



# **SWEDISH ALCOHOL POLICY**

## **- AN EFFECTIVE POLICY?**



## Foreword

In this report, commissioned by The Brewers of Europe, the Swedish Retail Institute, HUI, has analysed the success and failures of Swedish alcohol policy.

The Swedish Retail Institute, HUI, was founded in 1968 and is owned by The Swedish Trade Federation. Through market and customer analysis on different levels, our consultants help our clients make better business by improving their understanding of consumers, consumer behaviour and marketplaces. Our consultants also deal with issues on a social-economic level, business cycle analysis as well as procurement and processing of retail related data. HUI is the leading organisation for research regarding the retail and wholesale industry and the publications of our researchers can be found in numerous international scientific journals. HUI conducts its research activity together with several external researchers and in cooperation with a number of Swedish universities. HUI is well-known in the Swedish society for its seriousness, integrity and independence.

The Brewers of Europe, founded in 1958 and based in Brussels, is the voice of the European brewing sector to the European institutions and international organisations. Current members are the national brewers' associations from EU Member States, plus Norway, Switzerland and Turkey.

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## KEY FINDINGS AND SUMMARY

### KEY FINDINGS

- The outcome of this scrutiny of Sweden's alcohol policy is that it has produced mixed results and led to unintended consequences from both economic and public health points of view.
- Whilst the fundamentals of Sweden's alcohol policy have focused on seeking to reduce overall alcohol consumption with a view to reducing alcohol-related harm :
  - Alcohol consumption in Sweden has increased by 30% over the past 15 years;
  - Meanwhile, whilst Swedes' drinking habits have evolved towards more « continental style » habits, Sweden still has amongst the highest rates of binge drinking as compared to other European countries, in particular binge drinking by young people under the legal drinking age;
  - However, the negative effects of alcohol abuse have not increased to the same extent as overall alcohol consumption.
- Without (major) adaptations, the intended efficacy of Sweden's taxation and availability policies have been further challenged since Sweden's 1995 accession to the European Union :
  - Unregistered channels including personal imports and smuggling have reached higher levels (e.g. almost 30% for beer);
  - The state-owned retail monopoly has over the last 15 years lost market share to a very significant extent, notably to the benefit of unregistered channels ;
  - In particular, the sale of smuggled alcohol to young people under the legal age has become a source of greater concern;
  - Criminality associated with and resulting from smuggling has become more professional;
  - State revenue has been affected;
  - Sweden's brewing chain has been negatively impacted (decline in production, employment and sales).

### SUMMARY

This study aims to examine Swedish alcohol consumption and the Swedish alcohol policy, which is often pointed out as a successful weapon for reducing alcohol-related harm. The results, however, indicate that the reality of the situation is ambiguous. The restrictive Swedish alcohol policy has achieved its objectives in certain respects but has, in other respects, created large new problems in unintended areas.

With its location in the middle of the North European vodka belt, Sweden has a history as a country with a high consumption of spirits. During the 1700 and 1800s, for example, it was not unusual for people to receive a part of their wages in the form of spirits. Approximately 100 years ago, a reaction against the excessive consumption of alcohol emerged and several

measures were introduced in order to reduce consumption. A state retail monopoly (Systembolaget) that still exists, which is completely unique for the entire EU except Finland, was one such measure. Spirits, however, continued to be the dominant alcoholic beverage during a large part of the 1900s. Due to the influence of more continental drinking habits, both beer and wine have gained ground at the expense of hard liquor in recent years.

The Swedish alcohol policy aims to keep the total consumption of alcohol as low as possible. The objective is to generate as few heavy consumers as possible. In the official statistics, the total Swedish alcohol consumption, compared to other European countries, has been low for many years. However, during the past 15 years a change has occurred. Swedish alcohol consumption has sharply increased, by almost 30 percent. The foremost reason behind this trend is the substantial increase in personal imports by travellers and smuggling from other countries with significantly lower alcohol taxes than Sweden.

The traditional Swedish drinking culture is otherwise characterised by relatively few drinking occasions but higher consumption per drinking occasion, in comparison with several other countries, for example in Central-Southern Europe. Sweden also has a tradition as one of the European countries with a high rate of binge drinking. These behaviours mean that a relatively high share of all drinking occasions results in intoxication.

One important tool in the Swedish alcohol policy is the high alcohol tax. For example, the alcohol tax on beer is eight times as high in Sweden as in Germany.

Another important tool is the state retail monopoly, Systembolaget, which through high prices and restricted availability is meant to keep alcohol consumption low. However, due to the free movement within Europe of both people and goods, the Swedish alcohol policy has encountered problems. The possibility of legally bringing in large quantities of alcohol or buying via other people who have been abroad and purchased alcohol (smuggling) is large. Furthermore, the high prices at Systembolaget, resulting from the high Swedish alcohol taxes, make the financial savings from purchasing alcohol from other countries high. The high taxes, which were aimed at keeping alcohol consumption low, now seem to steer consumers towards other purchasing channels rather than keeping down the total alcohol consumption. Today, Systembolaget has a market share of 57 percent of the Swedish alcohol consumption.

Systembolaget, the Swedish alcohol monopoly, has in recent years had an increased sales that are in line with other parts of the retail trade. Behind the increase lies, among other things, a long economic boom in the whole economy but also a refurbishing of the Systembolaget stores, longer opening hours, and an increased focus on customer service. This has led to a regaining of some of the market shares but has hardly contributed to keeping down consumption levels. Viewed over a longer period however, Systembolaget has experienced considerably less growth than other parts of the retail trade.

Almost 30 percent of the beer over 3.5 percent alcohol that is consumed today comes from personal imports by travellers or smuggling and is, thus, neither taxed in Sweden nor sold via legal channels within the country. During the last 15 years, a sharp transition from weaker to stronger beer has also occurred. In 1994, beer with an alcohol content of up to 3.5 percent constituted 64 percent of all beer consumed while today it only constitutes 33 percent. Swedes, thus, drink more of stronger beer and a great part of this increase comes from private imports and smuggling.

The fact that the so-called unregistered channels, smuggling and personal imports by travellers, have been able to increase so significantly is a direct consequence of the price differences resulting from the tax differences between Sweden and other countries. A can of beer that costs approximately SEK 10 (about 1 Euro) at Systembolaget in Sweden costs slightly more than SEK 4 (about 40 eurocent) in the cross-border trade in Germany. (Price difference alter due to varying exchange rates.) Large amounts of money can, thus, be saved by those who purchase large volumes, or alternatively, can be earned by those who choose to (illegally) resell their goods. The increase is also due to the availability that the alternative channels provide, not least of all, for the young people who are not permitted to shop at Systembolaget (where the minimum age limit is 20 years of age). The sale of smuggled alcohol to young people is alarming. Because these consumers are not permitted to shop at Systembolaget, their price sensitivity is low. Therefore, the illegal traders often target exactly these consumers because they can charge young people a higher price. Currently, the availability of alcohol for teenagers is higher than ever.

One other consequence of the large price differences between Sweden and many neighbouring countries is also that people “stockpile” alcohol at home when they purchase smuggled goods or cross the border themselves in order to shop.

A further consequence of the large tax differences between Sweden and the neighbouring countries is the criminality it gives rise to. The smugglers are often from hardened criminal organizations that have added alcohol smuggling to their business activities.

Currently, however, it seems that the negative effects of alcohol abuse (e.g. in the form of alcohol-related injuries, accidents and violence) have not increased to the same extent as consumption. One explanation for this may be that a part of the increase is due to a more continental approach to alcohol (i.e., Swedes drink alcohol more often but at the same time they do not become intoxicated on each occasion). Another explanation may be the shift from spirits to more of lower strength products such as beer and wine.

In summary, the trend has been an increase in consumption, but from a public health point of view, it seems the results have not been as dramatic as expected by the total consumption model.<sup>1</sup>

The signals from the Swedish Customs and the producers who sell alcohol to border stores (the places, especially in Germany, where Swedes go and purchase their alcohol) is that the inflow of alcohol over the borders is not decreasing. Many observers believe that the smuggling has been professionalised. Observations indicate, namely, that fewer individuals cross the borders but that these people have greater quantities on each occasion.

In order to counteract the extensive illegal trade in alcohol at the Swedish border, and in order to return trade to the legal channels within the country, significantly improved conditions for Customs and the police are needed. However, Customs and the police think that even with significantly increased resources, the imports will most likely continue. One alternative is for the large price differences to be neutralised by a substantial tax reduction in Sweden. Reintroducing more restrictive import quotas has also been raised as a solution. One should,

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<sup>1</sup> A model that tends to assume that alcohol is the necessary and sufficient cause of all drinking problems ; that the availability of alcohol determines the extent to which it will be consumed ; that the quantity of alcohol consumed (rather than the manner in which it is consumed, the purpose for which it is consumed, the social context in which it is consumed, etc.) determines the extent of drinking problems.

however, be aware that even a halving of the import quotas still means that large quantities of alcohol (more than a year's consumption for the average consumer) can be brought into the country completely legally in just one trip and, furthermore, the incentives for smuggling would hardly be decreased as a result of such a measure.

The Swedish alcohol policy generates, via the high alcohol taxes, significant assets for the Swedish public treasury, although high taxes are obviously generated only by products purchased legally in Sweden. However, as an instrument for keeping alcohol consumption low, the trends in recent years show that it has not succeeded. Today's situation is far from the objectives that the Swedish alcohol policy is aiming to achieve. Imports are essentially free and huge quantities of imported alcohol are resold in the illegal trade. This, in combination with the fact that the availability of alcohol to young people is greater than ever before and criminal organisations have gained a hold on alcohol distribution makes the situation untenable. To say that the Swedish authorities have lost control over a large part of the alcohol trade is, thus, hardly an exaggeration.

## 1 INTRODUCTION

The objective of the Swedish alcohol policy is to keep total alcohol consumption as low as possible. It is thought that this can be achieved through high taxes, which result in high prices for the consumer, and through Systembolaget (the Swedish Alcohol Retail Monopoly), which restricts availability of alcohol. The number of stores and their opening hours are also restricted via Systembolaget. The minimum drinking age of 20 is an attempt to prevent young people from beginning to drink alcohol.

For many years, the average level of alcohol consumption in Sweden has also been kept low compared to many other countries. However, Swedish consumption of alcoholic beverages has increased sharply. The possibility of importing large amounts of alcohol into the country in combination with the proximity of markets with less expensive alcohol have led to a sharp increase in unregistered alcohol consumption, i.e., smuggling and personal imports by travellers. During 2008, it was estimated that the monopoly's share of alcohol consumed by Swedes would amount to approximately 57 percent.

In this report, a number of reports, attitude surveys, and statistics on alcohol consumption have been consolidated. The results show that the Swedish alcohol policy has become problematic since Sweden's entry into the EU. The large price differences between Sweden and the neighbouring countries make the Swedish alcohol policy ineffective to a certain extent. For those consumers who use Systembolaget, the alcohol policy is still of importance. Significant groups have, however, entirely abandoned Systembolaget as a channel for alcohol purchase, and a large number simply view it more as a complement, rather than an alternative, to smuggled alcohol or traveller imported alcohol.

The report reviews statistics on consumption and attitudes towards illegal alcohol, the financial losses to the Swedish state as a consequence of a large black market, Swedish drinking habits and how they have changed during the latest years and, finally, the effects on the Swedish brewing sector.



## 2 BACKGROUND ON THE SWEDISH ALCOHOL SITUATION

Alcohol has been an important part of people's lives for many centuries in Sweden. In the 1700 and 1800s, it was not unusual for people to receive a part of their payment for work in spirits, especially farmhands, maids, and other servants, but also many workers. In this way, alcohol became a part of daily life for the population. Home distillation was also very widespread during this period, especially so-called home use distillation (i.e., distilling aquavit for personal and close relations' use). During the middle of the 1800s, it is estimated that the consumption of spirits amounted to approximately 45 litres per inhabitant per year. Alcohol abuse was widespread among certain groups of the population. During this period, Sweden's position as a country in the so-called "vodka belt" of Europe was already established.

During the beginning of the 1900s, a series of measures were introduced in order to limit the widespread consumption of alcohol. Although forbidden earlier, throughout virtually the entire 1900s, home distillation, particularly in rural areas and small towns, was a significant reality that no alcohol policy was able to change, because its banning was almost impossible to enforce.

A retail monopoly, Systembolaget, was also gradually introduced during this period, and actually still exists, which is unique within the EU except Finland. During the early 1900s, another form of control was also introduced: a "ration book" was distributed to every household, which meant a substantial rationing of permitted alcohol purchases. The permitted amount of alcohol for purchase varied according to age, gender, economic and social position. The average amount permitted was approximately two litres of spirits per household per month. All purchases were registered in the ration book, which gave the state total control over how much alcohol each individual purchased. At the same time, beer above 4% alcohol could only be purchased, up until 1955, at pharmacies with a prescription from a doctor. The entire ration book system was abolished in 1955.<sup>2</sup>

The entire time, however, spirits retained their position as the most common alcoholic beverages in Sweden. It wasn't until during the later part of the 1900s that the weaker alcohol alternatives, beer and wine, substantially increased their shares of the alcohol consumption of Swedes.

The next major change in the alcohol policy came in the middle of the 1990s. As a result of Sweden's joining the European Union in 1995, Sweden has gradually adopted the rules for the amounts of alcohol that are permitted to be imported when travelling from other EU countries. Since 2004<sup>3</sup>, the same rules apply as in the rest of the EU. This means an indicative level of 10 litres of spirits, 20 litres of strong wine, 90 litres of wine, and 110 litres of beer for each trip. But if the traveller can establish that he has a greater need because, for example, he is arranging a large private party, he can bring in substantially larger volumes than that. In

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<sup>2</sup> For more historical information: [www.systembolaget.se](http://www.systembolaget.se)

<sup>3</sup> Until 31 December 2003, following art. 26 of directive 92/12 EEC, Sweden could apply restrictions on the quantity of alcoholic drinks brought by private individuals without the payment of excise duty. The quantities allowed were increased gradually as set out in the annex to the directive (art. 26 (3)).

several judgments<sup>4</sup>, Swedish courts have established that individual travellers on such occasions may be permitted to bring in over 1,000 litres of beer per trip. Therefore, it can be stated that in practice there is almost complete freedom for the importing of alcohol for private use from other EU countries.

Sweden has not, on the other hand, chosen to adapt other parts of the alcohol policy to that of other EU countries. For example, the very high taxes on alcohol have been retained. This makes it very good value to travel from Sweden to, for example, Germany in order to purchase alcohol for personal use and even for illegal resale within Sweden.

In negotiations with the EU, Sweden was permitted to retain the retail monopoly for alcohol, Systembolaget. This issue later went before the European Court of Justice<sup>5</sup>, where it was confirmed that the monopoly is permitted to remain under the condition, among others, that no producers from other EU countries are disadvantaged in any way. In order to gain support and understanding from the Swedish people for such a monopoly, several measures have also been taken in order to popularize Systembolaget. Stores are now open on Saturdays from earlier having been closed for the whole of Saturdays. There are self-service stores and not just over-the-counter stores. The merchandise is now often displayed more informatively and accessibly. Wine packaged in larger volumes has been introduced, most often in 3-litre boxes. In addition, stores are generally attempting to appear to customers more as “service stores” rather than “State institutions”.

Swedish alcohol consumption behaviour has also changed character over the last decades. Swedes more often come into contact with different nationalities, behaviours and products and acquire new habits from their travels abroad. There are also more and more international influences via the media. Furthermore, the behaviour and habits of people in various countries is becoming increasingly similar in general.

In broad terms, the development of the Swedish approach to alcohol can be described in this manner: The traditional way of drinking alcohol in Sweden, large quantities of spirits and widespread drunkenness on the weekend (but in return, nothing during the work week), partially remains. At the same time, often parallel to this, many have adopted a consumption pattern that is common in many other European countries, of a little alcohol on several days of the week, as an accompaniment to a meal or simply while socialising. The change in pattern is considered to be one of the factors behind the increase in alcohol consumption.

Another important factor is the increased availability of alcohol. Through the widespread imports and smuggling from countries with lower alcohol taxes, Systembolaget has been supplemented by private distribution. Not least of all, this has meant that young people under 20 are able to very easily obtain the alcohol they want, whereas Systembolaget has a minimum age limit of 20 years of age.

The Swedish alcohol policy has not been adapted to meet the new situation with large flows (including smuggling) of alcohol over the border, and as a result of this, illegal purchase from smugglers and personal imports by travelling consumers constitute a large share of the Swedish alcohol consumption today.

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<sup>4</sup> Brewers of Sweden. “Alcohol smuggling to Sweden 2002-2007”.

<sup>5</sup> C-189/95 (Franzén)

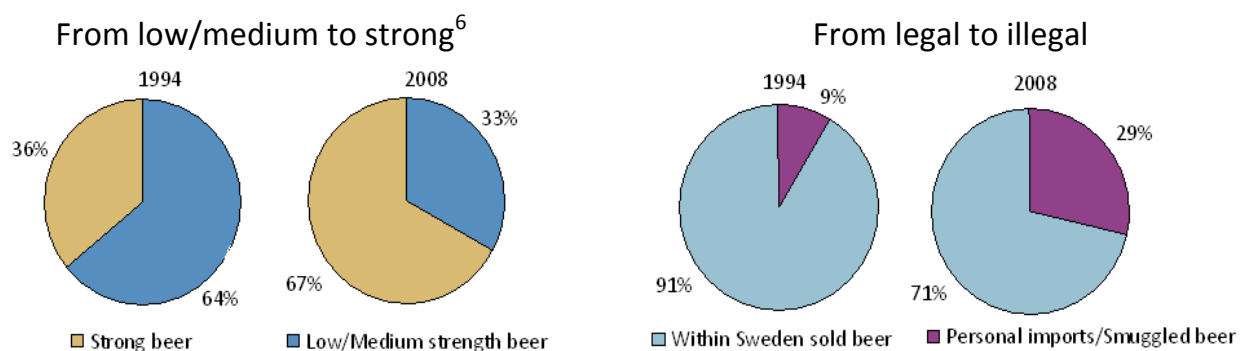
### 3 ALCOHOL CONSUMPTION IN SWEDEN

#### 3.1 Swedish beer consumption

The majority of the beer consumed in Sweden, approximately 67 percent, is what they call strong beer, most commonly with an alcohol content slightly above five percent, and which can legally only be purchased in Sweden from Systembolaget or in the Horeca sector (bars, pubs, cafés, restaurants etc). In 1994, the final year before Sweden became an EU member, the total consumption of beer was essentially the same as now, but the stronger beer only constituted 36 percent. In 2008, the total annual Swedish strong beer consumption amounted to 393 million litres, which corresponds to 51 litres per person over the age of 15 per year. (“Over the age of 15” is commonly used in official statistics.) Of the total 393 million litres of strong beer consumed, 212 litres were purchased via the state-owned Systembolaget, which means that, since these stronger beers can’t be purchased in the normal retail sector, a large portion of sales occurred via other channels, including smuggling. The total beer consumption, regardless of strength, amounted to 604 million litres in 2008 which is about the same amount as in 1994 when beer consumption reached 609 million litres. During recent years there has therefore been a dramatic transition towards stronger beer.

The background to the current situation lies in, above all, successively increased import quotas and the possibility of being able to bring into the country virtually unlimited amounts of alcohol. An important part of the policy is a sales monopoly for state-owned Systembolaget. When borders were closed to private imports from other countries, and it was possible to control sales within the country, the results of the Swedish policy were quite in line with expectations. The problem for the monopoly is that Systembolaget’s most widely sold beer costs slightly more than SEK 10 (about 1 Euro) per can in Sweden, while the same can costs slightly more than SEK 4 (about 40 eurocent) in the cross-border trade in Germany. A price difference principally due to the higher Swedish alcohol taxes.

**Diagram 4.1 Development during the period 1994-2008**



Source: Brewers of Sweden

The Swedish consumption of beer can be divided into two categories, low/medium strength beer with an alcohol content up to 3.5 percent which is sold within the Swedish retail sector and “strong beer”, most commonly with an alcohol content of a bit above five percent, which is sold by the Systembolaget and pubs/restaurants. The strong beer is to a much larger extent

<sup>6</sup> Strong beer is the official term used in Sweden for beer with more than 3.5 percent alcohol by volume, but usually with 5 percent or more alcohol. Low/medium strength beer is with at most 3.5 percent alcohol.

bought from abroad or from people who have been abroad where the alcohol tax is significantly lower. Almost 20 percent of the beers sold by Systembolaget have an alcohol content around 7-10 percent, which is called “extra strong beer” in Sweden.<sup>7</sup>

The beer consumption in Sweden most often takes place at home and the horeca sector’s share of beer consumption reaches less than 20 percent.<sup>8</sup>

### **3.2 Total alcohol consumption**

Even if beer is the alcoholic beverage that makes up the largest proportion, measured in volume (without taking into account the alcohol content), of smuggling and private imports, there is a need to analyse the total alcohol consumption level in order to fully understand Swedish alcohol consumption. This review is conducted in measurements of pure alcohol so that the various types of drinks (e.g. wine, beer, and spirits) can be compared.

In order to gain an accurate picture of how much alcohol Swedes drink, the sales statistics from the official channels, Systembolaget, retail trade, and the horeca sector are added to the estimate of the size of the “unregistered sector”, i.e., smuggling, personal imports by travellers, and home production. Taken together, the registered and unregistered sectors give an understanding of the total levels of consumption.

This estimation is conducted on an on-going basis by SoRAD on commission by the Swedish government. The calculation of the total alcohol consumption in 2008 came to an average consumption of 9.5 litres of pure (100 percent) alcohol per year for persons over the age of 15. Measured in litres, beer was the alcoholic beverage most consumed, whereas when measured in pure alcohol, wine was the most consumed beverage. The average Swede consumed the equivalent of 3.8 litres of pure alcohol annually in the form of wine. Thereafter comes beer, with a consumption amounting to 3.5 litres. In 2008, the consumption of spirits amounted to 2.1 litres of pure alcohol. In table 4.1, the average alcohol consumption of persons over the age of 15 is shown. The table shows centilitres of pure alcohol and the respective sales channels’ percentage share of the total market for each type of drink.<sup>9</sup>

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<sup>7</sup> Swedish Alcohol Retail Monopoly.

<sup>8</sup> SoRAD, Centre for Social Research on Alcohol and Drugs at Stockholm University.

<sup>9</sup> Ibid.

**Table 4.1 Consumption of pure alcohol per person over 15 years of age, centilitre, 2008**

Consumption of alcohol		
	Centilitre	Channel's share
<b>Spirits total</b>	209	100%
Registered	110	53%
Unregistered	99	47%
<i>Personal imports by travellers</i>	79	38%
<i>Smuggled</i>	15	7%
<i>Home-produced</i>	5	2%
<b>Wine total</b>	379	100%
Registered	316	83%
Unregistered	63	17%
<i>Personal imports by travellers</i>	47	12%
<i>Smuggled</i>	5	1%
<i>Home-produced</i>	11	3%
<b>Strong beer total</b>	288	100%
Registered	209	73%
Unregistered	79	27%
<i>Personal imports by travellers</i>	40	14%
<i>Smuggled</i>	37	13%
<i>Home-produced</i>	2	1%
<b>Medium strength beer*</b>	62	
<b>Cider and mixed drinks*</b>	16	
<b>Internet**</b>	1	
<b>Total consumption</b>	955	100%
Registered	713	75%
Unregistered	242	25%

\* Too small volumes of unregistered consumption to be estimated.

\*\* Too small volumes to be divided into different types of beverages.

Source: SoRAD

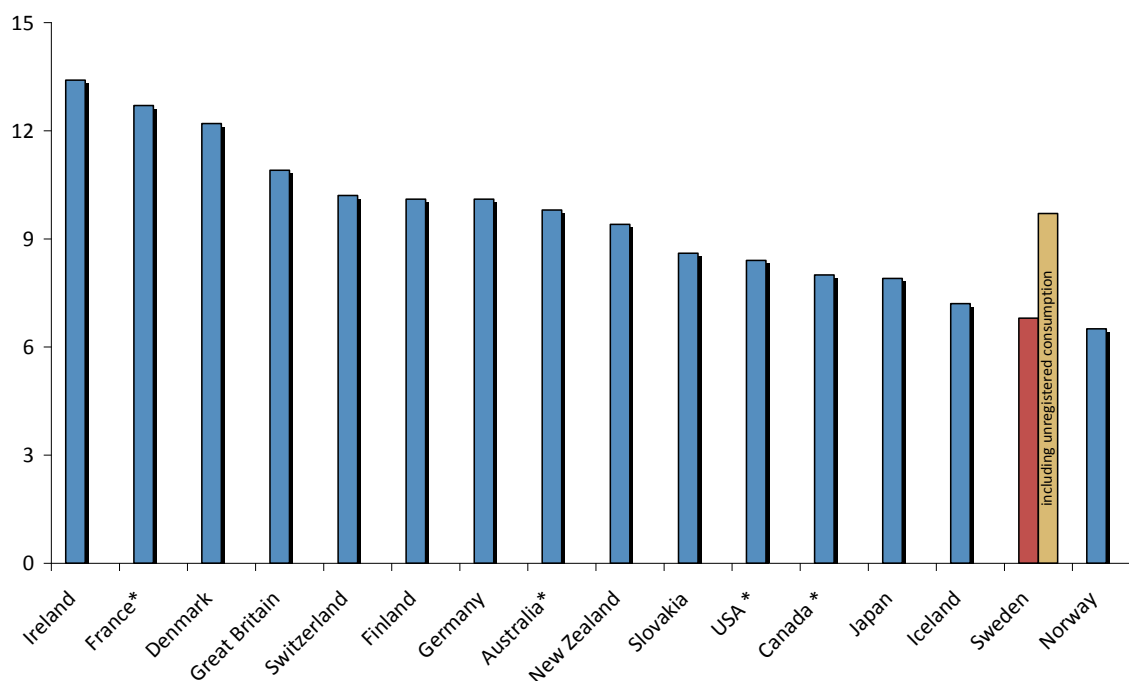
It is important to emphasise that the estimated average consumption is simply an average. Consumption varies between gender, age, region, and season. Men consume on average, for example, 2.4 times more alcohol than women, and younger people consume more than older people<sup>10</sup>. The consumption also has clear seasonal variations. Swedes drink most around the large holidays: Midsummer Day, Christmas, New Year, and Easter.

<sup>10</sup> Swedish National Institute of Public Health.

### 3.2.1 Swedish consumption compared to other countries

The Swedish alcohol consumption has, compared to other European countries been pointed out as low. However, in comparisons of Swedish alcohol consumption with that of other countries, there are several factors that differ. The first is that the unregistered sales in Sweden are considerably higher than in most other countries. Another difference is that spirits have a higher share of consumption. Below, in diagram 4.2, the consumption per capita in a number of countries is presented. The statistics show registered (i.e. official) consumption of alcohol. Swedish consumption seems relatively moderate when only the registered sales are reviewed. However, if we include unregistered consumption (e.g. alcohol purchased abroad etc), the Swedish consumption is considerably higher.

**Diagram 4.2 Consumption litres of pure alcohol per person, registered sales 2006**



Source: OECD Health Data 2008.

\* = year 2005

### 3.2.2 The Monopoly has slightly more than half the market

A large proportion of the alcohol consumed is not purchased within the bounds of the monopoly. (Diagram 4.3). Systembolaget's share of sales, measured in litres of pure alcohol, amounted to 57 percent in 2008. Retail trade (which sells low alcohol content drinks) has a share of 6.5 percent, and the horeca sector (pubs, restaurants etc) has a share of 10.5 percent. The remaining share, 26 percent, consists of the unregistered sector (i.e., personal imports by travellers, smuggling, and home production).

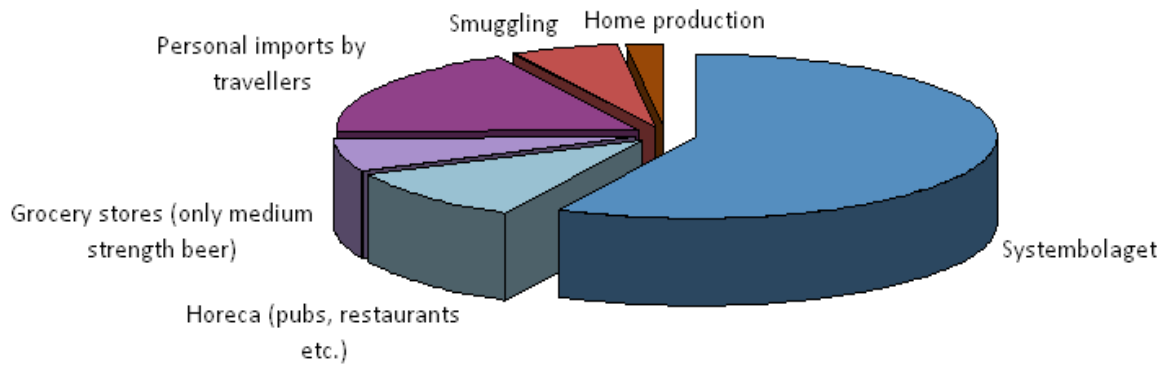
Measured in simple liquid volume alone, it is beer, above all, that crosses the borders. It is estimated that approximately 61 percent of all alcoholic drink imported for personal use or smuggled, is beer<sup>11</sup>. Of the illegal volumes, it is calculated that beer makes up 90 percent<sup>12</sup>.

<sup>11</sup> Centre for Social Research on Alcohol and Drugs at Stockholm University & Brewers of Sweden.

<sup>12</sup> Ibid.

Due to a number of factors, which are described later in this section, there is reason to believe that the unregistered sector is even larger. With this in mind the Swedish retail monopoly can be questioned to really function as a monopoly.

**Diagram 4.3 Various sales channels for alcohol, 2008**



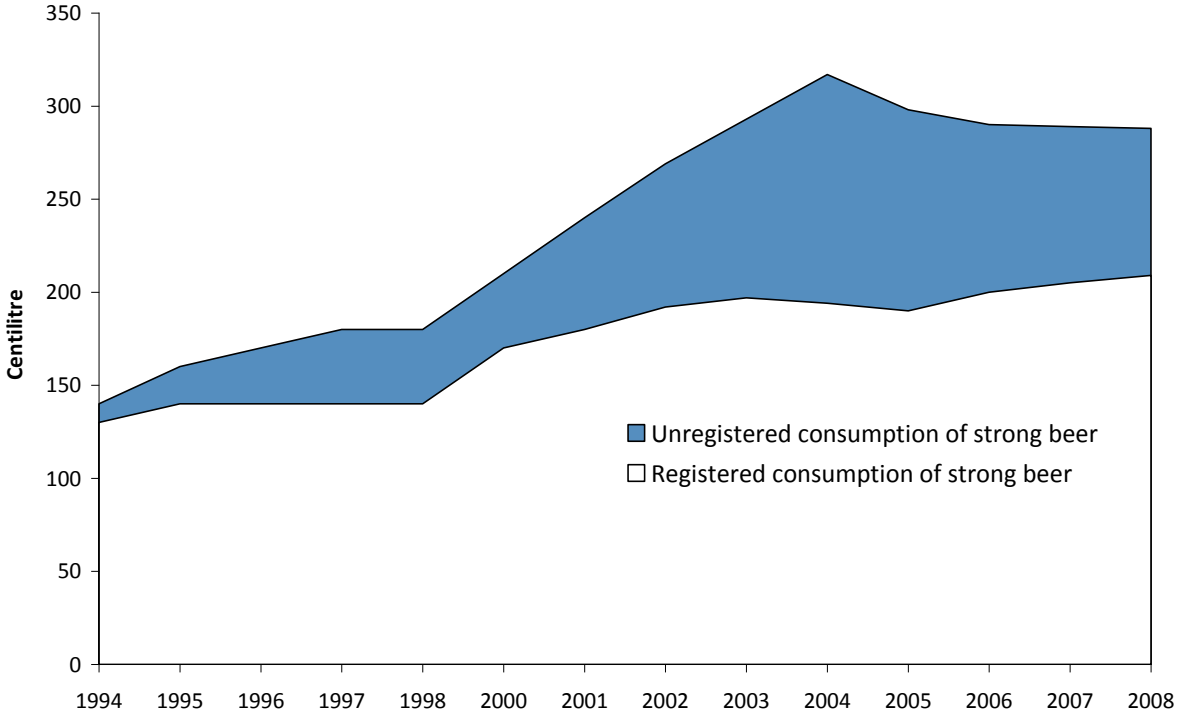
Source: SoRAD

### ***3.3 Smuggling and personal imports by travellers effects on consumption***

If the alcohol consumption of Swedes from the mid 90's is reviewed, it becomes evident that the registered channels, Systembolaget, and the horeca sector, had a considerably higher share of the sales of strong beer. Since then, however, the unregistered channels' share has increased substantially. The increase in total strong beer consumption that we have seen can be concluded to have stemmed principally from the unregistered sector while the registered sector's sales during this period have developed more moderate. The explanation behind the development lies in large differences in the alcohol tax between Sweden and some of the neighbouring countries. In diagram 4.4, this trend is presented.

According to these measurements, which were carried out by the alcohol researchers at SoRAD, the unregistered consumption peaked during 2004 when the share was as high as 40 percent of total consumption. Since then, SoRAD's statistics show that personal imports by travellers and smuggling seem to have fallen somewhat. This illustration has two possible interpretations. The first interpretation could be that Swedes have grown tired of driving to Germany in order to purchase alcohol. The novelty and possibility of inexpensively filling drinks' cabinets gave alcohol expeditions an upswing around 2004, but thereafter, interest in these types of trips seem to have lessened somewhat. The weakening in recent years of the Swedish currency might also have influenced the development.

**Diagram 4.4 Registered and unregistered beer consumption, 1994–2008, measured in centilitres of pure alcohol per person over the age above 15**



Source: SoRAD

The second interpretation could be that smuggling has been professionalised, which has not come to light in the investigations of the unregistered sector that have been conducted. The statistics compiled by SoRAD are, as it stands today, the only “official” statistics that are available on trends in alcohol consumption. The estimates are quite thorough but associated with certain difficulties. SoRAD’s measurements are based on questionnaires and it can be difficult to get respondents to answer and, furthermore, to answer truthfully to questions regarding smuggling and personal imports by travellers. The reason that the trend in the last few years can be questioned is that there are signals that indicate the trend is not decreasing. Observations made by the Swedish Customs, the Swedish Police, and the producers indicate that the flow of alcohol into Sweden has not decreased during these years.

**4.3.1 Swedish Customs’ seizures and Swedish’ brewers exports are increasing**

Swedish Customs’ observations indicate that the imports of alcohol, regardless of whether they are personal imports by travellers or smuggling, have not decreased since 2004 when the peak was reached according to official statistics. According to the Swedish Customs, the pattern seen in the seizures that have been carried out is that there are fewer individuals importing alcohol, but that those that do are bringing in greater quantities. The average amount of confiscated alcohol has in fact increased in the last few years. According to the Swedish Customs, this is one effect of a professionalisation in the smuggling of alcohol. On the one hand, there is a decrease in imports by “ordinary” Swedes who go and shop abroad. On the other hand, at least as much alcohol is coming into the country due to “professionals” bringing in more. The result of this, consequently, is that the share of smuggled alcohol is increasing while the share of personal imports by travellers is decreasing. This means that the estimated total amount of alcohol brought into the country is not decreasing.



In order to get an alternative understanding of the trends in the cross-border trade of alcohol, beer exports from Sweden can also be examined. Up to and including 2003, the export stood between 5 and 8 million litres annually<sup>13</sup>, but since 2004, they have boomed. The exports are aimed almost exclusively at cross-border trade shops in Germany where Swedes shop then drive home again. In 2008, these exports amounted to 46 million litres, which was an increase of 21 percent just on 2007<sup>14</sup>. Thus, a further consequence of the Swedish alcohol policy is that it has encouraged the establishment of a large illicit market.

A future challenge, in addition to this, might be the sharply increasing phenomenon of e-commerce. E-commerce has substantially increased within the Swedish retail trade, and the habit of shopping via the internet leads to more shopping more often. For example, internet sales of electronic products and books now represent 15 and 20 percent respectively of the total sales<sup>15</sup>. Even if the internet trade in alcohol is still not particularly extensive, it is estimated that the large differences in price exist and the growing habit of shopping via the internet may also lead to an increase in the purchasing alcohol via the internet.<sup>16</sup> Attempts have been made and the dispute with Swedish authorities even reached the European Court of Justice (Case C-170/04, Rosengren and Others. v. Riksåklagaren).

#### **4.3.2 Systembolaget's sales trends**

The State monopoly for alcohol sales, Systembolaget, has experienced relatively weak growth compared to other industries for a long period of time. In diagram 4.5, the trends in retail sales since 1994 are presented. It can be seen that the Systembolaget is one of the trades that has experienced the least growth. The industry that has suffered the most has been the trade in books and paper, which actually has some interesting parallels with the Systembolaget. In the case of bookstores, market shares have been lost to grocery stores and internet sales while in Systembolaget's case, the loss is due to personal imports by travellers and smuggling.<sup>17</sup>

However, during the past three years, Systembolaget's sales have grown well and increased by 17.6 percent between 2005 and 2008. This is almost as strong as the average for the retail trade, which has increased by 18.3 percent. During this time the business cycle has been good and Swedish consumption strong. In addition, more over-the-counter Systembolaget stores have been converted into self-service stores.

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<sup>13</sup> Brewers of Sweden.

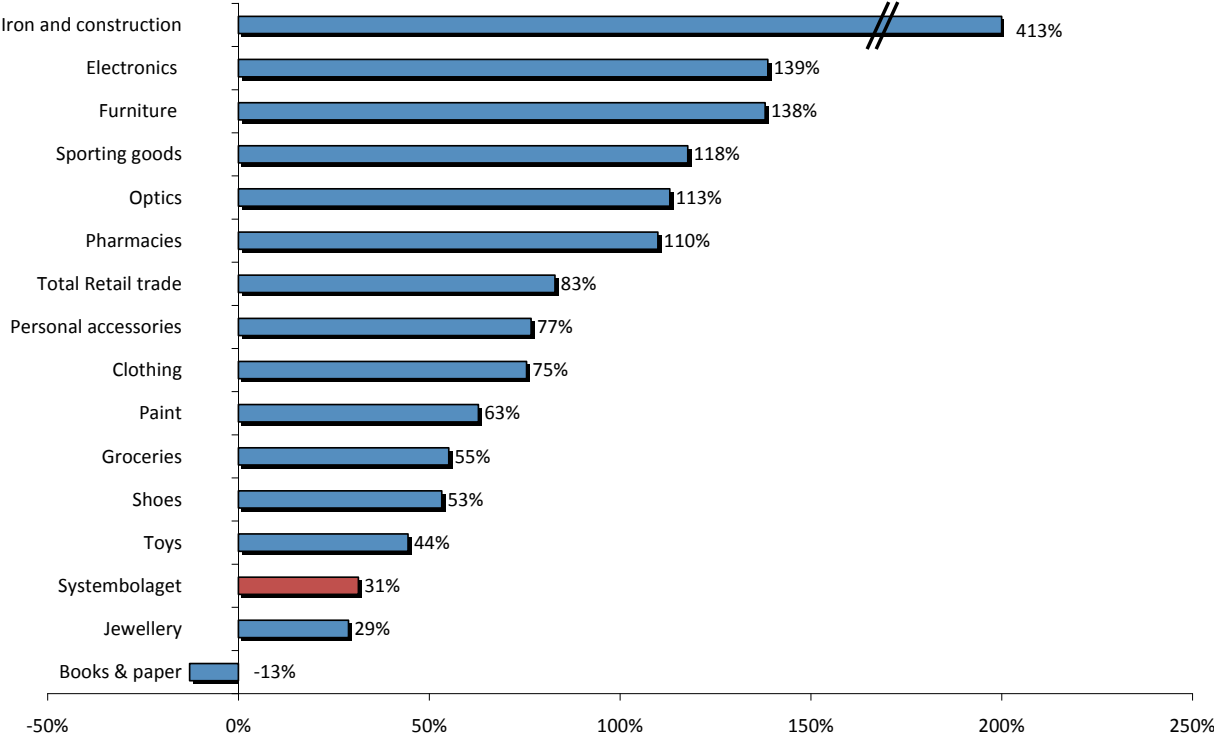
<sup>14</sup> Ibid.

<sup>15</sup> Swedish Retail Institute. "E-commerce index (e-barometern)".

<sup>16</sup> Ibid.

<sup>17</sup> Swedish Retail Institute. "Retail trade index".

**Diagram 4.5 Retail trade's sales trends 1994–2008, current prices**



Source: Retail trade index, Swedish Retail Institute.

## 4 OLD ALCOHOL POLICY MEETS NEW TIMES

The objective of the Swedish alcohol policy is to keep total alcohol consumption as low as possible. When borders were closed to personal imports from other countries, and it was possible to control sales within the country, the results of the Swedish policy were quite in line with expectations. However, when the borders were opened and it successively became easier to bring in alcohol from other countries, a change in purchasing behaviour occurred. The statistics presented in the previous section show that the monopoly does not control the entire market, and that the restrictions imposed by the Systembolaget have been circumvented to a great extent.

### 4.1 *The total consumption model*

A cornerstone in the Swedish alcohol policy is the total consumption model<sup>18</sup>, which presumes that the number of heavy users of alcohol and alcohol injuries are kept low if the total per capita alcohol consumption is also kept low. According to the model the focus of the alcohol policy is not on individual abusers of alcohol, but general measures that are aimed at everyone in society. Two of the main tools for trying to keep consumption low are restricted availability through a sales monopoly without an interest in profit and high prices via a high alcohol tax.

The problem for the traditional Swedish alcohol policy is that it has failed to adapt to a new reality with new drinking patterns and open borders that give the consumer the opportunity to benefit from the large price differences between the controlled sales channels and the alternative channels. The new channels for purchasing alcohol, especially the illegal channels, do not place limits on either age or volume and the “stores” are always open.

### 4.2 *Swedes open to alternative purchase channels for alcohol*

In a recent attitude survey on Swedes’ alcohol purchasing habits conducted by Swedish Retail Institute/Alcohol Update in 2008, it emerged that 9 out of 10 Swedes, who consume alcohol, have purchased alcohol via channels other than Systembolaget. Mainly this occurred in connection with taking the opportunity to buy alcohol while on a trip abroad, something that is neither surprising nor forbidden. However, it is also common to buy alcohol from other people who have purchased alcohol abroad (one third did this during 2008, which in fact is illegal)<sup>19</sup>.

In addition, the attitude towards purchasing via other channels is very open. One in two respondents think it is entirely okay to purchase alcohol via illegal channels, e.g. smuggled alcohol.<sup>20</sup>

The report also showed that the alternative channels seem to be increasing in influence. More than twice as many (21 percent) think that availability has increased, compared to those who think that it has decreased (9 percent) in the past year. Another interesting fact that emerges from the report is that a quarter of people know where to easily purchase smuggled alcohol,

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<sup>18</sup> See also footnote 1.

<sup>19</sup> Swedish Retail Institute/Alcohol Update (2009). “Swedish attitudes towards cross-border shopping.”

<sup>20</sup> Ibid.

and just over 10 percent of alcohol consumers never buy alcohol via Systembolaget. In southern Sweden, the number is as high as 18 percent. The motivation behind purchasing through the illegal channels is mainly price and, to a certain extent, also availability, something that young people under 20 years mention as a motive (because they are not permitted to purchase via the legal channels). Almost 90 percent of the respondents to the survey are of the opinion that more would shop at Systembolaget if the tax was lowered and the prices were, thus, more competitive.<sup>21</sup>

**4.3 Large stockpiling a new behaviour**

The new way of buying alcohol also often means larger stockpiles at home. Import quotas, (see table 5.1 below), allow an import of alcohol which is equivalent to approximately 2.5 times the average annual consumption for an adult. In addition, individuals who can establish that the purchased quantities are intended for “personal” use can be permitted to bring in more. Furthermore, there are no limits to how often one can do this. One consequence is that stockpiles of alcohol are built up, something that is substantiated by both the governmental investigation of Swedish alcohol imports conducted in 2004 and an analysis by economist Peter Stein in a 2004 report.<sup>22</sup>

**Table 5.1 Import quotas within EU in litres per alcoholic beverage and recalculated into pure alcohol**

	Permitted import		
	Litres alcoholic beverage	Recalculated into litres pure alcohol	Average consumption per Swede over 15 years of age
Beer	110	5.5	3.5
Wine	90	10.8	3.8
Spirits	10	4.0	2.1
Other			0.1
<b>Total</b>	<b>210</b>	<b>20.3</b>	<b>9.5</b>

With regards to alcoholic beverages, no research on stockpiling has been conducted. However, reviewing for example experiments with soft drinks (which are the most comparable product to beer on which experiments have been conducted), Stein concluded that it is clear that stockpiling increases consumption by nearly one hundred percent. Best before dates admittedly play a role where, for example, beer should be consumed within 6–12 months, while wine and spirits can be stored for longer periods. The reason behind stockpiling is often a question of price and the possibility of saving money by buying in larger quantities. Although the conclusion Stein draws is that an increase in the stockpiling of beer increases consumption, stockpiling is a matter of convenience for most of the people and does not lead to abuse.<sup>23</sup>

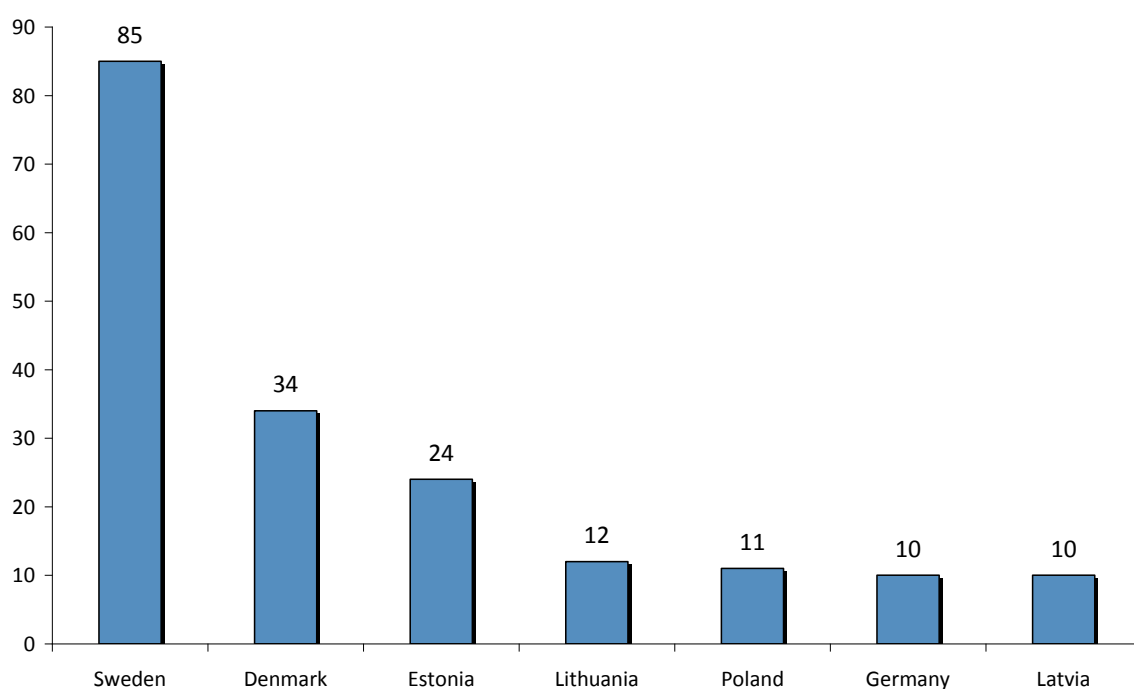
<sup>21</sup> Swedish Retail Institute/Alcohol Update (2009). “Swedish attitudes towards cross-border shopping”.  
<sup>22</sup> Stein, Peter (2004). “The relation between stockpiling and consumption.”. Brewers of Sweden.  
<sup>23</sup> Ibid.

## 5 THE SWEDISH ALCOHOL TAX

### 5.1 Why shop abroad?

The reason for an increase in imports and smuggling is the high, relative to adjacent countries, Swedish excise duties on alcoholic beverages, known as the alcohol tax. In diagram 6.1, the tax on beer is shown in countries neighbouring Sweden within the EU, where it is common to purchase alcoholic drinks. Because there is a lot of money to be saved by the Swedish consumer by purchasing abroad or, alternatively, by purchasing from someone who has been abroad, it is easy to understand that cross-border trade is extensive.

**Diagram 6.1 Tax rate per litre beer, 5.0 percent alcohol by volume, eurocent**



Source: Brewers of Europe

Exchange rate by European central bank 1 Oct. 2008, 1 Euro = 9.70 SEK.

EU excise duty minimum rate for beer 1.87 euro/hl alcohol percent. = Approx. 9.5 cent in diagram 6.1

To note: The alcohol tax in Sweden is about the same for beer and wine per percentage alcohol and about three times higher for spirits.

The Swedish Competition Authority, in connection with a governmental investigation, has also concluded, “As far as the Swedish Competition Authority can assess the incentive for extensive personal imports by travellers and smuggling will remain as long as such significant tax differences towards the outside world exist.”<sup>24</sup>

In order to take away the incentive for cross-border trade, the large tax differences between Sweden and its neighbouring countries would, thus, need to be reduced. Germany is the most important country for the smuggling that occurs in Sweden. Even if the Swedish tax was halved, the German excise duty on beer would need to be increased by several hundred

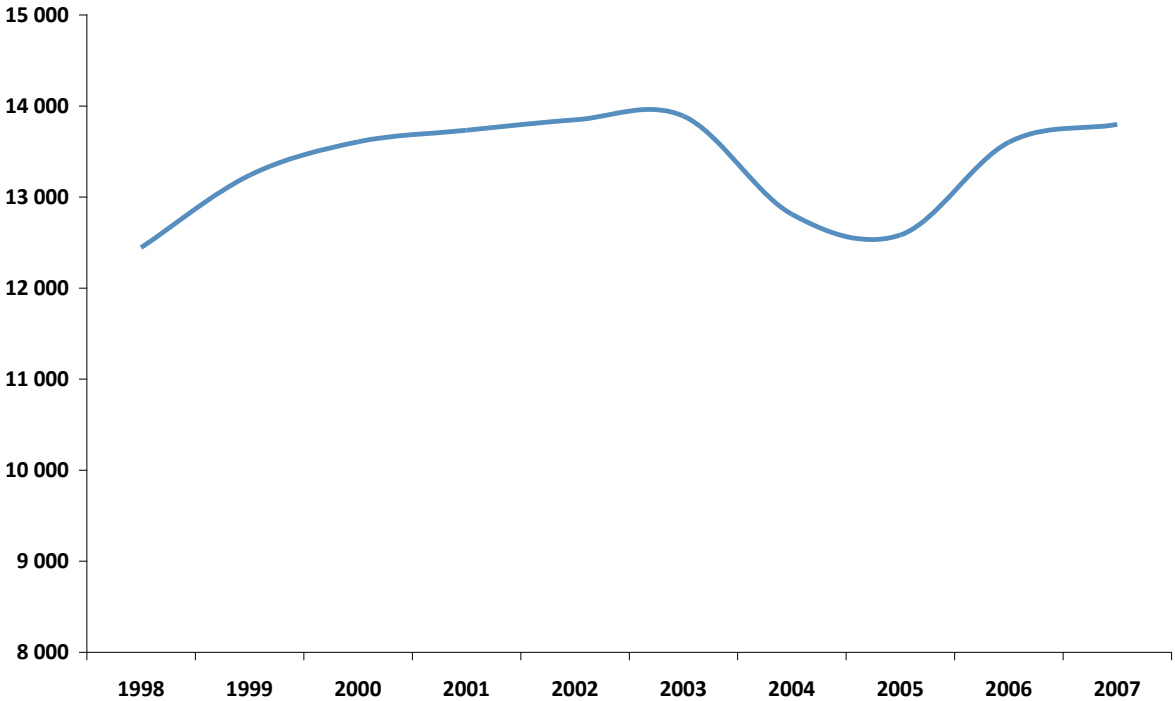
<sup>24</sup> Swedish Competition Authority’s statement, Dnr 234/2004.

percent in order for consumer prices in both countries to be more balanced. (See also diagram 6.1). A consequence of this is that it would be more realistic for Sweden to balance the divergence in the tax rates by lowering its alcohol tax rather than for other EU Member States to increase their excise duties.

**5.2 State revenue**

An integral part of Sweden’s alcohol policy, the alcohol tax also constitutes a revenue for the public treasury. In 2007, the revenue from the alcohol tax totalled approx. SEK 11 000 million (1 200 million EUR<sup>25</sup>). On top of the alcohol tax, VAT revenues on the alcohol tax must also be added, which gives almost an additional SEK 3 000 million (325 million EUR). In diagram 6.2, the revenues from the selective purchase tax since 1998 are shown.

**Diagram 6.2 Tax revenues from alcohol, SEK million.**



Source: Swedish Tax Agency  
 1 Euro = approx. 9.30 SEK average actual years.

The revenue’s growth indicates a relatively stable growth over time. When cross-border trade reached its peak in 2004, tax revenues also decreased. Thereafter, Systembolaget’s sales increased and the tax revenues recovered to a level in the vicinity of the peak reached in 2003, before the current, increased import quotas were introduced.

The extensive import of alcohol, legally via private imports by travellers and illegally via smuggling, nevertheless lead to the public treasury losing large amounts of revenue.

If all of the alcohol that was purchased via alternative channels in 2007 had instead been bought at Systembolaget, the public treasury would have accumulated another SEK 5 300

<sup>25</sup> 1 Euro = 9.25 SEK average 2007.

million (570 million EUR) in revenue, an increase of almost 50 percent. If the perspective is broadened to include the time from Sweden's entry into the EU in 1995, the accumulated tax losses total slightly more than SEK 70 000 million (7 500 million EUR) for the period 1995–2007.

This calculation is based on the presumption that all alcohol purchased abroad would otherwise be purchased at Systembolaget. The higher prices at Systembolaget would, however, make business less attractive and the volumes would most likely be lower. Still, this gives a picture of the extent of cross-border trade and a measurement of the loss it nevertheless involves.

**Table 6.1 Tax revenues if all alcohol was purchased via Systembolaget, SEK million**

	<b>Beer</b>	<b>Wine</b>	<b>Spirits</b>	<b>Other</b>	<b>Total</b>
<b>The state's alcohol tax revenues 2007 incl. VAT on alcohol tax</b>	3 461	4 780	5 324	231	13 796
<b>Extra revenues if the alcohol that is purchased abroad instead is purchased at Systembolaget incl. VAT on alcohol tax</b>	1 275	786	4 550	0	6 611

## 6 CONSEQUENCES OF SMUGGLING

One consequence of the large price differences for alcohol caused by high alcohol taxes is, among other things, widespread smuggling activity. An activity which, when the consequences are reviewed, has made the Swedish alcohol policy ineffectual to a great extent in view of taxation forming an integral part of the policy.

The smuggling is extensive. According to estimations from SoRAD, approximately 420 million litres of beer and 68 million litres of wine and spirits have been smuggled into Sweden during the years 2002–2008.<sup>26</sup> The value of this alcohol, calculated using Systembolaget's prices, totals SEK 18.5 billion or approximately two billion euro (calculated on a 2002–2008 average rate for the euro at 9.3 SEK/Euro). The chances for the judicial system to confiscate smuggled contraband are, furthermore, very small. During the years 2002–2006, 0.9 million litres of beer were deemed to be smuggled contraband, which is equivalent to less than one half percent of the beer that was privately imported and smuggled into the country during that same period. Because of the extensive traffic from neighbouring countries the Swedish Customs makes the judgement that more intensive border controls is not a measure that alone could stop the smuggling.<sup>27</sup>

### 6.1 *Who buys smuggled beer?*

The purchasers who buy smuggled beer can be grouped into two main categories, those motivated by price and those motivated by availability. Those who buy smuggled beer in order to get lower prices than at Systembolaget comprise a wide spectrum of price-focused consumers, from high-income earners to social outcasts with limited resources. The second main category, those who are motivated by availability, is dominated by teenagers who are not permitted to shop at Systembolaget. (There the legal purchasing age is 20.) The last group is also the most attractive to smugglers because the willingness to pay is high. Often the prices can be on parity with Systembolaget's, and thus, the profit for the smugglers very large. A case of beer with 24 cans at 33 centilitre costs approximately SEK 60-70 (about 6-7 Euros) in the cross-border trade in Germany and can be sold to minors in Sweden for an average price of slightly more than SEK 200 (about 20 Euros). The fact that those who are not permitted to shop at Systembolaget also belong to the age group that most frequently purchases smuggled beer is evident in diagram 7.1. The diagram shows the number of smuggled cans of beer consumed per age group.<sup>28</sup>

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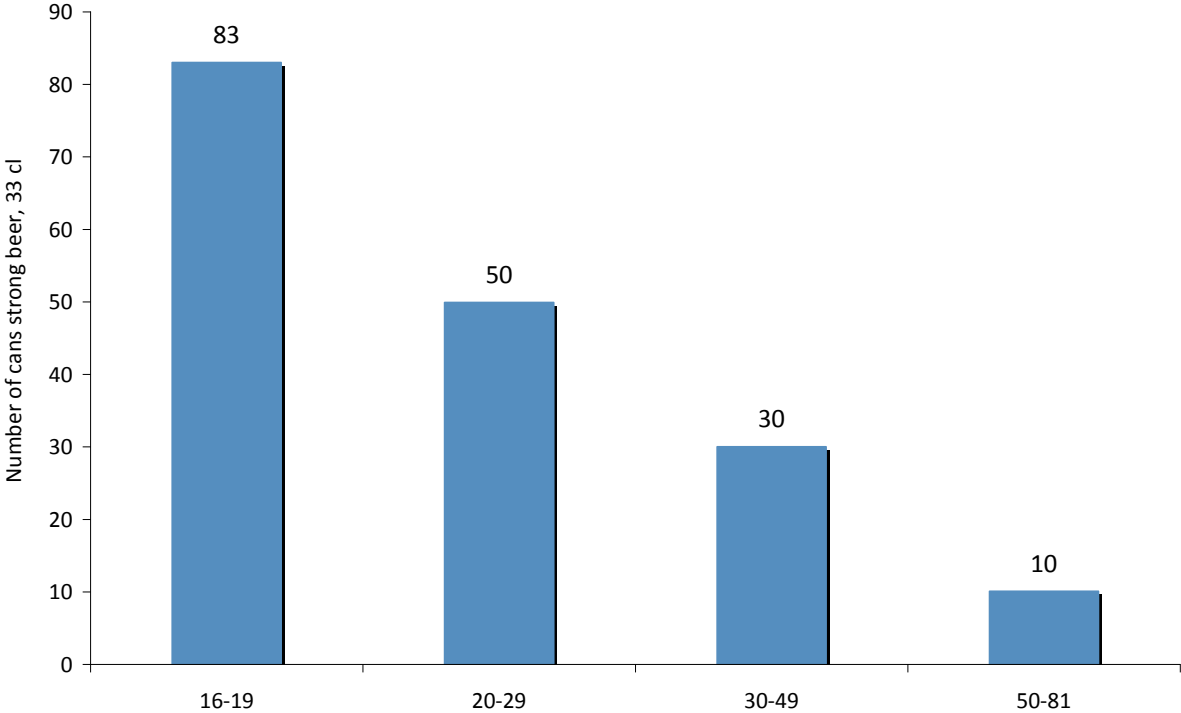
<sup>26</sup> SoRAD.

<sup>27</sup> Swedish Customs.

<sup>28</sup> Brewers of Sweden. "Alcohol smuggling to Sweden 2002-2007".



**Diagram 7.1 Consumption of smuggled beer, number of cans, 33 centilitres**



Source: SoRAD and Brewers of Sweden

The trade in smuggled alcohol occurs in apartments and garages in 40 percent of the cases. It occurs to an equally great extent via a telephone call to someone who delivers alcoholic beverages, and in 10 percent of the cases, alcoholic beverages are bought in a convenience store, kiosk, or somewhere similar. From this perspective it could be argued that the access to alcohol among Swedish teenagers has increased, just the opposite of the purpose with the Swedish alcohol policy.<sup>29</sup>

**6.2 Who Sells Smuggled Beer?**

The large price differences for alcohol between Sweden and for example Germany makes smuggling profitable and the unregistered sector a significantly large one. Some of those who have understood this are heavy criminal organisations that widen their activity by adding alcohol smuggling to their business. Below is a summary of different groups that smuggle alcohol:<sup>30</sup>

- Professional criminals. Hardened criminals who have also been sentenced for several serious crimes besides smuggling. Here, motorcycle gangs are a commonly occurring group.
- Younger small town men. A group of men thought to have a lot of free time and a great interest in beer.

<sup>29</sup>The National Alcohol Commission.

<sup>30</sup>Brewers of Sweden. “Alcohol smuggling to Sweden 2002-2007”. Based on sentences on alcohol smuggling to Sweden.

- Smuggler families. Families that sell from their apartments, often to their children's classmates, and others.
- Industrial purchasers. These account for a large portion of the smuggled volumes, regularly travel across the border, and have well established sales channels.
- Convenience store owners. Owners of smaller shops and kiosks, who by offering smuggled alcohol in their shops, increase their day's profits.
- Transport workers. These take the opportunity to stretch their salaries because they will be driving over the border in any case and have room for a little extra cargo.
- Persons on disability pensions and alcoholics who purchase to provide for themselves but also take the opportunity to earn extra income by selling to others.

### **6.2.1 Established Channels**

A great difficulty with criminal alcohol imports lies in finding ways to put an end to them once the channels for smuggling have been established. A parallel could be drawn with the Swedish tobacco tax, which was increased in 1992. This resulted in higher consumer prices which in turn led to increased smuggling of cigarettes. Consequently the Swedish government decided to lower the tax again, partly with a view to stopping channels for cigarette smuggling from being established.

In a similar way the government in Denmark argued when they have lowered their alcohol taxes the latest years. The result of this is also a significant lower share of smuggling and travellers imports than in Sweden.<sup>31</sup>

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<sup>31</sup> Arnberg, Jonas (2006). "Reduced tax, reduced consumption?". Swedish Retail Institute.

## 7 A CHANGED ALCOHOL CULTURE

A key objective for Sweden's alcohol policy has been to reduce the total consumption of alcohol as a means to reduce alcohol-related harms. Earlier sections in the present report, however, show that Swedish alcohol consumption has increased very significantly during successive years. In this section, the evolution of drinking patterns in a context of increased overall consumption will be examined, as well as the extent to which these have affected indicators such as driving under the influence of alcohol, violent crimes and ill health.

### 7.1 *New drinking patterns*

The increase of alcohol consumption in Sweden is reflected in a changed alcohol culture. Partly, Swedes drink more alcohol at home but also more often in pubs and restaurants. The increased importation of alcohol is one explanation, but another is a more "continental" approach to alcohol. For example, the number of pubs/restaurants with alcohol permits increased by approximately 33 percent between 1995 and 2008, and Swedes visit restaurants more frequently<sup>32</sup>.

The traditional Swedish drinking culture is otherwise characterized by relatively few drinking occasions but higher consumption per drinking occasion, in comparison with several other countries in Central-Southern Europe. A relatively high share of all drinking occasions, thus, results in intoxication. In the surveys that have been conducted on trends in intensive consumption, most of the research indicates an increase in the number of intensive consumption occasions from 1998 to 2002. Thereafter, the situation appears to have become more stable.<sup>33</sup>

A part of the increase in consumption in recent years, thus, stems from groups of Swedes intoxicating themselves more often, but above all, from more frequent drinking (partly through more restaurant visits and partly through Swedes drinking a beer or a glass of wine on more occasions than simply at dinner on Saturday evening). Systembolaget's pricing model favours large packages and almost 50 percent of the wine that is legally sold in Sweden is in the form of box wines in mostly three-litre containers<sup>34</sup>. A packaging form that, thus, gives constant access to an "opened" bottle.

It is commonly acknowledged that drinking patterns impact the relationship between alcohol and health. For example, occasional binge drinking may produce more negative health effects than moderate alcohol consumption that is spread out over several occasions. The difference between use and abuse is manifest and as an illustration, "saving up" daily intake guidelines for a binge at the weekend is not healthy at all.<sup>35</sup>

In the report "Estimates of Harm Associated with Changes in Swedish Alcohol Policy", Harold D. Holder and other international alcohol researchers describe how several of the

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<sup>32</sup> Swedish National Institute of Public Health and Swedish Hotel and Restaurant Association.

<sup>33</sup> Leifman, H. (2002). "Consumption, Drinking Patterns, Consequences and Policy Responses in 15 European Countries". National Institute of Public Health.

<sup>34</sup> Swedish Alcohol Retail Monopoly.

<sup>35</sup> Holder H D et al. (2005). "Estimates of harm associated with changes in the Swedish alcohol policy". National Institute of Public Health.

prognoses that have been made regarding harmful effects resulting from an increase in alcohol consumption have not come true. In certain cases, an increase in alcohol consumption has corresponded to an increase in the number of alcohol-related problems (for example, physical abuse and injuries), but in several other cases, the increase in consumption has not resulted in a corresponding increase in harmful effects. A possible explanation for this is that a general increase in wealth makes it take longer before any alcohol-related injuries are reflected in the statistics or that the total consumption model fails to meet its objectives.<sup>36</sup>

A more “continental” approach to alcohol (in which more drink a little more, rather than more drink more heavily) has probably entailed that the injuries have not been as high as projected. For example, women’s alcohol consumption has increased more than men’s, but today’s consumption level is still moderate, and thus, the increase in consumption need not have led to a corresponding increase in the number of alcohol-related problems. A tax reduction as a solution to the Swedish cross-border trade problem has been discussed. A reduction may lead to an increase in alcohol consumption but, from a public health perspective, this is considered to be less negative a solution compared to the current situation in which alcohol has become altogether too easily accessible for young people.<sup>37</sup>

### **7.1.1 Young people and women increasingly drink**

Alcohol consumption in Sweden is not evenly distributed across the population. Men drink approximately twice as much alcohol as women, and younger people drink more than older people. The trend, however, is that the differences are beginning to even out. More women and young people, especially girls, are drinking more alcohol and becoming intoxicated to a greater extent.

Since the beginning of the 1970s, Swedish Council for information on Alcohol and other Drugs, CAN, has conducted annual surveys on the drinking habits of young people under the legal drinking age. 66 percent of girls and 62 percent of boys in the ninth grade of compulsory school state that they have drunk alcohol sometime during the last 12 months. Furthermore, nowadays girls and boys in the ninth grade (i.e., 15–16 years of age) drink approximately equally large amounts of alcohol. According to the survey, alcohol consumption by girls has increased somewhat in recent years while, at the same time, consumption by boys has decreased a little. According to CAN, the difference between the genders has never been less. In the second year of upper secondary school (thus, 17-18 years of age), there are even more young people who drink alcohol. 84 percent state that they have drunk alcohol during the last 12 months. The survey also shows that boys in the second year of upper secondary school drink almost twice as much as those who are in the ninth grade of compulsory school (in other words, 15–16 years of age), and many young people have already become large consumers of alcohol by upper secondary school age. About one-fifth of the boys in the second year of upper secondary school drink over ten litres of pure alcohol a year. More than one-tenth of the girls in the same group state that they drink equally as much. This must then be seen in light of the fact that the minimum age limit at Systembolaget is 20 years of age. Thus, young people under 20 years of age must obtain alcohol in completely different ways than via the legal channels.<sup>38</sup>

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<sup>36</sup> Holder H D et al. (2005). “Estimates of harm associated with changes in the Swedish alcohol policy “. National Institute of Public Health.

<sup>37</sup> Ibid.

<sup>38</sup> Swedish Council for Information on Alcohol and Other Drugs. “Adolescent drug use 2008.”

In “The 2007 ESPAD Report”, a study among 15-16 years old European students, a comparison between European countries is presented. Here the Swedish students are at the average for Europe regarding “Drunk past 12 months”, but when it comes to “Alcohol volume latest drinking day” the Swedish youth have a consumption of almost 25 percent more than the European average. As stated in the report “the total amount of alcohol consumed during the last drinking day is usually low in countries where the students drink often, for example in Greece, and the other way round for countries with low consumption frequencies. Countries with such a pattern include the Nordic countries Finland, Iceland, Norway and Sweden”.<sup>39</sup>

In another ESPAD Report among students aged 17-18, released in 2007, it is documented that the country that reports the highest proportion of students that have been binge drinking three times or more during the last 30 days is Sweden. The same report also calls attention to the fact that the largest proportion of students that have been drunk 20 times or more in lifetime is found in Sweden where half of the students had this experience. Also in relation to the very frequent drunkenness behaviour, three times or more during the last 30 days, the Swedes report this to a higher degree than others.<sup>40</sup>

For many young people holidays such as Midsummer Eve, Halloween, and Saint Lucy’s Day end in blind drunkenness. At the Maria Ungdom treatment centre in Stockholm, a change in the character of alcohol consumption among young people has been seen during the last decade. The trend has moved towards more girls drinking alcohol and increasingly higher blood alcohol levels. This trend is also confirmed in the above 2007 ESPAD Report where Sweden belongs to those countries with relatively high rates of last-12-months intoxication for girls, where girls scored, on average, close to ten percentage points above the values for boys. Maria Ungdom points out that it is also girls who are most vulnerable to the consequences of drinking alcohol.<sup>41</sup>

The accessibility to alcohol has increased for young people in recent times. According to CAN, in 1997 20 percent of the boys and 15 percent of the girls stated that they had drunk smuggled alcohol. In the latest survey, this proportion has increased considerably, to 25 percent and 30 percent respectively. One must be aware, however, that it can sometimes be difficult for young people to know whether the alcohol that they drink has been brought into Sweden illegally, whether it has been purchased by an older person at Systembolaget and later resold to young people, or whether it is home-distilled alcohol. Experience from previous surveys shows that if home-distilled spirits have a negative association in one area (for example, as a consequence of methanol poisoning), the proportion showing that they have drunk home-distilled alcohol reduces and, to a corresponding degree, those who have drunk smuggled spirits increases. Over time, there has been movement between the various sales channels, especially regarding smuggled alcohol. The proportion of young people who feel it is fairly or extremely easy to obtain smuggled alcohol has increased significantly since the issue was introduced in 1997. Today, three out of ten boys state that they can obtain smuggled alcohol without any problem, while the corresponding figure for girls is 22 percent.<sup>42</sup>

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<sup>39</sup> Hibell B, Guttormsson U, Ahlström S et al. (2009). “The 2007 ESPAD Report: Substance use among students in 35 European countries.” CAN, EMCDDA, Pompidou Group

<sup>40</sup> Andersson B, Hibell B, Beck F et al. (2007). “Alcohol and Drug Use Among European 17-18 Year Old Students . Data from the ESPAD Project“. CAN, ESPAD, Pompidou Group

<sup>41</sup> Maria Ungdom Treatment Center, Stockholm.

<sup>42</sup> Swedish Council for Information on Alcohol and Other Drugs. “Adolescent drug use 2008.”

Alcohol consumption has become such a problem among young people below the legal drinking age that a social authority in the city of Stockholm has recently placed advertisements in newspapers describing how young people are trying alcohol for the first time at increasingly younger ages. Parents have been encouraged to be observant regarding alcohol use among young people. Even the police in Stockholm County have used advertisements in the same way to turn to parents with the message of trying to prevent young people from obtaining alcohol.

According to one report from Socialstyrelsen, the Swedish National Board of Health and Welfare, women's consumption of alcohol has increased sharply during the past 20 years. Between the years 1990 and 2006, the self-reported consumption of pure alcohol by women has increased from 1.5 to 2.9 litres per year (i.e., almost a doubling). Because self-reported consumption may most often constitute an underestimation, these levels are low. The actual alcohol consumption among women was estimated to be 6.1 litres in 2006. The increase in consumption among men has also been substantial. Measured by volume, the increase among men is greater than among women, but as a percentage, it is the women's consumption that has increased most substantially.<sup>43</sup>

## ***7.2 In the wake of increased total consumption***

In the same way that health describes a private individual's condition, public health describes a society's condition. Good public health requires, among other things, good living conditions, economic growth, and a safe and healthy environment for individuals. Misuse of alcohol can have a damaging effect on an individual's health and, thus, indirectly on a country's public health. However, it can be difficult to isolate alcohol's damaging effects because there are many other factors that also affect health, including where we live and how we live, our childhood, adolescence, education, and our work. An individual's health is also affected by his social network, being seen and being heard. In addition, lifestyle naturally also plays a role. What and how we eat, whether we smoke, and to what extent we exercise.<sup>44</sup>

Moderate alcohol consumption without the element of intoxication, generally means low medical risks and, therefore, has a marginal influence on public health. Several studies also show that a moderate consumption of alcohol under certain conditions can have a positive effect on an individual's health.<sup>45</sup> However, excessive consumption does lead to increased risks and from a public health perspective means that consumption with a high amount of binge drinking almost always leads to increases in alcohol-related injuries. Based on the available statistics, it is not possible to draw any entirely certain conclusions regarding the connection between increased total consumption in Sweden and increased injuries. What can be established, however, is that the increase in the consumption of alcohol is considerably higher than the increase in harmful effects resulting from increased alcohol consumption.<sup>46</sup>

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<sup>43</sup> Swedish National Board of Health and Welfare (2009). "Public Health Report 2009".

<sup>44</sup> Swedish National Institute of Public Health.

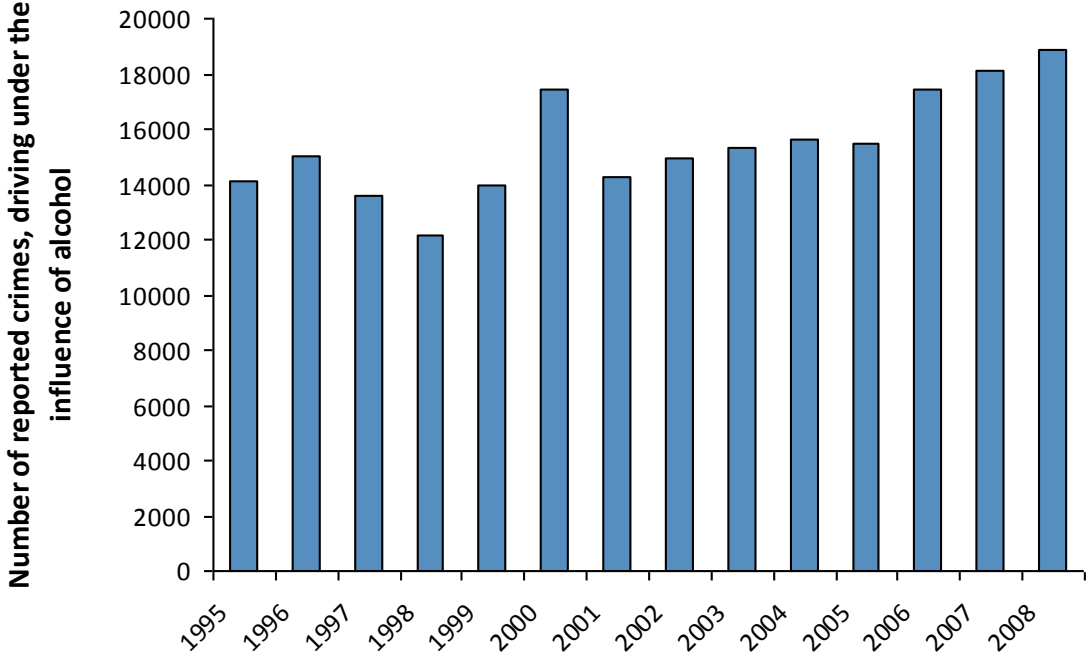
<sup>45</sup> Di Castelnuovo A, Costanzo S, Bagnardi V et al. (2006). "Alcohol dosing and total mortality in men and women : An updated meta-analysis of 34 prospective studies". Archives of Internal Medicine.

<sup>46</sup> Swedish National Institute of Public Health.

**7.2.1 Driving under the influence of alcohol**

According to Swedish law, the limit for driving under the influence of alcohol is a blood alcohol content of 0.2 per millage. The limit for aggravated driving under the influence of alcohol is 1.0 per millage. In 2008, approximately 19,000 offenses involving driving under the influence of alcohol were reported to the police. According to the results that are presented in diagram 8.1, the number of reported driving under the influence of alcohol offenses has increased considerably during the last ten years, which has several explanations.

**Diagram 8.1 Number of reported driving under the influence of alcohol offenses, 1995–2008**



Source: Swedish National Council for Crime Prevention

The police’s resources and priorities affect the statistics, and as the police have increased the number of controls, the number of reported driving under the influence of alcohol offenses has also increased. One important explanation of the sharp increase between 1998 and 2000 is the stricter legislation against driving under the influence of alcohol, which came into effect on July 1, 1999. Despite various underlying explanations, the Swedish National Council for Crime Prevention nevertheless makes the assessment that there has also been an actual increase in driving under the influence of alcohol. Most studies show that it is only a fraction of the actual number of cases involving driving under the influence of alcohol that are detected. The police, for example, may not always be aware of an accident, and sometimes, the police do not arrive to the scene of an accident until after the driver and any passengers are gone. In addition, near-accidents are not always investigated, which is another indication that the number of suspected cases involving the influence of alcohol is an underestimation of the actual number.<sup>47</sup>

<sup>47</sup> Swedish National Council for Crime Prevention.

In the year 2008, 420 people died in traffic accidents. According to the official statistics, seven percent of the drivers killed were under the influence of alcohol, but the question is whether the statistics give a fair picture of reality. Of the drivers who died in traffic accidents in 2007, 80 percent were autopsied. Of those drivers, 34 percent had alcohol in their blood, which is considerably higher than the seven percent that the official statistics indicate. One should also be aware that some of the drivers involved lived for a time after the accident and during that time any alcohol may have dissipated. The drivers may have also received blood transfusions before they died, which may have diluted any alcohol in their blood. In other words, if there was any alcohol in their blood at the time of the accident, it may have been gone at the time of autopsy.<sup>48</sup>

The Swedish Road Administration estimates that on a daily basis there are approximately 15,000–20,000 drunk drivers on the country's roads. This is equivalent to approximately 0.2 percent of the total traffic.<sup>49</sup> Based on the reasoning above, it is clear that there are not any totally reliable statistics that describe how many are killed or injured in accidents in which drivers under the influence of alcohol have been involved. What is, however, clear is the presence of alcohol in traffic. On the other hand, it is difficult to draw any conclusions regarding how the increase in total consumption in itself increases the frequency of accidents or whether it is a result of an increase in binge drinking.

In an international comparison, it appears that the connection between the total consumption of alcohol and fatal accidents is strongest in the Nordic countries and weakest in Southern Europe. An increase in consumption of one litre of alcohol per capita resulted in an eight percent increase in accidents in the Nordic countries, while the corresponding figure for Southern Europe was two percent. The difference between the Nordic countries and Southern Europe can maybe be explained in large part by the stronger presence of binge drinking in the Nordic countries.<sup>50</sup>

From an international perspective, Sweden has very few drivers under the influence of alcohol in traffic. Diagram 8.2 illustrates the number of alcohol-related traffic accidents per 100,000 inhabitants for a number of European countries. As can be seen, Sweden has positioned itself well regarding alcohol-related traffic accidents, as also confirmed by the Swedish Road Administration, which indicates that the number of road deaths per 100,000 inhabitants in 2007 amounted to 5.2 compared with an average 7.4 for the 15 “old” countries.<sup>51</sup> It is interesting to note that Germany, whose consumption of alcohol per capita is on a level with Sweden's, has considerably more alcohol-related traffic accidents per 100,000 inhabitants. Consequently, there is no clear-cut connection between high alcohol consumption and the number of traffic accidents in which alcohol is involved. Of course, other causes as for example the number of cars on the road, higher instance of younger drivers, higher performance vehicles etc in different countries, could also have had a significant impact on accidents.

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<sup>48</sup> Swedish Road Administration (2008). “Alcohol, drugs and traffic”.

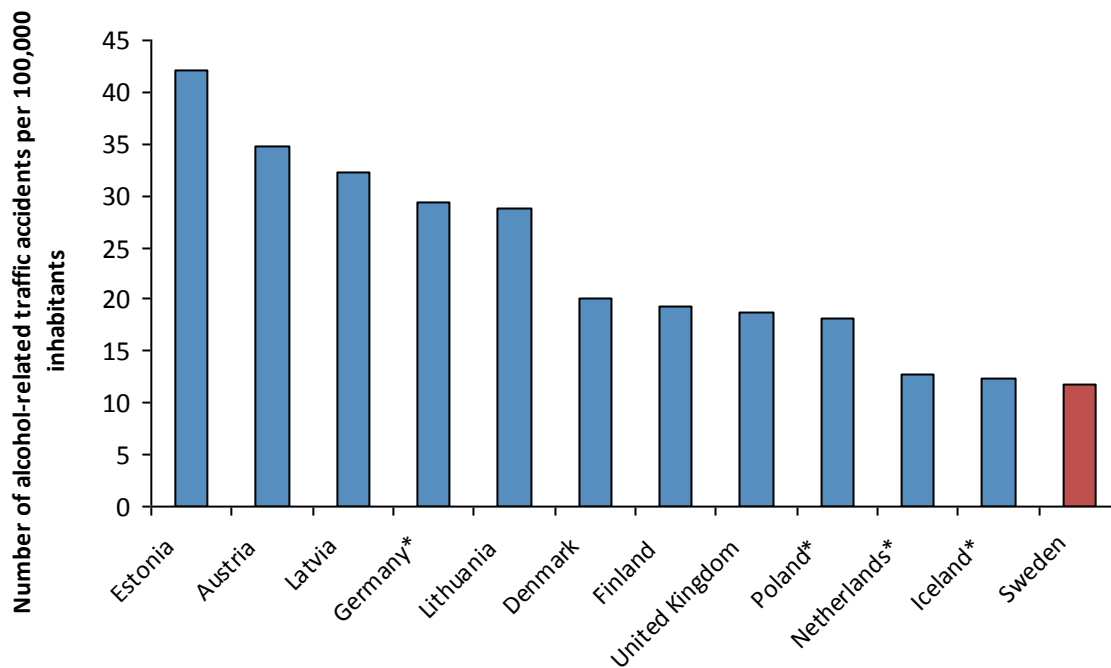
<sup>49</sup> Swedish Road Administration.

<sup>50</sup> Swedish National Institute of Public Health (2005). “Alcohol and health”.

<sup>51</sup> Swedish Road Administration (2009): “Annual Report 2008”.



**Diagram 8.2 Number of alcohol-related traffic accidents per 100,000 inhabitants, 2004**



Source: World Health Organization, \* = Data from 2003.

### 7.2.2 Violent crimes

Alcohol is present in some way in a large number of the violent crimes that are committed in Sweden every year. According to various surveys, approximately 70–80 percent of perpetrators and approximately 40–50 percent of victims in police reports in which violence has occurred were under the influence of alcohol.<sup>52</sup> There are also investigations that establish covariations between, on the one hand, reported violent crimes and, on the other hand, consumption peaks on weekdays, as there are more long-term connections over time between changes in consumption levels and violent criminality within various societies.<sup>53</sup>

According to surveys conducted by Statistics Sweden, no significant differences are evident in the number of those reporting that they were subjected to violence in the beginning of the 1990s compared to the beginning of the 2000s. Furthermore, even the number of people who were cared for in hospitals due to violent incidents is approximately the same size during both these periods. However, in a report from the Swedish National Council for Crime Prevention, it is stated that the increase in alcohol consumption that has occurred in Sweden since the middle of the 1990s has been accompanied by an increase in police-reported violent crimes. In view of such different findings, it is not possible to establish a simple causal connection between the increase in alcohol consumption that has occurred in Sweden and the number of violent crimes.<sup>54</sup>

The connection between alcohol and violence is generally stronger in countries with more binge drinking (for example, Sweden) than in countries in which the consumption is more spread out through the week, as in Southern Europe. A comparison between the Nordic

<sup>52</sup> Wikstrom, Per-Olof (1987). "Crime of violence and alcohol". Swedish Council for Information on Alcohol and Other Drugs.

<sup>53</sup> Swedish Council for Information on Alcohol and Other Drugs. "Drug trends in Sweden 2007".

<sup>54</sup> Ibid.

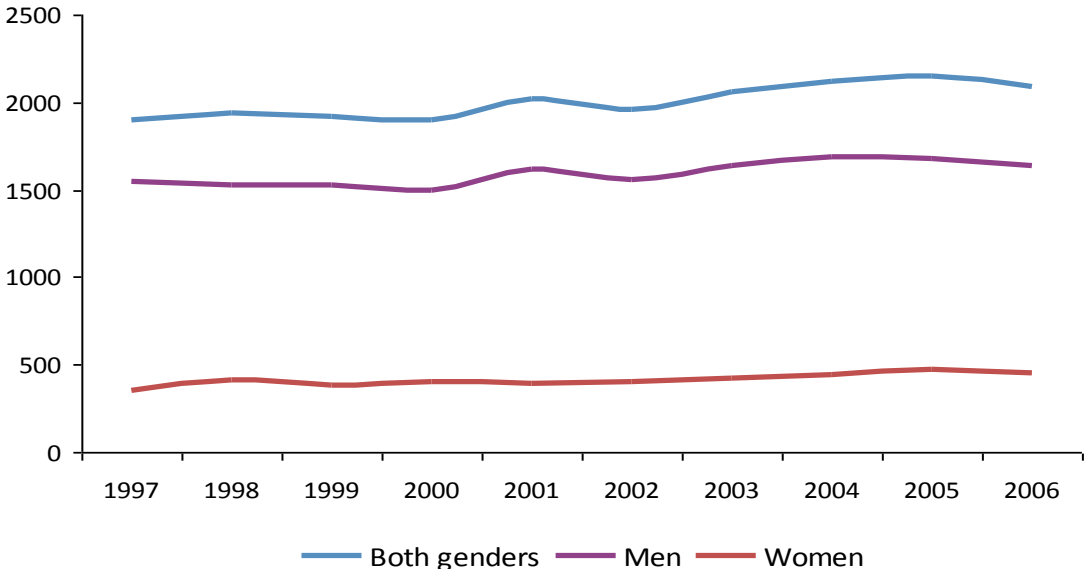
countries shows that the connection between alcohol consumption and violent crimes was stronger in countries with more explosive drinking patterns. According to the research, Finland has the most intoxication-oriented drinking pattern and even the strongest connection between alcohol and violence. Denmark has the most spread out drinking of the Nordic countries and does not either show any significant connection between violence and alcohol.<sup>55</sup> Thus, it is important to know a country’s consumption patterns and not simply changes in total consumption before conclusions are drawn regarding the connection between alcohol and violent crimes.

**7.2.3 Increased risk of ill health**

Apart from various underlying risk factors, drinking patterns also play a large role. The harmful effects of alcohol are determined by how much one drinks, when one drinks, the social situation, and the age and gender of the person that drinks the alcohol. Alcohol affects several of the body’s organs and many diseases and injuries, both acute and chronic, can be related to alcohol abuse. The medical problems are most often connected to intoxication rather than alcohol consumption in general.<sup>56</sup>

Misuse of alcohol entail, without a doubt, increased risks of damage to the heart and vessels. Inflammation of the pancreas, certain forms of cancer, and cirrhosis of the liver are other illnesses that have a strong connection to high alcohol consumption over a long period of time. Heavy binge drinking may result in more acute illnesses, such as alcohol poisoning. Risky alcohol drinking, binge drinking, is considerably more common among men than among women and younger people to a greater extent than older people have risky alcohol habits.<sup>57</sup>

**Diagram 8.3 Number of deaths in Sweden with alcohol-related diagnosis on death certificate, 1997–2006**



Source: Swedish National Board of Health and Welfare

<sup>55</sup> Swedish Council for Information on Alcohol and Other Drugs. “Drug trends in Sweden 2007”.

<sup>56</sup> Swedish National Institute of Public Health.

<sup>57</sup> Swedish National Institute of Public Health (2005). “Alcohol and health”.

Diagram 8.3 shows the number of deaths with an alcohol-related diagnosis mentioned on the death certificate. The alcohol-related deaths for both men and women in Sweden have remained at a relatively constant level since the end of the 1980s. The trend has not been unambiguous, but according to the results presented in the diagram, a small decrease in the number of deaths among men and a small increase among women can be seen in recent years.<sup>58</sup>

In a report from 1995 a group of leading scientists studying alcoholic behaviour predicted that a 1-litre increase in per capita-consumption would result in a 9.5 percent increase in total alcohol-related mortality in Sweden. Since then the consumption per capita in Sweden has increased by more than 2 litres which, according to those predictions, would have led to an increase in alcohol-related mortality by more than 20 percent. There are no official statistics supporting such a development or something even close to it.<sup>59</sup>

By studying, for example, the trends in the number of people who die from alcohol-related illnesses or the number who are treated for alcohol poisoning over time, a picture of the trends in alcohol-related injuries in Sweden can be drawn. The number of people treated in hospitals for alcohol poisoning has increased in recent years, among both women and men and in all age groups.<sup>60</sup> However, it is difficult to know whether this increase is due to the increase in total consumption or whether it is a consequence of other changes. Intoxicated people perhaps to a greater extent end up at hospitals as a consequence of the police contacting ambulances rather than driving the intoxicated person in question home. Another factor that might affect the alcohol statistics is the number of hospital beds that have been reduced during certain periods and increased during other periods.

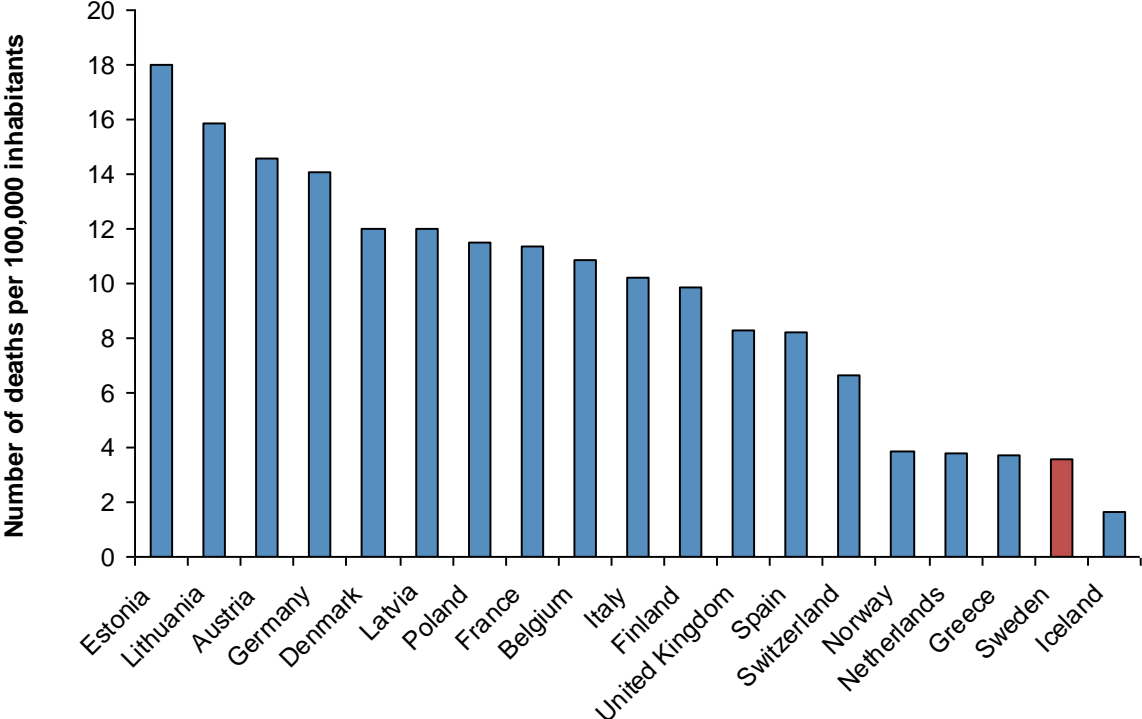
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<sup>58</sup> Swedish National Board of Health and Welfare.

<sup>59</sup> Holder ,Harold D, Giesbrecht N, Horverak Ø. et al. (1995) Potential consequences from possible changes to Nordic retail alcohol monopolies resulting from European Union membership. Society for the Study of Addiction to Alcohol and other Drugs.

<sup>60</sup> Swedish National Board of Health and Welfare.

**Diagram 8.4 Number of deaths from alcohol-related liver disease per 100,000 inhabitants, 2002**



Source: World Health Organization

In recent years, the number of deaths due to alcohol-related liver disease has increased somewhat in Sweden. From a European perspective, however, Sweden’s mortality rate for alcohol-related liver disease is low. Compared to most other European countries, Sweden has a considerably lower mortality rate for alcohol-related liver diseases. This is illustrated in diagram 8.4.<sup>61</sup> Once again, it is interesting to note that the ratio differs between Sweden and Germany. The countries are almost equal in alcohol consumption per capita, but the data regarding Germany show considerably more deaths from alcohol-related liver diseases per 100,000 inhabitants compared to Sweden. This indicates that there are other underlying factors apart from alcohol that affect the number of deaths from alcohol-related liver diseases. For example, it may relate to differences in the health conditions of the countries, exercise habits, and even metrological differences. The above statistics are for the year 2002, because later data is not available.

<sup>61</sup> World Health Organization.

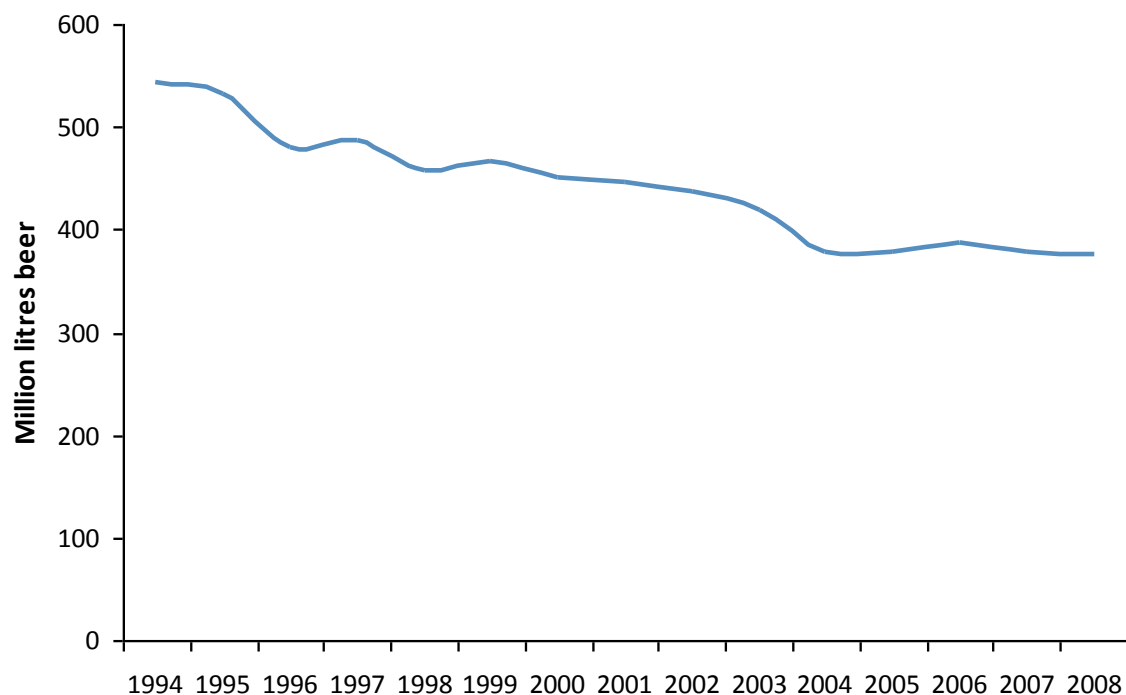
## 8 CHANGES IN THE SWEDISH BREWING SECTOR

The Swedish brewing sector has been affected by the Swedish alcohol policy. An increase in importation in combination with lower prices on alcohol in our neighbouring countries has contributed to considerably lower sales of beer from Swedish breweries. In this section, trends in the decline in sales from Swedish breweries will be presented, as well as other consequences of increased imports.

### 8.1 Consequences of decreased production in Sweden

The Swedish brewing sector has undergone great changes during the last 15 years. The consumption of beer by Swedes has basically remained unchanged, however, the total production of beer in Swedish breweries has decreased by about 30 percent. In 1994, Sweden's various breweries together produced 543 million litres of beer. 15 years later, the figure was only 375 million litres.

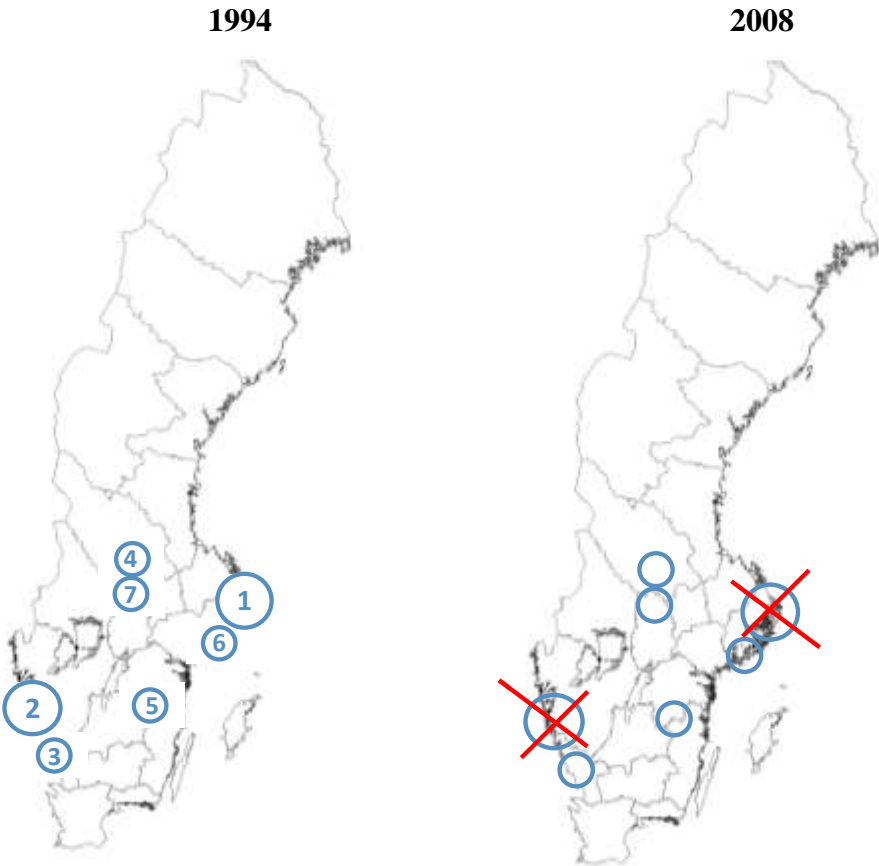
**Diagram 9.1 Total production of beer in Swedish breweries, 1994–2008**



Source: Brewers of Sweden

The production decline has changed the Swedish brewing sector to a very great extent. The two largest breweries with regard to production, one in each of the two largest cities (Stockholm and Gothenburg), have both been closed during this period. Most of the volume that was produced in Stockholm and Gothenburg has been replaced primarily by private importation and smuggling of beer.

**Figure 9.1 The two largest breweries in Sweden have been closed**



Source: Brewers of Sweden

A decrease in domestic production and the closing of the two largest breweries have, as a natural consequence, affected the number of people employed in the brewing industry. The number of people who directly or indirectly work with the beer operations at Swedish breweries has decreased during the last 15 years by about 40 percent, from almost 4,500 people to today’s about 2 600 people<sup>62</sup>. A certain part of the decrease in personnel can also be explained by a continual streamlining process within the Swedish breweries. A decrease in the number of people employed in the brewing sector by almost 2,000 people may seem small from a societal perspective but, seen from the brewing sector’s perspective, it is a decrease of great importance.

If all of the volumes that are currently brought in through private importation or smuggling were moved back to Sweden for production within the country’s borders, this would mean investments in the form of production capacity, storage, and logistics. The investments that Swedish breweries would be in need of are estimated by the breweries to be in the range of 30–40 million Euros. As a comparison, if similar investments were carried out in the German brewing sector, based on the size of their beer production, the figure is estimated to land at 800–1000 million Euros.

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<sup>62</sup> Brewers of Sweden.

## **8.2 Strong sales decline in grocery stores**

It is not only the brewing sector that has been affected by an increase in the importation of alcohol. Grocery stores, which sell low/medium strength beer, have experienced a significant decline in beer sales during the last 15 years. One effect of the consumers' increasing focus, in recent years, on beers with higher alcohol contents is that sales of low/medium strength beer in grocery stores have fallen sharply. Today, consumers can purchase privately imported or smuggled strong beer, which has not been taxed in Sweden, at lower prices than they would pay in grocery stores for medium strength beer, which has been taxed in Sweden. Since 1994, the total beer sales within grocery stores have more than halved<sup>63</sup>.

## **8.3 Low political interest in the brewing industry**

There are few Swedish politicians who have shown much interest in the brewing sector and the development in that sector. The alcohol policy is primarily handled by politicians whose interests are social issues that are organized by the government as public health issues in the Ministry of Health and Social Affairs.

The most important issue regarding the trends in the Swedish brewing sector in recent years, the Swedish alcohol taxes, is handled by the Ministry of Finance. The state's revenues from the alcohol tax are not an insignificant item in the central government budget, and finance politicians seek to secure such revenues.

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<sup>63</sup> Brewers of Sweden.

## 9 REFERENCES

- Andersson B, Hibell B, Beck F et al. (2007). "Alcohol and Drug Use Among European 17-18 Year Old Students . Data from the ESPAD Project". CAN, ESPAD, Pompidou Group.
- Arnberg, Jonas (2006). "Reduces tax, reduced consumption?". Swedish Retail Institute.
- Brewers of Sweden (2007). "Alcohol smuggling to Sweden 2002-2007".
- Brewers of Sweden. [www.sverigesbryggerier.se](http://www.sverigesbryggerier.se)
- Centre for Social Research on Alcohol and Drugs at Stockholm University, SoRAD. [www.sorad.se](http://www.sorad.se)
- Di Castelnuovo A, Costanzo S, Bagnardi V et al. (2006). "Alcohol dosing and total mortality in men and women: An updated meta-analysis of 34 prospective studies". Archives in Internal Medicine.
- ESPAD (European School Survey Project on Alcohol and Other Drugs). [www.espad.org](http://www.espad.org)
- Government Offices, Ministry of Finance. [www.regeringen.se](http://www.regeringen.se)
- Hidell B, , Guttormsson U, Ahlström S et al. (2009). "The 2007 ESPAD Report: Substance Use Among Students in 35 European Countries". CAN, EMCDDA, Pompidou Group.
- Holder, H D et al. (2005). "Estimates of Harm Associated with Changes in Swedish Alcohol Policy". National Institute of Public Health.
- Holder, H D, Giesbrecht N, Horverak Ø et al. (1995). "Potential consequences from possible changes to Nordic retail alcohol monopolies resulting from European Union membership". Society for the Study of Addiction to Alcohol and other Drugs.
- Leifman, H. (2002). "Consumption, Drinking Patterns, Consequences and Policy Responses in 15 European Countries". National Institute of Public Health
- Maria Ungdom Treatment Center, Stockholm
- National Alcohol Commission
- Organisation for Economic Co-operation and Development, OECD. [www.oecd.org](http://www.oecd.org)
- Statistics Sweden. [www.scb.se](http://www.scb.se)
- Stein, Peter (2004). "The relation between stockpiling and consumption." Brewers of Sweden.
- Swedish Alcohol Retail Monopoly. [www.systembolaget.se](http://www.systembolaget.se)
- Swedish Competition Authority (2004). Statement Dnr 234/2004



Swedish Council for Information on Alcohol and Other Drugs, CAN (2009). “Adolescent drug use 2008”.

Swedish Council for Information on Alcohol and Other Drugs, CAN (2008). “Drug trends in Sweden 2007”.

Swedish Customs. [www.tullverket.se](http://www.tullverket.se)

Swedish Hotel and Restaurant Association. [www.shr.se](http://www.shr.se)

Swedish National Board of Health and Welfare (2009). “Public Health Report 2009”.

Swedish National Board of Health and Welfare, [www.socialstyrelsen.se](http://www.socialstyrelsen.se)

Swedish National Council for Crime Prevention. [www.bra.se](http://www.bra.se)

Swedish National Institute of Public Health (2005). “Alcohol and health”.

Swedish National Institute of Public Health. [www.fhi.se](http://www.fhi.se)

Swedish Retail Institute/Alcohol Update (2009). “Swedish attitudes towards towards cross-border shopping”.

Swedish Retail Institute, HUI. [www.hui.se](http://www.hui.se)

Swedish Road Administration (2008). “Alcohol, drugs and traffic”.

Swedish Road Administration (2009). “Annual report 2008”.

Swedish Road Administration. [www.vv.se](http://www.vv.se)

Swedish Tax Agency. [www.skatteverket.se](http://www.skatteverket.se)

Wikstrom, Per-Olof (1987). “Crime of Violence”. Swedish Council for Information on Alcohol and Other Drugs.

World Health Organization, WHO. [www.who.int](http://www.who.int)