# Spring Skills Bulletin 2022

Moving on up: Better aligning existing skills levels with Ireland's labour market needs, Q3 2021





#### 1. Introduction

Occupation is often one measure of job quality. For example, mangers, professionals, and associate professionals typically attract better wages and conditions relative to some other occupational groups. Furthermore, the impact of the pandemic on employment and the subsequent recovery was not evenly distributed, with strong differences observed depending on a range of factors including individuals' occupations. Those with lower levels of skills or qualifications face a number of other, related disadvantages, including, among others,

- automation risk: for some, many of the tasks associated with their jobs are highly susceptible to automation
- lack of mobility: the perceived lower level of skill restricts possibilities to transfer those skills to other occupations
- low uptake of lifelong learning opportunities: data on lifelong learning participants shows that those in lower skilled occupations and those with low levels of educational attainment have shares participating in lifelong learning well below the average.

The focus of this report, therefore, is on persons employed in occupations typically exposed to such factors. We begin by defining the specific types of occupations frequently regarded as medium or lower skilled, before examining trends in employment levels as well as profiling, in terms of gender, age, education, and sector of employment, the persons working in these occupational groups.

The Standard Occupational Classification (SOC)¹ categorises occupations according to one of four skill levels, each of which is based on the length of time required for a person to become competent in performing the tasks associated with a job, through formal education and/or work experience. Table A in the Appendix summarises the occupations at each of these levels. It should be borne in mind that not all those employed in occupations at skill levels 1 and 2 have low skill levels: in fact, recent research (for example by the SLMRU² and NERI²) has shown that over-qualification continues to be a feature of Ireland's workforce.

For the purposes of this paper, we will focus on those employed in occupations at skill levels 1 and 2 (i.e. elementary, operative, sales, personal/caring and administrative occupations) and refer to them as lower and mid-lower skilled occupations. Those working in other occupations will be referred to as high and mid-higher skilled occupations, as relevant.

# 2. Profile of Ireland's workforce by occupational skill level

Between quarter 3 2011 and quarter 3 2021, the numbers employed in each of the occupational skill groups increased, albeit at different rates (Figure 1). Despite dips in 2020 related to the COVID-19 public health restrictions, by quarter 3 2021, employment levels were the highest ever over the period for each of the four occupational skill levels.

With approximately 828,000 workers in quarter 3 2021, those working in mid-lower occupations (i.e. skill group 2) formed the largest group while those in lower skilled occupations (i.e. skill group 1) comprised the smallest, with 258,000 workers.

Despite the increases in the numbers employed in each of the occupational skill levels, the distribution of skills within the workforce shifted gradually towards higher skill occupations. The share of workers in high skilled occupations grew from 25% in quarter 3 2011 to 28% in quarter 3 2021; over the same period, the share of workers in lower skilled occupations, and to a lesser extent those in mid-lower skilled occupations, fell (by two and one percentage points, respectively) and combined comprised 44% of employment (compared to 47% and 46% 10 years and 2 years earlier respectively).

SOC2010 Volume 1 (ONS 2020, p2-3). Further details are available at https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010/soc2010volume1structureanddescription sofunitgroups#the-soc2010-manual.

<sup>2</sup> Spring Skills Bulletin 2021: Skills Mismatch in Ireland's Labour Market.

<sup>3</sup> Trends in the Irish labour Market. Special Focus: Young People.

1000 828 800 694 657 681 527 600 470 400 258 226 200 0 Q3 11 Q3 12 Q3 13 Q3 14 Q3 15 Q3 16 Q3 17 Q3 18 Q3 19 Q3 20 Q3 21 Lower (elementary) Mid-lower (e.g. caring/secretarial) High (e.g. professional) Mid-higher (e.g. skilled trades/technicians)

Figure 1. Workforce aged 15-89 years (000s) by occupational skill group, Q3 2011-Q3 2021

Source: CSO Labour Force Survey (Supplementary Tables). Excludes instances where occupation was not stated

#### Impact of COVID-19

Table 1 shows the change in employment that occurred in the period since the pandemic by occupational skill group. Between quarter 3 2019 and quarter 3 2021, total employment grew by 145,100 persons, or 6%. However, the rate of growth was not evenly spread across the occupational skill groups: the mid-higher and high skilled occupations grew by 6% and 14% respectively, with a much smaller growth rate of 2% observed for mid-lower skilled occupations, and no growth at all in the employment levels for the lower skilled occupations. In fact, more than four fifths (87%, or 126,100 persons) of all employment growth that occurred in Ireland over this period was for high and mid-higher skilled occupations, indicating that workers in these occupations benefited most from the economic recovery post-Covid.

Table 1. Employment change (000s and %) by occupational skill group Q3 2019 and Q3 2021

Occupational skill group	Employment change (000s) Q3 2019 - Q3 2021	Employment Change (%) Q3 2019 - Q3 2021
Lower	-0.1	0%
Mid-lower	19.1	2%
Mid-higher	42.6	6%
High	83.4	14%
Total employment	145.1	6%

Source: CSO Labour Force Survey; Excludes instances where occupation was not stated

# 3. Lower and mid-lower occupational skilled occupations by subgroup

Employment levels increased for most of the sub-groups within lower and mid-lower skilled occupations (Figure 2) between quarter 3 2011 and quarter 3 2021. The exception was for elementary trades occupations (e.g. construction or farm labourers), where employment fell slightly (by 900 persons, or 2%). The largest absolute growth was for secretarial/admin occupations, which grew by 62,100 persons (31%) and caring/personal services, which grew by 41,800 persons (or 41%). Despite strong declines in 2020 (due to the pandemic), the number of persons in elementary services occupations (e.g. waiting, cleaning and security staff) also grew strongly over this ten-year period (+33,200 persons, or 19%).

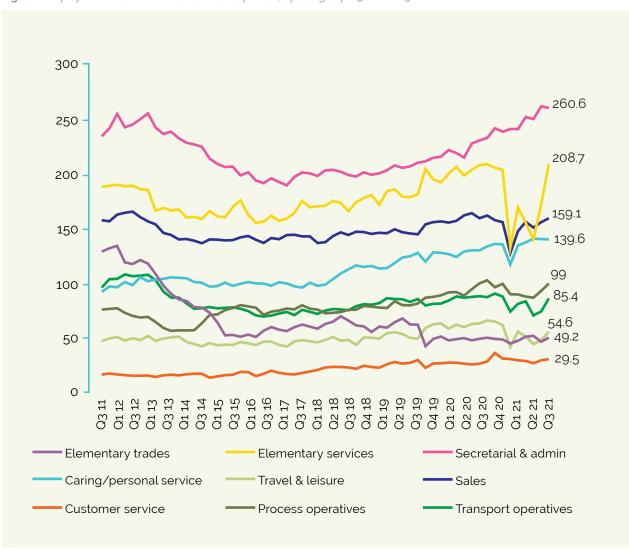


Figure 2 Employment in lower and mid-lower occupations, by sub-group Q3 2011 – Q3 2021

Source: CSO Labour Force Survey (Supplementary Tables) Excludes instances where occupation was not stated

#### 4. Gender

Combined, lower and mid-lower skilled occupations accounted for 468,200 males and 617,600 females (Figure 3). This translates into more than a third (36%) of the male workforce, but more than a half (54%) of the female workforce. Most of this gender difference was due to comparatively larger shares of females working in mid-lower occupations (i.e. traditionally female dominated roles such as admin, sales or caring/personal services) and smaller shares working in mid-higher skilled occupations (e.g. construction trades or farming).

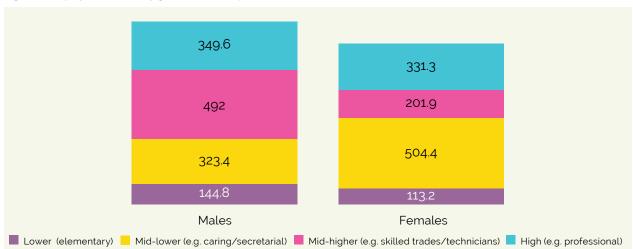


Figure 3. Employment (000s) by gender and occupation skill level, Q3 2021

Source: CSO Labour Force Survey Excludes instances where occupation was not stated

#### Impact of Covid

Table 2 shows the change in employment by gender and occupational skill group that occurred in quarter 3 2021 compared to quarter 3 2019. Overall, the recovery in employment levels was stronger for females (8%, or 89,900 additional persons) compared to males (4%, or 55,300 additional persons). Furthermore, while the growth in male employment was due entirely to increases in the number of persons working in high and mid-high occupations, the growth for females, while concentrated in the high and mid-high occupations, also occurred in mid-lower occupations (+5%) and to a lesser extent in lower skilled occupations (+2%).

In other words, while not evenly spread across occupational skill groups, female employment showed a stronger recovery than male employment, even for potentially vulnerable jobs in the lower and mid-lower skilled groups.

Table 2. Employment and employment change by gender and occupational skills group. Q3 2019 and Q3 2021

Q3 2019 (000s) Q3 2021 (000s) Change (000s) % Cha

	Q3 2019 (000s)	Q3 2021 (000s)	Change (000s)	% Change
Male	1254.6	1309.9	55.3	4%
High	299.2	349.6	50.4	17%
Mid-high	481.1	492	10.9	2%
Mid-lower	327.5	323.5	-4	-1%
Lower	146.8	144.8	-2	-1%
Female	1061	1150.8	89.8	8%
High	298.2	331.3	33.1	11%
Mid-high	170.4	201.9	31.5	18%
Mid-lower	481.3	504.4	23.1	5%v
Lower	111.2	113.2	2	2%

Source: CSO Labour Force Survey; Excludes instances where occupation was not stated

# 5. Age

As shown in Figure 4, in quarter 3 2021, nearly three quarters of all persons in employment aged less than 25 years were in lower and mid-lower skilled occupations, partly due to students holding jobs in the hospitality and sales sectors (44% of the <25-year-olds working in lower or mid-lower occupations had stated they were students). With the exception of <25-year-olds, **persons aged 55+ years have slightly higher shares of employment in lower and mid-lower skilled occupations** (accounting for 42% of employed persons aged 55+ years compared to 38% and 40% for their 35-44-year-old and 25-34-year-old counterparts respectively).

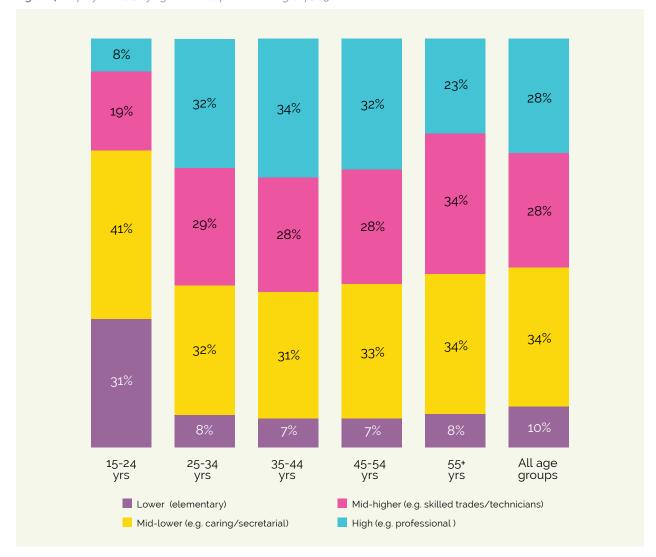


Figure 4. Employment (%) by age and occupational skill group, Q3 2021

Source: CSO Labour Force Survey Excludes instances where occupation was not stated

#### Impact of Covid

Table 3 shows the employment change that occurred in quarter 3 2021 compared to quarter 3 2019 (i.e. prior to Covid-19). While there was growth in employment levels for each of the age groups, the strongest growth was for the number of 15-24 year-olds, where employment grew by a fifth over the two-year period. More than half of the increase for 15-24-year-olds was for those working in lower skilled occupations (+28,800 persons or 41%), with the vast majority of these (24,500 out of 28,800 persons) being students.

For workers aged 25 years and over, employment shifted away from lower skilled occupations towards midhigher and high skilled occupations: in particular, employment growth for the prime working age cohort (25-54 years) was confined to mid-higher and high skilled occupations, with the number of people in this cohort actually declining for lower and mid-lower skilled occupations.

Table 3. Employment change (000s and %) by age group and occupational skills group, Q3 2019-Q3 2021

	Lower	Mid-lower	Mid-higher	High	Total
15-24 years	28.8	13.4	8	2.7	52.9
	+41%	+11%	+15%	+11%	+20%
25-54 years	-26.7	-1.2	6.8	67.6	46.5
	-18%	0%	1%	14%	3%
55 years+	-2	7	27.6	13.1	45.7
	-5%	5%	21%	14%	11%
All ages	0.1	19.2	42.4	83.4	145.1
	0%	2%	7%	14%	6%

Source: CSO Labour Force Survey Excludes instances where occupation was not stated

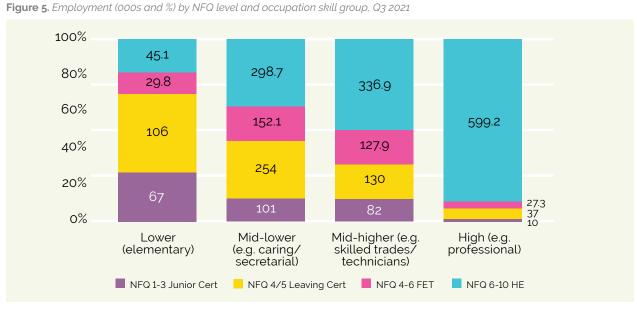
# 6. Education profile

In quarter 3 2021, the lower the occupational skill group, the greater the share of workers holding qualifications at the lower end of the National Framework of Qualifications (Figure 5). Persons holding at most a Leaving Cert qualification or equivalent (i.e. NFQ level 4/5) made up 70% of those working in lower skilled occupations and 43% of those in mid-lower skilled occupations, but 33% of the total workforce in quarter 3 2021. However, of the 527,900 persons with at most a level 4/5 secondary qualification who were working in lower or midlower occupations, almost a fifth (18%, or 96,000 persons) were students. Of the 343,800 third level graduates working in lower and mid-lower occupations, fewer than 7% were students.

Although the concentration of persons with NFQ 1-3 and NFQ 4/5 qualifications was greatest in lower and midlower skilled occupational groups, persons with these qualifications also made up nearly a fifth (19%, or nearly 259,000) of persons working in the mid-higher and higher skilled occupations combined. In other words, not all persons with, at most, secondary school qualifications work in mid-lower or lower skilled occupations4.

Therefore, the presence of more than a quarter of a million people with relatively low educational attainment who nonetheless worked in high and medium-high skills suggests that qualifications levels alone are not

necessarily barriers to career pathways.



Source: CSO Labour Force Survey Excludes instances where occupation and NFQ was not stated

While farmers made up by far the largest single occupation for those with at most NFQ 4/5 qualifications (approximately 42,000 persons), other second level qualification holders were working as hospitality managers (11,100 persons), business etc (including sales executive) associate professionals (26,600 persons), construction trades persons (33,400 persons), metal/electronic trades persons (27,000) and in food preparation occupations (15,200 persons).

# Mid-lower and lower skilled employment by occupational group & NFQ level

Within lower and mid-lower skilled occupations, elementary occupations had the lowest qualifications profile: 27% of those working in elementary occupations held at most NFQ 3 qualifications and a further 43% held at most level 4/5 qualifications (Figure 6). However, 30% of all elementary workers with, at most, level 4/5 qualifications were still students and had yet to complete education/training (nearly 51,000 workers); this share is higher than the 20% who were students working across all lower and mid lower skilled occupations.

While the majority (59%) of those working in sales occupations held, at most, NFQ 4/5 qualifications, a considerable number (over 30,000 persons) were also students, amounting to 28% of all sales workers with these qualifications.

The comparatively high numbers of persons with third level qualifications working in lower and mid-lower skilled occupations, especially in administrative, caring and operative occupations where the share of students is comparatively small (at most, 2%), suggests that many of those working in lower and mid-lower skilled occupations are over-qualified for their roles.<sup>5</sup>

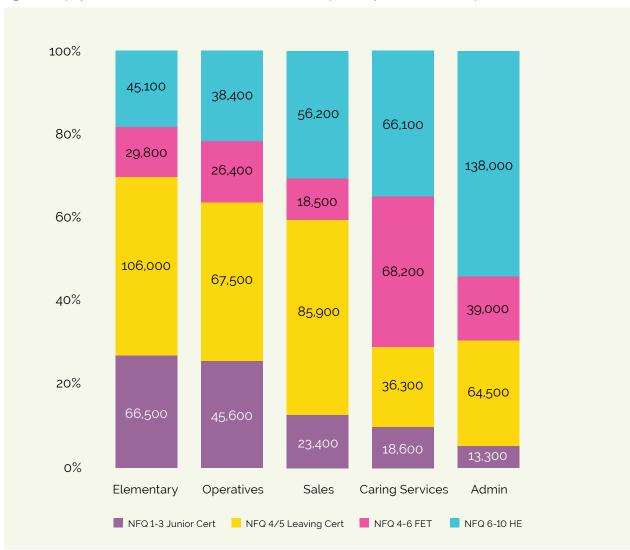


Figure 6. Employment (numbers and %) in lower and mid-lower occupations by NFQ level and occupation, Q3 2021

Source: SLMRU analysis of CSO (LFS) data \*Excludes persons who did not state an NFQ level

For further information on over-qualification, especially in administrative occupations, please see *Skills Mismatch in Ireland's Labour Market* (SOLAS: 2021).

# Impact of Covid

Figure 7 shows the percentage change in employment by NFQ level for each of the occupational skill groups. The employment growth that occurred between quarter 3 2019 and quarter 3 2021 for high, mid-higher and mid-lower skilled occupational groups was confined to those holding either FET or higher education qualifications. While persons with low qualification levels made up nearly a fifth of those working in high and mid-higher skilled occupations in quarter 3 2021 (as seen earlier in Figure 5), they nonetheless suffered strong declines in employment numbers compared to quarter 3 2019, while their counterparts holding qualifications at higher levels of the NFQ actually increased. (It should be noted, however, that the 29% fall in those with at most NFQ 3 qualifications in high skilled occupations relates to a comparatively small decrease in absolute terms due to the small numbers involved).

In general, the largest relative decreases in employment were observed for those with at most an NFQ level 3 qualification (with the exception of a 6% decline in the number of FET qualification holders working in lower skilled occupations), exposing the vulnerability of low qualified workers, even when they are employed in high and mid-higher skilled occupations.

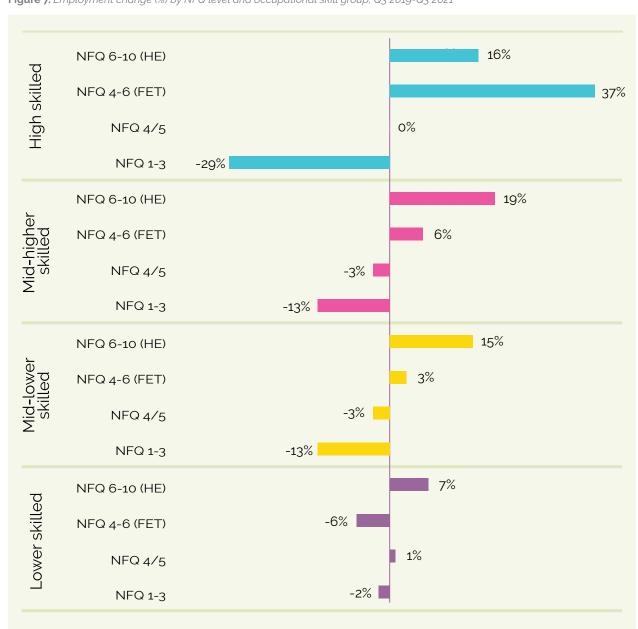


Figure 7. Employment change (%) by NFQ level and occupational skill group, Q3 2019-Q3 2021

Source: SLMRU analysis of CSO (LFS) data Excludes persons who did not state an NFQ level or occupation

# 7. Employment by sector

The occupational skills profiles of sectors differ considerably (Figure 8). At least 65% of total employment in the transport, accommodation/food, wholesale & retail and admin/support services sectors, was in lower and mid-lower skilled occupations. Alone these four sectors made up 44% of total employment in lower and mid-lower skilled occupations.

In contrast, just 10% of ICT sectoral employment was in mid-lower skilled occupations (and almost none in the lower skilled occupations). Similarly, the share of professional services employment in the lower skilled occupations was negligible, while just 18% were in mid-lower skilled occupations.

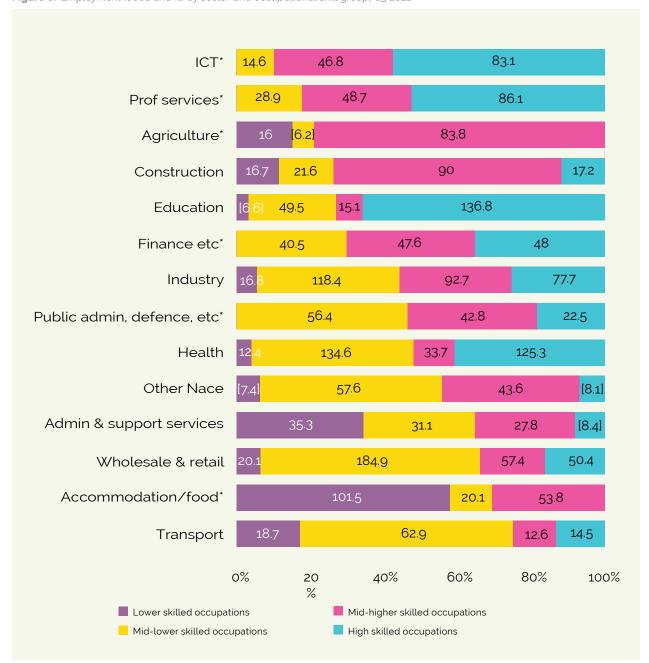


Figure 8. Employment (000s and %) by sector and occupational skill group, Q3 2021

Source: SLMRU analysis of CSO (LFS data). Excludes instances where occupation and/or sector were not stated \*Excludes occupational skill groups where instances were too small to report.

The Other NACE category includes arts, entertainment & recreation, and other services

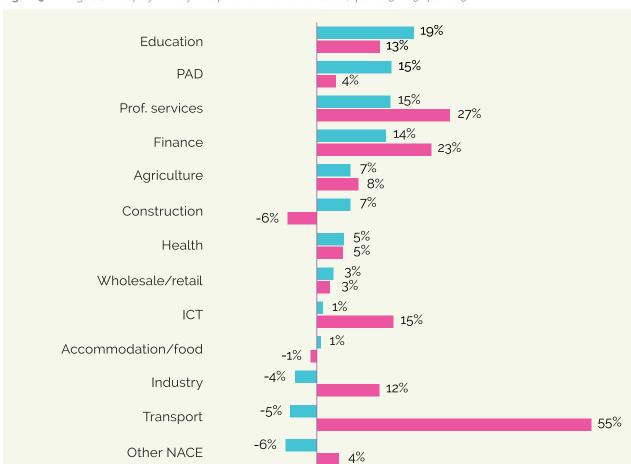
<sup>[ ]</sup> Numbers in square brackets are small and should be interpreted with caution

### Impact of COVID

Figure 9 compares the quarter 3 2019-quarter 3 2021 change in employment for lower and mid-lower skilled occupations with that of high and mid-higher skilled occupations. Compared to high and mid-higher skilled occupations, the employment growth rate for lower and mid-lower skilled occupations

- was higher for the education and public administration and defence (PAD) sectors; furthermore, in the
  construction sector, and to a lesser extent the accommodation/food sector, employment of persons in
  lower and mid-lower occupations grew while falling for those in high and mid-higher skilled occupations
- was almost the same for health and wholesale/retail
- was lower but nonetheless with positive growth for the professional services, finance, agriculture and ICT sectors.

In addition, despite growth in the high and mid-higher skilled occupation groups, employment declined for those working in lower and mid-lower skilled occupations in the other NACE, transport, industry and admin/support services sectors.



9%

High & mid-higher occupations

Figure 9. Change (%) in employment by occupation skill level and sector, quarter 3 2019-quarter 3 2021

-13%

Lower & mid-lower occupations

Source: CSO Labour Force Survey
Excludes instances where occupation was not stated

Admin/support services

# 8. Employment in lower and mid-lower occupations by NFQ and sector

Figure 10 shows the NFQ level of the qualification holders working in lower and mid-lower skilled occupations by sector. The educational profile of persons working in lower and mid-lower skilled occupations varied by sector: in some sectors (i.e. health, education, professional services, PAD and ICT/Finance), 70% or more of those working in perceived lower and mid-lower skilled occupations were well qualified, holding FET or higher education qualifications. With the exception of the real estate segment of the finance etc sector, these sectors are typically classified as knowledge intensive sectors.

In contrast, other sectors (i.e. agriculture, transport and construction) had comparatively higher shares of persons with at most a Junior Cert working in lower and mid-lower skilled occupations, with 29%, 30% and 29% respectively. In addition, it is worth noting that there were high numbers of persons with low qualifications levels (at most NFQ 3) working in lower and mid-lower skilled occupations in other sectors such as accommodation/food, wholesale/retail and industry, although because these sectors are typically amongst the largest in the economy the numbers did not translate into particularly high shares.

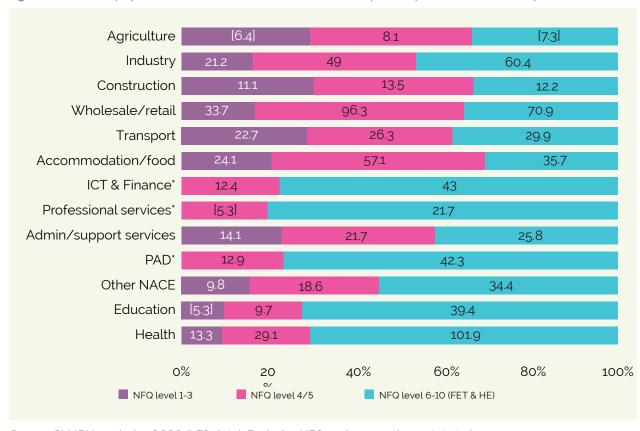


Figure 10. Persons employed (000s & %) in lower and mid-lower skilled occupations by sector and NFQ level Q3 2021

Source: SLMRU analysis of CSO (LFS data). Excludes NFQ and occupation not stated

# 9. Summary and conclusion

Employment in lower and mid-lower skilled occupations has been increasing since quarter 3 2011. However, since the onset of COVID-19, employment growth has been particularly pronounced for those in high skilled occupations, with only modest growth for mid-lower skilled occupations and a decline (albeit very small) for those in lower skilled occupations. The changes in employment levels since quarter 3 2019 were not evenly spread: the number of males employed in lower and mid-lower skilled occupations declined (while females in these occupations grew slightly); at the same time, in lower and mid-lower skilled occupations, the increases in employment for those aged 15-24 years offset declines for those aged 25-54 years.

<sup>[ ]</sup> Numbers in square brackets are small and should be treated with caution.

For these sectors, numbers employed were too small to report for those holding qualifications at NFQ 1-3.

Differences were also observed across qualification levels of workers; despite an overall increase in employment for those working in high and mid-higher skilled occupations between quarter 3 2019 and quarter 3 2021, employment levels in these occupations for those holding at most a Leaving Certificate or equivalent fell.

Nonetheless, the fact that many people in lower and mid-lower skilled occupations held third level qualifications, even accounting for those who were still in full-time education, suggests that there is scope for upward mobility into higher level occupations for some. Furthermore, not all persons employed in high and mid-higher skilled occupations held high qualifications levels, raising the possibility of progression, even for those without third level qualifications.

Navigating pathways for career changes and progression will play an important role in helping workers in occupations most vulnerable to impacts such as that of the pandemic, the digital transformation and the risk of automation.

# **Appendix**

**Table A.** Occupation sub-groups (SOC 2010) by skill group

Skill Group	Referred in this paper as	SOC Code	Occupation sub-group	Example
Level 4	High skilled	11	Corporate managers and directors	Bank manager
		21	Science, research, eng & technology professionals	Engineer
		22	Health professionals	Nurse
		23	Teaching and educational professionals	Teacher
		24	Business, media and public service professionals	Accountant
	Mid-high skilled	12	Other managers and proprietors	Hotel manager
		31	Science, eng. and technology associate professionals	Lab technician
Level 3		32	Health and social care associate professionals	Youth worker
		33	Protective service occupations	Gardaí
		34	Culture, media and sports occupations	Graphic designer
		35	Business and public service associate professionals	Tax expert
		51	Skilled agricultural and related trades	Farmer
		52	Skilled metal, electrical and electronic trades	Electrician
		53	Skilled construction and building trades	Carpenter
		54	Textiles, printing and other skilled trades	Chef
	Mid-lower skilled	41	Administrative occupations	Book-keeper
		42	Secretarial and related occupations	Receptionist
Level 2		61	Caring personal service occupations	Childcare worker
		62	Leisure, travel and related personal service occupations	Hairdresser
		71	Sales occupations	Sales assistant
		72	Customer service occupations	Call centre agent
		81	Process, plant and machine operatives	Food process operative
		82	Transport and mobile machine drivers and operatives	HGV driver
Lovela	Lower skilled	91	Elementary trades and related occupations	Ground worker
Level 1		92	Elementary administration and service occupations	Cleaner

Source: ONS

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