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IMPACT OF THE CHANGES IN EXCISE TAX FOR ALCOHOL ON THE STATE REVENUES AND MARKET PLAYERS

Abstract

In the economics recession period State revenues in most of all countries started to decrease. Government of Latvia decided to fight against this trend by increasing excise tax on strong alcohol. The total increase in 2009 constituted 42% and the rate increased from 896.4€ to 1 266.4€ for 100l absolute alcohol. This led to almost 50% drop in legal alcohol sales (by volume). As a result State revenues from VAT and excise tax decreased. Last estimated results for 2010 are indicating 54 million € decrease in VAT, excise tax and other taxes in comparison with 2008 (excise tax 19 million €, VAT 30 million €, other taxes 5 million €).

The paper aims to analyze impact of the increase in excise tax on the State revenues and competitiveness of the companies to draw up proposals (suggestions) for the state authorities for more effective tax management policy and increasing companies' competitiveness.

The analysis reveals a relationship between excise tax rate and illegal alcohol market that leads not only to decrease in competitiveness of legal producers and State revenues, but also have a negative effect on the consumer's health, since the death rates from the alcohol abuse have doubled despite the 50% decrease in sales of the legal alcohol.

The results can be used to improve excise tax system and effectiveness in Latvia.

Key words: *State revenues, alcohol market, excise tax, competitiveness*

Introduction

Most of all scientists who are doing researches in the alcohol field focus on alcohol abuse and its problems such as death rates, alcoholism, health problems and social costs of alcohol.

Latest data from World Health Organization shows that harmful use of alcohol takes 2.5 million lives each year, 320 thousands of them are young people (15-29) resulting in 9% of all deaths in that age group (WHO 2011).

Elizabeth Brainerd and David M. Cutler in their research "Autopsy on an Empire: Understanding Mortality in Russia and the Former Soviet Union" found increase in alcohol consumption as one of the main reason of increase in mortality and decrease in life expectancy (-6.6 years in the 5 years period from 1989 to 1994). Their estimations showed that about a quarter of the increase in mortality (1.7 years) was the result of increase in alcohol use (Brainerd, Cutler 2005). Similar results were achieved also by P. Walberg, M. McKee and V. Shkolnikov in work "Economic change, crime, and mortality crisis in Russia: a regional analysis", the results indicated how the alcohol has contributed to the regional diversity in the decline in life expectancy in the early 1990's (Walberg, McKee, Shkolnikov 1998).

Empirical analysis of J. Mullahy and J. L. Sindelar in research "Health, Income, and Risk Aversion: Assessing Some Welfare Costs of Alcoholism and Poor Health" showed alcoholism as a costly health problem (Mullahy, Sindelar 1994) while report of the European

commission on the Alcohol in Europe estimated a 125 billion € (1.3% of the EU GDP) tangible and 270 billion € intangible losses in the European Union from harms caused by the alcohol such as suffering, lost life that occur because of the criminal, social and health harms etc (Anderson, Baumberg 2007). S. Cnossen has shown that harmful alcohol use is a very important health and safety issue in the EU and proved that earnings from excise tax should be as high as loses from the harm caused by the alcohol (Cnossen 2006).

The aim of this work is to analyse the impact of changes in excise tax on the state revenues, local producers and mortality in Latvia.

Alcohol market and consumers in Latvia

Alcoholic beverages represent a complex market characterized by:

1. heavy impact of economic downturn with anticipated recovery only starting within few years (see Table 1);
2. high impact of consumers on market development which is typical for FMCG market with high turnover rate, hence the market is very competitive and new product propositions are developed and launched instantly following the changes in demand – as any FMCG market, consumer loyalty is rather low;
3. strong alcoholic drinks are distinct from other types of beverages due to relatively much higher importance of brand attributes and category specific consumption patterns. (Kaže et al, 2011) Category and brand propensity is remarkably influenced by consumer-related factors such as need states, lifestyles and even sensory preferences. (Brewer et al, 2011) On other hand – strong spirits are more vulnerable to counterfeiting than specific light ones (e.g. wine) thus posing a risk to legal market volumes and consequentially – state tax revenues.

Table 1. Latvian alcohol market dynamics by category 2006-13, '000 dal (Euromonitor, 2011)

Category	2006	2007	2008	2009	2010E	2011F	2012F	2013F
Beer	145 449	139 661	133 614	126 256	127 248	128 297	128 275	128 281
Wine	13 770	14 907	14 304	11 757	10 892	10 588	10 630	10 951
Vodka	11 918	13 636	13 589	9 384	8 321	7 859	8 054	8 505
Brandy	1 646	1 823	1 691	1 006	846	788	810	849
Other	19 268	23 668	22 098	15 669	13 772	12 997	12 770	12 857
TOTAL	192 052	193 696	185 296	164 072	161 078	160 529	160 539	161 443

Risk of consumers switching to non-commercial alcohol as result of price increase is higher within strong spirits categories as consumers are more driven by social value set that facilitates individualistic maximization of economic value of consumer choice – see Table 2. (Kaže et al., 2011) Consumer social values are analyzed on statistically representative value set of 2010 population survey assessing individual importance of 32 most relevant social

values to population grouped in 8 domains applying Social Values methodology. (Data Serviss, 2008; Kaže et al, 2011)

Table 2. Relative importance of consumer value by beverage category, % (Kaže et al, 2011)

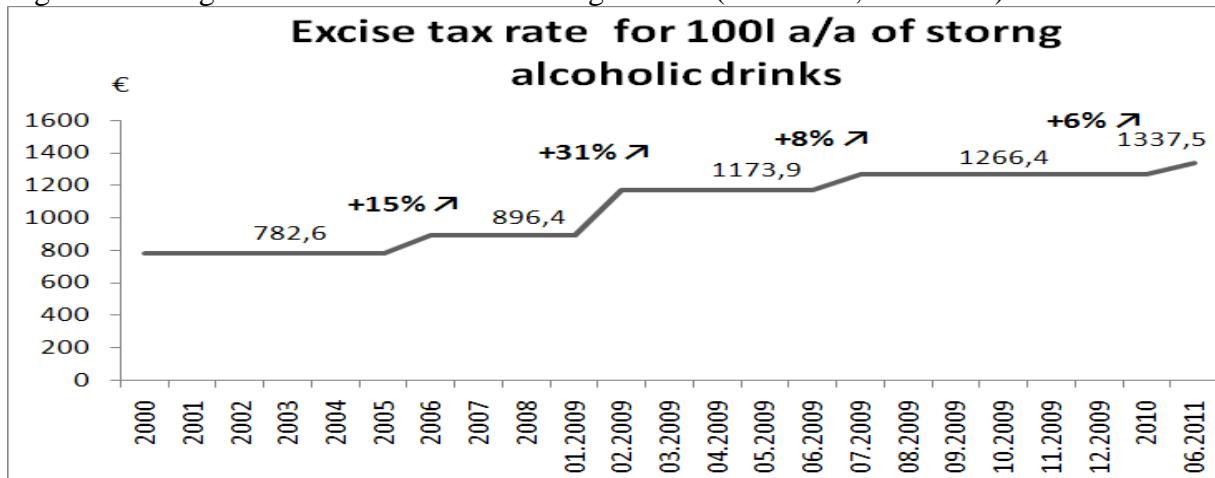
Consumer segment → ↓ Value domain	General population	Brandy	Vodka
n =	1457	567	802
Rationalist	8.9	9.2	9.2
Traditionalist	8.7	8.1	7.8
Peaceful	12.3	14.8	15.3
Domestic	19.5	23.7	23.8
Profound	12.7	15.3	15.0
Self-centred	9.3	5.9	6.0
Ambitious	2.3	2.9	2.6
Maximalist	7.2	10.6	9.9

Average importance of rationalist, maximalist and profound values in strong spirits are significantly above average for general population – such values promote maximalization of individual's economic value derived from a choice of product. Domestic values in economic downturn play similar role – saving behaviour. These consumer value patterns suggest that price increase within product category might serve as a trigger for consumers to enter non-commercial alcohol market. As excise tax plays major role in price build for strong spirits, this issue has to be properly examined.

Alcohol excise tax in Latvia

In the economics recession period State revenues in most of all countries started to decrease. Government of Latvia decided to fight against this trend by introducing new taxes and increasing an existing ones'. Excise tax for strong alcohol was one of those taxes that were increased the first. In the February of 2009 excise tax increased by 31% from 896.4 to 1 173.9€. Unfortunately it didn't give the planned result as the state revenues decreased, therefore another increase followed in July and excise tax increased from 1 173.9 to 1 266.4 €.

Figure 1. Changes in Excise tax rate for strong alcohol (VID 2011; MK 2011).



In 2009 increase of excise tax constituted 42%, that's almost three times more than the total increase of eight previous years.

The drastic changes in excise tax for strong alcohol led to changes in consumption and increase in illegal alcohol share since taxation is an issue worldwide (Peattie 1987: 851-860; Feige 1990: 989-1002). 1266.4 € per 100 a/a is 5.07 € ($1266.4 \times 0.4 / 100$) per 1l 40% alcohol volume bottle, that's approx. 50% of the 1l volume bottle vodka price in shop. If we add VAT, the total tax impact in the final price would constitute approximately 70% (depending on product).

If compared to other alcohol groups excise tax for strong alcohol is the highest one and gives 87-91% of the total state revenues from alcohol excise tax (VID 2011).

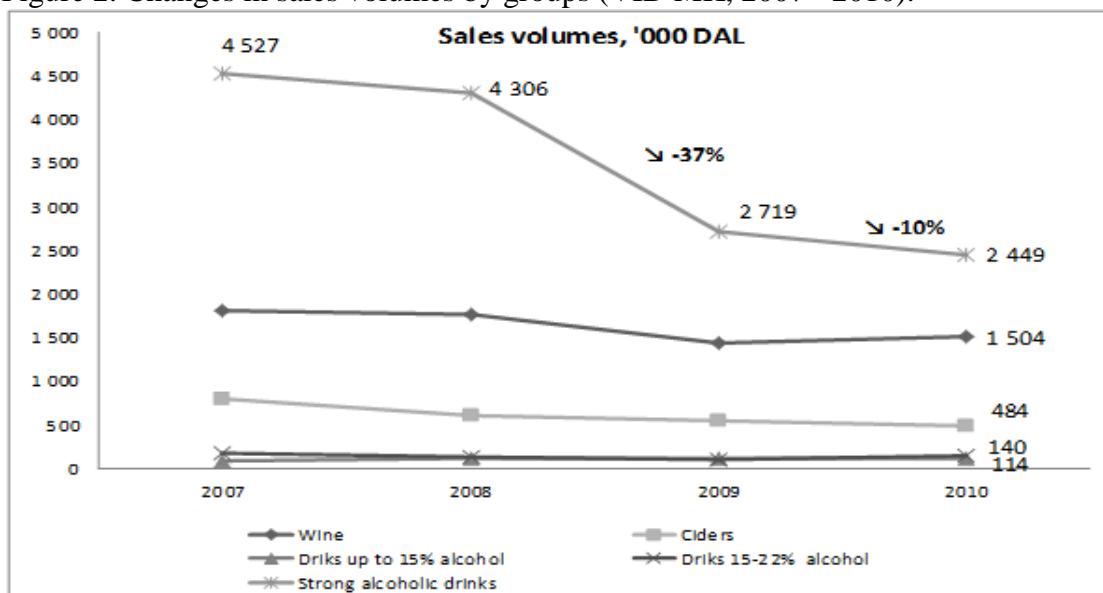
Table 3. Excise tax rates per 1l of alcoholic beverages divided by groups (VID MK 2011).

	Description and rates		Example of rates per 1l bottle	
	Description	Rate on 01.01.2011, €	Alc. strength	Excise tax, €
Wine	LVL/100l	64,0		0,64
Ciders	LVL/100l	64,0	5%	0,64
Driks up to 15% alcohol	LVL/100l	64,0	15%	0,64
Driks 15-22% alcohol	LVL/100l	99,6	20%	1,00
Strong alcoholic drinks	LVL/100l a/a	1266,4	40%	5,07
Beer	LVL 1l per a/a	3,10	5%	0,155

Impact of the changes in excise tax on volumes, State revenues and mortality

The relatively high price elasticities imply that if alcohol prices go up, consumption goes down and if prices go down, consumption goes up (Babor, Caetano & other 2003). According to official statistics sales volumes of the strong legal alcohol in 2009 and 2010 decreased by 37% (vs. 2008) and 10% (vs. 2009) respectively. Total decrease in strong alcohol sales volumes from 2008 to 2010 constituted 43% while there were almost not changes in other groups.

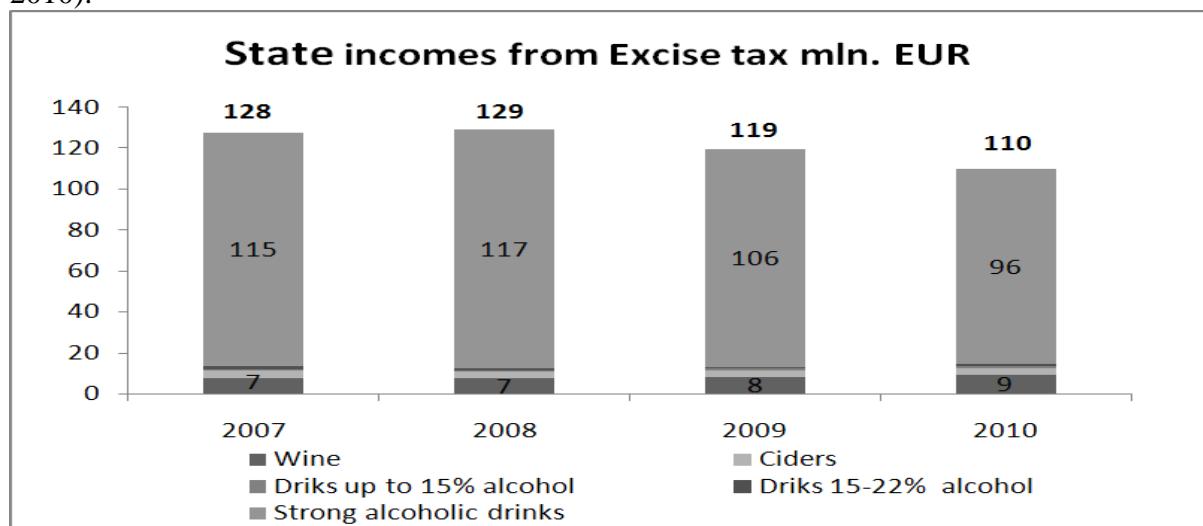
Figure 2. Changes in sales volumes by groups (VID MK, 2007 - 2010).



Analysis excludes beer, because its sales depends not only on price and excise tax but also on weather conditions as the drink is mostly used in the summer time (~62% of annual volumes) and beer sales in sunny summers differs very significantly from rainy ones (ARTA 2010).

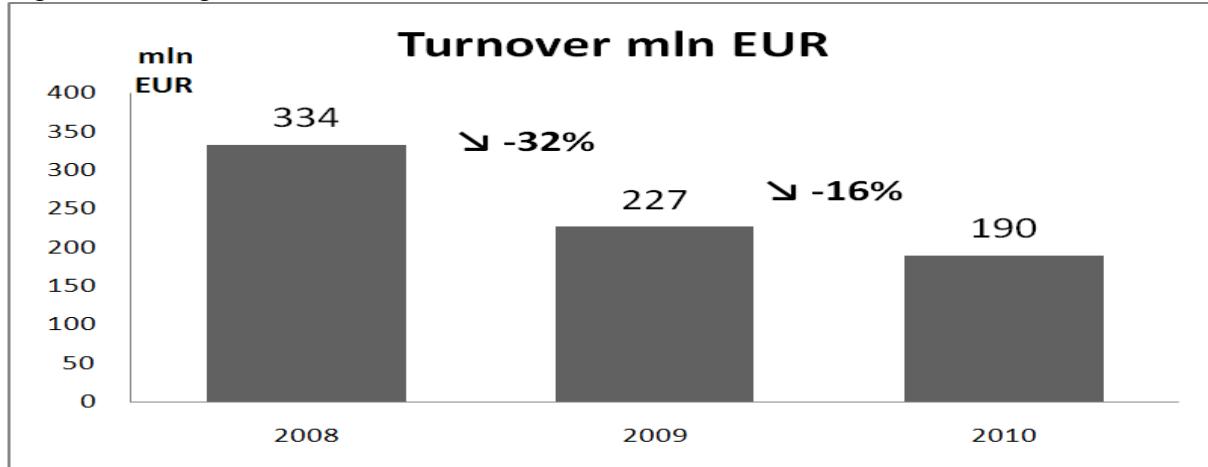
According to WHO Latvia is one of the leading countries in production and consumption of strong alcohol per capita (WHO 2011), therefore changes in excise tax for it had a negative impact on the local producers and the future perspectives as people are slowly switching to other alcohol groups and illegal products. As a result of decrease in strong alcohol sales volumes, state revenues from it as an excise tax decreased by 21 mln €, while total decrease constituted only 19 mln €.

Figure 3. State revenues from excise tax by alcohol groups million LVL (VID MK 2007-2010).

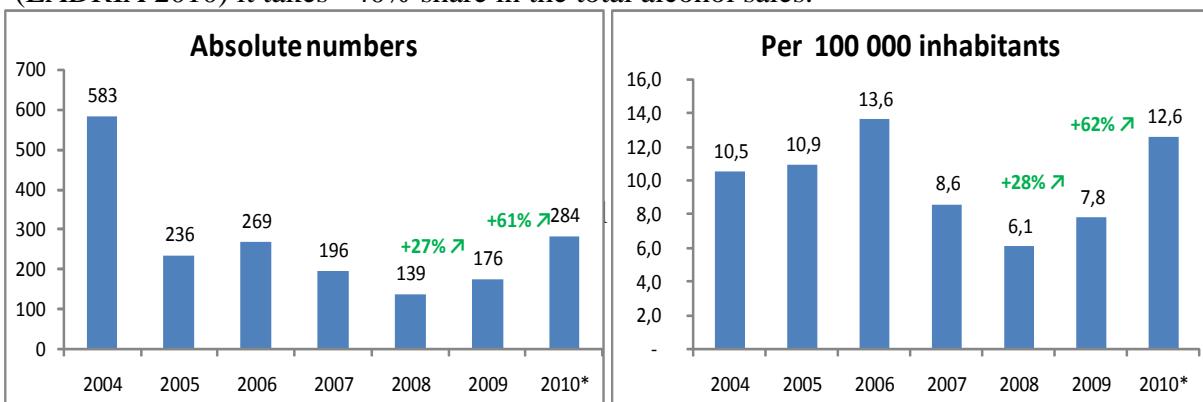


Decrease in sales volumes led to decrease in turnover and as a result from 2008 to 2010 it decreased by 144 mln € that leads to another 30.2 mln loses from VAT. According to the Association of Latvian alcohol producers and distributors changes in excise tax policy led to another 5 mln € decrease in state revenues from other taxes related to the direct business activities e.g. income tax and social tax (LADRIA, 2010) therefore total negative effect on state revenues constituted 19 (Excise tax) + 30(VAT) + 5 (Other taxes)= 54 mln €. Results of Latvian excise tax policy for strong alcohol shows that Latvian government have missed the optimal tax rate (Laffer curve) and every next increase leads only to another decrease in the State revenues.

Figure 4. Changes in alcohol turnover (Nielsen 2008-2010).



As stated in the introduction part many researchers have indicated alcohol negative impact on health and life expectancy, unfortunately Latvia is a special case because despite the huge drop in legal alcohol volumes, mortality from alcohol consumption doubled (from 6.1 deaths per capita in 2008 to 12.6 deaths in 2010). The only reason for such a huge increase in mortality (despite the decrease in alcohol sales) is increase in illegal alcohol market. According to the latest estimated analysis of the Association of alcohol producers and distributors (ARTA 2010) and Association of Latvian alcohol producers and distributors (LADRIA 2010) it takes ~40% share in the total alcohol sales.



Conclusions and suggestions

Alcohol market is one of those markets which have its positive and negative sides. It leads to millions of losses from the harm caused by the alcohol but gives millions of revenues as taxes. Excise tax works as an instrument for balancing loses and gains.

As a result of changes in excise tax for strong alcohol, the total state revenues decreased by approximately 54 mln €. The new tax policy – focusing only on one alcohol group led to changes in consumption: decrease in strong alcohol sales - the leading alcohol production industry in Latvia, therefore having a negative impact on the local producers. While doing changes in the tax policy state officials should focus not only on the excise tax rate but also on

the overall picture – results of the previous changes in excise tax, effect on local producers (because they give also working places and pay other taxes such as income tax, social tax etc), consumption, state revenues from other taxes (such as VAT, income tax, social tax etc.) and illegal market.

Illegal alcohol market has a negative impact on State revenues, mortality, legal sales volumes and producers. Latest estimated results shows that illegal alcohol market takes approx. 40% share in the total sales, therefore this is the field where State officials should maximize their attention and increase the fight against it.

Latvian excise tax rate for strong alcohol is above the optimal therefore every further increase will lead only to decrease in State revenues from it.

Bibliography

1. Anderson P., Baumberg B. Harmful drinking, *European commission, DG Health and Consumer Protection*, 2007.
2. ARTA / Alcohol consumption report for Latvia (2010), *Association of alcohol producers and distributors*.
3. Babor, T.F., R. Caetano, S. Casswell, G. Edwards, N. Giesbrecht, K. Graham, J. Grube, P.Gruenewald, L. Hill, H. Holder, R. Homel, E. Österberg, E.J. Rehm and I. Rossow. Alcohol: No Ordinary Commodity – Research and Public Policy, *Oxford University Press*, 2003.
4. Brainerd E., David M. Cutler. Autopsy on an Empire: Understanding Mortality in Russia and the Former Soviet Union, *IZA*, Discussion Paper No. 1472, 2005.
5. Brewer J., Saliba A. & Miller B. Consumer behaviour and sensory preference differences: implications for wine product marketing. *Journal of Consumer Marketing*, Vol. 28 No. 1, 2011, pp. 5-18.
6. Cnossen S. Alcohol taxation and regulation in the European Union, *Munich Society for the Promotion of Economic Research (CESifo)*, working paper No. 1821, 2006.
7. Data Serviss (2008). Social Values methodology. Internal documentatio, basics available on web: <http://www.data.lv/index.php?id=26> (retrieved 10.12.2008).
8. Euromonitor. Online alcohol industry trade sources/national statistics and consumer lifestyle trends. Retreived from <http://www.portal.euromonitor.com> (12.01.2011).
9. Feige. E. Defining and Estimating Underground and Informal Economies: The New Institutional Economics Approach, *World Development*, Vol. 18, No 7, 1990, pp. 989-1002.
10. Kaže V., Strateičuks A., Škapars R. Consumer Values and Consumption Patterns Driving Latvian Strong Alcoholic Beverages Market. Proceedings of International Conference ‘Current Issues in Management of Business and Society Development’, Riga, LU: 2011, 331-341.
11. LADRIA / Alcohol market in Latvia (2010), *Association of Latvian alcohol producers and distributors*.
12. MK / The Cabinet of Ministers of the Republic of Latvia, electronic resource www.mk.gov.lv.
13. Mullahy J., Sindelar J. Health, Income, and Risk Aversion: Assessing Some Welfare Costs of Alcoholism and Poor Health, *National Bureau of economic research (NBER – Cambridge)*, Working Paper No. 4649, 1994.
14. Nielsen / Report on alcohol consumption in Latvia (2007, 2008, 2009, 2010).

15. Peattie. L. An Idea in Good Currency and How It Grew – The Informal Sector, *World Development*, Vol. 15, No 7, 1987, pp. 851-860.
16. VEC / Ministry of health of the republic of Latvia, The centre of health economics Latvia, Consequences of consumption and distribution of alcohol in Latvia, 2010.
17. VID / State revenue services of the Republic of Latvia, electronic resource www.vid.gov.lv.
18. VID MK / State revenue services of the Republic of Latvia, National Customs board, *Alcohol consumption report for 2007; 2008; 2009; 2010*.
19. Walberg P., McKee M., Shkolnikov V. Economic change, crime, and mortality crisis in Russia: a regional analysis, *British Medical Journal*, Vol. 317, 1998, pp. 312 – 318.
20. WHO / World Health Organization, *Fact sheet and database*, 2011.