practitioners (GPs), clinical nurse managers 					
	 — Sales and marketing: account managers 					
Accesiet	— Supply chain (junior roles), planners/forecasting (junior/mid-management roles)					
professionals	— Building estimators, BIM coordinators					
	- IT technicians: tech support (with language skills, especially German, Nordic and French)					
	— Other technicians: (maintenance, quality, manufacturing) technician					
Administrative	— Accounts payable (with languages), payroll, general administration					
	 Procurement/supply chain/logistics administrative roles (many junior roles), freight forwarders, custom clearance 					
	— Welders: TIG, orbital, ARC					
Skilled trades	 Construction: steel erectors/fixers, electricians, curtain wallers, carpenters (niche – shuttering), fitters & glaziers, maintenance technicians, mechanics 					
	— Meat deboners					
Personal services	— Carers: homecare roles/nursing home care roles					
Sales & customer service	— Customer service representatives, telesales, sales reps (pharma),					
Operatives and	— Drivers: artic, HGV (E+, CI license), forklift drivers, reach, crane, site dump, teleporters operator					
Elementary	— Operatives (manufacturing, process, packaging, warehouse)					
	— Construction: scaffolders, pipe layers, ground workers					

Table 9.1 Summary of main job titles identified as difficult-to-fill, October 2020

Source: Recruitment Agency Survey, October 2020



Section 10 Occupational Employment Profiles

This section provides a statistical analysis of employment at occupational level. Employment profiles are provided for over 95 occupations.³⁵ 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 2020
- Employment growth: the annualised rate of employment growth for the period 2015-2020
- Females: the percentage of females employed in an occupation (based on quarter 4 2020 data from the LFS)
- Full-time: the percentage of persons who work full-time in an occupation (based on quarter 4 2020 data from the LFS)
- Unemployment rate: the numbers of unemployed persons who stated their previous occupation were too small to report in quarter 4 2020 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 2020 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 2020 data from the LFS)
- Third level qualifications: the percentage of persons who have attained a third level qualification (based on quarter 4 2020 data from the LFS)
- Employment permits: issued to non-EEA nationals in 2020. This is an indicator of the demand for skills that could not be met from domestic or EEA sources. (Based on 2020 data from the Department of Enterprise, Trade and Employment)

³⁵ Appendix B details the list of occupations included in each category

 Recruitment Agency Survey: presents the results of the SLMRU (SOLAS) Recruitment Agency Survey conducted in October 2020. The occupations with mentions of difficult-to-fill vacancies reported by recruitment agencies are indicated by an 'X'.

The Skills for Growth data, where employers, working directly with Regional Skills Fora managers throughout 2020 identify job vacancies which in their experience are proving 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.

For the outlooks across occupations, consideration is given to the SLMRU report on the future of work and the occupations expected to be most at risk of automation.³⁶ Many of the jobs that have been significantly impacted by COVID-19 are also those associated with a potentially high risk of automation, which may have implications for the extent of the recovery for certain occupations.

Although shortages have been identified for some occupations in this edition, these are primarily limited to roles in sectors which have been largely unaffected by COVID-19 restrictions. As occupational data is not available for those in receipt of income support payments, it is difficult to assess the available supply of skills and/or labour in sectors which have been particularly impacted by COVID-19 such as accommodation and food, wholesale and retail, construction and administrative support services. In addition, those in receipt of income support payments, in particular the EWSS, are often classified as employed in the CSO's Labour Force Survey; the true extent of the employment change at occupational level will not be fully apparent until the income support payments are removed and restrictions in the economy have ceased.

³⁶ https://www.solas.ie/f/70398/x/56f07c3f44/future-of-jobs-in-ireland_report.pdf

10.1 Science & Engineering Occupations

Overall employment: approximately 99,200 persons (70% male) were employed in the selected science and engineering occupations, representing 4.3% of the national workforce.

- Sector: 53% of overall employment was concentrated in industry, followed by 17% in professional service activities
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 22,500 (5.3% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for other engineering professionals (11.6%) during the period
- Age: the 25-54 age group accounted for the majority of those employed in these occupations, at 82%. The share of persons employed aged 55 years and over was 13%, below the national average of 19%
- **Education**: the share who had attained third level qualifications (79%) was significantly above the national average share (51%), while a further 15% had attained a higher secondary/FET qualification
- Full-time/part-time: 95% of those employed in science and engineering occupations were in full-time employment
- Nationality: the share of non-Irish workers (15%) was slightly below that of the national average of 17%, while 85% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below.

Employment in this occupational group grew strongly over the five-year period with employment continuing to grow in 2020. Growth in employment was particularly driven by high-tech manufacturing, including the pharma segment. Strong export growth in pharmaceutical products in 2020 was primarily driven by COVID-19 products.³⁷ As such, employment may continue to grow in future years for these occupations, albeit at a more moderate pace than that observed in 2020. Demand for many of these roles continued to be evident during 2020 through the employment permit data, vacancy data and appearing frequently in the Recruitment Agency Survey and the Skills for Growth data as roles which are proving difficult-to-fill.

Provision from the third level education system remains strong overall: in 2019, there were over 12,800 science and engineering graduates from the third level education system (2,000 more than in 2015). However, the skillsets (critical analysis, problem solving, etc.) of scientists and engineers are highly sought after in a range of other occupations (e.g. public administration professionals, teachers, among others).

The shift towards a low carbon economy is expected to result in a demand for certain skills amongst scientists (e.g. ecology, environmental, conservation), electrical engineers (e.g. renewable and high voltage) and technicians (e.g. solar/wind), in addition to their existing skills profiles. Future demand for these occupations is anticipated to be strong, with shortages likely to continue. The shortages are expected to be small in number and, for some, will relate to those with experience in niche areas.

Occupation	Economic summary
Scientists Shortage: Analytical chemists, medical scientists	Employment grew strongly for this occupation over the five-year period, with an increase of 8% in the year since 2019. Employment permits issued in 2020 were across many scientific fields with analytical chemists and medical scientists the most frequently mentioned. While science roles accounted for a relatively small share of the job vacancy data, vacancies continued to arise for biologists and chemists. Education provision for scientists remained strong in 2019, with almost 5,500 graduates at levels 8-10 (a fifth more than in 2015). Of these, almost 1,600 graduates were in the areas of pharma/biopharma, chemistry, biochemistry and medical science, a 34% increase when compared to 2015.
	roles that require a high level of experience and/or in niche areas.
Production, design & QC engineers	The strong employment growth over the five-year period was primarily attributed to increases occurring since 2018. The number of new employment permits has also increased with 600 new permits issued in 2020. These primarily related to process, quality (QA/QC) and design engineers. Mentions of vacancies that were difficult-to-fill in the Recruitment Agency Survey related to process (including lean six sigma), manufacturing, quality, regulatory and design engineers. These roles were
Shortage: Design, process and quality control/	also cited as difficult-to-fill by employers in the Skills for Growth data, with mentions across a range of sectors (e.g. food processing, professional services). Online job vacancies related primarily to production/process engineers. Supply from the education/training system was broadly in line with preceding years, with approximately 900 graduates at levels 8-10 in 2019.
assurance engineer	Although COVID-19 had an impact on industrial employment, with a number of workers in receipt of income support payments, these engineers do not appear to have been affected, since employment in this occupation grew in 2020 and demand for these skills persisted. Future growth is likely as these engineers fulfil critical roles across a wide range of industries (e.g. regulatory standards, manufacturing operations) with shortages of those with relevant experience likely to occur.

³⁷ https://www.gov.ie/en/publication/20b2f-economic-insights-economic-statistics-during-covid-19/

Other engineering professionals (e.g. mechanical, electrical and electronic engineers) Shortage: Engineers (mechanical, electrical, automation, validation)	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; employment declined between 2018 and 2019 and remained unchanged in 2020. Over 400 new employment permits were issued for this occupation in 2020 for engineering roles across a number of areas (mechanical, electrical, field service, automation and validation). Vacancies for these engineers were frequently mentioned as difficult-to-fill in both the Recruitment Agency Survey and by employers in the Skills for Growth data. Roles included engineers in automation, electrical, mechanical, validation, manufacturing, and EHS (Environmental Health and Safety). Many roles required specific software or industry (e.g. construction) experience. Vacancies also occurred in 2020 across this range of engineering roles. There were over 1,300 third level graduates at levels 8-10 in 2019, down slightly on the preceding year, but in line with earlier years.
Science & engineering technicians	Overall employment in this occupation saw little growth over the five-year period; employment grew in 2020 following a decline in 2019, with numbers returning to 2017 levels. A small number of new employment permits were issued in 2020 for manufacturing and quality technicians in both industry and the ICT sector. This occupation was cited in both the Recruitment Agency Survey and by employers in the Skills for Growth data as difficult to fill, where demand was for manufacturing, QA and design technicians across a range of manufacturing sectors. There was also a high volume of job vacancies for science and engineering technicians. While demand was evident in 2020, any future growth for these roles will be dependent on the performance of the manufacturing sector.
Production managers in manufacturing	Employment growth over the five-year period was below the national average, with a fall in employment in the year to 2020. There were a small number of new employment permits issued for this occupation in 2020. At 56%, these roles had the lowest share with third level qualifications across all science and engineering occupations indicating the importance of experience in these managerial positions. With employment concentrated primarily in industry, the outlook for this occupation post-COVID-19 will be dependent on a return to full activity in this sector.

10.2 ICT Occupations

Overall employment: approximately 98,300 persons (80% male) were employed in the selected ICT occupations, representing 4.3% of the national workforce.

- Sector: 62% of overall employment was concentrated in the ICT sector, with a further 11% employed in industry and 6% in financial activities
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 30,200 (7.6% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for ICT professionals n.e.c. (10.8%) during the period
- Age: the 25-54 year age group accounted for the majority of persons employed, at 89%. The share
 of workers aged 55 and over was 7%, well below the national average of 19%
- Education: the share who had attained third level qualifications (89%) was significantly above the
 national average share (51%), while a further 9% had attained a higher secondary/FET qualification
- Full-time/part-time: of those employed in ICT occupations, 96% were in full-time positions
- Nationality: the share of non-Irish workers was double that of the national average of 17%, while 65% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Between 2015 and 2020, overall employment increased by 30,200 (7.6% on average annually compared to 2.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

ICT occupations had both the highest annual average growth over the five-year period compared to all other occupational groups along with the highest growth since 2019. The growth was driven primarily by those employed as programmers and software developers. With over 3,500 new employment permits issued, these occupations had the second highest share in 2020, after healthcare occupations. Supply from the education/training system has been growing steadily over the last number of years, with almost 7,000 graduates emerging from the third level system in 2019.

While some employed in the ICT sector have been in receipt of income support payments since the onset of COVID-19, this does not appear to have impacted those in ICT-specific occupations. As such, the growth seen in recent years is likely to be sustained with potential shortages continuing to occur. With the significant take-up of working from home amongst those in ICT occupations,³⁸ accessing skills from outside Ireland without the requirement to be located here may alleviate some of the issues in sourcing suitably qualified staff.

Occupation	Economic summary
ICT specialist & project managers Shortage: IT product/ project managers	Employment growth was above the national average for this occupational group over the five-year period, although it was the lowest growth rate across all ICT occupations. New employment permits issued in 2020 related primarily to product/project/program managers. This occupation has been cited as difficult-to-fill by employers in the Skills for Growth data, particularly for those outside the ICT sector (e.g. manufacturing). Although shortages continue to arise for this occupation, the volume is likely to be relatively small compared with the other IT professional roles.
Programmers & software developers Shortage:	Employment for programmers and developers experienced strong employment growth over the five-year period, with an additional 6,000 persons employed since 2019. Despite the impact of COVID-19 in the economy, demand for these occupations continued to be strong in 2020. Over 1,600 new employment permits were issued and there were frequent mentions in the Recruitment Agency Survey of difficult-to-fill vacancies. They were also frequently cited as difficult-to-fill by employers in the Skills for Growth data notably for those with knowledge of Java. A high volume of vacancies also continued in 2020, with roles primarily in the ICT and professional services sectors, followed by the finance sector.
developers/ engineers	The sustained employment growth, not only in the ICT sector, but across many sectors, along with the rapid pace of change in this occupation, are likely to lead to a continued issue in sourcing suitably qualified and experienced candidates for these roles.
ICT profs. n.e.c. Shortage: IT analysts/ engineers	Employment fell sharply in 2018, potentially related to changes in the LFS in quarter 3 2017, but recovered strongly in the subsequent years, particularly evident in 2020. There was a high number of new employment permits issued in 2020 (primarily for systems and security analysts/engineers, network engineers and IT architects) and vacancies were frequently mentioned as difficult-to-fill in the Recruitment Agency Survey (e.g. front-end/mobile developers, IT security). A small number of employers cited vacancies for software testers and those with Al/cyber security skills as being difficult-to-fill in the Skills for Growth data. There was also a high volume of online job vacancies for systems analysts and database/network professionals in 2020.
IT technicians Shortage: IT technicians with foreign languages	Although employment grew above the national average over the five-year period for IT technicians, the growth since 2019 was the lowest across all ICT occupations. Over 100 new employment permits were issued in 2020, primarily related to technical support. There was a small number of mentions in the Recruitment Agency Survey, relating to technical support roles with languages (such as German and French). Although shortages are occurring for this occupation, they are likely to be smaller in number and specific to those working in the ICT sector and with foreign languages.

*For detailed table see Appendix A

³⁸ https://www.solas.ie/f/70398/x/0313655eeb/summer-skills-bulletin-2021.pdf

10.3 Business & Financial Occupations

Overall employment: approximately 228,200 persons (57% female) were employed in the selected business and financial occupations, representing 9.9% 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 18% in professional services and 11% in industry
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 42,400 (4.2% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for management consultants, etc. (19%) during the period
- Age: the 25-54 age group accounted for the majority of persons employed, at 80%. The share aged 55 and over was 15%, below the national average of 19%
- Education: the share with third level qualifications (80%) was significantly above the national average share (51%), while a further 16% had attained a higher secondary/FET qualification
- Full-time/part-time: of those employed in business and financial occupations, 88% were in fulltime employment
- Nationality: the share of non-Irish workers was below the national average of 17%, while 85% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Between 2015 and 2020, overall employment increased by 42,400 (4.2% on average annually compared to 2.2% nationally).

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

Employment increased in the overall business and financial occupational group in the year since 2019 despite the onset of COVID-19. Although a number of those in the financial sector were in receipt of income support payments in 2020, this does not appear to have impacted on these occupations. While the highest share of employment was concentrated in the financial sector, these skills are also required across a range of other economic sectors.

Supply from business and finance related fields of education has continued to grow, with over 24,000 persons gaining third level and/or professional qualifications in 2019.

The financial sector has been identified by the ESRI as a sector which is expected to be significantly impacted by Brexit, although this has yet to be evident from the employment data.³⁹ The closure of retail banks/branches announced in 2021 (e.g. AIB, BOI, KBC and Ulster Bank) will have an impact on staffing requirements in future years. The future demand for skills will also be impacted by changes in the nature of the tasks required to fulfil these financial 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 Shortage: Accountants with industry specific experience	Despite a fall in employment over the five-year period, employment grew strongly in the year since 2019. Over 200 new employment permits were issued, primarily for roles in the financial sector. Vacancies for accountants in the financial sector were also cited as difficult-to-fill in the Recruitment Agency Survey. Demand exists for those with specific industry experience (particularly in the financial sector). Replacement demand alone for such a large occupation will ensure job opportunities will continue even without any significant employment growth.
Mgt. consultants, business. 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 LFS methodology in 2017 (resulting in a significant increase for business project management professionals). Almost 700 new employment permits were issued for this occupation in 2020 for roles including business/finance analysts and project managers. Although these occupations appear frequently in the employment permits data, there is no evidence at present to indicate that vacancies for these roles are difficult-to-fill.
Actuaries, economists & statisticians; other business profs.	Employment grew strongly for this occupation over the five-year period, although this in part relates to changes in the LFS in quarter 3 2017. Employment permits issued in 2020 related to roles including actuarial analysts and data scientists. Vacancies for data scientists were also cited as difficult to fill in the Recruitment Agency Survey, relating to roles in the ICT sector. While demand for these roles was evident in 2020, the numbers involved are likely to be small. Increasing provision in the education sector should be sufficient to meet demand in the short-term.
Financial analysts and insurance underwriters	Employment growth was above the national average over the five-year period for this occupation, with employment growing strongly since 2019. A small number of new employment permits were issued in 2020 relating primarily to financial analysts. Despite strong employment growth, there is no evidence at present to indicate that vacancies for these roles are difficult to fill.
Financial accounts managers	Employment growth for this occupation was below the national average for the five-year period, although employment grew strongly in the year to 2020. The data provides no evidence of issues in relation to this occupation.
Other business associate profs. (e.g. accounting technicians, estimators, valuers)	This occupation had strong employment growth over the five-year period, although little growth was observed since 2019. With less than a third of those employed in this occupation employed in the financial sector, employment was spread across most economic sectors. The new employment permits issued for this occupation were for various analyst and financial roles. Vacancies for data analysts were cited in the Recruitment Agency Survey as difficult-to-fill.

³⁹ https://www.esri.ie/publications/examination-of-the-sectoral-overlap-of-covid-19-and-brexit-shocks

	While data analysts were in demand in 2020, there appears to be a shift towards data analytics emerging as a component of the required skills set sought by employers for existing occupations, such as regulatory or project managers, which may result in a reduced demand in future years for specific data analysts.
Financial managers & directors	Employment growth over the five-year period for this occupation was below the national average, although growth was strong in 2020. New employment permits issued in 2020 related primarily to financial managers and directors across a number of sectors, but primarily in financial activities and ICT. The restructuring of the banking sector is expected to have an impact on the demand for this occupation, although demand in other areas (both financial and other) may offset any potential declines.
Financial admin.	Employment in this occupation has grown strongly since 2018, although recent job hires in 2020 exceeded employment growth indicating that job churn is a factor for these roles. Difficult-to-fill vacancies noted in the Recruitment Agency Survey related to payroll and accounts payable roles. This occupation is at high risk of automation and any reduction in the workforce in the retail banking sector will likely have a significant impact on these roles. However, those employed in this occupation work across a wide range of sectors, and given the size of the occupation, job opportunities are likely to continue to arise due to replacement demand alone.
HR managers and officers	Despite fluctuations in the intervening years, employment numbers recovered strongly in 2020, with most of the growth in the most recent year relating to HR officer roles. New employment permits issued in 2020 related to various HR roles including recruitment consultants and HR business partners, half of which were for roles based in the ICT sector. This role also featured strongly in the online job vacancy data for associate professionals. Future demand for these roles is likely to be linked to the way in which the workforce adjusts to the changes in work practices as a result COVID-19 (e.g. hybrid or remote working) and the overall recovery in the economy.

10.4 Healthcare* Occupations

Overall employment: approximately 124,000 persons (77% female) were employed in the selected healthcare occupations, representing 5.4% of the national workforce.

- Sector: 87% of overall employment was concentrated in the health sector
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 8,600 (1.5% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for therapy professionals (7.0%) during the period
- Age: the 25-54 year age group accounted for the majority of persons employed, at 75%. The share of workers aged 55 years and over was on par with the national average of 19%
- Education: those who had attained third level qualifications (93%) was significantly above the
 national average share (51%), while 5% had attained a higher secondary/FET qualification
- Full-time/part-time: approximately 76% of healthcare 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.

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



Numbers employed, 2020 (annual average)





Between 2015 and 2020, overall employment increased by 8,600 (1.5% on average annually compared to 2.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Despite considerable demand for those employed in healthcare occupations as a result of COVID-19, overall employment growth for this group was below the national average for the period 2015-2020. However, demand has been evident, with these occupations accounting for 30% of all new employment permits issued in 2020 (primarily related to nurses and doctors). A recently announced expansion of the occupations in the employment permit system encompasses further therapists and healthcare professional roles.⁴⁰ It is also the intention of the HSE to create 16,000 whole time equivalent (WTE) posts in 2021.⁴¹ However, despite this demand, at least 5,000 persons employed in the health sector were in receipt of income support payments (PUP and EWSS combined) in June 2021; without any occupational breakdown available it is not possible to determine who this relates to although it is likely that the majority are based outside the hospital/nursing home setting. Due to Ireland's ageing demographics demand for health services is expected to continue to grow in future years.

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 Shortage: Medical practitioners	Demand for medical practitioners is in part dependent on public sector recruitment. Although employment growth was low for this occupation, the high number of employment permits issued indicates that employers are having difficulty recruiting doctors across all areas from EEA countries.
Therapy profs.	Employment growth for therapy professionals was well above the five-year national average. A recent HSE recruitment campaign included roles for occupational therapists, speech and language therapists and physiotherapists. These occupations have also been recently added to the employment permits eligibility list due to issues with attracting talent from within the EEA area.
Nurses & midwives Shortage: Nurses	Despite no overall employment growth over the five-year period, demand for nurses is evident in the high number of employment permits issued and a high volume of job posts advertised during 2020. The HSE are actively recruiting in this area with an additional 1,000 WTE posts expected in 2021. 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)	Employment growth was on a par with the national average for these occupations. Although employment in the individual occupations included in this category is too small for detailed analysis, demand is particularly strong, as evidenced in the growth in vacancy notifications and volume of employment permits for occupations such as radiographers, health service managers and directors. In addition, dieticians have been identified as difficult to source from within the EEA area, and as such can now qualify for the critical skills employment permit.
Health associate profs.	Employment growth was on a par with the national average for this group. Employment numbers in these occupations were too small to identify any trends at an individual level. The other data sources (e.g. vacancies, employment permits) do not point to any issues in relation to supply and demand for health associate professional occupations. However, those working outside of the hospital setting, such as dental technicians/nurses, acupuncturists and sports therapists, may have seen their employment impacted by the economic restrictions resulting from the pandemic.

⁴⁰ https://enterprise.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Latest-updates/

⁴¹ https://www.hse.ie/eng/services/publications/serviceplans/national-service-plan-2021.pdf

10.5 Education Occupations

Overall employment: approximately 159,100 persons (74% female) were employed in the selected education occupations, representing 6.9% of the national workforce.

- Sector: 93% of overall employment was concentrated in the education sector
- Employment growth (5-year): Bbetween 2015 and 2020, overall employment increased by 32,900 (4.7% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for educational support assistants (15.9%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 76%. The share
 of workers aged 55 years and over, was below the national average of 19%
- **Education**: the share who had attained third level qualifications (84%) was significantly above the national average share (51%), while 13% had attained a higher secondary/FET qualification
- Full-time/part-time: of those employed in education occupations, 83% were in full-time employment
- Nationality: the share of non-Irish workers was well below the national average of 17%, while 93% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Between 2015 and 2020, overall employment increased by 32,900 (4.7% on average annually compared to 2.2% nationally).

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

Employment in education occupations grew strongly over the period 2015-2020. Employment of persons in education related occupations is affected by demographic factors as well as developments in EU/Government policy and funding for education. The number of children in the primary school-age cohort is declining, while the number of second level pupils has been growing in recent years, with an expected peak in 2024-2025. Implicit in these demographic changes is a shift in the demand away from primary teachers towards second level teachers, with further potential changes for the FET and third level sectors as the second level cohort moves up through the education system.

EU targets for lifelong learning among adults and the upskilling and re-skilling required as part of the green and digital transitions are also likely to create demand for places (and education occupations) in the FET and third level sectors, extending the demand for education and training beyond the traditional school-leaving cohorts to all people of working age.

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. Employment permits issued in 2020 relate to lecturers in the higher education sector.
Secondary teachers	The short-term increase in the relevant age cohort has resulted in an increased demand for secondary teachers and given the nature of subject combinations, some schools may be experiencing difficulty in recruiting qualified teachers in specific areas. As demand falls, expected from 2025, issues may persist for certain subject combinations. The recent Department of Education report indicates particular challenges in recruiting teachers of STEM, modern Irish, modern foreign languages and home economics subjects. ⁴²
Primary & nursery teachers	Employment growth over the last five years was broadly in line with the national average. Assuming no change in the pupil teacher ratio, demand for primary school teachers is likely to fall in line with the decline in primary school enrolments. However, new policy developments in areas such as foreign language instruction may partially offset some of this decline. ⁴³ New hires outnumbered any employment change for primary teachers in 2020, most likely related to the recruitment of substitute teachers.
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, although some declines occurred in 2020.
Educational support assistants	Employment in this occupation has been growing strongly in recent years, as a result of both demographics of the total school-going age cohort and government allocations, both of which have increased. However, this is unlikely to be sustained in the medium term in the absence of a change in government allocations, as primary school enrolments are declining with secondary school enrolments expected to follow from 2025 onwards.
Trainers & instructors, career guidance	Despite a fall in employment over the five-year period for this occupation, employment increased between 2019 and 2020, primarily related to vocational trainers and instructors.

⁴² https://www.education.ie/en/Publications/Education-Reports/developing-a-teacher-demand-and-supply-model-for-ireland-2020-2036.pdf

⁴³ https://www.education.ie/en/Press-Events/Press-Releases/2021-press-releases/PR21-05-31.html

10.6 Social & Care Occupations

Overall employment: approximately 126,900 persons (83% female) were employed in the selected social & care occupations, representing 5.5% of the national workforce.

- Sector: 81% of overall employment was concentrated in the health sector
- Employment growth (5-year): between 2015 and 2020, overall employment increased by almost 9,000 (1.5% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for other caring services (9.8%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 74%. The share
 of workers aged 55 years and over, was slightly 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 42%, above the national average share of 35%, while 48% held third level qualifications, below the national average share of 51%
- Full-time/part-time: of those employed in social and care occupations, 71% were in full-time employment
- Nationality: the share of non-Irish workers was broadly on a par with the national average of 17%, while 83% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

Those employed in social and care occupations provide care typically for the very young and the older age cohorts. While COVID-19 had a significant impact on employment in 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.

Although the five-year employment growth for this occupation was below the national average, it was particularly strong for other caring services occupations (e.g. healthcare assistants) and social workers, more than offsetting declines in the number of care workers employed. Changes to government funded health services will give rise to increased demand for some of these occupations. In the medium to long-term, additional demand for childcare may occur with any increased labour force participation by females, once the effects of COVID-19 on the labour market recede. This may partially offset the decline in demand as a result of changing demographics.

Occupation	Economic summary
Welfare & housing associate profs.	Employment growth over the last five years has been below the national average.
Childminders, etc.	Employment in this occupation has been impacted by restrictions caused by COVID-19 including the temporary closure of childcare facilities and the subsequent reopening with reduced capacity. Despite this, employment grew marginally in the year since 2019, although the five-year employment growth was below the national average. Recent job hires outnumbered any employment growth, indicating that turnover continued to be an issue for these roles. The 26% decline in the number of children born in Ireland over the last 12 years is likely to impact future demand for childcare providers.
Social workers & welfare profs.	Employment grew strongly for this occupation since 2018, with the five-year growth rate above the national average. Although no issues with demand are evident in the data sources, social workers have been recently added to the list of eligible occupations for employment permits due to issues in the public sector in recruiting suitably qualified individuals for these roles. ⁴⁴
Care workers, home carers, etc.	Employment numbers fell for this occupation over the five-year period, with the decline relating primarily to the previous year, most likely due to COVID-19. Despite this, there was a high number of recent job hires in 2020, indicating that job churn is a factor for this occupation. There is also a high share (24%) of those working in this occupation aged 55 years and older which may affect replacement demand. Despite these issues, there was a high volume of vacancies advertised for care workers and demand for care workers is likely to be sustained given Ireland's ageing demographic profile.
Other caring services Shortage: Healthcare assistants	Employment has grown steadily in recent years in this occupation, resulting in a higher than average five-year employment growth rate. The high volume of vacancies relates primarily to healthcare assistants, mainly in hospital settings. Demand for healthcare assistants is expected to continue, as outlined in the Health Service Capacity Review 2018; as a result, and in light of recent recruitment difficulties, healthcare assistants have been recently removed from the employment permits ineligible list. ⁴⁵

 ⁴⁴ https://enterprise.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Latest-updates/
 ⁴⁵ Ibid

10.7 Legal & Security Occupations

Overall employment: approximately 59,900 persons (75% male) were employed in the selected legal and security occupations, representing 2.6% of the national workforce.

- Sector: 47% of overall employment was concentrated in the public administration and defence (PAD) sector, while administrative services and professional activities combined accounted for a further 40%
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 7,400 (2.7% on average annually compared to 2.2% nationally); the strongest employment growth rate was observed for barristers, judges, solicitors & related professionals (4.8%) over this period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 78%. The share aged 55 years and over was on a par with 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 28%, below the national average share of 35%. At 62%, the share with third level qualifications was above the national average share (51%)
- Full-time/part-time: of those employed in legal and security occupations, 92% were in full-time employment
- Nationality: the share of non-Irish workers was well below the national average of 17%, while 94% of workers were Irish nationals.

Numbers employed, 2020 (annual average)



Average growth rate (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

Employment growth for the five-year period was slightly above the national average for this occupational group. The impact of COVID-19 was most evident for security guards (where employment fell), with growth in all other occupations offsetting this decline. Future growth for these occupations will depend on a resumption of economic activities, especially in the areas of hospitality and entertainment (for security guards in particular), and on Government policies for those reliant on public sector funding.

Occupation	Economic summary
Barristers, judges, solicitors & related profs.	Employment growth for this occupation was slightly above the five-year national average. It is difficult to attribute the growth of this occupation to any one sub-sector of the economy, although legal advisory activities as a result of increased regulatory and compliance requirements in financial services etc. may be a contributing factor.
Gardaí	While employment grew in 2020, this was due to additional recruitment from March 2020 to support the public health restrictions on movement as a result of COVID-19. Any future employment growth for this occupation will depend on Government policies and funding.
Other protective service occupations (e.g. army personnel, fire/prison service officers)	Employment growth was slightly above the national average for the five-year period, although most of this growth occurred in the earlier years. Those working in this occupation are primarily employed within the public sector and, as such, any employment growth will be dependent on future Government funding.
Security guards	Employment for this occupation fell as a direct result of COVID-19 restrictions. This appears to have particularly impacted non-Irish nationals with the share employed in this occupation halving in the year since quarter 4 2019. Security guards are mainly employed in the administrative and support services sector; this sector accounts for one of the highest shares of persons in receipt of Pandemic Unemployment Payment (PUP). Although PUP data is not available at occupational level, it is likely that the temporary closure of offices, retail, nightclubs, bars and concert venues has resulted in a drop in demand for security-related personnel. Future demand for these roles will depend on the reopening of the Irish economy, although replacement demand for older workers, with 34% aged 55 years and older, will likely create job opportunities in the years to come.

10.8 Construction Occupations

Overall employment: approximately 130,900 persons (97% male) were employed in the selected construction occupations, representing 5.7% of the national workforce.

- Sector: 72% of overall employment was concentrated in the construction sector; a further 16% were employed in industry and professional activities combined
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 5,400 (0.8% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for bricklayers and plasterers (13.1%) during the period
- Age: the 25-54 age group accounted for the majority of persons employed, at 71%. The share aged 55 and over (20%) was slightly above the national average of 19%
- Education: a half of those employed in the selected construction occupations had attained higher secondary/FET qualifications, above the national average share of 35%. The share who had attained third level qualifications (26%) was well below the national average (51%)
- Full-time/part-time: full-time employment accounted for 92% of 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, 2020 (annual average)



Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

Numbers in square brackets are small and should be treated with caution. *See detailed occupation description in table below. Construction related technicians are included in overall total but numbers are too small to report.

The closure of construction sites as a result of COVID-19 has had a significant impact on employment for construction occupations. Employment growth over the five-year period was below the national average as a direct result of a fall in employment between 2019 and 2020. As restrictions have eased, many employed in the construction sector have returned to work, although a significant number continue to receive income support payments. Also associated with COVID-19, the number of new apprenticeship registrations fell across all construction trades in 2020 and remained far below pre-recession levels.

The Climate Action Plan (2019) and Programme for Government (2020) set targets to reduce carbon emissions by 2030 with activities such as the installation of renewable energy heating sources in residential premises (400,000 buildings) as well as the retrofit to B2 BER of housing stock (c500,000 buildings) by 2030. These targets, along with ambitious Government plans to address housing supply, through delivery of an average of 33,000 homes annually over the next decade,⁴⁶ are expected to increase demand for construction-related skills across a variety of occupations (operatives, skilled trades/supervisors, engineers) and may lead to future skills and labour shortages. Upskilling and reskilling of those already employed will also be required as the recent EGFSN report on the built environment⁴⁷ notes that the nature of the tasks associated with construction occupations is likely to undergo substantial change.

In the short-term, the recovery in employment for these occupations will depend on a return to full construction (and other economic) activity, as well as resolving issues with the supply of construction-related materials which have been accentuated as a result of factors such as COVID-19 and Brexit.

Occupation	Economic summary
Civil engineers & construction project managers	Employment growth was slightly below the five-year national average, due to a fall in numbers employed in 2020, related to COVID-19 restrictions. Despite this, employment permits continued to be issued for this occupation throughout 2020, and these roles were identified as difficult to fill in the Recruitment Agency Survey. The closure of construction sites in the early part of 2021 is likely to have further impacted employment in this occupation; however, the lifting of lockdown restrictions in quarter 2 2021 will create a demand for these roles which is likely to continue in the short-term. Although the number of level 8+ awards in higher education increased in the last two years, the numbers have not yet recovered to those prior to the recession. If construction activity returns to pre- COVID levels, skills shortages for civil engineers and construction project managers are likely to arise.
Architects & town planners, architectural technologists, & surveyors Shortage: Quantity surveyors	Contrary to the decline observed for many other construction occupations, there was no overall change in employment numbers for this occupation since 2019. Employment permits continued to be issued in 2020, primarily for quantity surveyors but also for architects and architectural technologists. Quantity surveyors in particular were identified as difficult to fill in both the Recruitment Agency Survey and in the recent EGFSN report. Following several years of decline, supply from the higher education system for quantity surveyors began to grow in 2018, with the number of level 8 awards reaching almost 150 in 2019. Despite this increase in supply, replacement and expansion demand for quantity surveyors in the economy, combined with employers' preference for experienced professionals, is such that supply is unlikely to be sufficient in the short-term, resulting in shortages.
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 in recent years with COVID-19 having no obvious impact on 2020 figures. New apprenticeship registrations, which had begun to recover, declined again in 2020 and remain one tenth of what they were in 2005. Although currently eligible for employment permits, uptake for bricklayers and plasterers remained small in 2020 (approximately 30). Demand for these occupations is expected to grow due to cosmetic and repair work associated with retrofit activities. This will help to offset the reduced demand for these roles onsite due to the introduction of new technologies and offsite construction methods.

⁴⁶ https://www.gov.ie/en/publication/ef5ec-housing-for-all-a-new-housing-plan-for-ireland/#for-low-income-households

⁴⁷ Building Future Skills; The Demand for Skills in Ireland's Built Environment Sector to 2030, EGFSN 2020

Plumbers	Although employment numbers had been increasing in recent years for this occupation, they declined in 2020 as a result of COVID-19. The number of apprenticeship registrations also fell in 2020 but remained well above figures five years previously. Plumbers will be required in relation to Ireland's targets for a low carbon economy, for both retrofit and new build activities. However, many plumbers may require re/up-skilling to carry out the work linked to alternative renewable energy sources (e.g. the installation of heat pumps).
Carpenters & joiners	Employment growth over the five-year period was slightly above the national average, although the numbers fell in 2020 as a result of COVID-19. Although there was a decline in the number of new apprenticeship registrations in 2020, for the last three years the numbers have been higher than at any time since 2008. The new employment permits issued related to shuttering carpenters and were primarily issued in the early months of 2020. The demand for carpenters is likely to return to growth once COVID-19 restrictions are fully lifted. Carpenters will be required to fulfil ambitions set out in the Programme for Government and the Climate Action Plan 2019 resulting in potential skill shortages. ⁴⁸
Painters & decorators	The above average five-year employment growth in this occupation may relate to changes that occurred on the introduction of the new Labour Force Survey in 2017 and mask the fact that employment was unchanged between 2018 and 2019, and subsequently declined in 2020. New apprenticeship registration numbers remained small for this occupation (24 in 2020). Painters/decorators are likely to be in future demand due to the cosmetic work resulting from retrofit activities.
Other construction trades	Employment growth over the five-year period was slightly above the national average, despite a decline between 2019 and 2020. Difficulty in filling vacancies, reported in the Recruitment Agency Survey, related to curtain wallers, steel fixers/erectors and fitters/glaziers. Assuming full commercial construction activity resumes, demand for these occupations is expected to resume. Furthermore, renewable energy targets may create additional demand for roofers in relation to the installation of solar panels, although this may require re/up-skilling for some.
Construction operatives & elementary	Although there was negative employment growth over the five-year period, this relates to changes that occurred on the introduction of the new Labour Force Survey in 2017. A relatively high volume of recent job hires in 2020 indicates that turnover was occurring. Difficulty in filling vacancies, reported in the Recruitment Agency Survey, refers to scaffolders, ground workers and pipe layers. Despite this demand, a high share of persons from the construction sector remained on PUP, and it is difficult to determine the extent to which supply matches demand.

⁴⁸ https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/ and https://assets.gov.ie/25419/c97cdecddf8c49ab976e773d4e11e515.pdf

10.9 Other Craft Occupations n.e.c.

Overall employment: approximately 116,500 persons (94% male) were employed in the selected other craft occupations n.e.c., representing 5.1% of the national workforce.

- **Sector**: 40% 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 2015 and 2020, overall employment increased by 6,200
 (1.1% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for electrical and electronic trades (5.6%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 72%. The share aged 55 years and over (18%) was slightly below the national average of 19%
- Education: the share of persons employed in the selected other craft occupations who had attained higher secondary/FET qualifications was 61%, well above the national average share of 35%. Those who had attained third level qualifications (25%) was well below the national average (51%)
- Full-time/part-time: full-time employment accounted for 93% of employment
- Nationality: the share of non-Irish workers was in line with the national average of 17%, while 83% of workers were Irish nationals.

Numbers employed, 2020 (annual average)



Average growth rates (%) 2015-2020



Between 2015 and 2020, overall employment increased by 6,200 (1.1% on average annually compared to 2.2% nationally).

Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below

The five-year annual average employment growth for this occupational group was below the national average, despite recording a growth of 3.6% in the year since 2019. Employment in these occupations was spread across industry, construction and wholesale and retail, with each of these sectors impacted by COVID-19 at varying levels. A significant share of persons from these sectors remains in receipt of income support payments (both EWSS and PUP), indicating that these sectors have yet to fully recover from the impact of the pandemic. Nonetheless, some skills are proving difficult to source, resulting in shortages.

Occupation	Economic summary
Metal forming, welding & related trades Shortage: Welders	Employment growth over the five-year period was slightly above the national average, with employment declining in the most recent year. New employment permits issued in 2020 for this occupation were primarily related to welders but also fabricators and pipefitters to a lesser extent. The demand for welders in manufacturing remains strong, in particular for those who have certification in the area and specific skillsets in MIG/TIG welding. Vacancies for welders were identified as difficult-to-fill in the Recruitment Agency Survey and by employers in the Skills for Growth data; they also appeared frequently in the vacancy data. As such, shortages are likely to occur for this job role.
Metal machining. fitting & instrument making trades Shortage: CNC programmers	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 grew strongly in 2020. The number of new apprenticeship registrations for fitters had been growing steadily in the main since 2011, although they fell in the most recent year. Vacancies for CNC programmers and fitters remained strong in 2020 with roles for CNC programmers being reported as difficult-to-fill by employers in the Skills for Growth data, leading to potential shortages for this role. With many employed in industry in receipt of income support payments (both PUP and EWSS), demand for the other occupations in this group will depend on how the sector recovers in the coming months and years.
Vehicle trades	Employment growth in this occupation was below the national average. New apprenticeship registrations for both motor and HGV mechanics had been increasing in recent years but declined in 2020 as a result of COVID-19. A small number of new employment permits were issued for this occupation in relation to aircraft mechanics. Frequent vacancies occurred for this occupation in roles including mechanics, HGV mechanics and tyre fitters. Any increased uptake in electric vehicles on Irish roads is likely to result in an increased demand for electric vehicle (EV) mechanics and an eventual, but gradual, decline in demand for traditional motor mechanic skills. This shift towards EVs will require reskilling, as automotive technology will involve substantial electrical skills.
Electrical & electronic trades, etc.	This occupation had the strongest employment growth in this group, driven by growth occurring between 2019 and 2020. The number of new apprenticeship registrations for electricians remains strong, although down 11% since 2019. Electricians were identified as difficult to fill in the Recruitment Agency Survey and by employers in the Skills for Growth data. Demand for additional electricians will be driven by the Government's climate change agenda in relation to retrofit activities and the installation of heat pumps and solar panels. Future shortages may emerge in the coming years if supply cannot meet the growing demand.
Other skilled trades (e.g. printers, furniture makers, and textile trades)	This occupation had a negative growth rate, with little change in employment over the five-year period. The share of non-Irish nationals employed in this occupation grew from 17% to 30% between quarter 4 2019 and quarter 4 2020. Most employment was based in industry across a wide range of occupations. Vacancies occurred for spray painters (including aircraft), cabinet makers and upholsterers. The wide range of jobs in this occupational group, the relatively small employment size, combined with little sign of employment growth, means that the outlook is difficult to ascertain.
Butchers, fishmongers, bakers etc.	Employment has been declining in this occupation in recent years. Although new employment permits continued to be issued for meat deboners, the numbers were less than half that of 2019. Despite this, the share of non-Irish nationals remained higher than the national average, at 30%.

The demand for butchers in retail is likely to continue but may not offset the subdued demand as
a result in the fall in food services. Brexit is also likely to impact future meat processing activities.

10.10 Agriculture & Animal Care Occupations

Overall employment: approximately 108,700 persons (84% 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 2015 and 2020, overall employment declined by 6,300 (or by 1.1% on average annually)
- Age: the 25-54-year age group accounted for 44% of persons employed, with 45% of those employed aged 55 years and over, well above the national average of 19%
- Education: these occupations had the highest share of persons employed with a lower secondary education or less, at 37% compared to 11% nationally; those who attained a higher secondary/FET qualification (42%), was above the national average share of 35%
- Full-time/part-time: 78% 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 94% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

*See detailed occupation description in table below.

**The number of animal carers & pest controllers and managers in horticulture, agriculture and fishing were too small in the period 2015-2020 to calculate growth rate.

The decline in employment in agriculture and animal care occupations over recent years continued in 2020, driven primarily by a fall in the number of farmers.

A recent ESRI paper points to the agricultural sector as being one of the most severely impacted sectors as a result of Brexit.⁴⁹ Issues in terms of disincentives to engage in low paid work, availability of supply through inward migration and Government targets in the <u>Climate Action Plan (2019)</u> are also likely to impact employment numbers for these occupations. Demographic effects alone will likely result in a continued decline in employment numbers in the coming years.

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, with a fall of over 14,000 since 2016; this is expected to continue given the older age profile of this occupation (over half of farmers are aged 55 years or more).
Horticultural, agricultural & fishing trades n.e.c. (e.g. gardeners)	Employment in this occupation declined over the five-year period, with the lowest levels in the five- year period occurring in 2020. This occupation also has a high share of older workers with 40% aged 55 years and above. The administrative support services sector (e.g. landscaping services) accounted for the majority of employment in this group, with this sector particularly impacted by COVID-19.
Elementary agriculture	Employment growth for elementary agriculture workers was on a par with the national average. Almost half of those employed were in part-time roles. The number of new employment permits in 2020 fell significantly on the previous year, from over 500 to less than 50 (relating to set quotas being filled); those issued in 2020 related to dairy farm assistants. There was a high frequency of vacancies for horticultural workers (including in the mushroom industry and fruit farms), although a high number of recent job hires for this occupation indicates that turnover was a factor. 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.
Animal carers & pest controllers	Numbers employed in this occupation are too small to allow for any analysis.

⁴⁹ https://www.esri.ie/publications/examination-of-the-sectoral-overlap-of-covid-19-and-brexit-shocks

10.11 Hospitality Occupations

Overall employment: approximately 133,700 persons (52% female) were employed in the selected hospitality occupations, representing 5.8% of the national workforce.

- Sector: 88% of overall employment was concentrated in the accommodation and food sector
- Employment growth (5-year): between 2015 and 2020, there was no change in overall employment
- Age: the 25-54-year age group accounted for the majority of persons employed, at 62%. The share
 of workers under 25 years was 26%, significantly above the national average of 10%
- Education: the share of persons employed in the selected hospitality occupations who had attained higher secondary/FET qualifications was 55%, well above the national average share of 35%. Those who had attained third level qualifications (28%) was well below the national average share (51%)
- Full-time/part-time: two thirds of those employed in the selected hospitality occupations were in full-time employment, the lowest share of all the occupational groups
- Nationality: the share of non-Irish workers, at 35%, was significantly above the national average of 17%, while 65% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

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

Employment fell across all occupations in this group between 2019 and 2020 with the pandemic continuing to cause significant disruption to employment. While overall employment numbers fell sharply in the accommodation and food sector (where the majority were employed) in the year since 2019, this may not be the full extent of the fall. Of those who were classified as employed in this sector, approximately 40% were 'away from work' in quarter 4 2020, compared to 11% in quarter 1 2020, indicating that the 2020 figures do not reflect the full impact of COVID-19. This is borne out in the fact that the accommodation and food sector also accounted for the highest share of persons in receipt of income support payments (both EWSS and PUP). The increase in average hourly earnings for this sector (as detailed in Section 1) indicates that the lower paid roles were most impacted as a result of COVID-19.

Future demand for these occupations will depend on the speed and extent of the recovery in this sector along with increased international travel.

Occupation	Economic summary
Hospitality managers	Employment in this occupation fell by 7% between 2019 and 2020; this was the smallest relative fall in employment across the hospitality occupations. The largest decline (based on quarter 4 data) related to restaurant managers. At 27%, the share of those aged 55 years and older was above the national average in quarter 4 2020; the share of non-Irish nationals was also above the national average, at 30%. Although least affected, the continued restrictions in the sector and the gradual return of international visitors will continue to limit demand for this occupation.
Chefs & cooks	Prior to the onset of the pandemic, employment was growing strongly for chefs. Numbers employed, however, declined in the year since 2019. Despite this, new employment permits continued to be issued in 2020, with numbers higher than in 2019. As a result, non-Irish nationals now account for a higher share of chefs than Irish nationals. The number of new registrations on chef apprenticeships remains small and output from the education and training system is declining. Many businesses were able to adjust their business models in order to continue trading during lockdown periods, retaining employment for some chefs and cooks; further recovery for this occupation will depend on a full easing of restrictions and a return of international travel.
Catering & bar managers	Numbers employed in this occupation are too small to allow for analysis.
Kitchen & catering assistants	The numbers employed in these occupations fell by almost a quarter between 2019 and 2020, with the decline likely to be larger if those employed but 'away from work' were also included. However, employment in these three occupations combined continued to account for over a half of all employment in this occupational group in 2020. Advertisements for these vacancies had one of the largest declines year on year. Despite this, there was a high volume of recent job hires in 2020, indicating that a significant amount of rehiring for these roles occurred as restrictions eased during the year. These occupations had a high share employed who were non-Irish (40% for kitchen and catering assistants), young (over half of waiters and bar staff were aged under 25 years) and working
Waiters & waitresses	
Bar staff	The impact of COVID-19 has been severe for these occupations; while some recovery has occurred as restrictions have eased, a full recovery is unlikely in the short-term as a result of reduced capacity and limited international travel. Furthermore, these occupations may experience reduced demand in the longer term, as they have been identified as being at high risk of automation.
Housekeepers & caretakers, etc.	The decline in employment in this occupation between 2019 and 2020 has resulted in the numbers being too small to allow for analysis. The reduced occupancy in hotels due to restrictions and the fall-off in international tourism will likely impact the recovery for this occupation.

10.12 Arts, Sports & Tourism Occupations

Overall employment: approximately 88,600 persons (63% female) were employed in the selected arts, sports and tourism occupations, representing 3.9% of the national workforce.

- Sector: 47% of overall employment was concentrated in the arts, entertainment and other services sector, with the ICT and professional services sectors combined accounting for a further 28%
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 7,300
 (1.7% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for leisure and travel service occupations (6.7%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 73%. The share
 of workers aged 55 years and over was 15%, 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 35%. Those who had attained third level qualifications (57%) was above the national average share (51%)
- Full-time/part-time: 71% of those employed were in full-time roles
- Nationality: the share of non-Irish workers was slightly above the national average of 17%, while 81% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



Source: SLMRU (SOLAS) analysis of CSO data

Employment for these occupations was growing broadly in line with the national average in recent years but declined by 7% in the year since 2019 as a result of the pandemic. Due to the restrictions faced by those working in these roles, including the closure of beauty/hair salons, leisure centres, entertainment venues and the limited foreign travel, there was a significant share of persons working in the arts, entertainment and other services sector who were in receipt of income support payments (both PUP and EWSS). The pace of recovery for many of these occupations will be dependent on the relaxing of social distancing requirements and the lifting of restrictions on overseas travel.

Occupation	Economic summary
Media profs. & librarians	Employment numbers in this occupation have seen little change since 2015 and the impact of COVID-19 is not evident. The numbers employed across the individual occupations were too small to allow for any meaningful analysis.
Artistic, literary & media associate profs.	Employment levels have been stable in recent years, with employment in these roles across a number of sectors including professional activities, IT and the arts and entertainment sector. Vacancies in 2020 were for interpreters, graphic designers and animators (including FX artists and 3D). Employment permits issued in 2020 were primarily related to animators, while vacancies for animators were mentioned as difficult-to-fill by employers in the Skills for Growth data.
Shortage: Animators	The outlooks for this occupation differ depending on the job involved; for some, such as actors and musicians, the impact has been severe due to the closure of event spaces and recovery will be dependent on the easing of social distancing requirements. Others, such as graphic designers and animators, were less disrupted by COVID-19 restrictions and as such, employment is expected to continue to grow.
Sports & fitness occupations	Overall employment levels for sports and fitness occupations have remained relatively unchanged since 2017, although employment numbers declined in the second half of 2020. This is most likely as a result of the closure of fitness centres and restrictions on sporting events due to COVID-19. Employment permits issued for this group related to professional sports players. The number employed in this occupation who were working part-time was far higher than the national average (37% compared to 19% nationally). The recovery in employment will be dependent on the lifting of restrictions and relaxation of social distancing requirements.
Leisure & travel service occupations	The strong five-year growth rate for this occupation masks the decline in employment that occurred in the year since 2019. 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.	The negative growth rate for this occupation was largely due to the fall in the numbers employed between 2019 and 2020 as a result of COVID-19 related restrictions. While some recovery in employment occurred in the latter half of 2020, it was not to the levels seen prior to the onset of the pandemic; further closures at the start of 2021 would have further impacted these occupations. The slow recovery in international travel may impact the recovery for beauticians/spa therapists employed in hotels etc.

10.13 Transport & Logistics Occupations

Overall employment: approximately 102,200 persons (93% male) were employed in the selected transport and logistics occupations, representing 4.5% of the national workforce.

- Sector: 52% of overall employment was concentrated in the transport sector with industry and wholesale/retail combined accounting for a further 29%
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 10,100 (2.1% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for managers and directors in transport and logistics (9.8%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 68%. The share of workers 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 45%, above the national average share of 35%. These occupations had the second highest share of persons with a lower secondary education qualification or less, at 30%
- **Full-time/part-time**: 85% of transport & logistics workers were in full-time employment
- Nationality: the share of non-Irish workers was slightly above the national average of 17%, while 81% of workers were Irish nationals.

Numbers employed, 2020 (annual average)



Average growth rates (%) 2015-2020



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.

National Skills Bulletin

Employment growth in these transport occupations was on a par with the national average; the fall in employment for drivers between 2019 and 2020 was partially offset by an increase in the numbers employed in administrative roles. The transport sector, in which many of these workers were employed, continues to have a relatively high share of persons who are in receipt of income support payments, in particular the EWSS. COVID-19 has also impacted on sectors of employment such as construction and wholesale and retail, and this in turn affects demand for transport-related occupations. Combined with the effects of Brexit, future growth for these occupations will be dependent on the extent of the economic recovery across sectors. In addition, technological changes, automation of processes and the implementation of the Climate Action Plan will result in a need for upskilling/reskilling across all occupations in this field (e.g. enhanced digital skills, green skills for business).

Occupation	Economic summary
Managers & directors in transport & logistics	Employment had been growing strongly in this occupation in recent years, although this stalled in the year since 2019. A small number of employment permits were issued in 2020 and, although few in number, this occupation was evident in the Recruitment Agency Survey in relation to transport/logistics managers. Despite the lack of employment growth, the skills profile for those working in this occupation is likely to shift in line with technological and regulatory changes associated with the transport/logistics sector. Training in these areas for some already employed in this occupation will assist in preventing future recruitment difficulties.
Stock control, transport & distribution admin. occupations	Numbers employed in this occupation are too small to allow for any analysis although some growth occurred in the year since 2019 and 2020. Employment permits issued in 2020 related to transport and distribution clerks. Vacancies for junior supply chain roles were mentioned in the Recruitment Agency Survey and employers identified customs clearance and freight forwarding administrative vacancies as difficult-to-fill in the Skills for Growth data.
Truck & van drivers	Employment had been growing strongly in this occupation but remained unchanged in the year to 2020. The transport and wholesale and retail sectors accounted for the largest shares of employment. New employment permits and mentions in both the Recruitment Agency Survey and the Skills for Growth data related to HGV drivers. Despite the overall employment numbers remaining relatively unchanged between quarter 4 2019 and quarter 4 2020, there was a shift in the age profile towards younger workers; the share aged 55 years and older fell from 27% in quarter 4 2019 to 17% in quarter 4 2020. It is unclear, as yet, if this relates to those in the older age cohorts leaving the occupation (temporarily or permanently) with the onset of COVID-19. The difficulty in attracting experienced, licensed HGV drivers may intensify as economic activity recovers.
Mobile machine drivers & operatives	Employment grew strongly between 2018 and 2019 but declined by 9% in 2020. Employment in this occupation was across a number of sectors including construction, industry and agriculture. There were a number of mentions in the Recruitment Agency Survey which were primarily related to drivers for the construction sector (machine, forklift, site dump and teleporters). Demand for this occupation may have fallen in the early months of 2021 due to the closure of construction sites and future demand will be dependent on the strength of the recovery of the construction sector.
Other drivers & transport operatives	Between 2019 and 2020, employment in this occupation fell by 10%, with numbers falling to 2015 levels. The share of workers aged 55 years and older grew from 42% in quarter 4 2019 to 49% in quarter 4 2020, which may result in a future increase in replacement demand as these workers leave the labour force. With most employed as taxi drivers and bus and coach drivers, any recovery in employment will be dependent on increased activity in hospitality and tourism.
10.14 Administrative & Secretarial Occupations

Overall employment: approximately 186,200 persons (76% female) were employed in the selected administrative and secretarial occupations, representing 8.1% of the national workforce.

- Sector: these occupations are employed across all sectors, with employment concentrated in PAD (27%), health (18%), along with transport, industry, professional activities, wholesale/retail and education which combined accounted for a further 37% share
- Employment growth (5-year): between 2015 and 2020, overall employment increased by almost 34,600 persons (4.2% on average annually compared to 2.2% for the national average). The strongest rate of employment growth was observed for government administrative occupations (10.3%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 70%; the share 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 35%; those who had attained third level qualifications (45%) was below the national average share (51%)
- Full-time/part-time: 76% of administrative & secretarial workers were in full-time employment
- Nationality: the share of non-Irish workers (9%) was well below the national average of 17%, while 91% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



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 and other administrative roles. Recent growth for these occupations occurred primarily for those employed in the public administrative and defence and health sectors, most likely related to the Government's COVID-19 actions, such as contact tracing centre operations, along with annual recruitment activity in the Civil Service.

A recent SLMRU report highlighted the high share of persons employed in administrative roles who are considered over-qualified, with almost half holding third level qualifications.⁵⁰ While supply continues to draw from both the FET and third level sectors, there are few issues with sourcing skills for these roles. Furthermore, the high risk of automation associated with these roles is likely to result in a reduced demand, although job opportunities will continue to arise as replacement (due to retirement, etc.) for such a large occupational group will translate into job vacancies.

Occupation	Economic summary
Government admin. occupations	Employment grew strongly in this occupation over the five-year period although this may relate, in part, to changes that occurred on the introduction of the new Labour Force Survey in 2017. Some of the recent employment growth related to the recruitment of temporary clerical officers in the Civil Service in 2020. At 24%, 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 and this may offset some of the replacement demand.
Other administrators	This occupation, which includes HR and sales administrators and records clerks, accounts for over 40% of all administrative occupations. There was a significant increase in employment in this occupation between 2019 and 2020, at 19%. While employment grew across a number of sectors, it was particularly evident in the health sector, due in part to recruitment in the HSE for roles in contact tracing centres. Despite this increase in employment, recent job hires in 2020 outweighed employment growth indicating a level of job turnover was occurring. At 25%, the share aged 55 years and older was higher than the national average. Given the high volume of employment in this occupation and the older age profile, job opportunities are likely due to replacement demand alone. However, the risk of automation associated with these roles may subdue future demand.
Office managers & supervisors administrative occupations	Employment of office managers and supervisors declined over the five-year period, with a 12% decline in the year since 2019. These roles were found across all sectors of the economy, albeit in small numbers. Because of the low volume of employment, it is difficult to determine how COVID-19 may have impacted these occupations, although it is likely to have varied depending on the sector.
PAs & other secretaries, etc.	Employment growth over the five-year period was below the national average for this occupation, including a 4% decline between 2019 and 2020. Given the main sectors of employment for this occupation (including health, professional activities, and education), the fall in employment was less severe than for administrative roles (e.g. receptionists) employed in sectors more impacted by COVID-19 (e.g. hospitality, retail). The age profile of this occupation is older than the national average with 27% aged 55 years and older, although job opportunities arising from replacement demand may be limited due to declining demand for these roles.
Receptionists	The number of persons employed as receptionists fell by almost a quarter between 2019 and 2020. This most likely relates to the closure of offices and hotels since the onset of COVID-19 in March 2020. As restrictions ease and business activity resumes, demand for this occupation is likely to recover, at least partially. However, employment levels in this occupation were in decline due to factors such as automation, which may limit the extent of the recovery.
Elementary admin (e.g. postal workers, couriers)	Employment has remained relatively unchanged in this occupation in recent years. Demand for couriers as a result of increased volumes of online shopping during restrictions may have offset a fall in demand for other roles included in this occupation.

*For detailed table see Appendix A

⁵⁰ https://www.solas.ie/f/70398/x/32c0cebdf4/solas_spring-skills-bulletin-2021.pdf

10.15 Sales, Marketing and Customer Service Occupations

Overall employment: approximately 271,700 persons (54% female) were employed in the selected sales, marketing and customer service occupations, representing 11.8% of the national workforce.

- Sector: 67% of overall employment was concentrated in the wholesale/retail sector, with industry, ICT, finance sectors combined accounting for a further 19%
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 14,200 (1.1% on average annually compared to 2.2% nationally). The strongest rate of employment growth was observed for sales related occupations (12.3%) during the period
- Age: the 25-54-year age group accounted for the majority of persons employed, at 64%. The share of employees aged under 25 years was 23%, significantly above the national average of 10%
- Education: the share of persons employed in the selected sales, marketing and customer service occupations who had attained higher secondary/FET qualifications was 48%, well above the national average share of 35%. Those who had attained third level qualifications (40%) was below the national average share (51%)
- Full-time/part-time: full-time employment accounted for a 71% share
- Nationality: the share of non-Irish workers (18%) was slightly above the national average of 17%, while 82% of workers were Irish nationals.

Numbers employed, 2020 (annual average)



Average growth rates (%) 2015-2020



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 grew at a rate below the national average, due to a fall in employment that occurred between 2019 and 2020. Approximately two-thirds of persons employed in these occupations were in the wholesale and retail sector which has been particularly impacted by COVID-19. This sector continues to account for a high share of persons in receipt of income support payments (both EWSS and PUP). A move to online shopping, social distancing requirements and the closure of many retail outlets will impact on the recovery in employment for those occupations particularly exposed to the downturn in the wholesale and retail sector.

Demand persists for those outside of the wholesale and retail sector (e.g. industry) who have a skills profile that combines sales skills with specific industry knowledge and technical expertise; as such, cross-sectoral mobility of some skillsets may be limited and difficult to source. The demand for those with both sales and language skills is primarily related to the ICT sector, evidenced in the employment permit data, although the numbers employed in this sector are comparatively small.

Occupation	Economic summary
Advertising, marketing & sales directors	Numbers employed in this occupation were too small to allow for any analysis. New employment permits issued primarily related to marketing/sales directors and procurement managers.
Managers & directors in retail & wholesale	There was strong employment growth in this occupation up to 2019, with only small declines in the year since then. Employment in the retail segment of the wholesale/retail sector grew by 7% between quarter 4 2019 and 2020, although this may mask variation in segments of retail (e.g. grocery, clothing), with differing consequences for managers in these areas. Without occupational information for those in receipt of income support payments, it is not possible to determine the full effect of COVID-19 on these occupations. The outlook for these managers/directors will depend on the extent of the recovery in the retail sector as restrictions ease.
Business sales executives	The significant fall in employment in this occupation over the five-year period can be attributed in part to changes to the LFS in 2017; however, employment continued to fall in 2019 and remained unchanged in 2020. Despite this, new employment permits continued to be issued, primarily for those with specific language skills in the ICT sector. Business sales executives are employed across a range of sectors but are primarily in wholesale/retail (42%) and industry (34%). The skills required for this occupation differ depending on the sector as, in addition to sales skills, industry knowledge, technical expertise and languages were identified as essential for many roles by employers, particularly in the Skills for Growth data. Any future issues with filling vacancies for these roles will depend on the availability of candidates with specific skill combinations.
Sales accounts & bus. dev. managers	This occupation had negative employment growth over the five-year period, although some increases have occurred since 2018. Employment occurred across many sectors, with the highest volumes in wholesale and retail. Employment permits issued in 2020 referred to account managers and business development managers (with over half for roles in the ICT sector). A small number of mentions for account or business development managers in the Recruitment Agency Survey and the Skills for Growth data suggests some issues in recruiting for these roles, although the numbers involved are likely to be small.
Other sales & marketing assoc. professionals	Employment grew strongly in this occupation over the five-year period. Roles within this occupation include buyers, marketing specialists, estate agents, and property managers, with COVID-19 restrictions having varying impacts on employment numbers. The financial sector accounted for the highest share of employment in this group of occupations, at a third, with the remainder spread across a number of sectors. Employment permits issued in 2020 referred to marketing executives and account executives (with language skills), with most relating to the ICT sector. Marketing specialists accounted for the largest share of persons employed in this group, at approximately 40%; the shift to online services, accelerated due to COVID-19, is likely to result in an increased demand for digital marketing and research skills. Demand for roles such as buyers and estate agents will very much depend on consumer behaviour as restrictions ease.

	Employment fell in this occupation over the five-year period, primarily related to a fall in employment numbers of 9% since 2019. Despite the fall in employment, this is one of the largest occupations, representing 5% of total national employment. This occupation is characterised by a high share in part-time positions (51%) and a much younger age profile than the national average (42% aged 15-24 years); females accounted for two thirds of employment.
Sales assistants	Despite a fall in 2020 when compared to 2019, this occupation accounted for the highest number of recent job hires in 2020, as in previous years. Along with job turnover, the high number of hires may relate to re-hiring that occurred as restrictions eased. The wholesale & retail sector accounts for a high share of those in receipt of income support payments from (both EWSS and PUP). Given its employment numbers, it is reasonable to infer that those working as sales assistants account for a high share of these, although occupational information is not available.
	Outside of the grocery sub-sector, recovery in employment in this occupation will be dependent on the resilience of many high street shops particularly in light of the accelerated move to online shopping at the onset of COVID-19. There have been many closures and job reductions announced in retail such as Debenhams, Gap, Pamela Scott, Brown Thomas/Arnotts, although these may be offset by increased demand in the grocery sector.
Customer service occupations	
Customer service occupations	Employment growth was above the five-year national average, with growth particularly strong in the period between 2018 and 2019. At 35%, this occupation had double the national average share of non-Irish nationals employed. Employment permits issued in 2020 referred to customer service associates (with languages skills including Chinese). Approximately 70% of permits related to the ICT sector, although this sector accounted for only a small share of employment for customer service occupations, with employment spread across most sectors (including wholesale and retail, finance and industry).
Customer service occupations	Employment growth was above the five-year national average, with growth particularly strong in the period between 2018 and 2019. At 35%, this occupation had double the national average share of non-Irish nationals employed. Employment permits issued in 2020 referred to customer service associates (with languages skills including Chinese). Approximately 70% of permits related to the ICT sector, although this sector accounted for only a small share of employment for customer service occupations, with employment spread across most sectors (including wholesale and retail, finance and industry). This occupation has also been identified as being at risk of automation and may be susceptible to relocation to other countries for operation costs reasons. As such, the outlook is difficult to determine for these occupations.

*For detailed table see Appendix A

10.16 Operatives & Elementary Occupations n.e.c.

Overall employment: approximately 163,200 persons (62% male) were employed in the selected operatives & elementary occupations n.e.c., representing 7.1% of the national workforce.

- Sector: 55% of overall employment was concentrated in industry, with the wholesale/retail and the administrative services sectors combined accounting for a further 24%
- Employment growth (5-year): between 2015 and 2020, overall employment increased by 16,400 (2.1% on average annually compared to 2.2% nationally); the strongest rate of employment growth was observed for plant and machine operative occupations (9.0%)
- Age: the 25-54-year age group accounted for the majority of persons employed, at 70%; the share of workers aged 55 years and over was slightly below the national average of 19%
- Education: the share of persons employed in the selected operatives and elementary
 occupations n.e.c. who had attained higher secondary/FET qualifications was 50%, well above
 the national average share of 35%; over a fifth of persons had a lower secondary education
 qualification or less
- Full-time/part-time: almost 80% of operatives & elementary occupations n.e.c. workers were in full-time employment
- Nationality: the share of non-Irish workers (26%) was well above the national average of 17%, while 74% of workers were Irish nationals.



Numbers employed, 2020 (annual average)

Average growth rates (%) 2015-2020



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

Overall Outlook for these Occupations

Employment grew strongly in this occupational group up to 2019, but declined by 10% in 2020, with overall growth for the five-year period broadly in line with the national average. Three quarters of all employment in 2020 was in industry, wholesale and retail and the administrative and support services sectors, all of which have seen significant numbers of persons employed accessing income support payments (both EWSS and PUP).

Many of these roles are considered at high risk of automation; therefore, a return to employment levels seen in 2019 is not expected. However, labour supply issues may arise for some of these occupations due in part to the attractiveness of the roles and the ability to source skills from outside of Ireland given the curtailments in travel due to COVID-19 restrictions.

Occupation	Economic summary
Food, drink & tobacco	Employment growth for this occupation was broadly in line with the five-year national average, with no change in employment between 2019 and 2020. At 35%, this occupation had double the national average share of non-Irish persons employed. Over 1,000 new employment permits were issued for this occupation in 2020 (relating to meat processing operatives), although the quota assigned to this occupation was filled during 2020 with no further quotas planned. There was also a significant volume of vacancies for this occupation in 2020. The demand for meat products has been impacted by the closure of food services as a result of COVID-19 and by restrictions in trade due to Brexit. Food processing operatives have been cited as difficult-to-fill by employers in the Skills for Growth data with skills in English, hygiene and safety standards particularly in demand.
Chemical & related process	Employment growth was strong for this occupation over the five-year period, although numbers remained unchanged between 2019 and 2020. Process and general operators in high and medium-high tech manufacturing have been mentioned in the Skills for Growth data especially for those with goods manufacturing practice (GMP) and/or cleanroom skills.
Other process operatives & process plant occupations (e.g. packers, bottlers and elementary process plant ops.)	The large fall in employment between 2019 and 2020 saw overall numbers returning to 2017 levels, most likely attributed to some temporary closures and changes in work practices to comply with social distancing. At 30%, this occupation had a higher share of non-Irish persons employed than the national average. With this occupation identified as being at high risk of automation, future demand for these roles may be limited.
Plant & machine operatives (e.g. quarry workers, energy and sewerage plant operatives)	Employment growth over the five-year period was strong, despite an 11% fall in 2020. The small number of employment permits issued in 2020 related to machine operators. These occupations have been identified as being at high risk of automation and, as such, future demand may be limited.
Assemblers & routine operatives	While employment fell in this occupation between 2019 and 2020, the numbers remained higher than at any stage in the period 2015-2018. Both the high automation risk associated with these occupations and the impact of COVID-19 indicate that a full recovery to pre-COVID-19 levels is unlikely, particularly in the short-term.
Cleaning	Cleaners were primarily employed in the administrative and support services sector, which has seen a relatively high share of persons in receipt of income support payments since the onset of COVID-19. As a result, the numbers employed in this occupation fell by 19% in the year since 2019. Those employed as cleaners were primarily female and working part-time. Almost a quarter were aged 55 years and older and 38% were non-Irish nationals. Despite the decline in

	employment, a high number of recent job hires occurred in 2020, which may be as a result of both re-hiring as restrictions eased and job turnover. A full recovery in employment numbers will be dependent on the re-opening of businesses as restrictions ease and the return to offices of remote workers.
Sales, storage &	Employment grew strongly over the five-year period, with numbers remaining unchanged since 2019. Warehouse operatives were mentioned in both the Recruitment Agency Survey and by employers in the Skills for Growth data where skills in demand included manual handling and stock control. Over 10,000 recent job hires, however, would indicate that job turnover is an issue for this occupation.
services	Demand was likely sustained during the COVID-19 restrictions due to the increased activity in the grocery sector and through increased online shopping. The risk of automation associated

*For detailed table see Appendix A



Appendix A: Demand and Supply Indicators by Occupational Group

10.1 Science & Engineering Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Chemical, biological & physical scientists	22,400	6.4%	54%	92%	-	78%	97%	156	Х
Other engineering professionals	16,900	11.6%	-	96%	-	87%	84%	428	Х
Production, design & QC engineers	20,200	10.6%	[36%]	95%	-	86%	93%	600	Х
Science & engineering technicians	24,700	0.4%	30%	95%	-	88%	66%	20	Х
Production managers in manufacturing, mining and energy	15,100	1.2%	-	99%	[25%]	87%	56%	32	
Total	99,200	5.3%	30%	95%	13%	85%	79%	1,236	

10.2 ICT Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
ICT specialist & project managers	19,800	4.3%	-	95%	-	82%	90%	336	Х
Programmers & software developers	36,700	9.8%	-	97%	-	61%	95%	1,603	Х
ICT profs. n.e.c.	20,800	10.8%	[24%]	97%	-	59%	88%	1,517	Х
IT technicians	21,000	4.7%	-	95%	-	64%	76%	102	Х
Total	98,300	7.6%	20%	96%	7%	65%	89%	3,558	

10.3 Business & Financial Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Accountants & tax experts	43,500	-1.1%	50%	93%	16%	81%	95%	245	Х
Mgt. consultants, bus. analysts & project managers	25,700	19.0%	42%	90%	-	81%	87%	684	Х
Actuaries, economists & statisticians; other business profs.	12,600	15.5%	[44%]	98%	-	92%	91%	70	Х
Financial analysts and insurance underwriters	20,400	5.1%	49%	95%	-	84%	86%	41	
Other bus. associate profs.	22,100	4.9%	48%	88%	-	81%	74%	118	Х
Financial accounts managers	10,500	1.1%	[38%]	90%	-	84%	80%	13	
Financial managers & directors	14,100	1.9%	[50%]	98%	-	95%	86%	63	
Financial admin. occupations	62,400	3.7%	75%	75%	17%	86%	61%	6	Х
HR managers and officers	16,800	2.7%	74%	92%	-	85%	88%	61	
Total	228,100	4.2%	57%	88%	15%	85%	80%	1,301	

10.4 Healthcare Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Medical practitioners	17,300	1.3%	[50%]	89%	-	74%	97%	1,803	Х
Therapy profs.	13,700	7.1%	74%	[63%]	-	82%	98%	4	
Nurses & midwives	56,900	0.0%	91%	75%	20%	87%	95%	2,247	Х
Other healthcare profs.	21,900	2.2%	69%	79%	[20%]	90%	93%	159	
Health associate profs.	14,200	2.2%	76%	76%	-	86%	77%	9	Х
Total	124,000	1.5%	77%	76%	19%	85%	93%	4,222	

10.5 Education Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Higher & further education teaching profs.	18,300	7.8%	44%	73%	[24%]	78%	96%	60	
Secondary teachers	36,600	2.0%	69%	90%	[11%]	95%	96%	-	
Primary & nursery teachers	49,200	2.1%	88%	91%	-	97%	92%	4	
Teaching & other educational profs.	21,600	8.5%	67%	71%	30%	94%	87%	10	
Educational support assistants	23,100	15.9%	93%	79%	26%	94%	40%	-	
Trainers & instructors, career guidance	10,300	-0.7%	[53%]	80%	-	88%	77%	3	
Total	159,100	4.7%	74%	83%	17%	93%	84%	77	

10.6 Social & Care Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Welfare & housing associate profs.	10,900	1.0%	71%	74%	-	99%	80%	1	
Childminders, etc.	29,000	1.0%	100%	57%	-	73%	40%	-	
Other caring services	19,900	9.8%	70%	81%	[23%]	82%	[36%]	-	х
Social workers & welfare profs.	11,300	5.3%	[62%]	85%	-	89%	97%	1	
Care workers, home carers, etc.	55,800	-1.0%	84%	72%	24%	87%	40%	10	
Total	126,900	1.5%	83%	71%	20%	83%	48%	12	

10.7 Legal & Security Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Barristers, judges, solicitors & related profs.	16,700	4.8%	[47%]	94%	[25%]	93%	97%	13	Х
Gardaí	13,200	4.1%	-	99%	-	100%	79%	-	
Other protective service occupations	14,500	3.6%	-	95%	-	98%	[42%]	-	Х
Security guards	15,500	-1.1%	-	77%	[34%]	83%	-	-	
Total	59,900	2.7%	25%	92%	19%	94%	62%	13	

10.8 Construction Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Civil engineers & construction project managers	15,300	2.1%	-	96%	-	96%	74%	233	х
Architects & town planners, architectural technologists & surveyors	11,400	6.8%	-	92%	-	79%	88%	87	х
Bricklayers & plasterers	11,300	13.1%	-	91%	-	94%	-	-	
Plumbers	[8,700]	[1.1%]	-	[93%]	-	[88%]	-	-	
Carpenters & joiners	18,600	2.8%	-	96%	-	90%	-	-	Х
Painters & decorators	[7,300]	[3.4%]	-	[89%]	-	[80%]	-	-	
Other construction trades	22,200	2.8%	-	96%	[26%]	90%	-	13	Х
Construction operatives & elementary	32,900	-5.7%	-	85%	[17%]	72%	-	8	Х
Total	130,900	0.8%	-	92%	20%	85%	26%	341	

10.9 Other Craft Occupations n.e.c.

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Metal forming, welding & related trades	11,400	2.6%	-	[89%]	-	[80%]	-	76	х
Metal machining, fitting & instrument making trades	21,100	-5.1%	-	97%	[20%]	91%	[31%]	54	Х
Vehicle trades	20,000	1.9%	-	96%	-	84%	-	15	
Electrical & electronic trades, etc.	43,200	5.6%	-	97%	16%	86%	32%	6	Х
Other skilled trades	11,300	-1.2%	-	[84%]	-	70%	-	1	
Butchers, fishmongers, bakers etc.	9,700	-0.8%	-	[75%]	-	[70%]	-	80	Х
Total	116,500	1.1%	[6%]	93%	18%	83%	25%	232	

10.10 Agriculture & Animal Care Occupations

	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Managers in horticulture, agriculture and fishing	[5,900]	-	-	[97%]	-	[100%]	-	9	
Farmers	65,800	-3.9%	11%	87%	55%	99%	14%	-	
Horticultural, agricultural & fishing trades n.e.c.	14,700	-0.9%	-	65%	[40%]	84%	-	-	
Elementary agriculture	16,900	2.3%	[33%]	54%	[19%]	80%	-	49	
Animal carers & pest controllers	[5,200]	-	-	-	-	-	-	-	
Total	108,700	-1.1%	16%	78%	45%	94%	19%	58	

10.11 Hospitality Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Hospitality managers	18,800	-0.1%	[49%]	88%	[27%]	70%	[48%]	1	
Chefs & cooks	28,500	2.1%	35%	76%	-	48%	[36%]	570	
Catering & bar managers	[6,400]	[6.7%]	-	-	-	-	-	-	
Kitchen & catering assistants	33,000	2.1%	53%	56%	-	59%	-	-	
Waiters & waitresses	25,400	-2.1%	74%	[44%]	-	79%	-	-	
Bar staff	14,700	-7.1%	-	[66%]	-	85%	-	-	
Housekeepers & caretakers, etc.	[6,900]	[4.9%]	-	-	-	-	-	-	
Total	133,700	0.0%	52%	66%	12%	65%	28%	571	

10.12 Arts, Sports & Tourism Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Media profs. & librarians	10,200	1.4%	[61%]	87%	-	87%	89%	24	
Artistic, literary & media associate profs.	27,300	0.6%	53%	76%	[17%]	77%	76%	144	
Sports & fitness occupations	13,900	3.8%	-	[63%]	-	77%	[51%]	28	
Leisure & travel service occupations	13,600	6.4%	[64%]	[54%]	-	86%	-	-	
Hairdressers & beauticians, etc.	23,600	-0.3%	91%	69%	-	84%	[33%]	-	
Total	88,600	1.7%	63%	71%	15%	81%	57%	196	

10.13 Transport & Logistics Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Managers & directors in transport & logistics	11,000	9.8%	-	98%	-	78%		7	х
Stock control, transport & distribution admin. occupations	[7,500]	[7.0%]	-	[90%]	-	[78%]	-	16	Х
Truck & van drivers	34,900	0.5%	-	89%	[17%]	78%	-	22	Х
Mobile machine drivers & operatives	16,300	5.7%	-	92%	-	76%	-	-	Х
Other drivers & transport operatives	30,200	-0.5%	-	72%	49%	90%	[18%]	-	
Total	102,200	2.1%	[7%]	85%	28%	81%	21%	45	

10.14 Administrative & Secretarial Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Government admin. occupations	48,700	10.3%	71%	86%	24%	95%	51%	-	
Other administrators	77,800	4.1%	79%	72%	25%	90%	49%	2	х
Office managers & supervisors	9,400	-0.8%	[73%]	87%	-	98%	[48%]	-	
PAs & other secretaries, etc.	30,800	0.9%	96%	71%	27%	85%	41%	-	
Receptionists	10,400	1.2%	90%	-	-	96%	-	-	
Elementary administrative	9,100	0.0%	-	88%	-	92%	-	-	
Total	186,200	4.2%	76%	76%	25%	91%	45%	2	

10.15 Sales, Marketing & Customer Service Occupations

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Advertising, marketing & sales directors	[7,200]	[1.8%]	-	[98%]	-	[100%]	[74%]	53	
Managers & directors in retail & wholesale	24,900	3.3%	39%	98%	-	75%	40%	4	
Business sales executives	15,700	-8.1%	-	93%	-	76%	[55%]	199	
Sales accounts & bus. dev. managers	20,300	-1.5%	[36%]	94%	-	87%	78%	115	Х
Other sales and marketing assoc. prof.	24,600	8.3%	58%	89%	[18%]	83%	74%	288	Х
Sales assistants	122,400	-1.3%	65%	49%	12%	88%	20%	3	Х
Sales related occupations n.e.c.	27,100	12.3%	42%	85%	[14%]	77%	39%	2	
Customer service occupations	29,500	6%	57%	82%	-	65%	52%	89	Х
Total	271,700	1.1%	54%	71%	13%	82%	40%	753	

10.16 Operatives & Elementary Occupations n.e.c.

Bulletin description	Number Employed, 2020 (Annual Average)	Annualised Employment Growth Rate, 2015-2020	% Female (Q4 2020)	% Full-Time (Q4 2020)	Aged 55 years and over (Q4 2020)	% Irish Nationals (Q4 2020)	% Third Level Graduates (Q4 2020)	New Employment Permits Issued, 2020 (Number)	SLMRU Recruitment Agency Survey, Oct 2020
Food, drink & tobacco	17,000	2.3%	-	89%	-	65%	-	1,059	
Chemical & related process	9,000	8.2%	-	98%	-	[80%]	-	-	
Other process operatives and process plant occupations	16,500	-1.5%	-	89%	-	70%	-	4	Х
Plant & machine	11,700	9.0%	-	91%	-	100%	-	4	
Assemblers & routine operatives	35,200	2.7%	40%	95%	[12%]	78%	33%	3	
Cleaners	40,200	-0.9%	75%	45%	24%	62%	-	1	
Sales, storage & services	33,600	4.2%	-	82%	[17%]	82%	-	1	Х
Total	163,200	2.1%	38%	79%	18%	74%	23%	1,072	

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 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 & 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.
	Other bus. associate profs. Estimators, valuers and assessors
	Other bus. associate profs. Estimators, valuers and assessors Importers and exporters
	Other bus. associate profs. Estimators, valuers and assessors Importers and exporters Financial and accounting technicians
	Other bus. associate profs. Estimators, valuers and assessors Importers and exporters Financial and accounting technicians Business and related associate professionals n.e.c.
	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
	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
	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
	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 managers & directors
	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
	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 managers & directors Financial managers and directors Financial institution managers and directors
	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 managers & directors Financial managers and directors Financial institution managers and directors Financial admin. occupations
	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
	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 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
	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 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
	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 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
	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 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 Financial administrative occupations n.e.c.
	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 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 Financial administrative occupations n.e.c. Pensions and insurance clerks and assistants
	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 Financial administrative occupations n.e.c. Pensions and insurance clerks and assistants HR managers and officers
	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 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 Financial administrative occupations n.e.c. Pensions and insurance clerks and assistants HR managers and officers Human resource managers and directors

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

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 & Care Occupations	Welfare & housing associate profs.
	Youth and community workers
	Child and early years officers
	Housingofficers
	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 & 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 & 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.

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

bakers and nour connectioners

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 and catering assistants
	Waiters & waitresses
	Waiters and waitresses
	Barstaff
	Bar staff
	Housekeepers & caretakers, etc.
	Housekeepers and related occupations
	Cleaning and housekeeping managers and supervisors
Arts, Sports & Tourism Occupations	Media profs. & librarians
	Librarians
	Archivists and curators
	Journalists, newspaper and periodical editors
	Public relations professionals
	Advertising account managers and creative directors

Arts, Sports & Tourism Occupations	Artistic, literary & media associate profs.
continued	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
	Granhic designers
	Product, clothing and related designers
	Sports & fitness occupations
	Leisure and sports managers
	Sports players
	Sports coaches instructors and officials
	Fitness instructors
	Sports and leigure assistants
	Travel agente
	Airtravel assistants
	Pail travel assistants
	Leisure and theme park attendants
	Travel agency managers and proprietors
	Leisure and travel service occupations n.e.c.
	Hairdressers & beauticians, etc.
	Hairdressers, barbers, beauticians and related occupations
Transport & Logistics Occupations	Managara & directors in transport & logistics
	Managers & directors in transport & togistics
	Managers and directors in transport and distribution
	Managers and directors in storage and warehousing
	Stock control, transport & distribution admin.
	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 & Logistics Occupations	Other drivers & transport operatives
continued	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
	Airtraffic controllers
	Aircraft pilots and flight engineers
	Ship and hovercraft officers
Administrative & Secretarial Occupations	
Administrative & Secretariat Occupations	Government admin.
	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
	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 & 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 & 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
	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.

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.



Tel: 01 5332464 Email: annemarie.hogan@solas.ie www.solas.ie



