

## Household Consumption Expenditure in Albania

PhD Candidate Eri Gjoka

Department of Economics  
Faculty of Economy  
University of Tirana

### Abstract

*Household consumption expenditure are an important indicator of well-being and standard of living of individuals. Often consumption spending, rather than income levels, are used to assess the country's monetary poverty. Household's total expenditure and spending decisions are affected by various factors such as size of the household, income, education level, gender and age of the head of the household, location, status and occupation. At this paper we estimated a consumption expenditure model, trying to identify the determinants of household consumption expenditure. Separated models were fit for urban and rural areas. Education and employment of head of the household, as well as that of other members of the household do boost consumption expenses. The size of the household shows an inverted U shape relation; expenditures are larger in larger households but decrease in very large ones. In urban areas, having a computer and internet connection also matters.*

**Keywords:** Household consumption expenditure, Albania, urban, rural

### Introduction

Household consumption expenditure are an important indicator of well-being and standard of living of individuals. Often consumption spending, rather than income levels, are used to assess the country's monetary poverty. Referring to monetary/material poverty, one needs to establish which kind of material indicators should be considered. Beyond everything, one may consider using expenditures as basis for computation (Saunders et al, 2002), incomes (Short, 2015), or deprivation (Brandolini et al, 2010; Nolan & Whelan, 2010).

Most of economist agree that consumption expenditure is a better indicator of poverty compared to income level due to some reasons: a) consumption gives us a better information on individual well-being, because income is only the mean that allows us to buy the goods but give no information on the accessibility and availability of different products and services; b) consumption is better measured compared to income (sometimes not all incomes are declared), especially in developing countries; c) today, with the development of financial system and micro-financing opportunities, one can consume more or less (to save) that his/her level of income.

The challenge related to expenditure-based method is that they are expensive in terms of measurement and require a lot of questions in questionnaires that define surveys. In Albania the information for level of consumption expenditure are collected by Living Standard Measurement Survey (LSMS) every 4 years and by the Household Expenditure Survey (HES).

The impact of household spending decision on economic development and policy planning (Deaton, Ruiz-castillo, & Thomas, 1989) has influenced economist to study household patterns that influence. Household's total expenditure and spending decisions are affected by various factors such as size of the household, income (Grossman, 1972), education level, gender and age of the head of the household (Bolin, Jacobson, & Lindgren, 2002), location, status and occupation. Different studies have tried to estimate the factors that do influence the amount of spending on food (Thirumarpan, 2014), education (Kousar, Sadaf, Makhdum, & Ijaz, 2017), health (Martín, del Amo Gonzalez, & Dolores Cano Garcia, 2011).

At this paper we aim to estimate a consumption structure, trying to identify the determinants of household consumption expenditure. We are going to use the data from Living Standard Measurement Survey (LSMS) 2012, collected by Institute of Statistics (INSTAT) in Albania. We organize the rest of the paper in the following way. In the next section, we realize a brief description of household consumption expenditure in Albania. In section 3 we describe the methodology used and present estimation results and section 4 summarizes our findings.

### **Consumption Expenditure in Albania**

In 2017, the average monthly consumption expenditure of Albanian household, consisting of an average of 3.7 people, are 73.400 ALL (INSTAT, 2018). The average consumer spending for an individual is estimated to be 19,660 ALL per month, of which: 44% for food consumption and 56% for non-food consumption. The amount and the structure of the consumption varies between different types of households.

The household expenditure differs from the region the household is living and working. It is expected the spending amount to be higher in families living in more developed regions due to some factors: like the possibility of higher incomes from employment and higher living cost. In figure 1 are presented the average expenses of households living all districts of Albania.

Figure 1: Average expenditure for consumption per capita, 2017

Source: INSTAT, 2018

Tirana and Korca are the districts with the higher level of expenditures for consumption per capita, being higher of the average expenditure of the country. All other districts remain under the country average level, with Dibra being the district where expenditures for consumption are to the lowest level. This is a result of two components: lower household expenditure and bigger families (4.1 members).

Inequalities in consumption expenditure in Albania are noticeable if we study the difference in expenditure for households in 10% of highest level of expenditure compared to the other 90%. If we take a look at figure 2, we can confirm a huge difference on per capita expenditure for both 2016 and 2017. A member of households with higher consumption expenditure, spends on average 3.5 times more compared to members in the other household. We can evidence a slight decrease on these differences in 2017, due to a decrease on expenditure on households in first decile and a raise of them in households in 2-10 deciles.

**Figure 2: Average consumption expenditure per capita, deciles 10/90**

	2016		2017	
	Average expenditure per capita	Members of household	Average expenditure per capita	Members of household
10% of households	62562	2.6	62329	2.6
90% of households	18119	3.9	18311	3.9
Average consumption	22563	3.7	22712	3.7
10/90	3.5		3.4	

Source: INSTAT, 2018

Not only total household expenditure depends on the size and composition of the household, but also the allocation of the expenditure. In figure 3 is presented the percentage of total expenditure allocated to the specific good/service based on different household patterns.

**Figure 3: Distribution of consumption expenditures in %, 2017**

	Single Person	Single person with a child	Couple	Couple with 3 or children	3 or more adults	3 or more adults with children	Total
Food and non-alcoholic beverages	45	47.1	46.1	45.8	41.4	44.4	44.1
Alcohol and smoking	2.9	1.3	3.6	3.2	3.7	3.5	3.5
Clothing	3.1	5.5	3.5	4.7	4.5	4.3	4.3
Expenses for housing, water, electricity, rent	14	14.9	11.7	11.6	10.6	9.9	10.9
Furniture, housekeeping	5.5	5.1	5.2	4.8	4.6	4.6	4.8
Health	4.8	2.3	5.5	2.4	3.9	3.9	3.9
Transportation	4.4	3.5	5.5	7.3	7.5	8.2	7.2
Communication	3.8	3.2	3.4	3.2	3.6	3.2	3.4
Entertainment and culture	3.1	5.7	2.8	3.7	3.2	2.6	3
Education	0.4	0.8	2.9	1.7	6.3	3.9	3.9
Restaurants and Hotels	7.6	3.4	4.5	4.6	5	5.1	5
Other goods and services	5.4	7.2	5.3	7	5.7	6.4	6
Total	100	100	100	100	100	100	100

Source: INSTAT, 2018

Despite household composition, the highest share of consumption expenditure in Albania is allocated on food and non-alcoholic beverages. This is typical in poorer households and in developing countries, while in developed countries the share for food expenditure is lower than 20 percent. There is a drop on expenses on health, communication, housekeeping, alcohol and smoking when in the household are added children as those expenses do focus more on necessities like education, entertainment and culture, transportation and other important goods and services.

### ***Estimation and results***

In this part of the paper we will construct and estimate a consumption expenditure model, trying to identify the factors that influence the amount of household consumption expenditure. Separated models were fit for urban and rural areas, following the paper by Doudich et al (2016). For each area two models were estimated. The first include individual variables referring to education, occupation, and housing, as well as interaction terms with regional dummies. The second adds assets. In the rural models, the Tirana region (and corresponding interactions) are not present, since this region is only urban. Within the table and subsequent models HD denotes indicators standing for the head of the household, while HH stands for counts at the household level.

**Table 1: Consumption expenses, LSMS 2012**

	Urban		Rural		Urban		Rural	
	Model 1		Model 2		Model 1		Model 2	
	B	sig	B	sig	B	sig	B	sig
(Constant)	11.651	.000	11.559	.000	12.187	.000	11.962	.000
reg_2 region=Coastal	-.142	.007	-.119	.018	-.259	.000	-.240	.000
reg_3 region=Mountains	.280	.003	.245	.008	-.112	.166	-.075	.344
reg_4 region=Tirana	-.158	.005	-.104	.055				
hhSize	.230	.000	.204	.000	.214	.000	.201	.000
hhSize2	-.015	.000	-.012	.000	-.012	.000	-.011	.000
lnAGE	.004	.897	.003	.921	-.047	.144	-.037	.244
married	.111	.000	.119	.000	.060	.012	.042	.069
primaryHD	.085	.021	.079	.026	.015	.705	.034	.365
secondaryHD	.099	.010	.092	.013	.045	.296	.056	.183
tertiaryHD	.138	.001	.111	.008	.208	.000	.183	.001
employedHD	.226	.011	.246	.004	.087	.030	.088	.026
employedHH	.112	.008	.056	.169	-.041	.007	-.042	.004
nojobHD	-.072	.039	-.078	.020	.015	.678	.008	.817
selfEmpHD	.056	.009	.047	.024	.002	.936	.017	.452
employerHD	.075	.413	.034	.698	.209	.114	.184	.154
publicHD	-.028	.498	-.028	.483	-.149	.019	-.074	.233
wagedHD	-.196	.029	-.226	.009	-.083	.056	-.091	.030
employerHH	.205	.000	.197	.000	-.072	.368	-.079	.312
publicHH	.042	.019	.021	.233	.070	.089	.031	.435
wagedHH	-.012	.782	.042	.326	.142	.000	.138	.000
primary1HH	.014	.239	.011	.344	-.014	.228	-.017	.132
primary2HH	.003	.768	.002	.853	.031	.001	.025	.011
secondaryHH	.049	.000	.034	.000	.069	.000	.055	.000
tertiaryHH	.120	.000	.089	.000	.059	.008	.041	.057
roomspc	.258	.000	.222	.000	.210	.000	.170	.000
roomspc2	-.052	.000	-.046	.000	-.014	.000	-.011	.000
water	.024	.250	.010	.631	-.020	.265	-.034	.055
R2_nojobHD	.115	.029	.108	.033	-.008	.886	.018	.750
R2_wagedHH	.022	.223	.018	.297	-.009	.639	-.011	.577
R2_publicHD	-.024	.619	.012	.787	-.016	.829	-.063	.384
R2_water	-.087	.003	-.081	.004	.045	.144	.044	.149
R2_roomspc	.174	.007	.159	.010	.186	.001	.159	.005
R2_roomspc2	-.018	.291	-.018	.281	-.066	.000	-.060	.000
R3_nojobHD	-.044	.605	-.036	.661	-.093	.218	-.084	.257
R3_wagedHH	-.126	.002	-.127	.002	-.099	.005	-.107	.002
R3_publicHD	-.046	.621	-.019	.834	.130	.146	.111	.202
R3_water	-.120	.042	-.099	.083	.054	.280	.054	.270
R3_roomspc	-.184	.145	-.142	.244	.108	.300	.073	.472
R3_roomspc2	.054	.122	.042	.207	-.041	.124	-.033	.200
R4_nojobHD	.027	.594	.009	.853				
R4_wagedHH	-.017	.357	-.034	.060				
R4_publicHD	.100	.026	.116	.008				
R4_water	.114	.000	.080	.006				
R4_roomspc	.164	.015	.159	.015				
R4_roomspc2	-.012	.521	-.014	.433				

kitchen	.095	.000	.057	.000
bath	.001	.964	.000	.994
flushingWC	.122	.266	.228	.000
computer	.162	.000	.211	.000
Internet	.058	.014	-.048	.280

Source: Author's calculation

The results of the models reveal the expected findings. The adjusted R-squares for models are .443 and .482 for urban areas, and .326 and .359 for rural areas.

Expenditures are larger in larger households but decrease in very large ones. Married couples also spend more.

Higher educated heads of household indicate higher expenditures. Education of other members of household also matters. The more educated the household is, the higher the expenditures are. Education as one of two elements of human capital, allows individuals to have a better performance in labor market, increasing the possibility of being employed (Gjoka & Duka, 2017), better position, higher wage (Gjoka, 2018) and thus increasing the household income and household expenditure possibilities. The effect of higher education in household consumption has the same impact for both rural and urban household, but having a higher effect on urban households, as expected.

Being employed (as head of household) increases the expenditures, but in rural areas, households with more employed people are less likely to spend so much (which is opposed to the situation in urban areas). In urban areas, having no job (unemployment) decreases expenditures, being self-employed increases them, while households headed by employers also spend more. Such relations were not observed in rural areas. Households with waged heads spend less both in urban and rural.

There is a certain variation across regions. In urban areas, the mountain one displays the larger expenditures all being controlled. In rural areas, the central region is increasing the household's likelihood for spending more. Central rural region in Albania is one of the most developed regions in agriculture, due to its better weather and land conditions. A rural household in central region has the possibility for higher consumption expenditure due to better/higher amount of goods produced and sold.

There is an inverted U shape relation with the size of the dwelling: the more rooms are, the higher the spending, but in urban areas 5 rooms or more means lower and lower expenditures. In rural areas it takes 11 rooms for the relation to get reversed. Access to running water does not differentiate in Albania, but presence of kitchen and computer are important. In urban areas, having an internet connection also matters.

### Conclusions

At this paper we estimated a consumption expenditure model, trying to identify the determinants of household consumption expenditure. Separated models were fit for urban and rural areas. For each area two models were estimated. The first include individual variables referring to education, occupation, and housing, as well as interaction terms with regional dummies. The second adds assets.

The results reveal the expected findings. Education and employment of head of the household, as well as that of the other member of the household do boost the consumption expenses. The more educated the household is, the higher the expenditures are. Being employed (as head of household) increases the expenditures, but in rural areas, households with more employed people are less likely to spend so much (which is opposed to the situation in urban areas).

There is an inverted U shape relation with the size of the dwelling: the more rooms are, the higher the spending. In urban areas, having an internet connection matters. The size of the household also influences the level of expenditures. It shows an inverted U shape relation; expenditures are larger in larger households but decrease in very large ones. Married couples also spend more. There is a certain variation across regions. In urban areas, the mountain one displays the larger expenditures all being controlled. In rural areas, the central region is increasing the household's likelihood for spending more.

Access to running water does not differentiate in Albania, but presence of kitchen and computer are important. In urban areas, having an internet connection also matters.

### References

Bolin, K., Jacobson, L., & Lindgren, B. (2002). The family as the health producer - When spouses act strategically. *Journal of Health Economics*. [https://doi.org/10.1016/S0167-6296\(01\)00135-7](https://doi.org/10.1016/S0167-6296(01)00135-7)

- Brandolini, A., Magri, S., & Smeeding, T. M. (2010). Asset-based measurement of poverty. *Journal of Policy Analysis and Management*. <https://doi.org/10.1002/pam.20491>
- Deaton, A. S., Ruiz-castillo, J., & Thomas, D. (1989). The Influence of Household Composition on Household Expenditure Patterns : Theory and Spanish Evidence. *Journal of Political Economy*. <https://doi.org/10.1086/261597>
- Doudich, M., Ezzrari, A., Van der Weide, R., & Verme, P. (2016). Estimating quarterly poverty rates using labor force surveys: A primer. *World Bank Economic Review*. <https://doi.org/10.1093/wber/lhv062>
- Gjoka, E. (2018). Gender wage gap in Albanian labor market. Budapest: THIRD MEDITERRANEAN INTERNATIONAL SOCIAL CONGRESS (MECAS III).
- Gjoka, E., & Duka, R. (2017). Estimating the employment effects of education in Albania (pp. 361–370). Retrieved from [http://www.asecu.gr/files/13th\\_conf\\_files/Estimating-the-Employment-Effects-of-Education-in-Albania.pdf](http://www.asecu.gr/files/13th_conf_files/Estimating-the-Employment-Effects-of-Education-in-Albania.pdf)
- Grossman, M. (1972). On the Concept of Health Capital and the Demand for Health. *Journal of Political Economy*. <https://doi.org/10.1086/259880>
- INSTAT. (2018). *Household Expenditure survey, 2017*. Retrieved from [http://instat.gov.al/media/4783/abf\\_2017.pdf](http://instat.gov.al/media/4783/abf_2017.pdf)
- Kousar, R., Sadaf, T., Makhdam, M. S. A., & Ijaz, A. (2017). Determinants of household's education and nutrition spending: A gender-based empirical analysis. *Humanomics*. <https://doi.org/10.1108/H-06-2016-0050>
- Martín, J. J. M., del Amo Gonzalez, M. P. L., & Dolores Cano Garcia, M. (2011). Review of the literature on the determinants of healthcare expenditure. *Applied Economics*. <https://doi.org/10.1080/00036841003689754>
- Nolan, B., & Whelan, C. T. (2010). Using non-monetary deprivation indicators to analyze poverty and social exclusion: Lessons from Europe? *Journal of Policy Analysis and Management*. <https://doi.org/10.1002/pam.20493>
- Saunders, P., Bradshaw, J., & Hirst, M. (2002). Using household expenditure to develop an income poverty line. *Social Policy and Administration*. <https://doi.org/10.1111/1467-9515.00248>
- Short, K. S. (2015). Hardship, debt, and income-based poverty measures in the USA. *Research on Economic Inequality*. <https://doi.org/10.1108/S1049-258520150000023009>
- Thirumarpan, K. (2014). DETERMINANTS OF HOUSEHOLD FOOD EXPENDITURE AMONG RURAL HOUSEHOLDS OF AMPARA DISTRICT. In *04th International Symposium, SEUSL* (pp. 325–332).