PARTICULARITIES OF THE UNPAID WORK IN THE SINGLE-PERSON HOUSEHOLDS IN SLOVAK REPUBLIC

Abstract

Households represent one of the basic units (besides government and firms) in every economy. However, not all households are the same. Every household has its own particularities and we can consider them according to the number of household's members, type of living, income group or structure of the members. In the last period, the growing ratio of the single-person households on the total amount of households has become a significant issue in Slovakia. It is an interesting phenomenon not only regarding the labour market (it means performing paid work), but also regarding the free time passing (including unpaid work activities).

The aim of this article is to identify particularities of the single-person households in Slovakia in the area of unpaid work activities. We focus on two main groups of single-person households according to the age (young persons in productive age and elderly persons in post productive age) and comparison of single-person households and other households.¹

Key words: Unpaid Work. Slovak Households. Single-person Households. Age Groups.

Introduction

Even the unpaid work has been a subject matter of scientific researches and official statistics in many foreign countries (e.g. Anderson, D. and M., Kelliher[1], Anger, S. [2], Antonopoulos, 2009 [3], Antonopoulos and Hirway, 2010 [4], Miranda, 2011 [5] and others), in Slovakia there has not been any official statistics about the unpaid work done yet.

Unpaid work is frequently considered as a natural work that represents natural feature of each family and household. Not only work performed at labour market, but also the unpaid work must be considered as a meaningful activity that has particular reason and result. However, it is not possible to study and research unpaid work from one point of view only.

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¹This paper is an output of scientific project of Grant Agency VEGA no. 1/0935/13 "Unpaid work as a potential source of socio-economic development of society and the determinant of individual well-being"

Unpaid work influences every aspect of individuals' and households' lives. This is also the reason, why the unpaid work must be analysed from the multidisciplinary point of view (economical, psychological, sociological, demographical, cultural, mathematical, statistical and others).

In 2011-2012, our interdisciplinary team starts first original research of the unpaid work in Slovakia that focused on understanding and analysing real status of the unpaid work, finding motives for unpaid work and its consequences on particular economic agents in Slovakia. This research was part of the VEGA 1/1141/11 project — "The Labour Market in the Specific Context of the Unpaid Work, the Measurement of Unpaid Work Value and its Impacts into Households, the Business Sector and the Economy" [8]. Afterwards follows new project, VEGA no. 1/0935/13 "Unpaid work as a potential source of socio-economic development of society and the determinant of individual well-being", focusing on discovering possibilities of substituting unpaid work activities by services offered by market [7]. Results of the research were published by the team members, and they focused mostly on detecting possibilities of offering market substitutes of unpaid work activities (Kika, M - Martinkovičová, M. 2014 [8] and estimating the value of the unpaid work in the Slovak households (Kaščáková, A. Kubišová, L. Nedelová, G. 2013, [9].),

In the following text, we present chosen results from the preliminary field research that was conducted as a part of the second project.

Methodology

In 2013, our multidisciplinary research team performed a preliminary field research, which was focused on finding the motives for performing (eventually not performing) market services substituting unpaid work activities in the households. This preliminary research was performed as a part of scientific project of Grant Agency VEGA no. 1/0935/13 "Unpaid work as a potential source of socio-economic development of society and the determinant of individual well-being". Not only possible demand for the market substitutes of the unpaid work activities was determined in the preliminary field research, but also extent of the time that individuals spend by the unpaid work activities.

In this article we focus on the particular group of the respondents from the field research – persons who live alone, it means single-person households. In the field research,

there were 1892 respondents all together. From them, 473 (almost 25 %) were persons living in single-person households. We tried to find out particularities of single-person households compering to other (multi persons) households as well as on comparison different kinds of single-person households (mostly comparison according to the age of the respondent). In case of multi person households, we calculate extent of the performed unpaid work activities for a single person (so we were able to compare multi-persons households' data with single-person households' data). Only persons older than 15 years of age were included into the calculation. Reason for that is a Slovak legislation, according to which children work is not legally allowed (we considered this restriction even if it is applied for paid work). Natural persons reach the legal personality for concluding working contract at the moment of reaching 15 years of age and fulfilling obligatory education.

To find out the extent of the unpaid work activities, we focus on different kind of unpaid work activities. We distinguished between activities that are included in the System of National Accounts (SNA) and activities that are not part of the System of National Accounts.

Unpaid work activities not included in SNA are food preparation, housekeeping, preparation and maintenance of cloths, growing ornamental plants, pet care, preparation and maintenance of furniture and cars, shopping and services (total value up to 1000 euro), children care, adults' care, volunteer work. Unpaid work activities included in SNA include growing of useful plants, breeding of farm animals constructions and building work. It means that households or individuals can get financial reward for them.

In the article, we present results of testing two hypothesis concerning single-person households and unpaid work:

- 1. There are statistically significant differences between single member households and other households.
- 2. There are statistically significant differences between single member households according to the age (older more than younger).

To test the hypothesis, we have used non-parametric tests, mostly Kruskal-Wallis Test and Mann-Whitney Test. We test hypothesis on the probability level $\alpha = 0.05$.

Unpaid work activities in single-person households and multi-persons households

In 2011, there were 25.7 % single-person households in Slovakia (source: Statistical Office of Slovak Republic). In our preliminary research, single-person households represented 25 % of all respondents (what corresponds with the Slovak division of households).

In the table 1, there is information about the extent of the unpaid work (according to the performed activities), for both single-person and multi-personshouseholds. Data are calculated as an average for one member in the household. It means, that in case of single-person households this information represent also total extent of the unpaid work in the household, while in the multi-persons households it is extent only for one member (in the calculation we consider only persons older than 15 years of age).

Table 1 Unpaid work in single-person and multi-persons households

activity	no. Of households me		Mean	activity	no. Of households'm		Mean
	mbers	N	Rank		embers	N	Rank
food	single member	473	1191,59	children	single member	429	755,65
preparation	more members	1340	806,54	care/week	more members	1232	857,24
	Total	1813			Total	1661	
housekeeping	single member	473	1052,45	adults	single member	425	741,84
	more members	1328	847,06	care/week	more members	1207	842,79
	Total	1801			Total	1632	
textiles	single member	466	1031,18	volunteer	single member	424	837,44
	more members	1298	829,12	activities/week	more members	1203	805,74
	Total	1764			Total	1627	
ornamental	single member	455	882,24	useful	single member	446	784,97
plants	more members	1299	875,84	plants/week	more members	1254	873,81
	Total	1754			Total	1700	
pet care	single member	444	715,35	farm	single member	428	785,99
	more members	1295	923,02	animals/week	more members	1204	827,35
	Total	1739			Total	1632	
maintenance	single member	441	733,42	building and	single member	424	694,20
and preparation	more members	1281	905,59	reconstruction/	more members	1216	864,54
	Total	1722		week	Total	1640	
shopping and	single member	473	1103,51	unpaid work	single member	473	1000,97
services	more members	1341	838,36	total	more members	1352	882,22
	Total	1814			Total	1825	

Source: own elaboration.

We tested, by the mean of Mann-Whitney non-parametric test, whether there are statistically significant differences in the extent of unpaid work performed by single-person households and multi-persons households. We confirmed statistically significant differences in case of all unpaid work activities, except of growing ornamental plants. Single-person households spend more time than multi-persons households (in average in week) by performing activities such as food preparation, housekeeping, preparation of textiles, shopping and services, volunteer activities as well as total extent of unpaid work (frequency is not the same in case of all activities, because not all activities were answered by the same amount of respondents). It means, that our hypothesis "There are statistically significant differences between single member households and other households" was confirmed (except the growing of the ornamental plants, where there is not statistically significant difference between the time spent by single-person and multi-persons households).

This result seems to be logic, because members in multi-persons households can split activities such as food preparation, housekeeping, shopping and services between them. These activities must be performed also by person living in single-person household. In general, total time spent for these activities is approximately the same, regardless they are performed in single-person or multi-persons households. However, if members in multi-persons households split these activities between them, each member spendsin average less time by them than only one member of the single-person household. Reason why single-person households spend less time by children and adults care is also evident. In this kind of households, there are neither children nor dependent adults living (it means that if members of single-person households spend some time by children or adults care, it is because they take care of children or adults living in other household, that is why they do not dedicate so much time to these activities).

Single-person households in Slovakia according to the age

More than 25 % of all households in Slovakia belongs to the single-person group. However, not all of these households are the same; there are many significant differences mostly according to the age of the household's member. In the table no. 2, there is information about the division of the respondents (it means also households) according to the age.

Table 2 Division of the single-person households according to the age

		Frequency	Percent %	Valid Percent	Cumulative Percent
Valid	from 15 to 30	182	38,4	38,4	38,4
	from 31 to 64	112	23,7	23,7	62,1
	more than 65	179	37,9	37,9	100,0
	Total	473	100,0	100,0	

Source: Own elaboration.

Young people (up to 30 years of age) represent almost 38.5 % of all respondents. This group is unique mostly because it represents persons, who are single, who were never married, and who dedicate most of their time to the paid job and are willing to spend more money on market services substituting unpaid work activities. The second largest group is represented by elderly persons older than 65 years (almost 38 %). This group includes persons, who are either widows or widowers, or who are divorced. Most of these persons do not actively work anymore (typical age of retirement in Slovakia is 62 years of age) and spend most of their daily time at home.

It is evident, that these two group represents also different approach to the spending the free time and utilising it for the unpaid work activities. This is the reason, why we test our hypothesis "There are statistically significant differences between single member households according to the age (older more than younger)".

To compare amount of the unpaid work performed in each age group, we have used non-parametric Kruskal-Wallis Test. In the table 3, there are data focusing on the extent of unpaid work activities performed by each age group within the single-person households.

Table 3 Extent of unpaid work in single-person households (divided according to the age)

	age	N	Mean Rank		age	N	Mean Rank
food preparation	from 15 to 30	186	150,61	children	from 15 to 30	164	184,26
	from 31 to 64	113	253,11	care/week	from 31 to 64	97	227,23
	Total	473			Total	429	
	from 65	174	318,89		from 65	168	237,95
housekeeping	from 15 to 30	186	172,36	adults care/week	from 15 to 30	165	201,08
	from 31 to 64	113	218,86		from 31 to 64	93	240,01
	Total	473			Total	425	
	from 65	174	317,88		from 65	167	209,74
textiles	from 15 to 30	179	167,24	volunteer	from 15 to 30	164	228,19
	from 31 to 64	113	251,52	activities/week	from 31 to 64	93	238,31
	Total	466			Total	424	
	from 65	174	289,96		from 65	167	182,72
ornamental	from 15 to 30	173	136,01	useful	from 15 to 30	168	164,32
plants	from 31 to 64	108	246,94	plants/week	from 31 to 64	108	212,78
	Total	455			Total	446	
	from 65	174	307,70		from 65	170	288,79
pet care	from 15 to 30	171	205,26	farm	from 15 to 30	164	195,94
	from 31 to 64	105	239,65	animals/week	from 31 to 64	93	192,67
	Total	444			Total	428	
	from 65	168	229,33		from 65	171	244,17
maintenance	from 15 to 30	172	219,16	building and	from 15 to 30	164	230,39
and preparation	from 31 to 64	102	217,61	reconstruction/w	from 31 to 64	93	217,76
	Total	441		eek	Total	424	
	from 65	167	224,97		from 65	167	192,00
shopping and	from 15 to 30	186	226,48	unpaid work total	from 15 to 30	186	150,51
services	from 31 to 64	113	253,51		from 31 to 64	113	250,77
	Total	473			Total	473	
	from 65	174	237,53		from 65	174	320,51

Source: own elaboration.

We found out, that there are statistically significant differences in case of all unpaid work activities, except of maintenance and preparation and shopping and services. However, we were no table to compare all three age groups by Kruskal-Wallis Test. It is only possible to sum up, that younger persons (in this case younger persons are person sup to 30 years plus persons from 31 to 64 years of age) spend more time by unpaid work in case of building and reconstructions and volunteer work. It seems to be logic, because young people dedicate to volunteer work much time in general than elder persons. Also building and reconstruction activities are usually performed mostly by persons in productive age.

To stress the differences between the households with younger and older members, we focused specially also on comparison of the extent of unpaid work activities performed by persons younger than 30 years and older than 65 years.

In the following table, there are data from Population and Housing Census 2011 in Slovakia. Not only single-person households, but households in general are included in this table.

Table 5 Slovak households with members younger than 30 and older than 65 year

Houdseholds in Slovakia nas	Slovak regio	ns; only pe	ople up to	30 years ar	nd people 6	5 and older	r, SODB 201	1				
Region	households of persons up to 30 years						households of personsof 65 and more years				ırs	
						ratio of single						ratio of single
						member househol						member househol
						ds on total						ds on total
						amount						amount
	according t	o househo	lds'membe	rs	total	%	according	to househo	lds'membe	ers	total	%
	1	2	3	4+			1	2	3	4+		
Slovac republic	46 496	17 792	13 880	8 692	86 860	0,54	179 896	81 027	960	122	262 005	0,69
Bratislava region	8 755	2 466	2 712	359	14 292	0,61	26 653	10 735	156	10	37 554	0,71
Trnava region	4 024	1 694	1 162	455	7 335	0,55	18 117	8 562	85	12	26 776	0,68
Trenčín region	4 171	1 950	1 293	546	7 960	0,52	21 215	10 866	118	22	32 221	0,66
Nitra region	5 055	2 283	1 599	736	9 673	0,52	26 911	12 024	151	8	39 094	0,69
Žilina region	4 055	1 877	1 564	799	8 295	0,49	19 436	8 977	69	9	28 491	0,68
Banská B ystrica region	7 253	2 575	1 736	1 338	12 902	0,56	25 385	10 866	142	33	36 426	0,70
Prešov region	4 819	2 055	1 852	2 376	11 102	0,43	19 154	8 868	124	19	28 165	0,68
Košice region	8 364	2 892	1 962	2 083	15 301	0,55	23 025	10 129	115	9	33 278	0,69

Source: Statistical Office of Slovak republic (http://census2011.statistics.sk/ [10])

Data clearly confirm, that households with single member represent significant part of all households in Slovakia. Households with single member old up to 30 years cover about 54 % of all single-person households. In all Slovak regions (except the Prešov region), the ratio of single-person households up to 30 years on total amount of single-person households is more than 50 %.

In case of households with members older than 65 years, the ratio is even more significant. In the whole Slovakia, about 69 % of households with the member(s) older than 65 years belong to the single-person households. This tendency is evident in all Slovak regions, without any exception.

In the table 6, we compare extent of the unpaid work performed by single-member households with member younger than 30 or older than 65 years of age.

Table 6 Extent of unpaid work performed by up to 30 and above the 65 years old single-person households

Activity	age	Ν	Mean Rank	Activity	age	N	Mean Rank
food preparation	from 15 to 30	186	122,08	children	from 15 to 30	164	145,94
	65 and more	174	242,95	care/week	65 and more	168	186,57
	Total	360			Total	332	
housekeeping	from 15 to 30	186	128,82	adults	from 15 to 30	165	163,10
	65 and more	174	235,75	care/week	65 and more	167	169,86
	Total	360			Total	332	
textiles	from 15 to 30	179	131,90	volunteer	from 15 to 30	164	183,37
	65 and more	174	223,40	activities/we	65 and more	167	148,95
	Total	353		N N	Total	331	
ornamental	from 15 to 30	173	106,39	useful	from 15 to 30	168	123,54
plants	65 and more	174	241,22	plants/week	65 and more	170	214,92
	Total	347			Total	338	
pet care	from 15 to 30	171	160,64	farm	from 15 to 30	164	148,79
	65 and more	168	179,53	animals/wee	65 and more	171	186,42
	Total	339			Total	335	
maintenance maintenance	from 15 to 30	172	167,83	building and	from 15 to 30	164	181,27
and preparation	65 and more	167	172,24	reconstruction	65 and more	167	151,00
	Total	339		TI/Week	Total	331	
shopping and	from 15 to 30	186	176,15	unpaid work	from 15 to 30	186	120,23
services	65 and more	174	185,15	total	65 and more	174	244,93
	Total	360			Total	360	

Source: own elaboration.

We tested, by the mean of Mann-Whitney non-parametric test, whether there are statistically significant differences in the extent of unpaid work performed by the single-person households with member up to 30 years of age and member older than 65 years of age. We found out, that there are statistically significant differences in all activities, except of maintenance and preparation, shopping and services and adults care. In case of activities with statistically significant differences, older persons spend more time by unpaid work than young persons (there are also exceptions – building and reconstruction and volunteer activities). Persons older than 65 years spend almost 245 hours a week by performing unpaid work activities, while young persons (up to 30 years) spend only about 120 hours by unpaid work

activities. This result seems to be logic, because older persons have much more free time that could be dedicated to unpaid work activities (persons above 65 years do not work at paid job).

Conclusion

Single-person households represent significant part of all households in Slovakia (more than 25 % of all households. They have very specific position in the economy, that is why i tis necessary to pay particular attention to them. Also our field research confirmed, that single-person households are specific comparing to the multi-persons households. On the probability level $\alpha=0.05$ we confirmed both our hypothesis. Single-person households spend more time by unpaid work activities than each member in the multi-persons households in case of food preparation, housekeeping, shopping and services and volunteer activities. In case of growing ornamental plants, there is no statistically significant differences and ain case of other activities, members of multi-persons households spend in average more time by these activities than single-person households. Regarding the age, young persons (up to 30 years) spend much less time by unpaid work activities than older persons (above 65 years of age). Building and reconstruction and volunteer activities are exception.

It is evident, that single-person households are very specific also regarding the unpaid work. It will be necessary to focus more deeply on them, also regarding their interest to substitute unpaid work by services offered by the market. The more detailed analysis of the financial situation of households will be probably necessary in order to link the rate of unpaid work with potentional, replace it by paid services to view the financial situation and household indebtedness, on which was for example (Kiaba, M.-Szalai, T. [11])paper focused.

Sources

- [1] KELLIHER, C. ANDERSON, D. 2010. Doing more with less? Flexible working practices and the intensification of work. In: Human relations, London: Sage publications, 2010. vol. 63. Issue SI. p. 83-106. ISSN 0018-7267.
- [2] ANGER, S. 2008. Overtime work as a signaling device. In :Scotish journal of political economy, Scotland : Longman Group Ltd., etc., 2008. vol 55. Issue 2. p. 167-189. ISSN: 0036-9292.
- [3] Antonopoulos, R. (2009). The Unpaid Care Work–Paid Work Connection. Working paper no. 86. Geneva: ILO.Retrived from: http://www.ilo.org/wcmsp5/groups/public/---dgreports/--integration/documents/publication/wcms_119142.pdf
- [4] Antonopoulos, R. &Hirway, I. 2010. Unpaid Work and the Economy. Palgrave Macmillan. ISBN 978-230-21730-0.
- [5] MIRANDA, V. 2011. Cooking, Caring and Volunteering: Unpaid Work Around the World. OECD Social, Employment and Migration Working Papers, No. 116, OECD Publishing.
- [6] VEGA 1/1141/11 The Labour Market in the Specific Context of the Unpaid Work, the Measurement of Unpaid Work Value and its Impacts into Households, the Business Sector and the Economy. Obdobieriešenia 2011 2012.
- [7] VEGA č. 1/0935/13 Unpaid work as a potential source of socio-economic development of society and the determinant of individual well-being. Obdobieriešenia 2013-2016.
- [8] KIKA, M. MARTINKOVIČOVÁ, M. 2014. Neplatenápráca v domácnosti skrytépríležitostirozvojapodnikania. In Management of organization in real and virtual environment: opportunities and challenges :zbiórartykułównaukowychzaprezentowanych na międzynarodowejkonferencjinaukowej Management of organization in real and virtual environment: opportunities and challenges V. Opole : PolitechnikaOpolska, 2014. ISBN 978-83-64056-53-6, s. 121-133.
- [9] KAŠČÁKOVÁ, A. KUBIŠOVÁ, Ľ. NEDELOVÁ, G. Estimation of unpaid work value in the Slovak households. In 2nd international M-Sphere conference for multidisciplinarity in science and business: book of proceedings, Dubrovnik, Croatia 10th-12th October 2013. Zagreb: Accent, 2013. ISBN 978-953-7930-03-05, s. 189-195.
- [10] http://census2011.statistics.sk/
- [11] KIABA, M. SZALAI, T. 2015. Špecifiká zadlženosti domácnosti v európskej únii. In Scientia Iuventa 2015: proceedings from international scientific conference of PhD. Students, Banská Bystrica: Univerzita Mateja Bela, Ekonomickáfakulta, 2015. ISBN 978-80-557-0858-4, p. 251-260