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Critical issues of alcohol safety in the region

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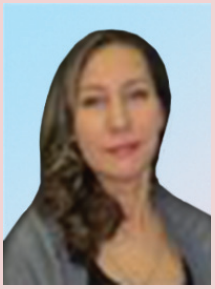

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Abstract. The paper presents results of the research into the economic and socio-demographic indicators associated with the production and consumption of alcoholic beverages. It discloses the analysis of the alcoholic beverage market structure in the Vologda Oblast. The authors have identified the threshold of the safe alcohol production volume in the region taking into account the World Health Organization standards of alcohol consumption and the share of illegally produced goods.

The article states that the increased alcohol production contributes to the rise in tax revenues, but the state fiscal policy to regulate the alcoholic beverage market leads to an increase in the share of shadow turnover. The authors have calculated the economic loss connected with the illegal production of alcoholic beverages in the Vologda Oblast. The alcohol consumption is a destructive socio-demographic process and one of the threats to the health of the nation. Excessive alcohol consumption leads to alcohol dependence, regression of the society and increases the threat to national and economic security. The study reveals a direct correlation between the consumption of alcoholic beverages per capita and mortality rates in men and women of working age from the causes related to the consumption of alcoholic beverages. The study of the international experience to regulate alcohol consumption has showed the need to tighten state

control in the sphere of production and turnover of alcoholic products. The conduct of the unified state alcohol policy substantiates the selection of the alcohol industry in the all-Russian classifier of economic activity types. The authors have elaborated the concept and conditions of alcoholic security from the point of view of economic growth and social development. The article substantiates the necessity to monitor alcohol safety indicators when considering the regional development. It presents the complex system of socio-economic and demographic indicators for its evaluation in dynamics.

Key words: alcohol policy, alcoholic beverage market, state regulation, alcohol safety, performance indicators, threats and indicators of alcohol safety.

Alcoholization of the society in modern Russia poses a threat to the state, society and individual. It should be noted that the inconsistency of the state policy with the society's basic needs contributes to the deterioration of socio-demographic and economic indicators [3]. Losses from alcohol abuse, such as increased mortality, reduced productivity, injuries, expenses on treatment of the diseases associated with alcoholic beverages consumption, social benefits for the disabled and orphans, public expenditures on crime control, are extremely hazardous for social and economic development of the country.

In Tsarist Russia (1914–1917) there was the lowest level of alcohol consumption in Europe – 0.83 liter of absolute alcohol (anhydrous alcohol) per capita, the significant increase in alcohol consumption was observed in the mid-1970s. In 2012 in the Vologda Oblast consumption amounted to 12.95 liters of absolute alcohol per year, which was 1.4 times higher than the national average and 1.6 times higher than the limit. Despite the state alcohol concept to reduce alcoholic beverages consumption, the steady 15% upward trend in alcohol consumption had been measured in the region by 2012 (*fig. 1*) [2].

With the prohibited alcohol-containing products and home-made alcoholic beverages being taken into consideration, actual consumption of alcoholic beverages per capita reaches 18–19 liters per year, although only 8 liters are permitted by the World Health Organization. It is obvious that alcohol consumption beyond the established standards is extremely dangerous for the health of the nation.

Accordingly, the issues to regulate alcohol consumption and prevent its abuse are topical. In order to improve the alcohol security management mechanism in the region one should carry out a continuous monitoring of all elements of the alcohol policy (production, sale, consumption of alcohol, change in the socio-demographic indicators associated with alcoholic beverages consumption). This study tries to assess the level of alcohol security in the region.

There is no unambiguous interpretation of alcohol security in modern literature. For example, some authors propose to consider alcohol security as economic security in the sphere of alcohol production in terms of industrial and trade policy and offer the interpretation of economic security in the alcohol industry as the state of

the country's economy, which ensures Russia's independence in this sphere, effective public regulation of the alcoholic beverage market, guarantees availability and safety of products and controls alcohol consumption within the rational norms required for citizens' healthy and dynamic lifestyle. In this case the tasks to provide economic security in the alcohol industry are the following: regular analysis and forecasting to identify, eliminate and prevent internal and external threats to economic security; timely elimination of negative factors consequences; sustainable development of domestic production of alcoholic beverages and raw materials needed for its production, sufficient to preserve the country's independence in the alcohol industry; provision of the quality and safety of alcohol products; achievement and maintenance of the alcohol consumption levels that do not to exceed acceptable limits, cause harm to health or have an adverse influence on the social development.

Thus, Russia's independence in the alcohol industry can be achieved through sustainable domestic production of alcohol in volume, which share in commodity resources of the internal market is not smaller than the set threshold [8, 12].

The alcohol safety issues can be also considered in the system to ensure the national security, as alcohol is a major destructive factor in the socio-demographic development of Russia. The reduction of

Figure 1. Dynamics of alcoholic beverages consumption in absolute alcohol per capita in the Vologda Oblast in 2000–2012

Source: authors' calculations on the basis of the Federal State Statistics Service data [13].

mortality, morbidity and social problems connected with alcohol consumption is an avowed goal of the state alcohol policy [6, 7, 9, 11, 15].

As, on the one hand, alcohol consumption poses a threat to socio-demographic development of the society and, on the other hand, contributes to implementation of the government's fiscal function, it is necessary to keep balance of socio-economic interests in terms of alcohol security.

In our opinion, the state of alcohol security is determined by two conditions:

– the combination of alcoholic products presented on the market and current alcohol requirements, which should be not below the level of vital interests of an individual;

– the current level of alcoholic requirements, which should not exceed the evidence-based standards of alcohol consumption.

– The threats to security can occur in the following cases:

– the level of alcohol requirements is below the level of vital interests of the individual, i.e., for example, the quality of alcoholic beverages does not correspond to the level (quality) of life that can be hazardous for human health (food safety hazard);

– the quantity of alcohol beverages on the market is below the current level of alcoholic requirements; from the economic point of view it reduces budget receipts in the region (economic hazard);

– the current level of alcohol requirements is above scientifically grounded norms of alcohol consumption, which leads to alcoholism and, consequently, to an absolute decrease in the standard of living (social and national hazards).

Alcohol security of the region can be considered as its socio-economic state provided that the combination of alcoholic products on the market and current alcohol requirements is not below the level of vital interests of the individual and the current level of alcoholic requirements does not exceed the evidence-based standards of alcohol consumption, ensuring favorable trends in demographic indicators, regardless of internal and external threats (conditions).

The problem to develop a system of continuous monitoring, analysis and assessment of the alcohol security threat level becomes acute as well. In modern economy the role of regular, comprehensive, objective monitoring is especially great, as there is high mobility, instability of socio-economic indicators, presence of numerous imbalances that require constant attention. If monitoring is not of high quality, then the dynamics of negative economic and social trends, their emergence and development can get out from the state control and become unmanageable and irreversible to some extent [5].

Monitoring is aimed at providing continuous information-statistical observation of alcohol security indicators. The assessment and analysis of the ratio of their current values to threshold values of the relevant indicators are carried out to identify the negative trends weakening alcohol security.

World experience of territorial administration demonstrates the necessity to use not a single index, but an aggregate of complex indicators for monitoring, analysis and estimation of the alcohol security threat level in the region. In this case, the identification of the system of economic, social and demographic indicators becomes one of the main tasks of alcohol security assessment.

The reliability of the system is known to be determined by the reliability of its elements. The region's interests lie in the stable reproduction and enhancement of economic, social and demographic potentials.

In our opinion, to develop the system of indicators it is necessary to follow the requirements, such as: the system approach to major hazards of alcohol safety; integration of economic, social and demographic indicators that are focused on the alcohol security level; ease of interpretation, minimality and availability.

It should be noted that some indicators can have a critical value of indicators. Relying on them, the authorities can help the system recover from the crisis.

The first group of indicators consists of economic indicators that show the condition of the alcohol industry (according to the WHO standards on alcoholic beverages consumption):

a) Absolute values:

– volume of alcoholic beverages production in absolute alcohol, thousand decaliters;

– volume of alcoholic beverages production in physical terms by types, thousand decaliters;

– sale of alcoholic beverages in absolute alcohol, thousand decaliters;

– sale of alcoholic beverages in physical terms, thousand decaliters;

– import of alcoholic beverages in physical terms, thousand decaliters;

– import of alcoholic beverages in absolute alcohol, thousand decaliters;

– export of alcoholic beverages in physical terms, thousand decaliters;

– export of alcoholic beverages in absolute alcohol, thousand decaliters;

– rate of excise tax on alcoholic beverages, rubles;

– regional budget's revenues from excise tax on alcoholic beverages, million rubles

b) Relative values revealing a downward trend in the dynamics:

– ratio of alcohol dependence in the region (ratio of production volume to sale volume);

– share of alcoholic beverages import of all products in the region in physical terms, %;

– share of illegally produced alcohol, %.

c) Relative values revealing an upward trend in the dynamics:

– share of alcoholic beverages export in manufactured products in the region in physical terms, %;

– share of alcoholic beverages supplies on the regional market by local producers, %;

– coefficient of the used production facilities of distilleries, %;

– ratio of the excise tax growth rate to the growth rate of the budget's excise tax revenues (less than 1).

The second group consists of social indicators of alcohol security in the region.

a) Absolute values (a downward trend in the dynamics):

– consumption of alcoholic beverages in absolute alcohol per capita, liters;

– consumption of alcoholic beverages in absolute alcohol per capita by product types, liters;

– consumption of alcoholic beverages in physical terms per capita products, liters;

– number of registered crimes, units;

– number of registered crimes committed under the influence of alcohol, units

b) Relative values (a downward trend in the dynamics):

– structure of alcoholic beverages consumption in absolute alcohol, %;

– structure of consumer expenditures of the population (according to the sample survey of household budgets), %;

– share of crimes committed under the influence of alcohol of all registered crimes, %;

– number of children taken from parents, deprived of parental rights, people;

– number of children without parental care, people.

The third group is demographic indicators of alcohol security in the region.

a) Absolute values, revealing a downward trend:

– mortality from causes related to alcohol consumption, people;

– number of patients registered in medical institutions with a diagnosis of alcoholism and alcoholic psychosis, people;

– number of patients registered in medical institutions with a diagnosis of alcoholism and alcohol psychoses per 100,000 population, people;

– number of patients under observation for the first time having a diagnosis of alcoholism and alcoholic psychosis, people;

– number of patients under observation for the first time having a diagnosis of alcoholism and alcoholic psychosis per 100,000 population, people

b) Relative values:

– share of mortality from the causes related to alcohol consumption in the overall mortality rate;

– share of patients registered in medical institutions with a diagnosis of alcoholism and alcohol psychoses in the total population size;

– share of patients under observation for the first time having a diagnosis of alcoholism and alcoholic psychosis in the total population size.

The proposed system of values to monitor alcohol security in the region is quite simple and the information base for the indicators calculation is available. Thus, it is possible to evaluate not only the socio-demographic and economic situation, but also to identify the reserves for an optimal balance of alcoholic beverages production and consumption in order to maintain the alcoholic beverage industry, ensure its effective operation, enhance products quality, meet medical standards and boost regional budget revenues.

The analysis of alcohol production in the Vologda Oblast indicates a steady downward trend in the production of

alcoholic beverages; the distilleries specialize in the production of vodka and other liqueurs and spirits (*tab. 1*). The coefficient of alcohol dependence of the region (the ratio of the production volume in the region to the sales volume) is high enough, in 2012 the region's provision with own alcoholic beverages amounted to 28.6%. The growth of external suppliers' interventions radically changes the structure of the alcoholic beverage market. For example, the share of domestic production of vodka and other liqueurs and spirits has reduced from 93.7 to 52.1%.

Undoubtedly, the state of the regional market was affected by unstable work of the Vologda distilleries, monopoly of some supermarket chains, which promote alcohol imported from other areas, and the inefficient regulation system in this sphere.

To estimate the critical value of alcoholic beverages production in the region we use WHO standards of safety (8 liters of absolute alcohol per capita).

This figure is a threshold for alcohol consumption, i.e. this is a maximum allowable amount on the regional alcohol beverage market. Its excess can lead to the

Table 1. Dynamics of alcoholic beverages production and sale in absolute alcohol in the Vologda Oblast in 2000–2012

Year	Alcoholic beverages production in absolute alcohol, thousand decaliters								Alcoholic beverages sale in absolute alcohol, thousand decaliters
	Vodka, liqueurs and spirits	Brandy	Grape wine	Fruit wine	Wine with alcohol content more than 20%	Wine with alcohol content less than 20%	Low-alcohol drinks with alcohol content not more than 9%	Total	
2000	763.56	-	0.43	7.70	12.77	5.66	-	790.12	1247.2
2001	811.31	0.48	0.31	5.29	5.10	1.10	2.35	825.94	1596.4
2002	884.03	-	15.87	4.43	25.48	0.88	5.51	936.2	1625.7
2003	1215.99	0.63	75.26	4.44	27.38	-	4.90	1328.6	1902.2
2004	1255.44	0.90	69.16	4.45	31.12	-	2.27	1363.34	2039.4
2005	1169.70	0.93	3.00	20.17	25.77	-	4.8	1224.37	1744.4
2006	911.10	0.46	-	22.73	3.67	-	0.46	938.42	1439.9
2007	854.29	1.66	-	21.22	-	-	-	877.17	1395.1
2008	666.25	2.78	-	17.32	-	-	-	686.35	1490.8
2009	550.81	2.69	-	16.17	-	-	-	569.67	1416.1
2010	528.66	2.37	-	18.72	-	-	-	549.75	1241.1
2011	364.22	0.58	-	-	-	-	-	364.8	1413.9
2012	432.17	-	-	-	-	-	-	432.17	1551.1

Compiled by: the Federal State Statistics Service data.

deterioration of alcohol security in the region. What is more, the amount of safe consumption should be adjusted taking into account the share of imported alcoholic beverages in the region, as the structure of the alcohol beverage market includes imported products.

The safe amount of alcohol production for intra-regional consumption is the volume to be produced by local businesses with regard to import and safe consumption.

To identify the actual production volume for domestic consumption it is necessary to exclude the share of exported alcohol, produced within the region, from the actual output and adjust it for the share of illegal production.

To calculate the deviation of the actual production from the threshold value it is required to compare the safe amount of alcohol production for intra-regional consumption with the actual production for domestic consumption. The positive value of this index presupposes safe production, the negative one – overproduction.

Calculated safe production of alcoholic beverages for intra-regional consumption for 2012 is presented in *table 2*.

The actual amount of alcohol production for domestic consumption does not exceed the threshold value (a safe amount of alcohol production for intra-regional consumption) and amounts to 269.46 thousand decaliters, thus it does not pose a threat to alcohol security in the region. The reserves of additional production alcoholic beverages total 141.01 thousand decaliters. However, if we take into account the illegal sale of alcohol, we can get different data.

Table 2. Calculation of safe production of alcoholic beverages for intra-regional consumption in 2012

Indicator	Value
Population, thousand people	1196.2
Consumption of alcoholic beverages per capita in absolute alcohol according to the WHO standards, liters	8
Safe amount of alcohol consumption, thousand decaliters	956.6
Volume of alcoholic beverages import, thousand decaliters	546.49
Safe amount of alcohol production for intra-regional consumption (threshold value), thousand decaliters	410.47
Share of legally production	0.534
Safe amount of intra-regional alcoholic beverages production, adjusted for the share of illegal production, thousand decaliters	219.19
Actual amount of alcohol production, thousand decaliters	432.17
Volume of alcoholic beverages exports, thousand decaliters	162.71
Actual amount of alcohol production for domestic consumption (local manufacturers supplies), thousand decaliters	269.46
Deviation of the actual volume of alcoholic beverages production for domestic consumption from the threshold value (overproduction), thousand decaliters	- 50.27
Compiled by: authors' calculations on the basis of the Federal State Statistics Service data.	

According to the assessment, the actual amount of alcohol production for consumption exceeds the safe amount of alcohol production for intra-regional consumption by 50.27 thousand decaliters.

The analysis of alcoholic beverages consumption shows a shift of consumer requirements from strong alcoholic beverages to a cheaper product – beer. At the beginning of the study period strong alcoholic beverages (vodka, liquors, spirits and brandy) amounted to 82.3% of all drinks in the consumption structure, in 2012 – 49.5%. The volume of beer consumption increases almost threefold (*tab. 3*).

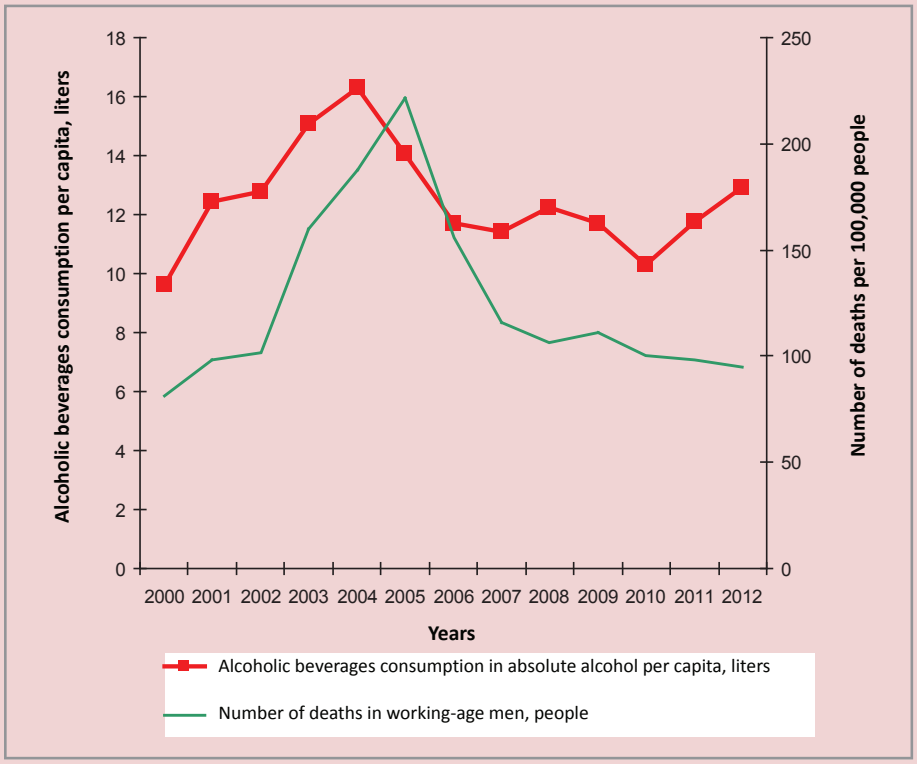
The increase in alcoholic beverages consumption leads to the demographic indicators worsening; for the analyzed period 78.2% of men and 21.8% of women have died from the causes related to alcohol consumption. The direct correlation between alcoholic beverages consumption per capita and mortality rates of men and women of working age from the causes related to alcohol consumption is reflected in *figures 2 and 3*.

Table 3. Consumption structure by types of alcoholic beverages in absolute alcohol in the Vologda Oblast in 2000–2012,

Year	Consumption per capita in absolute alcohol in the region													
	Vodka, liquors and spirits		Wine		Brandy		Champagne and sparkling wine		Low-alcohol beverage		Beer		Total	
	liters	%	liters	%	liters	%	liters	%	liters	%	liters	%	liters	%
2000	7.72	80.2	0.42	4.4	0.2	2.1	0.02	0.2	-	-	1.27	13.2	9.63	100.0
2001	9.24	74.3	1.05	8.4	0.2	1.6	0.03	0.2	-	-	1.91	15.4	12.43	100.0
2002	8.92	69.9	1.51	11.8	0.20	1.6	0.04	0.3	-	-	2.10	16.4	12.77	100.0
2003	9.85	65.3	2.28	15.1	0.21	1.4	0.04	0.3	-	-	2.70	17.9	15.08	100.0
2004	10.72	65.8	1.84	11.3	0.26	1.6	0.06	0.4	-	-	3.42	21.0	16.30	100.0
2005	8.8	62.6	1.36	9.7	0.26	1.8	0.06	0.4	-	-	3.58	25.5	14.06	100.0
2006	6.96	59.5	1.04	8.9	0.24	2.1	0.06	0.5	-	-	3.40	29.1	11.70	100.0
2007	6.48	56.8	1.31	11.5	0.15	1.3	0.07	0.6	-	-	3.40	29.8	11.41	100.0
2008	6.96	56.8	1.39	11.3	0.22	1.8	0.11	0.9	-	-	3.57	29.1	12.25	100.0
2009	6.08	52.0	1.85	15.8	0.21	1.8	0.14	1.2	-	-	3.41	29.2	11.69	100.0
2010	5.16	50.0	1.29	12.5	0.20	1.9	0.09	0.9	0.13	1.3	3.44	33.4	10.31	100.0
2011	6.16	52.3	1.50	12.7	0.24	2.0	0.13	1.1	0.15	1.3	3.60	30.6	11.78	100.0
2012	5.96	46.0	1.44	11.1	0.45	3.5	0.13	1.0	0.14	1.1	4.83	37.3	12.95	100.0

Compiled by: Official website of the Federal State Statistics Service. Available at: http://vologdastat.gks.ru/ [13].

Figure 2. Correlation between the mortality rate in men of working age from the causes related to alcohol consumption and alcoholic beverages consumption per capita in the Vologda Oblast



The alcohol industry while improving economic performance has a negative impact on the socio-demographic situation in the society. The improvement of people's health reduces alcoholic beverages consumption, thus decreasing the demand for alcohol and tax revenues to the state budget.

There is a trend of raising excise taxes to reduce the availability of alcohol. The main danger, associated with the rapid and high increase in excise tax, is a growth of illegally produced alcoholic beverages.

In 2010–2012 excise tax on vodka, liquor and spirits grew by 42.2%, but the revenues declined by 17.1%.

The revenues from alcohol production and turnover in the Vologda Oblast in 2012 amounted to about 0.8% of the regional budget revenues *(tab. 4)*.

The policy aimed at increasing excise taxes encourages shadow economy. During the sampling inspection to detect illegal production and turnover of ethyl alcohol and alcoholic beverages produced in 2012 in the

Figure 3. Correlation between the mortality rate in women of working age from the causes related to alcohol consumption and alcoholic beverages consumption per capita in the Vologda Oblast

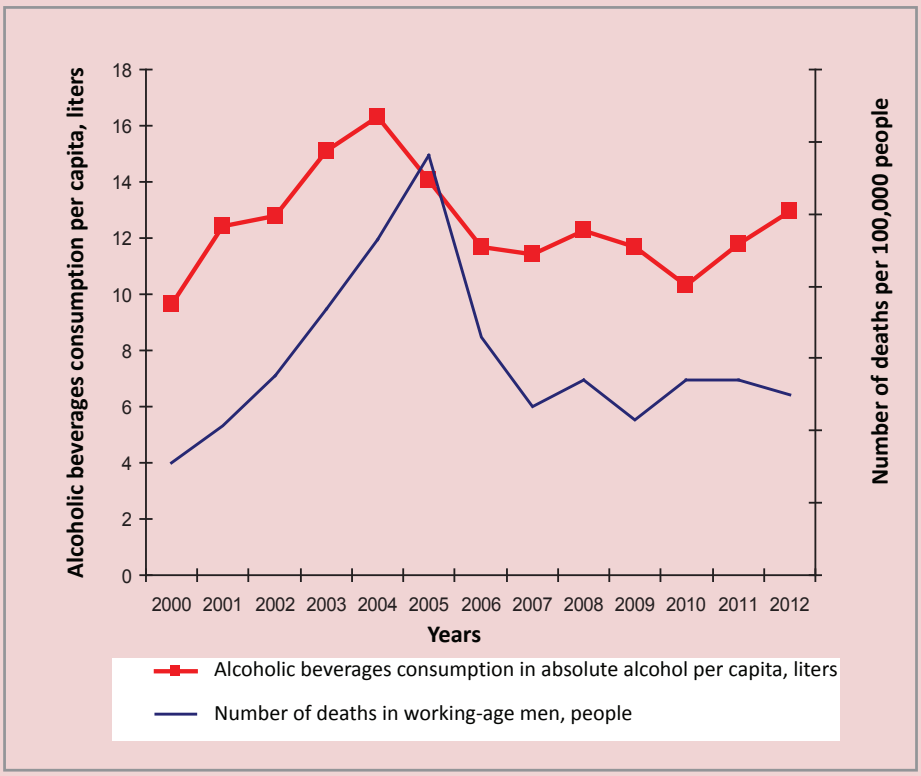


Table 4. Dynamics of regional budget revenues for 2010–2012

Indicator	Cash receipts, thousand rubles		
	2010	2011	2012
Regional budget revenues, total	36,057,172.7	39,342,345.0	42,391,989.1
including tax revenues	23,022,109.5	25,207,213.6	26,966,202.8
including excise tax	392,311.5	415,509.4	342,187.3
Compiled by: Official website of the Federal State Statistics Service. Available at: http://vologdastat.gks.ru/ [13].			

Vologda Oblast 9 gallons of ethyl alcohol and 138 gallons of alcoholic beverages, including 19 deciliters of vodka were confiscated. The share of illegally produced alcoholic beverages amounted to 46.6% of the amount of inspected products, the share of illegally produced vodka – 13%; it reveals the reserves of additional budget revenues *(tab. 5)*.

Table 5. Assessment of the economic losses associated with the illegal production of alcoholic beverages in the Vologda Oblast in 2012

Indicator	Low limit of the indicator	Point estimate of the indicator	Upper limit of the indicator
Actual amount of alcohol production in absolute alcohol, thousand decaliters	-	432.17	-
Share of illegally produced alcoholic beverages	0.4092	0.466	0.5228
Given the sample estimate of the share			
Volume of illegally produced alcoholic beverages in absolute alcohol, thousand decaliters	176,84	201,39	225,94
Given the average annual rate of excise tax (277 rubles)			
Loss amount of excise revenue , total, thousand rubles	489,846.8	557,850.3	625,853.8
Given the structure of excise revenue			
Of them: excise revenues to the federal budget, thousand rubles	293,908.08	334,710.18	375,512.28
Excise revenues to the regional budget, thousand rubles	195,938.7	223,140.1	250,341.5

The mean error of the share of alcoholic beverages which have been produced and sold illegally equals to 0.029, the maximum error of the share of illegally produced alcoholic beverages with the given probability α=0.05 – 0.0568, the confidence interval – 0.4092; 0.5228.

Therefore, it is necessary to take strict measures to prevent activities related to the illegal production and turnover of alcoholic products. There are effective state measures to combat alcohol abuse, which is considered as the main factor of Russia's demographic and social crisis and the national threat at the level of the individual, society and state. However, there are no uniform approaches to the regulation of production and turnover of alcoholic products. For many years we have observed a shift of priorities in the sphere of economic interests, which is hazardous for human health. We believe the state should be a monopolist in the ethyl alcohol production. In this case, alcohol is an object to levy excise tax and the public enterprise that creates preconditions to curb illegal production and turnover of alcoholic beverages and replenish the state treasury is a payer.

Obviously, there is still an unresolved question concerning the regulation of alcoholic beverages production and consumption (in terms of the safe value both for the population and for the state), followed by a lack of economic losses from the illegal sale of alcohol.

The evaluation of mechanisms to control the alcohol industry abroad has showed the presence of the balanced concept to develop and regulate the alcoholic beverage market, taking into account the interests of the state, producers and society. Professional unions and associations of alcohol business have a significant impact on the solution of alcohol industry problems. They cooperate with the authorities and have a possibility to shape the national alcohol policy [10, 16].

In foreign practice the restricted alcohol availability is one of the methods to promote alcohol security.

First, this is connected with the procedure of licensing and taxation of the production and sale of alcoholic beverages. In many countries (Canada, Sweden, Finland, Norway, etc.) in any part of the production cycle (production, wholesale or retail sale) there is either a state sector to strengthen control or an alcohol production and sale monopoly (full, partial). It enhances control over the ethyl alcohol circulation.

Second, we should note the Nordic countries' experience in the fight against alcoholism through physical and economic means to restrict the alcohol availability (shops located far from the places of mass gatherings, their limited work time, the decreased number of shops selling alcohol, increased cost of alcoholic beverages at the expense of higher excise taxes, increased penalties for alcohol falsification, disfranchisement for home-made alcohol, etc.).

Alcohol security should be managed within a single industry. If we consider the economic sector as a number of enterprises manufacturing and distributing similar products that compete on the same consumer market, the enterprises producing distilled alcoholic beverages, grape wine, beer, cider and other fruit wines, other undistilled beverages from fermented materials and the enterprises producing ethyl alcohol from fermented materials, food alcohol, denatured alcohol (methylated spirits) from food alcohol waste should be merged into one branch, because their products contain alcohol (the alcohol content is more than 1.5%) and refer to the alcohol beverage market.

Today, the administrative branch has enterprises producing methylated spirits, alcohol and soft drinks [4]. However, ethyl nondrinking alcohol (methylated spirits) in its content cannot be attributed to food industry products, as it contains denaturing additives in the concentration, which can not be used for the production of alcoholic beverages and other food products. According to the federal law, beer and beer-like beverages are alcoholic; however, the activities of their production and turnover are not subject to licensing. So, it is difficult to control its production and implementation [14].

Obviously, the state alcohol policy should be improved within the legal framework of alcohol production and turnover. It is advisable to single out a subsection "Production of ethyl alcohol, alcoholic and alcohol-containing products" in the subsection "Production of food, including beverages" in the section "Food industry" of the Russian National Classifier of Economic Activities. The proposed OKVED classification is presented in *Figure 4*.

Summing it up we can note that the government regulates the alcohol beverage market actively nowadays; in the sphere of alcohol products procurement and distribution there is a state structure, aimed at planning and monitoring production and

Figure 4. Recommended classification of economic activities

Source: the Russian National Classifier of Economic Activities. Available at: http://www.okvad.ru/razdel_da.html

adjusting ethyl alcohol consumption on terms of social responsibility and creative motivation, as the alcoholic beverage market is one of traditional and significant consumer markets. So, it is possible to use the proposed indicators system to monitor alcohol security and assess the dynamics of safety indicators in terms of economic growth and stability of the demographic situation.

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