


Underemployment in selected European Union countries

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Abstract

The aim of the article is to characterize the size and structure of the group of people aged 15–24 (including the gender criterion) belonging to the underemployment category. The analysis was carried out in selected European Union countries: Poland, Denmark, the Czech Republic, the Netherlands, Sweden and Italy. The article describes selected causes and socio-economic consequences related to the occurrence of underemployment. The time span of the study, based on the data published by the European Statistical Office (Eurostat), covers the years 2008–2017. The study has shown that the lowest percentage of underemployment among people aged 15–24 in the research time period was recorded in the Czech Republic and the highest in Sweden. In addition, there are significant differences in the occurrence of part-time employment of men and women – this phenomenon affects young women more often.

Keywords: labour market, underemployment

JEL Classification: E24, E62

1. Introduction

The problem of underemployment is as severe as the phenomenon of unemployment in many European Union countries. Young people are particularly affected by the phenomenon of underemployment as they very often are unable to find full-time jobs, they choose part – time jobs, bearing such negative consequences as lower remunerations, limited access to trainings, no prospects for self-development or career advancement opportunities. However, there are people who choose part-time work thoughtfully and in full consciousness thus combining employment with family responsibilities, education, etc.

The aim of the study is to characterize the size and structure of the underemployment phenomenon in selected European Union countries: Poland, Denmark, the Czech Republic, the Netherlands, Sweden and Italy. The study is divided into four parts. The first one characterizes the phenomenon of partial employment and describes its main dimensions. The second part presents the source of the analysed data, the time span of the analysis and the applied research methods. The third part presents the size and structure of the young people generation belonging to the underemployment category and the causes and consequences of part-time employment. In the summary, conclusions resulting from the conducted study are presented.

2. Review of the subject literature

Labour market is evolving, and for many years its transformations have been especially interesting for public statistics as well as domestic and foreign scientists undertaking research in the field of economics and socio-economic policy. The analysis of data on the economically active population, unemployment, employment and underemployment, especially in connection with other economic phenomena is the basis for monitoring current trends and structural changes on the labour market, as well as planning economic development directions.

Despite the growing interest in underemployment, this phenomenon does not have one commonly accepted definition. In the broadest meaning, underemployment is defined as lack of possibilities to do work that fully uses abilities and skills of an employee or employment that does not comply with certain generally defined standards, for example, in terms of remuneration, working time or education (Skórska, 2016, p. 40). In Polish literature, this phenomenon is described interchangeably by the terms: inadequate employment or insufficient employment or with the English equivalent – underemployment.

The catalogue of the predictors defining the phenomenon of underemployment has evolved over time and varied depending on the entity conducting research, research purpose and its scope. Special attention to underemployment as a multidimensional and complex construction, which became the interest subject of various scientific disciplines: economics, management, psychology and sociology, was drawn by F.M. McKee-Ryan and J. Harvey (2011, pp. 4–8). The authors presented an interdisciplinary approach to the phenomenon of underemployment and pointed to the correctness of this approach for further research development in this area.

The phenomenon of underemployment reflects the employment mismatch, shown by comparing the current situation of an underemployed person with the possible alternative working conditions of full employment (ILO, 1957). It means that defini-

tions of underemployment consider it as employment of lower quality. It is worth paying attention to four leading conceptualizations of this phenomenon:

- Hierarchical underemployment and skill – underemployment defined in terms of the hierarchy level of the new position. A situation in which employees who are laid off from full-time work engage in underemployment at lower level positions of the hierarchy of the new employer (e.g. Buss, Redburn, 1983).
- Perceived over-qualification – a type of underemployment in which an employee possesses surpluses of abilities, knowledge, competence, education, experience and/or other qualifications that are not required or used at a given job position (e.g. Johnson, Johnson, 2000, p. 435; Erdogan et al., 2011, p. 215).
- Hours underemployment – underemployment expressed by the percentage of employees who are employed part-time and who declare their willingness to work full-time (e.g. Wilkins, 2007, pp. 247–275).
- Underemployed by low income – underemployment referring to employees whose wages/salaries are lower (by 20% or less) than the remuneration received in the previous work place (e.g. Zvonkovic, 1988, pp. 161–178; Feldman, Leana, Bolino, 2002, pp. 453–471).

Due to the scope of the methodology applied in this work, it is important to quote the definition of underemployment used by European public statistics, which is best represented by the scheme below (Figure 1).

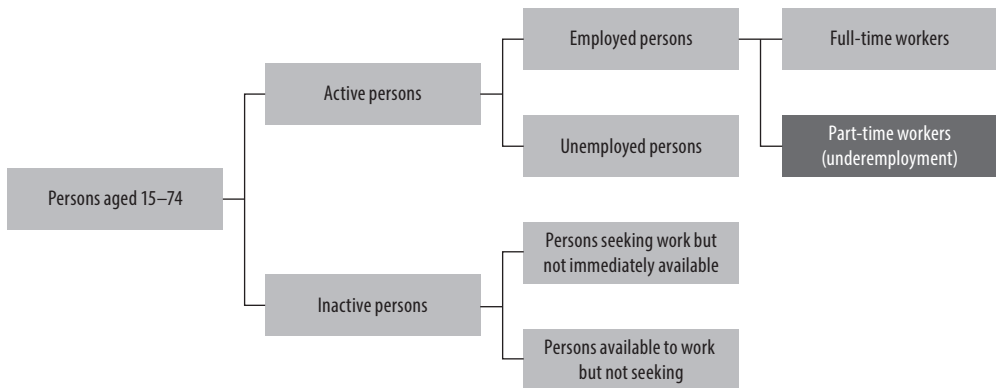


Figure 1. Diagram of the definition of underemployment of aged 15–74

Source: The author's own study based on Eurostat, *Statistics Explained*.

According to Eurostat, people classified as the underemployed are mainly employed, working part-time, but willing and able to work full-time. This criterion is the basis for further analysis in this work.

3. Data and research method

The aim of the article is to characterize the size and structure of the group of people aged 15–24 (including the gender criterion) belonging to the underemployment category. The analysis was carried out in selected European Union countries: Poland, Denmark, the Czech Republic, the Netherlands, Sweden and Italy. The time period of the research based on the European Statistical Office (Eurostat) data (EU-LFS workforce survey) covers the years 2008–2017.

The article attempts to answer the following research questions:

- What is the structure and size of the underemployment phenomenon among young people in selected European Union countries?
- What are the consequences of the underemployment phenomenon?

The empirical analysis was carried out applying the statistical and comparative analysis method.

4. The results of the empirical analysis

The workforce resources in the European Union are decreasing as a result of demographic changes. The reason for this phenomenon is an increase in the share of elderly people in the general population, which is reflected in the labour market. In order to meet the challenges of an ageing population, Europe needs to make the most of its work potential. This challenge was one of the five main objectives of Europe 2020 strategy introduced in 2010. It pointed out that the employment rate of people aged 20–64 should be 75%. According to Eurostat (*Europa 2020...*, 2010), in 2017 the employment rate of people aged 20–64 was 72.2%, which is therefore close to the forecasted estimations.

Taking into account the time range covering the years 2008–2017, the highest employment rate of young people aged 15–24 was identified in Denmark and the Netherlands, and the lowest in Italy (Table 1).

Table 1. Employment rate among people aged 15–24 in selected EU countries (in %)

Specification	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
UE-28	37.4	34.9	33.9	33.3	32.6	32.2	32.4	33.1	33.8	34.7
The Czech Republic	28.1	26.5	25.2	24.5	25.2	25.6	27.1	28.4	28.6	29.1
Denmark	66.4	62.5	58.1	57.5	55.0	53.7	53.7	55.4	58.2	56.3
The Netherlands	69.3	68.0	63.0	61.3	61.1	60.1	58.5	60.8	60.8	62.3
Poland	27.3	26.8	26.4	24.9	24.7	24.2	25.8	26.0	28.4	29.6
Sweden	42.2	38.3	38.8	40.9	40.2	41.7	42.8	43.9	44.5	44.9
Italy	24.2	21.5	20.2	19.2	18.5	16.3	15.6	15.6	16.6	17.1

Source: the author's own study based on Eurostat, Database.

4.1. Underemployment of people aged 15–24 in selected EU countries

Table 2 shows the percentage share of people aged 15–24, part-time employees in the total number of employees (for this age bracket).

Table 2. Underemployment of people aged 15–24 in selected EU countries (in %)

Specification	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
UE-28	6.0	7.2	7.8	8.0	8.5	9.4	8.9	8.8	8.3	7.7
The Czech Republic	0.2	0.9	0.7	1.0	1.1	1.9	1.5	1.2	1.0	1.4
Denmark	7.9	11.4	10.4	11.7	10.1	8.4	8.5	6.9	15.5	11.2
The Netherlands	2.5	3.1	3.5	3.5	4.0	11.7	11.7	11.2	9.9	8.7
Poland	2.3	3.2	3.9	4.5	5.5	5.0	4.9	4.1	3.6	3.0
Sweden	12.5	15.9	14.8	14.4	15.4	15.9	15.3	12.8	10.7	9.9
Italy	2.7	3.0	3.2	3.1	4.7	5.2	6.6	6.1	6.1	6.0

Source: the author's own study based on Eurostat, Database.

The lowest percentage of underemployment of aged 15–24 in the research time period was recorded in the Czech Republic, the highest in Sweden. Interestingly, this percentage decreased in Sweden in 2017 in relation to the base year by 2.6 pp unlike in the Czech Republic, where this percentage increased by 1.2 pp. In addition, the largest increase of the number of employees in the surveyed category was recorded in the Netherlands in 2013 by 7.7 pp (compared to 2012).

4.2. Underemployment of men aged 15–24 in selected EU countries

Analysing the data contained in Table 3, it can be observed that the lowest percentage of men aged 15–24 working part-time in the research time period was recorded in the Czech Republic, and the highest in Sweden.

Table 3. Underemployment of men aged 15–24 in selected UE countries (in %)

Specification	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
UE-28	4.3	5.4	6.1	6.3	6.6	7.6	7.2	7.0	6.9	6.3
The Czech Republic	–	0.4	0.5	0.4	0.9	0.7	1.0	0.9	0.8	0.5
Denmark	6.7	10.6	9.8	9.8	8.7	7.6	7.6	5.9	14.6	10.1
The Netherlands	2.4	3.2	3.5	3.4	3.8	10.0	10.2	9.4	8.9	7.7
Poland	2.1	2.6	3.1	3.8	3.9	3.4	3.6	3.1	2.6	1.9
Sweden	8.0	11.7	10.5	10.4	11.0	12.1	12.1	10.2	8.2	8.0
Italy	1.8	1.9	2.3	2.3	3.2	3.8	5.3	4.5	4.8	4.8

(–) Lack of data.

Source: the author's own study based on Eurostat, Database.

In 2013, there was a significant increase of men in the surveyed category in the Netherlands – by 6.2 pp (compared to 2012). In Poland and Italy, during the considered time period, the numerical values below the EU average were recorded, in Denmark except for 2015, the recorded numerical values exceeded the EU average. Denmark is on the second position in terms of the rate of young people employment with the highest level of underemployment among aged 15–24 of the selected countries in the European Union.

4.3. Underemployment of women aged 15–24 in selected EU countries

According to the data presented in Table 4, it can be concluded that the lowest percentage of women aged 15–24 employed part-time in the research time period was recorded in the Czech Republic, the highest in Sweden.

Table 4. Underemployment of women aged 15–24 in selected EU countries (in %)

Specification	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
UE-28	8.1	9.2	9.8	9.9	10.7	11.5	10.9	10.9	10.3	9.3
The Czech Republic	0.3	1.5	1.1	1.9	1.4	3.6	2.3	1.7	1.2	2.6
Denmark	9.1	12.2	11.1	11.6	11.5	9.3	9.4	7.9	16.4	12.3
The Netherlands	2.6	2.9	3.5	3.7	4.2	13.3	13.2	13.1	10.9	9.6
Poland	2.7	4.1	5.1	5.7	8.1	7.6	6.8	5.6	5.0	4.5
Sweden	17.7	20.1	19.3	18.5	19.7	19.7	18.6	15.4	13.1	11.9
Italy	4.0	4.8	4.8	4.4	7.1	7.2	8.5	8.7	7.9	7.8

Source: the author's own study based on Eurostat, Database.

In 2013, in the Netherlands there was a significant increase in the percentage of women belonging to the researched category, by 9.1 pp (compared to 2012). In addition, by comparing the data contained in Tables 3 and 4, it can be observed that the percentage of women aged 15–24 in the underemployment category is higher than the percentage of men in this category (EU-28) and in the researched countries. The largest difference between the percentage of women and men aged 15–24 working part time is in Sweden. In Poland and Italy values below the EU average were recorded in the researched time period.

4.4. Causes and consequences of underemployment among young people

Work in the life of every human being plays a key role. It is not only an indispensable condition for the existence of an individual, but also a factor shaping his/her personality and the determinant of his/her place in society. Therefore, appropriate work is not only the basis of the economic status of a human being, but it also deter-

mines the viability of his/her life dreams and plans associated with them (Skórska, 2017, p. 104).

Since the beginning of the financial crisis, from 2008, a significant number of job places created (especially in the euro area) have been offered on a part-time basis and have been occupied by people who are unable to take up full-time employment (ILO, 2018, p. 25). Their decisions to take up such work could result from their preferences and possibilities (it could have been the only way to be employed). Undoubtedly, the level of underemployment was to a large extent determined by the current macro-economic situation as well as conditions available for the transition from education to employment.

According to the data published by Eurostat in 2017, in Italy 77.3% of people aged 15–24 were in the underemployment group due to the lack of full-time employment opportunities. In Sweden, this figure was 34%, Poland 15.9%, Denmark 8.4%, the Netherlands 7.4% and in the Czech Republic 7.3% (Eurostat, 2018). In the same year, in the Netherlands 81.9% of people aged 15–24 were in the underemployment group due to education or training. In the Czech Republic it was 81%, Denmark 79.8%, Poland 59.5%, Sweden 53.4% and in Italy 15.7% (Eurostat, 2018). It means that one of the main reasons for remaining in the group of underemployed people aged 15–24 is ongoing education or participation in trainings, as well as impossibility to find full-time employment.

Part-time work can be a flexible solution if it is combined with caring for a child or developing one's own passions and interests. The nature of this work can also provide employment for people who were previously excluded from the labour market, e.g. people with disabilities. And finally, it can be the "only possible option" allowing to reconcile employment with private life. It appears that underemployment can bring both positive and negative results.

The methodology of measuring social and economic costs related to the phenomenon of underemployment is not yet developed (Burić, Lacmanović, Tijanić, 2016, p. 343). Nevertheless, the subject literature presents possible negative socio-economic effects resulting from the underemployment phenomenon. These include (European Commission, 2016; Eurostat, 2017, p. 34):

- loss of earnings which would come from a full-time job, and hence a reduction of consumer demand;
- reduced pension rights (lower income means less pension contributions);
- increased risk of living in poverty and, consequently, an increase in demoralizing behaviour;
- limited career development and promotion prospects;
- in the long term, lower earnings in the future and worse employment prospects (Bell, Blanchflower, 2011, pp. 241–267; Fondeville, Ward, 2014);

- creating a disproportion in income and access to productive jobs;
- under-utilization of the workforce, and thus slowdown of economic growth and competitiveness (Burić, Lacmanović, Tijanić, 2016, p. 343).

5. Conclusions

The world of work is evolving. The increasing complexity of the labour market is particularly problematic for young people who are unable to find their way into the new realities of the market game. Those who are qualified and willing to take up employment do not find suitable jobs, or the workplace and conditions offered do not meet their expectations.

The presented analysis allowed to characterize the structure of underemployment in relation to young people (aged 15–24) in the selected European Union countries. The following conclusions were formulated on the basis of the conducted research:

- the employment rate among young people aged 15–24 in 2008–2017 was the highest in the Netherlands and the lowest in Italy;
- the lowest percentage of underemployment of people aged 15–24 in the research time period was recorded in the Czech Republic and the highest in Sweden;
- there are significant differences in the level of underemployment between men and women – the phenomenon of underemployment among young people more often affects women;
- the largest difference between the proportion of women and men aged 15–24 employed part-time is in Sweden;
- one of the main reasons for belonging to the group underemployed people aged 15–24 is ongoing education or participation in training, as well as the impossibility to find full-time employment.

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Underemployment w wybranych krajach Unii Europejskiej

W artykule przedstawiono definicję zjawiska *underemployment*, dokonano charakterystyki osób należących do kategorii *underemployment* w grupie wiekowej 15–24 lata oraz jej struktury. Sytuację osób należących do tej kategorii przedstawiono w wybranych krajach: Polsce, Danii, Czechach, Holandii, Szwecji i w Włoszech. Scharakteryzowano także przyczyny i skutki wystąpienia tego zjawiska. Zakres czasowy badań opartych na opublikowanych przez Europejski Urząd Statystyczny (Eurostat) danych obejmuje lata 2008–2017. Przeprowadzona analiza wykazała, że najniższy odsetek pracowników *underemployment* wśród osób w wieku 15–24 lata w badanym okresie odnotowano w Czechach, a najwyższy w Szwecji. Ponadto z analizy wynika, że zjawisko *underemployment* najczęściej dotyczy kobiet.

Słowa kluczowe: rynek pracy, *underemployment*

JEL: E24, E62

