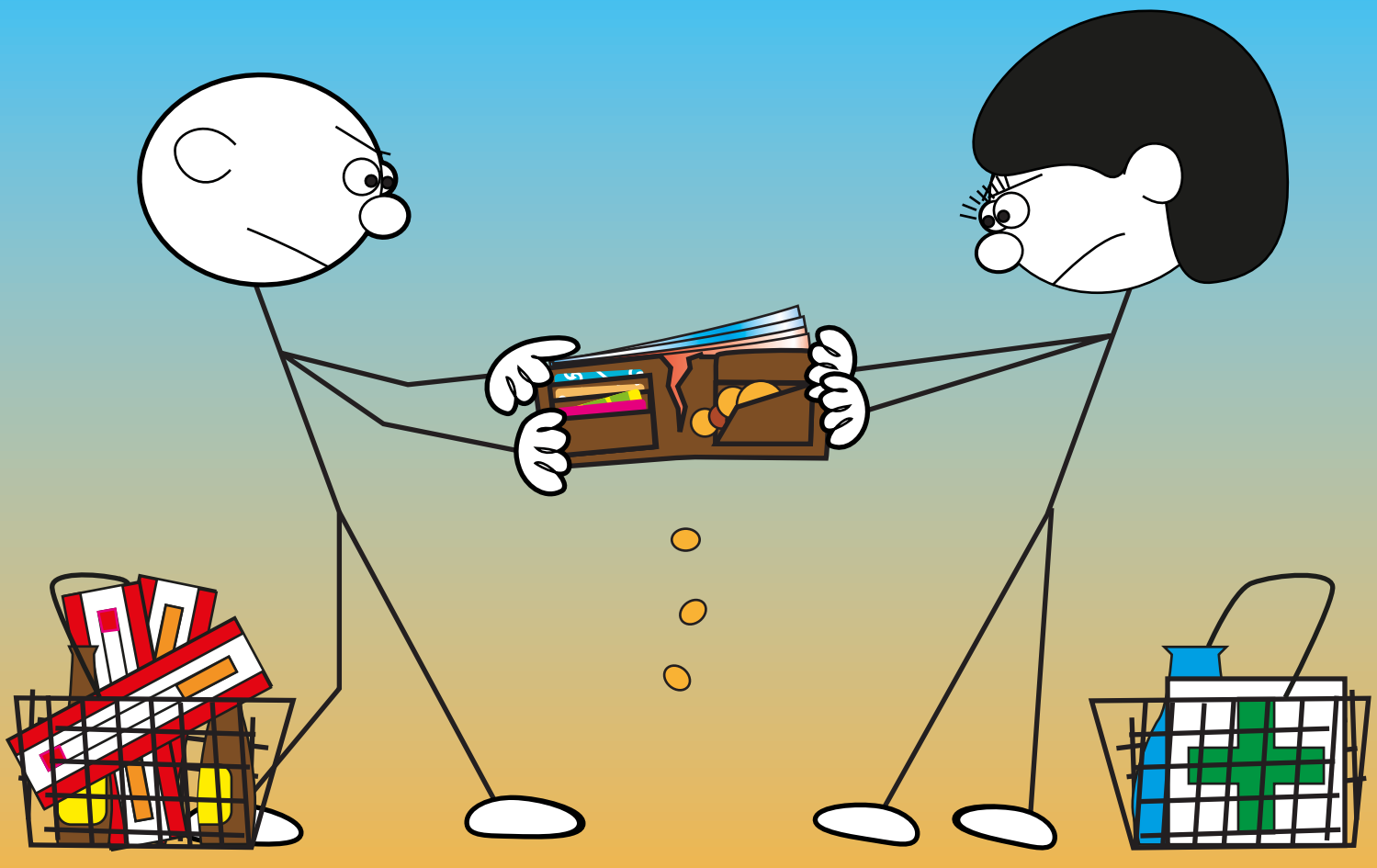
October 2017

gap | analysis

Household budget management men and women



This research was enabled by the Program of the Engagement for Equality (E4E), funded by the U.S. Agency for International Development – USAID, and implemented by the Advocacy Training and Resource Center – ATRC. The content is the responsibility of the GAP Institute and does not necessarily reflect views of the United States Agency for International Development – USAID, Government of the United States, or Advocacy Training and Resource Center – ATRC.

Executive Summary

Different studies indicate that female-headed households, differently from male-headed households, spend more from their budget in developing human capacities, as in education and health. Expenditures of the male-headed household are higher for consumption than those of female-headed households, where differences in spending for tobacco, food and drinks dominate.

In Kosovo, currently there are over 26,000 families receiving social assistance, which comprises approximately 10% of all families in Kosovo. According to the current social assistance scheme, around 32% of the social assistance beneficiaries are women, whereas 68% are men. Concerning the distribution of the beneficiaries according to the categories, there is a noticeable more imbalance categorization for category II of the Social Assistance Scheme (SAS), where only 8% of the assistance beneficiaries are women. The purpose behind this analysis is quantitative testing of the differences between female and male headed households in household budget spending, because the potential findings may serve in proposing optimal budgeting for distribution of social assistance according to the gender of the head of the household.

In order to achieve such results, we developed three models to measure the probability of the head of households in Kosovo to spend on health, tobacco and healthy food. Concretely, we based our work on the Logit model and we

used as data resource the Household Budget Survey (HBS) 2016, of the Kosovo Agency of Statistics (KAS). Findings of our models indicate that compared to female-headed households, male-head households in Kosovo are more likely to spend less in health (6%) and healthy food (4,4%), and more on tobacco (7%).

In addition to analyze the expenditures of the head of households on health and tobacco in terms of quantitative, this analysis offers some recommendations regarding more optimal policies in this area. In order to have a better management of the household budget and women empowering, the Government should increase the amount of social assistance for families who are beneficiaries of social assistance in which women are head of households. Considering the life in extreme poverty conditions of these families, such an incentive, regardless of how marginal it is, would increase the number of women as social assistance beneficiaries.

Introduction

In recent years, the researchers have expressed greater interest regarding the manner of spending the budget by households, in particular regarding the link between being a female-headed household in charge of budget management and the family welfare.[1] The manner of spending the budget by women and by men is greatly influenced by the cultural norms of a country and the position of women in the society. Often, these factors determine the unequal access of these groups to resources. In most countries, whether developed or developing ones, there is an income gap between men and women, with the latter being paid less.[2]

Different researches unveil discrimination of women in relation to men in terms of working conditions, as well as less availability of production inputs for women than men.[3] Consequently, comparing the manner of budget spending by these two categories is not easy, since the highest factors may determine the household budget orientation differences. Yet, as emphasized by some authors, these disfavoring measures against women may be

[1] See study by DeGraff, D. S., & Bilsborrow, R. E. (1993). Female-headed households and family welfare in rural Ecuador. *Journal of Population Economics*, 6(4), 317-336. See also the study of Khan, A. Study. H., & Khalid, U. (2012). Consumption patterns of male and female headed households in Pakistan: evidence from PSLM 2007-08. *The Pakistan Development Review*, 465-478.

[2] Arulampalam, W., Booth, A. L., & Bryan, M. L. (2007). Is there a glass ceiling over Europe? Exploring the gender pay gap across the wage distribution. *ILR Review*, 60(2), 163-186, uncovers the income gap in Europe, and also Blau, F. D., & Kahn, L. M. (2000). Gender differences in pay (No. w7732). *National bureau of economic research*.

[3] Banerjee, A. V., & Duflo, E. (2011). Poor economics: A radical rethinking of the way to fight global poverty. *Public Affairs*.

partially offset through better budget management by female-headed households.[4]

While research findings regarding budget family spending by single men and women vary and are focused on many aspects[5], those regarding female-headed households and men-headed households are more focused on family welfare.

Findings of Donkoh and Amikuzuno (2011) indicate that female-headed households, differently from male-headed households, spend more from their budget on human capacities development, such as education and health.[6] Furthermore, similar studies, emphasize that spending of female-headed households in education[7] and health[8] are more oriented towards children. However, being a divorced female-head household has a more prominent negative impact in children`s school admission than being married or unmarried female-head household. However, expenditures of male-headed households are higher for consumption than those of female-headed households, where spending on tobacco, food and drinks is present more.[9]

---

[4] DeGraff, D. S., & Bilsborrow, R. E. (1993). Female-headed households and family welfare in rural Ecuador. *Journal of Population Economics*, 6(4), 317-336, si dhe e Khan, A. H., & Khalid, U. (2012). Consumption patterns of male and female headed households in Pakistan: evidence from PSLM 2007-08. *The Pakistan Development Review*, 465-478.

[5] For example, O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of consumer research*, 16(2), 147-157, at women tendencies for unplanned purchases are noted. However, an early study of Kollat, D. T., & Willett, R. P. (1967). Customer impulse purchasing behavior. *Journal of marketing research*, 21-31, proves that there is no difference between sexes in relation to unplanned purchases.

[6] Donkoh, S. A., & Amikuzuno, J. A. (2011). The determinants of household education expenditure in Ghana. *Educational Research and Reviews*, 6(8), 570.

[7] DeGraff, D. S., & Bilsborrow, R. E. (1993). Female-headed households and family welfare in rural Ecuador. *Journal of Population Economics*, 6(4), 317-336.

[8] Duflo, E. (2003). Grandmothers and granddaughters: old -age pensions and intrahousehold allocation in South Africa. *The World Bank Economic Review*, 17(1), 1-25.

[9] Khan, A. H., & Khalid, U. (2012). Consumption patterns of male and female headed households in Pakistan: evidence from PSLM 2007-08. *The Pakistan Development Review*, 465-478. Si dhe Atkinson, A. B., Gomulka, J., & Stern, N. H. (1990). Spending on alcohol: evidence from the Family Expenditure Survey 1970-1983. *The Economic Journal*, 100(402), 808-827. See also Palipudi, K. M., Gupta, P. C., Sinha, D. N., Andes, L. J., Asma, S., McAfee, T., & GATS Collaborative Group. (2012). Social determinants of health and tobacco use in thirteen low and middle income countries: evidence from Global Adult Tobacco Survey. *PloS one*, 7(3), e33466.

Therefore, based on the gender-based expenditure structure, Oppong (1983), Bruce (1989) and Thomas (1990) conclude that resources managed by women, such as income, carry a higher probability to promote family wellbeing than when they are managed by men. So, by controlling the level of resources, we find that female-headed households in comparison to men-headed households, increase the wellbeing of the family, in particular the wellbeing of children.[10] On regional level also, an analysis of budget management by female and male-headed households in Albania, finds that female-headed households manage the family budget better than men.[11].

Therefore, the purpose of this analysis is quantitative testing of differences between female and male-headed households in household budget spending in Kosovo. The analysis was conducted by incorporating all household heads that were part of the Survey (2,313) due to the small sub-sample of female and male-headed households who are beneficiaries of social assistance. However, in our analysis we have also checked the household budget incomes, and this excludes the impact of different approach to resources of household heads in the gender variable results.

Consequently, potential findings that are in line with the theory may serve in the future for proposing the most optimal budget in this regard. Concretely, the respective may help in orienting budget assistance to the household heads that use it more rationally.

Gender differences in receiving social assistance

Social Assistance Scheme (SNS) in Kosovo

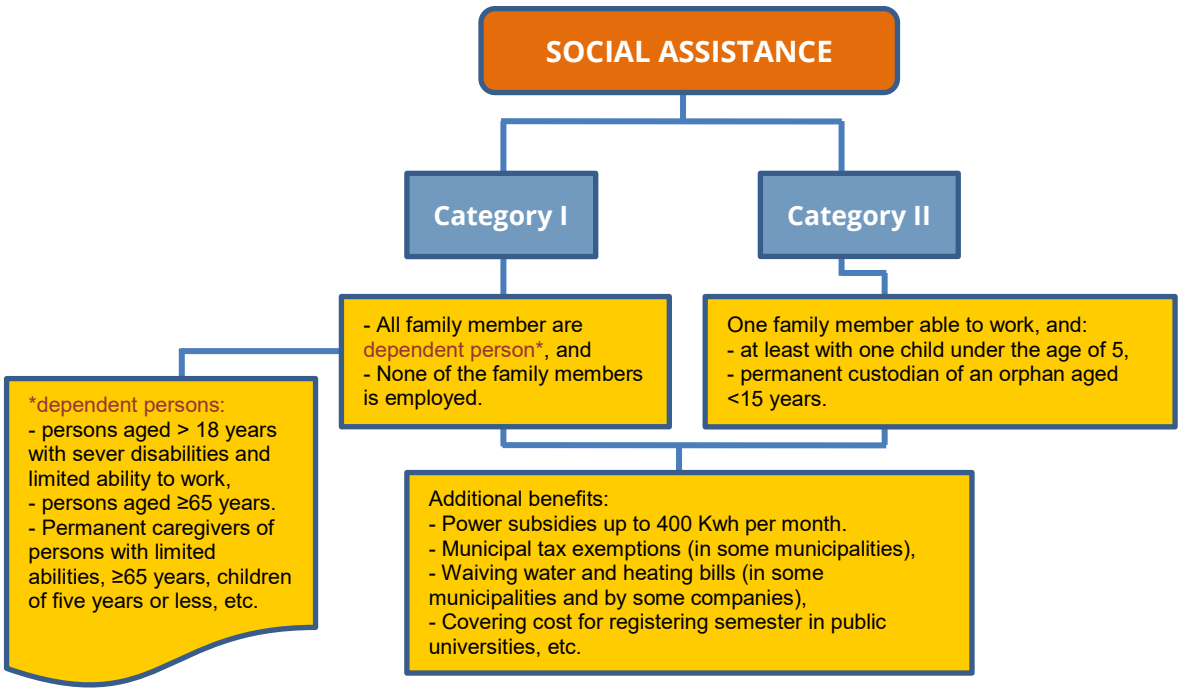
In Kosovo, care for families and individuals in need, is regulated upon the Law on the Social Assistance Scheme[12]. This Law regulates the way of supporting people at risk from poverty, the latter due to their poor access to the labor market, young age, taking care of any family member, or inability to work. There are three types of payments that make up the Social Assistance Scheme (SAS), and through which is aimed achievement of the above objectives: social assistance payments, allowances payment for children 0-18 years old, and special assistance payments.[13]

---

[10] Quoted in DeGraff, D. S., & Bilsborrow, R. E. (1993). Female-headed households and family welfare in rural Ecuador. *Journal of Population Economics*, 6(4), 317-336.
[11] Ikub. (2012). Women are more efficient head of households than men. Source: http://bit.ly/2ywLt7t, accessed on 27 July 2017.
[12] Official Gazette of the Republic of Kosovo, Law No. 2003/15 on the Social Assistance Scheme in Kosovo.
[13] Official Gazette of the Republic of Kosovo, Administrative Instruction No. 15/2012 on Calculation of the monthly amount of the Social Assistance, Article 5. Source: http://bit.ly/2vVKxbW.

Social Assistance Payment according to the family size presents the largest SAS category. In order to obtain the named assistance, families[14] alongside technical criteria shall[15], meet some non-financial and financial criteria. Non-financial criteria stipulate that in addition to being permanent residents of Kosovo[16], families have to be part of one of the categories defined by the respective Law, category I or II. In the category I, as described in the following Chart 1, all family members shall be dependents and unemployed. Whereas, in the category II are incorporated families that have one person capable of working or are dependent persons, and part of their family is any child below five years old, or any permanent guardian of an orphan below 15 years old.[17]

FIGURE 1: GRAPHICAL PRESENTATION OF NON-FINANCIAL CRITERIA FOR SOCIAL ASSISTANCE



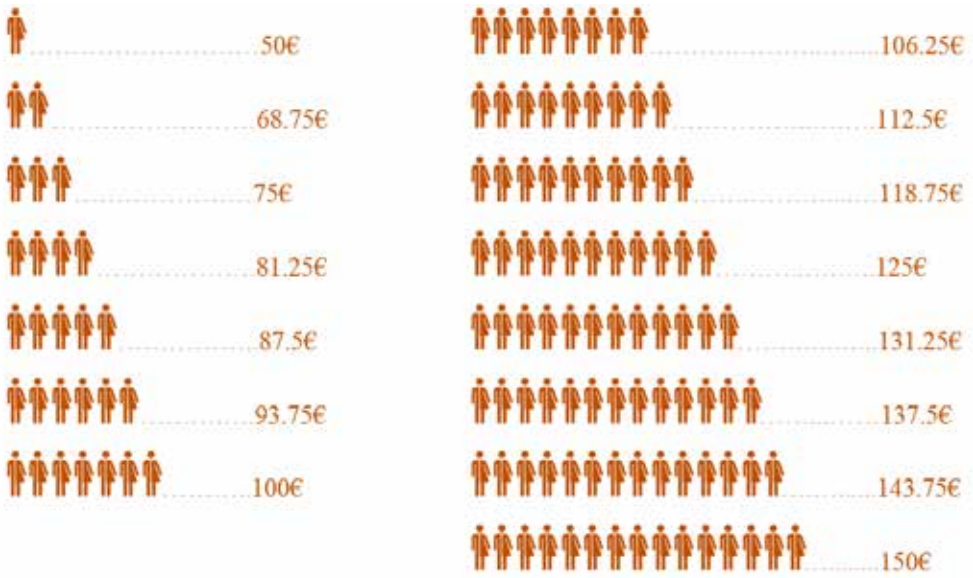
Source: GAP Institute, based on data of Ministry of Labor and Social Welfare

Alongside non-financial criteria, exist and financial ones that need to be met by families submitting requests for social assistance. Named criteria define that families shall have available finances below the allowed threshold and

[14] An individual is considered a one-member family.
[15] That include submitting of documents, such as ID Cards of members below 16 years old, different school and municipal certificates, etc. Official Gazette of the Republic of Kosovo, Administrative Instruction No. 04/2013 for submission of claims procedures for social assistance. Source: http://bit.ly/2vNJDOH.
[16] Exception is for persons with a residence permit, asylum seekers, refugees and persons enjoying temporary and supplementary protection. Official Gazette of the Republic of Kosovo, Law no. 2003/15 on the Social Assistance Scheme in Kosovo, Article 4. Source: http://bit.ly/2vpJSwX.
[17] Ibid. Article 4

the total income should be the same or below the amount stipulated by the respective Law. Financial and income assessment takes place through verification tests[18], and when total scores are 140 or less[19] to the family is allocated social assistance. As far as income part is concerned, the respective shall be equivalent to the standard monthly scales, presented in scores, as set by Law, and which vary depending on the family size. These scores determine the monthly payment that the family shall obtain, when the same meets all criteria. Ministry of Labor and Social Welfare and Ministry of Finances are obliged to issue on annual basis a Decision regarding the interpretation of each score in monetary value.[20] In the Chart 2 are specified amounts of social assistance according to the number of family members for year 2015.[21] As it can be noted, payment of social assistance per member is in inverse relation with the number of family members. Up to three members, payment per member is around 25 Euros, whereas per every additional member are allocated six Euros more. Thus, families with more members receive less social assistance per member.

FIGURE 2: MONTHLY PAYMENTS OF SOCIAL ASSISTANCE



*For cases when the family has over 15 members, social assistance is increased for five euros per each additional member.

Source: GAP Institute, based on data of Kosovo Agency of Statistics

[18] Tests are provided in details in the Administrative Instruction No. 15/2012 Calculation of the monthly amount of the Social Assistance. Source: http://bit.ly/2vVKxbW.

[19] In special cases, Head of SAS together with his/her team may decide to grant social assistance and to families that have been assessed with maximum150 scores. Source: http://bit.ly/2wKyxHh.

[20] Law No. 2003/15 on the Social Assistance Scheme in Kosovo. Source: http://bit.ly/2vp1hYr.

[21] Statistics of SocialWelfare (2016). Kosovo Agency of Statistics . Source: http://bit.ly/2gmGdt5

In addition to social assistance payments, to qualified families are granted and five additional Euros, in case they have children of the age group from 0 up to 18 years old. This payment is provided for enabling to families to spend on education and health.[22] As it can also be noted in the Chart 1, alongside social assistance payments, families that are part of this scheme also benefit other facilitations. If these families spend up to 400 KwH per month, they do not pay power bills, and they are released from municipal taxes, primary and secondary health services, and many other facilitations.[23]

Yet, social assistance beneficiaries are not released from property taxes payment. According to the Law in force[24] and Municipal Regulations, such as the one of the Municipality of Prishtina[25], only a group of organizations and institutions are released from those taxes, and the respective are mainly public and international organizations. Thus, taking into account differences in the evaluation of properties and applied taxes scales by Municipalities[26], household budget, part of the social scheme assistance, should have been inequivalent. Nevertheless, respective Law and Regulations envisage to not have confiscation of social assistance to persons who do not pay full amount of property taxes.

Whereas, the other part of the scheme, special assistance category is intended for extraordinary cases, such as floods, earthquakes, etc. This assistance is granted to all persons regardless if they are or not beneficiaries of any social assistance payments.

Gender distribution of social assistance beneficiaries

Currently, in Kosovo are over 26 thousand families with about 108 thousand members receiving social assistance as part of SAS. Based on the monthly budget allocated for 2017, families part of SAS (around 2.4 million Euros), a four-members family receives around 92 Euros a month. Among municipalities with the largest number of families part of SAS, are: Southern Mitrovica, Prishtina, Vushtrri, Lipjan and Drenas (Chart 3).

---

[22] Administrative Instruction No. 15/2012 on Calculation of the monthly amount of the Social Assistance, Article 12. Source: http://bit.ly/2vVKxbW.
[23] Ibid. Article 5
[24] Official Gazette of the Republic of Kosovo, Law No. 03/l-204 on Taxes on Immovable Property.
[25] Municipality of Prishtina, Regulation on Taxes on Immovable Property. Source: http://bit.ly/2uUbvfO.
[26] For example, in the municipality of Peja, owner of a 70m^2 apartment in the first zone, pays property tax from 47.25 Euros, whereas owner of an apartment with same specifications in Prishtina pays 46.20 Euros.

CHART 3: SAS ACCORDING TO MUNICIPALITIES

Source: GAP Institure, based on the data of MSWL.

As far as distribution of social assistance according to the classification in categories is concerned, there is noted that the biggest social assistance beneficiaries are families in difficult economic conditions (category I). Specifically, around 65% of the families that have received social assistance in May of this year, were part of category I, in which are incorporated families, members of which are unemployed and dependent (see definition in the Chart 1).

Whereas, in the gender aspect, there is noted a more equal distribution in the category I, where 45% of the beneficiaries were women and 55% men. A bigger difference in this aspect is noted in category II, where only 8% of beneficiaries were women. Taking into account the fact that a part of the families that are categorized in the Category II, receive social assistance since they take care of a child below five years old, in which cases guardians are usually mothers, number of women being social assistance beneficiaries turns out to be very low.

TABLE 1: DISTRIBUTION OF SOCIAL ASSISTANCE ACCORDING TO CATEGORIES AND GENDER, MAY 2017

Category I		Category II		Category I and II	
F	M	F	M	F	M
7.715	9.252	711	8.565	8.426	17.817
45%	55%	8%	92%	32%	68%

Source: GAP Institute, based on the data of MSWL.

If we analyze the amount that a four-member family benefits according to the SAS, we note that allocated amounts as per this scheme are insufficient for the families to escape the extreme poverty threshold. According to the Poverty Assessment in Kosovo conducted by KAS in 2015, poverty and

extreme poverty margins are 1.82 Euros, respectively 1.3 Euros per day per person.[27] Therefore, social assistance for a four-member family that is part of social assistance, enables to cover only around 52% of the amount needed to escape the extreme poverty threshold.

Gender differences in the household budget spending

As it was emphasized in the above part, studies indicate a tendency of female-headed households for a higher spending of the budget in education and health, whereas male-headed households are more prone to spending in tobacco, food and drinks. In order to analyze those hypothesis in quantitative approach for Kosovo case, we have constructed similar models based on the Donkoh and Amikuzuno (2011) Study.[28] Specifically, in this analysis we measured the differences between female and male-headed households expenditures for health and tobacco based on the Logit Model (see in Annex Logit Model Form).[29]

As far as the spendings of heads of household for health is concerned, according to this model, it shows that in Kosovo being a male-head household decreases the probability of spendings on health for approximately 6%. Nevertheless, there is a higher probability for spending on health when the heads of households are the elderly. This may occur since the head of the household being elderly will encounter health issues more often, or since he/she understands better the significance of medical checks. Similar, Norton et al. (2006) find in their study that persons age 66 spend around six times less for health than persons who are 95 years old.[30]

Also, in line with expectations, an increase in the 5-member household by one more member increases the chances for health expenditures by approximately 2%. Whereas, families living in urban areas spend around 7% less in health. Similar tendencies in differing spendings between urban and

---

[27] Poverty Assessment in the Republic of Kosovo in the period 2012 - 2015. April 2017 Kosovo Agency of Statistics Source: http://bit.ly/2l38Uk0.

[28] Data used for analyzing household budget spendings derive from the Household Budget Survey (HBS) 2016 of the Kosovo Agency of Statistics. This sample consists of 2,313 families who are female and male-headed households, including also women and men as household heads participating in SAS. Source: http://bit.ly/2xO6gDt, faqe 29

[29] Due to low observations regarding budget spending of female-headed households on education and alcohol, we have not been able to measure differences between these two groups also in these aspects.

[30] Norton, E. C., Wang, H., & Stearns, S. C. (2006). Out-of-pocket health care expenditures. *Swiss J Econ Stat*, 142, 3-11.

rural areas is also found asserted by Hotchkiss et al. (1998) in their study of Nepal.[31]

However, as far as heads of households spending on tobacco is concerned, our findings indicate that being a male-headed household in Kosovo increases the chances of spending on tobacco by around 7%.[32] In a similar study in India, Neufeld et al. (2005) finds that men spend on tobacco much more than women (approximately 25 times).[33] But, the likelihood for spending on tobacco by elderly heads of the households, although positive, is lower. The higher probability for tobacco consumption by younger and elderly persons is similar to findings in countries where both these groups are likely to spend on tobacco.[34]

Whereas, third model is developed more for supporting persistence of the argument that male-headed households are less prone to spending in a category promoting welfare. This model, where the dependent variable is spending on milk, cheese and eggs, also confirms that being a male-headed household lowers the probability of having the family budget oriented in quality food spending. Results also indicate that spending on healthier foods lowers when the number of the family members increases, this being so since the growth of the family may coincide with spending increases in other categories. However, possessing property and marginal increasing of annual household budget, according to our model, increase the probability for higher spending in healthier food products. Nonetheless, in the literature there are different findings regarding this point, in particular regarding the altering of human preferences in consumption, as a result of their raising income.

---

[31] Hotchkiss, D. R., Rous, J. J., Karmacharya, K., & Sangraula, P. (1998). Household health expenditures in Nepal: implications for health care financing reform. *Health policy and planning*, 13(4), 371-383.

[32] Such a finding is evident in many countries. For more, see Palipudi, K. M., Gupta, P. C., Sinha, D. N., Andes, L. J., Asma, S., McAfee, T., & GATS Collaborative Group. (2012). Social determinants of health and tobacco use in thirteen low and middle income countries: evidence from Global Adult Tobacco Survey. *PloS one*, 7(3), e33466.

[33] Neufeld, K. J., Peters, D. H., Rani, M., Bonu, S., & Brooner, R. K. (2005). Regular use of alcohol and tobacco in India and its association with age, gender, and poverty. *Drug and alcohol dependence*, 77(3), 283-291.

[34] Ibid

Conclusions and recommendations

In this analysis we have presented qualitatively the tendencies of the heads of households in Kosovo on spending on health and tobacco, i order to be able to give recommendations on gender budgeting on the part of the Social Assistance Scheme. Our findings indicate that male-headed households in Kosovo spend less on health and more on tobacco. These models that we developed can serve as a foundation for further research in this regard, taking into consideration in the future more delicate matters which can be tackled, such as analyzing the flexibility of expenditures in these categories of heads of households, depending on the differences in their income, building of a representative sample consisting solely of social assistance beneficiaries, etc.

Taking into account the above findings, where it is noted that women-headed households manage household budget better than the male-headed households, then, when possible, the should increase the number of women beneficiaries of social assistance. Such a step would result in a more optimal policy and an increase in the welfare.

Also taking into account that a number of families categorized in the category II according to SAS, receive social assistance since they take care of a child under five years old or an orphan under 15 years old, where the guardians are more likely to be mothers, it is necessary to increase the number of women who are beneficiaries of social assistance in this category.

This may take place by amending the Law on Social Assistance Schemes and dedicating higher amounts of social assistance for cases where women apply for assistance. Such a step would serve as an incentive to households where women are the beneficiaries, since such a decision would result in higher monthly income for them.

Annex

Logit Model is among the group of probabilistic models with binary dependent variable taking values 1 or 0. As such, the model calculates the likelihood for an individual to provide the respond that may be classified as 1 and not 0. Logit Model form is provided below:

$$\Pr(y=1 \mid \mathbf{x}) = F(\beta_0 + \beta_1 x_1 + \ldots + \beta_k x_k) = F(\mathbf{x}\boldsymbol{\beta})$$

Where Pr indicates the probability to spend on health, *y* the dependent variable, ***β*** *the coefficient vector* and **x** the vector of independent variables. And, F is the logistic function that takes values between 0 and 1. While,

$$F(\mathbf{x}\boldsymbol{\beta}) = \frac{e^{\mathbf{x}\boldsymbol{\beta}}}{1+e^{\mathbf{x}\boldsymbol{\beta}}} = \Lambda(\mathbf{x}\boldsymbol{\beta})$$

where $\Lambda(\cdot)$ is the cumulative distributin function for all real numbers.[35] In our case, the model regarding spending on health, would look as follows:

$$\text{logit}(\Pr_{\text{health}}) = \ln\left(\frac{Pr}{1-Pr}\right) = \beta_0 + \beta_1 \text{head of household} + \beta_2 \text{size\_hh} + \beta_3 \text{age} + \beta_4 \text{urban\_rural} + \beta_5 \text{age}^2 + \beta_6 \text{property} + \beta_7 \text{income} + \beta_7 \text{loan}$$

a model which presents the logarithm of odds ratios for each variable. The transformation of the model takes place through application of logarithm that gives a linear function to independent variables **x**. However, since the above provided odds ratios cannot be directly interpreted, we resent below calculations of marginal effects on the average independent variables by controlling the effects of other independent variables (*ceteris paribus*). This rule is also applicable when explaining the results of models.

[35] Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Nelson Education.

TABLE 2: VARIABLES USED IN MODELS

Dependent variable
Spending on health (model 1); tobacco (model 2); healthy foods (model 3) - (1 if the amount spent during the year is higher than 0, otherwise 0)
Independent variables
Head of household (1 = man, 0 = woman)
size_hh (number of family members)
age (in years)
urban_rural (1= urban area, 0 = rural area)
age^2 (age in years in square) This variable is included to consider different tendencies of elderly heads of households, in particular in models 1 and 3.
property (1= if head of the household possesses property, otherwise 0)
income (household income during one year, as an amount)
loan (1= if head of the household currently has a loan, otherwise 0)

TABLE 3: DEFINITION OF DEPENDENT VARIABLES USED IN MODELS

Definition of dependent variables
Health expenses – expenditures for medicines, therapeutic devices, medical services inside and outside hospital, dental services, medical screenings, traditional medicines, etc.
Tobacco expenses – spending on cigarettes in package, cigars or other tobacco
Healthy foods expenses – spending on milk with reduced fat, fresh milk, longterm milk, fresh cheese, eggs, etc.

Source: GAP Institute, based on the data obtained from the Household Budget Survey

TABLE 4: LOG MODELS FINDINGS

	Health	**Tobacco**	**Food**
	dy/dx	dy/dx	dy/dx
household head	-0.060*	0.070**	-0.044***
size_hh	0.021***	0.025***	-0.005***
age	-0.012*	0.020***	0.0001
urban/rural	-0.070***	0.014	0.170***
age^2	0.0002***	0.0002***	0.000
property	-0.050	-0.050	0.170***
income	0.000***	0.000	0.000**
loan	0.044	-0.030	-0.079

Significance: * 10%; ** 5%; *** 1%

INSTITUTI GAP
GAP INSTITUTE

GAP Institute is a Think-Tank established in October 2007 in Kosovo. The main goal of GAP is to attract professionals in order to create an environment of professional development and research, which is encountered in similar institutions in Western countries. This also provides the opportunity for the people of Kosovo to research, develop and implement projects with the aim of advancing the Kosovar society. The priority of this Institute is to mobilize professionals in addressing the economic, political and social challenges of the country. The main goals of GAP are to close gaps between the Government and the citizens, and also close gaps between problems and solutions.

GAP Institute is supported by:

Rockefeller Brothers Fund
Philanthropy for an Interdependent World

SWEDEN