



## **RIGHT TO BE DRUNK?**

Comparative analysis of alcohol regulation from an economic perspective

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## ABSTRACT

The purpose of the present thesis is to compare different approaches in alcohol regulation, in order to find the most efficient model. The *novum* of the comparison is that economic analysis of law is introduced as a guiding principle for the comparison.

Three different models of alcohol regulation are analyzed in the thesis. In the liberal model the legislator deals with alcohol and related problems only if harm has done to the society. In the modern temperance model the regulator tries to decrease alcohol related harms by intensive intervention in the alcohol market. Finally, the model of prohibition exiles alcohol from the society.

Based on a comparative analysis, two rankings of the alcohol regulation models are established. The first ranking measures legal efficiency, where the liberal model occupies the first position. According to the second ranking, the modern temperance model is proven to be the most efficient economically.

The overall conclusion of the comparison is that regulatory model, which intervenes to the alcohol market by restrictions and limitations, will provide a more efficient solution to alcohol related problems, so long as the society is willing to pay the price of it.

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*„Helan går,  
sjung hopp falleranlallanlej.  
Helan går,  
sjung hopp falleranlallanlej.  
Och den som inte helan tar,  
den inte heller halvan får.  
Helan går!  
Sjung hopp falleranlallanlej!”*

*/Swedish drinking song/*

*(The Whole goes  
sing hopp falleranlallanlej  
the whole goes  
sing hopp falleranlallanlej,  
the ones who don't take the whole,  
won't get the half,  
the whole goes!  
sing hopp falleranlallanlej!)*

## INTRODUCTION

Alcoholic beverages are, for the most part, associated with good company, good food and drink, and partying and having a good time. People serve and drink alcoholic beverages at parties and when they want to celebrate, when they have reason to be glad, and when they are happy. And whether it's due to the physiological effects of the alcohol or our own expectations, we often feel that alcohol makes it easier to express ourselves and easier to make contact with other people. It relaxes us and instills a sense of fellowship.

On the other hand however, the negative consequences of alcohol consumption are numerous and wide-ranging. On a global level, alcohol is a major contributor to disease, disability, and premature mortality. It also has an adverse impact on many aspects of social life. Alcohol can damage virtually every single one of the body's organs and systems. It causes a large number of diseases and injuries. Some of the most serious include cancer, cardiovascular disease and cirrhosis of the liver, accidents, poisoning, and murder. Alcohol is one of largest risk factor for ill health. It also causes social problems that can affect both the person who drinks and the people around them. It can cause fights, arguments, vandalism, violence, absenteeism at work, problems at work, and problems at home.

Problems related to alcohol consumption result in substantial costs, both for the individual and for society as a whole. But drinking patterns – the way in which alcohol is consumed – are just as important as the total amount consumed. Binge drinking accounts for a substantial percentage of both acute medical damage and social problems.

Regulating alcohol consumption is a real challenge for legal systems all over the world. We may find a wide variety of techniques to deal with alcohol related problems within the legal system, from total prohibition to unlimited liberalization. Because of the wide range of differing approaches, the regulation of alcohol consumption seems to be an appropriate field for measuring how far the practical applicability of economic efficiency may serve the best interests of the regulator and hence of the society. Needless to say how beneficial it would be for the treatment of alcohol consumption and all related social problems to find a practically applicable model for improving the efficiency of regulations concerning this issue.

Through a comparative study of alcohol regulations it is possible to measure efficiency of the different legal approaches. I have chosen to do a comparative study of regulations concerning alcohol consumption, because one may find very different, sharply contrasting approaches towards problems related to alcohol consumption. These examples enable me to measure both the economic and legal effectiveness of the relevant regulation within each very different approach. In other words, I examine the level of rationality in the regulations tackling with this particular field of irrational human behavior. Traditional works in the field of law and economics are either dealing with legal institutions *in abstracto*, or with concrete regulations of a concrete jurisdiction. The main contribution and *novum* of the present work is that it applies the approach of law and economics to a comparative legal analysis.

For the purposes of such a comparative study I compare two extreme and one in-between solution to the alcohol consumption problem. The first extreme would be the total prohibition of alcohol consumption, industry and trading in the United States in the beginning of the 20<sup>th</sup> century

(model of prohibition). The second extreme example highly tolerates alcohol consumption, and interferes only if alcohol consumption is abusive or linked to a deviant conduct (liberal model). This extreme is applied in most European continental countries. Between these two extremes we may find a system where the state is a rather active player on the alcohol market (modern temperance model). Prime example for this system is the Swedish model where the state has monopolized the whole alcohol industry, therefore interfered in the alcohol market not only as an ‘outsider’ regulator, but as the only legitimate player in the field of the market.

Because of the relatively new approach applied in this work, rather few existing sources fall specifically to the ambit of the present endeavor. Therefore, findings of various social sciences are used here. First of all, as the basic approach of the present work is of legal nature, the main focus will be made on primary sources of laws. Further, several essays, articles are dealing with the harms caused by abusive alcohol consumption, the findings of which works will also be included in the course of comparison. The Prohibition Era in the United States of America is mainly examined in works of history. Due to challenges with which the Swedish model is facing nowadays, several studies, surveys, essays and even monographies have recently been published in defense of the Swedish model. Although, such works are heavily biased in favor of the currently existing Swedish alcohol regulation model, if handled with care, these works are very useful materials for the purposes of this thesis. Alcohol consumption and alcoholism is frequently approached from medical perspective, which spectacular is helpful in demonstrating the complex nature of alcohol related problems. Results of surveys for statistical and sociological purposes facilitate to measure both the legal and economic efficiency of the different alcohol regulation models. Finally, works from the field of economic analysis of law, especially the law and



economics of regulation, are serving as a theoretical and methodological background for the comparison.

The purpose of the present thesis is to compare the legal regimes of Sweden, the United States and Hungary concerning alcohol consumption, to find the most efficient model, hence indicate directions for approving the effectiveness of alcohol consumption regulation. As a pre-conclusion I believe that economic efficiency is a wise adviser for the state when it comes to regulation (i.e. limitation) of rights and freedoms of individuals.

In Chapter 1 a short introduction will be made to the possible approaches of economic analysis of law concerning alcohol consumption. The main question which will be examined is whether alcohol could be treated as an ordinary commodity when it comes to regulation. Special emphasis will be put on addictive behavior as a certain form of irrational behavior. Alcohol consumption will be examined from three different approaches, such as the neoclassical model, the disease concept and the concept of rational addiction. Due to the fact, however, that the main topic of the present thesis is the comparative analysis of certain models of alcohol regulation the theoretical approach in Chapter 1 serves merely the purpose of raising questions about the applicability of traditional law and economic approach to alcohol regulation. The task to find answers to such questions falls out of the scope of the present thesis. Nevertheless, the theoretical backing of the comparison is necessary in order to facilitate the objective evaluation of the findings of this thesis.

In Chapter 2 the main characteristics of three contrasting models of alcohol regulation will be presented. First, emphasis will be taken on describing models and measures available for alcohol

policy and for regulation concerning alcohol. Afterwards the liberal model will be presented by analyzing the regulatory measures concerning alcohol in the legal regime of Hungary. The measures applied by the model of prohibition, the other extreme, will be analyzed through the failure of the Prohibition Era in the United States of America. Finally, the in-between model of Sweden will be examined. The purpose of this chapter is to identify how the different approaches of alcohol policy influences the legal regimes. Attempt will be made to find out whether the particular legal system is able to reach the goal of the alcohol policy behind, whether aims defined *a priori* have been achieved *a posteriori*, through the applied regulatory measures. Based on this examination a ranking will be set up between the three jurisdictions concerned, showing the level of legal efficiency achieved in these systems.

In the following Chapter conclusions, drawn in relation to the legal efficiency of the three models compared, will be confronted with statistical figures regarding alcohol consumption, alcohol related problems and social cost of alcohol consumption. This chapter focuses on the economic analysis of different regulatory solutions concerning alcohol consumption. The aim of this chapter is to find out whether legal efficiency (realizing the policy behind regulation) collides with economic efficiency (achieving the best available solutions with the least costs). Measuring the social costs of alcohol consumption necessitates a complex procedure. In order, however, to facilitate the transparency of such comparison the three main indicators of alcohol related social burdens will be examined in the three different models. These factors are the level of alcohol consumption, the effect of alcohol related criminal activities and the effect of alcohol on health care. Through the interpretation of various economic and social data concerning alcohol consumption and related social problems, another ranking will be set up, based on a simplified

cost benefit analysis of the legal regimes concerned. This ranking will indicate the level of economic efficiency achieved in Hungary, Sweden and in the US concerning alcohol regulation.

Finally, in Chapter 4 I will compare the two different rankings of the three countries, and hence examine the correlations between legal and economic efficiency. The basic question of this chapter is whether it is possible to construct a system dealing with alcohol related problems bearing in mind simultaneously both legal and economic efficiency.

*“The irrationality of a thing is no argument against its existence, rather a condition of it.”<sup>1</sup>*

## **CHAPTER 1 - THEORETICAL APPROACHES**

“Irrational human behavior”<sup>2</sup> is one of the most typical characteristics of mankind. It often leads us to creative, innovative solutions. It must not be merely coincidence that it is often the irrational behavior of scientists behind numerous inventions that have changed the fortune of mankind, or of artists behind masterpieces of art. However, irrational human behavior has its dark side too. Who has never been yellow with envy or felt blue despite everything seemed alright? The dark side of irrational human behavior is even more visible when it comes to harmful addictions. Who would argue for the presence of any rationality in taking drugs, smoking a cigarette or drinking alcohol in order to solve problems? There would be rather few candidates for such an enterprise, nevertheless we all do similar things surprisingly frequently.

Who is to protect us from our irrational behavior manifested in bad habits? One answer to this question is obviously the state as the main regulator of society. In order to maintain social cohesion and social productivity, the state has to protect us to some degree from our own or others’ irrational behavior. The emphasis here is on the degree of protection – regulation, intervention – of the state. In this thesis I will elaborate this question by examining alcohol consumption as one specific field of irrational human behavior. The choice of alcohol consumption as a specific irrational human behavior is not arbitrary. The main reason behind is that alcohol consumption is generally acceptable in the society, it is widespread all over the

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<sup>1</sup> Friedrich NIETZSCHE, *Human, All Too Human*; Cambridge University Press (1996), Section 9, 515.

<sup>2</sup> Francesco PARISI – Vernon L. SMITH (Eds.), *The Law and Economics of Irrational Behavior*; Stanford University Press, Stanford (2005), p. 3.

world, and does not linked solely to special sub-cultures – as for example drug consumption often does.

Alcohol consumption and related activities need special care when examining because they are often linked to a specific form of irrational behavior, namely to addictive behavior. Irrational behavior and hence addictive behavior are problematic from an economical perspective as neither of them guided by rationality. Therefore, **neoclassical rational choice theory** faces grave challenges in explaining abusive alcohol consumption. According to Becker the human behavior is mainly determined by three factors, the desire of maximizing utilities, stable set of preferences and the availability of information.<sup>3</sup> It follows that according to this model, addictions are treated rational “in the sense of involving forward-looking maximization with stable preferences.”<sup>4</sup> If this assumption was correct to alcohol consumption, no one would ever drink abusively. Unfortunately this is not the case. It follows that alcohol consumption cannot be described by the rational choice model.

Another possible approach to alcohol addictive behavior is the **disease concept**, according to which abusive alcohol consumption is the “disease of the will.”<sup>5</sup> It follows from the disease concept that alcohol consumption cannot be controlled, and the only possible solution to alcohol consumption is total abstinence. Not surprisingly this concept served often as a theoretical justification for prohibition movements. However, as the majority of the society manages to drink moderately day by day, the disease concept is not verified in practice.

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<sup>3</sup> Gary S. BECKER, *The Economic Approach to Human Behavior*, The University of Chicago Press, Chicago and London (1976), p. 14.

<sup>4</sup> Gary S. BECKER – K. MURPHY, A theory of rational addiction; *Journal of Political Economy*, Vol. 96 (1988), p. 675.

<sup>5</sup> Benjamin RUSH, *Medical Inquiries and Observations, on the Diseases of the Mind*; Kimber and Richardson, Philadelphia (1812), p. 266.

Behavioral model proposes a new approach for describing irrational behavior, when it comes to alcohol. The **concept of rational addiction** explains how a rational actor can be addicted.<sup>6</sup> The alteration from traditional rational choice model is the exchange of exponential discounting to hyperbolic discounting.<sup>7</sup> According to exponential discounting an individual – assuming that acting rational – will always chose a variant that offers more benefit, no matter of the distance in time. For example being sober - as the more beneficial option - will always be preferred over the immediate pleasure granted by drug consumption. Along this theory the discrepancy between long- and short term preferences cannot be explained. Why would a rational actor choose abusive drinking if it is clear that abstinence would grant more benefits in the long run, supposing that the actor has stable preferences? The answer is that long-term preferences are always threatened by short-term motives.<sup>8</sup> It follows that preferences are fluctuating in dynamic inconsistency, therefore are not stable over time.<sup>9</sup> When it comes to choosing between certain alternatives time will always be a determinant factor, often making minor short-term benefits with substantial long-term disadvantages more preferable over bigger long-term benefits. In other words, people often drink abusively because of the short term pleasure granted by alcohol and they do not care about the negative consequences abusive alcohol consumption might cause in the long run. I believe that the concept of rational addiction is a workable approach to alcohol consumption, however, the constant competing of the various theoretical approaches suggests that concerning the explanation of irrational behavior, there are still more questions than answers.

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<sup>6</sup> Ole-Jorgen SKOG, *Addiction, Choice and Irrationality*; In.: Parisi – Smith (2005), pp. 119-124.

<sup>7</sup> Idem, pp. 124-128.

<sup>8</sup> Idem, p. 127.

<sup>9</sup> Idem, p. 131.

Alcohol is not an ordinary commodity.<sup>10</sup> It follows that alcohol and alcohol consumption might raise issues not possible to be explained by the traditional approach of law and economics. In order to examine this statement, the different approaches of alcohol regulation will be analyzed in the followings. First of all, however, a system will be described, which facilitates the objective comparison of legal different legal frameworks.

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<sup>10</sup> Thomas BABOR – Raul CAETANO – Sally CASSWELL (and others), *Alcohol: No Ordinary Commodity: Research and Public Policy*; Oxford University Press, 2003.

## CHAPTER 2 – MODELS AND MEASURES IN ABSTRACTO

### **2.1. Models**

Alcohol consumption is a phenomenon the legal regimes of all societies can not avoid to tackle with. The society has to react somehow to the constant demand of people for alcoholic beverages, and also there might be situations when the society has to protect its members from the negative consequences of binge alcohol consumption. The reason for such reaction of the society is twofold. First of all, human dignity and solidarity requires that the society has to take care of its unfortunate members, based on the logic that everybody might become unfortunate and therefore dependent on the other members of the society. Second, harms caused by alcohol related problems have certain costs, which have to be born by every member of the society irrespective of his/her relation to alcohol. It follows that, if one accepts the first point as a necessary component of modern democratic societies, then the second point shall be examined more thoroughly. From the perspective of the society, the aim shall be crystal clear: offer the greatest achievable protection for the society while spending the least necessary amount of money on the problem. I believe that the realization of this goal needs a detailed analysis on past and present models and forms of tackling the alcohol problem with. It is highly likely that a uniform, anywhere, anytime applicable answer can not be given to the questions raised by alcohol related problems. However, after a thorough analysis of the already existing models, the legislator will be entitled with all the necessary information on building up a unique system, being the most successful among the particular circumstances.



Examining the various techniques of different societies dealing with alcohol related problems, three models may be differentiated. The first is the **liberal model**, where the state is refraining from regulating the drinking habit of grown-up citizens. In this model the regulator assumes that grown-up citizens do obtain enough knowledge, information and responsibility to decide whether they want to drink, and more importantly to decide how much they want to drink. The **main value** respected by this model is the freedom of the individual, hence the underlying philosophy of this stance of the state is that people shall have enjoy full freedom provided that they are not threatening other peoples freedoms. It follows that the state is not neglecting alcohol related problems, however it only intervenes if somebody's freedom is threatened or damaged because of abuse of freedom by others. For example, drivers under the influence of alcohol would be punished even in the most ordoliberal states, as threatening other people's right to life, right to physical integrity, etc. In other words, in the liberal model the regulator focuses on protecting freedom of choice of people, assuming that people are in the best position to decide what is in their best interest. This stance also means, that according to the liberal model it is acceptable, if someone chooses to damage herself/himself by extreme consumption of alcohol. In such case the state will only step in if this individual becomes a threat to other individual's freedoms, or if this person needs, or requires help from the state. The **main goal** of the liberal model is to let people make well-informed choice whether they drink or not.

Majority of jurisdictions in the Western societies apply the liberal model nowadays. These jurisdictions may be differentiated on the scale of intervention of states, however in neither of these jurisdictions exists alcohol monopoly organized by the state, and the state strictly limits its intervention to the fields of taxation, health care, education, sanctioning of criminal offences committed under alcoholic influence. As a representative of the jurisdictions applying the liberal

model, the laws of **Hungary** will be examined. The main reason of this choice is that Hungary is traditionally a country of high alcohol consumption. Furthermore, combination of economic development from the communist era to the capitalist era and the several social problems present in the country suggests that alcohol related problems shall be a new challenge for the young democracy. I will examine how Hungary answers to this challenge.

By contrast to the liberal model we may find the **model of prohibition**. This extreme model was popular from the second half of the 19<sup>th</sup> century, especially in the post civil war United States of America. After the first World War the theoretical model, backed often with fundamentalist religious supporters<sup>11</sup> gained the level of law in several countries in the form of so called dry laws. The **main goal** of the present model was „to reduce crime and corruption, solve social problems, reduce the tax burden created by prisons and poorhouses, and improve health and hygiene.”<sup>12</sup> Whereas the **main value** of the model of prohibition was abstinence. The most famous prohibition was in the **United States** started in 16 January 1920 and lasted until 1 December 1933. Therefore, the lessons of the model of prohibition will be presented through the example of the Prohibition Era in the USA.

Besides the USA, there were prohibitions in force in many other countries during the wake of the 20<sup>th</sup> century.<sup>13</sup> Furthermore, mainly in the Islamic culture, combined with some sort of aggressive

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<sup>11</sup> For example the Methodists, Northern Baptists, Southern Baptists, Presbyterians, Disciples, Congregationalists, Quakers, and Scandinavian Lutherans and Women's Temperance Union. Other supporters of the dry laws were for example the Temperance Society, Abstinence Society, Independent Order of Good Templars, Sons of Temperance, Templars of Honor and Temperance, Anti-Saloon League, various prohibition parties, and even the Ku Klux Klan in the United States of America.

<sup>12</sup> Mark THORNTON, Prohibition's Failure: Lessons for Today, USA Today, March 1992, Vol. 120, No. 2562, p. 70.

<sup>13</sup> For example: Russia, USSR: 1914-1925; Iceland: 1915-1922 (it shall be noted that the prohibition of beer continued until 1989); Norway: 1916-1927; Finland: 1919-1932.

fundamentalist government, we may find total abstinent societies even nowadays.<sup>14</sup> Though, in the Muslim countries the ban on alcohol is not eminently motivated by social impetuses, but by religious ones. However, in the Western world the main motivation of the prohibition was the assumption that alcohol is the main reason for most of the crimes, social discrepancies and even for poverty. History showed that all the attempts of total prohibition failed, basically due to economic reasons, and serious ineffectiveness. Therefore, nowadays even the most fierce enemies of alcohol opt to fight against alcohol related problems by different means.

I shall call the third model of dealing with alcohol related problems as the **modern temperance model**. Temperance movement was a political initiation against alcohol in the late 19<sup>th</sup> century USA. This movement has lead to the Prohibition Era. I use the attribute 'modern' in order to emphasize that the model at hand is different from that of leading to prohibition. However, the aim of modern temperance movement is the same as it was more than 100 years ago, namely „to minimize alcohol-related problems by selling alcohol in a responsible way.”<sup>15</sup> In other words, jurisdictions applying the modern temperance model aims to control alcohol consumption of people mainly by controlling the alcohol market. Obviously, the state controls the alcohol market at some extents even in the liberal model – for example by taxation, or by setting age limits -, however in the modern temperance model states usually not only control the market in the above elaborated sense, but they dominate, or even monopolize the whole alcohol industry, including wholesale, and retail market of alcoholic beverages. On a scale where the two endpoints are

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<sup>14</sup> Consumption of alcohol is prohibited in Saudi Arabia; Iran; Libya; Sudan Qatar. It shall be noted though, that there are some exceptions under the strict prohibition rules, mainly in order to attract tourists. However, in these countries the average citizen shall meet severe punishment if caught in alcohol consumption.

<sup>15</sup> „This is Systembolaget” at

[http://www.systembolaget.se/Applikationer/Knappar/InEnglish/Swedish\\_alcohol\\_re.htm](http://www.systembolaget.se/Applikationer/Knappar/InEnglish/Swedish_alcohol_re.htm) (last visited, 31 March 2007).

liberal model and model of prohibition, the modern temperance model lies somewhere in-between, although closer to prohibition than to the liberal model.

Prime examples for the modern temperance model are the Nordic countries in Europe (Sweden, Finland, Norway, Iceland), Canada and also some states of the USA (e.g.: Washington D.C., Mississippi). In the Nordic countries the state has monopolized some extents of alcohol industry, such monopolies may extend to production, distribution, wholesale and retail sale of alcoholic beverages,<sup>16</sup> as well as exportation and importation are often privileges of the state also. The states in these countries created private companies, exclusively owned by the state, with the sole purpose of controlling the alcohol market.<sup>17</sup> The main characteristics and functioning of the modern temperance model will be shown by analyzing the **Swedish** model of Systembolagets.<sup>18</sup> The rationale for this choice is twofold. First, the Swedish model has its roots back in 1850, when the inhabitants of a small Swedish town, Falun created the first monopoly on alcohol. Therefore, the Swedish model at several extents served as an example for other states when building a monopoly.<sup>19</sup> While, the second reason is that since Sweden has joined the European Union (EU) in 1995, several attempts were made both from outside and inside Sweden to demolish the monopoly. In the debate on the compatibility of Systembolagets with the laws of the EU several arguments were presented both pro and contra, which made the Swedish monopoly system the most transparent example of state monopoly over alcohol.

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<sup>16</sup> Gregory P. LUBKIN, Is Europe's Glass Half Empty or half Full? Alcoholic Beverage Taxation and the Development of a European Identity; Columbia Journal of European Law, Fall/Winter, 1997/98, p. 386

<sup>17</sup> These companies are the followings: 1. Sweden: Systembolaget (<http://www.systembolaget.se>); 2. Finland: Alko (<http://www.alko.fi>); 3. Norway: Vinmopolet (<http://www.vinmonopolet.no>); 4. Iceland: Vínbúð (<http://www.vinbudin.is>); 5. United States of America: National Alcoholic Beverage Control Association (<http://www.nabca.org>); 6. Canada: Provincial Liquour Crown Companies (e.g.: Societe des alcools du Quebec: <http://www.saq.com>) (all sites last visited, 31 March 2007).

<sup>18</sup> The literal translation of Systembolaget is 'System Company'.

<sup>19</sup> Furthermore, we may find the Swedish Lutherans among the most direful proponents of the Prohibition Era in the USA.

## 2.2. Measures

Each of the above elaborated models uses different techniques for achieving their goals, while respecting their main values. Basically there are two types of techniques controlling alcohol consumption, which I would categorize as hard and soft measures. **Hard measures** are prohibition, state monopolies, retail outlet restrictions, state standards and taxation.<sup>20</sup> Prohibition is the strongest tool against alcohol consumption, however history showed that it is far not the most efficient. Prohibition can be an efficient tool only if applied merely as an *ultima ratio* within criminal law in cases of abusive alcohol consumption (e.g.: alcohol consumption of children). Prohibition as a hard measure shall be differentiated from the model of prohibition. The model of prohibition relies mainly on total prohibition of alcohol as a hard measure of alcohol regulation, however this is not the only measure which is applied by the prohibition model. Further, prohibition as a hard measure means not only total prohibition of alcohol consumption, but refers also to situations, where only abusive drinking is prohibited (e.g.: in most jurisdictions it is prohibited to drive a car if the driver has consumed alcohol previously).

State monopolies are the typical characteristics of the modern temperance model, operating with state owned companies as the sole actors in the alcohol market within a certain jurisdiction.

Retail outlet restrictions are often present in the modern temperance movement, however one may find such restrictions in liberal countries as well. An example for such restriction is to limit the opening hours of shops selling alcohol, or to create an age limit under which no one is entitled to buy alcohol.<sup>21</sup>

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<sup>20</sup> Lubkin, p.385-388.

<sup>21</sup> Rob BAGOTT, Alcohol, Politics and Social Policy, 1990, Avebury, p.114-132.

State standards and taxation are present in both the liberal and the modern temperance movement, however they are more emphasized in the liberal model as often being the only hard measures in the regulation of alcohol consumption. With the tool of compulsory standards, the state can control for instance the alcohol content and the production process of alcoholic beverages, whereas taxation on the one hand may provide revenues for the state to cover costs of alcohol related problems, and on the other hand raises the price (cost) of alcohol, therefore cutting back demand for alcohol.<sup>22</sup> Much of the failure of the prohibition model was due to fact that such regulation could not rely on taxation and state standards.<sup>23</sup>

There is no exhaustive list of **soft measures** being important in alcohol regulation. These measures are mainly providing tools for prevention and harm reduction. Examples of soft measures are education, providing information on healthy drinking culture, accessible health care for people suffering from alcohol problems, etc. Neither hard, nor soft measures may achieve the goals of a given model on their own; there must be always some kind of combination of several hard and soft measures. However, there is typically one measure serving as an emblematic tool for the state to deal with alcohol related problems.

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<sup>22</sup> Lubkin, p.358.

<sup>23</sup> Thornton, p.71.

## CHAPTER 3 – HOW DO DIFFERENT LEGAL REGIMES REGULATE ALCOHOL CONSUMPTION?

### 3.1. Hungary

The bottom-line idea behind the policy of the liberal model is that freedom can only be restricted in favor of another stronger freedom. Freedom of the individual is perhaps the most celebrated achievement of modern liberal democracies. It follows that at least in some circumstances there are certain limits on the freedom of individuals. However, action of state, and hence the laws restricting the freedom of individuals are legitimate only if being reasonably necessary for the functioning of the state. Furthermore, it is essential that such interventions of the state must not cause more harm than benefits. In other words, freedom can only be limited in order to protect some other freedoms. This raises the issue of where exactly shall the line limiting our or others' freedom be drawn. Is law the most appropriate tool to perform such a social engineering role? The answer of the liberal model to this question is obviously 'no.' What is then the role of the laws in regulating freedoms of individuals in the liberal model? How does a country applying the liberal model of alcohol policy use its legislative power to regulate alcohol, and related conducts?

The Republic of Hungary, as an example for the jurisdictions applying the liberal model of alcohol regulation, uses mainly regulatory measures belonging to administrative law, labor law, tax law and criminal law as an *ultima ratio* intervention of state power. Hungary applies various measures in regulating alcohol, except for total prohibition and state monopolies. The dominant hard measure is taxation (both revenue and value added taxation), while the emblematic soft measure is the teaching of information on alcohol in preliminary- and high-schools.

There are several laws dealing with alcohol, or alcohol related problems in Hungary, all of which derive their final authority from the constitution of Hungary.<sup>24</sup> From the perspective of the constitution there are three aspects of alcohol consumption, namely the market oriented, the public health oriented and youth-protection oriented viewpoints. First, there shall be no restriction of the alcohol market, because the Republic of Hungary in general recognizes and promotes the freedom of competition on the market.<sup>25</sup> Second, Hungary recognizes and enforces the right for the healthy environment,<sup>26</sup> and the constitution grants the right of inhabitants for the highest level of achievable health.<sup>27</sup> Finally, the constitution emphasizes the duty of the state to protect the interests of the children and the youth.<sup>28</sup> In light of the provisions of the constitution the picture, regarding the alcohol regulation, is easy to draw in Hungary. Because of the duty to respect market economy and free competition on the market, the state may distort normal processes of the alcohol market, and regulate alcohol consumption only in order to protect public health as well as the interests of the youth. In other words, the principal rule is the free competition, freedom of the alcohol market, albeit there might be justified exceptions, all of which have to be originated in the above mentioned constitutional provisions.

As it is mentioned above, the laws, dealing with alcohol consumption, manufacturing and trade belong to four groups, namely to measures of administrative law, labor law, tax law, and criminal law.

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<sup>24</sup> Act XX of 1949 on the Constitution of the Republic of Hungary (hereinafter Hungarian Constitution).

<sup>25</sup> Hungarian Constitution, art. 9(2).

<sup>26</sup> Hungarian Constitution, art. 18.

<sup>27</sup> Hungarian Constitution, art. 70/D(1).

<sup>28</sup> Hungarian Constitution, art.16, and 67(1).



### 3.1.1. Administrative Law

The most numerous regulative measures in the Hungarian legal system concerning alcohol fall into the category of administrative law. We may find four types of administrative legal measures embodied into the Hungarian law. The first category aims to regulate the retail market of alcohol, according to which the principal rule is that shops selling alcohol may be opened and operated freely. However this does not mean that there would be no limitations on the retail market of alcohol. Alcoholic beverages may not be sold to persons less than 18 years of age,<sup>29</sup> and selling alcohol is also prohibited in places closer than 200metres of educational institutions of children.<sup>30</sup> The second category of administrative legal measures aims to educate, and inform people. We may find regulations prohibiting the advertisement of alcoholic beverages by children, or for children, and also in a way that would mislead the consumers, and motivate them to consume more than they desired to do.<sup>31</sup> Also there are provisions requiring the education of children and „suspect classes” – such as pregnant women<sup>32</sup> – concerning the consequence of alcohol consumption.<sup>33</sup> The third category of administrative legal provisions is in connection with health care with special emphasis on the protection of children as well as the youth,<sup>34</sup> and on the

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<sup>29</sup> 4/1997 (I.22) Decree of the Government on the operation of shops and on the conditions of interstate commerce, art. 16.

<sup>30</sup> Ibid, art. 15(1).

<sup>31</sup> Act LVIII of 1997 on commercial advertising activity, art. 12. See also, Act I of 1996 on radio and television, art 13 and 24(4); the European Convention on Transfrontier Television, Council of Europe (hereinafter, CoE), Strasbourg, 5 May 1989, art 15(2) (implemented by the Act IXL of 1998); 37/2000 (X.31) Resolution of the Hungarian Constitutional Court on the reviewing of art. 12 of Act LVIII of 1997.

<sup>32</sup> Act LXXIX of 1997 on the protection of foetal life, art 3(2)(a).

<sup>33</sup> Act XLIV of 1995 on the Child and Youth Fund, art. 4(1)(i). See also, 243/2003 (XII.17) Decree of the Government on issuing, introducing and applying the National Syllabus for Education; 46/2001 (XII.22) Decree of the Ministry of Education on the education in student dormitories.

<sup>34</sup> Act CXLIV of 1997 on the health care, art. 42(2)(c) and art. 42(3)(ae); Act XXXI of 1997 on the protection of the child, art. 53; 161/2006 (XII.28) Decree of the Government on the duties and competencies of the minister of health, art 3(c).

rehabilitation of alcoholics.<sup>35</sup> Finally, the last category of administrative legal measures in the Hungarian legal system is very close to criminal law measures aiming to protect public order. Such provisions state *inter alia* that drunken people may not enter into sport events<sup>36</sup> or may not drive a car.<sup>37</sup>

### 3.1.2. Labor Law

According to the labor law provisions of Hungary work and alcohol consumption in general shall not be compatible.<sup>38</sup> Further, specific labor law provisions put special emphasis on the sobriety duty in connection with certain professions. These jobs are typically professions where preciosity is important, where the danger for causing harm is prominently high, and where even a small negligence may cause grave harms. For example alcoholics may not serve in the armed forces,<sup>39</sup> may not be employees of civil aviation service,<sup>40</sup> and may not work for the national railway company.<sup>41</sup> Neither physicians, nor pharmacists,<sup>42</sup> nor sailors<sup>43</sup> may be under the influence of

<sup>35</sup> 2/1998 (XII.15) Decree of the Ministry of Home Affairs on the carrying of drunk persons to the detoxicating institution.

<sup>36</sup> Act I of 2004 on sport, art 71(1)(b)-(c). See also the European Convention on Spectator Violence and Misbehavior at Sports events and in Particular at Football Matches, CoE, Strasbourg, 19 August 1985 (implemented by Act LXIII of 2003).

<sup>37</sup> 1/1975 (II.5) joint Decree of Ministry of Transport and Ministry of Home Affairs on the rules of road traffic, art4(1)(c). See also, Resolution No. 107 of the Hungarian Supreme Court's Criminal Law Department.

<sup>38</sup> Act XXII of 1992 on the labor code, art. 103. See also Act XCIII of 1993 on labor safety and Resolution No. 122 of the Hungarian Supreme Court's Labor Law Department, par.2.

<sup>39</sup> 7/2006 (III.21) Decree of the Ministry of Defense on the professional and contractual military service, art 48(1)(d). See also: 21/2000 (VII.13) joint decree of Ministry of Home Affairs and Ministry of Justice on eligibility examination of professional members of the armed forces, art. 6(g).

<sup>40</sup> 14/2002 (II.26) joint Decree of the Ministry of Transport and the Ministry of Health on permissions for civil aviation.

<sup>41</sup> 14/1985 (XI.30) Decree of the Ministry of Transport on eligibility of railway company employees.

<sup>42</sup> 11/1972 (VI.30) Decree of the Ministry of Health on employees in the health care service, art 35-36.

<sup>43</sup> 41/2006 (VI.28) Decree of the Ministry of Economy and Transport on the training of sailors. See also 39/2003(VI.13) Decree of the Ministry of Economy and Transport on the order of water-transport; and 21/2002 (XI.8) Decree of the Ministry of Economy and Transport on the health eligibility of sailors.

alcohol while on their duties. Hunting is prohibited for drunken people;<sup>44</sup> furthermore, a drunken person may not carry arms at all.<sup>45</sup>

### 3.1.3. Tax Law

The Hungarian legal regime applies both revenue tax, and value added tax in connection with alcoholic beverages. The aim of such taxation is on the one hand to increase the cost of alcohol, and therefore decrease the demand for it, and on the other hand to collect money for the operation of social institutions dealing *inter alia* with alcohol related problems (e.g.: health care, police, courts, etc.) The tax level in the prices of alcohol is nevertheless not so high,<sup>46</sup> especially if compared to other subjects of revenue tax.<sup>47</sup>

### 3.1.4. Criminal Law

Finally, the fourth group of legal measures dealing with alcohol and particularly alcohol related problems are measures of criminal law. Hungary is an example of the jurisdictions applying the liberal model, therefore it is essential to note that criminal law measures are applied only as *ultima ratio*, in case if legal measures provided by the other branches of law has proved to be ineffective.<sup>48</sup> The appliance of the liberal model does however not mean the absence of criminal law measures in regulating alcohol consumption. Even the most ordoliberal jurisdictions recognize that abusive alcohol consumption might lead to dangerous conducts being very harmful

<sup>44</sup> Act LV of 1996 on hunting, art 69(6).

<sup>45</sup> 253/2004 (VIII.31) Decree of the Government on weapons and munitions, art 38(1)(c).

<sup>46</sup> The level of VAT for alcoholic beverages is 20% [Act. LXXIV of 1992 on Value added tax, art. 28], whereas the level of revenue tax is approx. 5-10% of the price of beer, champaign and wine, and 20-30% of the price of spirits, depending on the exact price of the particular beverage. It shall be noted though, that original wine is practically exempted under revenue tax [Act CXXVII of 2003 on Revenue Tax (Revenue Tax Act) art 64 (spirits), art. 76 (beer), art. 80 (wine), and art. 89 (champaign)].

<sup>47</sup> For example the level of revenue tax in the price of tobacco beverages is 27,5-52% and 45-50% in the price of petrol [Revenue Tax Act, art. 97 (tobacco), and art. 52 (petroleum)].

<sup>48</sup> See, Resolution of Parliament No.: 115/2003 (X. 28.) on the national strategy of social crime prevention.

for the entire society. Such conducts may not always be prevented by administrative-, labor- or tax law measures, therefore there is need for the use of criminal law. However the state power manifested in criminal sanctions is limited to the gravest perils abusive alcohol consumption might cause.

In full compliance with the theoretical justification of the use of criminal law measures in the countries applying the liberal model, Hungarian Penal Code<sup>49</sup> criminalizes the driving of a vehicle<sup>50</sup> if the driver is drunk.<sup>51</sup> It follows that the Penal Code follows the zero tolerance doctrine towards drunk-driving, what seems to be a bit harsh for a country applying the liberal model. It shall be noted, therefore, that in practice under the 0,8‰ of blood-alcohol level only administrative law sanctions are applied.<sup>52</sup> Further, often the applied sanction shall be more serious if the perpetrator was drunk at the time of committing the crime.<sup>53</sup> The Hungarian Penal Code also contains a sanction that is to be applied especially for alcoholic perpetrators, „if the crime committed is in connection with the perpetrators alcoholic lifestyle”.<sup>54</sup> There is one provision in the Hungarian Penal Code that seems to break the consequential application of the liberal model, namely the Penal Code criminalizes the alcohol consumption of soldiers on duty.<sup>55</sup> I believe that the aim here – to avoid negligence on duty due to alcohol – could have been achieved through administrative legal measures such as the various regulations of the army.

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<sup>49</sup> Act IV of 1978 on the Penal Code.

<sup>50</sup> Vehicle means all vehicle used for the purposes of railway transportation and aviation as well as all motorical vehicles used for water and public roads transportation. [Hungarian Penal Code, art. 188(1)]

<sup>51</sup> Hungarian Penal Code, art 188. and see also art. 189.

<sup>52</sup> 218/1999 (XII.28) Decree of the Government on specific breaches of law, art. 42.

<sup>53</sup> According to art. 83 of the Hungarian Penal Code the severity of the sanction shall be in harmony with the concrete circumstances of the particular case. On the basis of this provision the drunkenness of the perpetrator shall be considered as a factor leading to a more serious punishment. [Resolution No.: 154 of the Hungarian Supreme Court's Criminal Law Department, par. II/7.]

<sup>54</sup> Hungarian Penal Code, art. 75.

<sup>55</sup> Hungarian Criminal Code, art. 348.

Besides the real criminal sanctions there are some other similar sanctions of misconduct committed by drunken person. It shall be emphasized that both in case of criminal sanctions and similar sanctions it is never the drunkenness or alcohol consumption that is sanctioned, but the misconduct committed under the influence of alcohol. It is sanctioned, for example if someone, due to drunkenness, does not appear duly in front of the court or other authority despite a binding warrant to appear.<sup>56</sup>

### 3.2. USA

*„I make my money by supplying a public demand. If I break the law, my customers, who number hundreds of the best people in Chicago, are as guilty as I am. The only difference between us is that I sell and they buy. Everybody calls me a racketeer. I call myself a business man. When I sell liquor, it's bootlegging. When my patrons serve it on a silver tray on Lake Shore Drive, it's hospitality.” /Al Capone/<sup>57</sup>*

I suggest treating the Prohibition Era as realized sociological experiment. So far this is the most famous attempt in modern history to prohibit alcohol almost entirely in a society where alcohol consumption has cultural, traditional roots. It is not a secret that the total prohibition was a failure, however it is still worth to examine the model of prohibition for two reasons. First and foremost by analyzing the reasons of failure it may be possible to draw conclusions being relevant in formulating a better alcohol policy. Secondly, the Prohibition Era at many extents is similar to nowadays' drug prohibition policy. Although the examination of different drug policies is by far out of the scope of the present thesis, nevertheless the lessons of alcohol prohibition shall make proponents of zero tolerance cautious. In other words, I believe that a closer look on

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<sup>56</sup> Act XIX of 1998 on criminal law procedure, art. 69(2); Act CXL of 2004 on administrative law procedures, art. 48(2).

<sup>57</sup> Andrew SINCLAIR, Prohibition: The Era of Excess; Boston, Little, Brown and Co., 1962, p. 220.

the prohibition attempt will help policy makers to draw important lessons both for shaping alcohol, and drug policies.

In the present Chapter I will describe the legal, regulatory measures of the prohibition in the USA, while in Chapter 3, I will show the reasons of failure through statistical data.

### **3.2.1. History**

The Prohibition Era started in 16 January 1920, when the 18<sup>th</sup> Amendment came in to force, and lasted until 1 December 1933, when the 21<sup>st</sup> amendment effectuated and repealed the 18<sup>th</sup> Amendment. So far the 18<sup>th</sup> Amendment is the only Amendment being explicitly repealed. But the history of prohibition is far longer than the 13 years between the 18th and 21<sup>st</sup> Amendment. The prohibition at many extents started as early as the mid 19<sup>th</sup> century and lasted until the second half of the 20<sup>th</sup> century. As of today no state has dry laws in force, nevertheless there are several municipalities where the prohibition still continues.

Alcohol was playing an important role in America since the first explorers and conquistadors stepped on the land of the 'New World.' Alcohol was both an effective weapon against Indians – often known as the „white man's wicked water"<sup>58</sup> –, and a loyal companion for pioneers and wandering cowboys in their often long solitude. It is not a surprise therefore that alcohol for long was held as „God-given-gift.”<sup>59</sup> Nevertheless drunkenness was not welcomed, especially in settled colonies, however drunkenness was not to be blamed on alcohol, but on the person who

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<sup>58</sup> William E. UNRAU, *White Man's Wicked Water: The Alcohol Trade and Prohibition in Indian Country, 1802-1892*; Lawrence, University Press of Kansas, 1996

<sup>59</sup> Prohibition in the United States, [http://en.wikipedia.org/w/index.php?title=Prohibition\\_in\\_the\\_United\\_States&oldid=115448007](http://en.wikipedia.org/w/index.php?title=Prohibition_in_the_United_States&oldid=115448007) (last visited 31 March 2007).

has drunk in an abusive way. The control on alcohol consumption was the colonial society itself, as small populations were able to effectively restrain abusive drinkers. However, at the time, when railways spread almost everywhere, and extremely fast urbanization began, the strong links existing in the colonial society broke up, and the new, urban society was no longer able to restrain abusive drinkers.<sup>60</sup> This was the time when alcohol and alcohol related problems became disturbing social problems.

In the end of the 18<sup>th</sup> century Dr. Benjamin Rush, one of the Founding Fathers, and founder of the American psychiatry, came up with the idea, that abusive alcohol consumption leads to addiction, for which total abstinence is the only cure.<sup>61</sup> On the basis of this concept, the idea, that “the habit of drunkenness is a disease of the will”<sup>62</sup> became more and more popular. In other words, the traditional view has changed and it became the alcohol to be blamed for drunkenness and not the person who consumed the liquor. Rush’s idea about abstinence had influenced many religious movements, and finally led to the wake of the temperance movement in the end of the 18<sup>th</sup> century. Temperance organizations were established country-wide, aiming to build the alcohol free society. In their view, the only way to prevent alcohol related problems was to prohibit alcohol consumption.<sup>63</sup>

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<sup>60</sup> Howard GILLETTE, Jr. – Zane L. MILLER (Eds.), *American Urbanism: A Historiographical Review*, 1987, Westport, Greenwood, p. 214.

<sup>61</sup> Benjamin Rush, [http://en.wikipedia.org/w/index.php?title=Benjamin\\_Rush&oldid=115077309](http://en.wikipedia.org/w/index.php?title=Benjamin_Rush&oldid=115077309) (last visited 31 March 2007).

<sup>62</sup> Thomas Trotter (leading physician in North America in the late 18th century) cited by Jerome H. JAFFE, *The concept of dependence; Alcohol, Health and Research World*, 1993, Vol. 17, Issue 3, p. 188.

<sup>63</sup> G. EDWARDS, *Problems and dependence: The history of two dimensions*. In: M. LADER – G. EDWARDS – D.C. DRUMMOND (Eds.), *The Nature, of Alcohol and Drug Related Problems*; New York: Oxford University Press, 1992. pp. 1-14.

The temperance movement gained new impetus in the post Civil War era from the Women's Christian Temperance Union. By this time the only acceptable solution for the temperance movements was the total prohibition of alcohol. As the movement strengthened more and more states have adopted dry laws, starting with Kansas in 1880.<sup>64</sup> At the time of the beginning of the 20<sup>th</sup> century the prohibition issue reached the level of federal politics. By 1916 more than half of the 48 states adopted dry laws, therefore it was not a surprise that in the course of the presidential election in 1916 Woodrow Wilson did not dare to initiate debate on prohibition, despite the fact that he was personally against the prohibition movement.<sup>65</sup> Finally, one year later in 18 December 1917 the Congress passed the 18<sup>th</sup> Amendment serving as eminent example of moral legislation.<sup>66</sup> The Amendment entered into force in 16 January 1920, introducing the Prohibition Era. The Amendment was almost immediately challenged, on the basis that the applied ratification measure was an abuse of the power of the Congress, and therefore violated. Nevertheless, in *Dillon v. Gloss* the Supreme Court upheld the amendment, stating, that "of the power of Congress, keeping within reasonable limits, to fix a definite period for the ratification we entertain no doubt."<sup>67</sup>

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<sup>64</sup> Charles H. WHITEBREAD, *Freeing Ourselves from the Prohibition Idea in the Twenty-first Century*; 33 *Suffolk University Law Review*, 2000., p. 237.

<sup>65</sup> Subsequently Wilson tried to stop the prohibition, but it was too late. When he vetoed the Volstead Act, the Congress immediately overrode his protest. See, John FOUST, *State Power to Regulate Alcohol Under the Twenty-First Amendment: The Constitutional Implications of the Twenty-First Amendment Enforcement Act*, *Boston College Law Review*, May 2000, pp. 664-665.

<sup>66</sup> Whitebread, p.235.

<sup>67</sup> *Dillon v. Gloss*, 256 U.S. 368 (1921). See also, *State of Rhode Island v. Palmer* 253 US 350 (1920) also known as the *National Prohibition Cases*.



### 3.2.2. The 18th Amendment and the Volstead Act

The 18<sup>th</sup> Amendment prohibited the manufacture, sale, transportation and importation of “intoxicating liquors.”<sup>68</sup> It shall be noted, though, that the sole consumption of alcohol was never prohibited, however those who consumed alcoholic beverages were liable for possession of alcohol, which was also prohibited by the National Prohibition Act (Volstead Act).<sup>69</sup> The aim of the Volstead Act was to implement and facilitate the execution of the 18<sup>th</sup> amendment. Besides the prohibited conducts described in the 18<sup>th</sup> Amendment, the Volstead Act specified that “no person shall manufacture, sell, barter, transport, import, export, deliver, furnish or possess any intoxicating liquor except as authorized by this act.”<sup>70</sup> The act also defined the term “intoxicating liquor” as any beverage over 0.5% alcohol.<sup>71</sup> By the assistance of the Volstead Act, the system of prohibition was full.

There was one exception under the full prohibition according to the Volstead Act, namely the authorized possession that is possession of alcohol in a private dwelling for the personal consumption of the owner, his family, or his bona fide guests.<sup>72</sup> This exception amounted to “de facto prosecutorial immunization of the individual alcohol consumer.”<sup>73</sup> Notable though, that in Georgia, Idaho, Indiana, Kansas, and Tennessee the possession of alcohol was prohibited even for personal use.<sup>74</sup>

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<sup>68</sup> 18<sup>th</sup> Amendment to the Constitution of the United States of America (18<sup>th</sup> Amendment), Section 1.

<sup>69</sup> National Prohibition Act, 41 Stat. 305 (1919). Also known as Volstead Act after Andrew Volstead, a Republican politician proposing the legislation.

<sup>70</sup> Volstead Act, Section 3.

<sup>71</sup> Volstead Act, Section 1.

<sup>72</sup> Volstead Act, Section 33.

<sup>73</sup> Richard J. BONNIE and Charles H. WHITEBREAD, *The Marihuana Conviction: A History of Marihuana Prohibition in the United States*; Lindesmith Center, 1999, p.25.

<sup>74</sup> Whitebread, p. 238.

### 3.2.3. Failure of Prohibition

The main reason for the unsuccessful story of the Prohibition Era is the "Iron Law of Prohibition,"<sup>75</sup> according to which the more intense the enforcement of prohibition is, the more potent the prohibited alcohol will be. In other words, prohibition made alcohol a more desired commodity. There was an increase in demand for alcohol in three groups.<sup>76</sup> Youngsters found it adventurous to drink and consumed alcohol even earlier than would have done if it was legal above a certain age. Several non-drinkers were caught by the effective marketing of moonshines and illegal speakeasies. Finally, most of the immigrants, and former drinkers were increasing their alcohol consumption as a protest to dry laws. Because of the Iron Law of Prohibition, in the long run there was no substantial decrease in the consumption of alcohol; nevertheless the cost of enforcing the ineffective prohibition legislation was increasing.

Besides the Iron Law of Prohibition, there were three other factors fatally weakening the legal efficiency of dry laws. The first of such factors was that the potency of alcoholic beverages rose after prohibition had been effectuated. This was due to the fact that because of prohibition, the legislator abstained from using all hard- and soft measures of regulation except for total prohibition. Because of the illegality of alcohol, there were no production standards regulating the potency and quality of alcoholic beverages. Such consequence could be measured by the sharp increase of death rate due to poisoned alcoholic drinks during prohibition.<sup>77</sup> The second factor weakening the legal efficiency of dry laws was the loss of control by the authorities on drinking. As the only tool in the hand of the regulator was punishment, it could not regulate for

<sup>75</sup> Richard COWAN, How the Narcs Created Crack, National Review, 5 December 1986, pp. 30-31.

<sup>76</sup> Mark THORNTON, Alcohol Prohibition Was a Failure, Cato Policy Analysis No. 157, 17 July 1991, at <http://www.cato.org/pubs/pas/pa-157.html> (last visited, 31 March 2007).

<sup>77</sup> Thomas M. COFFEY, The Long Thirst: Prohibition in America, 1920-1933; New York, W.W. Norton and Co., 1975, pp. 196-98.

example the location of drinking establishments or drinking habits. It follows that illegal speakeasies were established almost everywhere including formerly dry areas or the neighborhoods of churches, and schools.<sup>78</sup> The third factor was the increase of consumption of legitimate alcohol, i.e. drinking alcohol and referring to the exceptions under the Volstead Act. According to a survey in 1932, the sale of medicinal alcohol increased by 400% between 1923 and 1931.<sup>79</sup>

In connection with the economic efficiency of prohibition hereby I would only like to note the tremendous costs of prohibition. Due to prohibition the price of alcohol was dramatically increased, but the demand did not decrease at the same time. It follows that the alcohol market has changed significantly. At the supply side we may find organized crime, whereas on the demand side we may find wealthy people from the middle or upper classes of the society. Prohibition on the one hand raised the price of alcohol, by giving the control of the market to racketeers, while on the other hand directed the demand side towards consumers with more wealth. Enforcement focused primarily on the supply side of the illegal market, ignoring the basic economic reality that as long as demand remains constant a decrease in supply will only drive up the price. While legislation may influence the price of the illegal good, it rarely affects the conscience of the customer seeking to purchase it.<sup>80</sup> Members of the middle and upper classes spent an additional 1 billion dollar on alcohol per year during the prohibition.<sup>81</sup> Prohibition caused an estimated loss of 1.25 billion dollars in annual tax revenues for the federal government; besides, the enforcement of the dry laws cost more than 2 billion dollars annually for the federal

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<sup>78</sup> Thornton, p. 71.

<sup>79</sup> Clark Warburton, *The Economic Results of Prohibition* (PHD); New York, Columbia University Press, 1932, p. 222.

<sup>80</sup> Whitebread, p. 240.

<sup>81</sup> Warburton, p. 262.

government.<sup>82</sup> In total, the costs of prohibition amounted to 4.25 billion dollars per year that is 55.25 billion dollars for the whole Prohibition Era. Spending 55.25 billion dollars on a regulation without any significant results, benefits are clearly not economically efficient.

The prohibition failed both in terms of economic and legal efficiency. As the idea was to ban and criminalize a commodity, alcohol consumed traditionally, and accepted in the society in general, the enforcement of the laws by itself raised criminality rates tremendously. "Alcohol prohibition criminalized an activity that many citizens did not regard as criminal."<sup>83</sup> Further, enforcing laws that are not welcomed by the majority of the society has huge costs. However, the efficiency of the legal system requires in all circumstances the enforcement of any single piece of legislation. Here, the legal and the economic efficiency of the regulation diverges. In other words, in the case of prohibition the maintenance of legal efficiency was not economically efficient. Economically not efficient regulation might be made and even enforced for a period, but can not last for long. Thirteen years between 1920 and 1933 obviously qualifies as a term long enough concerning economic efficiency.

With regards to the above stated it is not surprising, that in the fragile economic situation after the collapse of the world market, the new president Franklin Delano Roosevelt, putting great emphasis on economic stability could not afford to finance a clearly ineffective, nevertheless incredibly expensive endeavor as the prohibition. Therefore the strongest reason for repeal of the 18<sup>th</sup> Amendment was economic.<sup>84</sup> Due to the changed political and economical climate, the 21st

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<sup>82</sup> Warburton, pp. 259-263.

<sup>83</sup> Whitebread, p. 240.

<sup>84</sup> Norman H. CLARK, *Deliver Us From Evil: An Interpretation of American Prohibition*; New York: WW Norton and Co., 1976, p. 200.

Amendment could be initiated in the Congress with the promise of success. The 21<sup>st</sup> Amendment entered into force in 1 December 1933, signaling the end of the "pathetic story of alcohol prohibition"<sup>85</sup> in the United States. According to the first section of the Amendment, the 18<sup>th</sup> Amendment has been repealed.<sup>86</sup> It shall be noted that despite the fact that prohibition has ended on the federal level with the ratification of the 21<sup>st</sup> Amendment, the second section<sup>87</sup> of the Amendment has opened a door for dry laws on the state and local level.<sup>88</sup> However, the evaluation of such local legislation and also the interpretational controversies over the 21<sup>st</sup> Amendment<sup>89</sup> fall out of the scope of the present thesis therefore, will not be examined here.

### 3.3. Sweden

*"...have therefore formed a company which, without taking into account its own profit or advantage, shall assume the right to operate public houses in Falun, (...) to ensure that immoderate drinking is restrained, rather than encouraged, to ensure that schnapps is never sold on credit or account, and never to under-age or already intoxicated persons, and to ensure compliance with statutes and decrees, (...) to allocate the profit that may arise from the operation of the public houses (...) to any establishment that is of benefit to the town or is of a charitable nature. This is the purpose of the company."*

*/Statute of the first alcohol monopoly in Falun, Sweden/<sup>90</sup>*

The goal of Swedish alcohol policy is to reduce the medical and social damage caused by alcohol, by promoting a healthy drinking culture. The Swedish system of alcohol regulation is the

<sup>85</sup> Whitebread, p. 237.

<sup>86</sup> 21st Amendment to the Constitution of the United States of America.

<sup>87</sup> "The transportation or importation into any State, Territory, or possession of the United States for delivery or use there in of intoxicating liquors, in violation of the laws thereof, is hereby prohibited." [21<sup>st</sup> Amendment to the Constitution of the United States of America, Section 2.]

<sup>88</sup> Marcia YABLON, The Prohibition Hangover: Why We are Still Feeling the Effects of Prohibition, Virginia Journal of Social Policy and the Law, Spring 2006, p. 553.

<sup>89</sup> See: Board of Equalization of California v. Young's Market [299 U.S. 59 (1936)]; Hostetter v. Idlewild Bon Voyage Liquor Corp. [377 U.S. 324 (1964)]; California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc. [445 U.S. 97 (1980)]; Bacchus Imports Ltd. v. Dias [468 U.S. 263 (1984)]; Capital Cities Cable, Inc. v. Crisp [467 U.S. 691 (1984)] Granholm v. Heald [544 U.S. 460 (2005)]. For a general analysis on the case law and interpretation of the 21st Amendment see also: Foust, pp. 661-672 and 678-689.

<sup>90</sup> Annual Report of Systembolaget, 2005, p.4, [http://www.systembolaget.se/NR/rdonlyres/519ECCF4-6A29-422B-80DF-8FCA5B3E4BF3/0/arsberattelse\\_2005\\_eng.pdf](http://www.systembolaget.se/NR/rdonlyres/519ECCF4-6A29-422B-80DF-8FCA5B3E4BF3/0/arsberattelse_2005_eng.pdf) (last visited, 31 March 2007), p.10.

prime example of the modern temperance model. Sweden has a rather sophisticated set of regulation concerning alcohol consumption, trade and manufacturing. This system operates with all types of hard measures except for total prohibition. The dominant measure of alcohol regulation is the maintenance of state monopoly over the trade of alcohol in Sweden. However, we may find examples for retail restrictions – e.g. no alcohol can be sold to persons under the age of 20 –, state standards – Systembolaget is obliged to check the quality of alcohol – and taxation – one of the highest rates of excise taxation on alcohol. In principles, alcoholic beverages might freely be enjoyed in Sweden, once someone manages to obtain alcohol. And this is far more complicated than in countries applying the liberal model, and also at some extents it is even more complicated than it was to purchase alcohol during the Prohibition Era in the United States.<sup>91</sup> The Swedish system aims to regulate the trade of alcohol instead of regulating the consumption. This feature makes it similar to the system of the prohibition in the USA. However, the Swedish system differs in two extents from the prohibition model. First and foremost it is only regulating and not prohibiting the trade of alcohol, and secondly the Swedish system is more efficient than the prohibition in the USA. Perhaps the less is more when it comes to prohibition versus regulation. In order to be able to verify such early conclusions, in the followings I will describe the evolution and functioning of the Swedish modern temperance model, than will confront it with the statistics in Chapter 4.

### 3.3.1. History

The first monopoly on alcohol was formed by ore-miners living in a small town, Falun, located north-west to Stockholm in 1850. The idea was to let the small community build a system of self-

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<sup>91</sup> According to surveys during the Prohibition Era people felt that "there were 10 times more places one could get a drink during Prohibition than there had been before." Warburton, p. 206.

control on alcohol consumption based on the principle that without the market forces (i.e. the profit maximizing interest), alcohol consumption will remain temperance. In other words, the new system aimed that alcohol should be sold by companies whose objective was to reduce the problems associated with alcohol consumption. In 1865, a similar company was established in Gothenburg, which served as a model for the sale of alcoholic drinks in Sweden, thus became a model of monopolized alcohol regulation structure inside and outside of Sweden. latter half of the 19<sup>th</sup> century saw the formation throughout Sweden of local companies which were given exclusive rights, within their respective municipalities, to operate outlets for the sale and serving of alcoholic drinks. In 1895 the Swedish parliament (Riksdag) adopted the first Alcohol Act (Alkohollagen), according to which companies licensed to sell alcohol (i.e. local monopolies) should operate “in the interests of decency”<sup>92</sup> instead of striving for profit.

In the course of the evolution of the state-wide monopoly on alcohol first the monopoly was extended to the more harmful alcoholic beverages. First, local monopolies covered the retail market of schnapps, and then in 1905 the sale of vodka was only allowed to several licensed companies. In 1917, Vin & Spiritcentralen AB, a newly established company had the exclusive right to exercise wholesale activities of alcoholic beverages. At the time when the prohibition was just about to be launched in the United States, there was a referendum in Sweden on the topic. In 1922, Swedish people rejected the idea of the total prohibition by some 36,000 votes. Although the majority against prohibition was very small, the question of prohibition was never again at stake. Finally in 1955 the current form of monopoly on alcohol has been formed by the establishment of Systembolaget Aktienbolaget (Systembolaget AB). The Systembolaget is a state-owned company, exercising total control on the alcohol market of Sweden and comprised of

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<sup>92</sup> Swedish Alcohol Act (1895).

a chain of stores licensed to sell alcoholic beverages. In 1955, on the one hand all regional monopolies were merged into the Systembolaget system and on the other hand the monopoly of Systembolaget has been extended to all kinds of alcoholic beverages. At this time there were two monopolies lying vertically on the Swedish alcohol market. The wholesale activities were covered by Vin & Spiritcentralen AB, whereas the retail market was monopolized by Systembolaget AB. In other words, the control of the Swedish alcohol market was fully hands of the government and of the Riksdag.

### 3.3.2. Functioning of the Monopoly

The Law on Alcohol<sup>93</sup> is the main source of the Swedish alcohol legislation. It entered into force on January 1, 1995 as part of a comprehensive reform of that legislation and replaced the Laws on the Production of<sup>94</sup> and Trade in Beverages<sup>95</sup>. The Law on Alcohol is supplemented by the Decree on Alcohol<sup>96</sup>. The relationship between the Swedish State and Systembolaget AB as well as detailed provisions regarding the activities of the latter are involved in an agreement.<sup>97</sup>

According to these laws, the basic aim of the maintenance of the monopoly on alcohol has not been changed since the establishment of the first local alcohol monopoly in Falun. This social mandate is to “promote a healthy drinking culture.”<sup>98</sup> The promotion of a healthy drinking culture means in other words, that alcoholic beverages can only be sold in a way that prevents the harm

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<sup>93</sup> Alkohollag (1994:1738).

<sup>94</sup> Lagen (1977:292) om tillverkning av drycker.

<sup>95</sup> Lagen (1977:293) om handel med drycker.

<sup>96</sup> Alkoholförordning (1994:2046).

<sup>97</sup> Avtal mellan Systembolaget och staten (2001:852).

<sup>98</sup> About Systembolaget, [http://www.systembolaget.se/NR/rdonlyres/8C39020E-492A-47A1-B578-021AF5833CD6/0/foretagspres\\_03\\_eng.pdf](http://www.systembolaget.se/NR/rdonlyres/8C39020E-492A-47A1-B578-021AF5833CD6/0/foretagspres_03_eng.pdf) (last visited, 31 March 2007), p. 19.



they can cause.<sup>99</sup> In order to achieve such solemn goal, the monopoly lays on two basic cornerstones, such as the various retail restrictions, the not-for-profit motive.

Prime example for the retail restrictions is that no one may buy alcohol being younger than twenty years old, or being already intoxicated.<sup>100</sup> Similarly, Systembolagets are not entitled to sell alcohol, if the resale of alcohol is likely to happen. The enforcement of these restrictions is taken very seriously in Sweden, unlike it was indicated in the liberal model through the example of Hungary. For example 89% of the purchasers in the Systembolagets were asked to verify their age in 2005.<sup>101</sup>

The second cornerstone of the monopoly is the not-for-profit motive principle. This element of the alcohol regulation system necessitates the maintenance of the monopoly, and the total elimination of the free competition on the alcohol market. The idea behind is that alcohol related problems will be reduced if alcohol is sold in the absence of private-profit motive.<sup>102</sup> This principles means that alcohol has no active marketing Sweden, Systembolaget may not try to boost up sales – with for example discounts like ”pay for two, take three” – and the sale of alcohol must always be brand-neutral. The reward of the non-profit motive is the monopoly granted for the Systembolaget. Because the Systembolaget does not have to bother with the competitors it can focus on the quality of its service. It is an important feature of the system that the same service shall be available in every part of Sweden. Currently there are 411 stores, 560

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<sup>99</sup> Annual Report of Systembolaget, 2005, p. 6.

<sup>100</sup> Alkohollagen, Chapter 3, Section 8.

<sup>101</sup> Annual Report of Systembolaget, p. 2.

<sup>102</sup> Annual Report of Systembolaget, p. 9.

local agents covering whole Sweden.<sup>103</sup> In each store there must be at least a variety of 400 different drinks stored.<sup>104</sup> In case, the desired alcoholic beverage is not in the stock it can be ordered and will be delivered any part of Sweden in the next day.<sup>105</sup> Despite the shining data, the monopolistic situation has its backfalls too. Although in principle the not-for-profit motive sounds astonishing, in reality the statement of the Board of Directors of the Systembolaget seems to undermine the not-for-profit idea, according to which "the operation shall be profitable, shall generate the scope for corporate development and renewal."<sup>106</sup> According to the figures, the Systembolaget has larger profit than a retail company would be able to achieve in a competitive market environment. Such figures show, that the net profit of the company has almost doubled between 2004 and 2005,<sup>107</sup> and the dividends paid after shares were always more than planned.<sup>108</sup> Besides, the amount of the profit, it is more important, that such profit is guaranteed by the state by maintaining the monopoly. In sum, though the not-for-profit principle might have some inherent beneficial effects, though taking into account the larger pictures, these beneficial effects are overpaid by alcohol consumers in Sweden. In other words, there is an artificial cost allocation in the monopolized alcohol market in Sweden that seems to be inefficient, as prices are not governed by market rules.

### 3.3.3. Taxation

Besides the maintenance of monopoly, taxation is also a characteristic element of the Swedish modern temperance model. The taxation of alcoholic beverages and ethyl alcohol is laid down in

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<sup>103</sup> Annual Report of Systembolaget, 2005, p. 2.

<sup>104</sup> About Systembolaget, p. 8.

<sup>105</sup> About Systembolaget, p. 8.

<sup>106</sup> Annual Report of Systembolaget, p. 14.

<sup>107</sup> Annual Report of Systembolaget, p. 57. (for further data see, pp. 57-61).

<sup>108</sup> Annual Report of Systembolaget, p. 39.

the Law on Alcohol Tax,<sup>109</sup> which is supplemented by the Decree on Alcohol Tax.<sup>110</sup> The level of taxes calculated in the price of alcoholic beverages is substantially higher than in countries applying the liberal model. The taxation of alcoholic products in Sweden depends on the type and the alcohol content of the particular alcoholic beverage. The average level of revenue tax in the price alcoholic drinks is around 50%, which may be much higher concerning spirits.<sup>111</sup> Such high level of taxation serves the goal to treat alcohol as a commodity not so easy to obtain.

### 3.3.4. Systembolaget in the EU

According to the European Court of Justice, the goods produced in any of the member states shall be accepted in the market of any other member state without any restriction.<sup>112</sup> Hence, in the early 1990's, when Sweden first considered joining the European Union, it was impossible to harmonize the monopolistic alcohol market with the precious four freedoms<sup>113</sup> of the European Union. Therefore, a compromise was made, according to which the European Union decided to accept the retail market monopoly of Systembolaget AB, so long as the alcoholic beverages produced in any of the member states have the same chance to be bought in Sweden as alcoholic drinks produced in Sweden. In other words, the European Commission tolerates the Swedish alcohol monopoly on alcohol, until it does not threaten the free competition of the European market. The other side of the compromise was that Sweden on the one hand, by winding up Vin & Spiritcentralen AB, must demolish the monopoly on the wholesale market of alcoholic beverages. On the other hand, Sweden must ensure that the remaining monopoly on the retail market of alcoholic products will not be discriminatory. Sweden must also ensure that an

<sup>109</sup> Lag om alkoholskatt (1994:1564).

<sup>110</sup> Förordning (1994:1614) om alkoholskatt.

<sup>111</sup> Lag om alkoholskatt 1994:1564. See also, Annual Report of Systembolaget, 2005, p. 37.

<sup>112</sup> Cassis de Dijon C-120/78.

<sup>113</sup> Freedom of capital, services, goods, persons.

independent authority<sup>114</sup> and the Swedish Competition Authority could effectively monitor the functioning of the alcohol monopoly. It follows that since 1997, Systembolaget is entitled to acquire, purchase alcoholic beverages from almost any suppliers in the European Union.

Despite the compromise made in 1993, the Swedish monopoly faces heavy challenges in the EU, due to the fact that it is not compatible with the EU law based on the freedom of competition in the European market. Currently there are two potential dangers coming from the EU threatening the alcohol monopoly in Sweden. The first is the Service Directive (Bolkenstein Directive).<sup>115</sup> According to the original version of this directive crossborder services shall be subject to regulation in the country of origin, and may not be hindered or controlled by the recipient country's authorities. This rule could have caused a mortal wound on the monopolistic position of the Systembolaget in the Swedish alcohol market. However the rules regulating distance trade were left out from the Service Directive in the very last moment, *inter alia* due to the protest of Sweden. Nevertheless, it seems likely that the question of distance trading would arise again in the near future.

The second threat to the Swedish alcohol monopoly is coming from Luxembourg. The European Court of Justice was dealing with the issue of Systembolaget several times. In Franzén,<sup>116</sup> the ECJ reviewed the retail monopoly system, and declared it compatible with the EU law. However, the Court emphasized that such monopolies can be maintained only if not having any discriminatory effects on the relevant market.<sup>117</sup> Subsequently, in Apoteket AB case<sup>118</sup> the ECJ

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<sup>114</sup> Alcohol Assortment Board; see, Förordning (1994:2048) med instruktion för Alkoholsortimentsnämnden.

<sup>115</sup> 2006/123/EC Directive.

<sup>116</sup> Franzén case, C-189/95.

<sup>117</sup> *idem*, par. 38.

upheld the Franzén decision when having examined the pharmaceutical monopoly in Sweden. In *Gourmet International* case<sup>119</sup> the ECJ examined the compatibility of the Swedish Alcohol Advertising Act<sup>120</sup> with EU law. According to this act alcoholic beverages may not be advertised. According to the ECJ, the ban on advertisement is acceptable only if the protection of public health against the harmful effects of alcohol can not be ensured by other measures having less effect on intra-Community trade.<sup>121</sup> There are two more cases pending in front of the European Court of justice, concerning the review of the retail monopoly. In *Klas Rosengren and Others v. Riksåklagaren* the Advocate general proposes that the ban on private import of alcohol in Sweden is contrary to the provisions of EU law.<sup>122</sup> Finally in the most recent case,<sup>123</sup> pending in Luxembourg, the Commission itself has attacked the Swedish alcohol monopoly alleging that it is functioning discriminatory. Should the Commission convince the ECJ on the discriminatory nature of the Swedish monopoly, it would mean the dawn of the only functioning modern temperance model in the European Union.

### **3.4. Legal Efficiency Ranking**

After having described the legal regimes of the competing models concerning alcohol regulation, it is time now to create a ranking between them regarding legal efficiency. In this context legal efficiency means efficiency in accomplishing goals of the policy behind alcohol regulation.

Based upon both the alcohol policy and the legal framework aiming to reach the former's goals, the model of prohibition shall be the last concerning legal efficiency. As it was elaborated above

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<sup>118</sup> *Aklagaren v. Krister Hamer*, C-438/02.

<sup>119</sup> *Konsumertombudsmanen v. Gourmet International Products AB*, C-405/98.

<sup>120</sup> *Alkoholreklamlagen* (1999:143).

<sup>121</sup> *Konsumertombudsmanen v. Gourmet International Products AB*, par. 33.

<sup>122</sup> *Klas Rosengren and Others v. Riksåklagaren*, C-170/2004, par. 86.

<sup>123</sup> *Commission v. Sweden*, C-167/05.

the ultimate aim of the alcohol policy in the United States in the early 20<sup>th</sup> century was to abolish all forms of alcohol consumption. This policy was so strong that it had been manifested in the highest level of legal norms, as an amendment to the constitution. Despite of the strong legal framework, the dry laws were not possible to be enforced. Besides, the prohibition increased social problems linked to alcohol consumption.

Turning now to the two other 'competitors', the ranking seems rather difficult to make. The reason for this is that both the liberal and the modern temperance model are functioning models, in other words both of them is capable to reach goals formulated by the different alcohol policies. However, limiting the present evaluation strictly on legal efficiency the second place shall entitle the modern temperance model. Though the Swedish system has several advantages, however the costs of these beneficial effects seem to exceed their value. In other words, because of the artificial distortion of market processes, the modern temperance model seems not to be efficient. Besides the Swedish model is now facing great challenges in the European Union, which challenges are threatening its existence, questioning the compatibility of the legal framework with the laws of the Union. The history of Systembolaget and the Swedish alcohol monopoly is not over. The compromise made in 1994 between Sweden and the European Union is shaking nowadays, therefore I believe that major changes are to happen. The recently launched campaign in Sweden aiming to save the Systembolaget strengthens this assumption.<sup>124</sup> For all these reasons I believe that the though the Swedish model is successful in enforcing the alcohol policy behind it, however it accomplishes such goal in a way that is questionable from the perspective of both the market and the European Union.

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<sup>124</sup> See the letter to José Manuel Barroso, the president of the European Commission (Financial Times, 22 November 2005), as well as a campaign film on Systembolagets: <http://www.dearmrb.se/> (last visited, 31 March 2007).

Finally, the 'winner of the legal efficiency competition' is the liberal model and hence Hungary. It shall be noted though that this 'success' is more attributable to the rather limited alcohol policy than to the extremely efficient solutions in the legal framework. In other words, the Hungarian legal regime does not face difficult challenges when enforcing the alcohol policy, as the state is not interested in alcohol, and it intervenes only if harm due to alcohol has already caused to the society. Therefore, the dominant regulatory measures are of administrative nature. There is some emphasis on prevention and treatment of alcoholics, albeit this does not the dominating character of this particular system. There are only a few criminal law measures, all of which are dealing with abusive and alcohol consumption and related harmful conducts. The tax rate on alcohol is not high, and there are no substantial restrictions on the retail of alcohol. Therefore, alcohol is an easily accessible commodity in Hungary.

Concerning legal efficiency the ranking is the following: the most efficient is the liberal model, the second is the modern temperance model, and the third one is the model of prohibition. Both the liberal and modern temperance model seem to be workable at first glance, however it shall be noted that the real costs of alcohol consumption and related problems are not necessarily linked to regulation but rather to several social problems due to alcohol. Therefore, the final judgment on the efficiency of the liberal, prohibition and modern temperance model will be made in the upcoming chapter upon knowledge of certain statistics concerning alcohol consumption.

## CHAPTER 4 –CONFRONTING REGULATION WITH STATISTICS

After having reviewed the legal, regulatory measures applied by the three main models dealing with alcohol and alcohol related problems, it is time to check which model operates the most efficient way. The real advantages and disadvantages of a certain model may only be measured if confronted with the statistics concerning alcohol consumption and alcohol related problems, such as crime and health controversies.

There are certain indicators guiding us to judge whether a particular model dealing with alcohol is operating efficiently or not. In the followings I recommend to limit the examination of such indicators to three. Perhaps the most important of these indicators is the level of alcohol consumption. This data is extremely important in jurisdictions applying either the model of prohibition or the modern temperance model. In the liberal model level of alcohol consumption is not very much indicative concerning the functioning of the system, as the liberal model does not necessarily aim to influence the level of alcohol consumption. The second indicator, I suggest to have a closer look at is the effect of alcohol consumption on the general health of the population. Much of the social costs of alcohol are due to illnesses caused by alcohol consumption. Such illnesses (e.g.: cirrhosis, mouth cancer) make people dependent on the society instead of producing wealth therefore increasing the expenses of the whole society. The last indicator to be examined is the effect of alcohol on crime. Alcohol is often associated with crime, typically violent crime. Criminal activities are increasing social costs in two ways. On the one hand criminal activities are taking away certain parts of the 'common-wealth' from the society, whereas on the other hand they invoke the expensive maintenance of law enforcement



institutions, such as the police, courts, prosecutors, and jails. An efficient model of alcohol policy must be able to handle the challenges of alcohol related crime.

It shall be noted that the highest social costs of alcohol consumption and related activities are often due to productivity costs. Productivity costs consist of resources not produced because of alcohol, as they are typically results of decreased working capacity.<sup>125</sup> There might be several reasons for such decrease in working capacity in relation with alcohol consumption, like premature mortality, early retirement, absence from work, increase in unemployment, etc. Such factors would be important elements of a full cost-benefit analysis of alcohol regulations. Nevertheless, I will not deal with the monetarisation of them in the followings, as it is not necessary for the aims of this chapter. The aim of this chapter is to measure the economic efficiency of the above described alcohol regulation models, and this task could be accomplished even without the further examination of productivity costs, due to the fact that all such costs are derivatives of the three main indicators which will be further elaborated. Therefore, on the one hand, the economic analysis below will be indicative regarding the comparison of the three different models in economic efficiency, however, on the other hand, will not be exhaustive regarding the particular social costs of alcohol.

#### **4.1. USA**

As it was indicated in the previous Chapter,<sup>126</sup> the prohibition as a model failed in the United States. The question arises here, whether this failure was due to the concrete circumstances at the time between 1920 and 1933, or due to the misguided model itself. At this point I believe that, it

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<sup>125</sup> Pia JOHANSSON – Johann JARL – Antoninna ERIKSSON (and others), *The Social Costs of Alcohol in Sweden*; Forskningsrapport No. 36, SoRAD, Stockholm, 2002., p. 10.

<sup>126</sup> See, Section 3.2.3.

is not a risky hypothesis to draw, that the prohibition model offers neither economically, nor legally an efficient model to alcohol related problems. Measures suggested by moral legislation often are often blind to the concrete circumstances, and therefore are highly likely to be misleading.<sup>127</sup>

Based on a very simple cost-benefit analysis it was shown in the previous Chapter that the maintenance of the prohibition was not economically efficient. This was true even though not all costs of prohibition were involved in the equation in Chapter 2. Besides the direct expenses of the federal government to enforce the dry laws, and even besides the loss of huge amount of potential tax revenues on alcohol, the prohibition had other costs too, being more difficult to calculate in money. These costs are the social costs, such as the increasing crime. On the other hand, the propaganda of the prohibition stated that despite of the tremendous amount of costs, the benefits will much worth the expenses.

*„The reign of tears is over. The slums will soon be a memory. We will turn our prisons into factories and our jails into storehouses and corncribs. Men will walk upright now, women will smile and children will laugh. Hell will be forever for rent.“<sup>128</sup>*

Unfortunately, figures show that exactly the opposite happened as it was expected by optimistic proponents of prohibition. In other words, the costs of the prohibition were much higher than the benefits.

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<sup>127</sup> Whitebread, p. 236-237.

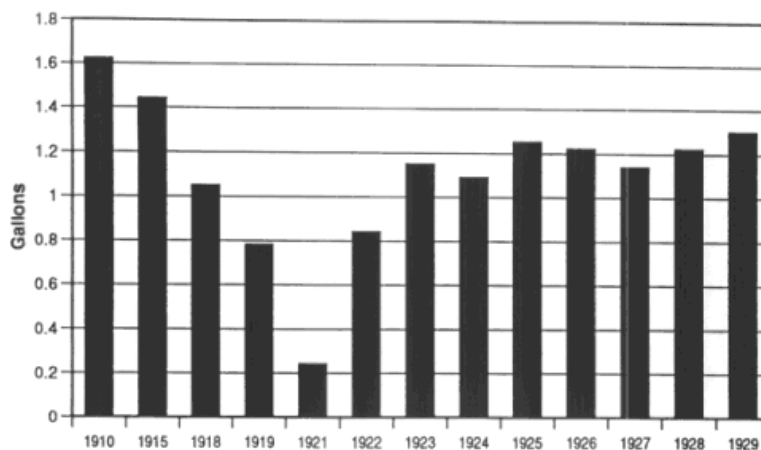
<sup>128</sup> Reverend Billy Sunday, Quoted by Michael WOODIWISS, Crimes, Crusades and Corruption: Prohibitions in the United States, 1900-1987; London, Pinter Publishers, 1988, p. 6.

#### 4.1.1. Level of Alcohol Consumption

Perhaps the best indicator of the failure, ineffectiveness of the 18<sup>th</sup> Amendment and the Volstead Act is the level of alcohol consumption during the Prohibition Era, compared to the level before and after prohibition. It can be seen on Table 1, that though there was a sharp decline in the alcohol consumption in the USA right after the effectuating of dry laws, however merely two years were enough time for the level of alcohol consumption to reach and even bypass the level of 1919, the last year before prohibition. First, it is interesting to recognize that the prohibition was initiated in an era, when the alcohol consumption was in a decreasing progress. Cynically, it might be stated that instead of stopping alcohol consumption, the prohibition reversed the decreasing trend of alcohol consumption.

**Table 1**<sup>129</sup>

Per Capita Consumption of Alcoholic Beverages (Gallons of Pure Alcohol) 1910-1929.  
(1 gallon = 3.7854 liters)



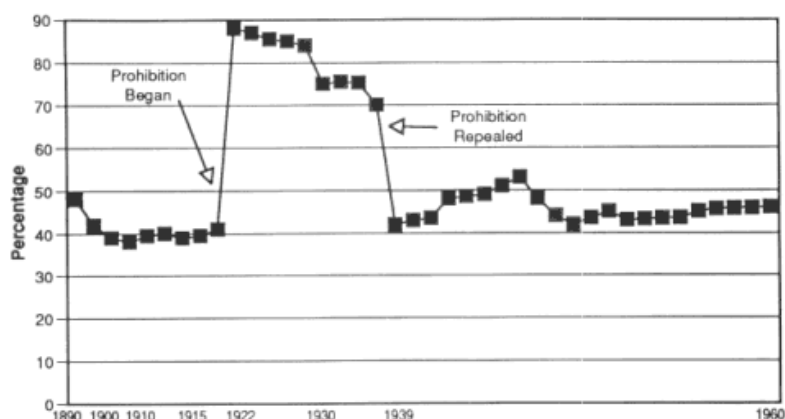
Besides the increasing level of alcohol consumption, Table 2 shows the percentage of expenditure on spirits compared to the total amount spent on alcohol in the period between 1890 and 1960. The sharp increasing – from 41% to 89% – at the time of launching the prohibition and inversely the steep decreasing – from 85% to 70%, and subsequently to 42% – are both

<sup>129</sup> Warburton, pp. 23-26, 72.

shocking. These figures underpin the above mentioned feature of the Prohibition Era, namely that drinking habits had changed, and the demand for stronger alcoholic beverages was rising seriously. The reason is simple, due to the criminalization, the risk of purchasing, obtaining alcoholic beverages increased, therefore it did not worth to risk criminal sanction for the pleasure of lighter alcoholic drinks. The increasing level of alcohol consumption combined with such change in the drinking habits indicates that one of the main consequences of prohibition was that people in general drank more dangerous substances at a level exceeding the level of pre-prohibition years.

**Table 2<sup>130</sup>**

Total Expenditure on Distilled Spirits as a Percentage of Total Alcohol Sales (1890-1960)



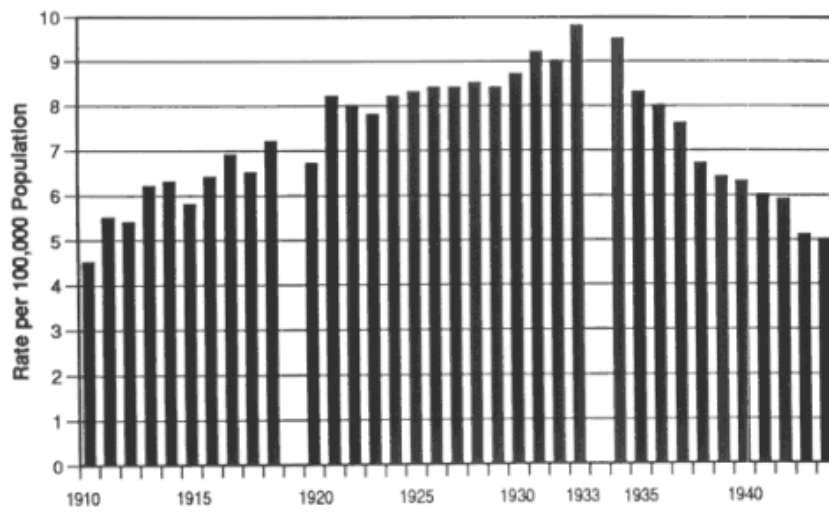
#### 4.1.2. Alcohol and Crime

The proponents of prohibition expected – as the quotation above illustrates – that almost all forms of crime will simply disappear, and there will be no need for prisons at all, once prohibition will be effectuated. This expectation was due to the wrong belief that most of the crime is attributable to alcohol. Unfortunately, the opposite happened. The prohibition on the one

<sup>130</sup> Clark WARBURTON, *Beverage Industry, Facts about the Licensed Beverage Industry*; New York, LBI, 1961, pp. 54-55.

hand criminalized the average people drinking alcohol, and on the other made it very profitable for real criminals to smuggle and trade with alcohol. Prohibition is often blamed for the upraise of organized crime in the United States.<sup>131</sup> Parallel with the development of organized crime, other forms of crime– especially violent crime – were strengthening during the Prohibition Era (Table 3). It is again interesting to recognize, that by the repeal of the dry laws homicide rate – as an indicator of violent crime – soon started to decrease substantially.

**Table 3<sup>132</sup>**  
Homicide Rate in the United States of America (1910-1944)



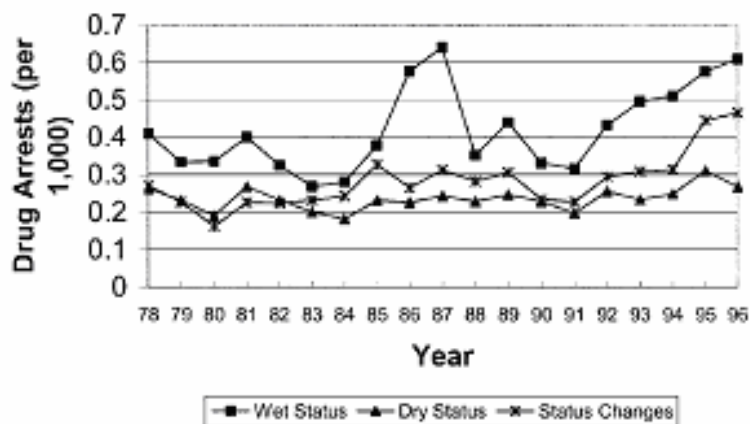
Although the data in Table 4 are more recent than the Prohibition Era, however they demonstrate clearly that people tend to switch to more dangerous substances should alcohol be prohibited. According to these figures, the rate of arrests for drug abuse is approximately 20% higher in 'dry' territories than in 'wet' ones.

<sup>131</sup> Whitebread, p. 239. See also, Sinclair, p. 220-41.

<sup>132</sup> U.S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970; Washington, Government Printing Office, 1975, part 1, p. 414.

**Table 4**<sup>133</sup>

Trends in drug arrests by local alcohol policy



#### 4.1.3. Alcohol and Health

Alcohol consumption is the main cause of cirrhosis of the liver,<sup>134</sup> therefore rate of cirrhosis in a society is often used to measure the impact of alcohol consumption on the state of health of the society. Table 5 shows the death rate of cirrhosis in the United States in the first half of the 20<sup>th</sup> century. According to the data, it seems that the prohibition has at least one positive result, namely the significant decline in the death rate of cirrhosis. There are however several facts shading the picture. First, though there was a decline in the cirrhosis death rate after the beginning of the Prohibition Era, however there is no significant reversal after the repeal of the 18<sup>th</sup> Amendment. Second, the death rate from cirrhosis bottomed just before the start of the prohibition. Later, the cirrhosis death rate started slowly to increase again probably due to the increased alcohol consumption during prohibition as well as the consumption of more potent alcoholic beverages.<sup>135</sup> Also it shall be noted that although there is positive correlation between cirrhosis death rate and alcohol consumption, such correlation is not instant. In other words,

<sup>133</sup> Michael CONLIN – Stacey DICKERT-CONLIN – John PEPPER, The Effect of Alcohol Prohibition on Illicit-Drug-Related Crimes; *Journal of Law and Economics*, vol. 48., April 2005, p.221.

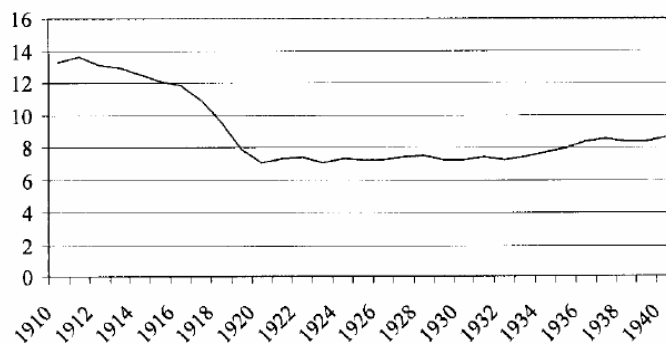
<sup>134</sup> Robert BERKOW (ed.), *The Merck Manual*; Rahway, Merck, N.J., 1992, p. 890-897.

<sup>135</sup> Thornton, p. 71.

several years of heavy drinking must be passed until cirrhosis develops and leads to death. It follows that the positive result of the prohibition on cirrhosis death rate (if any) could be examined earliest from the data in the mid 1920's. However, the figures demonstrate that there was no decline in the cirrhosis death rate at that time, instead a steady growth was recorded in the figures. All these suggest that the reason of the decline of cirrhosis death rate might be the decrease of alcohol consumption in the 1910's instead of the launching of the prohibition in 1920.

**Table 5<sup>136</sup>**

Cirrhosis death rate in the United States of America, per 100,000 people (1910-1940)



#### **4.2. Sweden and Hungary**

Based on the examination of the measures used by both the liberal and modern temperance model, it seems to be that both models are workable solutions for the treatment of alcohol in the society. Both models offer a system where alcohol consumption, manufacture, retail and wholesale trade is permitted. The bottom-line of the differences between the two approaches is that while on the one hand, the liberal model regulates only the deviant forms of alcohol consumption and related conducts, on the other hand, the modern temperance model tries to

<sup>136</sup> Angela K. DILLS, Alcohol Prohibition and Cirrhosis; American Law and Economics Review, Autumn 2004, p. 299.

intervene earlier and focuses on the prevention of abusive drinking and alcohol related harms. In other words, the liberal model, on the one hand, leaves the "regulation" of alcohol to the "invisible hand of the market"<sup>137</sup> and ensures free competition thereon, while on the other hand uses regulatory power to treat the negative consequences of alcohol consumption once they have occurred. In contrast, the modern temperance model does not trust the market. Instead it tries to regulate the market and treat unwanted consequences of alcohol consumption even before they may occur. As both models are manageable, the real question is, whether the liberal or the modern temperance model is the more effective both economically and legally. The hypothesis that shall be drawn from most law and economics studies is that the liberal model shall be more effective economically, as the self regulation of the market shall lead to the most efficient allocation of costs and benefits. "Markets work better than bureaucracy"<sup>138</sup> that creates regulation. Regulation may only be necessary in order to remedy market-failure, though it shall be born in mind always that regulation is never a costless tool.<sup>139</sup> It follows, that a cost-benefit analysis shall be made before deciding to intervene and distort market processes by regulation.

#### **4.2.1. Level of Alcohol Consumption**

According to a survey by the World Health Organization (WHO), the total recorded alcohol per capita consumption of pure alcohol (measured in the population older than 15 years old), in 2002 was 6.86 liters in Sweden and 11.92 liters in Hungary.<sup>140</sup> (See, Tables 6 and 7) Both levels are significantly higher than the average level of alcohol consumption globally (5.1 liters of pure alcohol per capita – Table 8). However, a better picture can be drawn if these figures are

<sup>137</sup> Adam SMITH, *The Wealth of Nation*; University of Chicago, 1976, vol. IV, ch. 2, p. 477.

<sup>138</sup> Cento VELJANOVSKI, *The Economics of Law*; The Institute of Economic Affairs, 1990, p. 85.

<sup>139</sup> Robert INNES, Enforcement costs, optimal sanctions, and the choice between ex-post liability and ex-ante regulation; *International Review of Law and Economics*, 2004, Vol. 24, pp. 38-40.

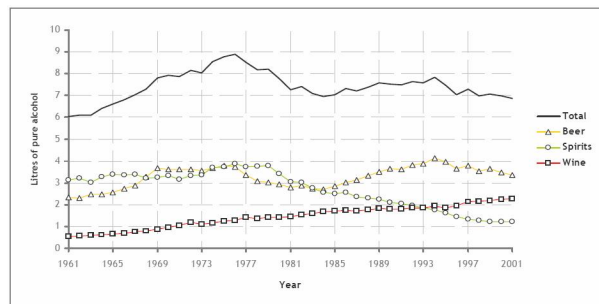
<sup>140</sup> FAO World Drink Trends 2003, In.: WHO Global Status Report on Alcohol 2004, [http://whqlibdoc.who.int/publications/2004/9241562722\\_\(425KB\).pdf](http://whqlibdoc.who.int/publications/2004/9241562722_(425KB).pdf) (last visited, 31 March 2007), p. 9.



compared to European statistics. The general alcohol consumption in the European population is 10.2 liters of alcohol per capita annually (Table 9). Such data suggests at first sight the efficiency of the modern temperance model in lowering significantly the level of alcohol consumption.

**Table 6**<sup>141</sup>

Level of Alcohol consumption in Sweden (1961-2001)



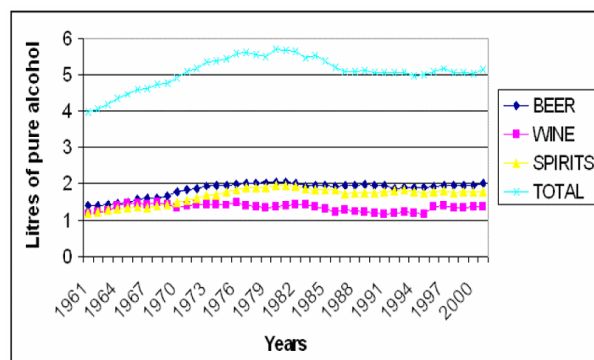
**Table 7**<sup>142</sup>

Level of Alcohol Consumption in Hungary (1961-2001)



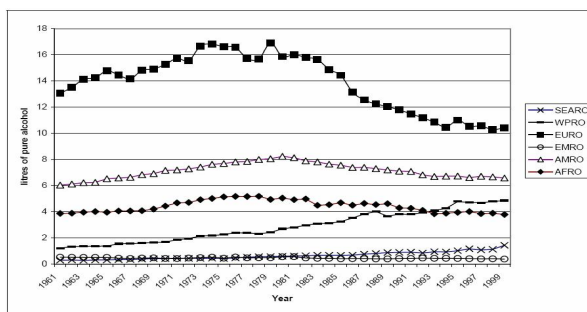
**Table 8**<sup>143</sup>

Global level of alcohol consumption (1961-2000).



**Table 9**<sup>144</sup>

Average level of alcohol consumption in the world by regions (1961-2000).<sup>145</sup>



The picture on the level of alcohol consumption in Sweden and Hungary is, however, not full yet, as the WHO figures measure only the recorded alcohol consumption. Due to the fact, that

<sup>141</sup> FAO World Drink Trends 2003, In.: Eurocare, country profiles, Sweden, at <http://www.eurocare.org/pdf/profiles/sweden.pdf> (last visited, 31 March 2007), p. 1.

<sup>142</sup> FAO World Drink Trends 2003, In.: Eurocare, country profiles, Sweden, at <http://www.eurocare.org/pdf/profiles/hungary.pdf> (last visited, 31 March 2007), p. 1.

<sup>143</sup> WHO Global Status Report on Alcohol 2004, p. 9.

<sup>144</sup> WHO Global Status Report on Alcohol 2004, p.10.

<sup>145</sup> EURO – European Region; SEARO – South-East Asian Region; WPRO – Western-Pacific Region; EMRO – Easter-Mediterranean Region; AMRO – American Region; AFRO – African Region.

alcoholic beverages are easily accessible in the liberal model, the recorded alcohol consumption level indicates more accurately the total alcohol consumption level. However, in the modern temperance model one must count on forms of illegal alcohol consumption, and also on drinking tourism,<sup>146</sup> both of which is difficult to measure. Estimated level of unrecorded alcohol consumption in Sweden was 3-3.5 liters of pure alcohol annually per capita of the population over 15 years.<sup>147</sup> Therefore, the total level of alcohol consumption in Sweden, according to the most recent data, is just around the European average, being 10.12 liters in 2005, and 9.66 liters in 2006.<sup>148</sup> It seems reasonable to assume, that unrecorded alcohol consumption must be lower in Hungary because of the significantly less restrictions on alcohol consumption due to the applied liberal model. Surprisingly, surveys suggest the opposite. Estimated unrecorded alcohol consumption in Hungary is around 4 liters annually, per capita of the population over 15 years.<sup>149</sup> It follows that average level of alcohol consumption in Hungary amounts to almost 16 liters annually, among people older than 15 years of age. This is almost 160% of the Swedish level of alcohol consumption. It shall be noted though that national surveys in Hungary regularly show lower levels of alcohol consumption than surveys convey by international organizations, such as the WHO, FAO or Eurocare.<sup>150</sup> In light of the above difference between the two jurisdictions it is

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<sup>146</sup> Systembolaget, <http://en.wikipedia.org/w/index.php?title=Systembolaget&oldid=109001502> (last visited, 31 March 2007).

<sup>147</sup> Alkoholkonsumtionen i Sverige under år 2006; Centrum for socialvetenskaplig alkohol- och drogforskning (SoRAD), 2007, [http://www.sorad.su.se/doc/uploads/alcohol\\_statistics/AlkoholkonsiSverigehelaret2006.pdf](http://www.sorad.su.se/doc/uploads/alcohol_statistics/AlkoholkonsiSverigehelaret2006.pdf) (last visited, 31 March 2007), p. 3.

<sup>148</sup> Idem.

<sup>149</sup> Alcohol per capita consumption, patterns of drinking and abstention worldwide after 1995; European Addiction Research, 2001, <http://content.karger.com/ProdukteDB/produkte.asp?Aktion=ShowPDF&ProduktNr=224233&Ausgabe=227135&ArtikelNr=50734> (last visited, 31 March 2007), p.156.

<sup>150</sup> For example, the Hungarian Central Statistical Office (KSH) estimates the level of alcohol consumption in Hungary 10.2 liters per year. In.: KSH Jelenti 2001/2, <http://portal.ksh.hu/pls/ksh/docs/hun/xftp/gyor/jel/jel20102.pdf> (last visited, 31 March 2007), p. 21.

interesting that despite of the higher level of alcohol consumption in Hungary proportionately there are more abstainers in Hungary than in Sweden.<sup>151</sup>

Taking into consideration the available data concerning the level of alcohol consumption in both Sweden and Hungary, it seems that the modern temperance model performs far more efficient in lowering alcohol consumption in the society. It is beyond any doubt that lower alcohol consumption rate is beneficial for the society, as it automatically lowers the social costs related to alcohol consumption and all problems in connection of alcohol. Without questioning the truth of the above stated, two qualifications shall be made. The first of such qualifications has been noted above, according to which judging the efficiency of the liberal and modern temperance model merely upon the level of alcohol consumption is certainly misleading. The reason is simple, the aims of the two models are different regarding alcohol consumption. Due to the fact that the modern temperance model focuses mainly on *ex-ante* regulation (i.e. restrictions on alcohol consumption), its influence on alcohol consumption level must be stronger. On the other hand, the liberal model focuses on mediating the harm caused by abusive alcohol consumption, therefore it operates mainly with *ex-post* regulation, not primarily concentrating on the lowering of alcohol consumption. According to the second qualification, helping to interpret the figures correctly, the level of alcohol consumption is not only be dependant on the applied model of alcohol policy. It is highly likely that applying the same models in different circumstances will lead to rather diverging levels of alcohol consumption.

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<sup>151</sup> Rate of abstainers among the adult population in Hungary is 17.5% (2002) whereas in Sweden it is only 11.3% (2001). (WHO Global Status Report on Alcohol, 2004; p. 12.)

Finally, it shall be noted again that the level of alcohol consumption is only one indicator leading us to make a well-grounded decision on the efficiency of the two remaining models. True enough, that the modern temperance model accomplished much better results concerning the lowering of alcohol consumption level. It is time now to take a look at how the competing models perform in connection with the next indicator, the effect of alcohol on crime.

#### 4.2.2. Alcohol and Crime<sup>152</sup>

It was shown above that instead of having beneficial effect on crime rates, the model of prohibition increased criminal activity simply by its existence. As neither the liberal, nor the modern temperance model uses total prohibition as hard measure of dealing with alcohol it could now be examined whether what the relation between crime and alcohol is, and how it can be influenced by the applied model of alcohol policy.

*On 21 October 2004 a drunken Hungarian truck-driver caused the death of five Swedish citizens near Malmö in Sweden. Due to the heavy influence of alcohol, the driver drove its truck opposite to the direction on the motorway. He crashed two cars driving normally, and murdered an entire family and another woman. The driver was so drunk, that the police arriving to the scene were not able to communicate with him. He was found guilty of homicide committed negligently, and sentenced to four years of imprisonment<sup>153</sup>.*

Drunk driving is typical crime associated with abusive drinking. As the sad example illustrates, crime is rather expensive for the society due to both the costs of the consequences of a particular criminal activity and the expenses spent on responding on the crime committed.<sup>154</sup> I would not dare to quantify the social cost of the loss of five lives, as the direct costs of the drunk driving in

<sup>152</sup> The comparison will be limited to those data that are available both in Hungary and Sweden. It shall be noted though, that an exhaustive evaluation of social costs related to the effect of alcohol on crime would require the calculation of several costs, such as: (i) cost in anticipation of crime; (ii) costs as a consequence of crime; (iii) costs in response to crime; (iv) regulation costs; and (v) costs for victims of crime. [See, The Social Cost of Alcohol in Sweden 2002, pp. 117-118.]

<sup>153</sup> Extract from the homepage of the Hungarian Television (Mtv), <http://www.mtv.hu/cikk.php?id=4280&offset=0> (last visited, 31 March 2007). (in Hungarian)

<sup>154</sup> The Social Cost of Alcohol in Sweden 2002, p. 37.

the example. Nevertheless the enormous expense of the society spent on crime can be demonstrated on the second factor of the social costs of crime, namely the amount spent on responding the criminal activity. The drunk driver in the above example was sentenced to four years of imprisonment. According to surveys in Sweden, the one month spent in jail costs the society SEK 51,000<sup>155</sup> (~USD 7300), plus the amount of the loss of production of the imprisoned perpetrator, that is another SEK 35,035 per month<sup>156</sup> (~USD 5000). Therefore, the response to the drunk driving committed in the example costs SEK 2,448,000<sup>157</sup> (~USD 350,610). Supposing that the truck-driver was a Swedish citizen, the response to the crime would have cost SEK 4,129,680<sup>158</sup> (~USD 591,500). In other words, the negligent act of the truck-driver cost almost SEK 0,5<sup>159</sup> for each and every Swedish citizen. It shall be noted that the quantification of even the response to the crime is not full, as for example the crime investigation, judicial proceedings, etc has significant costs too.

The costs of alcohol related crime seems to be tremendous, especially bearing in mind two things: crimes, accidents, due to abusive alcohol consumption happen rather frequently all over the world; and the above calculation was based on only one part of the consequences of a simple act of negligence. The total costs of alcohol related crime in Sweden is estimated to amount to SEK 4.2 billion annually<sup>160</sup> (~USD 601,839,910), that means a payment obligation of SEK 473<sup>161</sup> (~USD 68) annually for each Swedish citizen. Though similar quantifications, calculations are

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<sup>155</sup> Kriminalvårdens årsredovisning (Annual report of the Swedish prison system); Kriminalvårdsstyrelsen, KOS, Norrköping, 2002 (in Swedish)

<sup>156</sup> The Social Costs of Alcohol in Sweden, 2002, p. 48.

<sup>157</sup>  $51,000 * 12 * 4 = 2,448,000$

<sup>158</sup>  $51,000 * 12 * 4 + 35,035 * 12 * 4 = 4,129,680$

<sup>159</sup>  $4,129,680 / 8,876,000 = 0,47$  (the number of the inhabitants of Sweden is 8,876,000 – Eurocare, countryprofiles, Sweden, p. 6.)

<sup>160</sup> The Social Costs of Alcohol in Sweden, 2002, p. 61.

<sup>161</sup>  $4,200,000,000 / 8,876,000 = 476.18$

not available in Hungary, the costs of alcohol related crime in the western countries is highly likely to be proportionate to the Swedish example. It follows, that a model of alcohol policy treating alcohol related crime in an efficient way is very much favorable. As alcohol consumption is typically associated with road traffic accidents and violent crime, in the followings these two indicators will be used to compare the efficiency of the two examined models with relation to crime.

In Sweden the number of alcohol-related road traffic accidents per 100 000 population was 9.6 in 2000 and 10.9 in 2001.<sup>162</sup> Surveys also show, that not less than 86% of the female intoxicated drivers and 98% of male drunk drivers initiated car accident.<sup>163</sup> Considering violent crime, surveys suggest that alcohol accounts for about 50% of violent crimes in Sweden.<sup>164</sup> Also, various studies demonstrate that the level of alcohol consumption is in positive correlation with homicide rate in Sweden.<sup>165</sup> It follows, that an effective alcohol policy in lowering the level of alcohol consumption assumed to be an effective measure against violent crimes and road traffic accidents.

In Hungary detailed calculations, quantifications on the social costs of alcohol related crime do not exist, nevertheless, the findings of the most recent surveys concerning the effect of alcohol on crime are summarized in the Schedule for the "National Strategy of Social Crime Prevention."<sup>166</sup>

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<sup>162</sup> Eurocare, countryprofiles, Sweden, p. 5.

<sup>163</sup> M. OSTROM – H. SJÖRGEN – A. ERIKSSON, Role of alcohol in traffic crashes involving women passenger car fatalities in northern Sweden; *Journal of Studies on Alcohol*, 1995, Vol. 56, p. 506–512.

<sup>164</sup> Leif LENKE, Alcohol and criminal violence : time series analyses in a comparative perspective; Stockholm, Edsbruk, Akademitr., 1989. See also, Hanns. von HOFER, *Brott och straff i Sverige: historisk kriminalstatistik 1750-1982*; Stockholm, SCB, 1984.

<sup>165</sup> I. ROSSOW, Alcohol and homicide: a cross-cultural comparison of the relationship in 14 European countries. *Addiction*, 2001, Vol. 96, Supplement, pp. 77–92.

<sup>166</sup> *Supra* note, 48.

According to this document, 25% of the recorded crimes were committed under the influence of alcohol between 1985 and 2001. Besides, the rate of violent crimes with a link to alcohol has increased quicker than other forms of criminal activities in the last decade. While the percentage of alcohol related violent crime in the total number of violent crimes committed was 28 between 1985 and 1990, it has increased to 40% during the next ten years. Also according to the National Strategy of Social Crime Prevention, the rate of criminal principals acting under the influence of alcohol increased by 150%<sup>167</sup> between 1985 and 2002, while the average increase in the number of criminal principals during the same period was only 42%. These figures demonstrate that there is an increasing trend in the alcohol related violent crimes in Hungary. Concerning the other indicator, namely road traffic accidents related to alcohol consumption, the trend is reversal. Surveys show, that the number of alcohol related road traffic accidents decreased by 11% from 2004 to 2005,<sup>168</sup> whereas in the Swedish example there was an increasing trend. Still, however, the absolute numbers show that the relevant Swedish statistics are much promising, as the number of alcohol related road traffic accidents in Hungary was 20.19 in 2000 and 20.99 in 2001 per 100,000 persons.<sup>169</sup> Based on more recent there is an increasing trend in the occurrence of such accidents, as in 2005 the figure was 25.5<sup>170</sup> alcohol related road traffic accidents happened per 100,000 population, in Sweden this number is only 10.9.<sup>171</sup> The estimated annual social cost

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<sup>167</sup> The ratio of perpetrators committing vandalism under the influence of alcohol increased more dramatically, by 335%.

<sup>168</sup> Report of the Hungarian Central Statistical Office on Road Traffic Accidents with Personal Injuries, 2005; Budapest, KSH, 22 February 2006., p. 1. Also available at: <http://portal.ksh.hu/pls/ksh/docs/hun/xftp/gyor/ser/ser20512.pdf> (last visited, 31 March 2007).

<sup>169</sup> Eurocare, country profiles, Hungary, p.5.

<sup>170</sup> Calculations are based on the Report of the Hungarian Central Statistical Office on Road Traffic Accidents with Personal Injuries, pp. 3, 7.

<sup>171</sup> It shall be noted that the Swedish data is from 2001, and the Hungarian figure is from 2005. Nevertheless, I bearing in mind the trends of such accidents, the numbers are indicative.

of alcohol related road traffic accidents in 2003, in Hungary was approximately HUF 35,5 billion<sup>172</sup> (~USD 186,842,105).

In sum, the consequence to be drawn from the figures of this Section shall be twofold. First the social cost of alcohol related crime is huge. Second, under the modern temperance model the alcohol related crime rates are significantly lower than in the liberal model. As it was demonstrated in Section 4.2.1., the modern temperance model is quite successful in lowering level of alcohol consumption, therefore it can theoretically be anticipated that a more restrictive model of alcohol policy has beneficial effects on crime rates due to abusive drinking.<sup>173</sup> Historical facts underline this anticipation, as surveys show, that when the applied alcohol policy was more severe, the rate of violent crime soon decreased.<sup>174</sup> Considering the failure of the prohibition model, I believe that the efficiency improvement of a model of alcohol policy can be increased by making it more severe. There is, however, a point, beyond which the efficiency of the applied model will decrease significantly by increasing severity of the alcohol policy. This point comes when the majority of the society can not be convinced anymore of the beneficial effects of the model. The example of the Prohibition Era demonstrated that this certainly happen at the time of prohibition. Although Sweden applies several restrictive measures concerning alcohol consumption, so far the society seems to support such alcohol policy. This is the reason I believe for the success of the modern temperance model in Sweden in achieving lower alcohol related crime rates. It follows, that while in Sweden the severity of the modern temperance model

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<sup>172</sup> Including loss of productivity. Calculation is based on the Report of the Hungarian Central Statistical Office on Road Traffic Accidents with Personal Injuries, and on the figures presented on <http://www.baleset.org/> (last visited, 31 March 2007) (in Hungarian).

<sup>173</sup> Nils WIKLUND – Lars LIDBERG, Alcohol as a causal criminogenic factor: The Scandinavian experience; In.: R. BLUGLASS – P. BOWDEN, Principles and practice of Forensic Psychiatry; London, Churchill Livingstone, 1990, p. 943.

<sup>174</sup> Leif LENKE, Alcohol and crimes of violence: a causal analysis; Contemporary Drug Problems, 1982, Vol.11, pp. 355-365.



seems to be an efficient tool against alcohol related crime, it might not be efficient in Hungary, where the society is more used to the leniency of alcohol regulation. However, the bottom-line of the comparison of the Swedish and Hungarian situation – regarding the effect of alcohol on crime – is that the modern temperance model serves as a more efficient tool against alcohol related crime than the liberal model.

#### **4.2.3. Alcohol and Health<sup>175</sup>**

The estimated cost of health-care due to alcohol consumption in Sweden, excluding loss of productivity, is SEK 2.1 billion<sup>176</sup> (~USD 300,919,955). The main components of this price are the costs of medical treatment of alcohol related diseases, such as cirrhosis or mouth cancer. Table 10 shows the rate of alcohol related health problems compared to the totality of health problems in regional distribution. According to the WHO regionalization concerning alcohol statistics, Sweden is in the Euro A, and Hungary is in Euro C Region.<sup>177</sup> Interesting that the percentage of alcohol related diseases among males in Euro C Region is almost double than the percentage in Euro A Region. The difference is even more drastic concerning women (440%).

Table 10 indicates that alcohol must be a graver peril for the health-care in Hungary than in Sweden. This assumption is verified by the figures on Table 11. This Table demonstrates that comparing to Swedish citizens, Hungarians have more than 11 times bigger chance to die by liver cirrhosis, 7,5 times greater possibility to die by mouth or oropharynx cancer, and more than

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<sup>175</sup> The comparison will be limited to those data that are available both in Hungary and Sweden. It shall be noted though, that an exhaustive evaluation of social costs related to the effect of alcohol on health-care would require the calculation of several other factors, such as the costs of: (i) inpatient and outpatient care; (ii) primary health care; (iii) non-state paid treatment; (iv) pharmaceuticals; (v) ambulance service; (vi) preventive work within health care; and (vii) other medical personnel. [See, *The Social Cost of Alcohol in Sweden* 2002, pp. 116-117.]

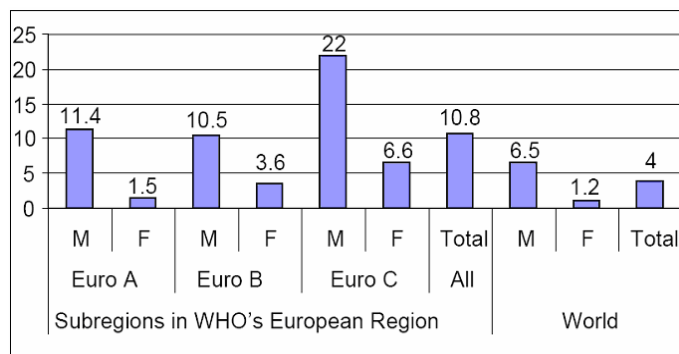
<sup>176</sup> *The Social Costs of Alcohol in Sweden*, 2002, p. 52.

<sup>177</sup> WHO Report on alcohol in the European Region; EUR/RC55/BD/1, 2005, p. 2.

double chance to have ischaemic heart disease as the cause of death. The difference between the alcohol consumption levels of the two countries<sup>178</sup> does not explain the striking discrepancy in the occurrence of death by alcohol related diseases. It follows, that there must be other reasons for such a striking difference (e.g.: different drinking habits, differences between health-care systems, or even cultural differences). Despite of the depressing statistics, the governmental and social effort seems to be inadequate to respond to such figures. Surveys show that efficiency of social and health-care institutions dealing with alcohol related problems in Hungary has relapsed in the last decade.<sup>179</sup>

**Table 10**<sup>180</sup>

Alcohol related diseases as percentage of all disease



**Table 11**<sup>181</sup>

Mortality rate for diseases typically associated with heavy alcohol consumption (per 100,000 population)

	Hungary	Sweden
Accidental Poisoning	1.40	1.49
Liver Cirrhosis	45.79	3.97
Mouth and oropharynx cancer	12.64	1.69
Ischaemic heart disease	179.07	89.28

Having evaluated the data concerning effect of alcohol on health in both Sweden and Hungary, the conclusion must be the same again, namely that the modern temperance model seems to perform better than the liberal model, concerning the occurrence and treatment of alcohol related diseases.

<sup>178</sup> The Hungarian level of alcohol consumption is estimated to be the 160% of Swedish level of total alcohol consumption. (See, Section 4.2.1.).

<sup>179</sup> Supra note 48, Schedule, Section 2.4.

<sup>180</sup> WHO Report on alcohol in the European Region, p. 6.

<sup>181</sup> Based on the WHO Global Status Report on Alcohol, 2004, pp. 57-58.

### **4.3. Economic Efficiency Ranking**

Having been finished with the evaluation of the three competing models of alcohol regulation, it is time to create the second ranking of the models. It was clear from the legal efficiency analysis of the models, that the model of prohibition has the worst results. The present chapter underlines this preliminary finding. The figures demonstrated that all indicators became worse after launching the prohibition. The hypothesis concerning the inefficiency of prohibition is now verified. Ironically, the most beneficial effect the Prohibition Era had on alcohol related problems was its repeal. As the above discussed data demonstrate, the repeal of prohibition has many beneficial effects on alcohol related problems, such as the healthier drinking habits, the decrease of violent crime, increase of the revenues of the state, etc. In other words, the model of prohibition was clearly unable either to lower the level of alcohol consumption, to successfully deal with alcohol related crime, or to cause the decrease of health problems due to alcohol consumption. On the basis of these data it is doubtless that the prohibition of alcohol is not an adequate solution to any of the alcohol related problems. In other words, the model of prohibition has failed beyond any doubt. Therefore the model of prohibition deserves the last position in the economic efficiency ranking.

Turning now to the other two models, the preliminary hypothesis, based on the logic of economics, suggested that the liberal model would be more efficient economically, due to the fact that it enables market forces to allocate costs and benefits of alcohol consumption in the society. Surprisingly, the evaluation of statistics does not verify this hypothesis. The liberal model is only the second in the present ranking. Basically, all the figures above demonstrated that alcohol related problems; hence social costs of alcohol are multiple times higher in Hungary than in

Sweden. Clearly this result shows the failure of the market in achieving the most efficient allocation of costs and benefits concerning alcohol consumption.

The 'winner' of the economic efficiency ranking, based on the examination of the above indicators is, beyond any doubt, the modern temperance model. Although the total estimated social costs of alcohol is approximately SEK 30 billion<sup>182</sup> (~USD 4.3 billion), what amounts to 1% of the GDP, still the modern temperance model seems to be effective on the one hand, in reducing costs where it is reasonably possible, and on the other hand allocating costs that cannot be reduced any more to the drinkers.

Finally, the ranking of the economic efficiency of alcohol regulation is the following: the most efficient is the modern temperance model; the liberal model deserves the second place; while the model of prohibition was squeezed to the third place again.

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<sup>182</sup> Treatment of alcohol and drug abuse: an evidence-based review; Report from the Swedish Council on Technology Assessment in Health Care, *International Journal of Technology Assessment in Health Care*, Vol. 18(1) (2002), p. 154. (Other sources estimate the total amount spent on dealing with alcohol related problems differently, albeit the difference is not substantial. See for example: *The Social Costs of Alcohol in Sweden*, p. 92-107)

## CHAPTER 5 – CONCLUSION

*“Alcohol gives no answers, nevertheless helps to forget the questions.”  
/Hungarian proverb/*

Despite the several differences of the models of alcohol regulation, the analyzed models have at least one common feature, namely that all of them are/were applied by a modern democratic polity. The principle of freedom of the individual, as a basic assumption of modern democracies, requires both the legislature and the judiciary to balance constantly between the rights and freedoms of individuals. All three models represent different outcomes of such balancing. However, no theory providing sufficiently objective and general criteria in the course of balancing has so far being applied. Therefore, one of the most important conclusions of the present thesis is that economic analysis of law seems to be a workable mechanism for such balancing. Economic analysis of law provides a theory for better understanding the final products of law and the regulations with the purpose of facilitating the recognition of economic perspectives in law. I recommend that economic efficiency should be included in the balancing process of freedoms as being neutral and objective, hence not deteriorating mechanisms of law and market. Furthermore, economic efficiency is a tool almost equally applicable in any parts of the world regardless of the culture, level of development, and other factors with high variability.

Having set up two rankings based on legal and economic efficiency, it is time now to take a glance on the final conclusions to be drawn from these results. The common element of both rankings is that the model of prohibition occupies the last position. This is not a surprise, especially when bearing in mind the historical fact that an alcohol policy being so popular in the

society to force the Congress to enact an amendment to constitution could last only for 13 years. There is no other amendment of the Constitution of the United States that has ever been explicitly revoked. Facing the legal and economic inefficiency of the dry laws, even its former proponents disappeared. The main lesson of such failure is that a model based on total prohibition of alcohol is definitely not compatible with modern, secular democracies. This conclusion is in line with the fact that jurisdictions where alcohol is prohibited are either not democracies, or being strongly committed to a religion which considers alcohol consumption as a sin.

The liberal model achieved first place in the legal efficiency ranking, and second place in economic efficiency ranking. The overall placing shall be the second place. The liberal model was good enough in legal efficiency, but mostly because of the lack of regulatory concerns, aims regarding alcohol related problems. The indicators of economic efficiency demonstrated that, the costs of alcohol related problems are much higher than the benefits gained in sparing resources by the minimalist regulation. Finally, the overall winner of the 'efficiency competition' based on consolidated rankings is the modern temperance model. Though, at first glance it seemed to waste resources on enforcing laws, but such expenditure returned with 'interests' when the figures of alcohol related costs were presented.

In the beginning of the present thesis I articulated two hypotheses, one was methodological and the other was substantial. The verification rate is 50%. The methodological hypothesis was that an economic analysis of law is possible to be applied with success to comparative analysis of law. The above state demonstrates that economic approach of legal regulation is indeed an important factor in analyzing different legal solutions. By the introduction of economic analysis of law a useful tool is provided for the regulator in deciding which legal solution to apply for dealing with

a specific problem. On the other hand, the falsified substantial hypothesis was that the liberal model shall provide the most efficient answer to social problems of alcohol consumption. The effectiveness of the modern temperance model in Sweden, both in legal and economic terms, demonstrated that the most efficient tackling with alcohol requires the active intervention of the regulator to the market, as the market forces are not able to reach the most efficient cost-benefit allocation concerning alcohol consumption and related problems. The price of such efficiency is, however, the restriction of certain freedoms.

The contest between the modern temperance and the liberal model demonstrated that legal and economic efficiency do not always go parallel. It follows, that the choice between these models is highly dependent on choice of values. If the society is willing to accept a certain level of restriction of freedoms then the modern temperance model is the best choice for handling alcohol related social problems. However, if the society values more the potential completeness of freedoms, then probably accepts also the higher social costs of alcohol related problems. Nevertheless, there might come a point where the burden on society, due to abusive alcohol consumption, becomes so severe, that moving towards the modern temperance movement seems more acceptable. Concerning the choice of values nowadays the European Union seems to favor freedom of the individual, and competition over the more protective role of the state, even in situations where market failure is evident.

As taking sides in choice of values exceeds the scope of the present thesis, therefore the main conclusion of the above work should be the following. Alcohol is not an ordinary commodity; therefore it distorts normal market rules. It follows that the invisible hand guiding the market is incapable to reach the best allocation regarding costs and benefits of alcohol consumption and

related activities. Therefore, a regulatory model, which intervenes to the alcohol market by restrictions and limitations, will provide a more efficient solution to alcohol related problems, so long as the society is willing to pay the price of it.

Finally, in case the present thesis was successful in challenging the Hungarian proverb, cited in the beginning of the present chapter, then it has achieved its main goals. In other words, I believe that formulating relevant questions is almost as important as finding the answers to these questions. Relevant questions often make the solution transparent, and “solving a problem simply means to represent it so as to make the solution transparent.”<sup>183</sup>

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<sup>183</sup> Gerd GIGERENZER, Is the Mind Irrational or Ecologically Rational?; In.: Parisi – Smith (2005), p. 56.



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