

ANALYSIS

4 May 2015

Occupations Performed Do Not Often Match Educational Attainment and Work Experience

Every fifth working person states that his/her occupation does not match the level of his/her qualifications. The level of qualification use is affected especially by the nature of the occupation performed and educational attainment. Working persons with secondary education with A-level examination, mostly females, relatively often underuse their qualifications.

In 2014 respondents were interviewed within the regular Labour Force Sample Survey (LFSS) if occupations they performed matched their educational attainment and work experience. Every fifth working respondent aged 15-64 years stated that they underuse their qualifications. If grossed up to demographic data, the total number of working persons, who underuse their qualifications, reached more than one million.

The highest share of working persons underusing their qualifications potential can be found among the young aged up to twenty years, in which it attained thirty per cent. And within this group the underusing of educational attainment is even as high as 43% in graduates from secondary schools with A-level examination. Needless to say, that the total number of working persons in this age group is very low (mere 26 thousand), because a vast majority of the young are still studying at secondary schools and universities. This also holds to the age group of 20-24 years, in which the share of those underusing their qualifications was almost identical with the youngest age group of the productive age of persons up to twenty years of age. Persons, giving the most frequently they underuse qualifications, are graduates from secondary schools with A-level examination (35%), yet also working graduates with tertiary education attainment (30%). This group, however, also features a high share of the inactive; there were less than one half of them working (46% of all persons of this age group).

Working persons aged 15-64 years underusing their qualifications and work experience by age group in 2014

Age groups	Working persons		
	Total (thousand)	In less qualified occupations (thousand)	Share of working persons underusing their qualifications in total working persons (%)
Total working persons aged 15-64 years	4862.1	1005.4	20.7
15-19 years	25.9	7.8	30.1
20-24 years	273.6	81.4	29.7
25-29 years	522.7	120.6	23.1
30-34 years	588.6	128.2	21.8
35-39 years	738.7	148.7	20.1

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40-44 years	765.1	141.3	18.5
45-49 years	606.4	110.5	18.2
50-54 years	594.1	122.1	20.6
55-59 years	496.7	92.2	18.6
60-64 years	250.2	52.7	21.0

Source: CZSO, Labour Force Sample Survey

The total number of working persons has been growing rapidly in the age group of 25-29 years, whose majority has finished their preparations for occupation. Over three quarters of the respondents of this age are already working. The share of those underusing qualifications in their jobs was 23% in this age group. After reaching the age of thirty years till the end of the productive age the share fluctuates around the level of twenty per cent. Persons having larger experience also often give they are underusing their qualifications. In the whole group of productive age, except for the aged 55-59 years, it is female who underuse their qualifications more frequently.

Working persons aged 15-64 years underusing their qualifications and work experience by sex and by age group in 2014

Age groups	Heads (thousand)		Share in the number of working persons (%)	
	Males	Females	Males	Females
Total working persons aged 15-64 years	541.2	464.2	19.7	22.0
15-19 years	4.6	3.2	27.5	34.6
20-24 years	42.8	38.5	25.8	35.9
25-29 years	69.0	51.6	22.0	24.7
30-34 years	76.3	51.9	21.3	22.5
35-39 years	80.3	68.4	18.9	21.8
40-44 years	69.9	71.4	17.0	20.2
45-49 years	55.6	54.9	17.0	19.7
50-54 years	57.7	64.4	19.4	21.7
55-59 years	49.7	42.5	18.9	18.1
60-64 years	35.3	17.4	20.9	21.5

Source: CZSO, Labour Force Sample Survey

Employment in the Czech Republic features a high share of working persons who passed secondary education (mostly with apprenticeship certificates, graduates from secondary schools and grammar schools with A-level examination). The share of working persons having secondary education attainment in total employment in the Czech Republic was, along with Slovakia, the highest one in the EU28. The youngest age group of working persons up to thirty years also features a high share of graduates having tertiary education attainment.¹ Percentage

¹ This educational attainment also includes graduates from higher professional schools according to the CZ-ISCED 2011.

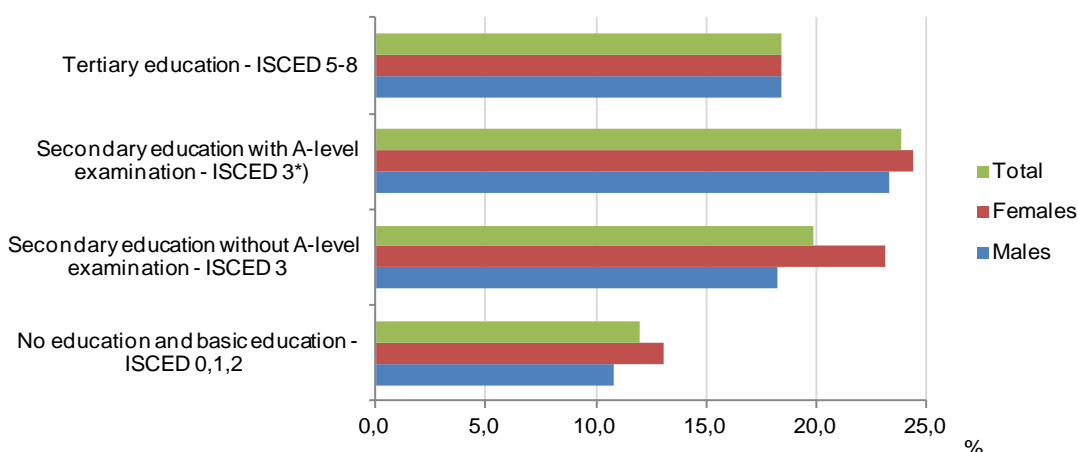
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of the young with the highest formal educational attainment shall be further growing, yet due to the demographic development these generations are smaller in numbers than the older generations of the productive age.

The lowest share of persons underusing their qualifications or work experience is, logically, given in the group of working persons with basic education (12%). Their number is, moreover, very low (solely 24 thousand persons). At higher formal educational attainments the conditions are different. In the last year there were 1 110 thousand persons, who graduated from universities or from higher professional schools (HPSs), working in the national economy. The number of persons with tertiary education attainment underusing their qualifications was a bit higher than 200 thousand. It is 18.4% of all working persons with this formal educational attainment.

The share of the underusing their educational attainment reached twenty per cent in the group of graduates from secondary education without A-level examination, which means mostly those having apprenticeship certificates in the Czech Republic. The highest share of the dissatisfied, with underusing of their qualifications, can be found in the group of graduates from secondary education with A-level examination, in which almost every fourth respondent gave this trouble. In all groups, the share of dissatisfied females prevails over that of males. It is especially clear in the group of persons with secondary education without A-level examination. It can be stated that males with apprenticeship certificates use their qualifications in a substantially better way than females with apprenticeship certificates and even much more than working males and females with A-level examination. The ratio of the use of qualifications of males and females is balanced at tertiary education attainment only.

Working persons aged 15-64 years underusing their qualifications and work experience by sex and by educational attainment in 2014



Source: CZSO, Labour Force Sample Survey

^{*)} Educational programmes of the ISCED 2011 level 4 are not employed to provide complete educational in the Czech Republic and therefore they are not measured within the LFSS.

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The survey results indicate that differences in satisfaction with the use of qualifications by formal education attainment pertain in all age groups of the productive age. If the age of respondents taken into account is 25+ years, when formal education has been finished in most cases, the share of the dissatisfied does not change much with growing age neither in the group of graduates from the secondary education nor in the university graduates (incl. graduates from higher professional schools (HPSs)). What is clear is an increase in dissatisfaction of respondents with basic education, which culminates in the oldest age groups of the aged 60-64 years; yet the share of the dissatisfied in them is lower than those in groups of working persons with a higher educational attainment.

The chosen field of studies or voluntary training affects the use of qualifications. The following overview gives the numbers and shares of persons underusing their qualifications by field of study of the secondary and tertiary level of formal education. Concerning graduates from secondary schools without A-level examination the far most dissatisfied persons were in the fields of engineering, manufacturing, and construction, yet if expressed relatively the share of these dissatisfied was lower than in other fields of vocational training.

In by the number the largest group of working persons with A-level examination the share of the dissatisfied with the use of their potential falls in majority of fields of education within 22% and 25%. Graduates from secondary schools focused on agricultural fields of study underuse their qualifications; a lower use of qualifications is also given by working persons in fields of trade and law. The graduates from fields of health and social work make an exemption because their satisfaction is clearly higher than that of graduates from other fields of study. These are mostly medical nurses with A-level examination.

In the group of university graduates and graduates from higher professional schools, the most favourable conditions are in the field of education, in which the share of persons underusing qualifications is mere 15%. Similar situation is in graduates from fields of health and social work (medical doctors and medical nurses, ever more often) and in services. A higher share of the dissatisfied is again namely in university graduates, who graduated from fields belonging to agriculture and veterinary sciences.

Working persons aged 15-64 years underusing their qualifications and work experience by formal educational attainment and by field of education in 2014

	Formal education attainment			Formal educational attainment		
	Graduates (thousand)			Graduates (%)		
	Secondary education without A-level examination ISCED 3 (incl. apprenticeship certificates)	Secondary education with A-level examination ISCED 3*	Tertiary education ISCED 5-8	Secondary education without A-level examination ISCED 3 (incl. apprenticeship certificates)	Secondary education with A-level examination ISCED 3*	Tertiary education ISCED 5-8
Total working persons aged 15-64 years	344.3	433.2	204.1	19.9	23.8	18.4

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Fields of education						
1- Education	-	8.4	25.2	-	22.2	15.2
2- Human sciences and arts	5.3	10.7	13.2	34.3	22.2	19.8
3- Social sciences, trade, and law	38.4	114.5	60.7	19.3	26.6	19.9
4- Natural sciences	.	6.7	22.6	.	24.9	20.9
5- Engineering, manufacturing, and construction	233.7	149.3	36.2	19.1	22.6	17.0
6- Agriculture and veterinary sciences	14.7	30.4	14.8	22.4	28.5	26.8
7- Health and social work	.	25.9	23.3	.	17.6	16.0
8- Services	49.6	45.3	8.3	23.1	24.8	16.6

Source: CZSO, Labour Force Sample Survey

*) Educational programmes of the ISCED 2011 level 4 are not employed to provide complete educational in the Czech Republic and therefore they are not measured within the LFSS.

The use of qualifications differs substantially by type of the main job. Those, who most frequently use their qualifications in full, are managers (CZ-ISCO major group 1) and working persons of the group of professionals (CZ-ISCO major group 2). A relatively higher satisfaction with the use of their qualifications is also given by technicians and associate professionals (CZ-ISCO major group 3) and by a large group of craft and related trades workers (CZ-ISCO major group 7). This is confirmed by data on above-average satisfaction with the use of qualifications in mainly males with apprenticeship certificates. Conversely, qualifications of working persons in the group of elementary occupations, in which the share of the dissatisfied attained almost one half of all working persons in this major group. Over a quarter of working persons in agriculture underuse their education and work experience. Respondents of the large major groups of service and sales workers and plant and machine operators, and assemblers gave a similar level of underusing their qualifications.

Working persons aged 15-64 years underusing their qualifications and work experience by sex and by classification of their current occupation in 2014

Occupations by CZ-ISCO major group	Major group	Heads (thousand)			Share in the number of working persons of the major group (%)		
		Total	Males	Females	Total	Males	Females
Total working persons aged 15-64 years		1005.4	541.2	464.2	20.7	19.7	22.0
CZ-ISCO							
Managers	1	30.3	23.7	6.5	11.7	13.2	8.4
Professionals	2	99.0	44.5	54.5	13.7	14.1	13.3

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Technicians and associate professionals	3	132.0	75.3	56.7	15.8	15.7	16.0
Clerical support workers	4	87.0	21.8	65.2	19.1	21.6	18.5
Service and sales workers	5	196.3	71.6	124.7	26.5	27.0	26.2
Skilled agricultural, forestry and fishery workers	6	18.3	11.8	6.5	26.7	26.0	28.0
Craft and related trades workers	7	152.1	130.7	21.4	17.9	17.3	22.8
Plant and machine operators, and assemblers	8	172.9	119.4	53.5	26.1	24.0	32.8
Elementary occupations	9	115.2	40.4	74.8	45.0	42.5	46.4

Source: CZSO, Labour Force Sample Survey

The underusing of qualification is not a matter of employees (21.2%) only, yet it is an issue of a great portion of the self-employed (18.3%). The highest share of the underusing qualifications is found in respondents in the position of a family worker (26.4%). The relatively good use of qualification in the major group of managers corresponds to a low share of the underusing qualification in the group of the self-employed with employees (less than 14%). In the group of own-account workers, where the nature of their work activities is comparable to activities of a great portion of employees, conditions are different (19.1%). The share of the self-employed in total employment in the Czech Republic is one of the highest in the whole EU. Almost 160 thousand persons in this position underuse their qualifications.

There are great differences in the use of educational attainment and work experience by activity of the national economy. In the sections of activities of households as employers and administrative and support service activities there is over one third of all working persons in the sections dissatisfied with the use of their qualifications. Two largest sections of economic activities of manufacturing and wholesale and retail trade feature the absolutely highest numbers of the dissatisfied. The shares of working persons underusing their qualifications are also above average in these sections. The sections of professional, scientific and technical activities, human health and social work activities, and education have relatively low shares of the dissatisfied. These are activities characteristic by a high share of working persons with tertiary education. It shows that, except for the youngest age group of the productive age, the decisive factors for the right use of qualification are, besides the educational attainment, also the field of study and, especially, the nature of work activities performed.

Working persons aged 15-64 years underusing their qualifications and work experience by sex and by selected CZ-NACE section in 2014

Occupations by CZ-NACE section	Heads (thousand)			Share in the number of working persons of the CZ- NACE section (%)			
	Total	Males	Females	Total	Males	Females	
Total working persons aged 15-64 years	1005.4	541.2	464.2	20.7	19.7	22.0	
CZ-NACE sections	Code						
Agriculture, forestry and fishing	A	37.7	27.1	10.6	25.2	24.9	25.9

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Manufacturing	C	281.9	167.6	114.2	21.8	19.6	26.0
Construction	F	78.7	70.6	8.1	19.6	18.9	30.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	G	131.6	56.3	75.3	22.4	20.6	23.9
Transportation and storage	H	60.3	42.4	17.8	20.2	19.8	21.0
Accommodation and food service activities	I	53.6	18.4	35.2	27.5	22.5	31.1
Information and communication	J	26.8	17.2	9.6	19.6	17.2	26.1
Financial and insurance activities	K	20.2	8.1	12.1	17.2	15.3	18.8
Professional, scientific and technical activities	M	31.3	13.8	17.5	14.3	12.5	16.0
Administrative and support service activities	N	43.4	25.4	18.0	35.6	37.9	32.7
Public administration and defence; compulsory social security	O	49.7	28.4	21.2	15.9	17.8	13.9
Education	P	48.5	7.6	40.9	15.7	11.7	16.8
Human health and social work activities	Q	54.2	10.4	43.8	16.0	14.5	16.5
Arts, entertainment and recreation	R	19.0	8.8	10.2	26.8	26.7	26.8
Activities of households as employers	T	10.8	2.9	7.9	37.0	56.5	32.8

Source: CZSO, Labour Force Sample Survey

The structure of vacant jobs differs in respective regions and this is projected into the use of qualifications of working persons. Persons underusing their qualifications and work experience can be most frequently found in the Olomoucký Region (over 28%), then in the Karlovarský Region (25%), and in the Pardubický Region (24%). On the contrary, there are relatively good conditions in the Moravskoslezský Region (less than 15%) and in the Plzeňský Region (17%). In the Hl. m. Praha Region conditions are interesting. The share of persons underusing their qualifications is higher than the Czech Republic average (over 23% compared to less than 21% for the Czech Republic).

The Capital City makes home to over 22% of all working persons with tertiary education and having usual residence in the Czech Republic. When balance of commuting to work is taken into account, the share of person with tertiary education working on the territory of Prague is nearing 28% of all working persons with this formal educational attainment in the Czech Republic. Despite a great span and diversity of available jobs the share of working persons with the highest formal educational attainment, who underuse their qualifications, is higher in Prague than in majority of other regions. This fact has an adverse effect on the total share of persons underusing their educational attainment in the Capital City (the number of working persons with tertiary education in Prague is two-and-a-half times higher than the number of working persons with secondary education without A-level examination).

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Comparison of the underusing qualifications in the Czech Republic and in the Hl. M. Praha Region by formal educational attainment in 2014 as percentage

Territory	Total	Formal educational attainment		
		Secondary education without A-level examination ISCED 3 (incl. apprenticeship certificates)	Secondary education with A-level examination ISCED ^{3*)}	Tertiary education ISCED 5-8
Czech Republic	20.7	19.9	23.8	18.4
Hl. m. Praha Region	23.3	22.7	23.9	23.2

Source: CZSO, Labour Force Sample Survey

*) Educational programmes of the ISCED 2011 level 4 are not employed to provide complete educational in the Czech Republic and therefore they are not measured within the LFSS.

* * *

Total employment is in a decisive manner affected by the number of working persons aged from 25 to 60 years. The employment rate of this age persons in the Czech Republic is the third highest, following those of Sweden and Germany, of all countries of the EU28; the employment rate of this age group males is even the highest (data for 2013). Employment of males and females of this age group has a principal influence on the social and economic conditions, both of the respondents with their families, and the whole society.

The survey results revealed that the graduates from secondary schools with A-level examination, mostly females, are most frequently dissatisfied with the use of their qualifications and work experience. The share of graduates from secondary schools with A-level examination and without the A-level examination in total employment attained 73% and is the highest, along with that of Slovakia, in the whole EU28. The share of persons with secondary education attainment in the total number of working persons underusing their qualifications is even over 77%. It is indisputable that dissatisfaction with the use of qualification relates to financial remuneration. Because graduates from the secondary education dominate since the younger productive age in terms of number, they will also affect overall conditions on the labour market in a substantial manner for long years. Simultaneously, it is shown troubles emerge with the use of qualifications of graduates with tertiary education attainment, as it can be seen in data for Prague.

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