

BULGARIAN ALCOHOL MARKET

MARKET ESTIMATION

23 FEBRUARY 2009



CANDOLE PARTNERS

This is only a partial version of the full report. It contains only selected sections from the industry overview chapter.

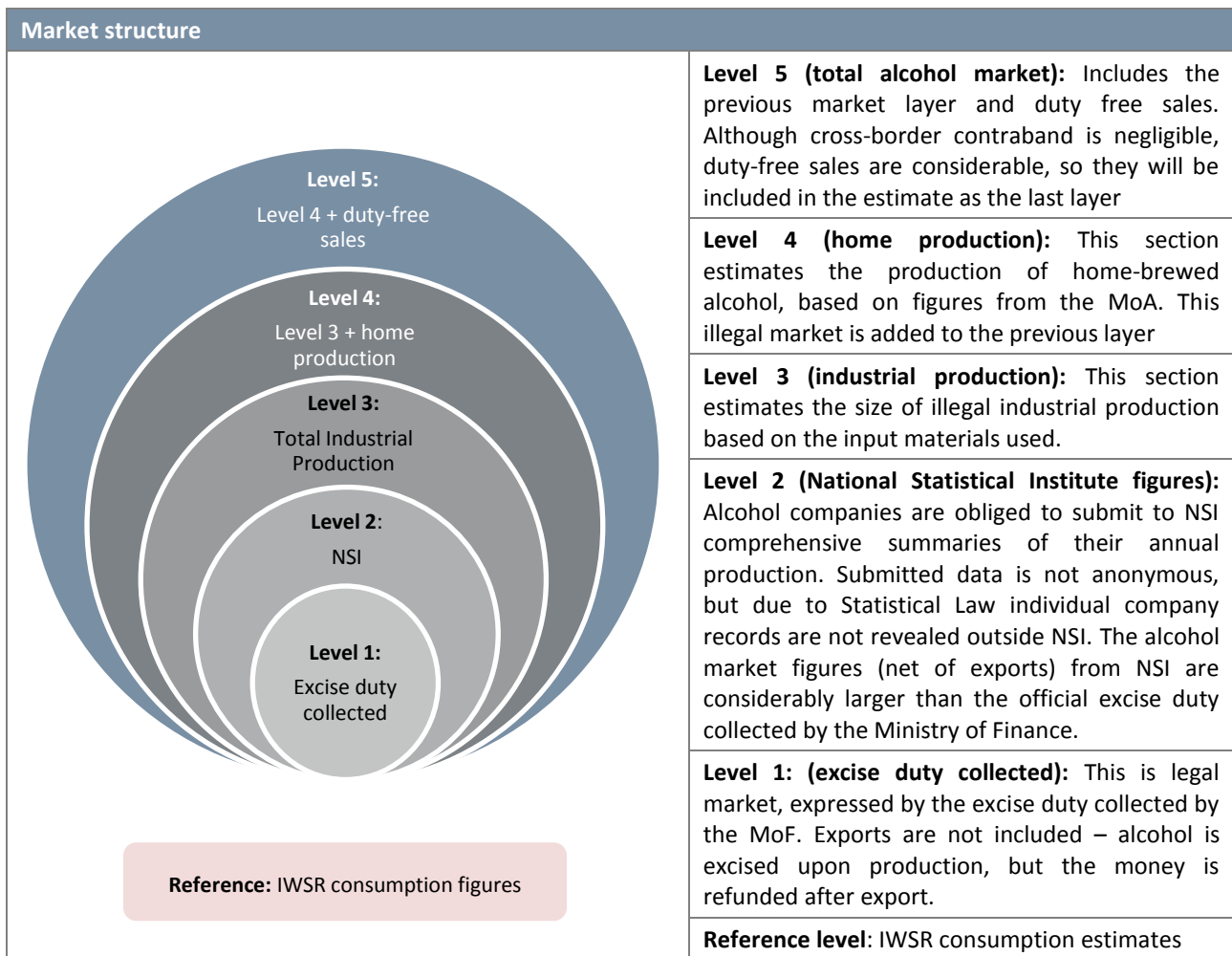
5. INDUSTRY

5.1. Production

During our research we came across estimates that at least half of the alcohol market is illegal, with shares ranging between 50%¹ and 85%² of the total. Our estimates also fall within this range. We will use a bottom-up approach in estimating the local market.

Structure

We have structured the market in five layers, based on the different techniques for excise duty evasion. The figure we are trying to estimate at every market layer is the (expected) excise duty collection and volume. Those target figures will show (1) the amount of uncollected excise duty, and (2) the total market size in hectoliters (for beer) and hectolitres of pure alcohol (for spirits).



¹ Source: Interview with AAA

² Source: Interview with BBB

Assumptions

There are three underlying assumptions throughout this section.

- **Alcohol content.** We take average values for alcohol content
 - Beer: 10.5°P. This is based on the average alcohol content of the three best-selling beers by the leading brewers, respectively Zagorka (Heineken), Kamenitza (AB Inbev), and Tuborg (Carlsberg Bulgaria).
 - Spirits: 40°C. Traditionally, the most consumed spirits (rakia, vodka, and whiskey) are 40°C. Deviations can be both up (with special vodka selections, or certain types of home-brewed rakia) and down (rum), but these special cases will be neglected.
- **Wine production is entirely legal.** Our interviewees indicated that wine producers have no incentive to hide the real volume of their wine production, because it is exempt from excise duty.
- **Excise duties.** The actual duty rates for 2006 and 2007 will be used when estimating the size of the illegal market. The rates since 2006 have been the following: beer is 1.5 leva per 1°P/HI and spirits are 1100 leva per HI of pure alcohol.

5.1.0. Reference: International Wine and Spirits Record

The following table, based on the IWSR consumption figures, will be used as a reference further in the report. Please note that IWSR estimates consumption, while our estimates are for production. One limitation of the International Wine and Spirits Record methodology is that it reports local production based on interviewees' estimates and excludes several important market components (duty free shops, home production, etc.). Nevertheless, we will compare it with our research on production by estimating the excise duty payable in both cases.

IWSR consumption figures and corresponding excise duty				
Category	Source	Unit measurement	2006	2007
Spirits	Local	HI (100% alcohol)	290,952	278,838
		BGN	320,047,200 лв	306,721,800 лв
	Imported	HI (100% alcohol)	19,827	23,207
		BGN	21,809,700 лв	25,527,348 лв
	Total	HI (100% alcohol)	310,779	302,045
		BGN	341,856,900 лв	332,249,148 лв
Beer	Total	HI	5,250,000	5,620,000
		BGN	82,687,500 лв	88,515,000 лв
Total (expected) excise duty collection			433,206,900 лв	430,037,148 лв

Source: IWSR 2008 - Bulgaria

5.1.1. Level 1 (legal market): Excise duty collected

The first (and the smallest) layer of the alcohol market is that of the official excise duty collected. The government releases annual figures on the excise duty collected by the Customs Agency within the Ministry of Finance, but without specifying the origin of the production. The duty collection is approximately 59% less than the expected figure in the IWSR report.

Official excise duty collected by the Ministry of Finance			
Category	Unit Measurement	2006	2007
Spirits	HI (100% alcohol)	82,482	81,000
	BGN	90,730,189 лв	89,100,000 лв
Beer	HI	5,547,290	5,447,619
	BGN	87,369,811 лв	85,800,000 лв
Total excise duty collection		178,100,000 лв	174,900,000 лв

Source: Ministry of Finance, Dnevnik

5.1.2. Level 2: National Statistical Institute

The NSI reports data that considerably differs from the excise duty paid to the Ministry of Finance. This data is compiled from mandatory company submissions, completed once a year. Our research shows that companies in general sometimes report inaccurate information simply because their own measurement units and operational activities are impossible to fit in the NSI survey. Since there is no control or verification method enforced by NSI, data cannot be entirely trusted. Additionally, companies producing illegal alcohol would logically submit data only on the legal part of their production. Therefore, it can be reasonably expected that the NSI values would be the same as those reported by the Ministry of Finance.

However, the NSI figures on expected excise duty collection are significantly larger than the actual amounts received by the Customs Agency. We believe there are two reasons for this:

- Statistical secret. According to article 26 of The Statistics Law, NSI cannot disclose data (to the public or other state institutions) if it is:
 - Statistical data from an individual submission
 - Statistical data that can be used to identify an individual company
 - Statistical data for less than 3 submissions or for a market where an individual company has more than 85% share
- Intra-company miscommunication. It is possible that large producers with high number of employees might find it hard to keep uniform official and unofficial production records, therefore resulting in big reporting discrepancies.

Based on the above obstacles, NSI cannot report to the Ministry of Finance to improve collection rates. Communication between agencies can only be in a general form to show trends, but theoretically it cannot be used to investigate violators.

National Statistical Institute figures and corresponding excise payable				
Category	Source	Unit measurement	2006	2007
Spirits	Local	HI (100% alcohol)	89,883	107,018
		BGN	111,205,600 лв	195,043,200 лв
	Imported	HI (100% alcohol)	26,111	54,397
		BGN	28,722,100 лв	59,836,700 лв
	Exported	HI (100% alcohol)	4,612	30,551
		BGN	5,073,200 лв	33,606,100 лв
	Total	HI (100% alcohol)	111,382	130,864
		BGN	122,520,200 лв	143,680,400 лв
Beer	Local	HI	4,956,508	5,565,899
		BGN	86,243,239 лв	96,846,643 лв
	Imported	HI	-	-
		BGN	0 лв	0 лв
	Exported	HI	-	-
		BGN	0 лв	0 лв
	Total	HI	4,956,508	5,565,899
		BGN	78,065,001 лв	87,662,909 лв
Total expected excise duty collection			200,585,201 лв	231,613,309 лв

Source: National Statistical Institute

The expected collection for 2007 is 32% more than the actual amount received. The amount is calculated by adding local production to net imports (because excise paid on alcohol for export is refunded).

5.1.3. Level 3: Industrial production

The third market layer (and supposedly the largest) is that of the illegal industrial production. We will evaluate it using the input sources. As one of the former Customs Agency directors put it, "There is simply no will in authorities to catch the illegal industrial production, which can be easily tracked by following the input materials of grapes and ethyl alcohol³".

Ethyl alcohol

Our research indicates that ethyl spirit is one of the main ingredients of illegal alcohol. If an alcohol beverage is made without paying excise duty, there is no external quality control; therefore, producers are more willing to sacrifice quality to lower costs. The most common example is with rakia - if a company produces a counterfeit grape rakia, it will put spirit and artificial flavors, instead of following

³ Source: Interview with KKK

the traditional recipe with fermented grapes. According to the former director of the alcohol industry association, using ethyl spirit reduces production costs by 0.60-0.80leva per bottle, which is why the illegal production is “mainly ethyl alcohol and a small percentage of distilled alcohol and flavors”⁴

Ethyl spirit was also a subject of illegal production. It was heavily smuggled from Ukraine, Russia, and Turkey in 2004-2005, but our interviewees confirmed this is no longer the case. Instead of importing illegally the ethyl alcohol for spirits, beverage producers now make it in-house. In recent years there has been a booming growth in installed production capacity, and as a result Bulgaria became a net exporter of alcohol.

There is excise duty payable on non-denatured ethyl alcohol, which is why there are major discrepancies between the official figures of production and the real market size. NSI reports the following figures:

National Material Balance of Non-denatured ethyl alcohol 80%+ volume		
Production (in HI)	2006	2007
Beginning inventory (suppliers and consumers)	41,540	1,9020
Local production	59,930	114,330
Imports	4,970	310
Total production	106,440	133,660
Consumption (in HI)	2006	2007
For production of alcoholic beverages	77,100	74,330
For other production	7,460	8,190
Export	3,300	26,290
Ending inventory (suppliers and consumers)	19,020	28,280
Statistical difference reported by NSI	-440	-3,430
Total consumption	106,440	133,660
Annual growth	-	26%

Source: National Statistical Institute, upon request for ProdProm code 15.92.11.00.00

Separately from the NSI figures, a director of a major ethyl alcohol producer⁵ we interviewed estimated the market size is actually double this volume. He estimated that the local market is approximately 350,000HI in 2008, or 277,000HI in 2007, and 220,000 in 2006⁶. He shared that half of the total quantity is used for illegal alcohol (respectively 138,500HI in 2007 and 110,000HI in 2006). Those figures precisely add up to the remaining official 50% of the ethyl alcohol market, those reported by NSI.

According to our interviewee, the ethyl alcohol market is dominated by five producers. Currently, they are (1) Zaharni Zavodi, (2) Almagest, (3) Peshtera, (4) Karnobat, (5) Alfatar Silistra, and (6) Gorna Malina (not yet operational). There is also a number of small garage -type producers, but the sum of all these is believed to be smaller than any of the five main producers. The majority of those large companies are officially owned by local beverage producers, or have ownership which is difficult to trace.

⁴ Source: Interview with XXX

⁵ Source: Interview with YYY

⁶ Source: Interview with ZZZ

SIS Industries and Vinprom Peshtera are most often speculated to be the main producers of illegal alcohol. Peshtera is officially one of the major brewers of ethyl spirit, while SIS is speculated to own one of the others (ownership is impossible to trace even with official company filings). Vertical integration is sensible, since it will make potentially harder for authorities to detect the illegal production. Although it is impossible to prove, vertical integration justifies why the reported official production figures by NSI are considerably lower than the estimate of the interviewed industry CEO (10.6m versus 22m liters in 2006; 13.3m versus 27m in 2007).

Another reason for hiding ethyl spirit production is the excise duty. Non-denatured ethyl alcohol is subject to excise duty of 2lv/liter.

Dry alcohol distillate

Another input material for alcohol is the dry distillate from wine and grape waste. According to the NSI, the production of dry distillate (in Hl 100% alcohol) is the following: 11,213hl in 2006 and 17,347hl in 2007. The real amount is impossible to track, because producers often reuse leftover wine and grape production to make dry distillate, and from it some rakia. It is dubious that those internal company operations are entirely revealed to statistical institute. We will use the NSI figures, which would be a conservative estimate of the dry alcohol distillate input.

Grapes

Grapes are technically the most important ingredient in the spirit production, as they are used for the traditional Bulgarian rakia. The official amounts of grape production in Bulgaria are tracked by the Ministry of Agriculture, but the reported figures are biased by two factors:

- Local alcohol producers act as a cartel when purchasing farmers' grape production. In 2007 1kg of grapes was sold to producers for 0.55lv, which is said to be lower than farmers' production costs⁷. The tension between suppliers and customers has been growing for years, and municipality counselors have sought government intervention on several occasions. In order to decrease the importance of the transaction, industrial producers have the incentive to report lower amounts of grapes purchased and processed.
- Farmers report higher tillable areas than they actually harvest, because this way they can apply for more EU funds. Therefore, the Ministry's estimates of official grape production might be inflated.
- The Ministry of Agriculture is selective in its release of information. The ministry generally suffers from poor image, resulting from protesting farmers⁸, accusations of corruption⁹, and DANS investigations.¹⁰

⁷ Source: Interview with XXX

⁸Source: Interview with YYY

⁹ Source: Interview with XXX

¹⁰ Source: Interview with FFF

The Ministry of Agriculture publishes the levels of grape production in an annual bulletin. There are estimates of official grape production, divided in two shares:

1. for direct consumption
2. for alcohol.

The share dedicated for alcohol is also divided in two groups:

- a. industrially-processed
- b. home-processed (in small distilleries).

The MoA also gives estimates what share of the home processed grapes is dedicated for wine and what for rakia; however, the equivalent estimate for industrial production is apparently confidential. Our requests for certain official figures and estimates from the Agrostatics department were rejected. As a result, we will use the reported share of home-processed grapes for rakia (7% in 2006 and 24% in 2007) to estimate industrially processed grapes for rakia.

Grapes production, 2006-2007					
Year	Total Grape production	Grapes for alcohol	Grapes processed in industrial conditions	Share dedicated for rakia *	Derived pure alcohol**
2006	336,128 tons	304,350 tons	255,668 tons	7% (17,897 tons)	8,422 hl
2007	376,663 tons	324,139 tons	200,823 tons	24% (48,197 tons)	22,680 hl

Source: Ministry of Agriculture, Grape and Wine production bulletin 2006, 2007

*Based on the reported shares dedicated for rakia from home production

**We found that 1l rakia is derived from 7-10kg grapes. We take the average of 8.5kg, and assume 40% alcohol content

It is also possible to make rakia from other fruits, such as apricots, apples, or plums, but since the Ministry of Agriculture estimates it is just 6% of the total rakia production, it will be disregarded in this equation

Input and output overview

The above input values allow us to approximately estimate the expected output volume of alcohol. Below are our calculations for the entire illegal industrial production and the difference from the statistical institute values. We will use add the difference from the NSI values to form market Level 3.

Calculation of illegal industrial alcohol production		
Input (hl 100% alcohol)	2006	2007
Ethyl spirit (for illegal alcohol production, interviewee estimate)	220,000	277,000
Ethyl spirit (for beverages, official NSI figures)	77,100	74,330
Dry distillate (NSI)	11,213	17,347
Grapes used for rakia (Ministry of Agriculture)	8,422	22,680
Total pure alcohol from input	316,732	391,357
Output (hl 100% alcohol)	2006	2007
NSI figures for locally-produced spirits (excluding excise-free exports)	89,883	107,018
Total pure alcohol from output	89,883	107,018

Difference from MoF values (in hl pure alcohol). Total illegal industrial production:	234,250 hl	310,357 hl
Difference from MoF values (in leva). Total duty not paid by producers:	257,675,000 лв	341,392,700 лв
Difference from NSI values (in hl pure alcohol)	226,849 hl	284,339 hl
Difference from NSI values (in leva)	249,533,900 лв	312,772,900 лв

5.1.4. Level 4: Home production

The next addition to the overall market size is that of the illegal home production of alcohol. One of the clauses of the Bulgarian EU accession treaty was to have an excise duty on home production, currently at 2.20lv/liter rakia. This government decision has been hugely unpopular in the rural areas and has brought no collection of excise revenues.

The poor collection rate is proven even by official figures. In 2006 there were 180 registered small distilleries¹¹, which increased to 1350 in 2007¹² and 1664 in 2009¹³. Despite the growing number of registered breweries, this almost did not influence excise revenue: in 2006 there was no excise collected¹⁴, while in 2007 it was just 10,000 leva. Dividing this by the preferential excise duty of 2.2lv, this means that only 4,545 liters were brewed in small distilleries in 2007. In other words, if the maximum allowed capacity of 30l/household has been used for preferential excise, only 150 families brewed their own alcohol.

Separately from the Ministry of Finance, the Ministry of Agriculture makes its own estimates. They are substantially different for home usage:

Grapes production (tons), 2006-2007						
Year	Total Grape production	Grapes for alcohol	Grapes processed in residential conditions	Share dedicated for rakia *	Derived alcohol**	pure
2006	336,128 tons	304,350 tons	48,682 tons	7.3% (3,553 tons)	1,672 hl	
2007	376,663 tons	324,139 tons	123,316 tons	24% (29,595 tons)	13,927 hl	

Note: We found that 1l rakia is generally derived from 7-10kg grapes. We take the average of 8.5kg, and assume 40% alcohol content

Source: Ministry of Agriculture, Grape and Wine production bulletin 2006, 2007

The MoA estimates of rakia production appear to be conservative. The alcohol industry association states that 50% of the grape production goes to small distilleries (compared to the Ministry's estimates of 16% in 2006 and 38% in 2007). However, the exact amount of home production is impossible to estimate, because:

- The owners of the small distilleries are said to be accepting small bribes from customers in order not to excise them on the total brewed volume. Our research shows that clients usually brew approximately 200 liters of rakia per season, but the number of clients remains unclear.
- There is an unknown number of unregistered home distilleries. People from the province often buy micro distilleries they install in their basements.

¹¹ Source: Interview with XXX

¹² Source: Interview with XXX

¹³ Source: Interview with XXX

¹⁴ Source: Interview with XXX

We will base our estimate on the conservative official numbers from the Ministry of Agriculture. The resulting unpaid excise duty was therefore 1.83m leva in 2006 and 14.6m leva in 2007.

5.1.5. Level 5 (total market): Duty-free imports

The illegal export and import of alcohol is a negligible fraction of the market. According to the NGO Centre for Study of Democracy, 2/3 of the market managers believe it is virtually non-existent.¹⁵ Currently, it comes mainly from Turkish border town of Kapikule. The customs police estimates that there are between 400 and 500 “suitcase” traders who daily transport different goods from Turkey (including cheaper groceries, cosmetics, and cigarettes)¹⁶. However, since the excise-free amounts for personal use are relatively low¹⁷, the alcohol volumes transported by the suitcase trades are insignificant.

However, a more important source of imports is the duty-free shops on the Bulgarian land borders. Although not violating any laws, we have two reasons for classifying them as “illegal”:

- The Centre for Study of Democracy, a Sofia-based NGO, identifies illegal alcohol as “one without excise duty paid”¹⁸. Adhering to this definition means including the unpaid excise from duty free shops. The table below shows that their sales reached €550m leva in 2006.
- The European Union identified them as “key centres for corruption and contraband”¹⁹. Their strong lobby prevented the shops’ closure for many years, until they were finally shut down in June 2008²⁰ under pressure from the European Commission. Currently, there are talks that shops on borders with non-EU countries will be reopened²¹.

Duty free sales of alcohol				
	Number of passengers through the Bulgarian borders	Alcohol sold by duty free stores (leva)	Alcohol sold by duty free stores (kg)	Alcohol sold by duty free stores (HI of pure alcohol)*
2001	15,302,434	95,717,500 лв	1,413,227	10,094
2002	17,183,454	84,831,963 лв	1,191,953	8,514
2003	18,963,469	116,437,862 лв	1,166,377	8,331
2004	21,392,003	152,356,553 лв	1,420,344	10,145
2005	22,807,386	145,823,774 лв	1,743,964	12,457
2006	23,252,594	559,202,707 лв	2,451,012	17,507
2007**	25,722,003	404,593,785 лв	2,181,711	15,584

Source: Centre for Study of Democracy, Customs Police

* Candole estimate, based on average volume of 1.4l per 1kg pure alcohol, derived from 2008 NSI import values

** Candole estimate

¹⁵ Source: Interview with XXX

¹⁶ Source: Interview with XXX

¹⁷ Source: Interview with XXX

¹⁸ Source: Interview with XXX

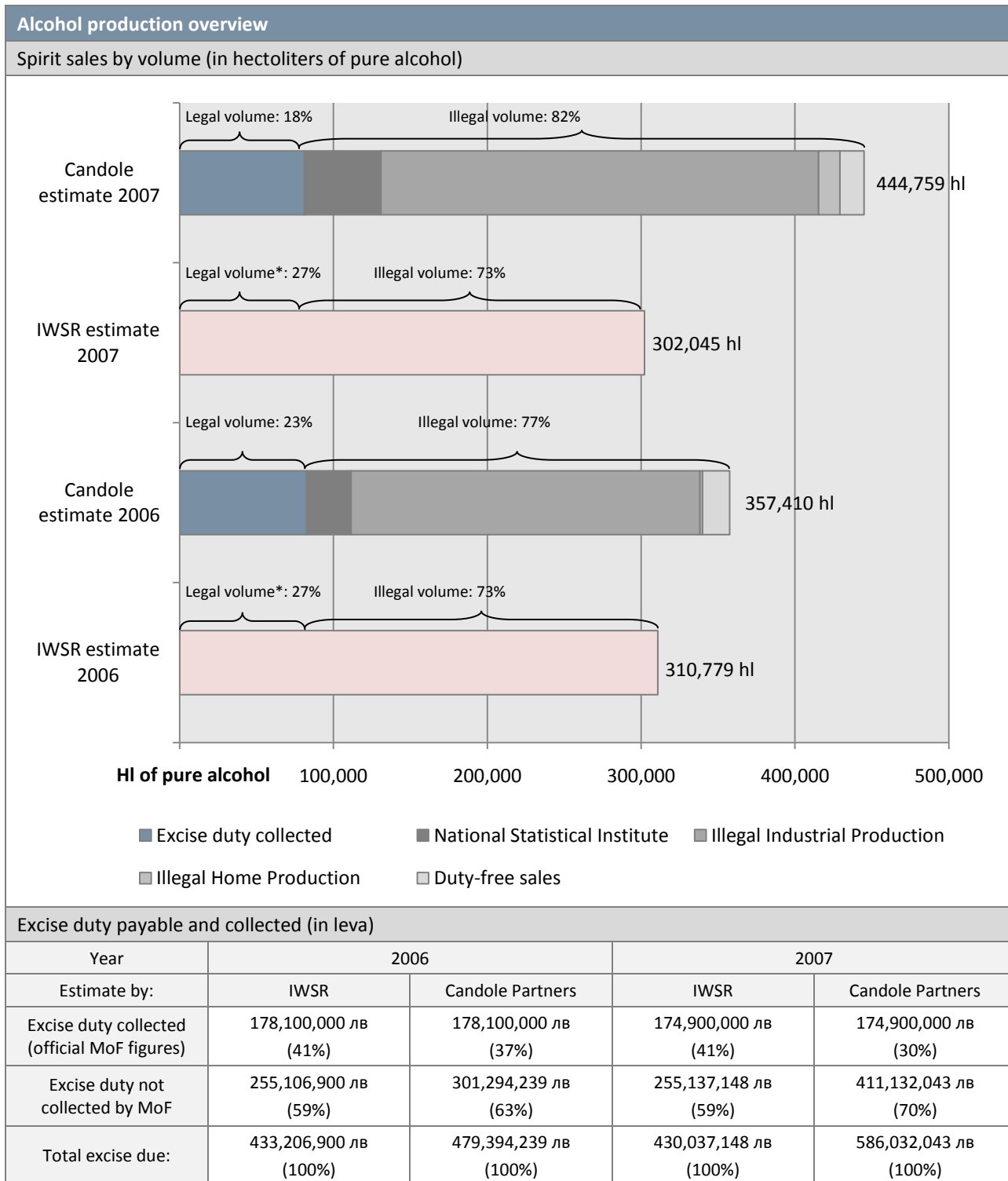
¹⁹ Source: Interview with XXX

²⁰ Source: Interview with XXX

²¹ Source: Interview with XXX

5.1.6. Summary

Our estimates align with those stated in the press that at least half of the local alcohol market is illegal. Our conservative approximation is that the state has not received between 62% and 71% of excise duty it is owed.



* IWSR does not report "legal" volume, so we use the official volumes paid for to the MoF