IMPACT OF SOCIAL TRANSFERS ON MONETARY POVERTY OF HOUSEHOLDS

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Abstract

Aging of population and persisting impact of crisis give a raise to the concerns about future government expenditures on pension system, system of unemployment benefits and other social benefits paid by the government. In spite of the prolongation of retirement age and extensive reforms of pension system in recent years in Europe the requirements on the government expenditures grow. This adverse trend weakens the capability of systems to reduce the extent of poverty and maintain the living standards of inhabitants. The paper focuses on an analysis of structure and level of transfers to households in relation to their income, age and gender of its head. An attention will be paid particularly to the influence of transfers paid in order to reduce the monetary poverty in selected EU countries. The proportion of particular types of social benefits is related to the settings of social policy in each state and therefore we chose for sake of comparison countries representing different type of social behavior, i.e. Czech Republic, Germany, Italy and Sweden.

Key words: living standard, social transfers, monetary poverty, EU

JEL Code: D31, E24, I32

Introduction

Economic crisis accompanied by deceleration or stopping of GDP growth and increase of unemployment together with growing indebtedness of both government and private sectors caused economic and political destabilization not only in EU but also in the whole world. This adverse economic situation is connected also with the world-wide phenomenon of population aging combined with further increase of mandatory expenditures of state budgets. The unfavorable demographic situation and growing dependence on expected working activity of inhabitants (see Fiala & Langhamrová, 2014) demands interventions to economic structures and social policy – particularly to the unemployment policy and conception of social security. Aging of population projects to the so called aging of economies. This problem becomes more important approximately from 70th of the 20th century. (In detail see, e.g., Shoven, 2011.) Population aging is a difficulty emerging particularly in advanced countries. Demographic trends indicate that in rather short time a decrease of efficient capacity of manpower will

become a serious issue. Nowadays, in some countries the retired people comprise more than one fifth of the population. This has a serious impact on the social and health systems.

Thus, the European states face the necessity to realize partial actions which can – in agreement with Europe 2020 – Strategy (see SPC, 2010) – lead to moderation of negative impact of both economic crisis and population aging. The strongest consequences of the contemporary economic crisis strike on the poorest, i.e. the households at risk of monetary poverty and social exclusion. The delicacy and topicality of the issue is confirmed by a range of papers devoted to the analyses of income inequalities, risk of monetary poverty and material deprivation, unemployment and demographic development which were in recent period published in research journals in the Czech Republic and abroad. From the Czech and Slovak papers we can enumerate, e.g., Bílková (2013), Pauhofová & Želinský (2015), Stankovičová, Ivančíková & Vlačuha (2015). Other frequent papers closely connected to the issue focus on the modeling of income or expenditure distribution and diagnostics of factors influencing it. In the last years we can name, e.g., papers by Malá (2013), Marek (2013), Pacáková, Linda & Sipková (2012), Řezanková & Löster (2013), Řezanková & Želinský (2014), Sipková & Sipko (2012), Šimpach (2013), etc.

1   Structure of social benefits in Czech Republic and selected EU states

In spite of the prolongation of retirement age and extensive reforms of the retirement system (which took place in the recent period in Europe) the demands on government expenditures increase. This adverse development weakens the ability of systems to reduce the extent of poverty and keep the living conditions of inhabitants. Analysis of the government budget burden by particular types of benefits provides an information base for the evaluation of the current situation and allows us to predict the future course using the estimates of demographical development.

The analysis of proportion of benefits on the total incomes of households is based on three viewpoints, namely:

- income category of household,
- age of head[1] of the household,
- gender of head of the household.

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[1] The head of household is in complete families always a man, regardless of his economic activity. In case of incomplete families and nonfamily type of household the first aspect is the economic activity and the second one is the amount of financial incomes of family members. This is the case also for more complicated types of households (more complete families).

Special attention is given to the structure of proportion of social benefits paid to the households at risk of monetary poverty. Thus, we obtain information concerning the dependence of the low-income households on the setting of social security system in particular country. As a threshold of monetary poverty we use the line defined by Eurostat as 60% of median on equalizes national income in purchasing power parity.

For the comparison of proportion of particular social benefits in the Czech Republic and several other European countries we intentionally selected countries with different type of social policy. In EU there exist several types of social models (see, e.g., Bambra & Eikemo, 2009). The essential difference is based on the trade-off between the higher unemployment benefits and higher protection of staff levels itself. Scandinavian model (Denmark, Finland, Iceland, Norway and Sweden) is not focused on the employment policy but on the strong social cohesion based on higher tax rates. Mediterranean model (Italy, Cyprus, Malta, Portugal, Greece and Spain) is based on the strict regulations of the employment and low level of social cohesion. Bismarckian model applied in Germany, France, Belgium, Nederland and Switzerland has high government expenditures on social transfers. On contrary, anglosaxon model (United Kingdom and Ireland) guarantees only the minimal level of social security and social function of the state is suppressed. The group of post-communist countries of Central and Eastern Europe (Bulgaria, Czech Republic, Croatia, Hungary, Poland, Romania, Slovenia and Slovakia) shows lower level of social services than other EU states. Similar situation appears in the group of Baltic countries (Estonia, Latvia and Lithuania).

The heterogeneity of social systems in European states was used for comparison of the situation of Czech Republic with other European countries. To achieve this we selected representatives of different systems, namely Italy, Germany and Sweden.

1.1   Data base

The data base is a result of the sample survey on incomes and living conditions EU-SILC (European Union Statistics on Income and Living Conditions, see EU-SILC 2012). The elementary unit is the household and its individuals who have in the particular flat their permanent address. It is an extensive survey mandatory for all member states of European Union and is carried out annually also in Norway, Iceland and Switzerland. The sample collected is representative and results of the analyses can be generalized and compared across the European Union.

1.2 Results

The proportions of particular types of social benefits on total household incomes are summarized in Tables 2 – 4. Types of incomes and transfers used for the structural estimation of social benefits proportion on total household incomes are listed in the Table 1. Values in Tables 2 – 4 represent average proportions of sum of all social benefits of considered type (see Table 1) which the household received in the year on the total disposable income of a household. Furthermore, the first column of the tables shows the average percentage of transfers received by the household (excluding pensions), i.e. the value

$$\text{Ratio of transfers} = \frac{HY020 - HY022}{HY020} \cdot 100\% \ . \tag{1}$$

Tab. 1: EU-SILC Variables used for estimation

Abbrev.	Description
HY020	Total disposable household income
HY022	Total disposable household income before social transfers other then old-age and survivor's benefits
PY090N	Unemployment benefits
PY100N	Old-age benefits
PY110N	Survivor's benefits
PY120N	Sickness benefits
PY130N	Disability benefits
PY140N	Education-related allowances

Source: EU-SILC 2012

According to the expectations, the average proportions of particular types of benefits show substantial difference (e.g., in Table 2 the vary from 0.05%, – proportion connected with education in Czech Republic in income group over median – till 55.04% as a proportion of old-age benefits on the incomes of Czech households in income group closely beneath the median). Therefore in our comparison we will focus only on several important items:

- ratio of transfers (proportion of all transfers excluding old-age benefits),
- ratio of PY090N (proportion of unemployment benefits),
- ratio of PY100N (proportion of old-age benefits),
- ratio of PY130N (proportion of disability benefits).

Table 2 presents the average proportions of transfers related to the total level of household incomes in the Czech Republic (CZ), Germany (DE), Italy (IT) and Sweden (SE). In this table we focus on low-income households, i.e. households lying under the national

monetary poverty thresholds and in the close neighborhood of poverty lines. We used division into groups according to the level of their equalized incomes expressed as a percentage of median of equalized income with categories from $\leq 40\%$ to $> 100\%$. This shows in all four states considerable dependence on transfers received (excluding old-age benefits) particularly in the group of the poorest ($\leq 40\%$). In the Czech Republic and in Germany relatively strong dependence can be detected also in the interval $(40\%; 60\%]$. The group with lowest level of incomes ($\leq 40\%$) shows relatively high proportion of disability benefits (33.25% in the Czech Republic) and proportions of unemployment benefits (19.26% in Germany). Old-age benefits represent the highest share on incomes (with one exception) in the groups of households with incomes between 60% and 100% of national medians. The situation is depicted in Figure 1.

Tab. 2: Proportion of transfers according to ratio of median of equalized household incomes (in %) in Czech Republic (CZ), Germany (DE), Italy (IT) and Sweden (SE)

country code	ratio of median	ratio of transfers	ratio of PY090N	ratio of PY100N	ratio of PY110N	ratio of PY120N	ratio of PY130N	ratio of PY140N
CZ	≤ 40	**67.94**	3.72	8.32	1.92	2.70	**33.25**	0.54
	(40;60]	20.91	0.66	31.17	2.25	1.10	9.71	0.06
	(60;80]	6.89	0.25	**54.57**	6.68	0.24	2.75	0.01
	(80;100]	4.40	0.20	**55.04**	3.77	0.23	2.03	0.01
	> 100	2.27	0.13	21.76	1.39	0.29	0.78	0.02
DE	≤ 40	**69.09**	**19.26**	12.39	1.66	1.22	**14.80**	2.42
	(40;60]	14.73	2.39	37.38	4.28	0.53	2.39	0.75
	(60;80]	7.79	0.90	**44.38**	4.05	0.36	1.21	0.23
	(80;100]	4.87	0.62	**45.18**	3.58	0.11	0.56	0.16
	> 100	2.56	0.28	28.58	1.72	0.11	0.26	0.05
IT	≤ 40	**31.35**	7.59	12.68	1.55	-	**10.89**	0.97
	(40;60]	8.69	2.21	**43.13**	2.58	-	1.88	0.11
	(60;80]	6.26	1.58	42.27	1.37	-	1.43	0.15
	(80;100]	4.04	1.34	**44.01**	0.79	-	0.71	0.08
	> 100	2.21	0.85	30.95	0.94	-	0.46	0.06
SE	≤ 40	**80.36**	**10.54**	9.65	0.38	2.23	**14.87**	13.05
	(40;60]	27.82	1.73	34.12	0.16	0.91	2.86	2.91
	(60;80]	16.14	1.15	**41.50**	0.11	0.43	1.76	1.40
	(80;100]	10.51	0.77	**39.50**	0.08	0.36	1.06	0.96
	> 100	5.55	0.30	15.91	0.12	0.30	0.53	0.50

Source: Computation based on EU-SILC 2012

Fig. 1: Average proportion of transfers (excluding old-age benefits) on the total incomes of households in Czech Republic (CZ), Germany (DE), Italy (IT) and Sweden (SE).
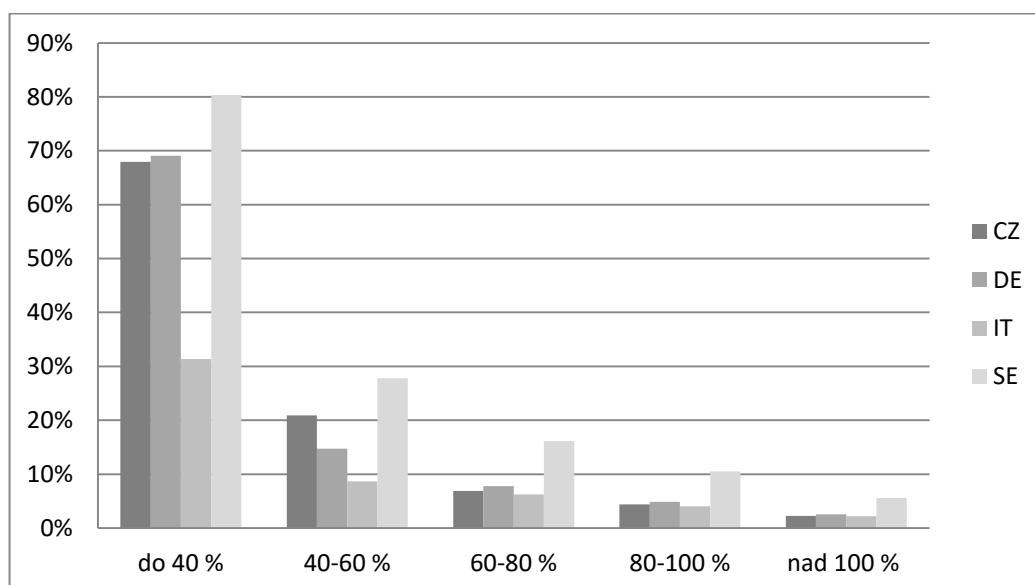
Source: Computation based on EU-SILC 2012

Table 3 presents that the households with women as a head of household are more likely to be dependent on incomes from transfers than the households with men as a head. It is the case of proportion of transfers (excluding old-age benefits) with exception of Czech Republic and proportions of old-age benefits (with the exception of Germany). Women are also usually more likely to be dependent on the disability benefits (Germany, Italy and Sweden). The unemployment benefits do not depend on gender.

Tab. 3: Proportion of transfers according to gender of head of household (in %) in Czech Republic (CZ), Germany (DE), Italy (IT) and Sweden (SE)

country code	gender	ratio of transfers	ratio of PY090N	ratio of PY100N	ratio of PY110N	ratio of PY120N	ratio of PY130N	ratio of PY140N
CZ	male	**8.50**	**0.44**	31.72	0.69	0.43	**4.01**	0.04
	female	8.06	0.29	**43.14**	7.70	0.49	3.24	0.06
DE	male	10.86	2.68	**37.07**	0.43	0.29	2.17	0.29
	female	**15.65**	**3.22**	22.99	6.10	0.34	**2.69**	0.68
IT	male	**6.13**	**1.77**	31.27	0.32	-	1.51	0.13
	female	5.62	1.52	**40.09**	3.03	-	**1.74**	0.19
SE	male	16.81	1.46	21.59	0.07	0.48	2.40	2.21
	female	**18.70**	**1.98**	**25.40**	0.21	0.69	**2.68**	2.33

Source: Computation based on EU-SILC 2012

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Table 4 shows the dependence of household on transfers according to the age group of the head of the household. It is comprehensible that the youngest category (≤ 30 years) has the highest proportion of transfers (excluding the old-age benefits) and that the oldest category (> 60 years) shows the highest proportion of old-age benefits. The youngest households are also more likely to be dependent on the unemployment benefits (surprisingly with the exception of Czech Republic). The proportion of disability benefits is without any surprise higher in the middle category (31 – 60 years) – and the highest values can be found in the Czech Republic with the proportion of 4.82%.

Tab. 4: Proportion of transfers according to age of head of household (in %) in Czech Republic (CZ), Germany (DE), Italy (IT) and Sweden (SE)

country code	age	ratio of transfers	ratio of PY090N	ratio of PY100N	ratio of PY110N	ratio of PY120N	ratio of PY130N	ratio of PY140N
CZ	≤ 30	**12.18**	0.44	0.94	0.45	0.39	0.80	0.61
	31 – 60	11.80	**0.59**	4.28	0.92	0.73	**4.82**	0.02
	> 60	3.68	0.15	**77.77**	5.81	0.11	2.87	0.00
DE	≤ 30	**19.63**	2.28	0.09	0.40	0.28	0.21	4.77
	31 – 60	17.33	**3.95**	1.97	0.90	0.42	**3.19**	0.16
	> 60	4.70	1.47	**79.92**	5.13	0.15	1.55	0.05
IT	≤ 30	**8.62**	**3.45**	0.73	0.61	-	0.20	1.10
	31 – 60	8.21	2.45	3.69	1.23	-	**1.69**	0.16
	> 60	3.02	0.61	**73.86**	1.21	-	1.57	0.05
SE	≤ 30	**27.16**	**2.59**	0.95	0.17	0.45	2.38	9.63
	31 – 60	18.20	1.87	1.35	0.10	0.83	**2.68**	0.60
	> 60	11.65	1.02	**67.35**	0.19	0.35	2.47	0.11

Source: Computation based on EU-SILC 2012

Conclusions

From the values of average proportion of total transfers received excluding the old-age benefits (1st column in tables) we can observe the influence of the social system. In case of the poorest households (under 40% of national median of equalized incomes) the proportion of transfers is as high as 67.94% for the Czech Republic, similarly in Germany 69.09%, but in Italy only 31.35%. On contrary, Sweden shows even more, namely 80.36%. This clearly confirms the expected difference in generosity of social systems – particularly between the Scandinavian and Mediterranean.

The division into groups according to the level of incomes shows in all four states considerable dependence of average proportion of total transfers (excluding old-age benefits) and the level of incomes. This dependence is substantial near the lower income area, i.e. the poorest households. In this group we can observe also high proportion of disability benefits (highest proportion in case of Czech Republic) and proportion of unemployment benefits (highest in Germany). Maximal proportion of old-age benefits are usually focused on the medium income categories – between 60% and 100% of national medians. The paper shows that distribution of transfers (excluding old-age benefits) is in all four states aimed at the reduction of poverty.

It is also apparent that the dependence on transfers is connected also with gender and age category of the head of household. Households with woman as head are more likely to be dependent on social transfers than the households with man as a head, namely in the proportion of transfers (excluding the old-age benefits) but also in the proportion of old-age benefits. They are also more often dependent on the disability benefits. Also the youngest households (with head younger than 30 years) receive in all four states the highest proportion of transfers (excluding old-age benefits) and are more likely to be dependent on unemployment benefits than the middle-aged households. (As can be expected, the highest proportion of disability benefits is in the group of middle-aged and the highest proportion of old-age benefits is in the oldest category above 60 years.)

Acknowledgment

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