



A COMPARISON ON THE WORKING POOR POPULATION IN SOME EUROPEAN COUNTRIES

Emese Bruder¹, Csilla Obadovics², Valentinas Navickas³

*Szent István University Gödöllő, Hungary¹, University of West Hungary, Sopron, Hungary²,
Kaunas University of Technology³*

Abstract

The working poor population had not been gained any emphasis in Europe until the European Union adopted the Lisbon Strategy in 2000 with a special focus on employment, economy and social policies.

In the framework of the Lisbon Strategy, the EU has started to develop a list of statistical indicators on poverty and social exclusion. These indicators aimed to control country level development on the agreed common goals, and they were adopted in 2001 at Laeken Council meeting in Belgium. In 2003, a new indicator, the in-work poverty risk has been added to the Laeken indicators. Since then, the existence of working poor population has took a more prominent place in the European debate.

The objective of this paper is to give an insight of the situation of the working poor population in Visegrad countries, Czech Republic, Slovakia, Poland and Hungary and compare the results with the Benelux states. These groups of countries both have shared history, and common path in European integration. We analyze the extent of working poverty, the gender asymmetry and the full-time, part-time proportions over working poor population.

Based on the 2007 wave of EU-SILC database, we individualize various income sources received by the household in order to obtain total individual incomes. With this approach, we would like to show how each individual would perform, if he/she could only rely on his/her own income.

Keywords: poverty, working poor, inequality.

Introduction

The concept of working poor is often discussed by researchers as it seems that having an employment today is not an escape from poverty. Although all researchers agree that the working poor are persons who are working but who are poor, the statistical implementation of the notion tends to alter a lot.

The European Commission emphasised the need for a common indicator which can detect the working poor population. The „in-work poverty risk” indicator has been introduced in 2003 and it became part of the Laeken indicators. According to the EC definition, the working poor are all full-time or part-time employees/self-employed workers aged 15–4 who live in a household with an equivalised household disposable income below 60% of the median of this income in the country. This indicator has been amply analysed and criticized since its introduction (Lelièvre, Marlier and Pétour 2004, Ponthieux 2007, Cazenave 2006).

The objective of this paper is to show the differences in working poor population between the Visegrad countries (CZ, HU, PL, SK) and the Benelux states (BE, NL, LU).¹ Each of these two groups of states shares a common history and a common path in European integration and economic development.

Literature review

The existing literature on working poverty is extremely heterogeneous in methodological terms. The computed rate of working poor is very sensitive to some basic assumptions made at the outset of any analysis: the definition of a worker, the definition of the poor, the reference population, income and the unit of analysis. Although all researchers agree that the working poor are persons who are working but who are poor, the statistical implementation of the notion tends to alter a lot.

In the definition of poverty, the European literature is quite solid. The majority of researchers defined being poor on the bases of a relative poverty threshold (equivalised household income being under the 50% or 60% of the national median income). As an equivalence scale, the so called “OECD-modified equivalence scale” is mostly used, which assigns a value of 1 to the household head, 0.5 to each additional adult member and 0.3 to each child. This method bases on assumptions about economies of scale in consumption as well as on judgments about the needs of each individuals in the household such as children or the elderly (OECD 2008).

The American Bureau of Labour Statistics (BLS) set an absolute poverty threshold expressed in dollars. This threshold varies by the size of the family. This method is used by Klein and Rones (1989) and Gardner

¹ Country codes: Czech Republic=CZ, Hungary=HU, Poland=PL, Slovakia=SK, Belgium=BE, Netherlands=NL, Luxembourg=LU

and Herz (1992) American researchers. Australian researchers like Robson and Rogers (2005) use again, the European style, relative poverty threshold, but set to 50% of the national median income level.

The definition of worker shows a much diverse picture even only in Europe. As for the French INSEE definition, worker is a person who has spent at least 6 months in the labour market in the reference year with a minimum of 1 month of employment. The European approach - what Eurostat adopted in the in-work poverty risk indicator - defines the workers as those people who are actually working at the time of survey and who has spent at least 7 months in employment during the reference year. The BLS definition of worker, namely a person who has spent at least 27 weeks in the year of reference in the labour market by working or looking for a job.

The next issue to consider is the type of income on which to base our analysis. In literature, there is again much variety in the kinds of income researchers use to determine working poverty. Most of the papers use equivalised household disposable income. This is also the approach used by Eurofound (2010). However, as far as the analysis focuses on the working poor, income is sometimes limited to earned income only, studies focusing on the working poor in a broader sense including also the unemployed and those on sickness leave tend to limit income to market income, still others sum up household income before or after taxation, with or without social welfare allowances, etc.

New approaches suggest, that taking the household as the income recipient unit leads to a false evaluation of poverty. (Wooley and Marchal 1994, Kabeer 1994, Meulders et al. 2009, Ponthieux 2009) The household acts as a “fig-leaf” of the household-members’ poverty, because some are above the poverty threshold because they can rely on their partner sharing his/her income. The household approach assigns the same poverty risk for all household members, neglecting how each one of them earns personally. However, as of Sen (1990) “perceived contribution response” exists, which suggests that women receive less from household resources because they need less and their contributions to household income are valued less than those of men. We argue that individual measures are more appropriate in a society where the divorce rates grow continuously since the 1960s (González and Viitanen 2006) and where the pooling of income within the household cannot be proven.

Ponthieux (2009) introduced the concept of “poverty in earned income” or “economic poverty” based on individual income. She used market income to measure working poverty, which is all income connected to employment (wages and salaries, self-employed incomes, unemployment and sickness benefits).² This study

showed that, contrary to what Eurofound found in its study based on equivalised household income (Eurofound 2010), women are much more exposed to economic poverty than men.

Meulders et al. (2009) developed a methodology in order to analyse poverty based on the resources of each individual, whatever the characteristics of the household in which he/she lives. This involved measuring inequalities between men’s and women’s individual incomes. A statistical and econometric study of these income disparities was carried out in order to propose indicators for monitoring purposes. The present paper is based on this methodology to revisit the issue of the working poor among V4.

Data and methodology

In this analysis, the working poor population is analysed in 7 EU countries, the Visegrad countries (CZ, HU, PL, SK) and the Benelux states (BE, NL, LU) using the 2007 wave of the EU-SILC. This database is an instrument aiming at collecting, timely and comparable cross-sectional and longitudinal multidimensional micro data on income, poverty, social exclusion and living conditions in EU countries. The sample size of the countries are 23059 in CZ, 22297 in HU, 42852 in PL, 14864 in SK, 15493 in BE, 25905 in NL and 10419 in LU. We made our calculations by applying the cross-sectional personal weights provided by Eurostat.

In our analysis, the definition of worker is those individuals were employed/self-employed full-time or part-time at least through 7 months of the reference year. The definition of poor is defined as those individuals, whose individual net income is under the 60% of the same national median income.

We individualise all income sources received by the household and add these incomes to real individual incomes in order to obtain total individual incomes. With this approach, we would like to show how each individual would perform, if he/she could rely only on his/her own income. We calculate total income from EU-SILC personal and household data. Concerning total income, there are variables which are provided by the database individually (employee cash or near cash income, cash benefits or losses from self-employment, unemployment, old-age, survivors’, sickness and disability benefits, as well as education-related allowances) and there are household-based variables (family/children related allowances, other social exclusion benefits, housing allowances, cash transfers received and income from capital investments). After

² Ponthieux computed the NGR rate as a ratio of the weighted sum of total disposable household income (variable HY020) to the weighted sum of total household gross income (variable HY010), negative incomes are expressed as zero. The ratio can be applied in our analysis because it includes the same variables we used to calculate total income, only on company car (PY021) and income received by people aged under 16 (HY110) is additional, and short of non-cash employee income (PY020) and interest repayments on mortgage (HY100).

individualising household income, we computed the net revenue of each individual, and calculated the 60% of the median of these incomes by country, which serve as the poverty threshold.

There are countries where only the gross income variables are available (CZ, HU, SK, NL) for these countries, we applied an inflation rate on the poverty thresholds. The inflation rates (Net-gross ratio: NGR) have been developed by Ponthieux (2010), by dividing disposable (net) household incomes with the gross household incomes. The poverty threshold inflation rates are as follows: CZ: 0.938; HU: 0.893; SK: 0.923; NL: 0.844. For the rest of the countries an inflation rate of 1.00 has been applied.

In result, the poverty thresholds have been set to 2,427 € in CZ, 1,663 € in HU, 1,659 € in PL, 1,698 € in SK, 9,491 € in BE, 7,521 € in NL, 14,306 € in LU. Those individuals who dispose a yearly income lower than the poverty threshold are designated 'poor' (or rather at-risk of poverty), and those who dispose higher income are 'not poor'. To sum up, the working poor population has to match three criteria, to be poor (dispose lower income than the 60% of the national median), to be a worker (full-time or par-time at least 7 months in the reference year) and to be 15-64 years old (in order to exclude pupils, young earners and old pensioners from the analysis).

We always calculated V4 and Benelux total values by weighting the country values by the size of the total population in 2006 available at Eurostat.

The advantage of applying NGR ratio is that to include all countries into our analysis is rather simple. The disadvantage lying in applying the NGR ratio is on one hand that we only judge the individual net value by the household values which might reduce the comparability of the results. On the other hand, we have to take into account when we read the results, that applying a common NGR neglects that those who earn less, pay less taxes, and those who earn more, pay more (women are more likely to earn less). This method actually increases the existing net income differences.

Results

Among V4 countries, the highest working poverty rate affects PL, where 5.92% of the population is a worker whose individual income is lower than the 60% of the national median income, which puts them into risk of poverty. We observe the lowest working poverty rate in CZ among the V4 but Benelux as well. These rates let us calculate the number of poor workers in each country, which could be 129,164 in CZ, 311,366 in HU, 2,258,898 in PL, 67904 in SK 325853 in BE, 205811 in NL, 21156 people in LU based on our calculations.

The working poverty rate is slightly lower in Benelux states if we take the group of countries as a whole, but within the countries, there are few interesting findings e.g. NL and LU has higher poverty rate than SK and HU, and BE has the lowest working poverty rate among Benelux countries. This is a remarkable result, as facts prove that the gross domestic product per inhabitant is

almost three and a half times higher in average in Benelux states than in V4 countries.³

Table 1. Percentage of working poor within the total population

CZ	1.26
HU	3.09
PL	5.92
SK	4.47
V4	4.60
BE	3.10
NL	5.03
LU	4.51
Benelux	4.28

Source: Own calculations based on EU-SILC 2007

CZ	10,251,079
HU	10,076,581
PL	38,157,055
SK	5,389,180
V4	63,873,895
BE	10,511,382
NL	16,334,210
LU	469,086
Benelux	27,314,678

Source: Eurostat 2006

As previous studies showed, men and women are marked by different working poverty rates. As of Eurofound (2010) and its household based analysis showed, working women are less likely than working men to live in a poor household. As of Ponthieux (2009) individualised analysis, this is because they are more likely to live with a partner who earns enough to lift the equivalised household income above the poverty threshold. She also stated that women, more often than men, live with a partner who has higher earnings than she has, while men, more often than women, live with a partner who has no earnings at all.

As we stated above, we would like to know how each individual would perform, if he/she could only rely his/her own income. Table 3 shows the gender asymmetry of working poverty, using the fully individualised incomes. We can observe that among women, the working poverty rate is significantly higher than that of men in all countries but HU. We add that the proportion of men and women among all workers is 55% men and 45% women in average both in V4 and Benelux.

³ Eurostat, 2007

Table 3. Proportion of men and women within the working poor and all workers

	Working poor				All workers			
	Men	Women	Total	Ratio W/M	Men	Women	Total	Ratio W/M
CZ	38.22	61.78	100.00	1.62	57.14	42.86	100.00	0.75
HU	55.59	44.41	100.00	0.80	54.07	45.93	100.00	0.85
PL	44.86	55.14	100.00	1.23	55.36	44.64	100.00	0.81
SK	41.50	58.50	100.00	1.41	53.17	46.83	100.00	0.88
V4	45.20	54.80	100.00	1.24	55.26	44.74	100.00	0.81
BE	32.27	67.73	100.00	2.10	55.40	44.60	100.00	0.81
NL	25.44	74.56	100.00	2.93	54.21	45.79	100.00	0.84
LU	23.16	76.84	100.00	3.32	58.12	41.88	100.00	0.72
Benelux	28.03	71.97	100.00	2.62	54.74	45.26	100.00	0.83

Source: Own calculations based on EU-SILC 2007

Table 4. Percentage of full-time and part-time workers within the working poor and all workers

	Working poor				All workers			
	Full-time	Part-time	Total	Ratio PT/FT	Full-time	Part-time	Total	Ratio PT/FT
CZ	78.01	21.99	100.00	0.28	96.90	3.10	100.00	0.03
HU	81.83	18.17	100.00	0.22	95.27	4.73	100.00	0.05
PL	72.86	27.14	100.00	0.37	90.72	9.28	100.00	0.10
SK	93.08	6.92	100.00	0.07	97.50	2.50	100.00	0.03
V4	76.81	23.19	100.00	0.30	93.00	7.00	100.00	0.08
BE	59.47	40.53	100.00	0.68	78.32	21.68	100.00	0.28
NL	31.54	68.46	100.00	2.17	62.47	37.53	100.00	0.60
LU	43.67	56.33	100.00	1.29	82.48	17.52	100.00	0.21
Benelux	42.50	57.50	100.00	1.35	68.91	31.09	100.00	0.45

Source: Own calculations based on EU-SILC 2007

This illustrates the turn towards the higher representation of women among working poor population compared to among all workers.

In V4 countries, CZ has the highest women overrepresentation among working poverty, i.e. 61.78% of working poor is women. However, this rate is lower than any Benelux rates, where the women representation among working poverty is 71.97% in total, with LU reaching 76.84%.

Part-time work is much more spread in Benelux states than in V4. 31% of all workers in the Benelux work part-time, while this rate is 7% in V4. Among V4, PL has the highest rate of part-time workers among all workers, therefore it is not surprising to discover the highest rate among working poor as well. If we take a look at CZ and SK results, we can observe, that full-time and part-time work among all workers have very similar proportions, while turning to the working poor population, we can state that proportions do not change as much as it do in other V4 countries. In other words, the overrepresentation of part-time workers among working poor is not as significant in SK as it is in the rest of the V4.

The working poor of Benelux states is also overrepresented by part-time workers, reaching 68.46% in NL, 56.33 in LU and 40.53% in BE. To conclude, the proportion of part-time workers is higher among working poor than among all workers in all countries.

Table 5 illustrates the inequality of part-time and full-time workers within the working poor men and women. The proportion of part-time workers is significantly higher among working poor women than among men, especially in Benelux states, where 71.56% of working poor women works part-time. The rate stands out again in NL, where it reaches 83.93%. To conclude, part-time workers are overrepresented in among working poor, and especially among working poor women all countries.

Here we add, that part-time job occupied by women is also overrepresented among all workers, especially in Benelux states. 10% of working women holds a part-time job in V4 while this rate is 56.7% in Benelux. Therefore, excluding part-time workers from the analysis would have resulted in excluding a 10% of working women in V4, and as high as 56.7% of working women in Benelux.

Table 5. Percentage of full-time and part-time workers within the working poor men and women

	Men				Women			
	Full-time	Part-time	Total	Ratio PT/FT	Full-time	Part-time	Total	Ratio PT/FT
CZ	90.55	9.45	100.00	0.10	70.25	29.45	100.00	0.42
HU	82.73	17.27	100.00	0.21	80.71	19.29	100.00	0.24
PL	79.96	20.04	100.00	0.25	67.06	32.91	100.00	0.49
SK	97.80	2.20	100.00	0.02	89.74	10.26	100.00	0.11
V4	83.60	16.40	100.00	0.20	71.64	28.30	100.00	0.40
BE	84.50	15.50	100.00	0.18	47.55	52.45	100.00	1.10
NL	81.10	18.90	100.00	0.23	16.07	83.93	100.00	5.22
LU	86.22	13.78	100.00	0.16	30.84	69.16	100.00	2.24
Benelux	82.50	17.50	100.00	0.21	28.44	71.56	100.00	2.52

Source: Own calculations based on EU-SILC 2007

Conclusion

V4 and Benelux states went through a different path of economic development in time, partly due to historical matters. Our first result was, that we calculated the poverty thresholds in each country, which have been set to a yearly income of 2,427 € in CZ, 1,663 € in HU, 1,659 € in PL, 1,698 € in SK, 9,491 € in BE, 7,521 € in NL and 14,306 € in LU. With these poverty thresholds we could identify those individuals, who are in-work, but whose individual income does not reach the poverty threshold. We replaced equivalised disposable household income by individual incomes in order to get a fully individualised poverty risks.

It turned out, that the percentage of working poor population within the total population is slightly higher in V4 than in Benelux, but there are some alterations within the groups of states. Contrary what Eurofound found, our results show that women are overrepresented among working poor population in most of the countries.

We also found, that the proportion of part-time workers is much higher among the working poor than among all workers. Additionally, part-time work is especially overrepresented among working poor women.

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Valentinas NAVICKAS, Doctor of social sciences (economics), professor at Kaunas University of Technology, the Faculty of Economics and Management, the Department of Economics and International Trade. E-mail valna@ktu.lt. Is an author of more than 210 scientific publications and scientific popularity articles published in Lithuania and abroad, author of four experimental development projects, prepared 4 doctors of social (economics) science; now he is research adviser of 2 persons maintaining a doctor's thesis of social (economics) science. *Spheres of interest*: microeconomics, macroeconomics, international economics, tourism economics, logistic, economic development.

Emese BRUDER, Phd candidate of Management and Business Administration PhD School, Szent István University Gödöllő, Hungary. Teaching assistant at the Institute of Economics and Methodology, Faculty of Economics and Social Sciences, Szent István University Gödöllő. E-mail: bruder.emese@gtk.szie.hu *Spheres of interest*: microeconomics, macroeconomics, well-being, labour market economics.

Csilla OBÁDOVICS, Doctor of Management and Business Administration, associate professor at the Faculty of Economics, University of West Hungary, Sopron, Hungary. Lecturer of two doctoral schools, Management and Business Administration PhD School at Szent Istvan University Gödöllő, and István Széchenyi Management and Organisation Sciences Doctoral School at University of West Hungary, Faculty of Economics. E-mail: obadovics.csilla@ktk.nyme.hu *Spheres of interest*: microeconomics, macroeconomics, regional analysis, labour market, econometrics, mathematics.