



SELECTED CHARACTERISTICS OF SLOVAK HOUSEHOLDS AS A SOURCE OF INFORMATION CONCERNING LABOUR SUPPLY

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Abstract

The purpose of the paper is to provide specific information on the labour supply in Slovakia based on the analysis of data collected from Slovak households. In line with the human capital theory, we consider households as essential in both shaping and providing the labour supply. The subject of the research survey were Slovak households and their members comprising a representative sample of the Slovak population with respect to the size, type and regional distribution of households as well as the age of their adult members. The sample consisted of 1,753 households and 4,855 household members as respondents. We looked at their willingness to make various choices in order to get a job and retain it as well as their family or household life strategies to maintain a work-life balance in view of their attitudes to sharing the family responsibilities. We used nonparametric statistical tests to establish the order of preferences for respective issues and the Spearman coefficient to find out the statistically significant relation between the age of the respondents and the choices they are most likely to prefer. The results have shown that age is a decisive factor in the responses to several of the questions, which is important to take into consideration as most of the labour demand in the following years will be created by the loss of older workers due to retirement or other reasons. This means that employers need to be prepared for a generational change and may be motivated to consider age management as one of their strategies to deal with the predicted labour shortage.

**WYBRANE CECHY SŁOWACKICH GOSPODARSTW DOMOWYCH
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Słowa kluczowe: płatna praca, strategie życia rodzinnego, podaży pracy, słowackie gospodarstwa domowe.

Abstrakt

Celem artykułu jest dostarczenie informacji na temat podaży siły roboczej na Słowacji na podstawie analizy danych zebranych w słowackich gospodarstwach domowych. Zgodnie z teorią kapitału ludzkiego gospodarstwa domowe są uważane za niezbędne, zarówno w kształtowaniu, jak i zapewnianiu podaży pracy. Przedmiotem badania ankietowego stały się więc słowackie gospodarstwa domowe i ich członkowie, którzy stanowili reprezentatywną próbę słowackiej populacji pod względem: wielkości, rodzaju, regionalnego podziału gospodarstw domowych oraz wieku ich dorosłych członków. Próba składała się z 1753 gospodarstw domowych i 4855 ich członków. Zbadano gotowość respondentów do dokonywania różnych wyborów w celu znalezienia i utrzymania pracy. Zbadano też strategie ich życia rodzinnego przyjęte w celu utrzymania równowagi między życiem zawodowym a prywatnym, a w szczególności podejście do podziału obowiązków rodzinnych. Do uporządkowania preferencji respondentów dotyczących rozpatrywanych kwestii w badaniach wykorzystano nieparametryczne testy statystyczne oraz współczynnik korelacji Spearmana, aby sprawdzić, czy zależność między wiekiem respondentów a wyborami, które są najbardziej prawdopodobne, jest istotna statystycznie. Otrzymane wyniki wskazują, że wiek jest decydującym czynnikiem w przypadku odpowiedzi udzielanych na kilka pytań. Kwestię tę należy wziąć pod uwagę, ponieważ większość popytu na pracę w kolejnych latach będzie spowodowana utratą starszych pracowników z powodu ich przejścia na emeryturę. Pracodawcy powinni być przygotowani na tę zmianę pokoleniową i powinni rozważyć przyjęcie strategii zarządzania wiekiem jako jednym z rozwiązań przewidywanego niedoboru siły roboczej.

Introduction

Following the recent trends in employment and labour markets, we have seen that rapid technology changes and economic growth result in challenges for companies and institutions related to adequate labour supply. Currently, the labour demand in Slovakia is much higher than the labour supply in some sectors (Štefanik, 2018) and the predictions are that the number of sectors in which it will be difficult to meet the labour demand will increase in the future (Radvansky & Miklosovic, 2016). In this paper, we focus on Slovak households and present a descriptive analysis of some of their social characteristics that may affect their contribution to the labour supply. This article is based on the theory of human capital, which is defined as “the set of attributes that individuals possess, including knowledge, skills, work experience, health and intangible

characteristics such as motivation. Such resources may be acquired or enhanced by education, training or other informal means including the experience of undertaking daily activities at home or at the workplace” (Shomos, 2010 in Loh-Kendig, 2013, p. 113). We take into consideration demographic and personal characteristics, and explore their relation to household strategies and attitudes to work. These phenomena have also been dealt with by Hronec, Kollar and Vallusova (Hronec *et al.*, 2015).

In addition to the theory of human capital, economic sociology puts emphasis on the impact of society and the group on individual actions and other noneconomic factors of human behaviour related to work (Granovetter, 2017). It recommends paying attention to the wider societal situation of the labour supply actors, their motivations, adopted ways of behaviour, and social and family structures. The labour market is about people, their way of life, personality and professional career that are greatly influenced by the family and the household. Coltrane (2000) claims that household labour is a permanent feature of family functioning and it affects its members. Other authors confirm that the home environment provides important opportunities for children and adolescents to learn skills that will be needed for independent living in adulthood (Dunn & Gardner, 2013; Riggio *et al.*, 2010).

We assume that job related choices depend to a considerable extent on the household situation and are part of household strategies. Therefore we look at the importance of the factors (reasons) for getting and retaining a job and the preferred family models. Taking into consideration the age-related differences, we also examine the aforementioned variables in relation to the age category of household members and workers. It is predicted that in Slovakia, the largest part of the new labour demand will be created by the loss of workers due to retirement and other age-related reasons. The employers should try to keep the older workforce at work as long as possible, due to demographic trends, because there will not be enough young people to replace them. That is why it might be interesting to know the differences in household strategies, attitudes to work and the life-work balance depending on the age of the respondents.

All of this could provide a more in-depth understanding of the households' potential both in terms of labor supply for the employers as well as the household needs and limitations, which should be reflected in public policies.

The labour market and its characteristics

The labour market is a specific type of a market that tries to match the demand for labour from the employers to the labour supply represented by job seekers. It is closely connected to the market economy, where the market of goods and services exists alongside the market of production factors, including labour.

The price of the labour in this market is represented by a wage or salary. The labour market is a derived market, which means that it reacts sensitively to changes in the market of products and services, as it is closely related to them. The labour force is represented by humans and that is why humans deserve increased attention if we want to understand the market and ensure its vitality (Uramova, 2004). Activities and decision-making in the labour market concern people, their way of life, personalities or professional career and indirectly also their families or households. We see this market having not only economic but also non-economic (social, cultural, ethical) parameters and determinants.

Labour demand is subject to the current structure of employment and the future needs of companies and organizations. The overall demand can be divided into two types. The first one is made of new jobs that are being created in the economy (expansion demand). The second one is the replacement demand which results from the need to replace the workforce leaving the labour market – mainly due to retirement, disability or change of profession. This replacement demand for labour closely corresponds to the age structure of employees in each sector (Radvansky & Miklosovic, 2016). With ageing as the prominent feature of the Slovak demographic trend, the replacement demand will comprise the major part of the future labour demand. Different economic sectors feature different age and educational structures of their labour force, so the labour demand in different sectors will vary, along with its educational levels.

Governments use various measures to influence the labour market both directly and indirectly. These include monetary, fiscal, tax, and social policies that form economic, legislative, institutional and business environments. In addition to the macroeconomic factors and economic and political arrangements, labour demand is also determined by the availability and price of other production factors and possibilities of their substitution. Technological progress and automation have always shaped the labour demand and its influence is becoming ever more crucial nowadays.

Labour supply is another variable of the labour market and it is closely linked with households, their members, their characteristics, and their willingness and ability to work. It states how many and what type of workers are available for the labour market. The supply is characterised by the number and structure of people/workers described by gender, age, qualifications and social status (Berg, 2015). In a wider perspective, it also includes the overall population, the share of people able to work, working hours, labour productivity, salary levels etc. It is always down to the supply of a certain number and quality of workers and the number of working hours.

Labour supply is thus a matter of behaviour and individual decisions that households make based on the opportunity costs of joining the workforce. Household members are willing to work when they realize that the result of their work is larger to or equal to the 'sacrifice' connected with its performance. It means that the main factor affecting the decision of the household (its members)

regarding the labour supply is the real wage. The labour supply is also interpreted as being a decision and choice of a consumer (household) when considering the utility of free time against the utility resulting from the ownership of products and services that one can buy for the wage in case one sacrifices their free time (Jirova, 1999). It means that the labour supply may be affected by household strategies regarding not only the paid job but also unpaid work connected with running the household and ways of spending their free time. We assume that when households count on unpaid work rather than market substitutes, it lowers their need and motivation for sacrifices in order to get a well-paid job. The objective of the household members on the supply side should be to get a job corresponding to their qualifications, abilities and aspirations for the highest possible wage. To summarise, the determinants of the labour supply in the market include factors such as: real wages, the demographic structure of the population of productive age, the professions' structure, and mobility; as well as the quality of the labour force and the size of specific groups like young people preparing for their job, women or the disabled.

Research methodology and results

The research survey concerning unpaid work and the use of free time in Slovak households was implemented by the research team VEGA1/06/2016 at the Faculty of Economics in Banská Bystrica. It included 1 753 Slovak households and 4 855 respondents. The sample was representative for age, household size and geographic regional distribution. The data were collected using the CAPI (computer assisted personal interview) method and processed using the IBM SPSS 19 statistical program. We first used frequency tables for the basic description of the observed variable values distribution. Then inductive methods were applied to generalise the findings in the selection sample to a basic sample – the overall population. We tested our assumptions with non-parametric Friedman and Wilcoxon tests and the Spearman coefficient. The results are presented in Tables 1–4. The mean rankings were established using the Friedman test and the overall ranking is the result of the Wilcoxon test with a significance level of 0.1. The significance level of the Spearman correlations was $p < 0.05$.

Although the survey was primarily aimed at unpaid work and free time, it also contained questions concerning paid work and employees' motivations to obtain and retain it. Labour market theory works with households and households are made of families with their strategies of time use and division of activities (among them labour supply as paid work) and of course with their characteristics, qualifications, needs, opinions, attitudes and expectations. Knowledge about these characteristics makes information about the labour supply more complex (Kika & Martinkovičová, 2015).

Table 1

Reasons for choosing paid work in the order of importance

Reasons for choosing the paid work	Average ranking	Overall ranking	Age sensitive/correlation
Financial reward	6.17	1.	men negative
Interesting work	4.86	2.	–
Self-fulfilment	4.62	3.	–
Job that is not very time consuming	4.53	3.	–
Opportunity to apply and use my education	4.30	4.	–
Making social contacts	4.20	4.	women negative
Career growth	3.87	5.	women negative
Social status	3.46	6.	–

Source: own results of the data analysis.

The basic characteristics of household members comprise the information on main motivations/reasons for which they do the paid work and what they are willing to do to obtain and retain it. The respondents were asked to rank each factor on the scale from 1 – definitely agree to 4 – definitely disagree. The overall ranking is the result of the Friedman and Wilcoxon tests and it shows the relative importance of these factors in the whole population. The dependence of the factors on the age of the respondents was tested with a Spearman coefficient with a significance level <0.05 . The negative correlation means that the level of agreement rises with age and positive correlation means that the level of agreement decreases with age. The findings are presented in the respective Tables.

The main reason for doing paid work is the financial reward, which is not surprising. It is important that the work is interesting and provides self-fulfilment while not being very time consuming. The possibility to apply one's education and making social contacts come next. The social attributes and ambitions of the job – contacts, career growth and social status that come with it rank the lowest, although for women the importance of social contacts and career growth rises with age. It seems that current workers are more self-centered and ready to sacrifice the social acknowledgment of their work as long as they are happy in their jobs.

The ranking of reasons is the same for both genders as for the financial reward, social status and the career growth. However, differences exist in self-fulfilment, which is more important for men, and a less time consuming job and social contacts being more valued by women. As women face a much higher load of unpaid work at home (Kika & Martinkovičová, 2015), their preference of a less time consuming job is to be expected.

We further asked about the steps that the respondents are willing to take to find a new job or retain a current one.

Table 2

Steps that the respondents are willing to take to acquire or retain paid work

To acquire / retain paid work	Average ranking	Overall ranking	Age sensitive/ correlation
Go through requalification/lifelong learning course	4.43	1.	men and women neg.
Commute to work outside my hometown	4.31	2.	men neg.
Work in a position outside my specialisation and not matching my qualifications	3.98	3.	men and women neg.
Reduce the time that I spend with my family	3.13	4.	–
Move with the family	2.85	5.	women neg.
Work for a minimum wage	2.30	6.	–

Source: own results of the data analysis.

Based on the available data, we see that the household members are most prepared to undertake further education, commute to work outside one's hometown and also work outside one's specialization in order to get or keep the job. On the contrary, Slovaks are less willing to reduce their family time or move the whole family because of work. Working for the minimum wage is the least motivating both for men and women, which confirms the prime reason for doing paid work. As for gender differences, women are more ready to take on further education and men are more willing to commute for work outside their hometown. There are also statistically significant differences depending on age – the negative correlations shown in the last column of Table 2 mean that some choices are more readily made by older generations of men and/or women. In terms of human capital it is interesting to see that the older people get, the more willing they are to embark on lifelong education or work outside one's specialization. This seems positive as it suggests that there is adaptability in the experienced workforce to the changing labour market. The higher willingness to move with age is surprising, but it was statistically significant only for women.

The work connected with running the household, like food preparation, cleaning, shopping, childcare etc., is known as unpaid work. We understand unpaid work as “activities done that are considered to be work (i.e. excluding sleep, personal care, hobbies etc.) and are not remunerated by a wage” (Povazanova, 2016, p. 26). As these activities require time, they affect the decision-making and time use of the households also in relation to their paid work. That is why we explored how the Slovak households manage these activities. The findings are presented in Table 3.

We see that Slovak households prefer to rely on themselves and close family, with their unpaid work most often carried out on their own, without using paid services, sharing it equally between partners, although the research shows that the actual time spent on unpaid work is much higher for women (Kika

Table 3

Ways of securing unpaid work

Ways of securing unpaid work	Average ranking	Overall ranking	Age sensitive correlations
Handling most of the jobs within the household on our own	5.36	1.	–
Equal division of household chores between spouses/partners	5.30	1.	women neg.
Division of jobs within the household into those typically done by men and women	4.40	2.	–
Using the help of parents and close family members	3.62	3.	men and women neg.
Household chores should be handled solely by a wife/woman	3.38	4.	women positive
Use reciprocal (mutual) help of friends and neighbours	3.02	5.	–
Use of paid goods and services	2.91	5.	women negative

Source: own results of the data analysis.

& Martinkovičová, 2015). There were a few differences in the responses between men and women. The women preferred the equal division more than men, especially the older ones. However, they both agreed on a division of jobs to those typically done by men and women and in the least favourite options – using the help of neighbours or paid services. As for the help of parents and other family members, this option was preferred more by older men and women, which seems to reflect the traditional arrangements in Slovak families. One surprising result is that younger women were more likely to agree that it is the woman who should take sole care of the household, and younger women were also less likely to use paid services as substitutes to paid work.

Another type of information about the Slovak households concerns the preferred ways of family functioning. It is interesting, because it reveals the background for decision-making regarding the division of work within the family and thus is an indirect indicator of participation in the labour supply. These preferences are significantly age-related.

The results show that Slovak households prefer the model where both partners reconcile the work and family together and have jobs. There are no substantial differences in the responses between men and women. They both agree on the need to deal with work and family obligations together as well as on the use of help and support of their parents and close family. Their opinions differ slightly at using institutional care that is preferred more by men. Women, on the other hand, prefer more of a so called dual career model and the use of paid services. These results correspond to a great extent to the set of answers in Table 4.

Table 4

Family strategies

The ways families function	Average ranking	Overall ranking	Age sensitive correlations
Try to reconcile work and family together	6.35	1.	women positive
Reconcile work and family demands by using institutional care	5.79	2.	women positive
Dual-career families	5.74	2.	men and women negative
Reconcile the work and family demands with the help of parents and other family members	4.58	3.	men and women negative
The man should secure the family financially and the woman should take care of the family	4.10	4.	women positive
First build the career and have children later	3.64	5.	men negative
The man should pursue a career and the woman should take care of the family	2.97	6.	woman positive
Intensive use of paid market services in this domain	2.83	7.	Men negative

Source: own results of the data analysis.

However, there is a statistically significant dependence on age in each of these questions. Younger women are more likely to prefer reconciling work and family demands together with men and using institutional care. It is surprising that the younger the women, the more they agree that a man should secure the family financially while pursuing his career and the woman should take care of the family. This is considered a more conservative model of family strategies. The generally unpopular option of using paid service as substitutes for paid work is more favoured by older men rather than younger ones.

The selected characteristics of the Slovak households that we consider as social determinants of the labour supply also include the ways in which the households (and their members) respond to the wider social and economic environment and deal with it. In our research we tried to establish what barriers are present that prevent family members from using their time based on their preferences. They could have chosen from 17 barriers, of which approximately one-third were statistically proven as being relevant. That list is presented in Table 5.

The data show that although the employment on one hand secures many needs, on the other hand it is the main barrier to the time division based on people's preferences. It means that having better options to divide the time and activities according to one's liking is an important factor that the respondents may take into consideration when choosing a job. This applies to all age groups. The second most important barrier to the preferred use of time is a shortage of financial means. This is more the case for younger people, as is the case of missing necessary equipment and means to do sports and other activities.

Table 5

Barriers to preferred time use

Barrier	% respondents	Age sensitivity correlations
My job	33.57	–
Lack of financial means	29.39	-0.132 ($p = 0.000$)
Stereotype	25.18	-0.059 ($p = 0.006$)
My age	20.64	0.284 ($p = 0.000$)
My health	15.92	0.370 ($p = 0.000$)
Missing equipment	11.58	-0.129 ($p = 0.000$)

Source: own results of the data analysis.

The older people get, the more they report their age and health as one of the barriers of their preferred time use, which is understandable. Nevertheless, it points out the unfavourable state of health and life expectancy in Slovakia, which is one of the lowest among the OECD countries¹. The third most serious barrier is falling into a stereotype, which surprisingly concerns younger people more than the older ones. Testing the differences of responses between the genders did not show any differences in stereotype, age or health. Men and women both ranked them as the third, fourth and fifth barrier respectively. While men consider employment as the most important barrier, for women it is the shortage of finances.

Conclusion

The labour market in Slovakia is already under strain for a larger workforce in some sectors and this trend will continue in the future. Most of the demand will be due to the ageing productive population. Another source of imbalance between the labour demand and supply is caused by regional disparities. Slovakia is nowadays among the countries with a relatively very low rate of population mobility. The findings on migration (Michálek *et al.*, 2016) show that those that would need to move out for the sake of finding a job are not able to do it, due to their poverty and the lack of financial means. As for the mobility of the workforce within the country that is formally promoted as a solution to imbalances in offer and demand of the workforce, our findings show that moving the family for the sake of a job is one of the least preferred choices of the Slovak household members. Other insights into the preferences and strategies

¹ Life expectancy at birth in the Slovak Republic is 76.5 years, which is the third lowest in the OECD. Also notable is the very low healthy life expectancy for the 65 year olds, the lowest among measured countries in the EU (<https://www.oecd.org/els/health-systems/Health-Policy-in-Slovak-Republic-March-2017.pdf>).

of the Slovak households show that people are rather self-centred when it comes to paid work. In addition to a good salary, they want to enjoy it and find satisfaction in it, whereas climbing the career ladder and social status or social contacts are less important. The older people get, the more willing they are to embark on further education and work outside their field of expertise, though, which should be taken into consideration when designing age management strategies to retain older people at work longer. On the other hand, older people see their age and health as major problems for their preferred use of time so there is a need to foster policies to support health and active ageing. Another dominant feature of the Slovak households is reliance on their unpaid work and family help when it comes to household chores and institutions for childcare, which could be a limiting factor for their commitment to paid work.

We believe that better knowledge of the reasons why household members work and what they are willing to do in order to be successful in the labour market should help design the respective policies and employment strategies.

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