# Exploring the impact of VAT reduction for good and services consumption expenditures

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## Abstract

The well-being of people is the priority on the agenda of every country together with the economic growth but more over under the current difficult economic situation due to natural and pandemic adversities. The example of the recent pandemic situation due to coronavirus, after the crisis of 2009, reconfirmed that the economy and the people are vulnerable to the effects of crisis. Lower employment, lower wages, higher inflation and increase of poverty are some of the effects of the crisis that need to be addressed from the policy makers. The study will use the data from household budget survey to construct a line of relative poverty based on the consumption expenditures and measure the development of the indicator during 2007-2017. The aim of this manuscript is to measure the effect of applying a VAT reduction in food consumption parallel with other countries, in a simulated situation towards reduction of poverty.

**Keywords:** Consumption expenditures, consumer price index, relative poverty, food consumption, VAT.

## Introduction

Nowadays, the economy all over the world is suffering crisis effects. After the financial and economic crisis of 2008-09, other unpredicted events took place in the latest 2000, different earthquakes, bad weather causing damages and floods, and recently the pandemic situation due to COVID19. Those events though do not have an intrinsic economic root, and theyare not parts of a cyclic course of the economy, have a substantial impact on the countries welfare, affecting economic growth and the life of people and individuals moreover, the most vulnerable segments of the society.

Crisis causes lower economic growth that is accompanied by lower levels of employment and higher unemployment, lower wages, higher inflation and reduction of purchasing power and the social marginalisation of the less well off. In general, the investments fall awaiting a more favourable economic climate, and the consumption decrease because of the need to face eventual difficult economic situation. The former aspects in turn generate lower levels of production, further reduction of economic growth rates and so on. The ultimate result is an increase on the poverty levels, deterioration in well-being, and other important aspects of life such as education and health care for the poorest layers of the society.

To ensure sustainability on the country welfare, the governments apply different methods based on the redistribution of the incomes aiming the reduction on poverty and inequality and stimulatethe social inclusion. The focus often is to sustain the poor

people, the vulnerable groups, like the oldest, children, women and youth, as well as disabled people or those with chronic diseases.Beside the social transfers that have often a major role, especially in low- and middle-income countries, there are other mechanisms that can help the maintenance of the well-being that we are not going to explore in details given that this is a very large issue. In this study we will focus instead in one of the aspects related to the erosion of the consumption in difficult situation due to the inflation.

It is known that a high inflation cause lower consumption as a result of lower purchasing power, and people buy less goods and services with the same budget. Thereof, an increase on employment and the wages is needed to maintain the same level of consumption but in difficult times, there is a completely opposite situation.In addition, the inflation is a permanent phenomenon is a permanent phenomenon that requires constant addressing especially for the most basic needs such as food, utilities, some products related to education, health etc.In this context, one of the mechanisms that might be applied is the reduction of VAT (Value Added Tax) included in the price of good and services. Through this method, it is expected to maintain the level of welfare in case of crisis but it can be functional even in a less dramatic course of the economy.

There are critics that oppose the application of VAT for implying higher prices especially to the low-income consumer. They sustain that while the VAT spreads the tax burden on the added value of a good as it moves through the supply chain, from raw material to final product, in practice the increased costs are typically passed along to the consumer, penalizing the low-income. According to these critics, the negative potential effects of VAT on lower-income individuals can be mitigated to some extent if the government exclude certain necessary household goods or foodstuffs from the VAT or provided rebates or credits to low-income citizens to offset the effects of the tax.[1]

Countries of European Union apply a standard rate to the supply of most goods and services that cannot be less than 15%. However, different countries apply reduced rates for specific goods and services that cannot be less than 5%. France, Spain, Croatia, Italy, Hungary, Poland, and Romania apply different VAT in foodstuff.[2]

This study aims to explore the possibility to smooth the impact of inflation through the application of VAT reduction in the country welfare, measured in this case by consumption expenditures. The paper will be divided further in 5 sections. Section 2 will be about the exposure of the problem and the data needed to the study. Section 3 will present the methodology used for calculations while Section 4 will resume the results and findings. Section 5 will end with conclusions and discussions.

**2. Problem exposure, data available and preparatory computation**

**2.1 Budget and structure allocated to the consumption by Albanian households**

The data on consumption expenditures in Albania are based on the Household Budget Survey (HBS) conducted by INSTAT from 2007. The data used in this paper include the period from 2007 to 2017, but only from 2014 the survey has been carried on continually with annually results, while 2007 has been followed by another

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[1.] Value-Added Tax (VAT) Definition from investopedia.com.

[2] VAT rules and rates: standard, special & reduced rates - Your Europe, europa.eu).

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survey in 2009. HBS is conducted near households and collects information on the expenditures of household and their members over a period of 1 year. It is based on the principle of homogeneous distribution of the sample over time and the territory of the country to include the seasonal changes and to ensure the representation of each area in all months of the year.

The data are collected through a diary left to household that fulfil it during 14 days recording the purchases of goods and services that are most frequent, basically food and other articles for personal care, cleaning etc. There is also a special dairy to fulfil with the products produced and consumed by their own during the same period. The auto consumption is included later in the total consumption expenditures of household through an evaluation process with the market prices of the area. Then, the interviewer use a face-to-face interview to collect the information on dwelling and household members, the expenditures on utilities, health, education etc. in general, these are the expenditures in goods and services with a higher value and less frequency.

The information on household consumption expenditures is used then to create the consumption aggregate based on the Classification of Individual Consumption According to Purpose (COICOP) to provide information on the level and the structure of consumption expenditure in Albania and other indicators related to the socio-demographic characteristics of individuals and typology of households. Another important purpose of this survey is to provide the weights of the basket to update the Consumer Price Index that reflect the inflation in the country. The total consumption expenditures of households refer to the monthly average and represent the expenditures of an average household composed by four persons.

**2.2 Deflation of nominal consumption to eliminate the influence of rising prices**
During the period 2007-2017, the consumption expenditures in Albania have known a fluctuation that reflects the effect of the 2009 crisis with a drop in 2009 and gradually recovering thereafter (Figure 1in Annex[3]). What it is evident, analysing the allocation of the budget through the different groups of consumption expenditures households is that food expenses make up almost half of the total budget of the Albanian households (Table 1 in Annex).

This is a particular situation for our country given that in the other countries the share of food expenditures occupy a much smaller part of the total budget dedicated to the consumption by the side of households (Table 2 in Annex). The table shows that according the latest data form April 2019, for developed and high income countries, the percentage of consumer expenditures spent on food (including non-alcoholic beverages) varies from 8 to 15% while the countries that joined lately the European Union present shares between 15 to 20%. Even the countries in the region present lower shares of food to total expenditures that goes from 25% in Serbia to 30% in Macedonia.

The changes in the consumption expenditures include however the change of consumption price index (Figure 2 and Table 3 in Annex). Therefore the inflation

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[3] Some of the data related to the study are chosen and organized in Annex with respected references. The own calculations are presented in the text of the paper or in Annex but they do not express official data rather than calculations of the author to the scope of the study.

might be removed to analyse the real development of this indicator. The missing data on consumption in 2008 and 2010-2013 makes difficult to compute the real consumption therefore we have chosen to deflate the data in expenditures using 2007 and re-indexing the consumer price index from the same year.Results from the calculation are resented in the Table 4 and 5 in the Annex while nominal and real total and food consumption expenditures during 2007-2017, are presented in Figure 2.2.1.Given that food expenditures are the most important item in the basket, the deflation of the consumer expenditures will extend also to the group 'food and non-alcoholic beverage'.
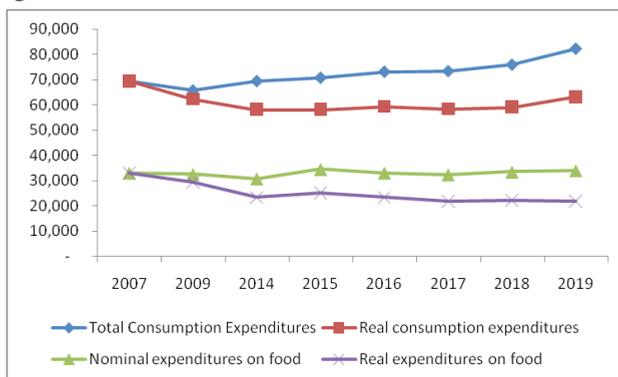


**Figure 2.2.1 Nominal and Real total and food consumption expenditures, in %**

Both the total consumption and food expenditures decrease gradually during the period that means households decrease their power of purchases buying less goods and services for the same budget dedicated to consumption. It is therefore, a need to cope with the effect of inflation if the aim is to support the households in maintaining good standard of living overtime.

**2.3 Application of VAT with different rates for specific items**
The deflation of nominal expenditures by CPI shows that the real consumption expenditures, during the period of reference, are lower due to the raise in the prices. That means, people are obliged to decrease the consumption of goods and services needed to meet their needs and reallocate the budget toward the more necessary items for subsistence, or to maintain a minimum of leaving standard, among the different consumption groups.
Because of the tendency of the consumer to maintain their standards, the level of consumption hide the fact that less product or services have to be bought using the same budget. This makes the situation even worse if the wages remain at the same level or do not rise adequately to cope with the inflation. To address the issue, the reduction of VAT is an efficient tool to maintain stable the welfare given that reducing the VAT included in the goods, the necessary consumption will be affordable even by less wealthy people.
The reduction of VAT for food products seems of particular interest in Albania, given the substantial share of this item in the total budget. This is even more effective when

it comes to the poorer household, for which the share of the food is even higher than the rest of the population. The share of first quintile allocated to food is about 1.6 times higher than that of fifth quintile during 2007-2017 (Table 6 in Annex).
To illustrate the eventual impact of VAT reduction on the well-being of Albanian households, we applied rates of 5% and 10% to the food products instead of the actual 20%. HBS data from 2007 to 2017 have been used to calculate the synthetic indicator of relative poverty to explore the changes in number and percentage of 'poor' households as a result of VAT reduced for food consumption. To the scope of the study, total consumption and food expenditures only,are taken into consideration but the study may also extend to other products or services necessary for the family or individual in other studies from analysts and policy makers whenever the issue would raise interest.
The aim of the study, however, is not to provide figures about poverty but to illustrate the impact of reducing VAT to the consumption and the welfare of population especially for the layers more in need.

## 3. Methodology

There are different methods and measurement of poverty but all of them are based on the same principle. First, a threshold is set to create the poverty line. This threshold divides the population in two big groups: poor and not poor. The poverty line is the minimum required to be achieved by an individual to be considered not poor according to the field of interest. The poverty can measure this way the poverty related to welfare, multidimensional aspects or material deprivation, subjective satisfaction of the needs etc. From the economic point of view, the main distinction resides in computing poverty based on the consumption aggregate or the total income of households.
Developed countries and all the members of European Union calculate the poverty based on the incomes. They use as poverty line the 60% of the median of the equalized disposable income. Therefore, the at-risk-of poverty rate is equal to the share of people with an equalised disposable income less than the poverty threshold. This measure of poverty is relative that means, it is not necessarily a measure of poor wealth but it is a relative measure of low income in comparison of other people of the same country. The limitation of this method is that it relies in a good representation of incomes that is typical for countries that dispose good registers on income and have lower level of informality. Countries that are in development, and do not have in place systems for having sufficient accurate and reliable data on income might encounter difficulties in having reliable results on total income and relative poverty. But, the situation become even more problematic for poor countries, hence the poverty is where the poverty is measured in these cases through absolute poverty that maintain a fixed threshold at constant prices to measure the changes of the indicator in time. Given the availability of the data about the consumption expenditures and the need to measure the impact of the Vat reduction in a simulation of the changes that it might produce to the expenditures of Albanian households, to calculate the poverty, the consumption aggregate is used in our study instead of the income. The use of consumption is considered in a way as the part of the disposable income to meet the household requirements, it is not only more favourable in Albania that suffer the accuracy and

reliability in reporting the incomes (with the consumption practically higher than incomes), but also because the current consumption of an individual or household includes the consideration of the past, present, and future sources of income.

Expenditures change less than incomes when short term changes in incomes are encountered, and can therefore be considered a better measure of living standards. Households can smooth expenditure by, for example, adjusting savings, drawing on wealth and borrowing, whereas incomes may be more volatile. This led to Friedman's "permanent income hypothesis", which suggests that decisions made by consumers are based on long-term income expectations rather than their current income.[4]

However, using a poverty line based on the consumption or in the incomes will produce different results regarding poverty rate and in most cases, the poverty measured by consumption expenditures will be lower than the poverty based on the income. This is because income and consumption have different distributions in the life cycle of households or individuals.

To compute the poverty line and poverty rates based on HBS data, the relative poverty is used and the aggregate of consumption of household's equalised for the OECD modified scale.The equalised household size reflects the fact that larger households have larger consumption expenditures but not proportionally to the number of households due to economies of scale. Therefore the household benefits from common expenditures such as payments for rent, utilities, transport etc. that are not multiplied by the number of the members but following certain rules that assign to each member a value according to the age. The most common used lately is called Modified OECD scale that assigns a value of 1 to the household head, of 0.5 to each additional adult member and of0.3 to each child.

The poverty line is calculated as 60 percent of the equivalent median consumption expenditure so the people on poverty are those whose equalised consumption expenditures are below this poverty line. The concept is similar with at-risk-of poverty given that the poverty line is calculated as a relative one changing each time according to the level of consumption. The fluctuation is smoothed by using median instead of consumption that is more solid towards extreme values (too small or too large) of the consumption expenditures. However, the poverty measured through the relative indicator like 60% of median does not necessarily reflect a deterioration of the well-being in the levels of subsistence (that is more pertinent to the absolute poverty) rather than some people are doing worse off in relation to the other part of the society. Beside the poverty threshold set to 60% of the median, the dispersion around the line is calculated that give the probability or risk of being in poverty or falling into poverty in the future. This indicator is computed as the share of people with equalised consumption expenditures below 50% and 70% of the equalised consumption expenditures.

## 4. Empirical results and findings

The computation of the at-risk-of poverty rate based on the equivalised consumption expenditures for the period 2007-2017 give an overview about the percentage of people that are given to spend less for consumption in their day life than other people in the

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[4] Chapter 3: Equivalised income - Office for National Statistics, ons.gov.uk.

country (Table 4.1). The threshold set to 60% of the median equivalised consumption expenditures, two other rates are calculated to present the sensibility of the poverty that is people that are positioned above and below the threshold (Table 4.2).

The dispersion around the threshold show that a change in the median, setting it 10 percentage points below, reduces substantially the poverty rate. On the other hand, the percentage of the people that consume less than 70% of the median is about one quarter of the population, therefore if for some reason the median is increased due to external factors and not as a result of genuine increase in consumption, the number of people that will become under the threshold will increase dramatically (Table 4.3).

Table 4.1 At-risk-of-poverty and dispersion around the threshold, in %

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Under 60% of the median equivalised consumption expenditures | 17.1 | 16.8 | 19.5 | 16.1 | 18.1 | 17.5 |
| Under 50% of the median equivalised consumption expenditures | 10.3 | 7.7 | 11.8 | 8.7 | 10.7 | 9.7 |
| Under 70% of the median equivalised consumption expenditures | 25.7 | 22.8 | 27.4 | 24.7 | 26.9 | 25.7 |

*Source: 2007-2017 HBS data, author calculation*

**Table 4.2 At-risk-of-povery threshold based on the equivalised consumption expenditures, in ALL**

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Under 60% of the median equivalised consumption expenditures | 14,140 | 13,777 | 14,427 | 15,129 | 15,529 | 15,747 |
| Under 50% of the median equivalised consumption expenditures | 13,896 | 13,483 | 13,945 | 31,040 | 29,775 | 15,432 |
| Under 70% of the median equivalised consumption expenditures | 13,344 | 13,090 | 26,133 | 29,316 | 28,121 | 15,021 |

*Source: 2007-2017 HBS data, author calculation*

**Table 4.3 People under the at-risk-of-poverty threshold based on the equivalised consumption expenditures, in number**

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|

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| | | | | | | |
|---|---|---|---|---|---|---|
| Under 60% of the median equivalised consumption expenditures | 503,820 | 491,867 | 561,032 | 466,787 | 519,860 | 501,531 |
| Under 50% of the median equivalised consumption expenditures | 304,714 | 226,973 | 337,472 | 252,190 | 308,255 | 278,619 |
| Under 70% of the median equivalised consumption expenditures | 758,182 | 670,246 | 786,719 | 713,648 | 773,246 | 737,678 |

*Source: 2007-2017 HBS data, author calculation*

Taking into consideration two different levels of reduction for VAT applied to the food consumption, the calculation about the poverty rate is done based on the 60% of the median consumption expenditures where the reduced budget used for consumption includes food consumption expenditures with VAT equal to 5 and 10 per cent (Table 4.4).

Because of the changes in the median (Table 4.5), both applications reduce drastically the at-risk-of poverty rate with a reduced number of people that 'escape from the poverty' or the risk to fall below a certain level of consumption that is the minimum of the living standard of their society (Table 4.6).The benefit that comes from the application of reduced VAT for food consumption is not an artificial tool, because the consumption expenditure is supposed to be reduced maintaining the same level of consumption but paying a lower price or at a lower cost.

**Table 4.4At-risk-of-poverty based on the consumption expenditures by different VAT application, in %**

| | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| VAT = 20% | 17.1 | 16.8 | 19.5 | 16.1 | 18.1 | 17.5 |
| VAT = 10% applied to food purchases | 9.5 | 9.0 | 13.5 | 9.6 | 13.4 | 9.5 |
| VAT = 5% applied to food purchases | 10.1 | 9.4 | 13.9 | 9.9 | 12.5 | 10.0 |

*Source: 2007-2017 HBS data, author calculation*

**Table 4.5 60% of the median equivalised consumption expenditures, by different VAT application, in ALL**

| | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| VAT = 20% | 14,140 | 13,777 | 14,427 | 15,129 | 15,529 | 15,747 |
| VAT = 10% applied to food purchases | 13,896 | 13,483 | 13,945 | 31,040 | 29,775 | 15,432 |
| VAT = 5% applied to food purchases | 13,344 | 13,090 | 26,133 | 29,316 | 28,121 | 15,021 |

*Source: 2007-2017 HBS data, author calculation*

**Table 4.6 People under the threshold of at risk of poverty, by different VAT application, in numbers**

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|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| VAT = 20% | 503,820 | 491,867 | 561,032 | 466,787 | 519,860 | 501,531 |
| VAT = 10% applied to food purchases | 280,538 | 264,105 | 387,270 | 276,697 | 383,984 | 273,093 |
| VAT = 5% applied to food purchases | 299,855 | 275,467 | 399,417 | 286,773 | 358,875 | 286,302 |

*Source: 2007-2017 HBS data, author calculation*

Results show that, when the reduction in VAT is applied, even in the periods when the poverty is higher (Years 2014 and 2016), the risk-at-poverty rate is much smother. The results do not differ substantially between the two applications; the poverty is much sensitive even for a reduction of 10 percentage points in VAT for food than for 15 percentage points. This means that the beneficiaries of the VAT reduction are mostly low-income consumer that are concentrated near the threshold rather than distributed in higher ranking positions. Those people spend more in food than in other goods and services.

Consequently, a reduction in food expenditures by reducing VAT has a very strong impact in maintaining the standard of leavingin the context of the rise in prices, lower growth during and post-crisis or limited budget for consumption. The illustration of the poverty calculated before and after reducing VAT for food consumption show that about forty per cent will avoid to fall inevitably in poverty.

## Conclusions and Discussions

This study has analysed the impact of reducing the value added tax applied for food consumption in the level of the at-risk-of poverty. The reduction of VAT is a known practice from the side of country governments for several countries. Even in the European Union countries, though by regulation the VAT is not allowed to fall under 15%,are applied different schemes that aim to facilitate food consumption and other goods or services related to education, culture, healthcare etc.

Given that in Albania, about half of the budget dedicated to the consumption is spent on food, the reduction of VAT offer an opportunity to sustain the low-income people that spend half of their budget in food to maintain a decent standard of leaving with a lower cost and reduce the levels of poverty or at-risk-of poverty.

This way, people that are near the poverty line would escape the poverty, in case internal or external factors cause fluctuation in the economic growth, smoothing the effects. It also gives the possibility to allocate the resources in health care, education, utilities and other aspects that ensure a decent life style and possibilities. For those that are better positioned in the consumer rankings, the part of the budget saved from food can be allocated for utilities, education, health services and other aspects, increasing the level of well-being.

On the other hand, the reduction of food consumption expenditures (for equal level of consumption) may turn into advantage in the long run. An increase in the liquidity flow means an increase in the circulation of goods and services and even more savings

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and investments that in turn canboost production and investments. This also means more employment and higher income leading to the recovery of VAT collection in the medium and long term. The mechanism of the reduction of VAT may result as a better system of increasing the wages to face the inflation given that the entrepreneurs tend to decrease the number of employees or the salaries to maintain the labour costs.

Unfortunately, a reduction of VAT in food consumption might lead (at least theoretically) to a reduction in the revenues that the state normally collects from VAT. It remains to explore if the reduction in poverty or the sustainment of the welfare, especially for the consumers with low-income, balance the reduction of state revenues coming from food consumption VAT as a first impact. In this context, studies that analyse the combination of Vat reduction and the progressive tax to the part of population with very high income also can be considered. To add some limitations about VAT reduction, must be said that, the benefits described from the reduction of VAT may of course encounter difficulties and even counter production if not associated with a system in place to control for an artificial rise in the prices of food by the side of food merchants overpassing the real costs.
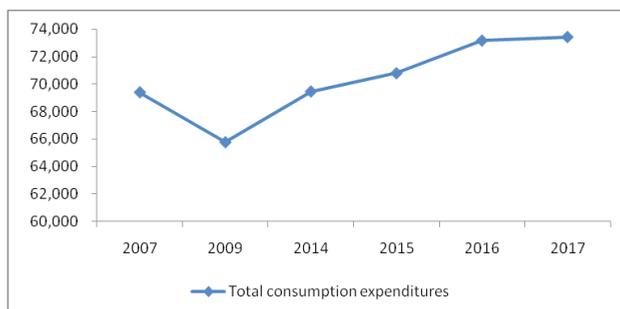
More studies are needed how to implement the right rate of reduction of VAT and maybe about a defined basket of goods and services that can bring in balance the costs and benefits deriving from this mechanism. Other benefits might be generated increasing the sales of the local food products thatbecome more competitive towards similar imported product by offering them at a lower price.Many other considerations can be taken into account but hopefully this study, among others, bring an empirical illustration of the fact that if Vat reduction is applied based on detailed studies in macro level, it will bring benefits in increasing the overall welfare and even the economic growth of the country.

## References

Value-Added Tax (VAT) Definition, investopedia.com.
VAT rules and rates: standard, special & reduced rates - Your Europe, europa.eu).
Chapter 3: Equivalised income - Office for National Statistics, ons.gov.uk).
Adjusting household incomes: equivalence scales, oecd.org.

## 7. Annex

**Figure 1 Total consumption expenditures of household in ALL**

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*Based on HBS data, 2007-2017*

## Table 1 Structure of household consumption expenditures, in %

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| Food and non-alcoholic beverage | 47.6 | 49.4 | 44.3 | 48.7 | 45.2 | 44.1 |
| Alcoholic beverages and tobacco | 4.3 | 4.2 | 3.6 | 3.5 | 3.4 | 3.5 |
| Clothing and footwear | 6.2 | 5.4 | 5.1 | 4.9 | 4.8 | 4.3 |
| Housing, water, electricity, gas and other fuels | 7.4 | 9.0 | 10.2 | 10.3 | 10.2 | 10.9 |
| Furnishing, household equipment and routine household maintenance | 5.9 | 4.9 | 5.4 | 4.8 | 5.0 | 4.8 |
| Health | 4.1 | 2.7 | 4.8 | 3.6 | 3.4 | 3.9 |
| Transport | 6.2 | 5.7 | 6.8 | 6.8 | 6.3 | 7.2 |
| Communication | 2.9 | 3.5 | 3.3 | 3.0 | 3.3 | 3.4 |
| Recreation and culture | 3.1 | 2.3 | 3.1 | 2.9 | 3.0 | 3.0 |
| Education | 1.7 | 2.0 | 4.2 | 2.1 | 4.4 | 3.9 |
| Restaurants and hotels | 5.0 | 5.0 | 3.2 | 3.6 | 4.4 | 5.0 |
| Miscellaneous goods and services | 5.5 | 5.8 | 6.0 | 5.8 | 6.5 | 6.1 |

*Source: INSTAT, Household Budget Survey 2007-2017*

## Table 2 Percent of consumer expenditures spent on food (including non-alcoholic beverages) by countries, 2018

| United Kingdom | 8.1 | 26,770 | 2,168 |
|---|---|---|---|
| Ireland | 9.0 | 23,267 | 2,099 |
| Canada | 9.1 | 25,961 | 2,351 |
| Switzerland | 9.2 | 42,714 | 3,909 |
| Austria | 9.8 | 26,656 | 2,618 |
| Germany | 10.7 | 23,918 | 2,563 |
| Netherlands | 11.4 | 23,083 | 2,621 |
| Denmark | 11.5 | 28,066 | 3,220 |
| Finland | 11.5 | 25,264 | 2,909 |
| Norway | 11.7 | 31,846 | 3,727 |
| Spain | 12.1 | 18,287 | 2,218 |
| Sweden | 12.4 | 23,371 | 2,894 |
| France | 13.2 | 22,586 | 2,983 |
| Belgium | 13.4 | 22,606 | 3,035 |
| Italy | 14.2 | 21,032 | 2,987 |
| Slovenia | 14.6 | 14,111 | 2,063 |

| | | | |
|---|---|---|---|
| Czech Republic | 16.3 | 11,230 | 1,836 |
| Portugal | 16.6 | 15,807 | 2,629 |
| Poland | 16.7 | 8,852 | 1,480 |
| Greece | 17.1 | 14,701 | 2,511 |
| Latvia | 17.3 | 10,499 | 1,821 |
| Hungary | 18.2 | 7,965 | 1,449 |
| Slovakia | 18.4 | 10,494 | 1,926 |
| Bulgaria | 19.3 | 6,070 | 1,172 |
| Estonia | 20.3 | 11,435 | 2,318 |
| Lithuania | 21.2 | 11,868 | 2,521 |
| Turkey | 21.8 | 5,544 | 1,210 |
| Croatia | 23.0 | 11,127 | 2,565 |
| Serbia | 25.6 | 4,792 | 1,226 |
| Romania | 27.3 | 7,481 | 2,041 |
| Montenegro | 27.5 | 6,417 | 1,764 |
| Bosnia-Herzegovina | 30.7 | 4,577 | 1,404 |
| Macedonia | 30.8 | 3,961 | 1,219 |

*Source: ERS, USDA calculations based on annual household expenditure data from Euro-monitor International, available at: http://www.euromonitor.com/*
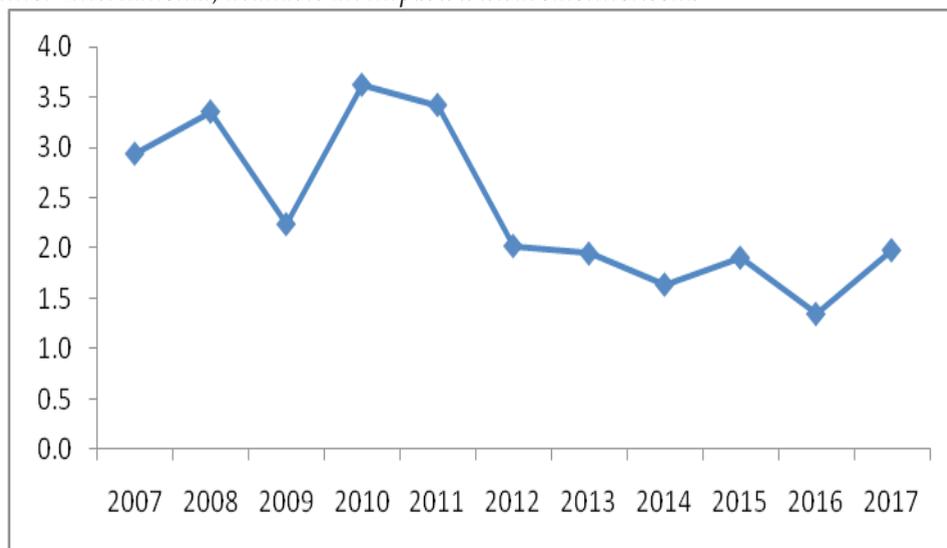


**Figure 2 Average Consumer Price Indices, in %**
*Source: INSTAT, HBS, CPI 2007-2017*

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**Table 3 Changes in consumption expenditures and prices, in %**

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|
| Consumption expenditure |  | -5.2 | 5.6 | 1.9 | 4.2 | 0.4 | 3.5 | 5.6 |
| Consumer price index |  | 7.2 | 15.5 | 1.9 | 1.3 | 2.0 | 2.0 | 1.4 |

*Note: 2007=base*
*Source: INSTAT, HBS, CPI 2007-2017*

**Table 4 Average CPI for all items and, food and non-alcoholic beverages**

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total of all items (Dec.2020 = 100) | 75.8 | 78.3 | 80.1 | 83.0 | 85.8 | 87.6 | 89.3 | 90.7 | 92.4 | 93.6 | 95.5 | 97.4 | 98.8 | 100.4 |
| Reindexto 2007 | 100.0 | 103.3 | 105.7 | 109.5 | 113.2 | 115.6 | 117.8 | 119.7 | 121.9 | 123.5 | 126.0 | 128.5 | 130.3 | 132.5 |
| Food and non-alcoholic beverages | 62.4 | 65.7 | 68.9 | 72.4 | 75.6 | 77.4 | 80.7 | 82.4 | 86.0 | 88.8 | 92.2 | 94.7 | 97.5 | 101.0 |
| Reindexto 2007 | 100.0 | 105.3 | 110.4 | 116 | 121.2 | 124 | 129.3 | 132.1 | 137.8 | 142.3 | 147.8 | 151.8 | 156.3 | 161.9 |

*Source: INSTAT CPI, and own calculation.*

**Table 5 Nominal and real consumption expenditures for total items and food (included the non-alcoholic beverages, in ALL)**

|  | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|
| Nominal Consumption Expenditures | 69,383 | 65,753 | 69,442 | 70,766 | 73,143 | 73,400 | 75,935 | 82,235 |
| Real consumption expenditures | 69,383 | 62,207 | 58,013 | 58,053 | 59,225 | 58,254 | 59,093 | 63,112 |
| Nominal expenditures on food | 33,003 | 32,470 | 30,745 | 34,489 | 33,083 | 32,347 | 33,436 | 33,952 |
| Real expenditures on food | 33,003 | 29,411 | 23,274 | 25,028 | 23,249 | 21,886 | 22,026 | 21,722 |

*Source: INSTAT HBS, and own calculation.*

**Table 6 Household consumption expenditures for food by quintiles, in %**

| Quintile | 2007 | 2009 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| I | 61.0 | 64.2 | 59.1 | 61.4 | 58.3 | 56.5 |
| II | 57.8 | 60.9 | 56.3 | 57.9 | 56.5 | 53.3 |
| III | 53.7 | 56.9 | 52.0 | 54.5 | 52.9 | 50.9 |
| IV | 48.8 | 51.6 | 47.0 | 50.8 | 47.4 | 46.4 |
| V | 39.4 | 39.0 | 34.3 | 40.0 | 35.8 | 34.9 |

*Source: INSTAT, HBS 2007-2017*