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торая состоялась в ИЭОПП СО РАН 10-13 октября 2016 г. Доклады посвящены вопросам  
пространственного анализа и моделирования социально-экономических систем, исполь-  
зования новых методов и данных в этой области.

Конференция была посвящена памяти академика А.Г. Гранберга, внесшего не-  
оценимый вклад в становление региональной науки в России. Публикуемые здесь труды  
ученых из разных регионов и стран, принадлежащих к разным научным школам, пред-  
ставляют современное состояние региональных исследований на постсоциалистическом  
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## Секция V

# РОССИЯ В МИРОВОЙ ЭКОНОМИКЕ. СИБИРЬ, ДАЛЬНИЙ ВОСТОК, АРКТИКА В ЭКОНОМИКЕ РОССИИ И МИРА

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## SIGNIFICANCE OF MEASUREMENT AND ANALYSES OF UNPAID WORK IN SOCIO-ECONOMIC DEVELOPMENT

### *Abstract*

*The paper deals with the issue of unpaid work and its significance in socio-economic development. Its aim is to highlight the importance of unpaid work in the context of socio-economic development and summarize the most important findings of research devoted to unpaid work in Slovakia which is carried out in Matej Bel University for more than 5 years. In the first part, it stresses the significance of measurement and analyses of unpaid work. Second part summarises most important results of the primary research carried out by the research team.*

*Key words: unpaid work, household economics, time use survey, Slovakia*

### **Introduction**

The issues of time use and performing unpaid work are traditionally the scope of sociological research as they are important variables describing life style in various cultures, gender issues, roles of the family members, family life quality etc. Increasingly, also economic science is interested in this issue. It can be dated back to 1965 when Gary Becker published his seminal work Theory of Allocation of Time and laid bases for new branch of economic research called family or household economics. In addition to microeconomic issues, the interest in unpaid work enriches also macroeconomic research. Measuring unpaid work enables more exact estimate of economic performance and shed more light into problem of poverty.

In European countries, the data on households' time use were gathered within the project of Harmonised European Time Use Survey (HETUS). The data were collected twice around 2000 and 2010 (depending on country). The Statistical office of the Slovak republic has not participated on any of these rounds (except for pilot research in 2006). This gap in the knowledge is gradually filled in by research team from the Faculty of Economics, Matej Bel University in Banská Bystrica.

The aim of this paper is to highlight the importance of unpaid work in the context of socio-economic development and summarize the most important findings of research devoted to unpaid work in Slovakia which is carried out on Matej Bel University for more than 5 years.

The article is organized as follows: in the first part significance of measurement and analyses of unpaid work and households is discussed. Second part presents most important results of the primary research carried out by the research team.

## 1. Significance of measurement and analyses of unpaid work

Every person carries out daily number of activities. The activities can be categorized into three groups, those that are considered to be paid work, unpaid work, and no work [1]. The first two categories can also be denoted as productive activities. In [9] productive activities are “all activities falling within the general production boundary, that is, any human controlled activity resulting in an output capable of being exchanged” (p. 11). Productive activities are those that can be associated with the concept of “work”.

The term “work” has numerous interpretations and meanings depending on the context. In a general sense, as is written in [22], work has been defined as “any conscious, purposeful activity which with satisfaction serves the material and spiritual needs of the individual and community” (p. 181).

Determining what activities should be classified as being unpaid work is difficult and disputable. A widely accepted principle for determining the scope of total unpaid work is the “third person/party” or “market replacement” criterion. According to Reid, 1934 (quoted in [5]) “Household production consists of those unpaid activities which are carried on, by and for the members, which activities might be replaced by market goods or paid services, if circumstances such as income, market conditions and personal inclinations permit the service being delegated to someone outside the household group. In this paper we follow the definition of Hirway [6]: “Unpaid work is essentially that work which does not receive direct remuneration” (p. 6).

In comparison with paid work, unpaid work receives less attention in the academic environment, but it does not mean that it is less important.

Traditional macroeconomic approach considered households as consumer units. Households are seen as suppliers of labour in the market and are receiving wage for it. They act also at the demand side in the economy, because they are demanding goods and services from the firms and are paying for them. If we look more closely at households, it is obvious that people are doing lots of activities by their own in home which could be identified as a work. Households also produce output through their unpaid work activities. Therefore in some cases unpaid work could influence the demand for certain goods and services available in the market. The examining of unpaid work in the households also expands the understanding of the importance and functioning of households in the economy. They are not only consumption units, but also the production units because they are producing some output through their unpaid work activities.

Significance of the unpaid work can be seen on the two levels: macroeconomic and microeconomic [7]. From the macroeconomic perspective, examination of the unpaid work provide more accurate description of a national economy by including household production into traditional measures of economic status or progress—particularly measure of gross domestic product (GDP). For example, Miranda [16] examined unpaid work in 29 countries (26 OECD members and 3 emerging economies). Her calculations suggests that between one-third and half of all valuable economic activity in the countries under consideration is not accounted for in the international measures of well-being, such as GDP per capita.

On the other hand, from the microeconomic perspective, it also leads to better understanding of behaviour of economic subjects as it can affect various decisions of economic agents, gender equality as well as the well-being of families [8]. Because of these facts, the frequently overlooked topic of unpaid work is attracting attention in the field of international science during last decades. However, the opposite is true in the region of Slovakia, where the systematic research in this area is in its infancy.

There is a variety of methods and procedures to measure the value of unpaid work in economies around the world. In most cases, the source of information about the amount and structure of unpaid work is statistical Time Use Survey (TUS).

In Slovakia, in 2005 the implementation of the pilot project was prepared using the Time Use Survey (TUS) methodology provided by Eurostat. The pilot project was implemented in 2006 and it included only 200 private households in the survey. The project ended in November 2006 and further surveys were cancelled.

Some research about volume of unpaid work in Slovakia can be found in works of [2]. The other data about unpaid work in Slovakia can be also found in The Second and The Third European Quality of Life Survey done in 2007 (for more details look at [15]; [3]). But it is important to say, that the primary aim of all of these above mentioned research was not the examination of unpaid work. All the previous mentioned facts lead to necessity of the new research which should bring detailed information about the unpaid work. The issue is dealt with primary surveys through questionnaires within the research projects VEGA 1/1141/11 and VEGA 1/0935/13 conducted at the Faculty of Economics, Matej Bel University. Relevant information about the survey is below.

## **2. Unpaid work in the Slovak Republic – overview of the most important research results**

The research team realised until now two representative measurements of extent of unpaid work in 2013 and 2015 (the reference year was always the previous year – i.e. 2012 and 2014). The examination of reference year 2015 is currently in progress. The following table shows weekly time devoted to unpaid work on average by men and women for each year (for details see [11]).

*Table 1*

**Average time devoted to unpaid work by men and women in the Slovak Republic**

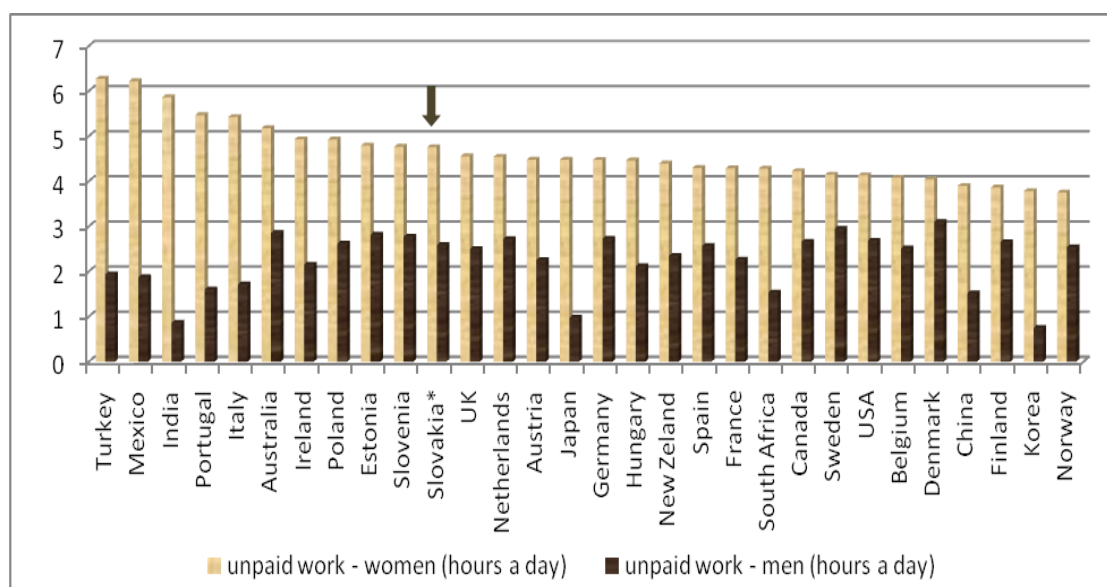
	<b>2012</b>	<b>2014</b>
<b>Women</b>	35,58	30,64
<b>Men</b>	21,41	20,14

*Source:* research VEGA 1/1141/11 and VEGA 1/0935/13

An important step in the research was an international comparison, which mapped the territory and adds more meaning to the results. Huňady et al. [8] analyse the average daily time spent by domestic works separately for men and women. The values 4:45 hours for women and 2:25 for men (data from 2012) show that the Slovak republic is slightly above the average among analysed countries (graph 1). The data for each country showed the significant difference in extent of unpaid work between men and women and difference in allocation of unpaid work in developed and developing countries. In this sense, it is possible to conclude that as to the amount of unpaid work, the Slovak Republic can be converge to the developed countries with more equal division of the domestic chores between men and women.

As to the structure of unpaid work, the table 2 shows percentage share of analysed activities on the total volume of unpaid work in the Slovak Republic. The biggest portion of unpaid work is devoted to common domestic work – food management, childcare and household upkeep. The lower portion of gardening and repairs could be caused by tendency of urbanisation, as to the fact that these activities are associated mainly with rural environment. These activities also require usually special equipment and knowledge. The adult assistance care contributes only by 4,4% to total volume of unpaid work. In this case, it is important to have in mind, that although it seems relatively insignificant on aggregate level, concerning individual households which have a disabled member, it forms most important portion of total time devoted to unpaid work.

From the macroeconomic point of view, the monetary value of unpaid work represents 18–25% of Slovak GDP (depending on calculation method – details in [19]. In comparison to Western countries where the share of unpaid work on GDP ranges from 35% to 50% as is obvious from [4]; [20]; [21], it is significantly low. One possible reason for this state is the fact, that the value of the unpaid work is evaluated by wage of a worker performing similar activity. Therefore, the lower share is not caused by lower extent of unpaid work, however, by lower level of wages in the Slovak Republic, in comparison to Western countries.



Graph 1. International comparison of volume of unpaid work

Source: Huňady, Orviská, Uramová, 2014, p. 41 (based on the data: Ahmad, N. and Koh. S. – data for Slovakia were obtained by a questionnaire survey, which was part of the research project VEGA 1/1141/11)

Table 2

**Contribution of individual activities to the total volume of unpaid work in Slovakia**

	Food management	Household upkeep	Care for textiles	Gardening	Pet care
% of total time	21,7%	17,1%	6,8%	6,0%	6,3%
	Repairs	Shopping and services	Childcare	Adult assistance care	Voluntary works
% of total time	3,6%	14,0%	19,2%	4,4%	1,0%

Source: Považanová a kol., 2015 (adjusted)

The analysis of determinants of unpaid work showed that the gender is the most important determinant of unpaid work. We can conclude that in Slovakia gender segregation persist in the performing the unpaid work in household. So-called traditional women`s tasks (food preparation, household upkeep, child care, making and care of textiles, and shopping and services) are performed mostly by women. Men in Slovakia devote more time to traditional masculine types of work: construction and repairs, repairs to dwelling, repairing equipment, furniture, vehicle maintenance, tending domestic animals and house construction and repair. The age is determinant of unpaid work in some groups of people – full-time employed, unemployed and pensioners. The income was the significant determinant of unpaid work in both groups of employed people – full-time and part-time [10].

The research also points out the differences in volume of unpaid work in developed regions and less-developed regions within Slovakia. It was expected that in the more developed regions the extent of unpaid work will be lower and vice versa. However, the data confirm this assumption only for region of Bratislava, which scores the low numbers in data from any round of the research. However, the highest ranks in the extent of unpaid work are achieved by regions of Žilina and Trnava, which belong to developed regions as well [17]. The reason for this state can be the fact, that regional division of the Slovak republic does not reflect much the historical and traditional development of the regions and it is done mainly on geographical base. The extent of unpaid work was proven to be significantly higher in the rural areas in comparison to households living in towns and cities.

The changing urban life style raises a question, if the Slovak households do substitute or are willing to substitute performing domestic chores by a market service by a third party. The data shown that currently, Slovak households substitute mainly works connected to food preparation, vehicle maintenance and preparing fuels for heating. The outsourcing of these works is mainly influenced by the income of the household, as well as by the fact, that household is often not able to ensure these activities by their own. On the other hand, traditional house works like doing laundry, household upkeep and childcare are only rarely outsourced and there is no prospective to change this state in the future. The households mostly refer positive attitude to doing this works and see them as a traditional in their family [18].

Outsourcing of unpaid work can be seen both as a business opportunity as well as an opportunity to create new workplaces. Martinkovičová et al. [14] come to the conclusion that this way of fighting unemployment has best perspective in small town and villages, where people tend to outsource their domestic obligations in higher extent. Another point is that domestic services (household upkeep, laundry, gardening...) tend to be more demanded than personal services (childcare, care for disabled adult...), which assumes higher level of trust in a service provider.

In order to describe complex picture of significance of unpaid work, it is necessary to deal with its non-economical functions in the society. The unpaid work is a phenomenon, which confronts us from the very beginning of the life. It has irreplaceable position in upbringing and informal education mainly in the process of gaining work related attitudes. In this context, the research showed, that it is not solely economic and financial incentives that stimulate performing the domestic chores but more important are the motives described as relational and social by researchers. Slovak household mostly consider the domestic work as a bearer of the tradition, educational example and meaningful spending of their free time. More than 57% of the respondents expressed positive attitude to unpaid work. The research also observed the participation of family members on total amount of unpaid work. It was shown that more than 23% of domestic works could be attributed to children under 15. Nearly half of the respondents reported the help of partner and parents. Therefore, it can be concluded that unpaid work is important factor of creating and maintaining family relations [12].

The knowledge about unpaid work does not have only descriptive purpose – deeper understanding of this issue can lead to improvement of life quality in everyday life. Kika and Vallušová [14] suggest the usage the knowledge about the nature of unpaid work on corporate level. They points out that its performance (e.g. more than 35 hours per week in case of Slovak women) assumes specific skills like time management, organisation, delegating etc. This idea is often forgotten in the process of recruitment and selection of employees, which leads often to undervaluation of female applicants with young children. Therefore, it can happen that potential quality employees are overlooked. Understanding of how employees spend their time can be used to more addressed design of employee benefits, work-life balance measures etc.

## Conclusion

The measurement and analysis of unpaid work contributes significantly to economic investigation both on macroeconomic and microeconomic level. Although, the first time use surveys are more than 50 years old, in the Slovak Republic the systematic research dates back only to 2011, when first research project on unpaid work was launched. The research showed that as to the extent of unpaid work, the Slovak republic achieves average amount of weekly unpaid work of 20,92 hour per capita, what represent circa one fifth of its GDP in monetary terms. As to the structure of the unpaid work, the largest portion of time is devoted to food management, childcare and household upkeep. The analysis of determinants of unpaid work showed that it is mainly tradition, what influence its amount and structure. The research also points out the differences in volume of unpaid work in developed regions and less- developed regions within Slovakia. Changing family life style raise a question of possibilities to substitute domestic works by market service. The analysis showed that Slovak households are mainly interested in substituting child and adult care, household upkeep and repair and maintenance works. This fact could be seen on the one hand as a business opportunity and on the other hand as an opportunity for job creation. The Slovak households generally have a positive attitude to performing the domestic chores. The respondents found domestic work to be an important in forming work attitudes of children and in strengthening family relations. The research aims to underline the social value of unpaid work and suggest taking it in to account in forming social policies on governmental, regional as well as corporate level.

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**Урамова М., Повазанова М., Валлюсова А.****ЗНАЧЕНИЕ ИЗМЕРЕНИЙ И АНАЛИЗ НЕОПЛАЧЕННОГО ТРУДА  
В СОЦИАЛЬНО-ЭКОНОМИЧЕСКОМ РАЗВИТИИ***Аннотация*

*Статья посвящена проблеме неоплаченного труда и его значению в социально-экономическом развитии. Цель состоит в том, чтобы прояснить значимость неоплаченного труда в контексте социально-экономического развития и обобщить наиболее важные результаты исследований, посвященных неоплаченному труду в Словакии, проводившихся в университете Матиуша Бела в течение более чем 5 лет. В первой части подчеркивается значимость измерений и анализа неоплачиваемого труда. Во второй части обобщаются самые важные результаты предварительных исследований, выполненных научным коллективом.*

*Ключевые слова: неоплаченный труд, экономика домашних хозяйств, обследование использования времени, Словакия*