

## Web Appendix

### The method to estimate total alcohol consumption in Russia

The following method was developed by the first author to estimate total alcohol consumption in Russia and is based on the ratio of observed deaths from external causes of individuals with alcohol in their blood and sober individuals (Nemtsov, 1998; Nemtsov, 2011).

The method is based upon the following rationale; since all deaths linked to alcohol reflect both, alcohol-related and non-alcohol-related factors (as in, for instance, traffic accidents), the genesis of BAC+ violent deaths needs to be separated from and put into relation to non-alcohol related factors. The ratio was developed in two steps. First, to represent the alcoholic factor in deaths ( $x_1$ ) in its “pure” form, BAC+ deaths ( $n_1$ ) are standardized (normalized) against BAC- violent deaths ( $n_2$ ):  $x_1 = n_1/n_2$ .

Second, as alcohol poisoning deaths ( $n_3$ ) among the BAC+ violent death cannot be standardized against the corresponding sober deaths, they must be subtracted. Therefore, the alcohol factor in deaths from external causes ( $x_2$ ) is more precisely expressed in the relationship  $x_2 = (n_1 - n_3)/n_2$ . It was demonstrated that this ratio had a linear relationship with per capita alcohol consumption in Moscow for the period 1983-1986. However, it should be emphasized that this linear regression equation was obtained by using data from a very short period of time and only one very specific region of Moscow, therefore omitting possible interactions of the dependent and independent variables in other regions. Also it should be noted that the quality of recorded data by the regional forensic services has declined over time, making estimates for the most recent years even more inaccurate.

## Supplementary Tables and Figures

Table W1 Life expectancy at birth in Russia (in years). Source: Russian State Statistical Service.

<b>Life expectancy at birth (years)</b>		
	Male	Female
<b>1980</b>	61.4	72.9
<b>1981</b>	61.6	73.2
<b>1982</b>	62.3	73.7
<b>1983</b>	62.2	73.4
<b>1984</b>	61.7	73.0
<b>1985</b>	62.7	73.3
<b>1986</b>	64.8	74.3
<b>1987</b>	64.8	74.3
<b>1988</b>	64.6	74.3
<b>1989</b>	64.2	74.5
<b>1990</b>	63.8	74.3
<b>1991</b>	63.4	74.2
<b>1992</b>	62.0	73.7
<b>1993</b>	58.8	71.9
<b>1994</b>	57.4	71.1
<b>1995</b>	58.1	71.6
<b>1996</b>	59.6	72.4
<b>1997</b>	60.9	72.8
<b>1998</b>	61.2	73.1
<b>1999</b>	59.9	72.4
<b>2000</b>	59.0	72.3
<b>2001</b>	58.9	72.2
<b>2002</b>	58.7	71.9
<b>2003</b>	58.5	71.8
<b>2004</b>	58.9	72.4
<b>2005</b>	58.9	72.5
<b>2006</b>	60.4	73.3
<b>2007</b>	61.5	74.0
<b>2008</b>	61.9	74.3
<b>2009</b>	62.9	74.8
<b>2010</b>	63.1	74.9
<b>2011</b>	64.0	75.6
<b>2012</b>	64.6	75.9
<b>2013</b>	65.1	76.3
<b>2014</b>	65.3	76.5
<b>2015</b>	65.9	76.7
<b>2016</b>	66.5	77.1
<b>2017</b>	67.5	77.6

Table W2 Standardized mortality per 100,000 for men and women between 1984 and 2014, The Human Cause-of-Death Database

Year	All cause		Chronic alcoholism		Alcoholic liver disease		Alcoholic liver disease		Acute pancreatitis		Suicide and injury		Homicide and injury		Injury undetermined	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1984	29648	17181	45	11	27	9	64	32	364	94	786	169	173	71	189	47
1985	28860	17144	40	9	25	8	56	32	301	79	654	146	160	67	156	44
1986	26335	15993	20	4	15	5	47	31	174	41	480	134	111	46	121	36
1987	26419	16107	15	3	14	5	51	31	151	35	497	133	119	48	108	33
1988	26492	16196	12	3	12	5	48	31	147	34	513	137	153	55	130	38
1989	26295	15553	15	3	13	5	50	30	167	38	550	131	203	63	181	48
1990	27048	15926	21	4	15	6	53	31	206	47	556	132	231	71	215	56
1991	27199	15842	19	4	14	5	51	28	212	47	557	126	248	72	252	63
1992	28480	16223	28	6	15	6	54	31	331	74	642	134	382	107	332	80
1993	33406	18282	74	18	26	10	75	33	571	141	797	148	514	148	517	121
1994	35595	19110	133	31	44	16	91	38	688	180	885	152	550	158	604	143
1995	33579	18350	141	33	49	18	85	37	542	137	849	155	521	149	580	138
1996	31556	17678	88	19	40	14	83	36	437	110	811	140	441	133	514	126
1997	30483	17483	56	12	36	12	76	36	346	88	772	137	399	120	461	113
1998	29669	17134	45	9	34	12	76	37	323	80	721	129	376	115	475	117
1999	31686	17968	46	12	41	14	80	36	368	95	796	141	434	135	494	116
2000	32746	18095	58	14	58	23	92	39	457	117	799	129	470	141	525	119
2001	32861	18091	66	17	77	32	104	42	510	133	801	127	496	147	559	127
2002	33871	18622	76	19	101	45	116	46	550	148	766	127	514	146	590	131
2003	33921	18596	74	19	122	57	120	48	558	144	723	118	481	139	589	134
2004	32854	17829	69	18	139	68	122	48	525	135	684	114	454	130	608	138
2005	32716	17766	68	17	160	80	136	52	506	124	637	104	411	119	629	139
2006	30451	16959	60	16	149	71	127	52	408	101	588	100	333	97	558	125
2007	29073	16121	55	15	139	66	130	51	312	76	560	101	292	83	542	127
2008	28691	15819	59	15	147	70	132	55	299	70	524	95	273	76	536	121
2009	27598	15165	51	14	140	63	135	53	263	65	507	88	243	71	499	119
2010	27349	15117	55	15	149	67	135	54	236	59	457	79	216	63	516	122
2011	25431	14000	43	11	138	60	127	52	202	48	423	76	193	54	516	122
2012	24591	13684	40	10	126	56	127	53	191	43	402	74	176	49	511	122
2013	23674	13294	34	8	119	51	131	52	182	40	396	68	166	45	504	121
2014	23416	13140	38	10	132	58	141	58	193	41	370	63	148	41	549	129

*Table W3 Crude mortality rates per 100,000 for men and women between 2011 and 2016 for alcohol-related causes of death, Federal State Statistics Service of the Russian Federation (Rosstat)*

ICD 10 Code	Causes of death due to alcohol use	Sex	2011	2012	2013	2014	2015	2016
F10.0	Acute alcohol intoxication	M	...	...	...	0.0	0.0	0.0
		F	...	...	...	0.0	...	0.0
F10.1	Harmful use of alcohol	M	1.0	1.1	0.8	0.7	0.9	1.1
		F	0.6	0.6	0.5	0.7	0.7	0.8
F10.2	Dependence syndrome caused by alcohol use	M	2.6	2.3	2.1	2.5	2.5	2.8
		F						
F10.3, F10.6, F10.8, F10.9	Other and unspecified mental and behavioral disorders due to alcohol use	M	0.1	0.1	0.1	0.1	0.1	0.1
		F	0.01	0.01	0.01	0.01	0.01	0.01
F10.4-5, F10.6 (partly) F10.7	Alcoholic psychosis, encephalopathy, dementia	M	0.5	0.5	0.5	0.5	0.5	0.4
		F	0.1	0.1	0.1	0.1	0.01	0.01
G31.2	Degeneration of the nervous system caused by alcohol	M	3.0	2.7	2.5	2.9	3.4	3.4
		F	0.7	0.6	0.5	0.6	0.8	0.8
G62.1	Alcoholic polyneuropathy	M	0.01	0.01	0.01	0.01	0.01	0.01
		F	0.0	0.0	0.0	0.0	0.0	0.0
G72.1	Alcohol myopathy	M	0.0	0.0	0.0	0.0	...	0.0
		F	0.0	0.0	0.0	...	...	0.0
I42.6	Alcoholic cardiomyopathy	M	24.9	22.0	20.7	20.7	20.4	20.1
		F	6.8	6.0	5.3	5.6	5.7	5.2
K29.2	Alcoholic gastritis	M	0.0	0.0	0.0	0.0	0.0	0.0
		F	0.0	...	0.0	...	0.0	...
K70	Alcoholic liver disease	M	11.9	10.8	10.2	11.3	11.2	10.4
		F	5.4	5.1	4.6	5.2	5.2	4.9
K85.2	Acute pancreatitis of alcoholic etiology	M	-	-	-	-	0.2	0.5
		F	-	-	-	-	0.1	0.1
K86.0	Chronic pancreatitis of alcoholic etiology	M	0.4	0.4	0.4	0.4	0.4	0.4
		F	0.1	0.1	0.1	0.1	0.1	0.1
Q86.0	Alcoholic syndrome in fetus (dysmorphia)	M	...	0.0	...	0.0	...	0.0
		F	0.0	0.0	0.0	...	...	...
X45	Accidental alcohol poisoning	M	17.9	16.9	16.1	17.0	16.5	15.2
		F	4.3	3.9	3.6	3.7	3.6	3.2
X65	Intentional self-poisoning and exposure to alcohol	M	0.0	0.0	0.0	0.0	0.0	0.0
		F	0.0	0.0	0.0	...	0.0	0.0
Y15	Poisoning and exposure to alcohol with uncertain intentions	M	2.4	2.3	2.6	3.4	3.8	3.2
		F	0.5	0.5	0.6	0.7	0.8	0.7

*Table W4 Chronology of government activities in the field of alcohol policy for the period 1990-2017.\* Events marked with an asterisk cannot be uniquely assigned to a specific month.*

*Sources: see method section.*

Year	Events
<b>1990</b>	<p><b>May</b> – the Supreme Soviet of the USSR introduces a specially regulated distribution procedure of basic foodstuff and alcoholic beverages as part of a phased transition into “a regulated market economy”.</p> <p><b>June</b> – the Russian Soviet Federative Socialist Republic declares sovereignty.</p> <p><b>July</b> – Resolution No. 724 of the Council of Ministers of the USSR drops some of the regulations of the Gorbachev anti-alcohol campaign from 1985 and extends the sale hours of alcohol from 2PM to 8AM in the morning.</p>
<b>1991</b>	<p><b>April</b> – the police (Militsiya) is reformed and released from the function to manage the occupational therapy rehabilitation centers - special units providing long-term forced treatment of people with alcohol and drug dependence.</p> <p><b>December</b> – the Soviet Union is dissolved and the Russian Federation is formed.</p>
<b>1992</b>	<p><b>January</b> – Government Decree N 55 “On measures to liberalize prices” is implemented. Prices rise steeply, but prices of a number of socially significant consumer goods and alcoholic beverages remain state-controlled until April.</p> <p><b>May</b> – Government Decree N 282 “On measures to regulate the production and trade of wine, spirits and beer” allows free market prices for alcoholic beverages.</p> <p><b>June</b> – the government's monopoly on alcoholic products is abolished, following the same decree. Legal and illegal alcohol markets flourish and large amounts of alcohol are imported from foreign countries.</p>
<b>1993</b>	<p><b>June</b> – Presidential Decree N 918 “On Restoring the State Monopoly for the Production, Storage, Wholesale and Retail Sale of Alcohol Products” introduces licensing and quoting for the production, wholesale and retail sale of alcoholic beverages as well as for the production, storage and wholesale of ethyl beverage alcohol. No such procedures are intended for the production of cellulosic ethanol produced for non-food applications/non-beverage alcohol, often used for the production of counterfeit alcohol. The legislation also prohibits free sale of alcohol (street sale or other premises such as private houses or apartments) and suggests carrying out quality controls of alcoholic beverages through certification. A special commission is formed and an additional sub-statutory decree is introduced to ensure the implementation of the state monopoly on alcohol products under the Council of Ministers, but the adopted measures are not enforced.</p> <p><b>July</b> – the State Duma approves the Federal Law N 5487-1 “Fundamentals of the legislation of the Russian Federation on the protection of public health”, which prohibits the advertising of alcoholic beverages and tobacco in the media.</p> <p><b>December</b> – Presidential Decree N 2270 raises the excise rate for spirits by 5% (effective from January 1<sup>st</sup> 1994).</p> <p>*Beginning in 1993 the National Sports Fund and a number of other organizations, including the Russian Foundation for the Disabled Veterans of the Afghanistan War and the Russian Orthodox Church, imported large amounts of alcoholic beverages, cigarettes and other products into the Russian Federation without paying the import duties by using special Presidential Decrees for tax deduction as charity associations. Between September 1994 and July 1996 a series of Government and Presidential Decrees, Resolutions and Orders of the Ministry of Agriculture (overall 8 different legislations) are issued to alter and finally repeal this arrangement.</p>
<b>1994</b>	<p><b>January</b> – CEOs of all Russian distilleries discuss special anti-crisis measures during an extraordinary</p>

	<p>meeting and try to prevent the government from raising the excise duties.</p> <p><b>February</b> – Presidential Decree N 2270 on raising the excise rates is repealed.</p> <p><b>April</b> – Government Decree N 358 “On Measures to Restore the State Monopoly for the Production, Storage, Wholesale and Retail Sale of Alcohol Products” is adopted. Ministry of Economy starts to develop a “Federal Special Purpose Program for the Production and Sale of Alcoholic Products”, trying to determine the amount of alcohol consumed in the country and its price. The program also intends to trace and label all imported alcoholic beverages beginning in 1995, but its implementation is postponed several times.</p> <p><b>July</b> – the system of occupational therapy rehabilitation centers is liquidated and about 150,000 alcohol-dependent patients are released from forced treatment. As a result, a private sector of addiction clinic develops, very diverse in its methods, level of staff qualification and treatment results.</p> <p>In the course of an ongoing hyperinflation prices for alcoholic beverages rise not as steeply as prices for other consumer goods, making alcohol relatively inexpensive (the real price for legal alcoholic beverages drops by 3.5 times between December 1990 and 1994 with the most significant drop in 1994).</p>
<b>1995</b>	<p><b>July</b> – Federal Law N 108 “On the advertisement” is adopted and restricts advertising of spirits on TV and radio (commercials between 7AM and 22PM are forbidden and certain other content-related conditions are imposed).</p> <p><b>July</b> – the State Duma, overcoming the President's veto, adopts the Federal Law N171 “On State Regulation of Production and Turnover of Ethyl Alcohol, Alcoholic and Alcohol-Containing Products and on Restriction Consumption (Drinking) of alcohol products”, which is approved by the Federation Council in November. The law aims at re-establishing the government’s monopoly on the production and turnover of alcoholic beverages. Licensing and declaration of volumes of production and turnover by the producers and sellers of alcoholic beverages are introduced as the main instruments, besides the stipulated penalties for their violation. The law also sharply limits the import of alcoholic beverages to Russia to 20% of the sold products, while the share of imported wine is allowed at the 80% level. It also prohibits the creation of organizations with foreign investments for the import, bottling and sale of alcohol products containing more than 12% of ethyl alcohol. Sale of spirits in kiosks is forbidden. However, beer/beer-based beverages are not covered and thereby officially not recognized as alcoholic beverages. The law becomes the main legislative instrument of alcohol control in the following years.</p> <p><b>November</b> – an interdepartmental working group led by First Deputy Minister of Economics is formed, to increase budget revenues from alcohol production and trade (by that time, the share of tax revenues dropped to 2%, while it was at the estimated level of 40% in 1984 and was not lower than 10% during the Gorbachev anti-alcohol campaign, which points to a large fraction of unrecorded alcohol on the market).The working group focuses on spirits and develops various legislations, which became the basis of a number of Presidential and Government Decrees adopted in the following years (see below), including measures such as raising fines for violations, giving privileges to domestic producers to reduce import and setting a minimum price for alcoholic beverages with an ethyl alcohol concentration higher than 28%.</p>
<b>1996</b>	<p><b>January</b> –Article 33 of the Federal Law N 108 “On the advertisement” comes into force, introducing a complete ban on advertising for spirits on TV and radio, but many producers continue to advertise not their products, but trademarks until 1997-1998.</p> <p><b>February</b> – Presidential Decree N 161 “On Strengthening State Control Over the Turnover of Alcoholic and Tobacco Products of Foreign Production” and the Presidential Decree No. 165 “On the Federal Service of Russia for the Provision of a State Monopoly for Alcohol Products” are adopted, the latter one forming a special federal service for the establishment of the state monopoly on alcohol and thereby replacing the previous special commission.</p>

	<p><b>July</b> – Government Decree N 874 “On the Introduction of the State Registration of Ethyl Alcohol from Food Raw Materials, Alcoholic, Alcohol-Containing Food Products and other Alcohol-Containing Products” is adopted.</p> <p><b>August</b> – Presidential Decree No. 1213 “On strengthening state control over the turnover of alcohol products” and Government Decree No. 938 “On the introduction of a special marking of alcohol products containing more than 6% of ethyl alcohol (except beer) produced on the territory of the Russian Federation” are adopted to strengthen monitoring of the production and distribution chain.</p>
<b>1997</b>	<p><b>January</b> – new alcohol excise stamps are introduced because of large numbers of counterfeits of previous stamps.</p> <p><b>April</b> - Presidential Decree No. 442 “On additional measures to prevent the illegal production and trafficking of alcohol, ethyl and alcohol products” prohibits the sale of alcoholic beverages with an alcohol content of more than 12% by volume in vending kiosks, sales tents and other small retail outlets.</p> <p><b>May</b> – Governmental Decree No. 601 “On marking of goods and products on the territory of the Russian Federation with conformity signs protected from fakes”</p> <p><b>August</b> – Governmental Decree No. 1013 “On approving the list of goods subjected to the mandatory certification” introduces additional measures against counterfeiting, but is never effectively enforced.</p> <p><b>August</b> – Government Decree No. 1030 “On the introduction of state registration of ethyl alcohol and alcohol-containing solutions from non-food raw materials” is adopted.</p> <p>Import of ethyl alcohol from Georgia is stopped for the period between July and December.</p>
<b>1998</b>	<p><b>July</b> – Government Decree No. 727 “On Licensing Activities for the Production, Storage and Circulation of Ethyl Alcohol, made from all Types of Raw Materials, Alcohol and Alcoholic Products”.</p> <p>September - the State Duma adopts an amendment to the Federal Law No. 171 “On State Regulation of Production and Turnover of Ethyl Alcohol”, which changes the legal status of beer and equals it to other alcoholic beverages.</p> <p><b>October</b> – the amendment is refused by the Federation Council and beer remains a non-alcoholic beverage according to the RF law.</p> <p>The advertising of low-alcohol drinks with a strength of less than 15 degrees was further restricted: at least half of the advertising time of the video should contain information about the harm of their use. More on TASS: <a href="http://tass.ru/info/1682150">http://tass.ru/info/1682150</a></p> <p><b>December</b> – minor amendments to the Federal Law are adopted and approved by the Council and the new version is signed by the president in 1999. The Federal Law No. 192 “On Priority Measures in the Field of Budget and Tax Policy” increases the excise rates for alcoholic beverages by 20% and for beer by 40%.</p>
<b>1999</b>	<p><b>June</b> – Government Decree No. 623 on the establishment of an “Interdepartmental Commission for Conducting a Unified State Policy to Prevent and Suppress the Illicit Production and Traffic of Ethyl Alcohol and Alcohol Products”.</p> <p><b>July</b> – Government Decree No. “On Mandatory Marking of Alcohol Products Produced in the Territory of the Russian Federation”.</p> <p><b>November</b> – amendments to the Federal Law N171 prohibits expand the advertising restrictions also on low-alcohol drinks: at least half of the advertising time should contain information about harm caused by their consumption.</p> <p><b>December</b> – Federal Law “On the excises” is amended by an additional legislation. Excise tax on alcoholic products is increased by 40% (except for natural wines and beer). The Ministry of Economic Development approves new minimum prices for vodka at the level of 62 rubles per liter for retail sale, effective from February 2000.</p>

2000	<p><b>January</b> – introduction of a minimal price on vodka (32 rubles for a 0.5litres bottle)</p> <p><b>May</b> – Government Decree N 390 “On the formation of the State Unitary Enterprise ‘Rosspirom’”, with the subordination of 200 distilleries and liquor enterprises.</p> <p><b>May</b> – the Ministry of Health bans the use of methanol-based windshield wipers to prevent fatalities as a consequence of misuse as surrogate alcohol in lower socio-economic strata.</p> <p><b>July</b> – Presidential Decree N 852 “On the formation of the Federal State Unitary Enterprise ‘Rosspirom’”. The Ministry of Agriculture of the Russian Federation signs a contract with Rosspirom and hands over the right of distributing the annual quota for alcohol production.</p> <p><b>December</b> – the First Deputy Minister of Health and Chief State Sanitary Doctor of Russia G. Onishchenko issues the Directive N 16 “On strengthening the state sanitary inspection for beer production” to strengthen state control over the production and advertising of beer.</p>
2001	<p><b>May</b> – the Moscow Arbitral Tribunal invalidates the contract between the Ministry of Agriculture and Rosspirom on the alcohol quotas.</p> <p><b>December</b> – the “Code of the Russian Federation on Administrative Offenses” imposes administrative penalties for the involvement of a minor in the use of alcohol and alcohol-containing products, de facto forbidding public alcohol consumption for minors.</p>
2002	<p><b>July - October</b> –the Accounts Chamber of Russia conducts inspections in several distilleries owned by Rosspirom to check the effectiveness of the enterprise and flow of payments to the federal budget. The final report is published in November and identifies a series of deficiencies.</p> <p><b>August</b> – change of management at Rosspirom.</p>
2003	<p><b>August</b> –*Transferring client accounts of factories, which belong to Rosspirom to two banks: the “Northern Sea Route” and the “International Bank for Trade Cooperation” (both belonging to the brothers Arkady and Boris Rotenberg, longtime friends of president Vladimir Putin). The process started already in 2001 and was completed by this time.</p>
2004	<p><b>August</b> – the State Duma amends the Federal Law N 108 “On Advertising” and restricts advertising of beer and beverages made on its basis (the 1995 legislation did not cover beer explicitly). Commercials between 7AM and 10PM on TV and radio are forbidden as well as beer advertisements on the first and last pages of print media. Several restrictions on the advertisement content and placements are imposed and obligatory health warnings are introduced (in the amount of not less than 10% advertisement space or time).</p> <p><b>October</b> – tax increase on ethyl alcohol from edible raw material by 50 % (effective from January 1<sup>st</sup> 2005).</p>
2005	<p><b>February</b> – the Federal Law N 11 “On restrictions of retail sale and consumption (drinking) of beer and beer-based drinks” forbids sale and consumption of beer in medical, cultural, health and educational facilities and public transport (except for gastronomy establishments in such facilities). The law also prohibits the sale of beer to minors.</p> <p><b>December</b> – the government starts a series of substantial amendments to the Federal Law N 171 “On State Regulation of Production and Turnover of Ethyl Alcohol”. New alcohol excise stamps, which are harder to falsify, are introduced and the use of old stamps is forbidden (effective from January 1<sup>st</sup> 2006). Authorized capital of producers of ethyl alcohol and spirits is significantly increased. New obligatory denaturing additives (gasoline, kerosene, croton aldehyde and denatonium benzoate) are introduced and the usage of the previously used additives is forbidden to prevent misuse of surrogate alcohol (effective from July 1<sup>st</sup> 2006).</p>
2006	<p><b>January</b> – the legislation on the new excise stamps comes into force and the Unified State Automated</p>



	<p>Information System (EGAIS) is introduced, a new monitoring system to collect data on the volumes of produced alcohol, including the use of raw materials and leftovers (and subsequently to curb the production of illegal alcohol).</p> <p>In the following months a serious disorganization of the alcohol market takes place, caused by the shortage of new excise stamps and inaccurate implementation of the EGAIS system; shortages in supply and sale of alcoholic beverages, especially spirits, are observed.</p> <p><b>March</b> – following a decree of G. Onishchenko, Russia's Chief Sanitary Doctor, the Federal Service for Consumer Rights Protection and Human Welfare blocks imports of wines and wine materials from Georgia and Moldova due to (unspecified) safety concerns.</p> <p><b>May</b> – regional authorities are given the right to impose restrictions on selling times for alcoholic beverages, containing &gt;15 % alcohol and to determine the authorized capital for retail sellers. Regions react differently – some adopt strict night bans, others ignore the legislation.</p> <p><b>July</b> – EGAIS is introduced for importers of alcoholic products. With the increase of the authorized capital and the costly installation of the EGAIS equipment, many of the small market players (small distilleries/importers) are pushed out of the market.</p> <p><b>August</b> – Finance Minister A. Kudrin admits in an official report to the Prime Minister that the EGAIS system does not actually work.</p>
<b>2007</b>	<p><b>June</b> – Government Decree N 401 approves a list of alcohol-containing perfumery and cosmetic products, which are exempted from the Federal Law N 171 “On State Regulation of Production and Turnover of Ethyl Alcohol” and are therefore exempted from taxation and the EGAIS monitoring.</p> <p><b>July</b> – decree of Russia's Chief Sanitary Doctor prohibits the use of methanol in motor-service fluids in general.</p> <p><b>September</b> – Government Decree N 612 forbids the remote sale (internet trade) of alcoholic beverages. *Formation of the Centre for Development of a National Alcohol Policy as a public association.</p>
<b>2008</b>	<p><b>December</b> – Formation of the Federal Service for Alcohol Market Regulation (“Rosalkogolregulirovaniye”) with the right to develop state policies in the field of production and turnover of ethyl alcohol and alcoholic beverages, as well as the right to control the implementation of alcohol policy.</p>
<b>2009</b>	<p><b>May</b> – Public Chamber of Russia publishes a report on the consequences of alcohol misuse in the population and suggests evidence-based counter-measures.</p> <p><b>November</b> – forming of the Commission for Alcohol Market Regulation (head officer is the first deputy chairman of the RF government, Viktor Zubkov). *The commission is dissolved after 3 years.</p> <p><b>November</b> – the EGAIS system is redirected to the Federal Service for Alcohol Market Regulation, which decides to develop and deploy it also for the retail sale of alcoholic beverages (including beer) to monitor the whole supply chain.</p> <p><b>December</b> – the RF government presents a strategy paper to reduce alcohol-related harm and to prevent alcoholism on a population level for the period 2010-2020. Reducing the availability of alcohol and raising the price are suggested as the main measures, next to suggestions to change the drinking patterns, promotion of a healthy lifestyle and early interventions.</p>
<b>2010</b>	<p><b>January</b> – increase of the minimum retail price of vodka (89 rubles per 0.5 liter bottle) and other spirits with penalties imposed for non-compliance. Minimal prices are announced to be gradually increasing for the following years in accordance with the long-term strategy to reduce alcohol consumption.</p>
<b>2011</b>	<p><b>January</b> – increase of the minimum retail price of vodka (98 rubles per 0.5 liter bottle) and other spirits.</p> <p><b>July</b> – further amendments to the Federal Law N 171 “On State Regulation of Production and Turnover of</p>

	<p>Ethyl Alcohol” following the recommendations of the long-term strategy (changes effective from July 2012). Sale of alcoholic beverages is prohibited in and next to gas stations and medical, educational and cultural facilities and consumption is prohibited in places of mass gatherings such as stadiums, airports and public transport (with the exception of facilities that also host bars or cafés). A federal night ban (from 11PM to 8AM) on the sale of alcoholic beverages is introduced, but regional jurisdictions can expand their restrictions on the places and conditions of retail sale of alcoholic beverages. Penalties for selling alcohol to minors are sharply increased. The revised version invalidates the Federal Law N11 “On restrictions of retail sale and consumption (drinking) of beer and beer-based drinks” and defines alcoholic beverages as a beverage containing at least 0.5% alcohol, thereby officially declaring beer an alcoholic beverage. However, the latter amendment is to come into force in January 2013 and until then the sale of beer is allowed in kiosks as well as night sales of beer with an alcohol volume lower than 5%.</p> <p>The following types of alcoholic products are explicitly listed as exceptions not covered by the Federal Law N 171: homemade alcoholic products for own consumption, alcohol-containing medicinal products, imported/exported alcoholic products intended for the official use by diplomatic missions, embassies etc.</p> <p>*Requirements are imposed on distilleries to purchase special and expensive equipment to utilize their industrial waste to animal feed. Companies not meeting the requirements are deprived of their license renewal.</p>
2012	<p><b>July</b> – the amendments of the Federal Law N 171 from the previous year come into force and new revisions are enacted. The list of places, where consumption of alcoholic beverages is prohibited is expanded (now including also recreational areas, parks, stair cases and backyards) and penalties for the according violations are mildly increased. Sale of all alcoholic beverages in kiosks is prohibited (the 1995 legislation banned only the sale of spirits in kiosks). Licensing for the transportation of ethanol with a concentration of at least 28% is imposed, including denatured alcohol. Ban of alcohol advertising on TV and internet news sites. Raising of the minimum price for vodka (125 rubles).</p>
2013	<p><b>January</b> – ban of beer sale in kiosks and expansion of the night ban of sales on beer with an alcohol volume of more than 5%. Tax increase on alcoholic beverages by 27 %. Raising the minimum price for vodka (170 rubles) and other spirits.</p>
2014	<p><b>January</b> – raising of the minimal vodka price (220 rubles). The commission for Alcohol Market Regulation is formed (with Deputy Prime Minister A. Khloponin as leader).</p> <p><b>July</b> – temporary amendments to the Federal Law N 108 “On the advertisement” are introduced, allowing beer advertisements during the broadcasts of sports competitions until the 31<sup>st</sup> of December 2018 (the legislation was introduced following the demands from FIFA regarding the 2018 World Cup).</p> <p><b>December</b> – advertisement of wine and sparkling wine made of domestic grapes are allowed between 23PM and 7AM on TV and radio, except for live broadcasting and broadcasts of children's and youth sports competitions (the law is believed to support the wine production in the Crimea).</p>
2015	<p><b>January</b> – the Federal Service for Alcohol Market Regulation issues a decree on the implementation of the EGAIS system in the wholesale and retail trade of alcoholic beverages (effective from 2016).</p> <p><b>February</b> – the minimal vodka price decreases to 185 rubles.</p> <p><b>September</b> – the Federal Service for Alcohol Market Regulation proposes an anti-alcohol campaign concept and asks for 2.3 billion rubles for its realization.</p> <p><b>November</b> – the Action Plan (“Roadmap”) to stabilize the situation and the competing developments on the alcohol market is approved.</p>
2016	<p><b>January</b> – the Federal Service for Alcohol Market Regulation is subordinated to the Ministry of Finance, transferring to it the functions of alcohol policy development and implementation.</p>

	<p><b>January</b> – implementation of EGAIS for the wholesale trade.</p> <p><b>June</b> – raising of the minimal vodka price (190 rubles).</p> <p><b>June</b> – the Ministry of Health publishes a draft of the “Interdepartmental Strategy for healthy lifestyle, prevention and control of non-communicable diseases for the period up to 2025”. The strategy identifies the need for further reduction of harmful use of alcohol at the population level and calls for a strengthening of the existing measures; for instance, a gradual increase in excise taxes on spirits and measures against the sale of illegal alcohol.</p> <p><b>July</b> – implementation of EGAIS for the retail sale.</p> <p><b>August</b> – the Ministry of Finance suggests a further raising of the minimal price on vodka.</p> <p><b>September</b> – the Ministry of Economic Development suggests in a governmental report a series of measures, which should increase the availability of legal alcohol in order to prevent unrecorded consumption. The report lists the following suggestions: lowering alcohol prices by lowering alcohol excise taxes, cheapening licensing of retail trade of alcoholic beverages and abandoning “excessive and unjustified” restrictions such as the ban on the internet sale of alcohol. The Ministry of Finance opposed the idea of lowering the prices.</p> <p><b>September</b> – the Ministry of Industry and Trade publishes a report prepared on behalf of the State Commission for Combating Illicit Turnover of Industrial Products. The report states that the level of <i>per capita</i> alcohol consumption is not a significant factor for the population’s health and mortality levels and does not affect life expectancy. Therefore, there is no sense in reducing alcohol consumption and the policies aiming at this. The report suggests a “balanced excise policy” and lowering alcohol prices (the “optimal price” for vodka is suggested at the level of 100 rubles per 0.5L, which is a price drop of 49%).</p> <p><b>December</b> – in the aftermath of a mass poisoning with methanol-containing surrogate alcohol in Irkutsk, the Consumer Rights Protection and Human Welfare issues a 30-days long ban on the sales of alcohol-containing liquids not intended for human consumption. The ban is prolonged for several times in the following year.</p>
2017	<p><b>January</b> - the Ministry of Health publishes a draft of the “Strategy for healthy lifestyle, prevention and control of non-communicable diseases for the period up to 2025”, which takes into account evidence-based recommendations and guidelines of the World Health Organization to prevent and control non-communicable diseases. The documents states that the current measures are insufficient and calls for additional actions, i.e. to further raise alcohol prices and to reduce availability of alcoholic beverages by limiting places and hours of sale and to limit alcohol advertising, especially among children and youth. Also, the national priority project “Forming of a healthy lifestyle” is launched. The key goal of the project is to increase the proportion of citizens committed to a healthy lifestyle, to 50% by 2020 and to 60% by 2025.</p> <p><b>July</b> – raising of the minimal vodka price (205 rubles).</p> <p><b>July</b> – amendment of the Federal Law No. 171 “On State Regulation of Production and Turnover of Ethyl Alcohol”. The new version prohibits the sale of alcohol-containing cosmetic products through vending machines as well as distribution of information and advertisement of sellers of alcoholic products on the Internet (to curb the illegal internet trade of alcohol).</p> <p><b>July</b> – the articles “Illicit production and (or) turnover of ethyl alcohol, alcohol and alcohol-containing products” and “Illegal retail sale of alcohol and alcohol-containing food products” are added to the Criminal Code of Russia, introducing harsh penalties for illegal alcohol production as well as forging of alcohol excise stamps/selling and using counterfeit stamps. Punishments range from fines to imprisonment, depending on the severity of the offense and the harm cause to others.</p>

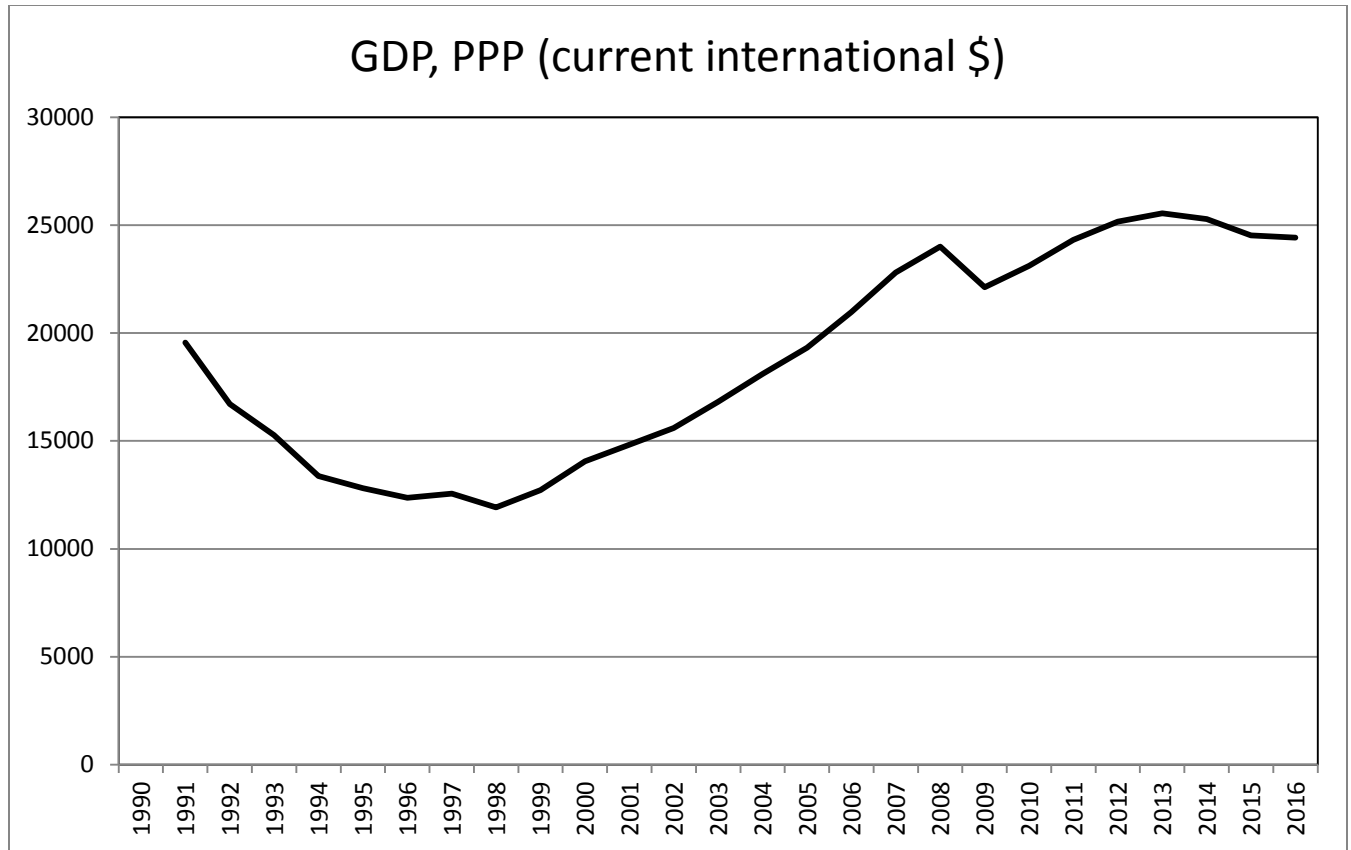


Figure W1: GDP, PPP for the Russian Federation (in current international \$). Source: World Bank, International Comparison Program database.

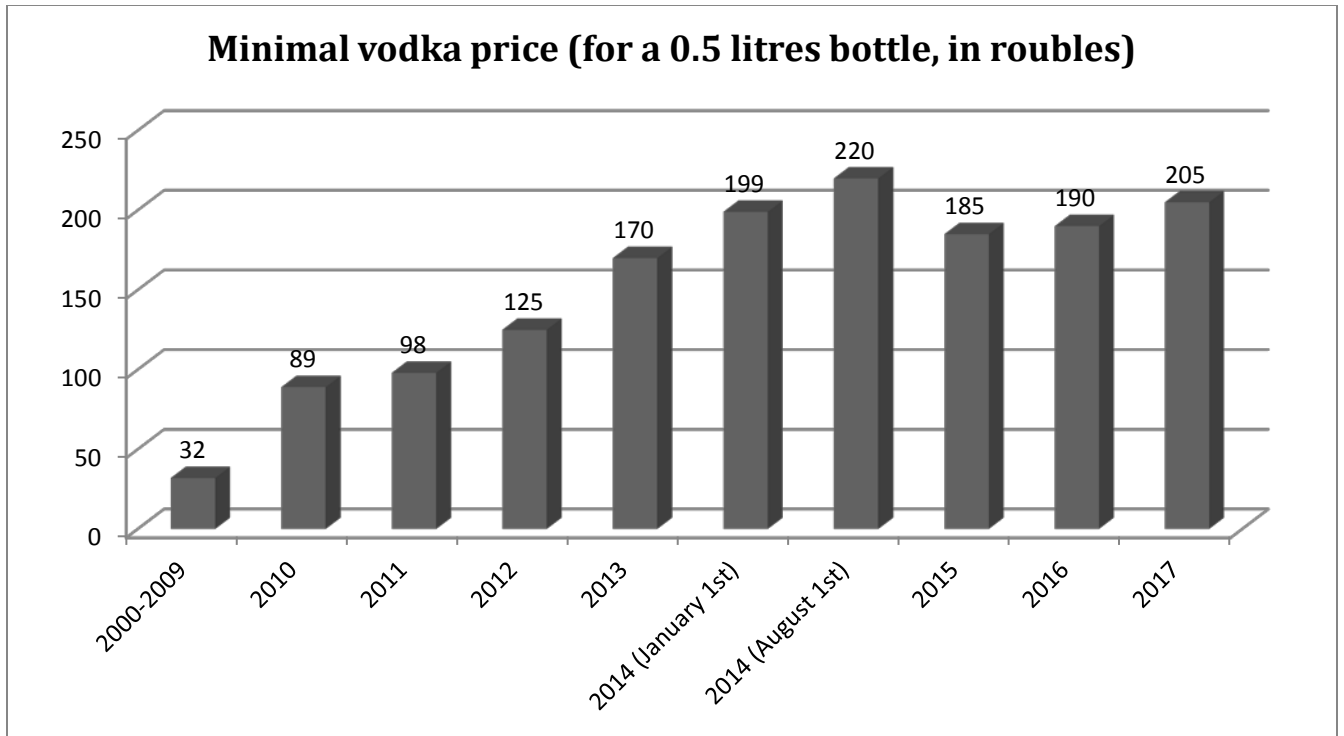


Figure W2 Development of minimal vodka prices in Russia since 2000. Source: see methods section.

*Table W5 Chronology of the amendments to the Federal Law N 171.*

<b>Versions of the Federal Law N 171 “On State Regulation of Production and Turnover of Ethyl Alcohol, Alcoholic and Alcohol-Containing Products and on Restriction Consumption (Drinking) of alcohol products”</b>
<b>№ 43 from 29.07.2017 (with changes effective from 01.01.2018, currently enforced)</b>
№ 42 from 29.07.2017
№ 41 from 03.07.2016
№ 40 from 03.07.2016
№ 39 from 03.07.2016
№ 38 from 03.07.2016
№ 37 from 03.07.2016
№ 36 from 23.06.2016
№ 35 from 29.12.2015
№ 34 from 29.06.2015
№ 33 from 06.04.2015
№ 32 from 06.04.2015
№ 31 from 31.12.2014
№ 30 from 02.11.2013
№ 29 from 23.07.2013
№ 28 from 30.12.2012
№ 27 from 28.07.2012
№ 26 from 28.07.2012
№ 25 from 30.06.2012
№ 24 from 25.06.2012
№ 23 from 21.07.2011
№ 22 from 21.07.2011
№ 21 from 18.07.2011
№ 20 from 01.07.2011
№ 19 from 28.12.2010
№ 18 from 27.07.2010
№ 17 from 05.04.2010
№ 16 from 27.12.2009
№ 15 from 27.12.2009
№ 14 from 30.12.2008
№ 13 from 23.07.2008
№ 12 from 01.12.2007
№ 11 from 19.07.2007
№ 10 from 29.12.2006
№ 9 from 16.10.2006
№ 8 from 31.12.2005
№ 7 from 31.12.2005
№ 6 from 02.11.2004
№ 5 from 25.07.2002
№ 4 from 29.12.2001
№ 3 from 07.01.1999
№ 2 from 10.01.1997
№ 1 from 22.11.1995

*Table W6 Retail sales of alcoholic beverages in the Russian Federation, Federal Statistics Service Russia (Rosstat)*

<b>Sales of alcoholic beverages</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Absolute alcohol in millions of deciliters	131.1	132.1	133.2	135.0	138.7	137.3	129.6	127.6	126.8	131.1	122.1	110.5	99.2	96.8
<b>Per capita (in liters)</b>	9.07	9.18	9.31	9.47	9.76	9.67	9.1	8.9	8.9	9.2	8.5	7.6	6.8	6.6
In millions of deciliters														
<b>Vodka and spirits</b>	216.4	208.6	203.5	197.2	184.6	177.2	166.1	157.8	156.4	153.0	133.6	112.4	97.2	96.6
<b>Grape and fruit wines</b>	72.2	77.7	84.9	81.1	94.9	102.9	102.5	103.4	97.1	93.6	83.6	90.4	86.9	84.9
<b>Cognacs</b>	5.9	6.2	6.8	7.6	8.9	10.8	10.6	11.1	11.6	12.4	12.1	11.5	10.6	10.3
<b>Sparkling wines</b>	18.7	18.5	19.4	20.6	24.1	26.0	25.5	27.3	28.5	28.3	27.7	26.4	23.6	22.0
<b>Beer</b>	762.5	844.7	892.1	1002.8	1155.3	1138.2	1024.7	1004.0	1011.5	1017.5	984.2	895.9	810.2	780.6

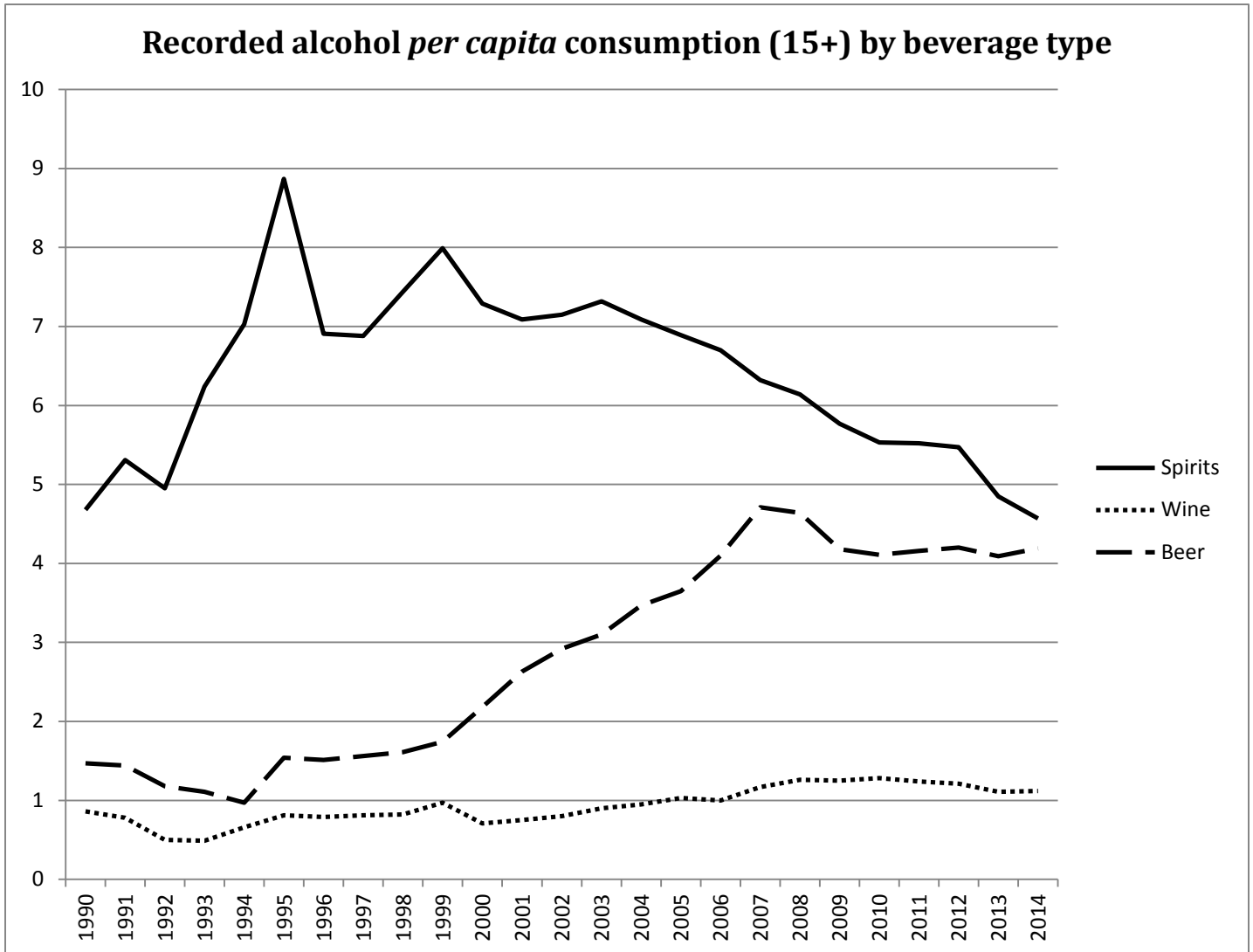


Figure W3 Recorded alcohol per capita consumption (15+) in liters of pure alcohol by beverage type.