Impact of Tobacco Spending on Intra-household Resource Allocation in Montenegro

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Ana Mugoša*

Mirjana Čizmović**

Violeta Vulović***

*Faculty of Economics, University of Montenegro &

Institute for Socio-Economic Analysis (ISEA), Podgorica, Montenegro

**Faculty of Business and Economics, Mediterranean University &
Institute for Socio-Economic Analysis, Podgorica, Montenegro

***Institute for Health Research and Policy, University of Illinois
Chicago, United States of America

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Correspondence to: Ana Mugoša, ISEA, e-mail: ana.mugosa@ucg.ac.me

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Abstract

Background

The main goal of this study is to estimate the crowding-out impact of tobacco expenditures on household budget allocation to other mutually exclusive commodity groups in Montenegro.

Methodology

The analysis uses Household Budget Survey data from 2005–2017 to estimate a system of Engel curves using a 3SLS approach. As the tobacco expenditure variable is endogenous to budget shares on other consumption items, instrumental variables were included to obtain consistent estimates.

Results

Overall, the results confirm the existence of the crowding-out effect of tobacco spending on various commodities, such as some food items (including cereals, fruits and vegetables, and dairy products), clothing, housing and utilities, education, and recreation. Meanwhile tobacco consumption was estimated to have a positive effect on budget shares on bars and restaurants, alcohol, coffee, and sugary drinks. These results are consistent across the household income groups. The estimates indicate that an increase in tobacco expenditures leads to reductions in budget shares on essential goods, which are likely to have negative impacts on household living standards.

Conclusions

Tobacco expenditure crowds out household spending on necessities, especially among the poorest households, thus increasing inequality, hampering human capital development, and potentially causing long-term adverse effects on households in Montenegro. Our results are similar to evidence from other low- and middle-income

countries. This paper contributes to the analysis of the crowding-out effect of tobacco consumption and represents the first such estimates conducted in Montenegro.

JEL Codes: D13, E21, E64, H31

Keywords: tobacco, expenditures, crowding out, income groups

Introduction

Expenditure on tobacco represents a large share of the household budget in many countries. Especially with limited resources, spending on tobacco crowds out spending on essentials including clothing, housing, education, furniture, and recreation. Therefore, tobacco spending can worsen a household's living standard and impact the development of children and the future earning potential of household members. This is particularly concerning for poor households who already have insufficient resources to support their basic spending needs.

Since the first studies in the early 2000s,[1, 2] research analyzing the crowding-out effect of spending on tobacco—especially from low- and middle-income countries—consistently found evidence of negative effects on spending on mainly basic necessities.[3–22]

For example, in 2001, Efroymson et al.[1] conducted the first study on the topic, by providing a simple comparison of consumption patterns between smoking and non-smoking households. Results confirmed the economic impact of tobacco consumption in Bangladesh and showed that tobacco use represents a large burden on the budget of households, especially those of the poor. They found that the poorest households are likely to smoke twice as much as the wealthiest households; and male smokers spent more than twice as much money on cigarettes as on clothing, housing, health, and education combined compared to females.

Similar research conducted in China[4] found that spending on tobacco negatively affects investments in human capital, productivity, and financial security. Tobacco spending also has important distributional effects within the family, as the costs of smoking can affect other family members by reducing the expenditure on basic needs of all members. Results in this study were obtained by estimating the almost-ideal demand system (AIDS) that controls for sociodemographic variables.

Following this research, the next generation of studies addressed the issue of endogeneity of tobacco use, with John[5] pioneering the use of instrumental variables

technique in the analysis in 2008. This study found that tobacco use crowds out certain products such as food, education, clean fuels, and entertainment.

The empirical evidence from low- and middle-income countries (LMICs) shows that poor households are the most affected.[5,6,8,9,14,15] For example, in rural Indonesia,[8] which tends to be less wealthy than urban areas, households with at least one smoker tend to divert a significant amount of their already scarce budget to tobacco products. This diverted spending on tobacco products negatively impacts children's nutrition due to resulting reduced food consumption. In Cambodia,[9] tobacco spending crowds out education and clothing expenditures as well as food expenditures for low- and middle-income households.

Lower education levels are associated with a higher likelihood of smoking, which in turn results in insufficient resources for further investment in education. The case of Chile[15] shows that potential health and education disparities can occur as a consequence of tobacco consumption. That study shows that tobacco expenditures are associated with a reduction in the budget share directed to health care, education, and housing costs, especially for poorer households. Non-smoking households had up to 32 percent and 16 percent higher budget shares on health and education, respectively, in comparison to households with smokers.

To conclude, spending on tobacco has a significant impact on household consumption patterns because the cost of purchasing tobacco products represents a significant percentage of their budget. The crowding-out effect has a greater impact on lower-income households, as spending on tobacco sacrifices expenditures on other goods, such as housing, health, food, and education. Similar trends of a negative impact on the structure of total consumption are also noticeable for middle- and high-income households, but the crowding-out effect is relatively lower due to their larger incomes.

The evidence[6,13,14,17] shows a less consistent association between food and tobacco consumption, as the relationship between them is less straightforward. This inconsistency may be due to the heterogeneity of food spending, since it comprises both genuine

necessity (for sustenance) and more discretionary spending (for relative luxury). As spending on basic necessities represents a major share of food spending for low-income households, it is not a surprise to obtain a positive relationship between tobacco spending and share of food spending in the remaining budget.[5]

Montenegro experienced a rise in smoking prevalence in recent years, by 5.3 percentage points between 2017[23] and 2019.[24] According to a survey of smokers in 2019, the prevalence of adult tobacco use was 40.7 percent in Montenegro.[24] Based on the Montenegro Household Budget Survey (HBS), spending on tobacco in households with smokers accounted for, on average, between 3.7 percent and 5.4 percent of their budget during 2005–2017. In 2020, 22.6 percent of the total population in Montenegro was at risk of poverty, while 13.5 percent of the population lived in households that could not afford at least four out of nine material deprivation items, and the child poverty rate was ten percentage points higher than the national poverty rate.[25]

The data suggest that tobacco represents a commodity that influences expenditure decisions in a large number of households. Thus, the main goal of this study is to examine the impact of tobacco spending on household expenditure patterns in Montenegro. This paper contributes to the existing empirical evidence by providing the first results of the impact of tobacco use on intra-household resource allocation in Montenegro. Research estimates can be used to support national efforts to prevent smoking and frame the issue of adequate tobacco control policies. To the best of our knowledge, this is the first such study in Montenegro.

Methodology

Theoretical framework and empirical approach

The theoretical framework for this analysis is consumption theory (Engel curve), according to which a household maximizes a utility that is a function of a set of commodities. A household's utility is a function of *n* commodities, including tobacco.

Following Pollak,[26] we assume that a household's demand for tobacco (q_n) is predetermined at level ($q_n = \overline{q_n}$), so the household maximizes the following utility function

$$Max\ U = U(q_1, \dots, q_{n-1}, \overline{q_n}; a) \quad (1)$$

subject to the budget constraint $M = \sum_{i=1}^{n-1} p_i q_i$, where M represents the remaining budget after deducting expenditure on tobacco ($M = Y - p_n \overline{q_n}$).

Since the demand for tobacco is predetermined, the demand for other commodities is conditional on the consumption of tobacco ($\overline{q_n}$), the prices of all commodities except tobacco ($p_1, \dots, p_{n-1}$), the remaining budget (M), and a set of household characteristics. Hence, we estimate the following model

$$w_{ij} = \alpha_i + \beta_{1i} d_j + \beta_{2i} tobexp_j + (\gamma_{1i} + \gamma_{2i} d_j) lnM_j + (\theta_{1i} + \theta_{2i} d_j)(lnM_j)^2 + \delta_i h_j + u_{ij} \quad (2)$$

where, for each household j, w_{ij} represents a share of spending on a commodity i in the remaining budget M after deducting spending on tobacco ($w_{ij} = p_{ij} q_{ij} / M_j$), d_j is a binary variable that is equal to one if a household has a smoker, $tobexp_j$ is the expenditure on tobacco ($p_{nj} \overline{q_{nj}}$), and h_j is a vector of household characteristics.

The binary variable d_j is included in the model to account for a difference in preferences between households with and without smokers. In other words, this variable explains whether the households with reported zero expenses on tobacco do not consume tobacco because they cannot afford it (corner solution) or because they have no tobacco in their utility function (abstention).

Testing the null hypothesis that coefficients associated with the binary variable in Equation (2) are jointly significant (H_0: $\beta_{1i} = \gamma_{2i} = \theta_{2i} = 0$) is done using the Wald test. Joint significance of the coefficients indicates that the households with and without smokers have different preferences. This means that the utility functions of households with reported positive tobacco spending are significantly different from the utility functions of households with zero spending.

The literature has identified a few econometric problems in estimating Equation (2). First, $tobexp_j$ and M_j are likely endogenous. Second, there is likely contemporaneous correlation, as the shares of spending on different commodities may affect each other. Finally, the errors may be heteroskedastic. To address these issues, it is recommended to apply the generalized method of moments three-stage least squares (GMM 3SLS) method as a more efficient estimator of a system of Engel curves.

However, as the GMM 3SLS did not converge, we estimated a traditional 3SLS model, which is effectively a combination of seemingly unrelated regressions (SUR) and the instrumental variables (IV) approach. We tested the null hypothesis for the presence of heteroskedasticity in the IV regression using the Pagan-Hall statistic, which was confirmed.[27] As 3SLS is less efficient with heteroskedastic standard errors, the estimation included 1,000 bootstrap replications to account for heteroskedasticity.

The C or GMM distance test was used to test the endogeneity of the regressors. A valid instrument needs to satisfy the following two strong assumptions for the IV estimation to provide a consistent estimator: (1) instrument is partially correlated with the endogenous regressors (inclusion restriction) and (2) instrument affects the dependent variable only through the regressors and not directly (exclusion restriction). To test the inclusion restrictions, the LM test statistic was applied for under-identification (Kleibergen-Paap rk LM-test). The exclusion restriction was tested using the Hansen J statistic (test of over-identifying restrictions), since a larger number of instruments than the number of endogenous variables was used. Instrumental variables used in the analysis are described in the following section.

Data and descriptive statistics

This study uses Household Budget Survey (HBS) data for Montenegro from 2005 to 2017 (except 2016, when HBS was not conducted) to estimate the crowding-out effect of tobacco expenditures. HBS is conducted annually by the Statistical Office of Montenegro (MONSTAT) in 21 municipalities across three regions: north, central, and south. The total

sample for 2005–2017 comprises 15,068 households, with an average number of households per year of 1,256.

HBS provides information on average household consumption, expenditure by commodity, and household size and structure, as well as detailed information on their demographic characteristics. As HBS does not provide information on household income, we use total reported spending as a proxy for income. The households were divided into three income groups—low-, middle-, and high-income—based on income per household member.

HBS contains data on household expenditures in 12 broad commodity groups according to the Classification of Individual Consumption According to Purpose (COICOP),[28] developed by the United Nations Statistics Division. As tobacco spending may have disparate impacts on expenditures on different food categories,[5] we separated expenditures on food and non-alcoholic beverages into 11 subcategories (cereals, meat, fish, milk, other dairy products, oils and fats, fruits and vegetables, desserts, ready-made food, coffee and tea, and other non-alcoholic beverages). Additionally, we disaggregated tobacco and alcohol consumption into two separate items, resulting in a total of 23 groups used in this analysis (more details in Table A1 in the Appendix). Table 1 presents the average monthly household expenditures and budget shares on tobacco in households with smokers, by year and income group.

Table 1. Average monthly expenditures on tobacco and tobacco budget shares from 2005–2017

Year	**All households**		**Low-income**		**Middle-income**		**High-income**	
	Real expenditures on tobacco in EUR*	Budget share on tobacco	Real expenditures on tobacco in EUR*	Budget share on tobacco	Real expenditures on tobacco in EUR*	Budget share on tobacco	Real expenditures on tobacco in EUR*	Budget share on tobacco
2005	21.0	4.1%	19.1	4.3%	26.6	4.1%	33.3	3.6%
2006	22.0	4.2%	18.8	4.6%	24.9	3.8%	28.8	3.4%
2007	21.7	3.8%	17.7	4.5%	22.9	3.5%	26.4	3.2%

2008	26.0	3.7%	20.6	4.1%	27.4	3.8%	28.4	3.2%
2009	27.3	4.6%	21.6	5.9%	30.2	4.3%	29.0	3.5%
2010	27.3	4.4%	23.8	5.3%	27.9	4.4%	29.4	3.7%
2011	32.7	4.9%	24.4	5.3%	33.1	4.9%	39.6	4.6%
2012	36.9	5.4%	26.4	5.4%	37.7	5.7%	44.5	5.1%
2013	37.6	5.3%	31.0	5.7%	37.8	5.5%	41.2	5.0%
2014	37.3	5.1%	27.6	5.7%	36.1	5.0%	44.6	4.9%
2015	40.2	5.4%	24.7	5.3%	34.1	5.0%	53.2	5.9%
2017	46.5	5.4%	32.9	6.4%	39.5	5.0%	54.0	5.6%

Source: Statistical Office of Montenegro

Notes: *Conditional on having positive expenditure on tobacco. Variables deflated by CPI to 2010 values.

Expenditures on tobacco increased over the observed period, both in terms of EUR and shares in total household spending for all household income groups. The low-income households allocate the highest share of their budgets to tobacco in comparison with their wealthier counterparts, which suggests that the low-income households could benefit the most from the reallocation of funds to more beneficial spending.

Due to budget constraints, households with smokers may not spend as much on basic necessities as households without smokers. This may be the case with low-income households especially. Table 2 shows the budget allocation to different commodity groups for households with zero versus households with positive tobacco expenditures, as well as the Student's t-test of the difference in shares.

Compared to non-smoking households, smoking households spend slightly higher shares of their budgets on clothes, transportation, bars, restaurants and hotels, alcohol, and sugary drinks; but they spend lower shares on housing and utilities, health, total dairy products, fruits and vegetables, and oils and fats. The statistically significant difference in expenditures between the two types of households suggests differences in taste and preferences, which presumably means that tobacco spending may have an effect on household expenditure.

Table 2. Budget shares spent on different groups of products by smoking and non-smoking households

	Households without smokers	Households with smokers	Difference	t-stat
Tobacco	0.0%	47.8%	-47.8%	-91.646
Food and non-alcoholic beverages	35.8%	36.2%	-0.4%	-1.164
Cereals	5.5%	5.6%	-0.1%	-0.896
Meat	8.8%	9.7%	-0.9%	-7.189***
Fish	0.9%	0.9%	0.0%	1.370
Milk	2.8%	2.6%	0.2%	2.813***
Other dairy products	6.3%	6.1%	0.2%	2.252**
Oils and fats	1.2%	1.1%	0.1%	3.791***
Fruits and vegetables	6.1%	5.9%	0.2%	2.537**
Desserts	1.6%	1.6%	0.0%	-0.773
Ready-made food	0.8%	0.9%	0.0%	-1.773*
Coffee and tea	0.9%	0.9%	0.0%	0.410
Other non-alcoholic	1.0%	1.1%	-0.1%	-3.291***
Clothes	5.3%	5.6%	-0.3%	-2.869***
Housing and utilities	31.8%	25.4%	6.4%	22.157***
Furniture	3.3%	3.4%	-0.1%	-1.188
Health	3.4%	2.3%	1.0%	11.301***
Transportation	6.8%	7.4%	-0.6%	-5.204***
Communication	4.5%	4.3%	0.2%	2.969***
Recreation and culture	2.1%	2.4%	-0.3%	-5.199***
Education	1.0%	0.9%	0.1%	0.730
Bars, restaurants, and hotels	1.5%	1.9%	-0.4%	-6.064***
Alcohol	3.6%	4.0%	-0.4%	-3.823***
Other	1.0%	1.4%	-0.4%	-12.384***

Source: Statistical Office of Montenegro, MONSTAT

Notes: *, ** and *** show significance levels at 10%, 5% and 1%, respectively. Null hypothesis of the Student's t-test for each good is H0: mean (non-smoking households) – mean (smoking households) = 0

For different income groups of households with smokers (results provided in Appendix Table A2) there are differences in the budget shares for different commodities. The low-income households with smokers spend the largest share of their budget on food (47.7 percent) in comparison to the other two income groups (34.5 percent for middle- and 27.0 percent for high-income households with smokers). Regarding the food commodity groups, all three income groups of households spend the most on cereals, meat, dairy products, and fruits and vegetables. On the other hand, the wealthiest households

allocate the largest share of their budget to housing and utilities (30.0 percent, compared to the poorest counterparts, which for this item allocate only 19.5 percent of their budget).

As for the budget allocation among different types of households in the low-income group, the households with smokers spend a relatively smaller share of their budget on essential commodities such as food (a statistically significant difference is evident in the case of milk, other dairy products, and oil and fats), health, education, and housing and utilities compared to households without smokers. A breakdown of food spending showed that the middle- and high-income households with tobacco spenders allocate a lower share of their budget to fruits and vegetables compared to households without tobacco users but spend relatively more on sugary drinks. As expected, in all income groups smoking households allocate relatively larger shares to alcohol and bars, restaurants, and hotels than non-smoking households.

Descriptive statistics analysis does not account and control for the impact of sociodemographic characteristics, which is why a more complex econometric modeling is needed to estimate the crowding-out effect. Our research includes the following sociodemographic variables: household size; average age of the household members; maximum education (defined as years of education attained by the highest-educated member in the household); number of children 0–2 and 3–6 years of age; number of household members aged 65 years or older; household type defined by economic activity as unemployed (if all members are unemployed), pensioners (if at least one member is pensioner and other members are unemployed), or employed (if at least one member is employed); region (north, south, or central); and year fixed effects.

In the Results section we estimate a system of quadratic Engel curves using HBS data from 2005–2017. Out of 23 commodity categories, the group “other commodities” was excluded to ensure the adding-up restriction in the system of equations. Based on the previous studies on this topic,[27] we use the following instruments for tobacco expenditure: adult sex ratio (adult male-to-female ratio), the percentage of adults per household, and the percentage of male adults per household. Adults are persons aged 18 years old and

older. Generally, as smoking prevalence among males is higher compared to females, both the adult sex ratio and the adult ratio are assumed to be uncorrelated with budget shares on other products but correlated with tobacco expenditure.

In addition, smoking prevalence and smoking intensity[7] (measured by the average number of cigarettes consumed per household) by year and municipality, are constructed as an instrument of a household's smoking characteristics. For total expenditure without tobacco, we use total expenditures per household. The test results (presented in Appendix Table A3) show the relevance and suitability of the utilized instrumental variables.

Results

As results of the Wald test suggest, households with smokers and those without smokers have different preferences. In other words, the price of tobacco is not likely a factor influencing a household's decision to consume tobacco in Montenegro (that is, households without smokers report zero expenditures on tobacco because tobacco is not in their utility function).

The results for all households and by income group (Table 3) show that, similar to previous studies in LMICs, tobacco spending crowds out the resources spent on clothing, housing, and education.[3,6.7,10,13,15,18] Among food categories, households with smokers spend less on cereals, dairy products (other than milk), and fruits and vegetables compared to those without smokers. These items are very important for healthy nutrition and are sacrificed due to tobacco consumption. Tobacco spending in households impacts the level of food quality, which consequently affects the health of all household members, especially children.[5] We also find that spending on tobacco crowds out spending on recreation for low- and middle-income households. The estimated effects on spending on health, transport, and communication are not statistically and economically significant.

These results confirm that tobacco consumption sacrifices resources for necessities, while devoting more to other non-healthy consumption. Tobacco expenditure positively

affects the budget shares on bars and restaurants and alcohol. The positive effect of tobacco spending on spending on coffee and sugary drinks is in line with previous research,[30–32] creating negative effects on nutrition and healthy lifestyles.

It should be emphasized that a positive relationship does not mean that expenditure on a certain food category or a commodity group would necessarily increase, but rather only that its share in the remaining budget would be higher. As the variable on the left-hand side is the share of spending on food in the remaining budget after deducting the tobacco expenditure (M), with a constant total budget, as tobacco spending increases M becomes smaller.

For example, this means that as spending on tobacco increases, the share of expenditure on alcohol, coffee, and sugary drinks in the remaining budget (after deducting tobacco expenditures) increases, but in absolute terms these types of spending may decrease, increase, or remain unchanged. On the other hand, for categories for which we find evidence of the crowding-out effect, such as cereals and fruits and vegetables, the share of spending on the remaining budget decreases as tobacco spending increases. As total budget remains constant, this means that the absolute amount of spending on these categories also decreases.

Table 3. Estimated crowding-out effect by income groups

	All households	Low-income	Middle-income	High-income
Food				
Cereals	-0.00010***	-0.00020***	-0.00011***	-0.00004***
Meat	0.00019**	0.00023	0.00019***	0.00015***
Fish	0.00001	-0.00002	0.00001	0.00001
Milk	0.00005***	0.00009*	0.00004**	0.00001
Other dairy products	-0.00008***	-0.00006	-0.00010***	-0.00006**
Oils and fats	0.00000	0.00001	0.00001	-0.00001
Fruits and vegetables	-0.00005***	-0.00005	-0.00006**	-0.00003
Desserts	-0.00000	0.00001	-0.00000	-0.00002*
Ready-made food	-0.00000	-0.00000	0.00000	-0.00001*
Coffee and tea	0.00002***	0.00005***	0.00001***	0.00000
Other non-alcoholic beverages	0.00002***	0.00004***	0.00002**	0.00000
Clothing	-0.00009***	-0.00023***	-0.00008**	-0.00002

Housing and utilities	-0.00036***	-0.00044***	-0.00035***	-0.00026***
Furniture	-0.00004**	-0.00001	-0.00007**	-0.00003
Health	-0.00002	0.00000	-0.00004	0.00000
Transportation	-0.00002	-0.00005	0.00007	-0.00009
Communication	0.00003*	0.00006	0.00001	0.00002
Recreation and culture	-0.00001	-0.00006*	-0.00006**	0.00005*
Education	-0.00014***	-0.00006**	-0.00019***	-0.00013***
Bars, restaurants, and hotels	0.00005***	-0.00002	0.00001	0.00010***
Alcohol	0.00009***	0.00007***	0.00009***	0.00009***

Source: Authors' calculations

*** p<0.01, ** p<0.05, * p<0.1

Note: Complete results available in Table A4 in the Appendix

The magnitude of the crowding-out effect declines in magnitude for clothing and housing with higher income levels. Recreation and culture were found to be significant in the case of low- and middle-income groups, as lower consumption of these items could particularly affect children's health, future development, and earning potential. Smokers allocate less financial resources to education across all income groups, which again negatively impacts their human development and future productivity, as well as that of their entire household. Spending on tobacco impacts the likelihood of having healthier nutrition, where the gap is more prominent among the poorest households and mostly visible in the case of consumption of cereals.

The results also indicate that tobacco consumption among all income groups crowds in alcohol consumption and provides evidence confirming a strong complementarity of these two categories, as found in the literature.[33–36] Spending on restaurants showed to be positively associated with tobacco expenditure, with the highest magnitude of the impact in the wealthiest group. This result is as expected, considering that there is a relatively larger available budget among the high-income households to be spent on commodities that are not considered as essential.

Conclusions

The problem of tobacco use and its negative relationship with the living standards of the population has been broadly recognized in the scientific research.[37–39] The evidence on

crowding out of tobacco spending shows a high burden, especially in LMICs, many of which continue to have high smoking prevalence. As a result, households with smokers sacrifice spending on other commodities, including those essential for human capital development of all household members and especially children. This issue is specifically concerning in the case of poor households with constrained budgets, as it exacerbates the long-term risk of falling into the poverty trap.

This study analyzed which commodity groups are displaced by tobacco in household budgets in Montenegro. The analysis was conducted using HBS data to estimate a 3SLS model. Overall, the results confirm that tobacco use crowds out other more productive consumption, such as clothing, housing, education, and recreation. On the other hand, a positive effect of tobacco spending was found on the budget shares of non-essential unproductive consumption, including coffee, sugary drinks, bars and restaurants, and alcohol. The existing evidence shows that consumption of these commodities and tobacco are often viewed as a correlated behaviors.[33,35,36] The results by income groups mostly reflect those for the full sample.

One of the limitations of this study is a lack of more recent HBS data, which prevents us from analyzing the crowding-out effect in the last five years, during which certain relevant tobacco control policies have been passed in Montenegro. Moreover, the HBS consumption data are self-reported information, so they may include measurement errors. In addition, as we are using household-level data, we were not able to analyze the impact of the intra-household resource allocation on individual household members.

Despite the above limitations, this study adds to the empirical evidence on the adverse effects of tobacco use on household welfare. The crowding-out effect of tobacco use negatively impacts the economy as a whole, implying reduced investment in human capital development. The estimated household budgetary effects indicate that strengthening and accelerating tobacco control policies is necessary to reduce consumption and spending on tobacco, since it would enhance household- and population-level well-being, especially of the most financially vulnerable groups of society.

Moreover, the estimated positive effect of tobacco spending on budget shares on bars and restaurants raises concerns that the smoke-free policy is not being implemented effectively.

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Appendix

Table A1. COICOP classifications of commodities used in the analysis

Commodities	Description
Tobacco	Tobacco (COICOP group 2.3)
Food and non-alcoholic	Food and non-alcoholic beverages (COICOP group 1)
Cereals	Cereals and cereal products (COICOP group 1.1.1)
Meat	Live animals, meat, and other parts of slaughtered land animals (COICOP group 1.1.2)
Fish	Fish and other seafood (COICOP group 1.1.3)
Milk	Raw, whole, Skimmed, non-animal, and other milk (COICOP group 1.1.4.1 - 1.1.4.4)
Other dairy products	Cheese, yogurt, milk-based dessert and beverages, eggs, and other dairy products (COICOP group 1.1.4.6 - 1.1.4.9)
Oils and fats	Oils and fats (COICOP group 1.1.5)
Fruits and vegetables	Fruits and nuts (COICOP group 1.1.6) and
Desserts	Sugar, confectionary, and desserts (COICOP group 1.1.8)
Ready-made food	Ready-made food and other food products (COICOP group 1.1.9)
Coffee and tea	Coffee, tea, and cocoa drinks (COICOP group 1.2.1)
Other non-alcoholic beverages	Water, non-alcoholic beverages, fruit and vegetable juice, and soft drinks (COICOP group 1.2.2)
Clothes	Clothing and footwear (COICOP group 3)
Housing and utilities	Housing, water, electricity, gas, and other fuels (COICOP group 4)
Furniture	Furnishings, household equipment, and routine household maintenance (COICOP group 5)
Health	Health (COICOP group 6)
Transportation	Transport (COICOP group 7)
Communication	Information and communication (COICOP group 8)
Recreation and culture	Recreation, sport and culture (COICOP group 9)
Education	Education services (COICOP group 10)
Bars, restaurants, and hotels	Restaurants and accommodation services (COICOP group 11)
Alcohol	Alcoholic beverages (COICOP group 2.1)

Table A2. Budget shares spent on different groups of products by smoking and non-smoking households, by income groups

Low-income household	Households without smokers	Households with smokers	Difference	t-stat
Tobacco	0.0%	5.6%	-5.6%	-50.140***
Food and non-alcoholic beverages	49.9%	47.7%	2.3%	3.585***
Cereals	8.0%	7.8%	0.2%	1.365
Meat	11.3%	11.2%	0.1%	0.353
Fish	1.0%	0.9%	0.1%	1.588
Milk	5.0%	4.4%	0.6%	4.038***
Other dairy products	9.0%	8.1%	0.8%	4.745***
Oils and fats	1.7%	1.6%	0.1%	2.109**
Fruits and vegetables	7.8%	7.6%	0.2%	1.457
Desserts	1.9%	2.0%	-0.1%	-1.428
Ready-made food	1.1%	1.2%	0.0%	-0.555
Coffee and tea	1.2%	1.2%	0.0%	1.246
Other non-alcoholic beverages	1.2%	1.2%	0.0%	0.384
Clothes	4.5%	4.7%	-0.2%	-1.036
Housing and utilities	23.2%	19.5%	3.7%	7.187***
Furniture	2.9%	2.9%	-0.1%	-0.650
Health	1.9%	1.6%	0.3%	2.819***
Transportation	6.0%	5.7%	0.2%	1.086
Communication	4.2%	4.2%	0.0%	0.380
Recreation and culture	1.6%	1.8%	-0.3%	-2.373**
Education	0.6%	0.4%	0.2%	1.756*
Bars, restaurants, and hotels	0.8%	0.9%	-0.1%	-1.273**
Alcohol	1.1%	1.4%	-0.3%	-3.685***
Other	3.3%	3.5%	-0.2%	-1.614
Middle-income household	**Households without smokers**	**Households with smokers**	**Difference**	**t-stat**
Tobacco	0.0%	4.4%	-4.4%	-62.184***
Food and non-alcoholic beverages	34.6%	34.5%	0.1%	0.195
Cereals	5.1%	5.1%	0.0%	0.353
Meat	8.8%	9.8%	-1.1%	-5.961***
Fish	0.9%	0.8%	0.0%	0.025
Milk	2.3%	2.1%	0.2%	2.900***
Other dairy products	6.0%	5.7%	0.2%	1.916**
Oils and fats	1.1%	1.0%	0.1%	3.182***
Fruits and vegetables	5.9%	5.5%	0.4%	3.656***

Desserts	1.5%	1.5%	0.1%	1.460
Ready-made food	0.8%	0.8%	0.0%	0.499
Coffee and tea	0.9%	0.8%	0.0%	1.496
Other non-alcoholic beverages	0.9%	1.0%	-0.1%	-2.527**
Clothes	5.6%	6.0%	-0.4%	-2.488**
Housing and utilities	32.3%	26.4%	5.9%	14.480***
Furniture	3.0%	3.4%	-0.4%	-3.619***
Health	3.2%	2.3%	0.9%	6.393***
Transportation	7.3%	7.8%	-0.6%	-3.120***
Communication	4.7%	4.5%	0.2%	2.442**
Recreation and culture	2.2%	2.5%	-0.2%	-2.481**
Education	1.1%	1.1%	0.0%	0.343
Bars, restaurants, and hotels	1.5%	1.9%	-0.4%	-4.999***
Alcohol	1.0%	1.4%	-0.5%	-8.422***
Other	3.5%	3.8%	-0.3%	-2.226**
High-income household	**Households without smokers**	**Households with smokers**	**Difference**	**t-stat**
Tobacco	0.0%	4.4%	-4.4%	-49.521***
Food and non-alcoholic beverages	25.9%	27.0%	-1.1%	-2.397**
Cereals	3.7%	3.7%	0.0%	0.015
Meat	6.7%	7.8%	-1.1%	-5.513***
Fish	1.0%	0.9%	0.0%	0.623
Milk	1.2%	1.2%	0.1%	0.996
Other dairy products	4.1%	4.1%	0.0%	-0.183
Oils and fats	0.9%	0.8%	0.1%	4.813***
Fruits and vegetables	4.8%	4.5%	0.2%	2.108**
Desserts	1.2%	1.2%	0.0%	0.554
Ready-made food	0.6%	0.6%	0.0%	-1.943**
Coffee and tea	0.7%	0.7%	0.0%	-0.059
Other non-alcoholic beverages	0.8%	0.9%	-0.1%	-3.211***
Clothes	5.6%	5.9%	-0.3%	-1.858*
Housing and utilities	38.1%	29.9%	8.3%	15.898***
Furniture	4.0%	3.9%	0.1%	0.691
Health	4.7%	3.1%	1.6%	8.336***
Transportation	6.9%	8.5%	-1.7%	-6.595***
Communication	4.4%	4.2%	0.2%	2.734***
Recreation and culture	2.4%	3.0%	-0.6%	-5.093***
Education	1.1%	1.2%	-0.1%	-0.448
Bars, restaurants, and hotels	2.1%	2.9%	-0.8%	-5.463***
Alcohol	0.8%	1.4%	-0.5%	-9.078***
Other	3.8%	4.6%	-0.8%	-3.003***

Table A3. Test of instrumental variables validity for all households and by income groups

All households	Pagan-Hall test statistics	p - value	Kleibergen-Paap rk LM-test	p - value	Hansen J	p - value	GMM C statistic	p - value	Wald test	p - value
Food and non-alcoholic										
Cereals	1114.664	0.000	420.421	0.000	0.203	0.652	10.745	0.013	27.070	0.000
Meat	188.474	0.000	217.045	0.000	2.518	0.113	79.681	0.000	51.599	0.000
Fish	75.921	0.000	217.045	0.000	1.071	0.301	7.283	0.006	2.829	0.002
Milk	439.589	0.000	217.045	0.000	2.864	0.091	57.405	0.000	50.277	0.000
Other dairy products	618.365	0.000	217.045	0.000	3.309	0.069	26.376	0.000	29.963	0.000
Oils and fats	425.377	0.000	214.368	0.000	24.217	0.079	20.983	0.000	23.796	0.000
Fruits and vegetables	281.115	0.000	217.045	0.000	0.157	0.692	38.780	0.000	37.154	0.000
Desserts	53.092	0.000	31.381	0.000	1.722	0.189	26.670	0.000	18.017	0.000
Ready-made food	135.432	0.000	217.045	0.000	0.097	0.756	2.261	0.045	3.839	0.009
Coffee and tea	561.908	0.000	420.421	0.000	3.718	0.054	22.007	0.000	23.416	0.000
Other non-alcoholic	57.692	0.000	29.746	0.000	2.484	0.115	30.437	0.000	20.584	0.000
Clothes	173.914	0.000	223.585	0.000	0.207	0.649	52.482	0.000	37.580	0.000
Housing and utilities	5.783	0.016	29.821	0.000	0.295	0.587	64.307	0.000	25.067	0.000
Furniture	33.845	0.000	29.746	0.000	0.086	0.770	11.439	0.010	7.698	0.049
Health	110.914	0.000	21.229	0.000	0.022	0.882	9.168	0.027	9.135	0.028
Transportation	9.421	0.002	29.746	0.000	0.014	0.904	164.687	0.000	25.340	0.000
Communication	70.203	0.000	223.585	0.000	0.557	0.456	82.925	0.000	52.805	0.000
Recreation and culture	6.893	0.009	26.256	0.000	4.725	0.659	87.453	0.000	18.057	0.000
Education	725.426	0.000	214.368	0.000	0.003	0.953	26.176	0.000	25.811	0.000
Bars, restaurants, and hotels	10.219	0.001	29.746	0.000	2.354	0.125	297.372	0.000	32.625	0.000
Alcohol	152.910	0.000	214.368	0.000	0.047	0.829	167.971	0.000	123.853	0.000
Low-income	**Pagan-Hall test statistics**	**p – value**	**Kleibergen-Paap rk LM-test**	**p – value**	**Hansen J**	**p – value**	**GMM C statistic**	**p – value**	**Wald test**	**p – value**

Food and non-alcoholic										
Cereals	48.064	0.000	68.926	0.000	1.428	0.490	7.615	0.055	6.511	0.009
Meat	114.030	0.000	68.825	0.000	0.551	0.458	8.265	0.041	3.132	0.027
Fish	119.631	0.000	68.825	0.000	0.705	0.401	11.239	0.011	10.280	0.016
Milk	32.845	0.000	68.926	0.000	5.172	0.075	18.122	0.000	20.330	0.000
Other dairy products	27.635	0.000	68.825	0.000	0.124	0.725	12.548	0.006	13.987	0.003
Oils and fats	14.521	0.000	23.402	0.000	0.307	0.579	12.088	0.007	8.606	0.035
Fruits and vegetables	71.217	0.000	19.248	0.000	1.176	0.278	12.165	0.007	7.486	0.046
Desserts	14.721	0.000	68.825	0.000	2.494	0.114	18.195	0.000	12.967	0.005
Ready-made food	84.573	0.000	68.825	0.000	0.208	0.648	13.743	0.003	20.951	0.000
Coffee and tea	85.146	0.000	68.825	0.000	2.616	0.106	3.396	0.033	2.700	0.044
Other non-alcoholic	64.884	0.000	68.825	0.000	0.717	0.397	9.040	0.029	8.821	0.032
Clothes	35.911	0.000	96.065	0.000	1.428	0.232	45.050	0.000	37.664	0.000
Housing and utilities	0.017	0.009	21.916	0.000	2.883	0.290	15.008	0.002	11.231	0.011
Furniture	7.855	0.005	9.912	0.007	0.489	0.484	18.991	0.000	9.035	0.029
Health	93.562	0.000	9.357	0.009	0.034	0.854	10.526	0.015	8.380	0.039
Transportation	8.616	0.003	22.371	0.000	0.421	0.516	12.413	0.006	7.478	0.048
Communication	8.995	0.003	22.371	0.000	0.452	0.501	23.085	0.000	12.276	0.006
Recreation and culture	25.051	0.000	96.065	0.000	0.348	0.555	20.902	0.000	21.464	0.000
Education	102.456	0.000	96.065	0.000	0.026	0.872	6.672	0.043	5.530	0.014
Bars, restaurants, and hotels	0.010	0.009	12.397	0.002	0.662	0.416	52.596	0.000	9.677	0.022
Alcohol	5.934	0.015	17.052	0.000	0.340	0.560	48.745	0.000	14.866	0.002
Middle-income	**Pagan-Hall test statistics**	**p - value**	**Kleibergen-Paap rk LM-test**	**p - value**	**Hansen J**	**p - value**	**GMM C statistic**	**p - value**	**Wald test**	**p - value**
Food and non-alcoholic										
Cereals	77.547	0.000	36.233	0.000	3.830	0.050	26.206	0.000	13.960	0.003
Meat	31.766	0.000	98.988	0.000	3.805	0.051	108.104	0.000	51.038	0.000
Fish	12.053	0.001	166.308	0.000	0.287	0.592	4.811	0.186	6.400	0.094
Milk	84.915	0.000	98.988	0.000	0.953	0.329	30.959	0.000	23.836	0.000

Other dairy products	94.156	0.000	98.988	0.000	0.682	0.409	28.122	0.000	26.919	0.000
Oils and fats	122.929	0.000	98.988	0.000	0.440	0.507	7.627	0.034	9.526	0.023
Fruits and vegetables	125.274	0.000	98.988	0.000	1.304	0.253	19.545	0.000	18.116	0.000
Desserts	2.472	0.116	15.627	0.000	2.510	0.113	68.288	0.000	9.235	0.026
Ready-made food	153.380	0.000	166.308	0.000	13.155	0.287	11.931	0.008	12.848	0.005
Coffee and tea	57.388	0.000	98.988	0.000	2.481	0.115	11.024	0.012	11.597	0.009
Other non-alcoholic	14.827	0.000	41.260	0.000	0.050	0.823	7.626	0.054	11.301	0.010
Clothes	45.435	0.000	96.242	0.000	0.213	0.644	36.317	0.000	22.416	0.000
Housing and utilities	4.882	0.027	107.950	0.000	2.080	0.149	69.549	0.000	48.126	0.000
Furniture	124.269	0.000	45.117	0.000	0.223	0.637	23.364	0.000	12.112	0.007
Health	127.132	0.000	43.370	0.000	0.110	0.740	16.817	0.001	9.221	0.026
Transportation	6.494	0.011	45.117	0.000	2.462	0.117	48.990	0.000	20.211	0.000
Communication	33.557	0.000	96.242	0.000	3.475	0.062	30.182	0.000	20.074	0.000
Recreation and culture	5.553	0.018	14.141	0.001	1.189	0.275	28.815	0.000	12.065	0.007
Education	219.993	0.000	96.242	0.000	0.107	0.743	14.384	0.002	11.228	0.011
Bars, restaurants, and hotels	4.105	0.043	43.370	0.000	0.720	0.396	95.872	0.000	31.552	0.000
Alcohol	60.011	0.000	96.242	0.000	2.881	0.090	77.174	0.000	65.887	0.000
High-income	**Pagan-Hall test statistics**	**p – value**	**Kleibergen-Paap rk LM-test**	**p – value**	**Hansen J**	**p – value**	**GMM C statistic**	**p – value**	**Wald test**	**p – value**
Food and non-alcoholic										
Cereals	2.020	0.155	51.245	0.000	0.859	0.354	27.002	0.000	18.301	0.000
Meat	71.422	0.000	86.415	0.000	0.528	0.467	28.482	0.000	26.701	0.000
Fish	8.405	0.004	25.758	0.000	0.880	0.348	12.032	0.007	10.467	0.015
Milk	22.944	0.000	51.245	0.000	1.993	0.158	27.083	0.000	19.082	0.000
Other dairy products	31.637	0.000	51.245	0.000	2.678	0.102	41.884	0.000	33.508	0.000
Oils and fats	0.697	0.404	12.403	0.002	0.123	0.726	21.388	0.000	7.991	0.046
Fruits and vegetables	11.401	0.001	51.245	0.000	0.141	0.707	15.934	0.001	13.859	0.003
Desserts	1.454	0.023	12.403	0.002	1.865	0.172	49.362	0.000	9.498	0.023
Ready-made food	106.758	0.000	51.245	0.000	3.327	0.168	9.655	0.022	15.713	0.001

Coffee and tea	70.446	0.000	86.415	0.000	1.834	0.176	10.464	0.015	9.722	0.021
Other non-alcoholic	25.155	0.000	25.758	0.000	1.008	0.315	16.566	0.001	11.392	0.010
Clothes	5.749	0.017	17.227	0.000	0.007	0.931	13.716	0.003	8.028	0.045
Housing and utilities	4.037	0.045	102.957	0.000	2.065	0.151	75.804	0.000	65.337	0.000
Furniture	109.384	0.000	102.957	0.000	0.148	0.700	21.297	0.000	8.231	0.041
Health	18.205	0.000	63.866	0.000	0.264	0.608	8.109	0.044	13.349	0.004
Transportation	94.633	0.000	63.866	0.000	0.017	0.896	24.460	0.000	24.316	0.000
Communication	16.671	0.000	102.957	0.000	1.332	0.249	32.107	0.000	19.624	0.000
Recreation and culture	68.285	0.000	108.837	0.000	0.110	0.740	18.981	0.000	12.538	0.006
Education	315.062	0.000	63.866	0.000	0.047	0.828	8.063	0.045	9.800	0.020
Bars, restaurants, and hotels	62.792	0.000	63.866	0.000	0.844	0.358	16.613	0.001	23.476	0.000
Alcohol	83.514	0.000	92.711	0.000	1.690	0.194	31.563	0.000	59.736	0.000

Notes: Adult share = share of adults out of total household members; asexratio = ratio of male to female adults in household; madultshare = share of male adults out of total household members; lnX = log of total tobacco expenditures; lnX2 = log of total tobacco expenditures squared; s_prev = prevalence by municipality (18+); cig_intensity = average number of cigarettes smoked monthly by municipality (18+)

Table 4. Estimation results: Full sample – part 1

VARIABLES	Cereals	Meat	Fish	Milk	Other dairy products	Oils and fats	Fruits and vegetables	Desserts	Ready-made food	Coffee and tea	Other non-alcoholic beverages
exptob	-0.00010***	0.00019***	0.00001	0.00005***	-0.00008***	0.00000	-0.00005***	-0.00000	-0.00000	0.00002***	0.00002***
	(0.00001)	(0.00004)	(0.00001)	(0.00001)	(0.00002)	(0.00000)	(0.00002)	(0.00001)	(0.00000)	(0.00000)	(0.00001)
lnM	-0.14663***	0.02078	-0.00182	-0.06049***	-0.07285***	-0.00582	-0.00475	0.00777*	0.00240	-0.01572***	-0.01474***
	(0.01714)	(0.01990)	(0.00452)	(0.01551)	(0.01427)	(0.00383)	(0.01228)	(0.00447)	(0.00330)	(0.00376)	(0.00410)
lnM2	0.00880***	-0.00234	0.00016	0.00305**	0.00340***	0.00004	-0.00092	-0.00086**	-0.00046*	0.00088***	0.00099***
	(0.00133)	(0.00158)	(0.00036)	(0.00122)	(0.00112)	(0.00030)	(0.00096)	(0.00036)	(0.00026)	(0.00029)	(0.00032)
tob	-0.04018***	-0.08420***	-0.00353	0.02749**	-0.09515*	0.03124	-0.03875**	0.00914	0.03159	0.00509*	0.03424*
	(0.00681)	(0.01007)	(0.02218)	(0.01304)	(0.04978)	(0.02104)	(0.01717)	(0.02003)	(0.02266)	(0.00265)	(0.01805)
tob*lnM	0.01518	0.02902	0.00181	-0.00958	-0.02866	-0.00953	-0.01185	-0.00321	-0.00982	-0.00121	0.01062*
	(0.02131)	(0.03198)	(0.00699)	(0.02044)	(0.02219)	(0.00655)	(0.01786)	(0.00629)	(0.00700)	(0.00552)	(0.00568)

tob*lnM2	-0.00140	-0.00238	-0.00020	0.00076	0.00212	0.00072	0.00088	0.00029	0.00077	0.00007	-0.00081*
	(0.00166)	(0.00253)	(0.00055)	(0.00159)	(0.00172)	(0.00051)	(0.00139)	(0.00049)	(0.00054)	(0.00043)	(0.00044)
household size	0.00732***	0.00536***	0.00043***	0.00516***	0.00625***	0.00129***	0.00379***	0.00051***	0.00034***	0.00048***	-0.00006
	(0.00034)	(0.00052)	(0.00011)	(0.00025)	(0.00031)	(0.00009)	(0.00029)	(0.00011)	(0.00008)	(0.00006)	(0.00008)
mean age	-0.00033***	0.00017**	0.00005***	0.00000	0.00022***	0.00001	0.00008**	-0.00012***	-0.00006***	0.00003***	-0.00008***
	(0.00003)	(0.00007)	(0.00002)	(0.00003)	(0.00004)	(0.00001)	(0.00004)	(0.00001)	(0.00001)	(0.00001)	(0.00001)
max education	-0.00045***	-0.00304***	0.00026***	-0.00141***	-0.00233***	-0.00024***	-0.00036*	-0.00014*	-0.00020***	-0.00016***	0.00005
	(0.00015)	(0.00032)	(0.00007)	(0.00015)	(0.00019)	(0.00005)	(0.00018)	(0.00007)	(0.00004)	(0.00003)	(0.00005)
economic activity - employed	0.00009	0.00137	0.00032	-0.00153	-0.00317	0.00062	0.00168	0.00052	0.00035	-0.00042	-0.00027
	(0.00158)	(0.00263)	(0.00053)	(0.00179)	(0.00202)	(0.00047)	(0.00165)	(0.00059)	(0.00050)	(0.00034)	(0.00045)
economic activity - pensioner	0.00135*	-0.00040	0.00020	-0.00252***	-0.00515***	0.00047*	0.00086	0.00122***	-0.00032	-0.00026	-0.00003
	(0.00072)	(0.00177)	(0.00037)	(0.00076)	(0.00107)	(0.00028)	(0.00093)	(0.00034)	(0.00025)	(0.00018)	(0.00025)
region - south	-0.00046**	-0.01024***	0.00117***	-0.00148***	-0.00529***	0.00099***	-0.00200***	-0.00007	-0.00043***	-0.00032***	-0.00044***
	(0.00020)	(0.00042)	(0.00013)	(0.00015)	(0.00024)	(0.00009)	(0.00024)	(0.00010)	(0.00007)	(0.00005)	(0.00007)
region - north	-0.00810***	-0.00142**	-0.00230***	0.00691***	0.00604***	0.00150***	0.00405***	-0.00009	-0.00010	0.00080***	-0.00157***
	(0.00036)	(0.00069)	(0.00012)	(0.00034)	(0.00045)	(0.00012)	(0.00043)	(0.00015)	(0.00011)	(0.00008)	(0.00010)
number of children (age 0-2)	-0.00417***	-0.00131	-0.00054	0.00515***	-0.00378***	-0.00055*	0.00070	-0.00035	0.00491***	-0.00028	0.00044
	(0.00101)	(0.00201)	(0.00039)	(0.00096)	(0.00115)	(0.00030)	(0.00109)	(0.00037)	(0.00055)	(0.00018)	(0.00034)
number of children (age 3-6)	-0.00191**	0.00465***	0.00011	0.00173**	-0.00279***	-0.00011	-0.00003	0.00269***	-0.00040*	0.00001	0.00046*
	(0.00081)	(0.00150)	(0.00032)	(0.00071)	(0.00086)	(0.00022)	(0.00079)	(0.00034)	(0.00023)	(0.00015)	(0.00024)
number of elderly 65+	0.00208***	0.00156	-0.00006	0.00360***	0.00375***	0.00029	0.00147**	0.00103***	0.00032**	0.00025*	0.00028
	(0.00050)	(0.00116)	(0.00027)	(0.00055)	(0.00072)	(0.00020)	(0.00072)	(0.00025)	(0.00016)	(0.00014)	(0.00017)
y2	-0.02256***	-0.05323***	-0.00375***	-0.00651***	-0.02073***	-0.00317***	-0.02464***	-0.00481***	-0.00269***	-0.00205***	-0.00663***
	(0.00138)	(0.00307)	(0.00072)	(0.00132)	(0.00186)	(0.00052)	(0.00194)	(0.00065)	(0.00043)	(0.00032)	(0.00047)
y3	-0.01925***	-0.04146***	-0.00374***	-0.00646***	-0.01703***	-0.00295***	-0.02084***	-0.00504***	-0.00143***	-0.00121***	-0.00300***
	(0.00160)	(0.00350)	(0.00083)	(0.00139)	(0.00196)	(0.00058)	(0.00224)	(0.00071)	(0.00055)	(0.00038)	(0.00059)
y4	-0.01870***	-0.06268***	-0.00512***	-0.00421***	-0.01479***	-0.00120**	-0.02828***	-0.00894***	-0.00244***	-0.00264***	-0.00605***
	(0.00153)	(0.00320)	(0.00074)	(0.00134)	(0.00200)	(0.00054)	(0.00199)	(0.00063)	(0.00046)	(0.00034)	(0.00052)
y5	-0.02102***	-0.04491***	-0.00493***	-0.00352**	-0.00989***	-0.00445***	-0.02168***	-0.00685***	-0.00174***	-0.00194***	-0.00511***

	(0.00152)	(0.00353)	(0.00080)	(0.00145)	(0.00215)	(0.00054)	(0.00215)	(0.00071)	(0.00048)	(0.00038)	(0.00053)
y6	-0.02338***	-0.04901***	-0.00638***	-0.00571***	-0.01477***	-0.00491***	-0.03022***	-0.00787***	-0.00159***	-0.00209***	-0.00620***
	(0.00144)	(0.00326)	(0.00068)	(0.00129)	(0.00203)	(0.00053)	(0.00192)	(0.00062)	(0.00046)	(0.00033)	(0.00047)
y7	-0.01729***	-0.05860***	-0.00632***	-0.00887***	-0.02247***	-0.00276***	-0.03042***	-0.00681***	-0.00224***	-0.00159***	-0.00606***
	(0.00145)	(0.00312)	(0.00071)	(0.00139)	(0.00188)	(0.00056)	(0.00196)	(0.00063)	(0.00044)	(0.00034)	(0.00050)
y8	-0.02028***	-0.06806***	-0.00709***	-0.00867***	-0.02246***	-0.00434***	-0.03797***	-0.00852***	-0.00325***	-0.00149***	-0.00678***
	(0.00181)	(0.00310)	(0.00065)	(0.00155)	(0.00193)	(0.00053)	(0.00186)	(0.00060)	(0.00043)	(0.00034)	(0.00050)
y9	-0.02397***	-0.07598***	-0.00825***	-0.01205***	-0.02868***	-0.00565***	-0.03980***	-0.00977***	-0.00301***	-0.00127***	-0.00778***
	(0.00149)	(0.00292)	(0.00066)	(0.00134)	(0.00180)	(0.00053)	(0.00185)	(0.00065)	(0.00044)	(0.00035)	(0.00050)
y10	-0.02624***	-0.07426***	-0.00784***	-0.01207***	-0.02910***	-0.00643***	-0.04019***	-0.00909***	-0.00246***	-0.00179***	-0.00661***
	(0.00140)	(0.00308)	(0.00070)	(0.00139)	(0.00187)	(0.00049)	(0.00192)	(0.00063)	(0.00048)	(0.00033)	(0.00047)
y11	-0.02912***	-0.07250***	-0.00758***	-0.01638***	-0.02600***	-0.00645***	-0.03543***	-0.00927***	-0.00271***	-0.00218***	-0.00788***
	(0.00138)	(0.00311)	(0.00069)	(0.00133)	(0.00188)	(0.00050)	(0.00193)	(0.00063)	(0.00045)	(0.00034)	(0.00052)
y12	-0.02974***	-0.06436***	-0.00634***	-0.01686***	-0.02492***	-0.00625***	-0.03255***	-0.00840***	-0.00030	-0.00254***	-0.00809***
	(0.00139)	(0.00314)	(0.00069)	(0.00126)	(0.00194)	(0.00051)	(0.00194)	(0.00061)	(0.00065)	(0.00033)	(0.00048)
Constant	0.64686***	0.10995*	0.01523	0.28354***	0.38987***	0.04620***	0.14047***	0.01179	0.01639	0.07253***	0.07356***
	(0.05493)	(0.06272)	(0.01416)	(0.04943)	(0.04554)	(0.01228)	(0.03936)	(0.01408)	(0.01059)	(0.01195)	(0.01314)
Observations	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007
R-squared	0.42626	0.15922	0.06682	0.31007	0.31722	0.16850	0.19774	0.08814	0.09293	0.20917	0.09982

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4. Estimation results: Full sample – part 2

VARIABLES	Clothes	Housing	Furniture	Health	Transportation	Communication	Recreation	Education	Bars and restaurants	Alcohol
exptob	-0.00009***	-0.00036***	-0.00004**	-0.00002	-0.00002	0.00003	-0.00001	-0.00014***	0.00005***	0.00009***
	(0.00003)	(0.00006)	(0.00002)	(0.00002)	(0.00004)	(0.00002)	(0.00002)	(0.00002)	(0.00002)	(0.00001)
lnM	-0.03934***	0.55287***	-0.01536	-0.02219	-0.04435**	0.07315***	-0.02340***	-0.10651***	-0.04387***	0.01254**
	(0.01158)	(0.03495)	(0.00969)	(0.01869)	(0.02033)	(0.00622)	(0.00736)	(0.01369)	(0.00998)	(0.00487)
lnM2	0.00563***	-0.04518***	0.00249***	0.00255	0.00555***	-0.00582***	0.00291***	0.00983***	0.00462***	-0.00069*
	(0.00096)	(0.00278)	(0.00081)	(0.00159)	(0.00174)	(0.00049)	(0.00063)	(0.00120)	(0.00086)	(0.00038)
tob	-0.25621***	0.18011**	-0.02147**	-0.05439	-0.09906	0.01091	-0.00309	-0.00105*	-0.16313***	0.08345**

	(0.05943)	(0.08229)	(0.00925)	(0.07350)	(0.11217)	(0.03717)	(0.04681)	(0.00059)	(0.03987)	(0.03721)
tob*lnM	0.08275***	-0.07700	0.00728	0.01638	0.03299	-0.00370	-0.00010	0.00345	0.05660***	-0.02063*
	(0.01948)	(0.05204)	(0.01528)	(0.02451)	(0.03757)	(0.01165)	(0.01554)	(0.02243)	(0.01323)	(0.01150)
tob*lnM2	-0.00656***	0.00734*	-0.00055	-0.00129	-0.00265	0.00027	0.00012	-0.00049	-0.00479***	0.00123
	(0.00159)	(0.00410)	(0.00126)	(0.00203)	(0.00312)	(0.00091)	(0.00128)	(0.00190)	(0.00109)	(0.00089)
household size	-0.00292***	-0.01899***	-0.00232***	0.00076*	-0.00002	-0.00016	-0.00192***	0.00251***	-0.00307***	-0.00035**
	(0.00046)	(0.00093)	(0.00030)	(0.00042)	(0.00053)	(0.00022)	(0.00028)	(0.00035)	(0.00026)	(0.00016)
mean age	-0.00081***	0.00109***	0.00017***	0.00075***	-0.00034***	-0.00005*	-0.00037***	-0.00011***	-0.00010***	0.00015***
	(0.00005)	(0.00013)	(0.00005)	(0.00005)	(0.00006)	(0.00003)	(0.00003)	(0.00004)	(0.00003)	(0.00002)
max education	0.00120***	0.00373***	-0.00032*	-0.00157***	0.00081***	0.00195***	0.00143***	-0.00001	0.00077***	-0.00071***
	(0.00024)	(0.00057)	(0.00019)	(0.00023)	(0.00028)	(0.00013)	(0.00015)	(0.00017)	(0.00015)	(0.00010)
economic activity - employed	-0.01107***	0.03401***	-0.00088	0.00802***	-0.01561***	-0.00746***	0.00101	0.00160	-0.00607***	-0.00167*
	(0.00201)	(0.00551)	(0.00153)	(0.00163)	(0.00213)	(0.00103)	(0.00156)	(0.00151)	(0.00088)	(0.00094)
economic activity - pensioner	-0.00923***	0.03696***	-0.00031	0.00964***	-0.02163***	-0.00414***	0.00207***	0.00437***	-0.00933***	-0.00319***
	(0.00122)	(0.00309)	(0.00097)	(0.00111)	(0.00147)	(0.00070)	(0.00072)	(0.00089)	(0.00067)	(0.00059)
region - south	0.00241***	0.01944***	-0.00078***	0.00273***	-0.00191***	0.00047**	-0.00058**	-0.00003	0.00013	-0.00140***
	(0.00036)	(0.00089)	(0.00030)	(0.00037)	(0.00046)	(0.00021)	(0.00023)	(0.00030)	(0.00022)	(0.00012)
region - north	0.01306***	-0.01525***	0.00092**	-0.00337***	-0.00372***	-0.00233***	-0.00141***	0.00267***	0.00161***	0.00143***
	(0.00056)	(0.00125)	(0.00038)	(0.00043)	(0.00057)	(0.00028)	(0.00030)	(0.00043)	(0.00027)	(0.00024)
number of children (age 0-2)	-0.00916***	0.01322***	0.00578***	0.00304***	-0.00807***	-0.00437***	-0.00751***	-0.01056***	-0.00413***	0.00056
	(0.00154)	(0.00322)	(0.00111)	(0.00111)	(0.00179)	(0.00073)	(0.00088)	(0.00075)	(0.00054)	(0.00060)
number of children (age 3-6)	-0.00428***	0.01555***	0.00268***	0.00392***	-0.00551***	-0.00403***	-0.00181**	-0.01016***	-0.00403***	0.00048
	(0.00120)	(0.00244)	(0.00079)	(0.00082)	(0.00138)	(0.00061)	(0.00074)	(0.00060)	(0.00046)	(0.00041)
number of elderly 65+	0.00094	-0.01459***	-0.00177**	0.00257***	0.00104	-0.00009	0.00052	-0.00347***	-0.00122**	0.00093**
	(0.00081)	(0.00223)	(0.00072)	(0.00089)	(0.00110)	(0.00049)	(0.00051)	(0.00056)	(0.00049)	(0.00043)
y2	-0.00651**	0.19790***	-0.01017***	0.00416**	0.00030	-0.00491***	-0.00664***	0.00112	-0.00310*	-0.00637***
	(0.00270)	(0.00479)	(0.00218)	(0.00167)	(0.00269)	(0.00167)	(0.00164)	(0.00124)	(0.00187)	(0.00104)
y3	-0.01354***	0.15787***	-0.00955***	0.00304	0.00886***	-0.00737***	-0.00427**	0.00228*	0.00089	-0.00489***
	(0.00270)	(0.00582)	(0.00235)	(0.00186)	(0.00293)	(0.00172)	(0.00171)	(0.00119)	(0.00189)	(0.00120)
y4	-0.01580***	0.18470***	-0.01405***	0.00352*	0.02457***	-0.00674***	-0.00445**	0.00077	0.00287	-0.00879***

	(0.00269)	(0.00523)	(0.00241)	(0.00196)	(0.00296)	(0.00161)	(0.00186)	(0.00127)	(0.00193)	(0.00116)
y5	-0.01305***	0.16979***	-0.01198***	0.00358**	0.00865***	-0.01323***	-0.00502***	0.00306**	0.00057	-0.00868***
	(0.00269)	(0.00563)	(0.00231)	(0.00181)	(0.00283)	(0.00168)	(0.00175)	(0.00129)	(0.00186)	(0.00115)
y6	-0.01047***	0.19531***	-0.02014***	0.00514***	0.01320***	-0.00922***	-0.00553***	0.00353**	-0.00003	-0.00827***
	(0.00256)	(0.00522)	(0.00216)	(0.00185)	(0.00280)	(0.00157)	(0.00175)	(0.00137)	(0.00187)	(0.00115)
y7	-0.00722***	0.19500***	-0.01706***	0.00822***	0.02056***	-0.00587***	-0.00760***	0.00249**	0.00028	-0.01050***
	(0.00261)	(0.00475)	(0.00218)	(0.00184)	(0.00277)	(0.00164)	(0.00175)	(0.00122)	(0.00177)	(0.00109)
y8	0.00203	0.19265***	-0.01894***	0.01087***	0.03062***	-0.00787***	-0.00471***	0.00470***	0.00144	-0.00959***
	(0.00276)	(0.00460)	(0.00209)	(0.00182)	(0.00280)	(0.00158)	(0.00180)	(0.00131)	(0.00184)	(0.00105)
y9	0.00432	0.21309***	-0.02084***	0.01109***	0.03436***	-0.00695***	-0.00680***	0.00905***	0.00181	-0.01194***
	(0.00271)	(0.00491)	(0.00214)	(0.00184)	(0.00290)	(0.00159)	(0.00170)	(0.00160)	(0.00182)	(0.00104)
y10	0.00443	0.20357***	-0.01941***	0.01184***	0.03419***	-0.00781***	-0.00131	0.00609***	0.00540***	-0.01316***
	(0.00277)	(0.00468)	(0.00215)	(0.00189)	(0.00270)	(0.00160)	(0.00186)	(0.00129)	(0.00184)	(0.00098)
y11	0.00384	0.19098***	-0.01953***	0.01170***	0.03056***	-0.00111	0.00072	0.00870***	0.00834***	-0.01101***
	(0.00266)	(0.00473)	(0.00222)	(0.00189)	(0.00273)	(0.00165)	(0.00182)	(0.00142)	(0.00183)	(0.00109)
y12	0.01299***	0.16922***	-0.01841***	0.00765***	0.03800***	-0.00264	-0.00026	0.00569***	0.01336***	-0.01315***
	(0.00259)	(0.00465)	(0.00230)	(0.00186)	(0.00270)	(0.00165)	(0.00185)	(0.00136)	(0.00191)	(0.00106)
Constant	0.11590***	-1.57262***	0.04796	0.02821	0.13258**	-0.18131***	0.07318***	0.28246***	0.11787***	-0.03357**
	(0.03486)	(0.10932)	(0.02935)	(0.05523)	(0.05959)	(0.01971)	(0.02113)	(0.03880)	(0.02960)	(0.01569)
Observations	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007	15,007
R-squared	0.2529	0.37591	0.05039	0.14739	0.1899	0.08675	0.12673	0.09396	0.13988	0.06794

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4a. Estimation results: Low-income group – part 1

VARIABLES	Cereals	Meat	Fish	Milk	Other dairy products	Oils and fats	Fruits and vegetables	Desserts	Ready-made food	Coffee and tea	Other non-alcoholic beverages
exptob	-0.00020***	0.00023***	-0.00002	0.00009**	-0.00006	0.00001	-0.00005	0.00001	-0.00000	0.00005***	0.00004**
	(0.00005)	(0.00009)	(0.00002)	(0.00004)	(0.00006)	(0.00001)	(0.00005)	(0.00002)	(0.00001)	(0.00001)	(0.00001)
lnM	-0.12991***	0.08803*	-0.00479	0.05987	0.04910	0.01222	0.07420**	0.00748	0.01764***	-0.00078	-0.01495
	(0.03866)	(0.04809)	(0.00987)	(0.04115)	(0.03367)	(0.00934)	(0.02914)	(0.01165)	(0.00637)	(0.00864)	(0.00974)

lnM2	0.00588*	-0.00815*	0.00044	-0.00777**	-0.00679**	-0.00164**	-0.00858***	-0.00100	-0.00178***	-0.00035	0.00089
	(0.00332)	(0.00421)	(0.00086)	(0.00353)	(0.00292)	(0.00080)	(0.00252)	(0.00102)	(0.00055)	(0.00074)	(0.00084)
tob	-0.19293**	0.15833***	0.04281	0.00248	0.18507	0.02914	0.11012	-0.03760	0.07966	0.00682**	-0.02454***
	(0.07587)	(0.05942)	(0.05282)	(0.15288)	(0.15415)	(0.04924)	(0.13042)	(0.04669)	(0.05165)	(0.00321)	(0.00832)
tob*lnM	0.06818	-0.05991	-0.01473	-0.00273	-0.06417	-0.00940	-0.03969	0.01191	-0.02659	-0.00217	0.00706
	(0.05157)	(0.06826)	(0.01795)	(0.05205)	(0.05257)	(0.01656)	(0.04446)	(0.01606)	(0.01718)	(0.01352)	(0.01416)
tob*lnM2	-0.00602	0.00545	0.00126	0.00034	0.00543	0.00075	0.00356	-0.00092	0.00223	0.00017	-0.00049
	(0.00436)	(0.00585)	(0.00152)	(0.00440)	(0.00446)	(0.00139)	(0.00377)	(0.00137)	(0.00143)	(0.00113)	(0.00120)
household size	0.00976***	0.00133	0.00012	0.00599***	0.00542***	0.00120***	0.00381***	0.00018	-0.00004	0.00024*	-0.00028*
	(0.00096)	(0.00106)	(0.00024)	(0.00067)	(0.00076)	(0.00020)	(0.00065)	(0.00024)	(0.00020)	(0.00013)	(0.00017)
mean age	-0.00068***	0.00015	0.00002	0.00014	0.00057***	-0.00002	0.00005	-0.00023***	-0.00007**	0.00009***	-0.00013***
	(0.00009)	(0.00015)	(0.00004)	(0.00010)	(0.00010)	(0.00003)	(0.00009)	(0.00003)	(0.00003)	(0.00002)	(0.00003)
max education	-0.00043	-0.00036	0.00061***	-0.00289***	-0.00320***	-0.00027**	0.00008	0.00002	-0.00017*	-0.00021***	0.00026**
	(0.00041)	(0.00061)	(0.00015)	(0.00037)	(0.00043)	(0.00012)	(0.00041)	(0.00015)	(0.00010)	(0.00008)	(0.00011)
economic activity - employed	-0.00008	0.00096	0.00028	-0.00358	-0.00441	0.00033	0.00074	0.00014	-0.00016	-0.00024	-0.00054
	(0.00269)	(0.00349)	(0.00082)	(0.00285)	(0.00283)	(0.00077)	(0.00235)	(0.00091)	(0.00080)	(0.00053)	(0.00066)
economic activity - pensioner	0.00224	-0.00016	0.00076	-0.00525***	-0.00550**	0.00151**	0.00083	0.00024	-0.00059	-0.00035	-0.00055
	(0.00168)	(0.00293)	(0.00068)	(0.00183)	(0.00225)	(0.00061)	(0.00185)	(0.00066)	(0.00059)	(0.00041)	(0.00049)
region - south	0.00096	-0.00420***	0.00262***	-0.00304***	-0.00482***	0.00148***	-0.00002	0.00079***	-0.00028	-0.00042***	-0.00028
	(0.00069)	(0.00112)	(0.00038)	(0.00058)	(0.00078)	(0.00028)	(0.00069)	(0.00027)	(0.00021)	(0.00015)	(0.00021)
region - north	-0.01382***	-0.00301***	-0.00188***	0.00879***	0.00796***	0.00159***	0.00710***	0.00039	-0.00037	0.00086***	-0.00161***
	(0.00071)	(0.00110)	(0.00023)	(0.00066)	(0.00079)	(0.00020)	(0.00070)	(0.00026)	(0.00023)	(0.00014)	(0.00019)
number of children (age 0-2)	-0.00617***	-0.00272	-0.00005	0.00725***	-0.00293*	-0.00046	0.00241	-0.00111**	0.00347***	0.00015	-0.00009
	(0.00164)	(0.00260)	(0.00058)	(0.00155)	(0.00175)	(0.00048)	(0.00163)	(0.00057)	(0.00060)	(0.00030)	(0.00050)
number of children (age 3-6)	-0.00480***	0.00519**	-0.00037	0.00276**	-0.00340**	-0.00004	0.00003	0.00217***	-0.00042	0.00017	0.00035
	(0.00129)	(0.00211)	(0.00043)	(0.00128)	(0.00136)	(0.00038)	(0.00121)	(0.00049)	(0.00032)	(0.00023)	(0.00037)
number of elderly 65+	0.00345***	-0.00123	0.00010	0.00466***	0.00084	0.00009	0.00062	0.00123**	-0.00001	-0.00042	0.00078**
	(0.00118)	(0.00228)	(0.00057)	(0.00148)	(0.00164)	(0.00045)	(0.00152)	(0.00052)	(0.00035)	(0.00031)	(0.00037)

y2	-0.01878***	-0.05995***	-0.00417***	-0.00795***	-0.02623***	-0.00277***	-0.02231***	-0.00486***	-0.00334***	-0.00230***	-0.00601***
	(0.00198)	(0.00383)	(0.00090)	(0.00189)	(0.00271)	(0.00072)	(0.00244)	(0.00087)	(0.00060)	(0.00045)	(0.00062)
y3	-0.01354***	-0.03173***	-0.00260**	-0.00476**	-0.01363***	-0.00106	-0.00950***	-0.00204*	-0.00082	-0.00071	0.00039
	(0.00256)	(0.00514)	(0.00113)	(0.00240)	(0.00296)	(0.00090)	(0.00314)	(0.00115)	(0.00086)	(0.00060)	(0.00095)
y4	-0.01484***	-0.06847***	-0.00599***	-0.00133	-0.01531***	0.00109	-0.02813***	-0.00889***	-0.00248***	-0.00304***	-0.00594***
	(0.00273)	(0.00473)	(0.00103)	(0.00288)	(0.00386)	(0.00108)	(0.00302)	(0.00105)	(0.00075)	(0.00062)	(0.00076)
y5	-0.01767***	-0.02892***	-0.00170	0.00292	0.00105	-0.00438***	-0.00720**	-0.00652***	-0.00165**	-0.00143**	-0.00396***
	(0.00279)	(0.00525)	(0.00137)	(0.00280)	(0.00365)	(0.00092)	(0.00355)	(0.00128)	(0.00075)	(0.00065)	(0.00089)
y6	-0.02375***	-0.05640***	-0.00683***	-0.00462*	-0.01175***	-0.00434***	-0.03182***	-0.00820***	-0.00052	-0.00238***	-0.00636***
	(0.00240)	(0.00441)	(0.00095)	(0.00244)	(0.00370)	(0.00088)	(0.00264)	(0.00104)	(0.00085)	(0.00054)	(0.00068)
y7	-0.01616***	-0.06382***	-0.00378***	-0.00835***	-0.03219***	-0.00012	-0.02608***	-0.00642***	-0.00235***	-0.00096	-0.00537***
	(0.00276)	(0.00480)	(0.00109)	(0.00311)	(0.00311)	(0.00108)	(0.00295)	(0.00103)	(0.00068)	(0.00059)	(0.00076)
y8	-0.01651***	-0.07850***	-0.00598***	-0.01036***	-0.02907***	-0.00388***	-0.03641***	-0.00972***	-0.00316***	-0.00157***	-0.00676***
	(0.00351)	(0.00416)	(0.00097)	(0.00285)	(0.00335)	(0.00089)	(0.00284)	(0.00095)	(0.00067)	(0.00057)	(0.00079)
y9	-0.02585***	-0.07291***	-0.00766***	-0.01527***	-0.03621***	-0.00576***	-0.03928***	-0.01000***	-0.00325***	-0.00047	-0.00787***
	(0.00251)	(0.00438)	(0.00096)	(0.00282)	(0.00335)	(0.00098)	(0.00284)	(0.00133)	(0.00068)	(0.00071)	(0.00077)
y10	-0.02995***	-0.07220***	-0.00861***	-0.00689**	-0.03172***	-0.00645***	-0.04132***	-0.01123***	-0.00286***	-0.00096*	-0.00590***
	(0.00217)	(0.00430)	(0.00093)	(0.00329)	(0.00315)	(0.00072)	(0.00252)	(0.00088)	(0.00069)	(0.00055)	(0.00069)
y11	-0.03240***	-0.07747***	-0.00910***	-0.02448***	-0.03833***	-0.00671***	-0.04066***	-0.00949***	-0.00370***	-0.00148**	-0.00769***
	(0.00248)	(0.00489)	(0.00101)	(0.00252)	(0.00327)	(0.00084)	(0.00292)	(0.00116)	(0.00070)	(0.00068)	(0.00078)
y12	-0.04276***	-0.06221***	-0.00509***	-0.02231***	-0.02330***	-0.00640***	-0.03190***	-0.00908***	0.00572	-0.00219***	-0.00793***
	(0.00262)	(0.00578)	(0.00132)	(0.00303)	(0.00448)	(0.00095)	(0.00327)	(0.00130)	(0.00350)	(0.00074)	(0.00087)
Constant	0.65777***	-0.07579	0.02257	-0.04472	0.02847	0.00009	-0.06270	0.02292	-0.02494	0.02678	0.07924***
	(0.11412)	(0.13958)	(0.02859)	(0.12147)	(0.09809)	(0.02768)	(0.08565)	(0.03349)	(0.01886)	(0.02541)	(0.02875)
Observations	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714
R-squared	0.39787	0.15787	0.09887	0.20519	0.23826	0.10371	0.18425	0.09626	0.05220	0.15224	0.12828

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4a. Estimation results: Low-income group – part 2

VARIABLES	Clothes	Housing	Furniture	Health	Transportation	Communication	Recreation	Education	Bars and restaurants	Alcohol
exptob	-0.00023***	-0.00044***	-0.00001	0.00000	-0.00005	0.00006	-0.00006*	-0.00006***	-0.00002	0.00007**
	(0.00007)	(0.00013)	(0.00004)	(0.00004)	(0.00008)	(0.00005)	(0.00003)	(0.00002)	(0.00002)	(0.00003)
lnM	-0.11160***	0.02192	0.00341	0.04487***	-0.05690**	0.03237***	-0.04946***	-0.06188***	-0.02659***	0.03492***
	(0.02293)	(0.05985)	(0.01533)	(0.01603)	(0.02401)	(0.01130)	(0.01144)	(0.01212)	(0.00662)	(0.01019)
lnM2	0.01274***	0.00249	-0.00004	-0.00353**	0.00782***	-0.00167	0.00543***	0.00625***	0.00281***	-0.00264***
	(0.00209)	(0.00531)	(0.00141)	(0.00140)	(0.00221)	(0.00103)	(0.00108)	(0.00115)	(0.00064)	(0.00089)
tob	0.05506***	-0.52527*	-0.01229	-0.08091	-0.08468	-0.04153	0.05739**	-0.03378***	0.01667	0.19540**
	(0.01156)	(0.31241)	(0.07360)	(0.07980)	(0.11990)	(0.08287)	(0.02602)	(0.00964)	(0.04579)	(0.07920)
tob*lnM	-0.02470	0.19513*	0.00296	0.02241	0.02845	0.01816	-0.02072	0.01645	-0.00660	-0.06312**
	(0.04123)	(0.10674)	(0.02585)	(0.02756)	(0.04288)	(0.02841)	(0.02288)	(0.01782)	(0.01593)	(0.02664)
tob*lnM2	0.00274	-0.01779*	-0.00013	-0.00150	-0.00237	-0.00189	0.00191	-0.00183	0.00069	0.00511**
	(0.00364)	(0.00909)	(0.00226)	(0.00237)	(0.00380)	(0.00242)	(0.00200)	(0.00164)	(0.00139)	(0.00223)
household size	-0.00205**	-0.01738***	-0.00072	0.00076	-0.00251***	-0.00184***	-0.00169***	0.00055	-0.00025	-0.00082***
	(0.00089)	(0.00161)	(0.00044)	(0.00057)	(0.00091)	(0.00046)	(0.00050)	(0.00034)	(0.00038)	(0.00030)
mean age	-0.00054***	0.00054**	0.00003	0.00070***	-0.00028**	0.00002	-0.00033***	0.00002	0.00004	0.00020***
	(0.00010)	(0.00025)	(0.00006)	(0.00009)	(0.00012)	(0.00007)	(0.00006)	(0.00004)	(0.00004)	(0.00005)
max education	0.00058	0.00088	0.00040	-0.00119***	0.00044	0.00199***	0.00088***	0.00066***	0.00098***	-0.00042**
	(0.00047)	(0.00094)	(0.00027)	(0.00030)	(0.00049)	(0.00029)	(0.00027)	(0.00024)	(0.00030)	(0.00019)
economic activity - employed	-0.00476*	0.03528***	-0.00461***	0.00581***	-0.01411***	-0.00543***	0.00065	0.00211	-0.00291***	-0.00296**
	(0.00279)	(0.00718)	(0.00167)	(0.00185)	(0.00290)	(0.00152)	(0.00165)	(0.00158)	(0.00088)	(0.00120)
economic activity - pensioner	-0.00173	0.02036***	-0.00212*	0.00819***	-0.01444***	-0.00101	0.00091	0.00226*	-0.00215**	-0.00413***
	(0.00208)	(0.00511)	(0.00121)	(0.00178)	(0.00233)	(0.00139)	(0.00103)	(0.00118)	(0.00088)	(0.00109)
region - south	-0.00148*	0.01666***	-0.00151***	-0.00210***	-0.00112	0.00048	-0.00157***	0.00044	-0.00007	-0.00056
	(0.00083)	(0.00203)	(0.00050)	(0.00057)	(0.00113)	(0.00063)	(0.00048)	(0.00041)	(0.00035)	(0.00035)
region - north	0.01455***	-0.01156***	0.00039	-0.00470***	-0.00690***	-0.00183***	-0.00020	0.00195***	0.00208***	0.00189***
	(0.00091)	(0.00184)	(0.00049)	(0.00059)	(0.00091)	(0.00051)	(0.00047)	(0.00045)	(0.00038)	(0.00038)
number of children (age 0-2)	-0.01036***	0.00458	0.00343***	0.00214*	-0.00494**	-0.00375***	-0.00632***	-0.00369***	-0.00265***	0.00150*

	(0.00195)	(0.00459)	(0.00114)	(0.00118)	(0.00233)	(0.00112)	(0.00129)	(0.00070)	(0.00058)	(0.00080)
number of children (age 3-6)	-0.00389**	0.01346***	0.00041	0.00258**	-0.00258	-0.00183*	-0.00134	-0.00422***	-0.00203***	-0.00031
	(0.00164)	(0.00335)	(0.00083)	(0.00106)	(0.00177)	(0.00094)	(0.00100)	(0.00061)	(0.00051)	(0.00058)
number of elderly 65+	-0.00187	-0.00789**	-0.00192*	0.00037	0.00338*	-0.00016	0.00159*	-0.00150**	-0.00110	0.00069
	(0.00156)	(0.00388)	(0.00102)	(0.00132)	(0.00194)	(0.00101)	(0.00087)	(0.00068)	(0.00077)	(0.00079)
y2	-0.01041***	0.19964***	-0.00359*	0.00622***	-0.00395	-0.00635***	-0.00684***	0.00171	-0.00062	-0.00629***
	(0.00322)	(0.00639)	(0.00213)	(0.00178)	(0.00318)	(0.00194)	(0.00175)	(0.00141)	(0.00118)	(0.00125)
y3	-0.01480***	0.10487***	0.00395	0.00375*	0.00163	-0.01134***	-0.00499***	0.00238*	0.00125	-0.00441***
	(0.00313)	(0.00838)	(0.00276)	(0.00206)	(0.00352)	(0.00223)	(0.00180)	(0.00142)	(0.00114)	(0.00147)
y4	-0.01384***	0.14549***	-0.00429	0.01293***	0.03458***	-0.00479**	-0.00511**	0.00014	0.00629***	-0.00987***
	(0.00380)	(0.00824)	(0.00288)	(0.00313)	(0.00442)	(0.00229)	(0.00219)	(0.00110)	(0.00143)	(0.00160)
y5	-0.01277***	0.10986***	-0.00378	0.00119	0.00585*	-0.01755***	-0.00403*	-0.00073	0.00052	-0.00827***
	(0.00333)	(0.00918)	(0.00235)	(0.00211)	(0.00344)	(0.00216)	(0.00211)	(0.00098)	(0.00114)	(0.00167)
y6	-0.01213***	0.17093***	-0.01271***	0.00680***	0.02582***	-0.00808***	-0.00448**	-0.00050	0.00289**	-0.00818***
	(0.00343)	(0.00754)	(0.00211)	(0.00231)	(0.00413)	(0.00201)	(0.00223)	(0.00161)	(0.00126)	(0.00169)
y7	-0.00566	0.18022***	-0.01386***	0.01330***	0.02560***	-0.00580**	-0.00904***	0.00038	0.00178	-0.01180***
	(0.00370)	(0.00679)	(0.00186)	(0.00261)	(0.00405)	(0.00226)	(0.00205)	(0.00148)	(0.00147)	(0.00168)
y8	0.00263	0.19487***	-0.01442***	0.01180***	0.03241***	-0.00405*	-0.00549**	0.00020	0.00229**	-0.00825***
	(0.00395)	(0.00690)	(0.00192)	(0.00242)	(0.00364)	(0.00222)	(0.00214)	(0.00163)	(0.00114)	(0.00152)
y9	0.00472	0.21427***	-0.01679***	0.01046***	0.03959***	-0.00244	-0.00903***	0.00197	0.00393**	-0.01093***
	(0.00428)	(0.00821)	(0.00200)	(0.00248)	(0.00440)	(0.00242)	(0.00212)	(0.00216)	(0.00162)	(0.00153)
y10	0.00187	0.19617***	-0.01376***	0.01048***	0.04173***	-0.00920***	0.00056	0.00606**	0.00538***	-0.01312***
	(0.00402)	(0.00703)	(0.00197)	(0.00219)	(0.00371)	(0.00208)	(0.00273)	(0.00246)	(0.00143)	(0.00116)
y11	0.00007	0.19836***	-0.01069***	0.01547***	0.03748***	0.00075	0.00000	0.00688**	0.01311***	-0.00922***
	(0.00382)	(0.00751)	(0.00229)	(0.00323)	(0.00396)	(0.00241)	(0.00235)	(0.00283)	(0.00150)	(0.00177)
y12	0.01607***	0.16433***	-0.01298***	0.00637**	0.03869***	-0.00385	0.00245	0.00234	0.01100***	-0.01240***
	(0.00488)	(0.00917)	(0.00259)	(0.00289)	(0.00503)	(0.00279)	(0.00342)	(0.00258)	(0.00166)	(0.00198)
Constant	0.28018***	-0.08552	0.01862	-0.15037***	0.13732**	-0.08501***	0.13765***	0.14310***	0.05736***	-0.09757***
	(0.06411)	(0.17031)	(0.04279)	(0.04670)	(0.06717)	(0.03219)	(0.03161)	(0.03148)	(0.01885)	(0.03010)
Observations	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714	4,714

R-squared	0.20681	0.35243	0.05169	0.12946	0.19668	0.08955	0.08906	0.05272	0.06520	0.07105

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4b. Estimation results: Middle-income group – part 1

VARIABLES	Cereals	Meat	Fish	Milk	Other dairy products	Oils and fats	Fruits and vegetables	Desserts	Ready-made food	Coffee and tea	Other non-alcoholic beverages
exptob	-0.00011***	0.00019***	0.00001	0.00004***	-0.00010***	0.00001	-0.00006**	-0.00000	0.00000	0.00001***	0.00002**
	(0.00002)	(0.00006)	(0.00001)	(0.00001)	(0.00003)	(0.00001)	(0.00002)	(0.00001)	(0.00001)	(0.00000)	(0.00001)
lnM	-0.00734	-0.02302	-0.00706	-0.02406	-0.07660***	0.00673	0.07161***	0.02088**	-0.00093	-0.01552***	-0.00116
	(0.01757)	(0.04507)	(0.00922)	(0.01799)	(0.02821)	(0.00709)	(0.02573)	(0.00862)	(0.00599)	(0.00546)	(0.00626)
lnM2	-0.00166	0.00252	0.00075	0.00051	0.00415*	-0.00080	-0.00633***	-0.00182***	-0.00022	0.00079*	-0.00002
	(0.00140)	(0.00366)	(0.00076)	(0.00141)	(0.00223)	(0.00056)	(0.00205)	(0.00070)	(0.00048)	(0.00043)	(0.00052)
tob	-0.05457***	-0.02102**	0.00016	0.03463**	0.03334**	0.04947	-0.00570*	0.08223*	-0.03463	0.00190*	0.02726***
	(0.01675)	(0.01017)	(0.03973)	(0.01509)	(0.01401)	(0.03803)	(0.00315)	(0.04466)	(0.02727)	(0.00102)	(0.00591)
tob*lnM	-0.01639	0.01649	0.00152	0.01160	-0.00446	-0.01483	-0.00368	-0.02651*	0.01038	-0.00027	0.00789
	(0.02644)	(0.06515)	(0.01285)	(0.02366)	(0.04410)	(0.01191)	(0.03331)	(0.01414)	(0.00872)	(0.00797)	(0.00945)
tob*lnM2	0.00119	-0.00189	-0.00024	-0.00100	-0.00009	0.00110	0.00037	0.00212*	-0.00077	0.00001	-0.00057
	(0.00208)	(0.00520)	(0.00104)	(0.00185)	(0.00346)	(0.00093)	(0.00262)	(0.00111)	(0.00070)	(0.00062)	(0.00075)
household size	0.00655***	0.00379***	-0.00002	0.00432***	0.00554***	0.00092***	0.00266***	0.00052*	0.00059**	0.00070***	0.00023
	(0.00051)	(0.00141)	(0.00027)	(0.00037)	(0.00070)	(0.00017)	(0.00070)	(0.00029)	(0.00024)	(0.00012)	(0.00023)
mean age	-0.00012***	0.00027**	0.00006***	0.00012***	0.00037***	0.00005***	0.00021***	-0.00009***	-0.00002	0.00003**	-0.00003*
	(0.00004)	(0.00012)	(0.00002)	(0.00004)	(0.00007)	(0.00002)	(0.00006)	(0.00002)	(0.00002)	(0.00001)	(0.00002)
max education	-0.00074***	-0.00453***	0.00004	-0.00094***	-0.00244***	-0.00032***	-0.00089***	-0.00030**	-0.00024***	-0.00019***	0.00001
	(0.00017)	(0.00053)	(0.00011)	(0.00018)	(0.00031)	(0.00007)	(0.00028)	(0.00012)	(0.00007)	(0.00005)	(0.00008)
economic activity - employed	0.00033	0.00888*	0.00158*	-0.00152	0.00278	0.00102	0.00327	0.00061	0.00111	-0.00081*	0.00022
	(0.00210)	(0.00471)	(0.00089)	(0.00187)	(0.00326)	(0.00065)	(0.00257)	(0.00103)	(0.00084)	(0.00049)	(0.00070)
economic activity - pensioner	0.00026	0.00556**	-0.00005	-0.00063	-0.00370**	0.00006	0.00135	0.00151***	-0.00002	-0.00053*	0.00065
	(0.00091)	(0.00257)	(0.00047)	(0.00100)	(0.00155)	(0.00039)	(0.00148)	(0.00053)	(0.00030)	(0.00028)	(0.00048)
region - south	-0.00135***	-0.01102***	0.00079***	-0.00178***	-0.00612***	0.00075***	-0.00317***	-0.00032*	-0.00050***	-0.00042***	-0.00061***

	(0.00025)	(0.00069)	(0.00020)	(0.00018)	(0.00038)	(0.00012)	(0.00035)	(0.00017)	(0.00011)	(0.00007)	(0.00012)
region - north	-0.00404***	-0.00026	-0.00216***	0.00550***	0.00446***	0.00169***	0.00337***	-0.00004	0.00003	0.00075***	-0.00149***
	(0.00037)	(0.00100)	(0.00016)	(0.00040)	(0.00063)	(0.00016)	(0.00066)	(0.00022)	(0.00012)	(0.00011)	(0.00013)
number of children (age 0-2)	-0.00192*	0.00776**	-0.00038	0.00504***	0.00071	-0.00026	0.00155	0.00025	0.00720***	-0.00031	0.00128**
	(0.00098)	(0.00352)	(0.00055)	(0.00085)	(0.00150)	(0.00031)	(0.00150)	(0.00057)	(0.00122)	(0.00024)	(0.00054)
number of children (age 3-6)	0.00095	0.01034***	0.00066	0.00247***	0.00307**	0.00020	0.00158	0.00304***	0.00011	0.00041**	0.00059
	(0.00094)	(0.00274)	(0.00048)	(0.00057)	(0.00119)	(0.00026)	(0.00103)	(0.00053)	(0.00038)	(0.00020)	(0.00037)
number of elderly 65+	0.00083	0.00174	-0.00036	0.00034	0.00162	-0.00015	0.00025	0.00123***	0.00022	0.00023	-0.00042
	(0.00064)	(0.00193)	(0.00036)	(0.00065)	(0.00109)	(0.00030)	(0.00114)	(0.00038)	(0.00023)	(0.00022)	(0.00028)
y2	-0.00708***	-0.03286***	-0.00276**	-0.00001	-0.01034***	-0.00306***	-0.02578***	-0.00237*	-0.00085	-0.00208***	-0.00711***
	(0.00183)	(0.00714)	(0.00120)	(0.00134)	(0.00305)	(0.00100)	(0.00548)	(0.00132)	(0.00060)	(0.00060)	(0.00115)
y3	-0.00607***	-0.03768***	-0.00315**	-0.00170	-0.01204***	-0.00355***	-0.02745***	-0.00402***	-0.00011	-0.00180***	-0.00501***
	(0.00196)	(0.00751)	(0.00151)	(0.00138)	(0.00308)	(0.00102)	(0.00562)	(0.00134)	(0.00074)	(0.00065)	(0.00119)
y4	-0.00199	-0.04590***	-0.00402***	0.00155	-0.00558*	-0.00123	-0.02885***	-0.00698***	-0.00089	-0.00299***	-0.00616***
	(0.00200)	(0.00718)	(0.00121)	(0.00141)	(0.00303)	(0.00099)	(0.00551)	(0.00129)	(0.00058)	(0.00059)	(0.00119)
y5	-0.00690***	-0.03323***	-0.00542***	0.00028	-0.00736**	-0.00434***	-0.02802***	-0.00427***	-0.00016	-0.00227***	-0.00545***
	(0.00199)	(0.00744)	(0.00127)	(0.00153)	(0.00324)	(0.00101)	(0.00569)	(0.00140)	(0.00066)	(0.00069)	(0.00118)
y6	-0.00739***	-0.02674***	-0.00574***	0.00051	-0.00758**	-0.00470***	-0.03050***	-0.00564***	-0.00020	-0.00223***	-0.00693***
	(0.00186)	(0.00747)	(0.00115)	(0.00147)	(0.00300)	(0.00102)	(0.00547)	(0.00130)	(0.00061)	(0.00061)	(0.00114)
y7	-0.00030	-0.04144***	-0.00616***	-0.00341**	-0.01224***	-0.00296***	-0.03241***	-0.00440***	-0.00060	-0.00199***	-0.00613***
	(0.00195)	(0.00709)	(0.00115)	(0.00143)	(0.00298)	(0.00103)	(0.00548)	(0.00131)	(0.00060)	(0.00060)	(0.00115)
y8	-0.00571***	-0.05077***	-0.00698***	-0.00403**	-0.01346***	-0.00451***	-0.04084***	-0.00581***	-0.00224***	-0.00197***	-0.00742***
	(0.00194)	(0.00708)	(0.00115)	(0.00168)	(0.00303)	(0.00102)	(0.00547)	(0.00134)	(0.00060)	(0.00062)	(0.00116)
y9	-0.00848***	-0.06192***	-0.00784***	-0.00612***	-0.01890***	-0.00536***	-0.04145***	-0.00723***	-0.00169***	-0.00200***	-0.00788***
	(0.00193)	(0.00701)	(0.00112)	(0.00152)	(0.00297)	(0.00101)	(0.00543)	(0.00129)	(0.00060)	(0.00064)	(0.00115)
y10	-0.01076***	-0.06150***	-0.00821***	-0.00721***	-0.02059***	-0.00659***	-0.04296***	-0.00657***	-0.00088	-0.00246***	-0.00719***
	(0.00187)	(0.00701)	(0.00111)	(0.00146)	(0.00299)	(0.00098)	(0.00543)	(0.00132)	(0.00074)	(0.00061)	(0.00114)
y11	-0.01558***	-0.05707***	-0.00737***	-0.00765***	-0.01486***	-0.00643***	-0.03576***	-0.00785***	-0.00141**	-0.00278***	-0.00814***
	(0.00186)	(0.00714)	(0.00115)	(0.00150)	(0.00307)	(0.00099)	(0.00556)	(0.00131)	(0.00062)	(0.00062)	(0.00123)

y12	-0.01728***	-0.05088***	-0.00701***	-0.00978***	-0.01734***	-0.00685***	-0.03464***	-0.00719***	-0.00047	-0.00309***	-0.00888***
	(0.00189)	(0.00714)	(0.00116)	(0.00143)	(0.00298)	(0.00099)	(0.00561)	(0.00130)	(0.00064)	(0.00060)	(0.00111)
Constant	0.16496***	0.18232	0.02674	0.14282**	0.37011***	0.00056	-0.12064	-0.03476	0.02413	0.07472***	0.02619
	(0.05550)	(0.14039)	(0.02837)	(0.05734)	(0.08910)	(0.02251)	(0.08037)	(0.02659)	(0.01866)	(0.01738)	(0.01919)
Observations	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098
R-squared	0.14846	0.11318	0.06870	0.18737	0.22204	0.09685	0.09164	0.03510	0.08042	0.17943	0.06249

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4b. Estimation results: Middle-income group – part 2

VARIABLES	Clothes	Housing	Furniture	Health	Transportation	Communication	Recreation	Education	Bars and restaurants	Alcohol
exptob	-0.00008*	-0.00035***	-0.00007**	-0.00004	0.00007	0.00001	-0.00006***	-0.00019***	0.00001	0.00009***
	(0.00005)	(0.00009)	(0.00003)	(0.00003)	(0.00005)	(0.00002)	(0.00002)	(0.00003)	(0.00002)	(0.00002)
lnM	-0.08647***	0.19895**	-0.04096	-0.02047	0.13970***	0.09490***	-0.05596***	-0.09666***	-0.06509	0.01339
	(0.03170)	(0.08306)	(0.03171)	(0.03422)	(0.03906)	(0.01622)	(0.01880)	(0.02844)	(0.05588)	(0.01450)
lnM2	0.00893***	-0.01816***	0.00463*	0.00150	-0.00967***	-0.00773***	0.00491***	0.00879***	0.00662	-0.00069
	(0.00265)	(0.00665)	(0.00262)	(0.00272)	(0.00325)	(0.00133)	(0.00160)	(0.00247)	(0.00475)	(0.00116)
tob	-0.26822*	-0.14698*	-0.03621***	0.05659	0.06494	0.08284	-0.05527***	-0.07416***	-0.10803	0.23646**
	(0.13938)	(0.07998)	(0.01266)	(0.15804)	(0.16049)	(0.07427)	(0.01490)	(0.02055)	(0.16687)	(0.10978)
tob*lnM	0.08846*	0.01181	0.01259	-0.02392	-0.01856	-0.02820	0.01724	0.02713	0.04063	-0.06510*
	(0.04555)	(0.12591)	(0.04168)	(0.05011)	(0.05245)	(0.02382)	(0.02445)	(0.03453)	(0.05556)	(0.03418)
tob*lnM2	-0.00715*	0.00147	-0.00097	0.00228	0.00125	0.00232	-0.00132	-0.00236	-0.00365	0.00445*
	(0.00370)	(0.00987)	(0.00341)	(0.00396)	(0.00425)	(0.00190)	(0.00199)	(0.00288)	(0.00458)	(0.00265)
household size	-0.00214*	-0.02443***	-0.00243***	0.00231***	0.00184	0.00017	0.00040	0.00392***	-0.00203**	0.00073*
	(0.00122)	(0.00240)	(0.00078)	(0.00087)	(0.00139)	(0.00058)	(0.00072)	(0.00106)	(0.00086)	(0.00043)
mean age	-0.00082***	-0.00008	0.00006	0.00078***	-0.00013	0.00000	-0.00049***	-0.00004	0.00003	0.00017***
	(0.00009)	(0.00023)	(0.00006)	(0.00008)	(0.00010)	(0.00005)	(0.00006)	(0.00006)	(0.00005)	(0.00004)
max education	0.00152***	0.00568***	-0.00042	-0.00111***	0.00079*	0.00232***	0.00135***	0.00022	0.00059***	-0.00097***
	(0.00039)	(0.00100)	(0.00032)	(0.00035)	(0.00045)	(0.00020)	(0.00024)	(0.00029)	(0.00019)	(0.00018)
economic activity - employed	-0.01888***	0.02516**	-0.00258	0.00573*	-0.01653***	-0.00962***	0.00230	0.00494	-0.00536***	-0.00025

	(0.00336)	(0.01056)	(0.00218)	(0.00321)	(0.00384)	(0.00175)	(0.00383)	(0.00307)	(0.00185)	(0.00177)
economic activity - pensioner	-0.01416***	0.03100***	0.00028	0.00775***	-0.02082***	-0.00530***	0.00236*	0.00586***	-0.00805***	-0.00062
	(0.00181)	(0.00493)	(0.00151)	(0.00177)	(0.00237)	(0.00110)	(0.00121)	(0.00139)	(0.00111)	(0.00092)
region - south	0.00296***	0.02470***	-0.00083*	0.00271***	-0.00322***	0.00128***	-0.00064	0.00064	-0.00040	-0.00165***
	(0.00062)	(0.00143)	(0.00047)	(0.00059)	(0.00070)	(0.00037)	(0.00039)	(0.00051)	(0.00034)	(0.00020)
region - north	0.01292***	-0.01765***	0.00198***	-0.00402***	-0.00347***	-0.00295***	-0.00194***	0.00317***	0.00138***	0.00167***
	(0.00083)	(0.00187)	(0.00069)	(0.00062)	(0.00087)	(0.00040)	(0.00048)	(0.00071)	(0.00038)	(0.00040)
number of children (age 0-2)	-0.00850***	0.00324	0.00402**	0.00154	-0.00720**	-0.00451***	-0.01190***	-0.01304***	-0.00634***	0.00064
	(0.00278)	(0.00501)	(0.00202)	(0.00154)	(0.00302)	(0.00122)	(0.00123)	(0.00150)	(0.00105)	(0.00110)
number of children (age 3-6)	-0.00479**	0.00088	0.00142	0.00327***	-0.00696***	-0.00546***	-0.00490***	-0.01259***	-0.00602***	0.00260***
	(0.00203)	(0.00382)	(0.00124)	(0.00119)	(0.00208)	(0.00091)	(0.00117)	(0.00108)	(0.00094)	(0.00074)
number of elderly 65+	0.00153	-0.00210	0.00066	0.00373***	-0.00371**	-0.00113	0.00117	-0.00538***	-0.00249***	0.00099
	(0.00133)	(0.00351)	(0.00106)	(0.00135)	(0.00178)	(0.00070)	(0.00077)	(0.00096)	(0.00070)	(0.00077)
y2	-0.02288***	0.19342***	-0.01945**	0.00250	-0.00957*	-0.01102***	-0.01012**	0.00469**	-0.00904	-0.00720***
	(0.00697)	(0.00960)	(0.00765)	(0.00346)	(0.00568)	(0.00394)	(0.00502)	(0.00217)	(0.00617)	(0.00251)
y3	-0.03066***	0.18911***	-0.02325***	0.00211	0.00380	-0.01157***	-0.00813	0.00692***	-0.00541	-0.00660**
	(0.00680)	(0.01070)	(0.00785)	(0.00351)	(0.00607)	(0.00394)	(0.00509)	(0.00212)	(0.00623)	(0.00274)
y4	-0.03301***	0.18418***	-0.02580***	0.00504	0.01728***	-0.01098***	-0.00862*	0.00428**	-0.00309	-0.00946***
	(0.00677)	(0.01023)	(0.00774)	(0.00343)	(0.00591)	(0.00381)	(0.00506)	(0.00198)	(0.00610)	(0.00263)
y5	-0.02822***	0.19431***	-0.02465***	0.00576	-0.00162	-0.01670***	-0.00951*	0.00649***	-0.00621	-0.01035***
	(0.00677)	(0.01087)	(0.00770)	(0.00374)	(0.00578)	(0.00384)	(0.00503)	(0.00247)	(0.00598)	(0.00267)
y6	-0.02924***	0.19813***	-0.03121***	0.00454	0.00191	-0.01563***	-0.01081**	0.00910***	-0.00720	-0.00940***
	(0.00676)	(0.01002)	(0.00762)	(0.00356)	(0.00569)	(0.00383)	(0.00498)	(0.00260)	(0.00600)	(0.00273)
y7	-0.02664***	0.21422***	-0.02996***	0.00479	0.00710	-0.01186***	-0.01290**	0.00460**	-0.00632	-0.01218***
	(0.00682)	(0.00967)	(0.00751)	(0.00343)	(0.00566)	(0.00386)	(0.00510)	(0.00197)	(0.00585)	(0.00257)
y8	-0.01374**	0.21068***	-0.03036***	0.00665*	0.01979***	-0.01382***	-0.01042**	0.00887***	-0.00549	-0.01237***
	(0.00693)	(0.00958)	(0.00739)	(0.00341)	(0.00596)	(0.00386)	(0.00504)	(0.00232)	(0.00570)	(0.00258)
y9	-0.01607**	0.22807***	-0.03086***	0.00929***	0.02632***	-0.01191***	-0.01310***	0.01150***	-0.00557	-0.01350***
	(0.00694)	(0.00985)	(0.00739)	(0.00346)	(0.00603)	(0.00387)	(0.00499)	(0.00243)	(0.00555)	(0.00257)

y10	-0.01102	0.22327***	-0.02981***	0.00991***	0.02506***	-0.01311***	-0.00874*	0.01022***	-0.00267	-0.01558***
	(0.00687)	(0.00949)	(0.00756)	(0.00344)	(0.00556)	(0.00386)	(0.00498)	(0.00220)	(0.00570)	(0.00254)
y11	-0.01592**	0.20534***	-0.03137***	0.00893***	0.02058***	-0.00589	-0.00561	0.01422***	0.00146	-0.01332***
	(0.00685)	(0.00959)	(0.00764)	(0.00340)	(0.00569)	(0.00387)	(0.00508)	(0.00245)	(0.00580)	(0.00259)
y12	-0.00135	0.19438***	-0.03086***	0.00346	0.02896***	-0.00902**	-0.00556	0.00954***	0.00595	-0.01591***
	(0.00687)	(0.00935)	(0.00782)	(0.00335)	(0.00552)	(0.00381)	(0.00515)	(0.00224)	(0.00582)	(0.00254)
Constant	0.29543***	-0.37882	0.13698	0.05333	-0.41926***	-0.23953***	0.20339***	0.25016***	0.17082	-0.04082
	(0.09596)	(0.26240)	(0.09636)	(0.10799)	(0.11868)	(0.05053)	(0.05768)	(0.08176)	(0.16871)	(0.04586)
Observations	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098	6,098
R-squared	0.27051	0.26916	0.05917	0.15798	0.18186	0.11279	0.13505	0.08815	0.11089	0.08445

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4c. Estimation results: High-income group – part 1

VARIABLES	Cereals	Meat	Fish	Milk	Other dairy products	Oils and fats	Fruits and vegetables	Desserts	Ready-made food	Coffee and tea	Other non-alcoholic beverages
exptob	-0.00004***	0.00015***	0.00001	0.00001	-0.00006***	-0.00001*	-0.00003	-0.00002**	-0.00001**	0.00000	0.00000
	(0.00002)	(0.00005)	(0.00001)	(0.00001)	(0.00002)	(0.00000)	(0.00002)	(0.00001)	(0.00000)	(0.00000)	(0.00001)
lnM	0.00448	0.23605***	0.02927***	-0.01990	-0.02698	0.00632	0.09887***	0.00751	0.00099	-0.00559	0.00848
	(0.01399)	(0.04598)	(0.00898)	(0.01700)	(0.02869)	(0.00563)	(0.01924)	(0.00793)	(0.00436)	(0.00363)	(0.00518)
lnM2	-0.00163	-0.01816***	-0.00214***	0.00095	0.00053	-0.00072*	-0.00840***	-0.00081	-0.00023	0.00019	-0.00073*
	(0.00104)	(0.00340)	(0.00067)	(0.00122)	(0.00206)	(0.00041)	(0.00142)	(0.00058)	(0.00032)	(0.00027)	(0.00039)
tob	-0.06268***	0.34756***	0.05227	-0.10426	-0.12516**	-0.03445**	-0.09150	-0.00828**	0.00256**	0.01229	0.00180
	(0.01371)	(0.04360)	(0.04183)	(0.06983)	(0.06542)	(0.01598)	(0.10598)	(0.00388)	(0.00119)	(0.01891)	(0.02808)
tob*lnM	0.01810	-0.08921	-0.01416	0.03101	-0.03455	0.00943	-0.02653	0.00132	-0.00025	0.00385	0.00091
	(0.02036)	(0.06572)	(0.01255)	(0.02039)	(0.03811)	(0.00788)	(0.03134)	(0.01143)	(0.00697)	(0.00553)	(0.00836)
tob*lnM2	-0.00130	0.00567	0.00093	-0.00228	0.00235	-0.00063	0.00191	0.00001	0.00000	-0.00028	-0.00008
	(0.00151)	(0.00494)	(0.00094)	(0.00148)	(0.00276)	(0.00058)	(0.00231)	(0.00084)	(0.00051)	(0.00040)	(0.00062)
household size	0.00576***	0.01275***	0.00108***	0.00284***	0.00625***	0.00124***	0.00626***	0.00101***	0.00032**	0.00062***	0.00026
	(0.00040)	(0.00144)	(0.00028)	(0.00028)	(0.00053)	(0.00014)	(0.00058)	(0.00023)	(0.00014)	(0.00010)	(0.00018)

mean age	-0.00010***	0.00049***	0.00008***	0.00003	0.00017***	0.00006***	0.00025***	-0.00005**	-0.00003**	0.00001	-0.00006***
	(0.00003)	(0.00012)	(0.00002)	(0.00003)	(0.00005)	(0.00001)	(0.00005)	(0.00002)	(0.00001)	(0.00001)	(0.00002)
max education	-0.00126***	-0.00536***	0.00010	-0.00109***	-0.00170***	-0.00019***	-0.00067**	-0.00012	-0.00020***	-0.00011**	-0.00031***
	(0.00016)	(0.00062)	(0.00014)	(0.00015)	(0.00032)	(0.00007)	(0.00027)	(0.00010)	(0.00005)	(0.00004)	(0.00008)
economic activity - employed	-0.00363	0.00516	-0.00091	-0.00159	-0.00032	0.00009	-0.00106	0.00013	0.00054	-0.00040	0.00006
	(0.00239)	(0.00883)	(0.00114)	(0.00113)	(0.00465)	(0.00101)	(0.00417)	(0.00124)	(0.00109)	(0.00071)	(0.00096)
economic activity - pensioner	0.00122	-0.00294	0.00039	0.00169**	-0.00059	0.00019	0.00238*	0.00126**	-0.00024	0.00072**	-0.00049
	(0.00090)	(0.00317)	(0.00076)	(0.00067)	(0.00169)	(0.00035)	(0.00141)	(0.00054)	(0.00031)	(0.00028)	(0.00040)
region - south	-0.00127***	-0.01150***	0.00073***	-0.00167***	-0.00498***	0.00078***	-0.00256***	-0.00037***	-0.00041***	-0.00020***	-0.00035***
	(0.00020)	(0.00057)	(0.00017)	(0.00018)	(0.00029)	(0.00010)	(0.00028)	(0.00012)	(0.00007)	(0.00005)	(0.00009)
region - north	-0.00216***	0.00535***	-0.00255***	0.00218***	0.00293***	0.00060***	-0.00070	-0.00066**	0.00000	0.00024*	-0.00128***
	(0.00046)	(0.00196)	(0.00024)	(0.00046)	(0.00087)	(0.00018)	(0.00084)	(0.00030)	(0.00017)	(0.00013)	(0.00019)
number of children (age 0-2)	-0.00146	0.00007	-0.00315***	0.00133	-0.00397***	-0.00050	-0.00203	0.00030	0.00650***	-0.00010	0.00125
	(0.00163)	(0.00548)	(0.00093)	(0.00093)	(0.00148)	(0.00045)	(0.00193)	(0.00078)	(0.00131)	(0.00039)	(0.00093)
number of children (age 3-6)	0.00169	0.00619	0.00120	0.00054	0.00004	0.00009	0.00264	0.00304***	-0.00005	0.00041	0.00171*
	(0.00130)	(0.00459)	(0.00155)	(0.00063)	(0.00151)	(0.00042)	(0.00184)	(0.00080)	(0.00046)	(0.00044)	(0.00093)
number of elderly 65+	0.00078	-0.00134	0.00002	0.00110	0.00187*	0.00005	-0.00030	0.00077**	0.00011	0.00015	0.00036
	(0.00060)	(0.00211)	(0.00046)	(0.00079)	(0.00106)	(0.00025)	(0.00098)	(0.00038)	(0.00020)	(0.00020)	(0.00029)
y2	-0.00807*	-0.02483**	-0.00165	0.00303*	-0.00937**	0.00003	-0.01439**	-0.00304	-0.00245**	-0.00142	-0.00622***
	(0.00440)	(0.01099)	(0.00261)	(0.00169)	(0.00384)	(0.00133)	(0.00630)	(0.00189)	(0.00121)	(0.00088)	(0.00211)
y3	-0.00911**	-0.01996*	-0.00397*	-0.00082	-0.01141***	-0.00096	-0.01544**	-0.00563***	-0.00272**	-0.00043	-0.00565***
	(0.00422)	(0.01159)	(0.00227)	(0.00150)	(0.00376)	(0.00128)	(0.00614)	(0.00183)	(0.00116)	(0.00089)	(0.00207)
y4	-0.00673	-0.03535***	-0.00297	0.00040	-0.00672*	0.00113	-0.01511**	-0.00609***	-0.00280**	-0.00132	-0.00619***
	(0.00429)	(0.01066)	(0.00232)	(0.00145)	(0.00367)	(0.00126)	(0.00604)	(0.00178)	(0.00115)	(0.00086)	(0.00206)
y5	-0.00870**	-0.03523***	-0.00463**	-0.00069	-0.00502	-0.00081	-0.01600***	-0.00532***	-0.00269**	-0.00163*	-0.00624***
	(0.00427)	(0.01064)	(0.00217)	(0.00146)	(0.00387)	(0.00125)	(0.00607)	(0.00178)	(0.00118)	(0.00087)	(0.00206)
y6	-0.00688	-0.02874***	-0.00393*	0.00003	-0.00689*	-0.00155	-0.01584***	-0.00509***	-0.00265**	-0.00116	-0.00519**
	(0.00426)	(0.01072)	(0.00227)	(0.00144)	(0.00357)	(0.00122)	(0.00607)	(0.00179)	(0.00114)	(0.00087)	(0.00208)
y7	-0.00543	-0.03298***	-0.00552**	-0.00138	-0.00851**	-0.00054	-0.01903***	-0.00499***	-0.00300***	-0.00113	-0.00692***

	(0.00425)	(0.01070)	(0.00220)	(0.00140)	(0.00369)	(0.00124)	(0.00605)	(0.00176)	(0.00114)	(0.00084)	(0.00206)
y8	-0.00700	-0.03417***	-0.00487**	0.00280	-0.00667	-0.00013	-0.02202***	-0.00553***	-0.00288**	-0.00012	-0.00601***
	(0.00426)	(0.01099)	(0.00220)	(0.00259)	(0.00412)	(0.00128)	(0.00607)	(0.00179)	(0.00118)	(0.00087)	(0.00208)
y9	-0.00760*	-0.04978***	-0.00592***	-0.00099	-0.01450***	-0.00159	-0.02463***	-0.00732***	-0.00304***	-0.00027	-0.00797***
	(0.00426)	(0.01057)	(0.00216)	(0.00167)	(0.00368)	(0.00123)	(0.00597)	(0.00177)	(0.00116)	(0.00087)	(0.00206)
y10	-0.01150***	-0.05627***	-0.00458**	-0.00330**	-0.01475***	-0.00192	-0.02428***	-0.00579***	-0.00278**	-0.00073	-0.00768***
	(0.00420)	(0.01078)	(0.00232)	(0.00158)	(0.00368)	(0.00122)	(0.00594)	(0.00175)	(0.00118)	(0.00086)	(0.00205)
y11	-0.01112***	-0.04925***	-0.00455**	-0.00560***	-0.01078***	-0.00209*	-0.02033***	-0.00570***	-0.00225*	-0.00096	-0.00847***
	(0.00421)	(0.01058)	(0.00217)	(0.00141)	(0.00353)	(0.00123)	(0.00596)	(0.00178)	(0.00117)	(0.00087)	(0.00204)
y12	-0.01269***	-0.04238***	-0.00380*	-0.00633***	-0.01030***	-0.00169	-0.01926***	-0.00516***	-0.00050	-0.00111	-0.00853***
	(0.00418)	(0.01046)	(0.00217)	(0.00140)	(0.00348)	(0.00122)	(0.00596)	(0.00172)	(0.00117)	(0.00084)	(0.00205)
Constant	0.08946*	-0.66211***	-0.09258***	0.10256*	0.19767**	-0.00621	-0.23873***	0.00460	0.01416	0.03439***	-0.00327
	(0.04652)	(0.15550)	(0.03010)	(0.05915)	(0.09978)	(0.01913)	(0.06506)	(0.02705)	(0.01488)	(0.01246)	(0.01714)
Observations	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195
R-squared	0.14605	0.16541	0.04875	0.10909	0.20068	0.0828	0.09854	0.02938	0.09127	0.12263	0.06028

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects

Table 4c. Estimation results: High-income group – part 2

VARIABLES	Clothes	Housing	Furniture	Health	Transportation	Communication	Recreation	Education	Bars and restaurants	Alcohol
exptob	-0.00002	-0.00026***	-0.00003	0.00000	-0.00009	0.00002	0.00005	-0.00013**	0.00010***	0.00009***
	(0.00005)	(0.00008)	(0.00004)	(0.00004)	(0.00007)	(0.00002)	(0.00004)	(0.00005)	(0.00003)	(0.00002)
lnM	0.04651	-0.03490	0.13691***	-0.14374	-0.19823**	0.07768***	-0.04271	-0.17721***	-0.01707	0.05360***
	(0.03914)	(0.08611)	(0.03791)	(0.08923)	(0.09787)	(0.01657)	(0.03266)	(0.05618)	(0.03349)	(0.01128)
lnM2	-0.00188	-0.00685	-0.00793***	0.01272*	0.01876**	-0.00645***	0.00411	0.01429***	0.00256	-0.00379***
	(0.00303)	(0.00632)	(0.00285)	(0.00696)	(0.00771)	(0.00122)	(0.00254)	(0.00441)	(0.00263)	(0.00082)
tob	0.01250	-0.81899*	0.17035	-0.50686	0.21548	-0.03703	-0.02402	-0.28452***	-0.11603***	0.21048***
	(0.18853)	(0.42032)	(0.17376)	(0.31773)	(0.50088)	(0.08161)	(0.20804)	(0.05383)	(0.02804)	(0.07013)
tob*lnM	0.00082	0.19556	-0.05060	0.15109	-0.05105	0.00947	0.00682	0.08949	0.04756	-0.05447***
	(0.05716)	(0.12388)	(0.05282)	(0.09833)	(0.15479)	(0.02422)	(0.06378)	(0.08386)	(0.04290)	(0.02074)

tob*lnM2	-0.00048	-0.01121	0.00378	-0.01133	0.00304	-0.00063	-0.00045	-0.00699	-0.00449	0.00346**
	(0.00431)	(0.00908)	(0.00399)	(0.00757)	(0.01191)	(0.00179)	(0.00485)	(0.00651)	(0.00327)	(0.00153)
household size	-0.00318**	-0.00967***	-0.00655***	-0.00350	-0.00701***	0.00160***	-0.00344***	0.01151***	-0.00884***	0.00049
	(0.00148)	(0.00232)	(0.00118)	(0.00263)	(0.00264)	(0.00054)	(0.00106)	(0.00188)	(0.00103)	(0.00041)
mean age	-0.00119***	0.00083***	0.00047***	0.00080***	-0.00029**	-0.00009**	-0.00040***	-0.00039***	-0.00041***	0.00016***
	(0.00011)	(0.00023)	(0.00013)	(0.00012)	(0.00014)	(0.00004)	(0.00007)	(0.00010)	(0.00008)	(0.00004)
max education	0.00203***	0.00687***	-0.00152***	-0.00189***	0.00116**	0.00172***	0.00257***	-0.00090**	0.00115***	-0.00067***
	(0.00039)	(0.00116)	(0.00046)	(0.00058)	(0.00057)	(0.00020)	(0.00031)	(0.00040)	(0.00029)	(0.00020)
economic activity - employed	-0.01546***	0.01213	0.00847	0.01313*	-0.01146	-0.00553*	-0.00334	0.00831	-0.01421***	0.00451
	(0.00595)	(0.02000)	(0.00889)	(0.00795)	(0.00818)	(0.00304)	(0.00351)	(0.00576)	(0.00337)	(0.00364)
economic activity - pensioner	-0.01172***	0.04264***	-0.00230	0.00949***	-0.02736***	-0.00398***	0.00213	0.01079***	-0.01780***	-0.00384***
	(0.00227)	(0.00583)	(0.00245)	(0.00275)	(0.00341)	(0.00122)	(0.00153)	(0.00215)	(0.00174)	(0.00096)
region - south	0.00456***	0.01783***	-0.00129**	0.00475***	-0.00067	0.00032	-0.00016	-0.00023	0.00054	-0.00147***
	(0.00052)	(0.00128)	(0.00055)	(0.00074)	(0.00080)	(0.00026)	(0.00039)	(0.00055)	(0.00038)	(0.00019)
region - north	0.00895***	-0.00981***	-0.00000	-0.00381***	-0.00155	-0.00245***	-0.00356***	0.00296**	0.00125	0.00030
	(0.00121)	(0.00312)	(0.00102)	(0.00126)	(0.00148)	(0.00066)	(0.00070)	(0.00116)	(0.00088)	(0.00054)
number of children (age 0-2)	-0.00855	0.02243***	0.02098***	0.00948	-0.01951***	-0.00288	-0.00597	-0.03361***	-0.00699**	-0.00114
	(0.00529)	(0.00830)	(0.00533)	(0.00807)	(0.00715)	(0.00188)	(0.00425)	(0.00389)	(0.00289)	(0.00141)
number of children (age 3-6)	-0.00557	0.00390	0.01501***	0.01376***	-0.00863	-0.00592***	-0.00135	-0.02801***	-0.00996***	0.00104
	(0.00426)	(0.00621)	(0.00493)	(0.00492)	(0.00623)	(0.00153)	(0.00306)	(0.00363)	(0.00242)	(0.00126)
number of elderly 65+	0.00413**	-0.00355	-0.00418**	0.00406*	-0.00066	-0.00048	0.00036	-0.00533***	0.00017	-0.00052
	(0.00173)	(0.00402)	(0.00173)	(0.00229)	(0.00270)	(0.00082)	(0.00116)	(0.00150)	(0.00118)	(0.00067)
y2	-0.03298**	0.20122***	-0.02886*	-0.00413	0.01574	0.00439	-0.03402**	0.01187**	-0.02598	-0.01000
	(0.01678)	(0.02696)	(0.01571)	(0.01540)	(0.01785)	(0.00709)	(0.01667)	(0.00486)	(0.02303)	(0.00677)
y3	-0.04748***	0.21248***	-0.03371**	-0.00036	0.01398	0.00388	-0.02721	0.01379***	-0.02033	-0.00797
	(0.01588)	(0.02614)	(0.01586)	(0.01508)	(0.01674)	(0.00666)	(0.01661)	(0.00476)	(0.02297)	(0.00686)
y4	-0.05373***	0.22283***	-0.02986*	-0.00948	0.01649	-0.00263	-0.02894*	0.01705***	-0.02064	-0.01166*
	(0.01596)	(0.02608)	(0.01576)	(0.01483)	(0.01646)	(0.00658)	(0.01665)	(0.00488)	(0.02296)	(0.00683)

y5	-0.05071***	0.21263***	-0.02709*	-0.00142	0.01524	-0.00419	-0.02974*	0.02110***	-0.01817	-0.01164*
	(0.01591)	(0.02661)	(0.01583)	(0.01473)	(0.01672)	(0.00662)	(0.01666)	(0.00501)	(0.02300)	(0.00677)
y6	-0.04394***	0.22166***	-0.03448**	0.00139	0.00833	-0.00219	-0.03054*	0.01780***	-0.02228	-0.01216*
	(0.01595)	(0.02600)	(0.01554)	(0.01496)	(0.01654)	(0.00663)	(0.01663)	(0.00478)	(0.02297)	(0.00677)
y7	-0.04061**	0.19364***	-0.02574	0.00440	0.02475	0.00204	-0.03038*	0.02015***	-0.02108	-0.01224*
	(0.01599)	(0.02618)	(0.01583)	(0.01496)	(0.01648)	(0.00653)	(0.01662)	(0.00525)	(0.02288)	(0.00679)
y8	-0.03820**	0.17170***	-0.03070**	0.01155	0.03380**	-0.00371	-0.02804*	0.02095***	-0.01924	-0.01196*
	(0.01595)	(0.02580)	(0.01559)	(0.01533)	(0.01633)	(0.00662)	(0.01673)	(0.00486)	(0.02285)	(0.00675)
y9	-0.02937*	0.19989***	-0.03368**	0.00942	0.03229**	-0.00338	-0.02875*	0.02816***	-0.01901	-0.01537**
	(0.01585)	(0.02599)	(0.01561)	(0.01513)	(0.01625)	(0.00673)	(0.01659)	(0.00567)	(0.02286)	(0.00671)
y10	-0.02912*	0.20150***	-0.03684**	0.01125	0.03276**	-0.00014	-0.02120	0.01681***	-0.01206	-0.01524**
	(0.01606)	(0.02591)	(0.01570)	(0.01537)	(0.01629)	(0.00661)	(0.01683)	(0.00461)	(0.02297)	(0.00690)
y11	-0.02649*	0.18302***	-0.03505**	0.01020	0.03075*	0.00455	-0.02149	0.02055***	-0.01494	-0.01425**
	(0.01599)	(0.02580)	(0.01562)	(0.01505)	(0.01626)	(0.00667)	(0.01673)	(0.00483)	(0.02293)	(0.00698)
y12	-0.02410	0.15988***	-0.03283**	0.00824	0.04198***	0.00633	-0.02397	0.01970***	-0.00641	-0.01504**
	(0.01589)	(0.02555)	(0.01552)	(0.01492)	(0.01609)	(0.00659)	(0.01669)	(0.00456)	(0.02288)	(0.00695)
Constant	-0.07184	0.59633**	-0.48297***	0.39363	0.57293*	-0.19169***	0.16938	0.53888***	0.08214	-0.16783***
	(0.12707)	(0.29483)	(0.12830)	(0.28772)	(0.31083)	(0.05684)	(0.10442)	(0.17803)	(0.11070)	(0.03760)
Observations	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195
R-squared	0.32953	0.42339	0.0594	0.12794	0.21731	0.08674	0.14154	0.15291	0.18884	0.08252

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1; Note: exptob – expenditure on tobacco; lnM – logarithm of total expenditure without tobacco; lnM2 – logarithm of total expenditure without tobacco squared; tob – dummy variable indicating smoking and non-smoking households (1-consumers, 0-non consumers); y2-y12 – year fixed effects