



ALCOHOL EXCISE TAX GROUPS DIFFERENCES IN BALTIC STATES

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Abstract

Purpose of this study is to evaluate different approaches and purposes of applying alcohol excise tax rate and raw material groups for low alcohol content beverages in Baltic states. Main focus and goals of this study are different models of low alcohol excise tax groups, taxation rates among excise tax groups and politics of alcohol types by maintenance of alcohol excise tax groups. The study examines the impact of these models on tax revenue and different attempts and goals of politics, especially in favour of local raw material and beverage producers, also for health indicators improvement. For this research is used quantitative analysis of statistics data, also comparative analysis of theoretic method to analyse research results and legislative documents. Scope of this research is limited to Baltic states during last decade. The result and principal conclusion is that each country has its practice that differs and is guided both by economical, practical and political reasons. Representation of the interests of agricultural entrepreneurs is provided by such state politics: this research attempts to answer effectiveness of different states realised policies in application of excise tax for light alcohol.

Keywords: excise tax, light alcohol, fermented beverages.

Introduction

Alcohol production and marketing issues, consumption caused social and health problems and economic impact evaluation is widely researched and there is ongoing research as industry is vast. There is gap of scientific analysis and scientific investigations reflected in scientific literature on alcohol excise tax groups and their taxation differences. Countries obtaining alcohol excise tax revenue do it according to various taxation rates and calculation methods relevant to particular excise tax group that depends on raw material of beverage. Tax can be calculated by volume of beverage, volume and Plato, volume and alcohol content. First of all, such differences set uneven conditions for various types of alcohol while it is not appropriate for researchers to elevate one or another alcohol as more or less harmful to the society and health. Secondly it encourages industry to search for new methods of production to put in use more advantageous raw material. On one hand it is good for development of industry and production as such, but on another hand it misleads both consumers and policymakers. European Union has issued directive 92/84/EEC about minimal alcohol excise tax rates among major excise taxation groups, but it does not limit member states (MS) of European Union (EU) to invent subgroups and producers to produce one or another alcoholic beverage by using one or another raw material. Mainly this opportunity of switching raw materials is for low alcohol content products that are in trend for a decade or more and are consumed the most. Therefore, it is both a novelty in research field and also a necessity to evaluate differences of excise tax groups among European Countries along with development of alcohol production trends.

Research aim is to identify trends in low alcohol content excise tax groups along with attempts in several countries to support usage of local raw material.

The following **objectives** have been set to achieve the aim:

- 1. To assess the interaction between low alcohol content fermented beverages excise tax rate policy and consumption trends.
- 2. To evaluate and assess development of alcohol consumption along with excise tax revenue in different excise tax groups.

Research object and methods

The research object is the analysis of alcohol consumption and excise tax revenue within different alcohol excise tax groups in Estonia, Latvia, and Lithuania, covering the period 2013-2023. Alcohol consumption is defined as the total litres of pure alcohol consumed per year, derived from national statistical office and similar government entities published data. Excise tax revenue is defined as the total revenue in euros generated from excise taxes on alcoholic beverages, categorized into excise tax groups, as defined by each country's national legislation.

This research employs a quantitative analysis of empirical data to analyse alcohol consumption and excise tax revenue. Statistical data is obtained from the national statistical offices and similar governmental institutions of Estonia (Maksu- ja Tolliamet − Taxation and Customs Bureau of Estonia), Latvia (Valsts Ieņēmumu Dienests − Taxation Bureau of Latvia) and Lithuania (Valstybės duomenų agentūra - Statistics agency of Lithuania), as well as Eurostat and World Health Organization databases. Data are processed using descriptive statistics, trend analysis, and correlation analysis. Alcohol consumption data are taken from the respective national statistical offices or calculated from excise tax revenue taking into account excise tax rates as for full year and average alcohol content for fermented beverages. All units of measurement will comply with the International System of Units (SI), with consumption expressed in litres per year (L/year) and revenue in euros (€).

A comparative analysis of theoretical material is conducted to examine existing research and legal frameworks. This involve analysing academic articles, policy reports, and national excise tax laws to understand the factors influencing alcohol consumption and excise tax policies in the Baltic states. Qualitative content analysis is used to compare the policy frameworks.

Alcohol importance in Baltic states

Alcohol and to it related challenges has been actual issue for long time, probably even since science in this region occurred. Especially important this topic is since OECD has stated Baltic countries as the most alcohol consuming (OECD, 2025). It pushes to research both reasons and reliability of such statistics. Each of Baltic states has its own path and therefore also aims and goals, it shapes alcohol policy of each of these states despite its common history and close geographical location. Some state aims to improve health statistics indicators, some state aims to increase excise tax revenue on account of neighbouring countries and even reveals public statistics for it, some state deals with alcohol as an issue both for state economy, healthcare system, social stability and also state budget revenues. Alcohol causes not only health problems, but also social security threats what is in agenda both of policy makers and researchers (Rehm, 2024).

Statistics data shows not only high alcohol consumption in Baltic states, but also high dependence of state budget on alcohol excise tax revenue. In average 2% of all revenues is of alcohol excise tax in Baltics – it is rather high result compared to average European 0,1% (European Commission, 2023). So to say – if consumption is to be decreased, taxation should be increased in order to keep economic stability of the state. In terms of export also alcohol is important product for local economies.

This area is also special for traditions and novelties of production using local fruit and berry wine and beer raw material for production of another alcoholic beverages while applying alcohol excise tax according to the raw material. This draws attention to excise tax groups in Baltics and management of them on state level. And especially important it is since Baltic states already almost a decade are dealing with border trade what allows to transport for private use serious amount of alcohol (European Union, 2025): it all started with Estonia welcoming purchasers from Finland, then from Sweden. By time this border trade occurred also in Latvia for purchasers from Estonia, Finland and Sweden. And couple of years it has moved also Lithuanian purchasers massively to Latvia what has caused also researchers attention (Zirgulis, 2023). Here occurs interesting element about the beer – excise tax in Latvia and Lithuania is the same, but price differs sometimes double on the same product. Apparently not only excise tax shapes shelf prices, but also market itself what arises even more questions for further research.

One of the most recent papers released is "The Impact of Raising Alcohol Taxes on Government Tax Revenue: Insights from Five European Countries" (Manthey, 2024). It is a work of co-authors from several countries, and it states mainly only one conclusion: excise tax increase solves issue with extensive alcohol consumption all around the Baltic Sea. It is true that in Northern Europe excise taxes are the highest along with consumption which is constantly decreasing. With decreasing population, it is obvious that not only excise tax increase serves to improve health statistics indicators. Also youth of new generations come with new perception of alcohol, new trends that are researched in this area and show both current impact and sets trend for future (Horverak, 2012), (Müller, 2023). Researchers go on with their investigations in this field.

Alcohol excise tax groups in Baltics

According to EU Council Directive 92/84/EEC there are 4 major alcohol excise tax groups: spirits, intermediate products, wines and beers (European Union, 1992). Although each or MS is entitled to provide their own system of grouping as long as in major lines it complies with previously mentioned Directive and taxation minimum level is along with this document. It has caused various combinations and options across the Europe what makes rather difficult to set correct statistics: it has been observed in various sources with numerous remarks explaining possible differences from other sources. Baltic countries have used this right and each of countries has set their own system of excise tax groups what mainly differs at low alcohol content beverages. Beer, spirits and intermediate products are set in 3 groups with one subgroup for intermediate products as shown in Table 1, compiled using data from state revenue service for each country:

Table 1. Identic alcohol excise tax groups in Baltic states in 2025

| Ethyl Alcohol | Intermediate Products <15% ALC | Intermediate Products >15% ALC (max 22%) | Beer | |
|--|--------------------------------|--|------|--|
| Source: Created by Agris Raipalis, data source: (EMTA, 2025; VID, 2025; VMI, 2025) | | | | |

Important to mention that unlike beer and ethyl alcohol, intermediate products, fermented beverages and wines have alcohol excise tax calculation equity that does not include alcohol content. To calculate excise tax of beer and ethyl alcohol is needed to take into account volume, alcohol content and taxation rate. To calculate excise tax of intermediate products, fermented beverages and wines is needed to take into account volume and taxation rate. It means that within one group of taxation may be products with various alcohol content, but the same tax: it gives advantages to stronger in alcohol content beverages from consumers perspective, but only within particular taxation group. This situation makes merchants to look for maximum opportunities given by taxation regulation and opportunities of production particularly among fermented products of various types. It requires both deeper calculations as in some cases even highly taxed ethyl alcohol can be considered to be more advantageous, especially for very low alcohol

content products. As beer has the lowest excise tax rate among all alcohol excise tax groups, it is important to investigate opportunities of production as there are many products that can be produced from beer raw material and even more that cannot or is not suggested to, or technology is not yet ready.

Alcohol excise tax groups of fermented products like grape wines and berry and fruit wines are shaped in each country differently. In Table 2 are included compiled using data from state revenue service for each Baltic country:

Table 2. Fermented beverages and grape wine excise tax groups in 2025

| Estonia | Latvia | Lithuania | |
|--|--------------------------------------|---|--|
| fermented beverages and wines <=6%ALC | fermented beverages <=6%ALC | fermented beverages and wines <=8.5%ALC | |
| | still and sparkling grape wine 1-15% | | |
| still and sparkling grape wine >6% ALC | ALC | still wine, sparkling wine, fermented beverages >8.5% ALC | |
| fermented beverages >6%ALC | fermented beverages >6%ALC | beverages >8.3% ALC | |

Source: Created by Agris Raipalis, data source: (EMTA, 2025; VID, 2025; VMI, 2025)

The most noticeable difference is with Lithuania as it clearly sets border between the lowest alcohol content group and the rest of the fermented products as wines also can be related to fermented beverages. 8.5% of alcohol content is on the half way from ciders at 6% maximum and regular grape wines starting at 10%, which also is a border for fermented products in EU to avoid necessity for 2 year best before conditions according to the Regulation (EU) No 1169/2011 of the European Parliament and of the Council (European Union, 2011). Such this group is for more than 10 years – long term government strategy of alcohol policy. There is important difference: both groups in Lithuania include grape wines and fermented beverages what are fruit and berry wines – it is significant element that distinguishes this system from other Baltic states that push more focus on separate groups of subgroups for fermented beverages.

Estonia and Latvia from first glance seems to have identic excise tax groups for fermented beverages as both countries have set border between the lowest alcohol content group and the rest of the fermented products and wines at 6% of alcohol content as it is the highest ABV for cider. Choice for Latvia seems to be obvious and this way government representatives have repeatedly stated it: to support local traditional raw material producers and stipulate consumption of lower alcohol content natural products without unnatural additives what would make such products to be intermediate and therefore corresponding to higher excise tax rate. There are several sparkling grape wines that content less than 6% ABV, but in Latvia to them is related full grape wine excise tax despite low alcohol content. Unlike in Estonia to such products would be considered alcohol excise tax group for fermented beverages and wines up to 6% ABV – in Estonia this group unites both raw material types and makes no exclusion due to that. But to be honest – for high value grape wine sparkling products excise tax difference does not reflect much on final sales price on the shelf.

For fermented beverages and wines above 6% ABV both in Estonia and Latvia are separate groups, unlike in Lithuania. Both countries have been and may become more aware on taxation politics among these raw material groups as excise tax groups mainly depend on raw material. At the moment and at least for past decade alcohol excise tax rate in both countries for both raw material alcohol excise tax groups have been the same. Both countries keep opportunity to have diverse politics towards each of these groups in case some political or economic circumstances occur. Although in various taxation materials due to identic taxation rate both groups may be stated together, but in statistical reports of local importance fermented beverages are stated apart. It underlines importance of role fermented beverages play or might play in local economy of Estonia and Latvia. Important remark: if in Estonia both for wines and fermented beverages both groups are between 6% and 15% ABV, then in Latvia it is so only for fermented beverages while for wines it is from 1.2% up to 15% ANV as grape wines in Latvia are not enjoy lower excise tax rate for wines below 6% ABV.

Interesting element is treatment of intermediate products in Baltic countries if we consider those up to 15% ABV what are direct competitors to grape still and sparkling wines, fermented beverages (both still and sparkling), fruit and berry still and sparkling wines, ciders, fermented alcoholic beverages (FAB), ready to drink beverages (RTD) etc. Author treats these intermediate products as related to low alcohol content products as their ABV does not exceed 15%. Also important remark that there is not one definition for intermediate products that would always involve blend of distilled and fermented alcohol for intermediate products – this status can be given also in case of additives to fermented products that change products taste, flavours, texture and other elements so much that are lost characteristics of raw material (Österberg, 2012). It highly depends on local legislation in each country. In Baltic states again Lithuania differs a lot from Estonia and Latvia. If in last two countries at least for a decade alcohol excise tax rate for intermediate products up to 15% ABV has been the same as for grape wines and fermented products (EMTA, 2025), (VID, 2025), then in Lithuania this difference from 25% above excise tax rate of wines and fermented beverages has decreased to 9% from 2013th to 2023rd (VMI, 2025). This signals that in Lithuania attitude towards intermediate products despite similar alcohol content is less welcoming comparing to wines and fermented beverages which in this case benefit from such state politics.

Low alcohol excise content tax groups in Baltics

Latvia and Estonia have limited their lowest in terms of alcohol excise tax rate among fermented beverages group of products up to 6% ABV. It basically limits group of products for ciders, few FABs ad RTDs, which can be suspected to be intermediate products due to additives and that would cause higher excise tax within another taxation group. In case of Estonia also some fine sparkling wines would benefit from this low alcohol content fermented beverages group. One thing is lower excise tax rate, another element is previously mentioned fact that according to EU legislation to products below 10% ABV should be treated also best before conditions not exceeding 2 years of validity.

Lithuania has similar excise tax group, but with limit up to 8,5% ABV and including both fermented beverages and wines. In case of Lithuania conditions for necessity of best before are applicable. Due to the fact that products of this group in Estonia and Latvia can compete in rather narrow group of ciders and similar to them really low alcohol content beverages, this group is limited more than in it is Lithuania. In Lithuania this group includes products up to 6% and also below 8,5% ABV – it gives opportunity to compete both with ciders and also with wines as 8,5% is way closer to classical minimum alcohol content for still and sparkling wines what is 10% ABV. It is crucial detail as it practically makes merchants attracted by lower alcohol excise tax what provides opportunities for more competitive shelf price versus regular wine and at the same time more considerate due to two years best before conditions. This all combined in Lithuania stipulate production and trade of entry level shelf price alcohol with good rotation mainly based on favourable price for final consumer. It aligns with "Nudge" concept created by Richard Thaler and Cass Sunstein on their well-known book that reveals choice architecture: and it could have been used on government level deliberately and by merchants guided by intuition, (Thaler, 2008). Even though alcohol consumption in any case is a harm to health consumers make choices and both government politics and merchants guidance has important role. This alcohol excise tax group in Lithuania attempts to provide transition of consumers from more alcohol containing and higher in price still or sparkling wines to other grape wines or fermented beverages of lower alcohol content and eventually also shelf price. As best before is limited and alcohol is not related to fast moving consumer goods (FMCG), manufacturers, producers and wholesalers have to make these products attractive by looks and also taste qualities along with attractive final price for higher rotation. And previously mentioned concept of making choices also foresees option of making consumption limitation choices by sets or doses: it means that some social trend or habit may limit consumption not while reaching some qualitative effect, but quantitative. And by that government can reach their goals of lowering alcohol consumption in terms of pure alcohol per capita as consumer makes choice to be enough with particular number of units while consumed total alcohol is decreased. Important detail to add is that in Lithuania both on state and society level there is no intention to state out grape based wines from the mass of fermented beverages. Already for long time the most consumed wine brand in Lithuania is Voruta (IWSR, 2024), which is fruit and berry wine series and good part of it corresponds to the alcohol excise tax group with alcohol content up to 8.5% alcohol content.

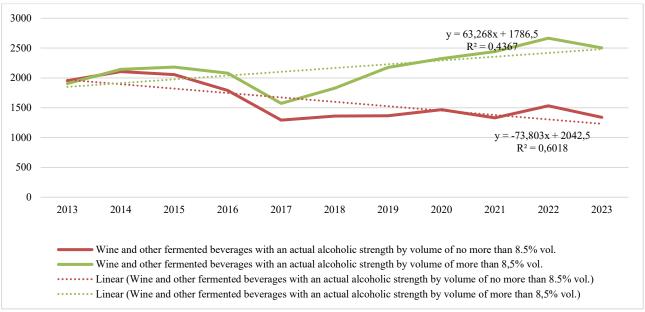
Therefore, it is possible to conduct that comparing Estonian, Latvian and Lithuanian the lowest excise tax rate groups for fermented beverages:

- 1) Group in Latvia is the most narrow and brings the least opportunities.
- 2) Group in Estonia is a bit wider compared to Latvia, but also is very much limited in opportunities.
- 3) Group in Lithuania is the widest among Baltic states and has broader opportunities to have impact on other excise tax groups in terms of transition from higher alcohol content groups to lower that should be in interests of the state and also supporting production of such type products that is more relevant to local producers.

Author has done calculation of annual alcohol consumption in pure alcohol for each of excise taxation groups in Baltic states as usually all reports are in tax revenue and in few cases as secondary data analysis is presented alcohol consumption per capita in major groups by international institutions. That do not reflect specific structure of alcohol excise tax groups in Baltic states. Also, there are reports on consumption of particular alcohol type, but it does not reflect real situation with alcohol excise tax groups as one and the same product can be produced from raw material relevant to different excise tax group.

In Figure 1 is visible consumption of fermented beverages and wine up to 8,5% ABV and above in Lithuania by pure alcohol for the last decade. Despite wide opportunities of production and attractive excise tax rate, alcohol excise tax group for fermented beverages and wines up to 8,5% has not developed successfully. It is obvious that excise tax rate does not play significant role in price build up even being more than 100% higher than for group of above 8,5% ABV all decade long. Consumer even in Lithuania with its traditions for fruit wines that naturally contain less sugar for alcohol production compared to grapes have chosen stronger in alcohol content wines. It requires further research on social trends and habits, because alcohol content is not the only variable for decision making, also popularity and status of grape wine might have its role, and there might be also other aspects of production, costs, marketing. On another hand researches show trends on low alcohol content beverages, including wine (Bucher, 2020).

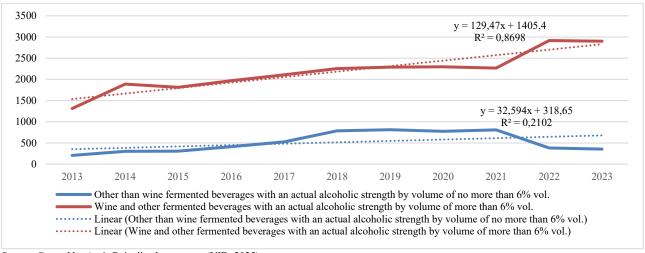
Data indicate that consumption of wine and other fermented beverages with an actual alcoholic strength by volume of more than 8,5% in Lithuania (thousands of litres) in 2013-2023 is decreasing annually in average by 73,8 litres; consumption of wine and other fermented beverages with an actual alcoholic strength by volume of no more than 8,5% in Lithuania is increasing annually in average by 63,3 litres.



Source: Created by Agris Raipalis, data source: (VMI, 2025)

Fig. 1. Consumed fermented beverages and grape wine in Lithuania (thousands of litres) in 2013-2023

In Figure 2 is visible trend of variable success for fermented beverages with alcohol content up to 6% ABV and also obvious trend of grape wines and fermented beverages combined successful trend of consumption. As along with time population in Latvia transfers from strong alcohol and beer to wine due to cultural trends arises question on fermented beverages like cider. For a decade or even more excise tax has rate deliberately been kept unchanged for low alcohol fermented beverages unlike for wine it has almost doubled. It both reveals low popularity of ciders in Latvia and possible mistake of policy makers as potential consumer of cider has moved away to beer category and since recent history with new products based on beer have started to replace cider and similar beverages both by taste and flavour, but also by design and perception. It has statistically increased beer consumption, but practically has caused transition from one excise tax group to another along with unobtained excise tax revenue difference.



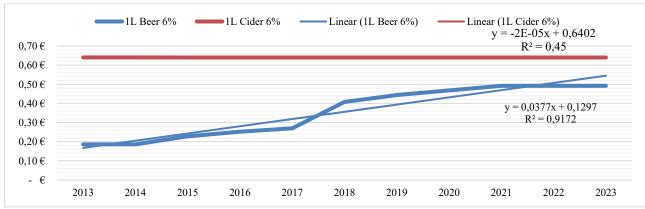
Source: Created by Agris Raipalis, data source: (VID, 2025)

Fig. 2. Consumption of fermented beverages and grape wine in Latvia (thousands of litres) in 2013-2023

Data indicate that during last ten years (2013-2023) in Latvia consumption of wine and other fermented beverages with an actual alcoholic strength by volume of more than 6% is increasing annually in average by 129,45 litres every year; consumption of other than wine fermented beverages with an actual alcoholic strength by volume of no more than 6% is increasing annually in average by 32,6 litres every year.

For long period of time producers have been motivated to seek new technologies of production and when excise tax rate difference has decreased from 244% to only 30% for 1L of 6% ABV product, see in Figure 3, the interest in ciders has been lost both by consumers and producers. Due to particular alcohol politics has been caused such a transition which leaves market with narrow range of real cider, both local and imported, and vast amount of product that pretends to replace cider and at the same time messes up statistics that should serve policy makers to make right decisions. And that is not

going to happen due to existing situation and alcohol management system in Latvia which limits identification of product within the group of alcohol excise tax that is set according to the raw material of production.



Source: Created by Agris Raipalis, data source: (VID, 2025)

Fig. 3. Excise tax dynamics in Latvia for 1L of 6% ABV cider and beer, 2013-2023.

Data indicate that for cider excise tax is almost the same – there are very small reductions, but for beer (6%) excise tax tendency for last ten years is on increase in average by 0,0377 percent points every year with determination coefficient 0,9172.

In Estonia situation is way better compared to Latvia in this field as excise tax of beer and low alcohol content fermented beverages is in better harmony. Local cider producers in Estonia are supported and system works as it has been stated by the government of Estonia initially. It is visible also in the stores of Estonia, but the main – alcohol management system of Estonia reveals opportunities to see in the alcohol register of Estonia each product and its corresponding excise taxation group and other necessary characteristics for decent analysis. True that also in Estonia consumption of cider and other low alcohol content fermented beverages is declining, but in general it is declining due to various factors. Also due to excise tax increase that is mentioned in various research articles and is mentioned as the main and almost the only alcohol consumption decreasing tool (Manthey, 2024). These researches escape also change of generations that have another opinion on alcohol consumption (Kraus, 2019) and depopulation of Baltic region as such.

Conclusions

- 1. State by politics of fermented alcoholic beverages represents interests of local agricultural entrepreneurs, effectiveness of state politics in all three states is questionable due to decreasing volumes and migration of products traditionally produced by fermented alcoholic beverages to other alcohol excise tax groups. State attempts in Baltic countries to support usage of local raw material do not provide credible results due to decline in consumption of products that could be manufactured and correspond to low alcohol content fermented beverages. Despite results research aim has been achieved.
- 2. Trends in lowest alcohol content fermented beverages excise tax groups are negative despite global trends and state attempts in all Baltic states. Only wine category which is related to low alcohol category among fermented beverages is in positive trend. By that his objective has been solved.
- 3. Development of alcohol consumption along with excise tax revenue in majority of excise tax groups lags behind, except for intermediate products above 15% ABV in all Baltic states and the lowest alcohol content fermented beverages where both revenue and consumption decline in Latvia and Estonia. By that this objective has been solved.

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