

## **Expedience of differentiation of the value added tax rate imposed on foodstuffs in Estonia**

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**Abstract.** Changing the principles of imposing income tax and cutting down the rate of value added tax imposed on food has been discussed in Estonia during the last years. The possible impact of reduction of the value added tax rate, imposed on foodstuffs, on the disposable income of Estonian households was analysed for the period 2002–2003. Households were distributed into five income groups, and the effect arising from discussed changes in the value added tax was calculated for all income groups. In order to compare it with the result of VAT differentiation, the impact of linking of the basic exemption rate and gross minimum wages to the income of households was analysed as well. Due to the insignificant impact on the disposable income of households, a proposal to reduce the rate of value added tax imposed on food is not well-grounded and there is no justified need to drop it from current 18% to 5%.

**Key words:** value added tax, households' income, saving

### **INTRODUCTION**

Over the last couple of years, changing of the well-established principles of tax policies (Estonian Taxes..., 2005) has called for heated political discussion in Estonia. The discussion has been focused on both changing the principles of imposing income tax, but also on cutting down the rate of value added tax imposed on food. Three alternative approaches can be distinguished here:

- Progressive taxation of income;
- Continued proportional taxation of income, accompanied with decreasing of tax rates and increasing of the basic exemption rate;
- Decreasing of the rate of value added tax applicable to food by observing, therefore, the example of the other European Union Member States.

The associated proposals, made by various political forces, are clearly aimed at achieving popularity among the electorate, but no analysis has been conducted to learn about the impact of the measures devised may have on the disposable income of different groups of the population. A. Kaasa has studied factors influencing inequality in income in her doctoral thesis stating that the relations between the development of the financial sector and unequal income have been studied too little (Kaasa, 2004). The income of individuals and formation of wealth among different age groups has been studied more in depth by S. Lollivier (Lollivier, 2004), who made a conclusion about different formation of income in different age groups. Relations between wealth and power in society have been studied, based on the example of Russia (Lokshin &

Ravallion, 2005). The size and structure of income is different, depending on the power of a person.

The authors of this paper have conducted research aimed at studying the possible impact that reduction of the rate of value added tax imposed on foodstuff may have on disposable income of Estonian households.

The paper tries to find answers to the following questions:

- Whether and to what extent the income of households is affected by dropping the current 18% value added tax, imposed on food, to 5%;
- Whether and to what extent linking of the basic exemption rate and gross minimum wages can affect the disposable income of households;
- Whether the reduction of the value added tax rate imposed on food is a well-grounded proposal.

## MATERIALS AND METHODS

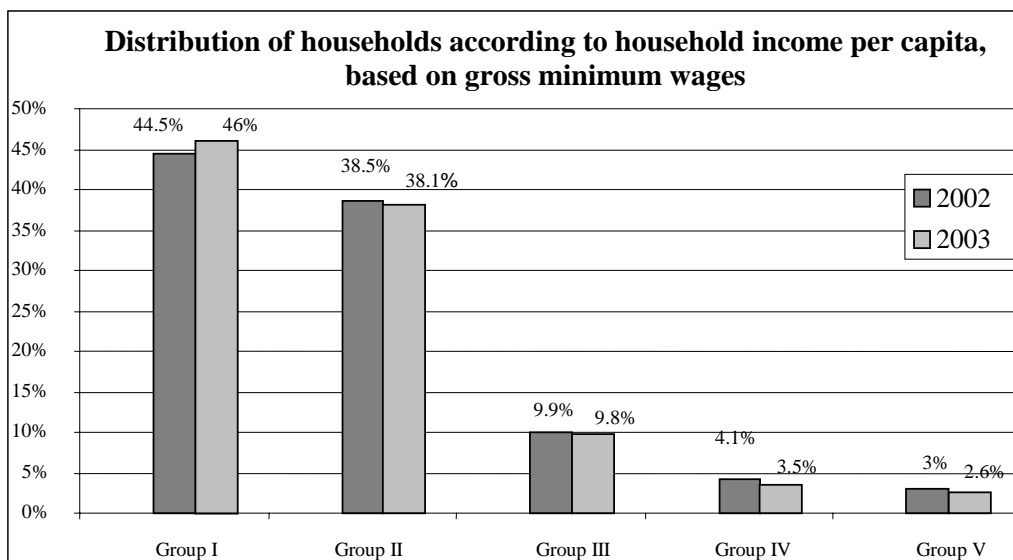
The impact of the change in the VAT rate on foodstuffs will be analysed from economic, social, and fiscal aspects. Disposable income of households and state budget tax revenues are used as indicators. The two years period of 2002–2003 was analysed as an example.

For the purpose of the analyses, households have been distributed between income groups, based on their income (Fig. 1); net income per household, based on gross minimum monthly wages, serves as the basis for the distribution. Income groups are distributed as follows:

- Group I** – households with a net income per capita up to one gross minimum wage per month;
- Group II** – households with a net income per capita between one to two gross minimum wages per month;
- Group III** – households with a net income per capita between two to three gross minimum wages per month;
- Group IV** – households with a net income per capita between three to four gross minimum wages per month;
- Group V** – households with a net income per capita exceeding four gross minimum wages per month.

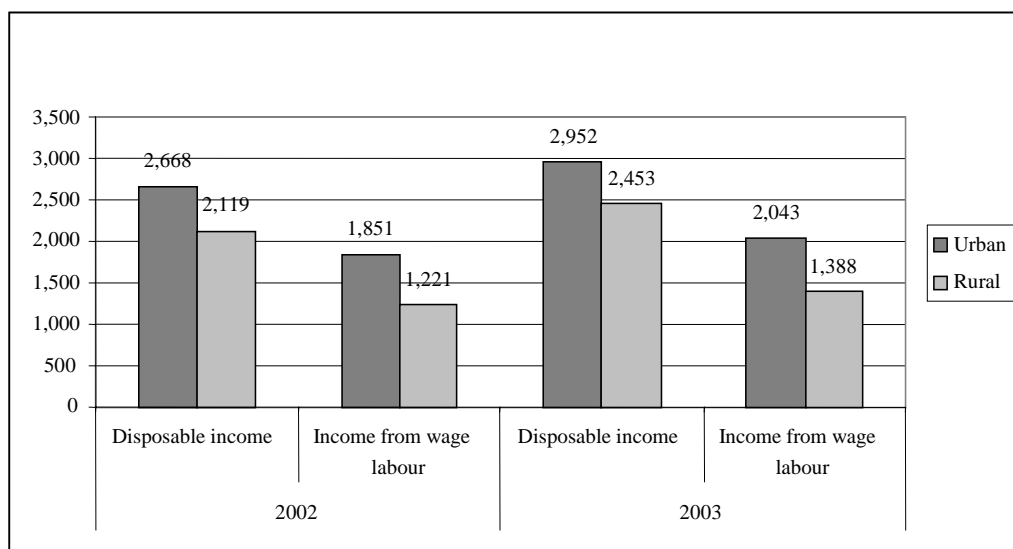
The expected impact of reducing the value added tax rate, imposed on food, on the disposable income of households is compared by the same groups.

The alternative proposal in tax policy discussions is connected with linking the basic exemption to gross minimum wages, having also an impact on disposable income of households. The new exemption rate is assumed to be equal to the minimum wage rate (Zeiger, 2005). The impact of reducing the rate of value added tax, imposed on food, on the disposable income of households has been compared to linking of the basic exemption to gross minimum wages and the related impact. Expenses made on foodstuffs by income groups served as the basis for calculation of the proportion of the value added tax on food, collected to the state budget.



**Fig. 1.** Distribution of households according to their income.

In 2002–2003, there were 569 thousand households in Estonia on average; each household consisting, on average, of 2.4 members (Leibkonna elujärg, 2002; Leibkonna elujärg, 2003). The basic exemption rate in 2002 was 12,000 kroons per annum, the gross minimum wages being 1,850 kroons per month. In 2003, the basic exemption rate was also 12,000 kroons per annum whereas the gross minimum wages went up to 2,160 kroons per month.



**Fig. 2.** Average monthly disposable income per household member in urban and rural areas in 2002–2003, in Estonian kroons.

Rural population is dominating in the lowest income groups. Average disposable income per household member, gained from paid employment, is appreciably less in rural areas than in urban areas. (Fig. 2). The changes in taxation influence, first of all, the lowest income groups, including the rural population.

## RESULTS AND DISCUSSION

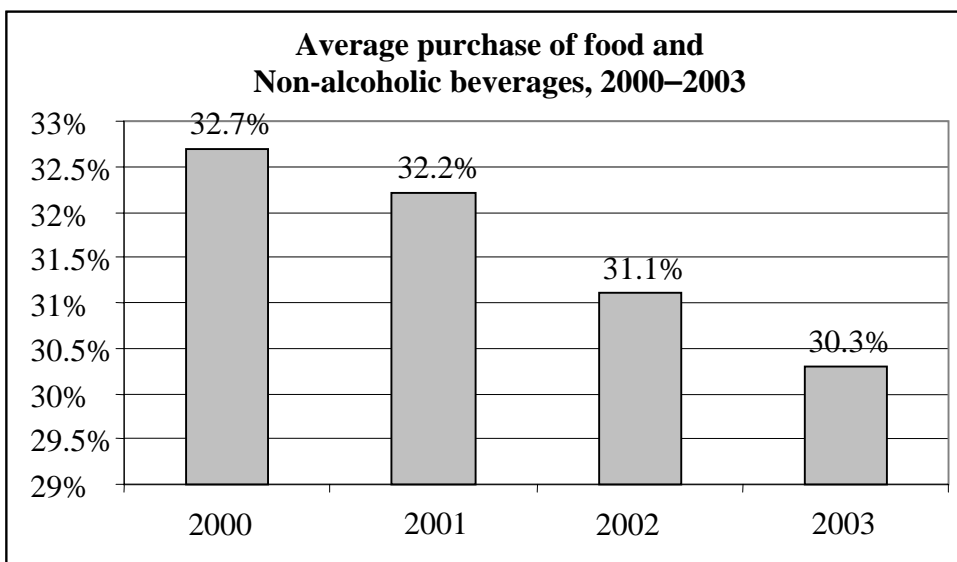
In Estonia, a standard rate of value added tax (18%) is imposed on goods, including foodstuffs. According to documents issued by the European Commission, the rates of value added tax imposed on essential goods, including food, are considerably lower in a large number of European Union (EU) Member States (Value added...,2004). In the European Union, the average rate of value added tax is 19.4%; while the respective rate imposed on food amounts to 8.2% (Table 1).

**Table 1.** Value added tax rates in EU Member States as of 01.09.2004.

<b>Member State</b>	<b>Standard rate of VAT</b>	<b>VAT rate on food</b>
Belgium	21%	6%
Czech Republic	19%	5%
Denmark	25%	25%
Germany	16%	7%
<b>Estonia</b>	<b>18%</b>	<b>18%</b>
Greece	18%	8%
Spain	16%	4%
France	19.6%	5.5%
Ireland	21%	0%
Italy	20%	4%
Cyprus	15%	0%
Latvia	18%	18%
Lithuania	18%	5%
Luxembourg	15%	3%
Hungary	25%	15%
Malta	18%	0%
Holland	19%	6%
Austria	20%	10%
Poland	22%	3%
Portugal	19%	5%
Slovenia	20%	8,5%
Slovakia	19%	19%
Finland	22%	17%
Sweden	25%	12%
Great Britain	17.5%	0%
<b>EU average</b>	<b>19.4%</b>	<b>8.2%</b>

Imposing on food a lower added tax rate than the standard rates in Estonia would not be against the principles applicable in the European Union. Until 31.12.2005, the European Union Member States are allowed to apply standard value added tax rates not lower than 15%. After this date, the Council of Europe is going to apply unified rates in all Member States. Besides the standard rate, all the Member States are free to pass decisions concerning the application of one or two lowered rates. Such rates may be imposed on special goods and services, provided that the rate does not drop below 5% (Sixth Directive...,1997).

In 2000, expenses made on food by household in Estonia average to 32.7% of consumption costs, dropping to 30.3% by the year 2003 (Fig. 3). Reduced importance of expenses on food are not contributable to reduced consumption of food but, instead, to an increased proportion of other costs. For example, in 2000 the proportion of housing costs was 15.6% of the consumption costs, growing to 16.2% by 2003. Expenses on education amounted to 1.4% of household's consumption costs in 2000, while totalling 2.1% in 2003 (Leibkonna elujärg, 2000; Leibkonna elujärg, 2003). Expenditures on recreation and leisure amounted to 6.7% of household's consumption costs in 2000; the respective indicator being 7.0% in 2003.



**Fig. 3.** Proportion of household's expenditure on food and non-alcoholic beverages to total consumption costs in Estonia in 2000–2003, expressed as percentages.

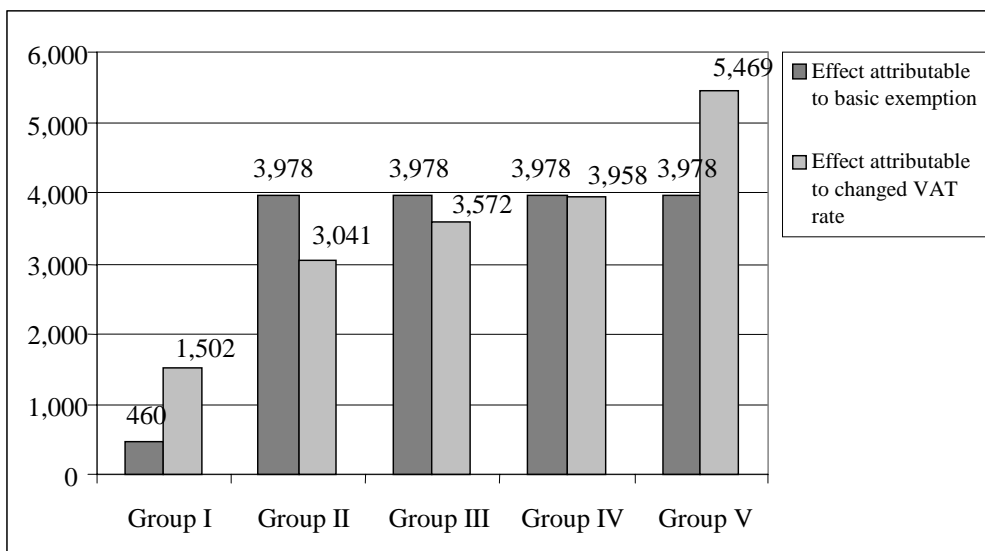
Information of the Statistical Office of Estonia, concerning the income and expenditures of households, and data on the collection of taxes paid to the Estonian state budget in years 2002–2003 serve as the grounds for the establishment of an expected impact of the reduction of value added tax rate imposed on food. The effect of revenue transfers has been eliminated for the purpose of observing the income of

households. Expenses made by Estonian households on purchase of foodstuffs have been compared to the respective indicators of Great Britain, Latvia, and Lithuania.

The researchers of Great Britain have observed a declining trend of the importance of food and non-alcoholic beverages in household's expenditures (Family Spending, a). In 1995, respective expenses amounted to 18% of household's total expenses and remained steady at 16% in 2002–2003 (Family Spending). Household expenditures have stably remained on the level of 16–17%. Transport costs born by households make up 13–15% of total consumption costs. Compared to Estonian households, leisure and recreational costs of Great Britain households are higher, amounting to 11–13% of total consumption costs.

Importance of expenses made on foodstuffs in household's consumption expenses has also dropped in Latvia. In 2001, such expenses amounted to 36.4% and in 2002, respectively, to 35.2% of households' consumption expenses (Household consumption expenditure, 2001; Household consumption expenditure, 2002). In Lithuania, the respective indicators of household consumption costs averaged to 42.4% in 2001, dropping to 40.7% in 2002 (Household consumption expenditure structure, 2001, 2002).

A comparative analysis, drawn up by the authors of the paper on the data of the year 2002, reveals that by decreasing the value added tax rate imposed on food to 5%, the income group I could save as much as 1,502 kroons per household per annum. In the income group V, the possible saving would be as high as 5,469 kroons per household per annum. Compared to increasing the basic exemption rate to the level of gross minimum wages, the effect obtained by reducing the value added tax rate was higher in groups I and V. Groups II and III would obtain better results if the basic exemption rate would be linked to gross minimum wages. As for group IV, both changes would result in approximately the same results (Fig. 4).

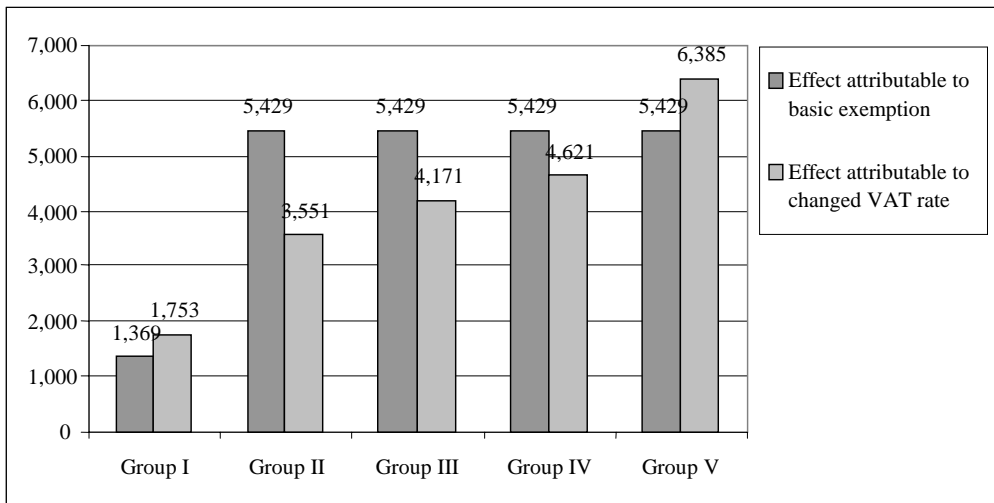


**Fig. 4.** Comparison of the effect attributable to changes in the income tax and VAT rates applicable in 2002, in kroons.

When observing the effect of a decreased rate of value added tax imposed on food, one can observe that the results would be favourable for 47.5% of households. For 48.4% of households, a positive effect would come from linking of the basic exemption to gross minimum wages while 4.1% of households would achieve the same results in the case of both changes.

As for the state budget, the reduction of the value added tax rate imposed on food to 5% would have caused undercollection of 1.53 billion kroons in 2002. Linking of the basic exemption to the gross minimum wages would have been attributable to undercollection of 1.46 billion kroons to the state budget in 2002.

A comparative analysis, drawn up for the year 2003 (Fig. 5), demonstrates that decreasing the rate of value added tax imposed on food to 5% provides a more noticeable effect in household groups I and V, when compared to increasing the basic exemption. Linking the basic exemption to gross minimum wages would give a better effect in the household groups II, III, and IV.



**Fig. 5.** Comparison of the effect attributable to changes in the income tax and VAT rates applicable in 2003, in kroons.

In 2003, decreasing of the rate of value added tax imposed on food would have had a positive effect on 48.6% of the households. Linking of the basic exemption to gross minimum wages would have had a positive effect on 51.4% of households.

In 2003, reduction to 5% of the value added tax rate imposed on food would have caused undercollection of 1.75 billion kroons. Linking of the basic exemption to gross minimum wages would have been attributable to undercollection of 1.74 billion kroons to the state budget in 2003.

When looking at the state budget, both the decreasing of the value added tax rate and increasing the basic exemption to a level equivalent to gross minimum wages would have resulted approximately in the same level of undercollection. Linking the basic exemption to gross minimum wages would have some impact on a major proportion of households.

The authors of the paper think that the proportion of expenditures made on food in total consumption of households will continue to drop, remaining steady at 25–28% of total consumption expenditures by the year 2010. Therefore, the expected long-term positive effect on the disposable income of households, attributable to a decreased rate of value added tax imposed on food, is expected to decrease. In the common economic space of the European Union, one can expect the consumption structure of Estonian households to change, and the relative importance of food in consumption expenditures will go into decline. As a result, expenses on housing, transport and leisure, etc., are going to increase, therefore, decreasing the rate of value added tax imposed on food would fail to lose its considerable effect. Relative value added tax burden of households, attributable to consumption of food, is going to decrease while it can be expected to increase as a result of growing expenditures on other spheres of life, including housing, transport, recreation, and leisure.

An interview with the experts of the Department of Social Statistics of the Statistical Office of Estonia revealed that Estonia has experienced the outcome of a reduced value added tax rate. The value added tax rate imposed on books was decreased from 18% to 5% without having a considerable effect on retail prices of books (Interview with M. Kreizberg and A. Valtin in Tallinn, on May 7, 2003).

In the opinion of the authors, similar effects may be experienced if the rate of value added tax imposed on food would have been reduced. The undercollection of value added tax to the state budget, totalling to 1.5–1.7 billion kroons, does not necessarily meet its objective of improving the living standard of households as a relatively larger proportion of the aforementioned amount may be held by entrepreneurs, above all, in retail trade. According to some politicians, considering democratic aspects, a decreased rate of value added tax imposed on food would be justified only if the effect would extend to more than 50% of households (Interview with T. Leinatamm in Tartu, on September 25, 2003).

A number of arguments, pro and contra, could be stated when discussing a reduced rate of value added tax imposed on food.

The following arguments are in favour of the option of VAT reduction:

- Legislation allows the rate of value added tax imposed on food to be reduced;
- Major share of the European Union Member States are applying a reduced rate of value added tax on food;
- Failure to implement the alternative taxation changes would result in a situation where the reduction of the rate of value added tax imposed on food would only have some effect on less than 50% of households.

Several arguments work against decreasing the rate of value added tax imposed on food. Such arguments are the following:

- Linking the basic exemption to gross minimum wages would have a positive effect on a major share of households;
- A relative decrease in expenditures on food to total consumption expenditures of households would shift the value added tax burden from the consumption of food to expenses necessary to cover other living expenses;
- The undercollection of value added tax to the state budget, totalling to 1.5–1.7 billion kroons, does not necessarily meet its objective of improving the living



standard of households as a relatively larger proportion of the aforementioned amount may be held by entrepreneurs, above all, in retail trade.

According to the analyses, decreasing of the rate of value added tax imposed on food would influence fewer households than linking of the basic exemption rate and gross minimum wages.

In the opinion of the authors, the arguments against reduction of the rate of value added tax imposed on food are stronger and there is no justified need to decrease the rate of value added tax imposed on food. Differentiation of the value added tax rate imposed on food might only be reasoned if the standard rate of value added tax would increase in Estonia as a result of the implementation of the respective provision of the Sixth Directive of the Council of the European Union.

## CONCLUSIONS

In Estonia, a standard rate of value added tax (18%) is imposed on goods, including foodstuffs. As a result of decreasing the rate of value added tax imposed on food from the current 18% to 5%, the different income groups could afford possible saving in a sum of 1.753–6.385 kroons per annum, on the expenses level of the year 2003. Observed as an alternative, linking of the basic exemption to gross minimum wages could afford the different income groups possible saving in a sum of 1.369–5.429 kroons per annum, on the expenses level of the same year. Both the decreasing of the value added tax rate and increasing the basic exemption to a level equivalent to gross minimum wages would have resulted approximately in the same level of undercollection to the state budget (1.75 billion kroons). However, linking of the basic exemption to gross minimum wages would have some impact on a major proportion of households.

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