Summer Skills Bulletin 2025

Prevalence of Skills Mismatch in Ireland's Labour Market

SOLAS
learning works

Skills Match and Skills Mismatch in Ireland Workforce

Key Points

The skillsets of most workers (60%) in Ireland are well-matched to their jobs.
However, under-skilling and in particular over-skilling are also a feature of Ireland's workforce.

Under-skilled workers

Nearly

7%

of workers report that some of their skills are lower than what is required for their job (OECD average: nearly 10%). Under-skilled workers are more likely to be

- **young**
- working in **skilled occupations**
- **male**
- working in the **education, public administration** & **defence (PAD), industry,** or **wholesale/retail sectors**

Skills deficits were driven in particular by workers' perceived need to improve **computer or software skills** and, to a lesser extent, **team-working/leadership** and **project management skills.** Yet recent education and training participation tended to be in other areas (e.g. health and safety).

Over-skilled workers

33.5%

One third of workers in Ireland were over-skilled, which is a considerably larger share than the OECD average (26.1%.).

Over-skilled workers were more likely to:

- be aged 45-54 years
- be born outside of Ireland
- work in transport, wholesale/retail or accommodation /food sectors
- have studied ICT or engineering /construction subjects

1. Introduction

Skills mismatch in the workforce has important implications for the labour market. Under-skilling in the workforce can affect firm productivity as well as lead to lower wages and increased risk of unemployment for the individual, while over-skilling has been shown to lead to lower job satisfaction and wage penalties for employees, as well as lower productivity and retention issues for employers (OECD 2024).[1] The aim of this report is to highlight where and the extent to which skills mismatch occurs amongst workers in Ireland to inform skills intervention policies designed to make the most efficient use of skills.

Data and definitions

PIAAC (Programme for International Assessment of Adult Competencies) is an OECD-led project carried out across selected countries. A key product of PIAAC is its Survey of Adult Skills. While the main focus of the Survey is the level of numeracy, literacy and adaptive problem solving, information was also collected on the extent to which workers perceived their skills to be matched or mismatched to the jobs that they do. In PIAAC, a worker was classified as:

- **over-skilled** if their skills are higher than is required by their job.
- **under-skilled** if their skills are lower than required by their job and need to be further developed.
- **well-matched** if their skills are well matched to what is required to do their job.

The second and most recent cycle of the Survey of Adult Skills, in which Ireland participated, was conducted in late 2022 and early 2023. Results were released in December 2024. In addition to a published report,[2] detailed datasets were made available in public use files.[3] Using data from the public use files, this report examines the profile of workers whose skills are mismatched to their jobs.

As highlighted by the OECD, this type of skills mismatch measure may be subject to some bias (e.g. under- or over-confidence) in that the extent of skill match or mismatch is identified by the respondents themselves. On the other hand, this type of measure assumes that workers are best placed to report on their own skills and the requirements of their own job and as such can contribute to identifying areas where and the extent to which skills mismatches are occurring.

1 OECD (2024). Do Adults Have the Skills They Need to Thrive in A Changing World?

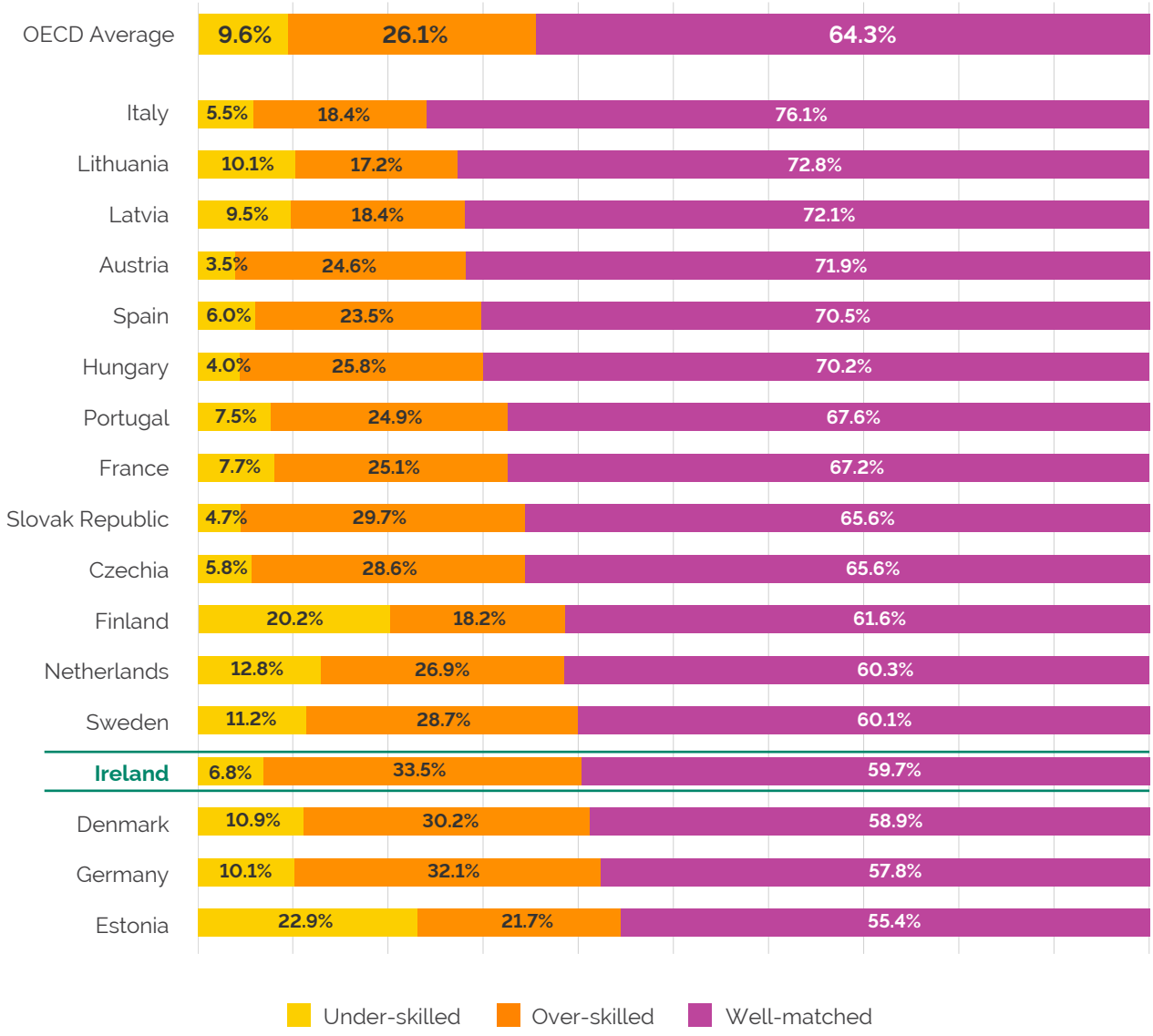
2 Ibid.

3 Public Use Files. PIACC data and methodology | OECD

2. Skills match and mismatch in Ireland

In 2023, nearly 60% of workers[4] in Ireland believed their skills were well matched to their jobs (Figure 1). This is lower than the OECD average (64.3%), mainly because the share of those in Ireland who deemed themselves to be over-skilled (at 33.5%) is considerably higher than the 26.1% observed across OECD countries on average. The share of workers in Ireland who believed they were under-skilled, at nearly 7%, is lower than the OECD average of 10%. Amongst participating EU countries, Ireland had the fourth highest share of skills mismatch in the workforce (just over 40%), driven largely by the fact that Ireland had the highest share of over-skilled workers.

Figure 1. Incidence of skill mismatch (%) in selected EU countries & OECD average, 2023



Source: OECD (PIACC Table A.4.12)

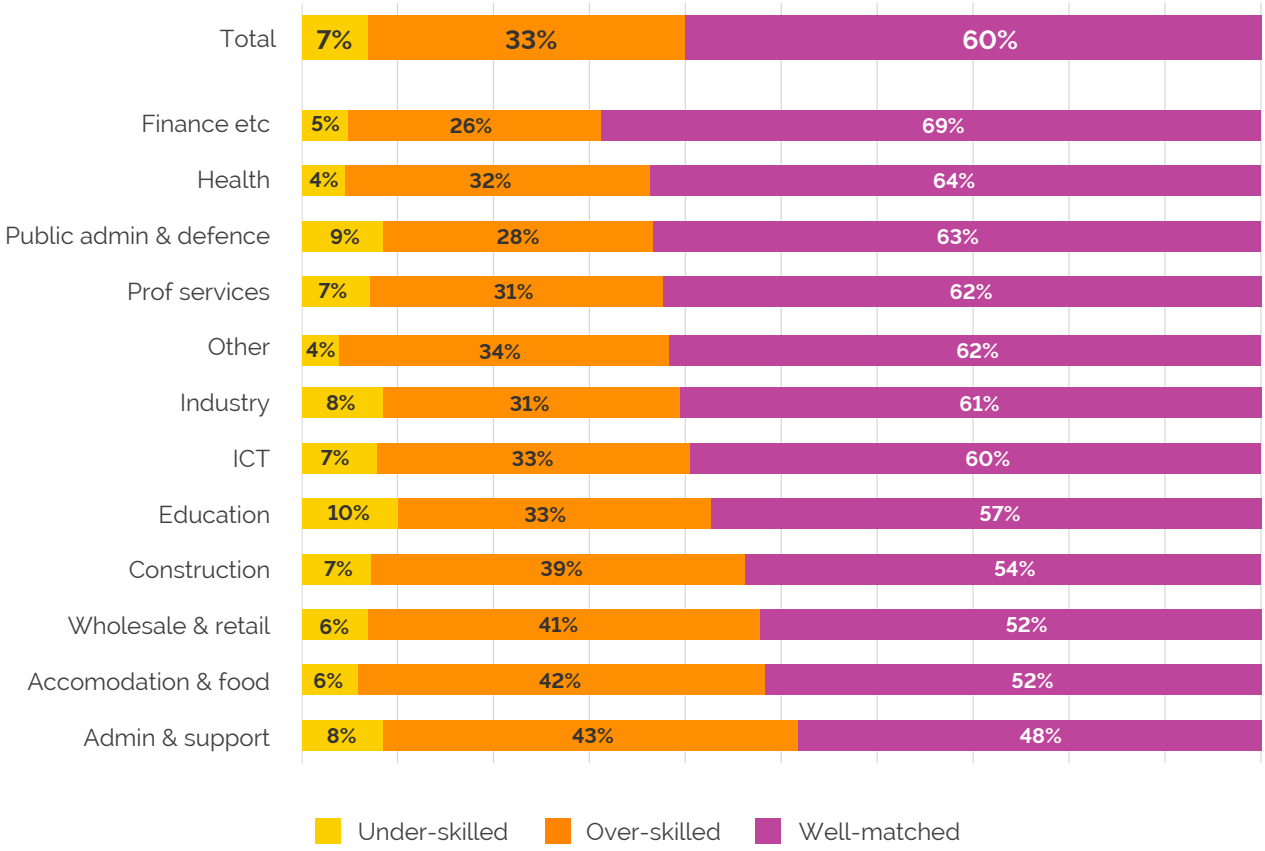
4 Self-identified; 25-64 year-olds only; Workers who were not self-employed.

2.1. Skills match and mismatch by sector[5]

Sectors with the largest shares of skill matching were finance, health, and public administration/ defence; however, while the incidences of over- and under- skilling were below average for workers in the finance and health sectors, the public administration and defence sector had a higher-than-average share who were under-skilled (9% compared to 7% for all workers) and a lower-than-average share who were over-skilled (28% compared to 33%).

The administration and support services sector had the smallest share of well-matched workers, at 48%, due both to the larger-than-average shares who were under-skilled (8%) and especially over-skilled (43% compared to 33% on average for all workers).

Figure 2. Incidence of skill match and mismatch by sector, 2023



Source: OECD (PIACC Public User Files)

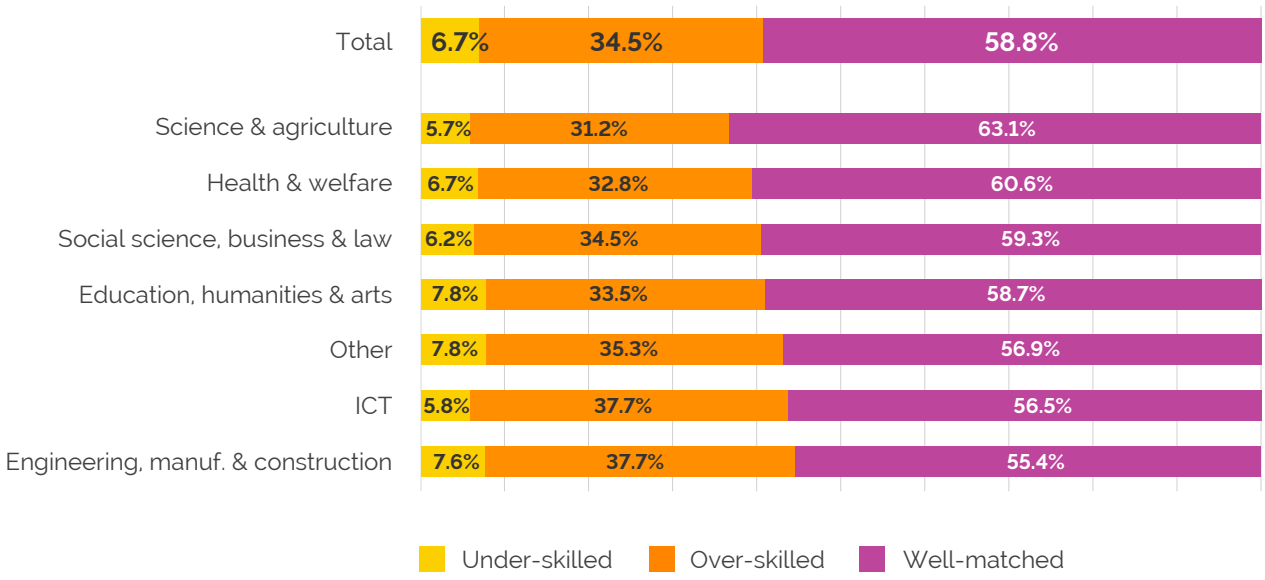
5 Due to sample sizes, some sectoral data has been grouped; the sectors included in the 'All other sectors' category are agriculture, transport, and arts/entertainment etc. It excludes instances where sector of employment was not stated.

2.2. Skills match and mismatch by field of learning[6]

Skills mismatch is due to both under-skilling and over-skilling in the workforce, but the contribution of each of these types of mismatch varied, depended on the subject area of workers' qualifications (Figure 3): **while ICT qualification holders and 'other' qualification holders had amongst the lowest shares of workers whose skills were well-matched to their jobs**, ICT qualification holders were more likely to be over-skilled (at 38%) and less likely to be under-skilled (nearly 6%) compared to 'other' qualification holders (35% and 8% for over- and under-skilled respectively).

Persons with qualifications in **health/welfare** or **science/agriculture** had the highest shares of workers whose skills were well-matched to their roles, at 61% and 63% respectively. In contrast, those with qualifications in **engineering, manufacturing and construction** had the lowest share of well-matched workers, with both higher-than-average shares who were under-skilled (8%, compared to average of 7%) and over-skilled (37% compared to 35%).

Figure 3. Incidence of skill mismatch by subject area of highest qualification attained, 2023



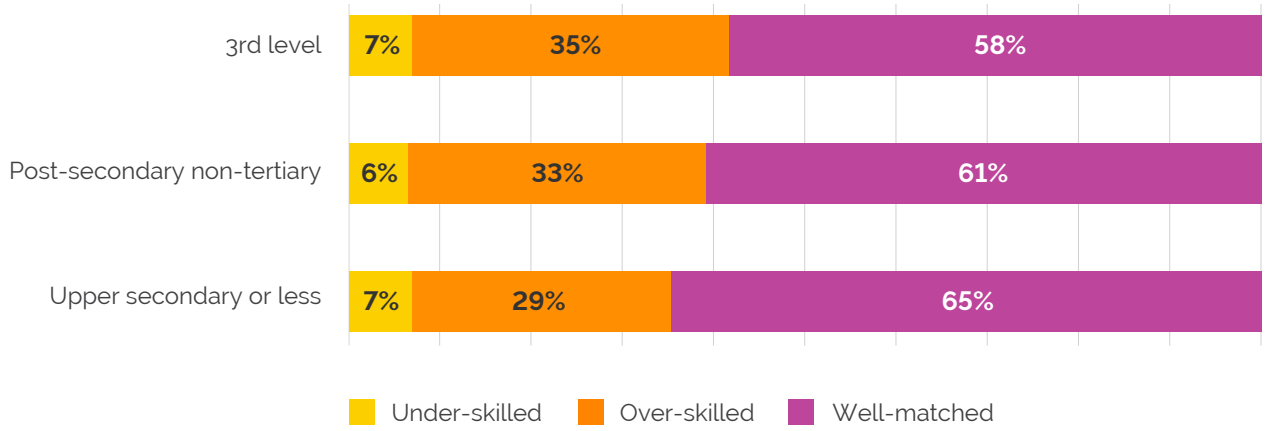
Source: OECD (PIAAC Public User Files)
The 'Other' category includes personal services and studies where no main area was identified.
Field of learning refers to post-secondary non-tertiary (e.g. FET) and third level graduates.

2.3. Skills match and mismatch by education level

Figure 4 shows that while there is very little difference between third level graduates and non-third level graduates in terms of under-skilling, **over-skilling is more prominent amongst third level graduates,** leading to a lower level of skills matching (58%) compared to their post-secondary non-tertiary (61%) and upper secondary or less (65%) counterparts.

6 PIAAC 2023 identifies 16 subject areas; due to small numbers for some categories, we have grouped the subject areas into six. Appendix A provides further details on the composition of these subject areas.

Figure 4. Incidence of skill mismatch by education, 2023



Source: OECD (PIAAC Public User Files)

2.4. Skills match and mismatch: engagement in recent training activity

Nearly two thirds of workers had engaged in training activities in the previous 12 months (Table 1), with the share rising to 69% for under-skilled workers. Overall, the share engaging in recent training activities was lower for well-matched workers (64%) compared to their mismatched counterparts (66%).

Although under-skilled workers had the highest shares engaging in recent training activities, they engaged in a smaller number of training activities: 36% of under-skilled workers had engaged in at least three training activities compared to 38% for over-skilled workers, and 37% overall.

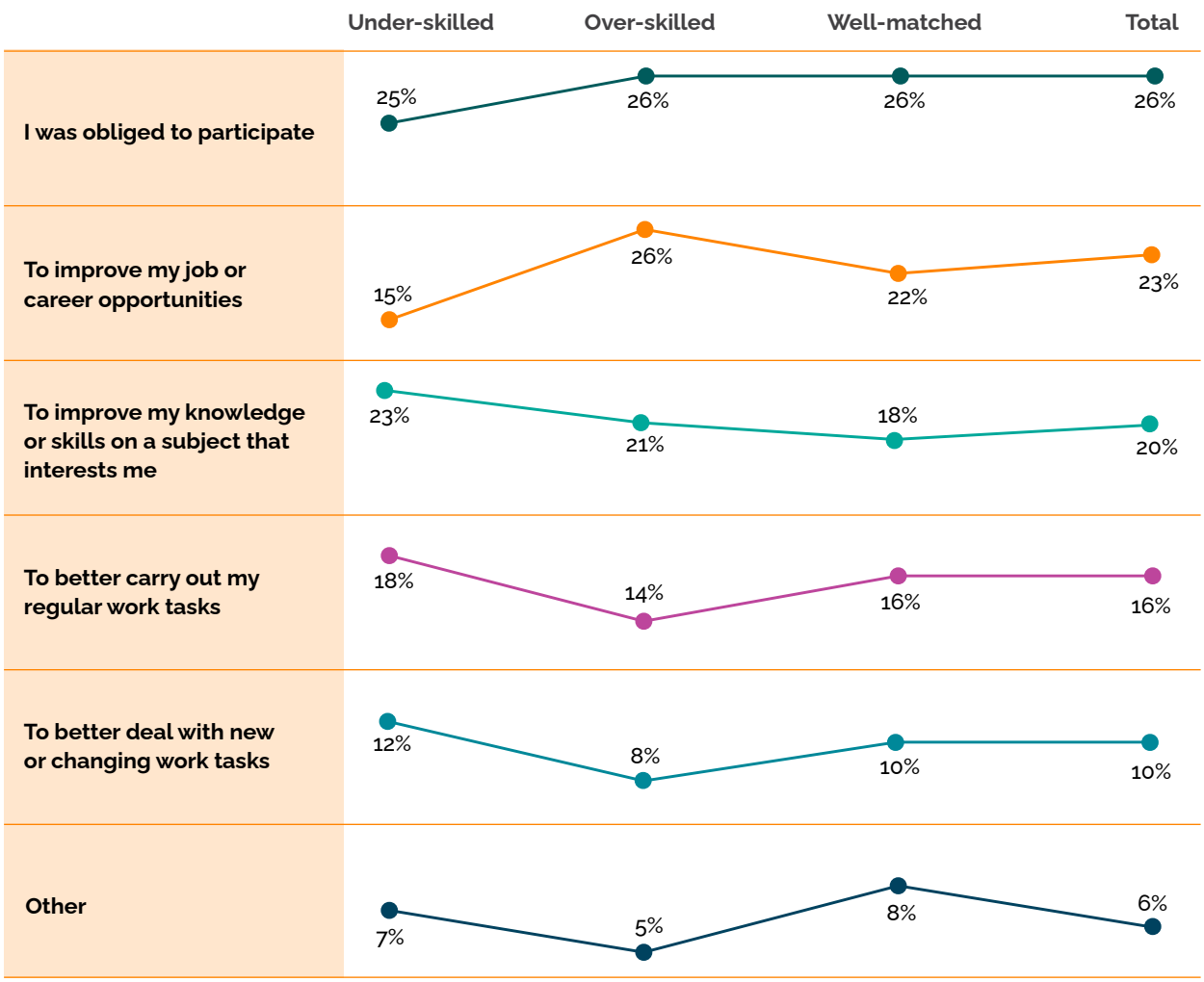
Table 1. Engagement in training activities by skills match/mismatch, 2023

	Under-skilled	Over-skilled	Mismatched	Well-matched	Total
No recent training	31%	35%	34%	36%	**35%**
Engaged in training	69%	65%	66%	64%	**65%**
Number of activities					
1	21%	17%	18%	16%	**17%**
2	12%	10%	10%	11%	**11%**
3 or more	36%	38%	37%	37%	**37%**

Source: OECD (PIAAC Public User Files)

Approximately one quarter of the workers who had engaged in recent training activities, regardless of the incidence of skills matching, did so because they were obliged to do so. For well-matched, the second most frequent reason was to improve their career opportunities, but for under-skilled workers, the second most frequent reason related to subjects that interested them. (Figure 5).

Figure 5. Workers' reasons for engaging in job-related training*, 2023



Source: OECD (PIAAC Public User Files)

**Refers to workers who had engaged in education/training in the previous 12 months*

Table 2 highlights the main reasons learners who wanted to engage in training activity but did not. Regardless of the skills match/mismatch level, time was by far the most significant factor in workers' non-engagement in training activities, whether due to work-related or family responsibility reasons, amounting to 54% overall. Expense was the third most significant factor, although at 16%, it was more prominent for under-skilled workers than for either over-skilled (14%) or well-matched (12%) workers.

Table 2. Reasons for workers' non-engagement in training activities

Reason	Under-skilled	Over-skilled	Mis matched	Well-matched	Total
I had no time due to work-related reasons	30%	30%	30%	31%	**30%**
I had no time due to family responsibilities	20%	27%	26%	23%	**24%**
Training activity would have been too expensive	16%	14%	14%	12%	**13%**
Training activity took place at an inconvenient time or location	13%	5%	7%	9%	**8%**
Lack of employer's support	5%	3%	4%	6%	**5%**
All other reasons*	16%	21%	20%	19%	**20%**

Source: OECD (PIAAC Public User Files)
**All other reasons include Training activity was cancelled or postponed; I did not find any suitable training activity; Something unexpected came up that prevented me from participating; I did not have the prerequisites.*

3. Incidence of under-skilling amongst workers in Ireland

As shown in the preceding section, nearly 7% of workers in Ireland believed their skills were lower than what was required to do their job. In 2022, at the time of the survey,[7] the annual average number of 25-64-year-olds in employment was 2.18 million (CSO Labour Force Survey); of these it is estimated that **148,000 employed persons** (6.8%) were under-skilled. Since then, the number of persons employed in Ireland has increased, and by quarter 1 2025, 6.8% of the workforce represented nearly 161,000 persons.

3.1. Who are the under skilled workers in Ireland?

As detailed in Figure 6, under-skilling was more prevalent than average (6.8%) amongst

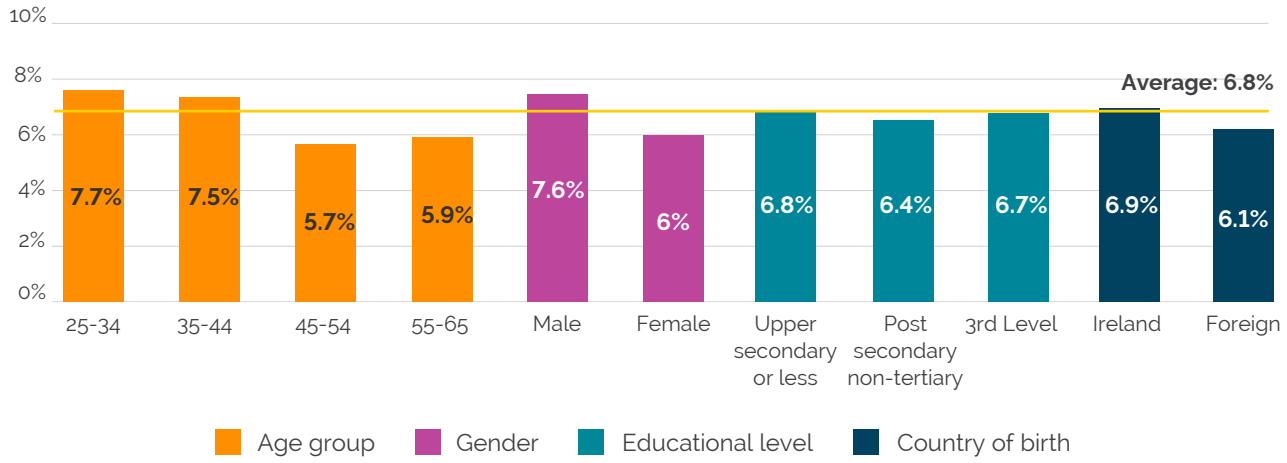
- **younger workers:** at 7.7% and 7.5% respectively, workers aged 25-34 years and 35-44 years had higher shares of under-skilling compared to those aged 45-54 years.
- **male workers (7.6%).**
- **Irish-born worker:** at 6.9%: while this share is only slightly above the average observed across all workers (6.8%), it is nonetheless higher than the 6.1% for foreign-born workers.

7 The survey was conducted in Ireland by the Central Statistics Office between June 2022 and September 2023.

In contrast, when examined by educational qualification level, there was very little difference between those with and those without third level qualifications, suggesting that educational qualifications alone are an insufficient indicator of skills matching.

Workplace skills typically take time to acquire through on-the-job experience, or through education/training, or a combination of both. As a result, the share of under-skilled workers tends to be higher amongst younger workers; however, given the rapid pace of change in the workplace, and the evolution in tasks associated with roles over time, work experience may not be enough to prevent skills deficits, as evidenced by the very slight increase to 5.9% amongst 55-65-year-olds, particularly as older workers are shown to be less likely to avail of lifelong learning opportunities.[8]

Figure 6. Under-skilled workers (%) by age, gender, education level, & country of birth, 2023



Source: OECD (PIAAC Public User Files)

3.2. What type of work do under-skilled workers do?

PIAAC data groups workers' occupations into one of four categories, based on ISCO classifications: skilled (e.g. nurse, teacher, engineer); semi-skilled blue collar (e.g. plumber, electrician); semi-skilled white collar (e.g. clerical worker); elementary (e.g. cleaner, food preparation assistant).[9] Due to relatively small numbers involved, this report has reduced this to two groups: skilled and other (comprising semi-skilled and elementary occupations). These two categories were retained, for ease of comparison, in the analysis of over-skilled workers.

The incidence of **under-skilling was higher amongst skilled workers** compared to other occupational groups (semi-skilled & elementary): nearly 8% of skilled workers (e.g. professionals) believed they did not have all the skills required for their job, compared to 4.6% for all other occupations (Figure 7). **This pattern holds across gender and age groups**: the largest gap occurred for 35-44-year olds (6.4 percentage points), with an under-skilling share of 9.6% (skilled occupations) and 3.2% (other occupations); this was followed by females, where the share of under-skilling amongst those in skilled occupations was more than twice that of females working in other occupations (7.2% and 3.5% respectively).

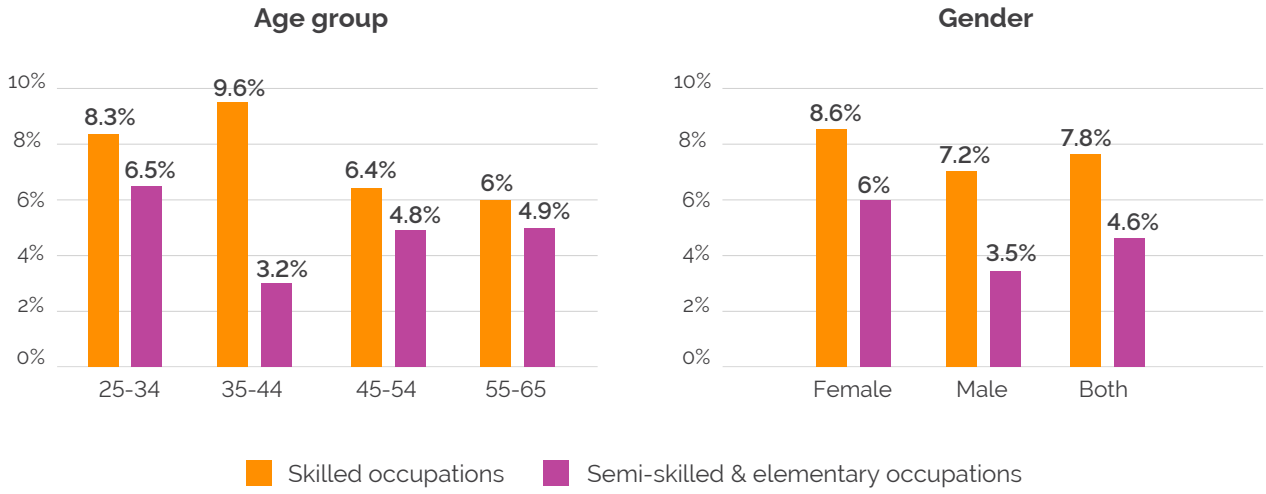
8 SOLAS (2025). Lifelong Learning Amongst Adults in Ireland, Q4 2024.

9 International Standard Classification of Occupations (ISCO) Skill Levels [Last accessed 09.07.2025]

While under-skilling rates dropped sharply and plateaued after the age of 45 years for workers in skilled occupations, the incidence of under-skilling amongst other occupations tends to increase after the age 34 years. This is perhaps a reflection of the fact that skilled occupations typically involve complex skills sets that demand specialised knowledge (e.g. engineering, accounting, medical, etc) and advanced cognitive abilities (e.g. problem solving, critical thinking, analytical skills etc), which typically take more time to acquire (through education and/or work experience) than the skills required for semi-skilled and elementary occupations.

Females working in other occupations had one of the lowest shares of under-skilling, which is possibly related to the fact that females often accept work in certain occupations (childcare, clerical, sales) that offer greater flexibility than some higher skilled occupations to allow for caring duties that tend to fall disproportionately on females.[10]

Figure 7. Under-skilling in skilled vs semi-skilled & elementary occupations, age group & gender, 2023



Source: OECD (PIAAC Public Use File)
**Excludes not stated*

3.3. Under-skilled workers: what skills are lacking and what skills are the focus of training activities, if any?

Under-skilled workers in Ireland had **higher than average shares participating in training activities:** 69% of under-skilled workers had engaged in at least one training activity in the preceding 12 months compared to 65% amongst total workers and 64% amongst well-matched workers. Nonetheless, nearly a third of under-skilled workers did not engage in any training in the 12 months prior to the survey.

Of the workers in Ireland who reported inadequate proficiency in skills, approximately one **half (50.7%) identified a lack of computer or software skills** (Table 3); this was one of the highest shares observed across all OECD countries (only three countries had higher shares – Canada, Finland, and Sweden) and was well above the OECD average of 41.9%.

10 SOLAS (2019). Quarterly Skills Bulletin Q1 2019: Women on Home Duties. [Last accessed 09.7.2025]

Despite this, amongst under-skilled workers, **there was a substantial gap between the share who identified a lack of computer/software skills (50.7%) and the share who actually undertook any recent training with a focus on skills in this area (13.7%).** The gap underscores the urgency of lifelong learning opportunities both offered to and availed of by workers, especially under-skilled workers and particularly give the rapid pace of technological change in workplaces today.

Security training featured strongly in under-skilled workers' recent training activity (nearly 15%), but not amongst identified skills deficiencies, possibly because this type of training is often mandatory for many roles in order to comply with health and safety regulations.

Other skills workers reported lacking include teamwork & leadership (26.3%), project management (25.3%), and communication/presentation skills (24.5%), although fewer than 10% of workers had engaged in recent training in these areas.

Table 3. Under-skilled workers: identified skills deficits* vs focus of recent training activity**, 2023

	Share of under-skilled workers who	
	reported inadequate proficiency* in	**undertook training** in**
Computer or software skills	50.7%	13.7%
Team-working/leadership	26.3%	6.0%
Project management/organisational skills	25.3%	4.4%
Communication/presentation skills	24.5%	2.2%
Handling customers, patients or students	23.9%	5.5%
Skills in operating machinery	13.7%	4.9%
Skills involving numbers/calculating	14.0%	2.7%
Reading/writing	6.6%	1.6%
All other training types, including:		37.7%
- Security (manual handling, first aid)		14.8%
- Sports & music		4.4%
No training		30.6%
Total	**n/a***	**100%**

Source: OECD (PIAAC Table A4.13 and Public User Files)

** Workers could select more than one skills deficit, so the total adds up to more than 100%.*

*** Refers to the most recent training activity undertaken.*

4. Incidence of over-skilling amongst workers in Ireland

Approximately one third (33.5%) of Ireland's workforce is in jobs that require skills that are lower than the workers hold. In 2022, at the time of the survey, the CSO's Labour Force Survey data shows that the annual average number of persons aged 25-64 years in employment was 2.18 million; of these it is estimated that **nearly 731,000 persons** were over-skilled. By quarter 1 2025, due to increased numbers of persons in employment, and assuming that the 33.5% still held, it is estimated that 791,000 persons in the workforce were over-skilled.

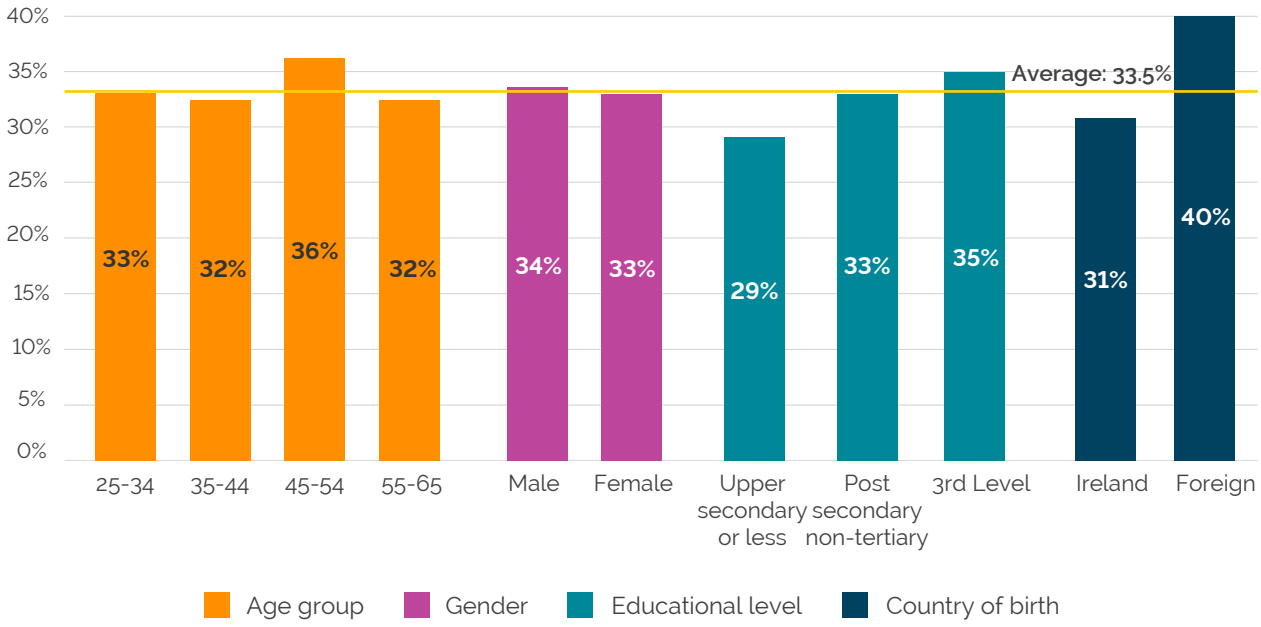
4.1. Who are Ireland's over-skilled workers?

As detailed in Figure 8, the highest shares of workers who believed that their skills were greater than what was required in their jobs were

- **foreign born workers** (nearly 40% believed they were over-skilled, almost nine percentage points (pp) higher than Irish born workers)
- **45-54-year-olds** (36.4% were over-skilled, nearly three percentage points (pp) higher than the national average, and nearly five pp greater than the oldest age group (55-65 year-olds).

Those with at most upper secondary education (e.g. Leaving Certificate) and Irish born workers were least likely to be over-skilled, being 4.6 pp and 2.3 pp lower than average, respectively.

Figure 8. Share of workers who were over-skilled, by age, gender, education level, & country of birth, 2023



Source: OECD (PIAAC Public Use File)

Numbers with at most lower secondary education (e.g. Junior Certificate) were too small to report.

4.2. What type of work do over-skilled workers do?

Over-skilling was less likely to occur amongst those working in skilled occupations (e.g. nurse, engineer, software developer, accountant) compared to those working in all other occupational groups (semi-skilled and elementary), with shares of 31% and 38% respectively (Figure 9). With the exception of 55-64-year-olds, this pattern was observed regardless of the age, gender and educational attainment of workers. However, the national averages mask strong gaps in the incidence of over-skilling amongst certain cohorts, including:

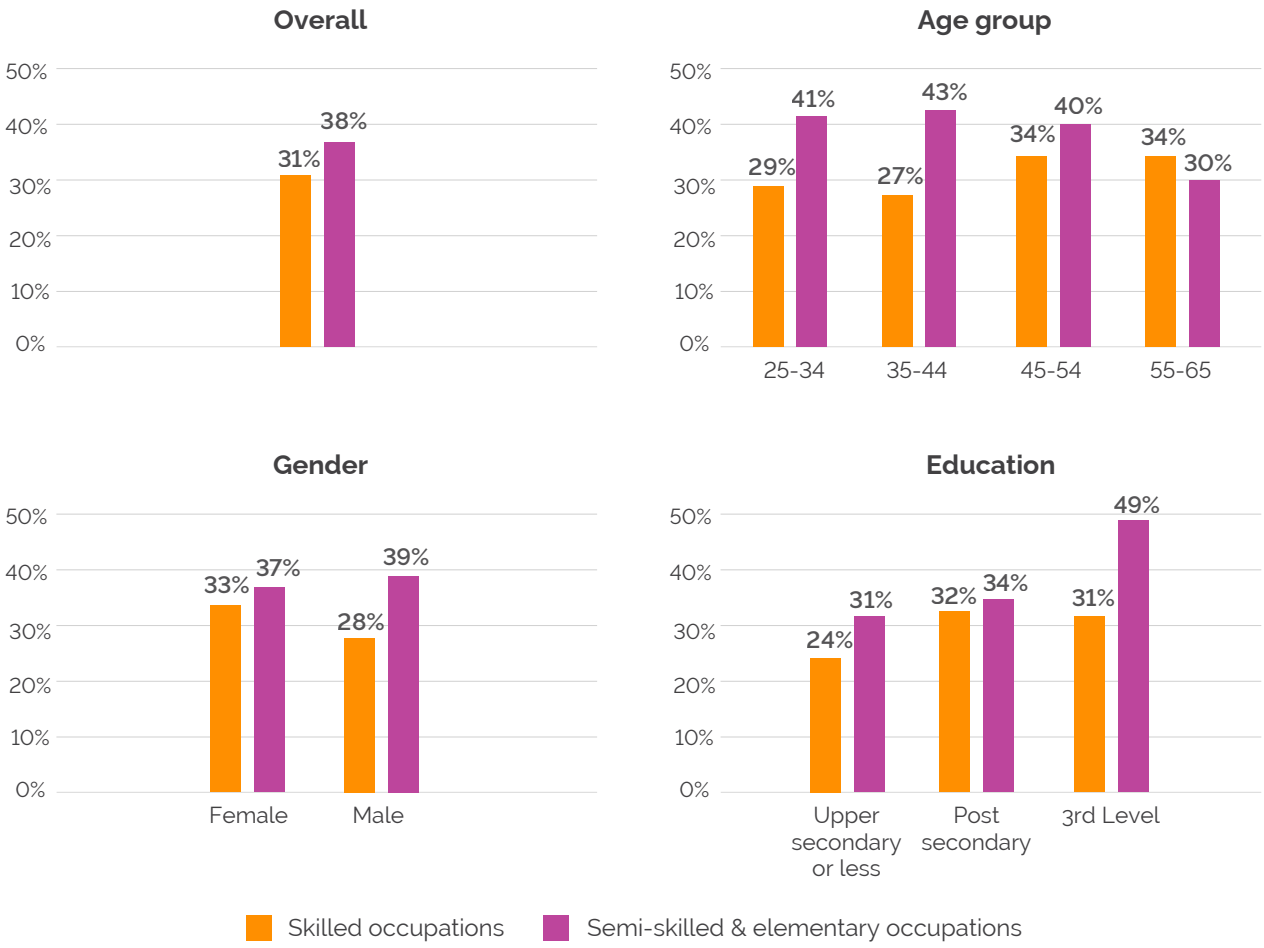
- **third level graduates working in semi-skilled and elementary occupations,** where nearly one half were over-skilled; the over-skilling share in these occupations was even higher for third level graduates with qualifications in engineering/construction (62%), education/arts etc (54%), and health/welfare (59%). At the same time, third level graduates from these three fields who were working in skilled occupations had over-skilling rates at or below the average for all third level graduates (i.e. at or below 31%).

- **people aged less than 45 years who were working in semi-skilled/elementary occupations**: more than two fifths of persons aged 25-34 years or 35-44 years stated they were over-skilled; compared to their counterparts in skilled occupations; the percentage point gaps were 12 pp and 16 pp, respectively.

- **females working in semi-skilled and elementary occupations,** where the incidence of over-skilling was 11 percentage points (pp) higher than females working in skilled occupations; in contrast, the gap between the two occupational groups for males was much smaller at just 4 pp.

Only amongst 55-64-year-olds was the incidence of over-skilling higher amongst skilled occupations, compared to semi-skilled/elementary occupations, perhaps pointing to the value of work-experience in skilled jobs in gaining skills.

Figure 9. Over-skilling in skilled vs semi-skilled & elementary occupations, age group & gender, 2023



Source: PIAAC Public Use File
**Excludes not stated*

5. Conclusion

The data provided by PIAAC on the extent to which skills mismatch occurs in Ireland has important implications for skills alignment in the labour market. Although this measure of skills mismatch is based on workers' own perceptions, which may be subject to bias, it nonetheless offers useful insights on where and for whom under-skilling and over-skilling seems to most prevalent.

Firstly, **skills mismatch** is estimated to affect over 40% of the workforce, representing nearly 880,000 employed persons (with 148,000 persons reporting insufficient skills and 731,000 reporting over-skilling) at the time of the survey (in 2022).

Secondly, the fact that **under-skilling** is almost equally prevalent amongst third level and non-third level graduates suggests that formal qualifications alone are insufficient in aligning workers' skills to labour market needs. In addition, the fact that under-skilling tends to decline (mostly) with age highlights the role of the **workplace and work experience as important vehicles for skills acquisition**.

It is also encouraging to find that most learners (65%) have engaged in recent training activity, and furthermore that under-skilled workers are slightly more likely (69%) to do so. Nonetheless, the fact remains that one third of all workers had not engaged in any training in the preceding 12 months. At a time when the workplace is evolving rapidly, and skills and knowledge can quickly become outdated, the importance of ongoing **continuous engagement in adult learning needs to be (or continue to be) a priority** for workers, employers, training providers and policy makers.

Crucial in addressing workers' skills needs will be to **ensure that training opportunities match the skills needed by workers.** The data shows that the largest skills gaps identified by under-skilled workers tended not to be the focus of training. This gap was particularly pronounced for ICT skills, but it occurred also in other areas, such as project management/organisational skills, and communication/presentation skills. Time constraints (either work- or family- related) appeared to be the main obstacles to engaging in training and point to a need to further expand the availability of bite-sized, flexible learning opportunities (such as micro-credentials and micro-qualifications) in the education/training system to all workers.

Even amongst **over-skilled** workers, education and training opportunities may be required in order to ensure their skills are sufficiently aligned to the needs of their jobs and to ensure workers achieve their potential. An analysis of employment data elsewhere shows that many persons employed in administrative, caring, sales, operative and elementary occupations in Ireland have third level qualifications, although traditionally a third level qualification would not be required for most of these roles (e.g. sales assistant, healthcare assistant, security guard, etc.),[11] which raises the possibility that many graduates, particularly those in the fields of engineering, health, and education/arts etc have pursued qualifications in which demand might be poorly aligned to labour market needs, or where advancements in technology and workplaces have rendered the initial qualification less useful in the labour market. Regardless of educational attainment, a responsive and agile education system, together with **career guidance,** will play a key role in building awareness of potential learning pathways and guiding workers to develop their skills in line with workplace needs.

11 SOLAS (2025). Monitoring Ireland's Skills Supply 2024 (Figure 13.6).

In conclusion, in order to remain competitive and increase Ireland's productivity, it is vital to harness the skills of the workforce effectively. While the skills of the majority of workers in Ireland are aligned to the requirements of their jobs, much work is yet to be done to ensure the labour market is better able to recognise and harness workers' skills and potential. While skills imbalances are almost inevitable in all workforces, policy measures to better align skills with labour market needs can enhance outcomes for economies, businesses and individuals. Such policy measures will be most effective when they are targeted at cohorts where skills mismatch is most prevalent.

Appendix A: Subject areas of highest level of education attained

Social science, business & law
Economics, business & administration
Law
Social & behavioural sciences
Journalism and information
Health & welfare
Health
Welfare (e.g. social work, youth work, elderly care, child care)
ICT
Science & agriculture
Science (inc maths & statistics)
Agriculture, forestry & fisheries & environmental studies
Engineering, manufacturing & construction
Engineering & manufacturing
Construction
Education, arts & humanities
Education & teacher training
Humanities, languages & arts
Other
Personal & community services
Security & transport
No main area of study

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