

## Availability restrictions and alcohol consumption: A case of restricted hours of alcohol sales in Russian regions

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### Abstract

**Aim:** To determine how new restrictions on hours of alcohol retail sales influence alcohol consumption in Russia.

**Design:** Natural experiment with combined regional and micro-data.

**Setting/Participants:** Cross-sectional samples from the Russian Longitudinal Monitoring Survey, corresponding to waves 18 and 19, years 2009–2010, 32 Russian regions and more than 7,000 adults (aged 15 and up) consuming alcohol at least once per month.

**Measures:** Descriptive analysis of per capita alcohol sales at the regional level and regression analysis of pure spirit consumption at the individual level, controlling for various socioeconomic factors, including sales bans.

**Findings:** We revealed a significant positive correlation between the amount of alcohol consumed and the number of hours of allowed alcohol sales when other factors were controlled. The results gained from analyzing the micro-data were confirmed using the regional sales information. In terms of drinking reduction, sales restrictions in the evening hours seem more efficient than restrictions in the morning hours. Restricted hours of sale do not increase consumption of beer or home-distilled alcohol.

**Conclusions:** Alcohol consumption depends on the hours of sale, all else being equal. Restricting the legal hours of alcohol sales in Russian regions has the potential to reduce consumption levels. These findings indicate a need for a further reduction in sales hours in the regions where heavy drinking is especially widespread.

Excessive alcohol consumption has long been typical of unhealthy behavior in many countries in the world. The consequences associated with drinking include illness and reduced life expectancy for the consumer and negative external effects for society, such as domestic violence, crime, traffic and workplace accidents (Babor et al., 2010; World Health Organization [WHO], 2011). From the perspective of economic theory, these are all arguments for governmental intervention in the process of individual consumer choice.

The idea of restricting the sale of alcohol is based on a fact well known among economists: the “supply side” of any market influences its “demand side.” A review by Hahn et al. (2010) provided an assessment of the effects of increasing sales hours in several high-income countries. The researchers showed that extending the sales period by two or more hours increased harmful alcohol consumption (pp. 594–598). Based on 14 studies, Middleton et al. (2010) analyzed the results of changes to limits on the days on which alcoholic beverages were sold. They found that removing limits on sales increased alcohol consumption

(pp. 583–584). Especially interesting was a natural experiment in Sweden, where, in the year 2000, legislation was changed, allowing alcohol retail shops that had previously been closed on Saturdays to open in several counties. In other counties, the rules remained the same. Nordström and Skog (2003) used these data to estimate the impact of an additional day of alcohol sales. The researchers found a statistically significant increase in alcohol consumption in those counties where Saturday sales occurred (p. 397). A detailed review of research papers devoted to restrictions on hours and days of alcohol sales can be found in a paper by Popova, Giesbrecht, Bekmuradov, and Patra (2009). The authors analyzed 15 articles based on data from different countries and found a positive correlation between the hours and days of sales and alcohol consumption. Another review of temporal restriction practices and relevant scientific evidence was provided in the comprehensive volume “Alcohol: No Ordinary Commodity” (Babor et al., 2010). The authors concluded that the level of effectiveness of restrictions on times of sale is relatively high, and that research solidly supports these measures. The WHO Global Strategy to

Reduce the Harmful Use of Alcohol (WHO, 2010) listed the “availability of alcohol” among recommended target areas for national action.

Russia has consistently been among those countries with the highest levels of alcohol intake, and it has the most dangerous model of consumption, according to the WHO (2011). Alcohol policy in Russia has a long and complex history. A total prohibition of alcohol sales and consumption was established by Tzar Nicolas II’s decree in 1914 during World War I, and provided immediate positive results: per capita alcohol consumption decreased from 4.7 liters of pure spirits in 1913 to 0.2 liters in 1915 (Gosudarstvennaya Duma Rossiyskoy Federatzii, 1994). After the revolution in 1917, the new Bolshevik government maintained the prohibition until 1923, when it was abolished because of a high prevalence of home brewing and a need for financial resources for new governmental campaigns. Later in the USSR’s history, there were numerous episodes of restrictions being set and then abolished or left unenforced.

In 1985, Gorbachev began a large-scale anti-alcohol campaign that limited alcohol sales to the hours from 2 p.m. until 7 p.m. (Soviet Ministrov SSSR, 1985). These restrictions were in place until 1990. During this campaign, per capita alcohol sales were reduced by 60% (Khalturina & Korotaev, 2008, p. 27).

Unfortunately, after the collapse of the USSR, the emerging Russian government had higher priorities than maintaining the anti-alcohol campaign. As part of rapidly changing market relationships, the state lost its monopoly on alcohol production and sales and its control over restricted hours of sale. Many new producers, including large multinationals, entered the alcohol market. According to the Federal State Statistical Service (Rosstat), alcohol sales in liters of pure spirit per adult increased from 7.1 in 1990 to 11.6 in 2007 and then declined slightly, to 10.7, in 2010 (Rosstat, 2012a, p. 81, p. 535). Research on the Russian alcohol situation after 1991 often stresses the negative role of any state alcohol policy. For example, Treisman (2010) argued that the increasing death rates observed in Russia in early 1990 were caused by alcohol pricing policy (the low relative price of vodka) rather than by the distress of political and economic transition. Bhattacharya, Gathmann, and Miller (2012) described the end of the Gorbachev anti-alcohol campaign as the main factor contributing to the so-called Russian mortality crisis.

Recently, the Russian government has turned to more radical anti-alcohol policy instruments. The key document outlining this approach, “Concept for State Policy to Reduce the Scale of Alcohol Abuse and Prevent Alcoholism among the Population of the Russian Federation,” was approved in 2009 (Pravitel’stvo Rossijskoi Federatzii, 2009). All Russian regions obtained the right (but not the obligation) to establish restrictions on hours of alcohol sales. In 2009, few regions had such restrictions in place. In contrast, by 2010, 72 out of 83 regions had adopted a ban on all alcoholic beverages, except beer, during various night hours (see Appendix A).

Since July 2011, off-premises sales of alcohol have been forbidden from 11 p.m. until 8 a.m. across the country; regional authorities now have the authority only to tighten this measure, if they wish. Hence, we no longer observe significant regional variations in restricted hours of sale. However, the unique situation that existed during the year 2010 created a natural experiment that makes it possible to evaluate the efficiency of the newly adopted restrictions. Several potential consequences of such restrictions merit investigation: First, it is important to understand how the existence and severity of temporal bans correlate with the amount of alcohol consumed. Second, it is unclear whether morning and evening restrictions are equally effective. Lastly, it is not clear how the ban on retail alcohol sales corresponds with the consumption of home-distilled beverages and beer, which are not subject to restrictions. Hence, the following four hypotheses were tested:

- H1: A temporal ban on alcohol sales reduces individual alcohol consumption, all else being equal.
- H2: Evening restrictions are more efficient than morning restrictions (as a greater amount of alcohol is normally sold in the evening hours).
- H3: Availability restrictions on strong alcohol do not necessarily induce the consumption of beer as a substitute.
- H4: Availability restrictions on retail alcohol sales do not necessarily induce the consumption of home-distilled alcohol as a substitute.

## Data and Methods

To estimate the impact of the restricted hours of sale in 2010, we used regional and micro-level data. First, we have official statistical information on alcohol sales by type of beverage (vodka, cognac, wine, beer) provided by the Rosstat for all Russian regions (Rosstat, 2011, pp. 722–723). We used these data to estimate per capita sales of vodka, cognac and wines in liters of pure spirits in every Russian region. Beer was not subject to restrictions because, until 2013, it was not considered to be alcoholic. Thus, we calculated per capita sales of beer separately. Two regions with sales levels close to zero (Chechen Republic and Republic of Ingushetia) were excluded from observation, as were three autonomous districts without separate data on alcohol sales, and the Kurgan region, where sales restrictions were only partial. Thus, of 83 Russian regions, we analyzed 77, of which 68 had various temporal bans in 2010, and nine did not (see Appendix A).

The regions were grouped by the number of hours when alcohol sales were permitted, ranging from those which permitted sales for eight hours of the day, to those which allowed 10 or 12 hours of sales, to those with no restrictions at all. We then compared the average per-adult sales dynamics (2009–2010) for alcoholic beverages that were subject to restrictions and for beer in these seven regional groups. These calculations were repeated for five regional groups with different closure hours.

Another type of micro-data was provided by the Russian Longitudinal Monitoring Survey (RLMS-HSE), conducted by the Higher School of Economics and ZAO “Demoscope” together with the Carolina Population Center, University of North Carolina at Chapel Hill, and the Institute of Sociology RAS (National Research University Higher School of Economics [HSE], 2011). The RLMS-HSE is a household-based, nationally representative survey, and its individual questionnaires collect information on respondents’ well-being, including the amounts of alcohol consumed monthly by type of beverage. We used a cross-sectional sample from round 19 of the RLMS-HSE (year 2010). Of 32 regions included in the survey in 2010, 28 had introduced restrictions on hours of alcohol sales; the other four had no restrictions.

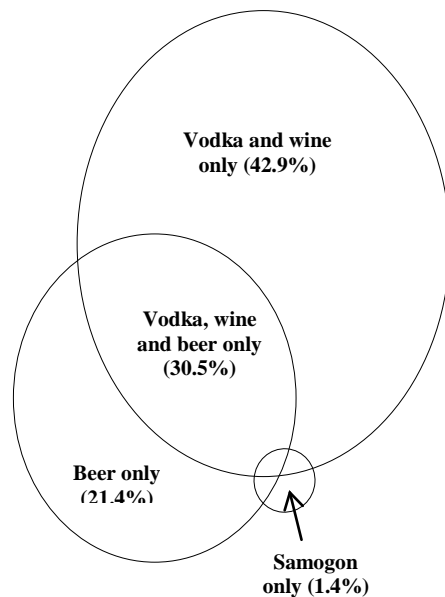
The subsample of individuals consuming alcoholic beverages at least once per month amounted to 7,286 adults. Among these adults, the largest share—3,128 (42.9%)—reported drinking only vodka and wine, which were banned from sale at night. In total, 1,561 (21.4%) consumed only beer. The number of those individuals drinking only vodka, wine and beer (but not home-distilled wine, or *samogon*) amounted to 2,221 persons (30.5%). Samogon consumers were less numerous, accounting for 376 persons, or 5.2% of those individuals drinking alcohol. Thus, the main patterns of alcohol drinking in Russia were 1) vodka and wine, 2) vodka and wine paired with beer, and 3) only beer (Figure 1).

We constructed a multiple linear regression model, with the logarithm of the total amount of individual consumption of alcohol in grams of pure spirits per month as the dependent variable. To estimate this variable, we summarized the amounts of all alcoholic beverages consumed by every individual (adjusted according to alcohol concentration). In line with previous research on alcohol consumption (Andrienko & Nemtsov, 2006; Cerdá, Johnson-Lawrence, & Galea, 2011; Contoyannis & Jones, 2004; Cutler & Lleras-Muney, 2010; Gottlieb & Baker, 1986; Le, Ahern, & Galea, 2010; Leonard & Mudar, 2003; Livingstone & Room, 2008; Neufeld, Peters, Rani, Bonu, & Brooner, 2004; Park & Kang, 2008; Zhou et al., 2006), we used numerous socioeconomic factors as independent variables (including gender, family status, the type of settlement, educational level, average household income, and others). Sales restrictions were modeled in three different ways: as the total number of hours when alcohol sales were allowed, as the time of sales closure and as the time of sales start. These variables were used as exogenous variables, and their influence on total consumption was estimated.

We then estimated the same model for the amount of individual consumption of alcohol, excluding beer and samogon, which were not subject to nighttime sales restrictions. This modeling allowed us to track the impact of bans on the consumption of the beverages that were subject to restrictions.

**Figure 1**

*Main patterns of alcohol consumption in Russia, 2010 (share of those individuals drinking certain beverages among all alcohol consumers, %)*



*Note.* The data in this figure are from the HSE (2011). Russian Longitudinal Monitoring Survey - Higher School of Economics. Available at: <http://www.hse.ru/org/hse/rlms>

As mentioned above, beer was not subject to restricted hours of sale in 2010. Thus, theoretically, beer could have been consumed as a replacement for other alcoholic beverages. Several research papers on alcohol consumption in Russia have already shown that beer is a supplement to strong drinks. For example, Kossova, Kossova, and Sukhodoev (2012) estimated a regression model of beer consumption based on regional sales data and found “a positive logarithmic relationship between beer and vodka” (p. 14). In Russia, where more than half of all alcohol consumed is vodka, the rapidly growing consumption of beer is not accompanied by a comparable decline in the consumption of strong drinks ([United Nations Development Program](#) [UNDP], 2011, pp. 89–90). To assess the possible substitution effect caused by sales bans, we estimated a separate regression model for beer that included variables for temporal restrictions.

A common criticism of availability restriction measures is that they may induce increased consumption of home-distilled substitutes. In fact, descriptive data from the RLMS-HSE and other surveys show that samogon is not currently popular, as its share of consumers has decreased consistently (UNDP, 2011, pp. 89–90). However, we estimated the share of the population drinking samogon and the average intake of individuals who drink this beverage separately for two groups of regions (with and without restrictions). The same regression model was estimated for samogon consumption as for the total amount of alcohol consumption and included the exogenous variables reflecting regional sales bans.

## Results

An analysis of descriptive statistics shows that in regions where alcoholic beverages could be sold for 17 or more hours per day, the average level of sales per person increased between 2009 and 2010. In contrast, in regions with relatively stringent restrictions, sales per person dropped (see Table 1). In the case of beer, which could be bought all day, there was not such a clear relationship between consumption rates and number of hours. Only Chukotka—a region with a reputation for high rates of alcoholism—demonstrated a rapid growth of per capita sales of beer; the other regions showed a slight decrease or slight growth.

In those regions where liquor could be sold until 8, 9, 10 or 11 p.m., per capita sales of alcoholic beverages (excluding beer) declined in 2010 from 2009. Conversely, in the territories where alcohol sales stopped at midnight or later, or did not stop, we observed increasing per capita sales (see Table 2).

RLMS-HSE data on individuals grouped by region reveal that the share of the adult population drinking home-distilled alcohol (samogon) declined in all regions, regardless of policies controlling retail alcohol sales. However, the average daily intake of those individuals who prefer samogon increased in the regions without sales restrictions. In contrast, in the group of territories where restrictions were set, the amount of samogon consumed per person declined (Table 3).

**Table 1**

*Sales of alcoholic beverages per adult, in liters of pure spirit, by groups of regions with various hours of sale, 2009–2010*

Number of hours per day when alcohol sales permitted	Number of regions	Alcohol sales per adult, in liters of pure spirit (excluding beer)		Growth rate, %	Beer sales per adult, in liters of pure spirit		Growth rate, %
		2010	2009		2010	2009	
8	1	8.03	8.09	-0.74%	0.89	0.52	71.15%
10–12	15	5.94	6.24	-4.70%	2.89	2.91	-0.01%
13–14	13	5.53	5.66	-2.34%	2.89	2.88	0.00%
15	15	6.17	6.20	-0.41%	3.48	3.43	1.46%
16	17	6.85	6.88	-0.53%	3.35	3.50	-4.29%
17–19	7	5.15	5.13	0.56%	2.85	2.80	1.79%
24	9	5.78	5.59	3.38%	3.46	3.40	1.76%

*Note.* The data in this table are from the Rosstat (2010). Regiony Rossii. Sozialno-ekonomicheskiye pokazateli. Available at: [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/publications/catalog/doc\\_1138623506156](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156) [Rosstat (2010). Regions of Russia. Socio-economic indicators.]; Rosstat (2011). Regiony Rossii. Sozialno-ekonomicheskiye pokazateli. Available at: [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/publications/catalog/doc\\_1138623506156](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156) [Rosstat (2011). Regions of Russia. Socio-economic indicators.]

**Table 2***Sales of alcoholic beverages per adult, in liters of pure spirit, by groups of regions with various closure times, 2009–2010*

Closing time for alcohol sales	Number of regions	Alcohol sales per adult in liters of pure spirit (excluding beer)		Growth rate, %	Beer sales per adult in liters of pure spirit		Growth rate, %
		2010	2009		2010	2009	
8–9 p.m.	7	6.14	6.29	-2.36%	2.68	2.73	-1.83%
10 p.m.	17	5.78	5.95	-2.76%	2.95	2.97	-0.67%
11 p.m.	37	6.16	6.28	-1.91%	3.21	3.25	-1.23%
12–2 a.m.	7	6.40	6.22	2.94%	3.28	3.17	3.47%
No restrictions	9	5.78	5.59	3.38%	3.46	3.40	1.76%

*Note.* The data in this table are from the Rosstat (2010). Regiony Rossii. Sozialno-ekonomicheskiye pokazateli. Available at: [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/publications/catalog/doc\\_1138623506156](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156) [Rosstat (2010). Regions of Russia. Socio-economic indicators.]; Rosstat (2011). Regiony Rossii. Sozialno-ekonomicheskiye pokazateli. Available at: [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/publications/catalog/doc\\_1138623506156](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156) [Rosstat (2011). Regions of Russia. Socio-economic indicators.]

**Table 3***Samogon consumption in regions with temporal bans on alcohol sales and in regions without restrictions, 2009–2010*

	Regions with temporal bans		Regions without restrictions	
	Percentage of adult population drinking samogon	Average daily amount, in grams (for those drinking samogon)	Percentage of adult population drinking samogon	Average daily amount, in grams (for those drinking samogon)
2009	2.66%	260.7	4.36%	270.0
2010	2.11%	235.5	3.13%	276.6

*Note.* The data in this table are from the HSE (2011). Russian Longitudinal Monitoring Survey—Higher School of Economics. Available at: <http://www.hse.ru/org/hse/rfms>

Table 4 presents a brief summary of the regression analysis results. All of the models were statistically significant, with high levels of F-statistics. Most of the beta-coefficients were statistically significant and had the expected signs. Integrating the results of models 1 to 4, we can state the following:

- 1) The number of hours during which alcohol sales are allowed correlates positively with individual alcohol consumption, all else being equal (models 1.1, 2.1, 3.1, 4.1).
- 2) A negative coefficient sign for the variable of sales start shows that the later an outlet opens, the less a person will drink. A positive sign before the coefficient of the closure time variable indicates that the longer a shop is open, the more a person will consume. However, the magnitude of the evening ban coefficient is 3.5 to 4 times higher than that of the morning ban coefficient (models 1.2, 1.3, 2.2, 2.3, 3.2, 3.3).

- 3) Estimates of models 3.1 to 3.3 demonstrate that individual beer consumption reacts to restricted hours of sale in the same way as the consumption of vodka and wine, which were subject to night sales restrictions.

- 4) Estimates of models 4.1 to 4.3 reveal non-significant  $\beta$ -coefficients for the variables of morning and evening restrictions. The only significant coefficient for the variable “Number of hours” has the same sign as in all of the models for total alcohol and for beer. Thus, we can argue that the individual consumption of vodka, beer and samogon is lower in territories where the banned period is longer, all else being equal.

The regression analysis results coincide with the regional macro-data presented in Tables 1 to 3 and thus verify the findings. The above hypotheses were thus confirmed.

**Table 4***Influence of restricted hours of sale on individual alcohol consumption: Regression analysis results*

Dependent variable: individual monthly consumption of alcoholic beverages in grams of pure spirit, ln		N	Independent variables of restrictions	Coefficient estimate	p-value	Std. error	R <sup>2</sup>	Number of observations
All alcoholic beverages (including beer and samogon)	1.1		Number of hours when alcohol sales were permitted	0.008**	0.002	0.003	0.236	6,032
	1.2		Time when sales end in the evening (9 p.m., 10 p.m., etc.)	0.076***	0.000	0.015	0.229	5,226
	1.3		Time when sales begin in the morning (6 a.m., 7 a.m., etc.)	-0.025***	0.000	0.006	0.228	5,226
All alcoholic beverages (excluding beer and samogon)	2.1		Number of hours when alcohol sales were permitted	0.009***	0.000	0.002	0.320	5,516
	2.2		Time when sales end in the evening (9 p.m., 10 p.m., etc.)	0.077***	0.000	0.014	0.316	4,858
	2.3		Time when sales begin in the morning (6 a.m., 7 a.m., etc.)	-0.020***	0.000	0.005	0.313	4,858
Beer	3.1		Number of hours when alcohol sales were permitted	0.010***	0.000	0.002	0.174	3,895
	3.2		Time when sales end in the evening (9 p.m., 10 p.m., etc.)	0.082***	0.000	0.014	0.178	3,340
	3.3		Time when sales begin in the morning (6 a.m., 7 a.m., etc.)	-0.027***	0.000	0.005	0.177	3,340
Samogon	4.1		Number of hours when alcohol sales were permitted	0.021**	0.004	0.007	0.249	343
	4.2		Time when sales end in the evening (9 p.m., 10 p.m., etc.)	-0.004 <sup>ns</sup>	0.941	0.059	0.214	285
	4.3		Time when sales begin in the morning (6 a.m., 7 a.m., etc.)	0.009 <sup>ns</sup>	0.518	0.014	0.215	285

\*\*  $p < .01$ ; \*\*\*  $p < .001$ ; *ns* = non-significant

## Discussion

The results of this study show that the amount of individual alcohol intake is positively correlated with the number of hours when sales are permitted. This observation is true for all types of alcohol consumption (total alcohol consumption, total alcohol consumption without beer and samogon, beer consumption, and even samogon consumption). These results are consistent with the findings of systematic reviews performed by Babor et al. (2010), Hahn et al. (2010) and Popova et al. (2009). In addition, in this study, we found that not only is alcohol consumption influenced by the number of hours when sales are forbidden, but that the times when alcohol sales start and close are also important. Based on regression coefficient magnitudes, we can argue that closure time is a more efficient instrument to reduce drinking.

In our study, we did not observe any substitution effect between beer and vodka at the individual level, a result that is consistent with the findings of Kossova et al. (2012) at the macro level. We also discovered no evidence that restricted hours of retail alcohol sales led to greater

consumption of home-distilled alcohol. Previous research in Russia revealed a tendency of consumers to substitute samogon for vodka when the price of the latter increased (Andrienko & Nemtsov, 2006). Our results concerning restricted hours of sale do not confirm that home-distilled alcohol is consumed as a substitute for commercially produced beverages, and particularly vodka.

Price regulation is often named as one of the most efficient measures for drinking reduction (Babor et al., 2010, Treisman, 2010, WHO, 2010). In our study, we did not estimate the influence of alcohol pricing, for two reasons. First, in the regression analysis, we used cross-sectional data for only one year, so we could not track price growth. Second, and perhaps more importantly, the real price of alcohol in Russia is still very low. In 2010, a floor price was introduced for vodka for the first time and was set at 89 rubles for a half-liter bottle, which was equal to the price of 3 kilos of bread or 3 liters of milk (Rosstat, 2012b, pp. 66-67). The excise tax on strong alcohol in Russia is still several times less than in European countries, including Finland and Poland, and this tax comprises less than 50% of the retail price (Kalinin, Kolosnitsyna, & Zasimova,

2011, p. 21). Therefore, we do not believe that alcohol prices had a significant effect on consumption in 2010. However, as alcohol taxes have recently increased, we are planning to continue this research using panel data and to estimate the influence of price along with that of restricted hours of sale.

## Conclusions

The investigated case has confirmed that alcohol consumption depends on the hours of sale, all else being equal. The results are consistent with the general economic theory that supply influences demand. It is important to note that the Russian regions that banned nighttime liquor sales demonstrated relatively low consumption of both commercially available alcohol and home-distilled wine and beer, which were not subject to restrictions. Restricted hours of alcohol sales in Russian regions have the potential to reduce total consumption levels. These findings indicate a need for a further reduction in sales hours in regions where heavy drinking is especially widespread. Evening sales closures could be effective in confronting the Russian culture of binge drinking.

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## Appendix A

### Temporal bans on the sales of alcoholic beverages in Russian regions, 2010

Regions		Hours when sales are illegal	Regions		Hours when sales are illegal
1	Chechen Republic <sup>a</sup>	10 a.m.–8 a.m.	43	Tambov region <sup>b</sup>	11 p.m.–8 a.m.
2	Republic of Ingushetia <sup>a</sup>	6 p.m.–10 a.m.	44	Tomsk region <sup>b</sup>	11 p.m.–8 a.m.
3	Chukotka autonomous district	8 p.m.–12 p.m.	45	Volgograd region <sup>b</sup>	11 p.m.–8 a.m.
4	Nenets autonomous district <sup>a</sup>	8 p.m.–11 a.m.	46	Vologda region	11 p.m.–8 a.m.
5	Moscow region <sup>b</sup>	9 p.m.–11 a.m.	47	Yaroslavl region	11 p.m.–8 a.m.
6	Murmansk region	9 p.m.–11 a.m.	48	Sakhalin region	12 a.m.–9 a.m.
7	Republic of North Ossetia–Alania	9 p.m.–11 a.m.	49	Chelyabinsk region <sup>b</sup>	11 p.m.–7 a.m.
8	Tver region <sup>b</sup>	9 p.m.–10 a.m.	50	Chuvashi Republic <sup>b</sup>	11 p.m.–7 a.m.
9	Jewish autonomous region	10 p.m.–11 a.m.	51	Kirov region	11 p.m.–7 a.m.
10	Kamchatka territory	10 p.m.–11 a.m.	52	Leningrad region <sup>b</sup>	11 p.m.–7 a.m.
11	Krasnodar territory <sup>b</sup>	10 p.m.–11 a.m.	53	Pskov region	11 p.m.–7 a.m.
12	Ulyanovsk region	8 p.m.–8 a.m.	54	Republic of Buryatia	11 p.m.–7 a.m.
13	Ivanovo region	9 p.m.–9 a.m.	55	Republic of Karelia	11 p.m.–7 a.m.
14	Kabardino-Balkarian Republic <sup>b</sup>	10 p.m.–10 a.m.	56	Rostov region <sup>b</sup>	11 p.m.–7 a.m.
15	Orenburg region <sup>b</sup>	10 p.m.–10 a.m.	57	The City of Sankt-Petersburg <sup>b</sup>	11 p.m.–7 a.m.
16	Republic of Dagestan	10 p.m.–10 a.m.	58	Tula region <sup>b</sup>	11 p.m.–7 a.m.
17	Republic of Tatarstan <sup>b</sup>	10 p.m.–10 a.m.	59	Tyumen region	11 p.m.–7 a.m.
18	The City of Moscow <sup>b</sup>	10 p.m.–10 a.m.	60	Udmurtian Republic <sup>b</sup>	11 p.m.–7 a.m.
19	Magadan region	11 p.m.–11 a.m.	61	Vladimir region	11 p.m.–7 a.m.



Regions		Hours when sales are illegal	Regions		Hours when sales are illegal
20	Kemerovo region	10 p.m.–9 a.m.	62	Voronezh region	11 p.m.–7 a.m.
21	Novosibirsk region <sup>b</sup>	10 p.m.–9 a.m.	63	Yamalo-Nenets autonomous district <sup>a</sup>	11 p.m.–7 a.m.
22	Primorsky territory <sup>b</sup>	10 p.m.–9 a.m.	64	Astrakhan region	12 a.m.–8 a.m.
23	Stavropol territory <sup>b</sup>	10 p.m.–9 a.m.	65	Zabaikalsk territory	12 a.m.–8 a.m.
24	Republic of Tuva	11 p.m.–10 a.m.	66	Penza region <sup>b</sup>	11 p.m.–6 a.m.
25	Bryansk region	10 p.m.–8 a.m.	67	Republic of Kalmykia	11 p.m.–6 a.m.
26	Irkutsk region	10 p.m.–8 a.m.	68	Republic of Mordovia	11 p.m.–6 a.m.
27	Nizhni Novgorod region <sup>b</sup>	10 p.m.–8 a.m.	69	Republic of Altai	12 a.m.–7 a.m.
28	Republic of Marij El	10 p.m.–8 a.m.	70	Sverdlovsk region	12 a.m.–7 a.m.
29	Republic of Sakha (Yakutia)	10 p.m.–8 a.m.	71	Saratov region <sup>b</sup>	12 a.m.–6 a.m.
30	Ryazan region	10 p.m.–8 a.m.	72	Republic of Khakasia	2 a.m.–7 a.m.
31	Belgorod region	11 p.m.–9 a.m.	73	Altai territory <sup>b</sup>	no restrictions
32	Republic of Adygeya	11 p.m.–9 a.m.	74	Kaliningrad region	no restrictions
33	Amur region <sup>b</sup>	11 p.m.–8 a.m.	75	Karachaevo-Cherchessian Republic	no restrictions
34	Arkhangelsk region	11 p.m.–8 a.m.	76	Khabarovsk territory	no restrictions
35	Kaluga region <sup>b</sup>	11 p.m.–8 a.m.	77	Khanty-Mansijsk autonomous district - Yugra <sup>a</sup>	no restrictions
36	Kursk region	11 p.m.–8 a.m.	78	Kostroma region	no restrictions
37	Lipetz region <sup>b</sup>	11 p.m.–8 a.m.	79	Krasnoyarsk territory <sup>b</sup>	no restrictions
38	Novgorod region	11 p.m.–8 a.m.	80	Kurgan region <sup>ab</sup>	no restrictions
39	Oryol region	11 p.m.–8 a.m.	81	Omsk region	no restrictions
40	Perm territory <sup>b</sup>	11 p.m.–8 a.m.	82	Samara region	no restrictions
41	Republic of Bashkortostan	11 p.m.–8 a.m.	83	Smolensk region <sup>b</sup>	no restrictions
42	Republic of Komi <sup>b</sup>	11 p.m.–8 a.m.			

<sup>a</sup> Regions not included in the analysis of regional per capita sales.

<sup>b</sup> Total of 32 regions included in the Russian Longitudinal Monitoring Survey.

Note. The data in this table are from the Centre for National Alcohol Policy, available at:

<http://www.alcomarket.info/CRNAP/print.asp?NewsId=153203>; the Information Agency "Russian News," available at: [http://ru-news.ru/art\\_desc.php?aid=4783](http://ru-news.ru/art_desc.php?aid=4783); websites of regional authorities.