

# Change and stability?

Trends in alcohol consumption, harms and policy:  
Sweden 1990–2010

## Background

The Swedish alcohol scene has undergone dramatic changes during the last 20 years, with EU membership playing a crucial role in the development. Perhaps the most important change has been the increase in travellers' allowances of alcoholic beverages, related to the emergence of a single market among the EU member states. From having restrictive travellers' allowances before joining the EU in 1995, Sweden had adopted practically free alcohol imports for private use by 2004.

Most experts believed that alcohol consumption and related harms would increase substantially when private persons were allowed to bring practically unlimited amounts of alcohol to Sweden from the neighbouring low-price countries such as Denmark and Germany (for example, Holder et al. 1998). In addition, by paving the way for more unrecorded consumption in terms of cross-border trade and smuggling, the new conditions put pressure on the traditional restrictive policy tools of a monopoly (*Systembolaget*) and high domestic price levels.

---

submitted 26.07.2010  
initial review completed 08.10.2010  
final version accepted 13.10.2010

## ABSTRACT

M. Ramstedt: Change and stability?  
Trends in alcohol consumption, harms  
and policy: Sweden 1990–2010

Over the past two decades, alcohol consumption in Sweden has grown by 20 per cent as a result of an increasing consumption of wine and strong beer. The rise is driven by a combination of factors such as the higher physical availability and lower real prices of alcohol, which suggests that alcohol has become much more affordable. In addition, the possibilities to bring back cheaper alcohol from other EU countries have been greatly extended during the Swedish EU membership. No definite patterns were found with respect to certain social and demographic changes during the study period. Despite the significant increase in consumption, indicators of alcohol-related harms did not show consistently increasing trends. It is not evident why the increasing availability should have such different effects on various population sub-groups, and there are obviously other relevant factors at play. Widespread political concern at the implications of the rising availability of alcohol has led Sweden to spend more per capita than any other European country on alcohol policy and prevention initiatives. It will be a continuous challenge for policy makers to find measures that limit the harms caused by alcohol in the Swedish society.

### ■ KEYWORDS

Alcohol policy, consumption, harm,  
trends, Sweden

Also, a basic principle of the Swedish alcohol policy, the limitation of private profit, was given less priority. The decision to abolish all previous alcohol monopolies except for the retail monopoly in 1994 (Trolldal 1998), laid the ground for a growing number of private companies in the alcohol market. The number of companies licensed to trade in the wholesale of alcoholic beverages increased from 23 in 1994 to about 1,065 in 2009 (Alcohol Statistics 2010). The legalisation of alcohol advertisements in 2003 is another example of the commercialisation of alcohol in Sweden, followed by significantly increased investments in alcohol marketing.

The considerable changes of the last 20 years give cause to examine the alcohol arena in Sweden. This article will therefore address the following questions: How did trends in consumption, availability and harm develop? What were the policy responses and how did the retail monopoly manage during these new conditions? How did other social and demographic factors of possible relevance to alcohol consumption develop?

### **Alcohol consumption in Sweden 1990–2009: main trends and patterns**

What were the main trends and patterns in Swedish drinking habits during this period? Even before the EU membership and the subsequent increase in travellers' imports, it had become apparent that it was necessary to produce estimates of unrecorded sources of alcohol in order to obtain reliable figures of actual per capita consumption in Sweden. After several years of scattered studies and results based on different methods, a scientific group

(the so-called KALK project) began its work in 1993 with the remit of establishing a methodology acceptable to all actors in the alcohol field (Kühlhorn et al. 2000). The group published a report in 2000 with a presentation of the methodology and annual estimates of total per capita consumption, including estimates of unrecorded sources. The 1990s data presented here are retrieved from this report whereas the more recent data come from the Monitor project, which built on and developed the methodology for estimating unrecorded alcohol consumption (Ramstedt et al. 2009).

Per capita consumption in Sweden in 2009 was about 20 per cent higher than in 1990, having risen from 7.8 litres pure alcohol per adult (15+) to 9.3 litres (Table 1). The increase during the 1990s was rather small – from 7.8 to a full 8 litres – but was much larger during the first years of the new millennium, peaking at 10.5 litres in 2004. Alcohol consumption per capita has subsequently declined in Sweden.

The rise in the consumption only applies to wine and strong beer. The increase has been particularly sharp in the consumption of strong beer, which more than doubled during this period. The use of spirits, traditionally the major alcoholic beverage in Sweden, declined somewhat, accounting for 27 per cent of the total alcohol consumption in 2009 compared with 37 per cent in 1990 (in terms of pure alcohol). The consumption of weaker beer, "*folköl*" ("people's beer", more than 2.25 but less than 3.5 per cent alcohol by volume), which is the only alcoholic beverage sold in grocery stores, decreased dramatically: the sales were roughly halved between 1990 and 2009. Approximately one per cent of the Swed-

**Table 1.** Alcohol consumption in Sweden 1990–2009 expressed as yearly litres of alcohol (100%) per inhabitant aged 15 years and above by beverage type and divided into recorded and unrecorded sources.

	1990	1995	2000	2005	2009	1990–2009**
<b>Total consumption</b>	7.8	8.0	8.4	10.1	9.3	▲
Spirits	2.9	2.7	2.3	2.6	2.1	▼
Wine	2.3	2.3	3.0	3.9	3.8	▲
Strong beer	1.3	1.7	2.1	3.0	2.7	▲
“Folköl”	1.2	1.3	1.0	0.7	0.6	▼
Cider/alcopops	–	–	0.1	0.1	0.1	›
<b>Recorded consumption</b>	6.4	6.0	6.2	6.5	7.3	▲
Systembolaget	4.4	3.9	4.3	4.9	5.8	▲
Restaurants	0.8	0.8	0.9	1.0	0.9	▲
Grocery stores (“Folköl”)	1.2	1.3	0.9	0.7	0.6	▼
Proportion of total (%)	82	74	74	64	78	▼
<b>Unrecorded consumption*</b>	1.4	2.1	2.2	3.6	2.1	▲
Travellers’ imports	0.7	1.1	1.6	2.3	1.3	▲
Smuggling	0.1	0.2	0.2	1.0	0.6	▲
Home-made	0.6	0.7	0.4	0.3	0.2	▼
Internet	–	–	–	0.04	0.03	›
Proportion of total (%)	18	26	26	36	23	▲

Sources: Kühlnhorn et al. 2000; Ramstedt et al. 2009. \* Estimated in surveys \*\* Arrows indicate the direction of change between the years 1990 and 2009 if the change was at least 10% in any direction: ▲=clearly up 1990–2009, ▼=clearly down 1990–2009, › = Stable/ no significant change 1990–2009.

ish per capita consumption consists of cider and alcopops.

Significant changes occurred in both recorded and unrecorded consumption. Unrecorded consumption increased during the first part of the 1990s and continued to rise between 2000 and 2005 in particular, which was mainly driven by travellers’ imports and smuggling. The share of total consumption accounted for by unrecorded alcohol increased from 18 to 36 per cent between 1990 and 2005. During recent years, however, unrecorded alcohol has declined in both absolute and relative terms, representing 22 per cent of the total consumption in 2009. This is actually

lower than in 1995. It is also worth noting that home-made alcohol, which was as common as travellers’ imports in 1990, has diminished consistently during the last 20 years, accounting for only 2 per cent of the total in 2009.

At the same time, recorded alcohol consumption remained relatively stable between 1990 and 2005 in absolute terms, or in litres per capita, but declined substantially in relative terms (from 82 to 64 per cent). Different sources showed different trends, however: for example, sales at *Systembolaget* decreased in the mid-1990s but have since showed a general upward trend, in recent years in particular. In fact,

*Systembolaget* reported all-time high sales figures in 2009. Alcohol sales in restaurants increased over the period but have recently declined slightly, and, as already mentioned, sales of beer in grocery stores declined substantially.

■ **Trends and patterns among men and women in different age groups**

Such overall figures based on sales and purchase data do not tell us to what extent the development has been different in the various sub-groups of the population. To identify these patterns, survey data has to be used.

There is no recurrent general population alcohol survey in Sweden, and estimates from different surveys have to be put together to obtain a picture of the development. The only exception is the data for drinking among 9<sup>th</sup>-grade students (15–16-year-olds) which have been collected annually since the 1970s by the Swedish Council for Information on Alcohol and Other Drugs (CAN). Results from general population surveys using similar alcohol questions have been used to make the figures as comparable as possible across time. For instance, average consumption is measured by the beverage-

**Table 2.** Alcohol consumption in Sweden 1990–2009 among men and women in different age groups according to self-reported data in surveys. Expressed as litres of pure alcohol per person.

	1990	1995	2000	2005	2009	1990–2009*
<b>Men</b>						
16–75 years <sup>1</sup>	4.8	4.7	5.8	5.9	5.3	▲
16–29 <sup>1</sup>	5.7	6.6	8.3	7.7	5.9	›
30–49 <sup>1</sup>	5.7	4.3	5.1	6.0	5.4	›
50–75 <sup>1</sup>	3.4	4.1	4.2	4.9	5.0	▲
Abstainers (%) <sup>2</sup>	9	9	11	11	11	›
9 <sup>th</sup> grade male students <sup>3</sup>	3.1	2.8	5.3	3.5	3.2	
<b>Women</b>						
16–75 years <sup>1</sup>	1.7	2.1	2.4	2.6	2.5	▲
16–29 <sup>1</sup>	1.8	2.8	3.2	3.3	2.8	▲
30–49 <sup>1</sup>	1.8	2.3	2.3	2.6	2.5	▲
50–75 <sup>1</sup>	1.3	1.5	2.2	2.3	2.4	▲
Abstainers (%) <sup>2</sup>	15	17	19	17	17	›
9 <sup>th</sup> grade female students <sup>3</sup>	1.8	1.9	2.9	3.2	2.1	▲

Sources: <sup>1</sup>1990–2000: Leifman & Gustafsson (2003); 2005–2009; Ramstedt et al. (2009), <sup>2</sup>1990–1995 Ramstedt & Kühnlhorn (1998), 2000 (Hradilova Selin 2004), 2005–2009 (National Institute of Public Health), <sup>3</sup> CAN (2010).

\* Arrows indicate the direction of change between the years 1990 and 2009 if the change was at least 10% in any direction: ▲=clearly up 1990–2009, ▼=clearly down 1990–2009. › =Stable/no significant change 1990–2009.

specific quantity and frequency scale, that is, a combination of how often one drinks and the typical amount per occasion. The estimates for 2005 and 2009 are based on a running monthly survey with questions about the last 30 days aggregated into an annual estimate, whereas direct questions about the last 12 months were used for the earlier estimates. To account for the fact that the latter approach leads to a 10 per cent lower annual estimate, an upward adjustment has been made for the earlier figures.

In accordance with the figures on estimated per capita consumption, self-reported alcohol consumption is higher in 2009 than in 1990 among both men and women. A clear increase in consumption is found in all age groups apart from 9<sup>th</sup>-year male students and men under 50. As for total consumption, the development is not straightforward across time, and a decline is found in recent years among younger age groups (<30). The general rise in drinking is not caused by more drinkers in the population, as the proportion of abstainers has remained stable. Using the last 12 months as the reference period shows that some 10 per cent of all men and 15 per cent of all women can be classified as abstainers during the study period. A plausible determinant behind the rising consumption level is rather a higher frequency of drinking. According to data collected by the SOM Institute, an independent survey organisation at the University of Gothenburg, the share of men consuming any alcohol weekly increased from 36 to 48 per cent between 1992 and 2008, while the rise for women was from 23 to 34 per cent (Weibull & Holmberg 2008). A large part of this increase seems

attributable to more regular wine drinking (Ramstedt 2009).

There are of course several methodological limitations in comparing different surveys across time because of different non-response rates and norms on acceptable drinking. Still, the similarity with estimated total consumption suggests that these problems are within acceptable limits.

## Determinants of the changes in consumption

### ■ Changes in economic and physical availability

We now turn to the question of which factors have contributed to these changes in alcohol consumption. It is well known that trends in alcohol consumption are driven by a wide range of factors including price, income, preferences, social and cultural changes, etc. (Room et al. 2009). At a given point in time, some factors such as tax cuts, may push drinking up, whereas others, such as an economic recession, push drinking down. In addition, many factors tend to stabilise consumption. These include cultural norms and practises regarding where and when drinking is acceptable. A change in consumption is thus most likely the result of a rather complex process where the relative importance of every factor is difficult to disentangle.

I will first examine the development of factors which the research literature considers the most important, namely those directly affecting the opportunity and possibility to buy alcohol (Babor et al. 2010). These factors typically come under the concept of availability, which in turn is divided into economic and physical availability. Economic availability pertains to the price of alcohol and the general pur-

chase power, whereas accessibility in terms of, for example, the number of outlets falls into physical availability.

All economic factors suggest that alcohol consumption should be higher in 2009 than in 1990 (Table 3). First, off-premise prices (at *Systembolaget*) have declined for all beverages. The decline is particularly steep for strong beer, where the real price was 45 per cent lower in 2009 than in 1990. Prices have fallen similarly for wine and spirits, which are now 20 and 9 per cent cheaper, respectively. The figure for wine is a minimum estimate of the price decline, since the Swedish price index does not consider the price decline asso-

ciated with the introduction of new products such as bag-in-box wine, launched in 1996. In 2009, such wine accounted for 55 per cent of all wine sales.

Disposable incomes have risen substantially, by more than 40 per cent between 1990 and 2009. Most of the increase has taken place after 2000. Combining the data on price and income gives a measure of the development in the general affordability of alcohol during the period. Starting from the year 1990, this affordability index shows that in 2009 spirits were 49 per cent more affordable and the corresponding increases for wine and strong beer were 5 and 116 per cent respectively wine was 56 per cent

**Table 3.** Changes in economic and physical availability of alcohol in Sweden 1990–2009.

	1990	1995	2000	2005	2009	2000–2009*
<b>Economic**</b>						
Off-premise prices						
Spirits	104	100	117	101	95	▼
Wine	112	100	104	92	92	▼
Beer	116	100	80	68	71	▼
Disposable income	97	100	108	124	139	▲
Affordability						
Spirits	93	100	99	120	142	▲
Wine	87	100	100	124	143	▲
Beer	84	100	129	165	196	▲
<b>Physical</b>						
Off-premise stores	345	384	411	411	412	▲
Self service (%)	0	6	17	61	80	▲
Retail outlets for "Folkö"l"	12792	–	12300	8600	7800	▼
On-premise stores	6437	8121	9631	10526	10960	▲
<b>Other</b>						
Import quotas						
Spirits	1	1	1	10	10	▲
Wine	2	5	20	90	90	▲
Beer	5	15	24	110	110	▲

\* Arrows indicate the direction of change between the years 1990 and 2009 (▲=clearly up 1990–2009, ▼=clearly down 1990–2009), \*\* Indexed figures where 1995=100.

cheaper and strong beer 116 per cent more affordable. This index does not take into account the fact that a larger proportion of all alcohol purchased in Sweden is bought in other countries. Although it is not possible to calculate the price reduction with any exactness, it is obvious that the price Swedes actually pay for their alcohol has declined even more if the increase in travellers' imports and smuggling is considered.

Physical availability has also increased during this period. There was a 20 per cent increase in the number of retail stores, with most of the rise happening during the 1990s. In addition, there are now many more self-service stores than before, from zero in 1990 to about 80 per cent of all stores in 2009. Furthermore, an increase in the number of opening hours has taken place as a result of Saturday opening (2001) and extended opening hours on weekdays. Other measures toward more customer-friendly monopoly stores were also taken on the basis of a parliament decision to strengthen the legitimacy of *Systembolaget*. One example is the possibility to print an online shopping list with suggestions of recommended beverages to food, a service introduced in 1999; another was that credit cards became accepted as payment in 2000. Moreover, the ordinary assortment expanded markedly: the number of brands grew from 900 in 1990 to 2,200 in 2009.

Availability increased also in terms of an expansion of the number of restaurants selling alcohol (on-premise licenses), from 6,437 in the early 1990s to 10,960 in 2009 (Alcohol Statistics 2010). On the other hand, the number of outlets selling "folköl" were reduced from 13,000 in 1990 to 8,000 in 2009 (Table 3).

### ■ Other restrictions on availability

In addition to these domestic changes in availability, the gradual repeal of import quotas has also been associated with the increasing physical and economic availability of alcohol in Sweden. The new possibilities to bring back large amounts of alcohol from abroad has created an illegal alcohol market in which both legally and illegally imported alcohol is sold further to young people but also to work places (Svensson & Hradilova Selin 2007).

Other major restrictions in availability in Sweden are age limits for purchasing alcohol which have not changed during the study period. The age limit for buying any alcoholic beverages in the monopoly stores is 20 years whereas one has to be 18 to purchase the weaker beer "folköl" in grocery stores and alcohol in restaurants. A restriction that was recently lifted was the ban on buying alcohol through the internet. This has been allowed since October 2007, as long as Swedish alcohol tax is paid. As shown in table 1, however, buying alcohol through the internet is still a marginal phenomenon in Sweden.

### Development in alcohol marketing

Alcohol advertising was essentially banned in Sweden until 2003 when it became permitted after a verdict in the so-called Gourmet case by the Swedish Market Court that the ban conflicted with EU rules (Cisneros 2009). This made advertising possible in periodical publications but only for alcoholic beverages weaker than 15 per cent by volume and given that the advertisement had moderate formulation. In 2005, tougher advertising rules were adopted, and warning labels became obligatory.

The legalisation of alcohol marketing has been followed by a sharp rise of investment in alcohol advertisement from 8.1 million in 2000 to 87.5 in 2003 and 369 million in 2008 (SEK) (INDIKAT 2010). The magnitude of the increase in alcohol marketing is probably underestimated as more un-traditional forms of marketing may have increased even more, including the use of internet, sponsoring, etc. (Indikat 2010). There is a substantial amount of alcohol advertisement on TV channels broadcast from other countries such as channels 3 and 5. However, documentation of the development of investments in non-traditional forms of marketing is not available.

#### Demographic and social changes

As has been mentioned, changes in population drinking have many possible determinants in addition to availability factors. For instance, alcohol consumption varies across different social and demographic groups. Population changes in the composition of various groups may thus have affected the consumption as well. Table 4 presents data obtained from Statistics Sweden of some demographic and social changes that might have had a bearing on the recent developments in Swedish population drinking.

Rather than driving alcohol consumption up during this period, the changing age structure seems to have contained levels of consumption: younger age groups who consume the most alcohol have declined somewhat whereas the elderly represent a higher proportion of the entire population.

Also, a large number of inhabitants of Sweden are born outside the country. The share rose from 9 per cent in 1990 to 14

per cent in 2009. Most of this increase goes back to immigration from non-Nordic countries, which accounted for 20 per cent of immigration in 1990 and 50 per cent in 2009. According to surveys by the Swedish National Institute of Public Health immigrants from outside the Nordic countries consume on average less alcohol than the general population. This has most likely also dampened the increase in Swedish population drinking.

Another trait found between 1990 and 2009 is the significant growth in the proportion of men and women with higher education, here defined as at least three years of education after *gymnasium* for the age group 25–64. The rise is particularly marked for women, with an increase from 11 to 27 per cent, whereas the corresponding rise for men is from 12 to 19 per cent. Several studies suggest that highly educated people in Sweden abstain from alcohol to a lesser extent, consuming more alcohol in general and more wine in particular (for example, Hradilova Selin 2004). It is thus plausible that the increase in those with higher education may have contributed to the rises in Swedish population drinking, notably in wine consumption and among women.

Increasing female participation in the labour market is sometimes pointed out as one determinant of increasing alcohol consumption among women (for instance, Room et al. 2009). However, there have been no substantial changes in women's participation in the labour market during the last 20 years: women accounted for a steady 49 per cent of the labour force between 1990 and 2005. The very marginal changes in urbanisation also were associated with increasing alcohol consumption

**Table 4.** Changes in a selection of social and demographic variables in Sweden 1990–2009.  
Source: Statistics Sweden.

	1990	1995	2000	2005	2009	Implication for population drinking
<b>Age structure</b>						▼
0–15	19	19	19	18	17	➤
16–29	19	18	17	17	18	➤
30–49	28	28	27	27	27	➤
50–74	25	26	27	28	29	➤
75+	8	9	9	9	9	➤
<b>Born abroad (%)</b>	9	11	11	12	14	▼
<b>High education* (%)</b>						▲
Men	12	12	15	18	19	➤
Women	11	12	18	23	27	➤
<b>Women's participation in the labour force (%)</b>	48	48	48	48	–	➤
<b>Urbanisation</b>						
Living in urban areas (%)	83	84	84	84	–	➤

\*age group 25–64 years \* ICD-10: Acute intoxication (F10.0), Mental and behavioural disorders due to alcohol (F10.1–F10.9), alcoholic liver disease (K70), pancreatitis (K86.0) alcoholic polyneuropathy (G62.1), alcoholic cardiomyopathy (I42.6), alcoholic gastritis (K29.2), alcoholic myopathy (G72.1), degeneration of nervous system due to alcohol (G31.2) and toxic effect of alcohol (T51).

in some drinking cultures. The proportion of the population living in urban areas in Sweden was rather stable during the study period, going up from 83 to 84 per cent and is not likely to have had any significant impact on recent trends in drinking. To summarise, most of the social and demographic changes raised here have most likely not contributed significantly to the rising population drinking in Sweden, although more systematic analyses are needed to draw any definitive conclusions.

### Alcohol-related harms

Considering previous Swedish experiences of increases in per capita consumption

and the evidence in the research literature (such as Norström & Ramstedt 2005), the increasing population drinking was expected to be followed by more alcohol-related harm. However, previous studies on this period have presented data suggesting a smaller increase in harm than expected in particular for alcohol-related mortality (Andréasson et al. 2006; Ramstedt 2007). On the basis of statistics from three different areas, the current development will be outlined using the most recent data available: alcohol-related mortality, alcohol-related hospitalisations and alcohol-related crime.

#### Alcohol-related mortality

A broad mortality index derived from all deaths with an alcohol-specific diagnosis as an underlying or contributory cause<sup>1</sup> is used as an indicator of the development in alcohol-related mortality. According to this indicator, the overall level of alcohol-related mortality in Sweden has been relatively stable among men but has somewhat increased among women between 1990 and 2008 (Table 5). Some notable differences are seen across age groups with a marked decline in the 30–49 age group among both men and women but with increasing levels among elderly women (50+). Fairly stable patterns are evident in the other age groups. According to this measure, alcohol-related mortality has not increased among men whereas increases are found among women and among elderly women in particular. It should be noted that there may be diverse trends for different diagnoses included in this index. For instance, it has recently been shown that when alcohol-related cirrhosis is singled out from this index, quite substantial increases are found among both men and women (Ramstedt et al. 2010). Also, different patterns are evident in other types of mortality known to respond to changes in population drinking, such as fatal accidents, suicide, homicide and all-cause mortality (Norström 2002). No significant change is found for fatal accidents among men and women, but declining trends were detected for suicide, homicide and all cause mortality (Statistics Sweden 2010).

#### Alcohol-related hospitalisations

A similar broad index of hospitalisations with an alcohol-related diagnosis is presented next. This indicator gives essential-

ly a similar picture as the index based on alcohol-related mortality with no change in the development among men but some increase among women (Table 5). The age-specific trends are also similar to those found for mortality with one exception: a notable rise is found among younger women.

A more detailed analysis reveals that this is the result of an increase in alcohol poisonings (for example, Ramstedt 2006).

#### Alcohol-related crime: drink driving and violence

Statistics on alcohol-related crimes were collected from the Swedish National Council for Crime Prevention (BRÅ). They include the number of persons suspected for drink driving and assaults. Only data for 1995 to 2009 are used here because of the limited availability of the official databases.

There are some thought-provoking similarities between the crime data and the health statistics. First, women now account for a larger share in both types of crime, with a rise from 9 to 11 per cent among persons suspected for drink driving and from 9 to 14 per cent for persons suspected for assaults. Furthermore, the changing age structure suggests an increase of older people in particular drink driving: the proportion of suspected persons above 50 years has increased from one fifth to one third among both men and women. While a similar change is seen for assaults, the trend is less clear. What is different, however, is that the overall number of suspected persons has increased during the study period for both crimes with roughly 10–15 per cent. The data showed a similar gender pattern in the number of

**Table 5.** Alcohol-related mortality and alcohol-related hospitalizations per 100 000 by gender and age 1990–2008.

	1990	1995	2000	2005	2008	1990–2008*
<b>Alcohol-related mortality</b>						
Men						
Total	45	45	42	46	44	➤
16–29	4	5	5	5	5	➤
30–49	35	32	24	22	17	▼
50–74	91	88	85	91	95	➤
75+	56	61	50	66	58	➤
Women						
15+	9	10	11	12	12	▲
16–29	1	1	2	0,5	1	➤
30–49	9	9	7	7	6	▼
50–74	16	20	23	26	25	▲
75+	4	5	6	11	10	▲
<b>Alcohol-related hospitalisations</b>						
Men						
All	699	601	520	463	528	▼
16–29	218	211	174	186	217	➤
30–49	1325	940	767	569	635	▼
50–74	1000	951	952	914	1031	➤
75+	223	130	134	115	167	▼
Women						
All	159	145	157	162	180	▲
16–29	110	114	140	174	172	▲
30–49	330	274	246	207	227	▼
50–74	176	172	218	242	261	▲
75+	25	20	21	23	28	

\* Arrows indicate the direction of change between the years 1990 and 2008 if the change was at least 10% in any direction: ▲=clearly up 1990–2008, ▼=clearly down 1990–2008, ➤=stable.

persons taken into custody for drunkenness by the police, which declined from 75,000 cases in 1990 to 62,000 in 2007 in total (CAN 2010). However, the decline only applied to men, and the fraction of cases accounted for by women increased from 7 to 12 per cent. Although all these indicators of harm have limitations, there is thus some evidence of an increase in

the negative consequences from the rise in population drinking in Sweden, but most clearly among women and the elderly.

### Prevention and policy initiatives

The overall goal of the Swedish alcohol policy is to reduce social and medical problems related to alcohol by cutting the

total level of drinking as well as harmful drinking patterns (Prop.2005/2006:30). To reach this goal, a set of intermediate aims have been proposed, such as delaying initiation of drinking among the youth, promotion of alcohol-free zones (in traffic, during pregnancy and in the workplace) and combating illegal alcohol (illegal sales to minors in particular). In the implementation of the strategy, the local level has been a key target, and-so called “local coordinators” now work in practically all municipalities in Sweden.

There has been widespread political concern at the implications of a rising availability of alcohol and a matching readiness to act. For instance, between 2001 and 2010, about 200–250 million SEK were invested annually in various policy and prevention initiatives. Again, the major focus was local prevention work. Leading prevention projects of the recent years include brief interventions in the health care sector (The Swedish Risk Drinking Project), the preventing of serving alcohol to the under-aged and intoxicated guests in licensed premises (Responsible Beverage Service), police interventions on bootleggers selling illegal alcohol and youth drinking (The Kronoberg Model) and an attempt to reduce youth drinking by targeting parents (The Örebro Prevention Program).

An underlying feature of the Swedish strategy has thus been the introduction of new measures assumed to work in the new environment associated with European integration but also to keep traditional restrictions on price and availability. In contrast to Finland and Denmark, alcohol taxes have not been cut to combat the rising level of alcohol imports and il-

legal trade, although this was suggested in a governmental report of 2005 (SOU 2005). Sweden also decided to adjust gradually to the new import quotas while Finland and Denmark adopted a more abrupt policy in 2004.

It seems that this fairly restrictive alcohol policy finds favour among the Swedish population, although some “liberal winds” have occasionally been blowing over the last 20 years. For instance, in the early 1990s when Sweden was about to enter the EU, a clear majority (75 per cent) were in favour of selling wine in grocery stores but the share has since declined, standing at only 45 per cent today (Leifman 2000; Ramstedt et al. 2009). Similarly, there was strong support for cutting the alcohol tax in 2004 and 2005 when alcohol imports from EU countries became free, but the public opinion has since changed dramatically: support for a tax reduction dropped from 55 to 36 per cent between 2005 and 2006 (Holmberg & Weibull 2007). A possible explanation is that the negative Finnish experiences of lowering taxes received a lot of attention in the Swedish media.

At present, a new Swedish alcohol strategy is being prepared, to be launched in 2011. Whether this brings any changes in goals and measures remains to be seen.

## Discussion

This article has briefly outlined the development in the Swedish alcohol scene during the last 20 years. There is no doubt that the Swedish population consumes more alcohol today than two decades ago and it seems likely that increasing physical and economic availability has played a major role in this development. Alcohol-related harm has not, however, increased consist-

ently according to the harm indicators reviewed here, and the trends differ depending on what sub-group and harm indicator is considered. It seems quite clear that alcohol-related harm has increased more for women than men and more among the elderly than younger age groups. In some age groups, such as among the 30–49-year-olds, the indicators show that alcohol-related harm has declined, whereas the opposite is true for the age group 50–75. It is not perceptible why the increasing availability should have such different effects on various population sub-groups, and there are obviously other relevant factors at play, e.g. cohort effects (Rosén & Haglund 2006). Understanding divergent trends is nevertheless an important future research topic.

As mentioned, Sweden acted differently from Finland and Denmark in adjusting to the European integration by gradually increasing the allowances, by not cutting the alcohol tax to prevent cross-border trade and by allocating large resources for preventive work. It is difficult to assess whether this was a beneficial strategy. Recent comparisons of trends in drinking and harm suggest a more favourable development than in Finland, whereas no clear difference has been revealed in relation to Denmark (Room et al. forthcoming).

It has come as a surprise to many that the Swedish retail monopoly has not only survived but substantially strengthened its position in recent years even without the help of a tax reduction. This conclusion obviously presupposes that existing estimates of unrecorded alcohol are valid and that the estimated decline in unrecorded alcohol represents a true decline. Although the Swedish method for estimating unrecorded alcohol is very ambitious

in an international perspective (Ramstedt et al. 2009), the inherent uncertainty of estimates of unrecorded alcohol needs to be borne in mind. The marked upturn in recent years in the sales at the *Systembolaget* perhaps also stems from a more customer-friendly approach and is linked to the efforts to market the advantages with a monopoly. For instance, 13 massive campaigns were carried out between 2002 and 2007 in order to increase knowledge and general support for the existence of *Systembolaget* (Cheng et al. 2009).

According to a recent study by Norström et al. (2010), keeping the monopoly is positive from a public health perspective since it tends to imply a lower drinking level and less alcohol-related harm compared with a private licensing system. However, this doesn't rule out that increasing alcohol sales in the monopoly stores could be problematic, in particular if this results in an increase in per capita consumption (Norström & Ramstedt 2008). It is indeed a challenge for the Swedish monopoly to balance between keeping an acceptable market share and strong public support and not pushing population drinking up.

It is not easy to encapsulate the transformation of the Swedish alcohol scene during the last 20 years since the changes have seldom gone in one direction only. The idea that alcohol has become more of “an ordinary commodity” (Norström & Ramstedt 2006) is true to some degree and is supported by changes such as the introduction of sales on Saturdays, repeal of import quotas and legalisation of advertisements. On the other hand, the massive investment in alcohol policy efforts illustrates that alcohol is still a very special commodity in the Swedish society. This is exemplified by

the warning labels required in the advertisements, strict age limits, high taxes and Sunday closing of alcohol retail sales.

It seems that the long Swedish history of ascribing problems to alcohol and of reacting with countermeasures when problems arise and drinking increases is still there, but the tools are different. Previously, when dramatic changes happened, immediate measures were taken such as the tax increase in conjunction with the repeal of the rationing system in 1955 and the dis-

continuance of the experiments with beer sales in grocery stores in the 1960s and 1970s. Today, such measures are not likely to be implemented, and it will be a continuous challenge for policy makers to find measures that limit the harms caused by alcohol in the Swedish society.

**Mats Ramstedt**, researcher  
Centre for Social Research  
on Alcohol and Drugs (SoRAD)  
Stockholm University, Sweden  
E-mail: mats.ramstedt@sorad.su.se

## NOTES

- 1 ICD-10: Acute intoxication (F10.0)

## REFERENCES

- Andreasson, S. & Holder, H.D. & Norström, T. & Österberg, E. & Rossow, I. (2006): Estimates of harm associated with changes in Swedish alcohol policy: Results from past and present estimates. *Addiction* 101: 1096–1105
- Babor, T. & Caetano, R. & Casswell, S. & Edwards, G. & Giesbrecht, N. & Graham, K. & Grube, J. & Hill, L. & Holder, H. & Homel, R. & Livingston, M. & Österberg, E. & Rehm, J. & Room, R. & Rossow, I. (2010): *Alcohol: No ordinary commodity. Research and public policy*. 2<sup>nd</sup> edition. Oxford: Oxford University Press
- CAN (2010): *The development of drugs in Sweden 2009*. Rapportserie, Rapport Nr 107. Centralförbundet för alkohol- och narkotikaupplysning, Stockholm
- Cheng, H. & Kotler, P. & Lee, N. (2009): *Social marketing for public health: global trends and success stories*. Jones & Bartlett Learning; 1 edition
- Cisneros, J. (2009): *The Europeanization of Swedish Alcohol Policy*. Stockholm: Department of Political Science, Stockholm University
- Holder, H. D. & Kuhlhorn, E. & Nordlund, S. & Österberg, E. & Romelsjö, A. & Ugland, T. (1998): *European Integration and Nordic Alcohol Policies – Changes in Alcohol Controls and Consequences in Finland, Norway and Sweden 1980–97*. Ashgate Publishers
- Holmberg, S. & Weibull, L. (2007): *The changed opinion on alcohol 2007*. In: Holmberg, S. & Weibull, L. (red.): *Det nya Sverige*. Göteborg: SOM-institutet, SOM-rapport
- Hradilova Selin, K. (ed.) (2004): *Swedish drinking habits and their consequences in the beginning of the millennium*. Stockholms universitet: SoRAD – Forskningsrapport nr. 20
- INDIKAT (2010): *Ölmärken blev mer digitala (Beer brands became more digital)* 31 Mars 2010. [http://www.reklamkraft.tv/pdf/oI\\_2009\\_INDIKAT.pdf](http://www.reklamkraft.tv/pdf/oI_2009_INDIKAT.pdf)
- Kühlhorn, E. (1998): *Swedish drinking habits in a perspective of change*. In: Kühlhorn, E. & Björk, J. (red.): *Svenska alkoholvanor i förändring*. Sober Förlag, Stockholm
- Kühlhorn, E. & Hibell, B. & Larsson, S. & Ramstedt, M. & Zetterberg, H. L. (2000): *The alcohol consumption in Sweden during the 1990's*. Stockholm: OAS, Socialdepartementet

- Leifman, H. & Gustafsson, N.-K. (2003): A toast for the new millennium. A study on the Swedish people's alcohol consumption in the beginning of the 2000's. Forskningsrapport 11, SoRAD (Centrum för socialvetenskaplig alkohol- och drogforskning). Stockholms Universitet, Stockholm
- Leifman, H. (2000): The Swedes' attitudes towards alcohol in general and alcohol sales in food stores in particular. In: Holder, H. (ed.): Sweden and the European Union – Changes in National Alcohol Policy and Their Consequences. Stockholm: Almqvist och Wiksell International
- Norström, T. & Miller, T. & Holder, H. & Österberg, E. & Ramstedt, M. & Rossow, I. & Stockwell, T. (2010): Potential consequences of replacing a retail alcohol monopoly with a private license system: Results from Sweden. *Addiction* 105:2113–2119
- Norström, T. & Ramstedt, M. (2008): Unregistered alcohol consumption and alcohol-related harm in Sweden, 2001–2005. *Nordic Studies on Alcohol and Drugs* 25 (2): 101–114
- Norström, T. & Ramstedt, M. (2006): Mortality and population drinking – a review of the literature, *Drug and Alcohol Review* 24: 537–547
- Norström, T. (2002): Alcohol in Postwar Europe: Consumption, Drinking Patterns, Consequences and Policy Responses in 15 European Countries, Stockholm: National Institute of Public Health and European Commission
- Ramstedt, M. (2009): Alkoholkonsumtion och alkoholrelaterade problem bland äldre svenskar – hur ser det ut egentligen? [Alcohol consumption and alcohol-related harm among elderly Swedes – what is the actual situation?]. *Nordic Studies on Alcohol and Drugs* 26 (5): 385–397
- Prop.2005/2006:30 Nationella alkohol- och narkotikahandlingsplaner 149. Socialdepartementet 2005
- Ramstedt, M. (2007): Has the impact of population drinking on harm become weaker in Sweden? *Nordic Studies on Alcohol and Drugs* 24 (Suppl.): 73–83
- Ramstedt, M. (2006): Alcohol poisonings in Sweden 1987–2004 – trends and temporal patterns in times of a rapidly rising population drinking. *Nordic Studies on Alcohol and Drugs* 23 (Suppl.): 97–109
- Ramstedt, M. & Stokkeland, K. & Hultcrantz, R. (2010): Alkoholkonsumtion och alkoholrelaterade leversjukdomar – vad har hänt i Sverige sedan EU-medlemskapet? (Alcohol consumption and alcohol-related liver disease – what happened after the EU-membership?) *Läkartidningen* 22:1463–1466
- Ramstedt, M. & Axelsson-Sohlberg, T. & Engdahl, B. & Svensson, J. (2009): Tal om alkohol – en statistisk årsrapport från Monitor projektet. [Figures on alcohol – a statistical annual report from the Monitor-project]. SoRAD Rapportserie, nr 54. Stockholm: Stockholms Universitet, SoRAD
- Ramstedt, M. & Kühnlhorn, E. (1998): An erosion of the part of abstainers in Sweden. In: Kühnlhorn, E. & Björ, J. (eds.): Svenska alkoholvanor i förändring. Sober Förlag, Stockholm
- Room, R. & Österberg, E. & Ramstedt, M. & Rehm, J. (2009): Explaining change and stasis in alcohol consumption. *Addiction Research and Theory* 15: 216–223
- Rosén, M. & Haglund, B. (2006): Trends in alcohol-related mortality in Sweden 1969–2002: an age-period-cohort analysis. *Addiction* 101: 835–840
- SOU (2005): Gränslös utmaning – alkoholpolitik i ny tid. Slutbetänkande från Alkoholinförelsetredningen (Borderless Challenge – alcohol policy in a new era. Final report from the traveller's imports commission). SOU 2005:25. Stockholm: Ministry of Health and Social Affairs
- Statistics Sweden (2010): Våra dödorsaker (Causes of death statistics)
- Svensson, J. & Hradilova Selin, K. (2007): Alkoholsmuggling i Sverige 2002–2006 (Smuggling of alcohol in Sweden 2002–2006) Forskningsrapport nr. 49. SoRAD, Stockholms universitet, Stockholm
- Trolldal, B. (1998): Ändrade villkor för svensk alkoholpolitik [New conditions for Sweden's alcohol policy]. In: Kühnlhorn, E. & Björ, J. (eds.): Svenska alkoholvanor i förändring [Swedish trends]. Sober Förlag, Stockholm
- Weibull, L. & Holmberg, S. (2008): Svenska trender (Swedish trends). SOM-Rapport 2008:19.

