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Günter Schmölders and the Economics of Prohibition

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INTRODUCTION¹

The orientalist Franz August Schmölders from the University of Breslau, who spoke 22 foreign languages and thus had to be replaced by three successors after his death in 1880, must have transmitted some of his talent for languages to his grandson Günter. No earlier than on the steamer to New York in August 1928, Günter Schmölders, with a *Langenscheidt* in his hands, taught himself the first lessons of the English language. (Not that he was poorly educated, but the foreign languages which he had learned in his youth were Latin, Greek, French and Norwegian). In the 11 days on the Atlantic he learned enough to immediately begin research in the States, though he did not master pronunciation very well - small wonder for a language in which wine does not rhyme on magazine, and beer rhymes on hear, but not on bear. These examples have not been chosen arbitrarily, as Schmölders did not come for the purpose of exchange with his American colleagues² - as one might think from today's perspective -, but simply because he happened to be interested in a phenomenon which could be observed in the United States: prohibition.

Schmölders was born on 29th September 1903 in Berlin, where he began to study economics

¹ Biographical information in this chapter is mainly taken from Schmölders (1988). On Franz August Schmölders see also Weber (1891).

² In 1928, the intensity of cross-atlantic exchange of economic research was much lower than it is today. In the second issue of the time-honoured *Jahrbücher für Nationalökonomie und Statistik* of 1928, we find four papers and two notes, one of them being Schmölders (1928). Not a single reference in these papers is in English. Though admittedly in the third issue there is one paper which refers to English economic literature, it is evident that in the 1920s it was possible to be a German professor of economics without reading English. 70 years later, in No.2 of the 1998 volume of the *Jahrbücher für Nationalökonomie und Statistik*, there are five papers written in German, and one in English by German authors, nevertheless the majority of the references are English papers.

in 1921, very much to the disgust of his father, a jurist. Prohibition in Northern Europe was the subject of his doctoral thesis (Schmölders, 1926). Looking for a topic for his *Habilitation*³, extending this research to American prohibition seemed most natural. The outcome was the book *Die Prohibition in den Vereinigten Staaten - Triebkräfte und Auswirkungen des amerikanischen Alkoholverbots*, which is now largely forgotten, though much has been written on the economics of drug prohibition, both in German and in English, since the seventies. However, in 1930, Schmölders' book received many favourable newspaper reviews, and Schmölders made it known in a series of articles he wrote for scholarly and popular journals. In a publicity circular for prospective American buyers, the publisher propagated the book, with Schmölders' explicit approval, as follows:

"We are perfectly sure that this work will interest you. It is not the work of a mere traveller who has visited the States for some weeks or months, but it is the product of many years of scientific research on prohibition in all of its forms and in all of the countries with some sort of restrictive legislation.

The author is a well known sociologist [sic!] whose studies have been specialised on the prohibition question from the very beginning of such legislation in the northern countries of Europe and in the United States. His book, containing 266 pages with some 60 most valuable statistical tables compiled from official sources, is the only unbiased and comprehensive study on prohibition and its effect on public economy, morals and health ever written by a foreign expert.

You will agree that it is easier for a foreigner to see the real problems behind prohibition (...) than for anybody daily surrounded with particular impressions of the ever changing situation."⁴

The book is divided into two parts: reasons, or "driving forces" (*Triebkräfte*), for prohibition and its effects (*Auswirkungen*). In the next two sections, these will be contrasted with modern economic works in that area, the result being that Schmölders' contribution was quite considerable.

Nevertheless, the book failed to serve its purpose, as his principal adviser Heinrich Herkner was unwilling to accept another demonstration of the failure of prohibition - too strong was Herkner's wish that it would work, out of concern for the well-being of the working class. Thus, Schmölders had to begin from scratch. His book on beverage taxes (Schmölders, 1932) was approved as his *Habilitation*, and a long and extremely productive academic career, which will be briefly sketched in the final section, could begin.

³ In Germany, the *Habilitation* was - and usually still is - another monograph which has to be approved before one can apply for a full professorship.

⁴ Source: papers of Schmölders at the Hoover Institution; I am indebted to Barbara Zöller for research assistance.

REASONS FOR PROHIBITION

The prohibitionists had won the battle for National Prohibition in the United States on 16th January 1919, when Nebraska completed the necessary 3/4 majority of states who ratified the 18th Amendment to the Constitution. Section 1 of the Amendment said that:

"After one year from the ratification of this article the manufacture, sale or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited."

The amendment had passed the Senate on 1st August 1917 and the House of Representatives on 18th December 1917, needing at least 2/3 of all votes but receiving considerably more in both cases. All states but Connecticut and Rhode Island finally ratified. How was this possible?

From today's perspective, any economist who tries to find answers to such a question would say that at least partly he is motivated by the desire to apply or to test theories about interest groups, collective action or the vote-maximizing politician. However, none of these theories had been explicitly developed in the 1920s, and reading the first half of Schmolders (1930), which is devoted to the reasons for prohibition, one gains the impression that Schmolders sees no need to justify his approach. He seems to presume that the reader considers positive political economy to be interesting for its own sake. However, though his investigation is not really motivated by a theory in today's sense, reading his foreword between the lines one could say that Schmolders has a hypothesis, or central argument of which he intends to convince the reader: prohibition was adopted not because it is wise to ban alcohol, but due to specific circumstances - or, to use modern parlance, "explanatory variables". Fortunately, Goff and Anderson (1994) have done a modern mainstream piece of research on the determinants of prohibition, with which we can compare Schmolders' insights.

Dependent variable in their logit analysis is a dummy variable - for each senator taking the value 1 if he voted for prohibition, and 0 otherwise. Table 1 provides a list of independent variables.

Table 1:
Public choice determinants of alcohol prohibition

Explanatory variable	Operationalization in Goff and Anderson, 1994 (and sign of coefficient if significant at the 5%-level)	Discussion by Schmolders
Measures of interest group activities		
Importance of alcoholic beverages industry	Gallons of fermented beverages produced in the respective state in 1917 (-)	extensive
Party affiliation	Republican vs. Democratic dummy, taking the value 1 for the latter (-)	in passing
	Prohibition party membership	brief
General constituent preferences		
Religious fundamentalism	Percentage of the state's population belonging to one of the three largest Fundamentalist religious groups (Baptists, Churches of Christ, and Disciples of Christ)	extensive
Population density	Population density in 1920 (-)	brief
Descent	Percentage of Irish-born citizens; percentage of German-born citizens	With respect to brewers' descent
Women's suffrage	Dummy variable for whether a state had adopted full women's suffrage or not by 1917	extensive
Race-related measures	E.g. percent black population	extensive
Legislator-specific preferences	Age	in passing
Regional constituent preferences	Geographic dummy variables for Northeast, South etc.	extensive

The development of econometrics, which began shortly after Schmölders' book was written, was an important achievement; it greatly improves the opportunity to test hypotheses. However, as the case of alcohol prohibition shows, a price has to be paid for the use of econometrics. The availability of data to Goff and Anderson, and its quality, have a possibly decisive impact on the results. E.g., do the results change if another dependent variable is chosen - say, voting behaviour in the House of Representatives, rather than in the Senate, or the timing of ratification by the states, or timing of adoption of State Prohibition Laws before 1919? If data is available, one could find, in principle, an empirical answer to this question, and determinants of the latter variable are indeed investigated by Hersch and Netter (1989). So far, so good, but here another problem arises: contradicting empirical results. Unlike Goff and Anderson, Hersch and Netter do find a significant impact of religion (with minor qualifications defined as a state's percentage of Protestants)⁵. Thus, the empirical relevance of religion as a public choice variable is not quite clear - unless we turn to Schmölders. Parts of his general account of Puritanism's impact on daily life (Schmölders, 1930, ch.2) are rhetorically brilliant, culminating in the upshot that

"Protestantism, puritanical in its trains of thought and moral views, fanatical and intolerant to the point of absurdity in its fight against religious apathy and strange, modern thoughts, is the religious foundation, particularly in the states in the midwest and south, of the currents of thought and forces which (...) paved the way for the idea of prohibition." (p.34)

He gives a vivid impression of the interconnection between temperance organizations, founded and led by clerics, and churches. New abstinentes were "converted" and "took a vow of abstinence", temperance "chorals" were sung, etc.

Interestingly, Schmölders is not content with ascribing the involvement of the Protestant churches to some religious preferences which cannot be explained. Rather, he points out that the many Protestant churches had to compete for members, with "practical" successes being a major competitive advantage (Schmölders, 1930, ch.3).

Thus, Goff and Anderson's finding that their variable "religious fundamentalism" had no significant impact on voting in the Senate is highly misleading as it suggests that American Protestantism had nothing to do with the possibility of prohibition laws. I do not want to suggest that Goff and Anderson's econometrics is bad - if this was the point, re-estimation would be more productive than reading complementary contributions such as Schmölders'. Rather, it is really difficult for econometricians to control for all the other variables which

⁵ The same problem arises for studies of contemporary county-level prohibition, cf. Toma (1988) vs. Brown, Jewell and Richer (1996).

also had an impact on the emergence of prohibition. For example, during World War I, the brewers' lobby had little weight in the political process given the fact that most of them were of German descent. According to Schmolders (1930, ch.5), together with more general tactical clumsiness of the alcohol producers, this has resulted in an unfavourable image of the alcohol industry. What you can measure, however, is only a proxy variable as imperfect as the percentage of German-born citizens in each state obviously is. Also, Goff and Anderson's dummy variable for whether a state had adopted full women's suffrage or not by 1917 only imperfectly captures the channels through which women can influence public (and their husbands') opinion, channels which are nicely described by Schmolders (1930, ch.4).

For our purpose, there is no need to discuss the "driving forces" of prohibition as seen by Schmolders (see Table 1)⁶ completely. None of these may be news to historians, but the point is that Schmolders brought pieces together from an economic point of view. However, as his reasoning seems to be neither inductive nor deductive, how does Schmolders do economics? (A question he would not have found interesting; he never thought much of methodological discussions according to Kirsch, 1993, p.13.) The part of his work discussed so far can be seen as exemplifying the *Verstehen* approach (Pettit, 1998) or "reconstructive imagination"⁷. E.g., how did Americans perceive the women's position in society, and how did this result in successes of famous temperance activists like Mother Stewart, Frances E. Willards or Mary Hunt? How binding were laws perceived by the privileged Southerners and "their" executive bodies? (Less for themselves than for blacks and the subordinates, Schmolders argues, resulting in "voting dry" but "drinking wet".)

Seeing alcohol and temperance through the eyes of 19th century Americans, and conceiving what it must have been like to be a politician shortly before prohibition is instructive, but also somewhat vague as a methodological basis. However, Schmolders (1930) does not build all of his work on it. His attempt to evaluate the economic costs of prohibition, which will be reviewed in the next section, will be more familiar (or more orthodox) to most economists.

⁶ It is noted in table 1 that Schmolders discusses legislator-specific preferences in passing. He makes a related remark which is noteworthy: concerning prohibition, there often was a difference between politicians' "personal" and "political" convictions (Schmolders, 1930, p.82). That such a difference is possible can be considered as a kind of paradigm of modern public choice theory.

⁷ This is Berlin's (1976, p.xix) characterization of a concept of knowledge pioneered by Giambattista Vico, a precursor of the *Verstehen* approach of which Dilthey and Max Weber are main proponents.

EFFECTS OF PROHIBITION

Two main effects of prohibition can be distinguished: its impact on alcohol consumption, and a change in the structure of the alcohol industry. Concerning the latter, it suffices for the moment to note that prohibition did not stop the supply of alcohol, but of course it kept suppliers and anyone else from recording their sales for statistical purposes. So how can some light be shed on alcohol consumption during prohibition?

To tackle this problem, Schmölders provides 22 tables (not counting minor and complementary ones) with 10 proxy variables, one example being the mortality rate for alcoholism in various states and cities - see table 2.

Table 2: Alcoholism mortality in Chicago and New York, 1912-1927			
	New York	Chicago	
	deaths per 100,000 inhabitants	deaths per 100,000 inhabitants	‰ of all cases of death
1912	11	4.7	3.2
1913	13	2.4	2.6
1914	13	3.7	2.6
1915	11	4.4	3.1
1916	13	3.5	2.4
1917	10	3.4	2.3
1918	4	1.4	0.8
1919	3	2.1	1.7
1920	2	1.5	1.2
1921	2	3.5	3.1
1922	5	5.6	5.0
1923	7	6.2	5.3
1924	9	8.5	7.6
1925	12	7.7	7.0
1926	13	11.3	9.7
1927	14	12.4	10.8
Adapted from Schmölders (1930), pp.160-161			

Taken together, Schmolders' evidence seems to provide a solid foundation for his conclusion that the amount of alcohol probably declined to an uncertain extent, the misuse of alcohol, however, returned to the same level as before prohibition as soon as the industry adapted to the new law (Schmolders, 1930, pp.180-181). In a sense, this part of Schmolders (1930) is outdated now, for two reasons. First, the most important of the statistics are now readily available for almost the entire period of prohibition from Warburton (1932), which is also free from tables of dubious value such as the development of the number of arrests due to drunken driving (Schmolders, 1930, p.176-177) which would only make sense if the rapidly changing number of cars was also given. And second, as already noted, methods of data analysis have become more sophisticated. A first small progress is made by Miron and Zwiebel (1991), who regress several proxy variables on alcohol consumption before and after prohibition, then estimating alcohol consumption for the prohibition years from these equations. However, for all the proxy variables the use, namely Cirrhosis of the Liver, Alcoholism Deaths, Drunkenness Arrests⁸ and Alcoholic Psychosis, Schmolders provides a thorough discussion of problems with the data sets. Just to give one example of how much Schmolders goes into detail: he points out that the police's practice of recording drunkards and drunkenness varied over time and between regions, as did their criterion for what drunkenness is. E.g., the test which the police in some cities used was the correct pronunciation of "Wesleyan Methodist" (Schmolders, 1930, p.172), whereas others used the more conventional criterion of a faltering gait. To make the point, Miron and Zwiebel should be praised for resisting the temptation to suggest precision to the second place after the point. Instead they conclude that at first prohibition caused alcohol consumption to fall to 20 to 40 percent, then it increased to 50 to 70 percent. However, alcohol consumption did not increase after the repeal in 1933. This points to the problem that to have an idea of how much alcohol was consumed during prohibition is only half of the story. To assess the "success" of prohibition, one should also know how much otherwise would have been consumed - the pre-prohibition level, the post-prohibition level, or something inbetween. Consequently, one has to control for factors such as age structure of the population and the effect of World War I. This is what Miron (1997) does in a careful econometric study, his conclusion being that prohibition probably did not cause alcohol consumption to decline at all. A part of Schmolders' work on the economics of prohibition is thereby substantially improved, but it took more than 60 years to do so.

Now whereas the benefits of prohibition were lower than expected, its costs were surely

⁸ Drunkenness in the public was an offence during prohibition as it was before, whereas even during prohibition only the production, sale and transportation, not the possession and consumption of alcoholic beverages was illegal, see the wording of the 18th amendment quoted above.

higher. Here statistics are even less reliable, Schmolders notes: nobody counted those who were killed when trying to enforce prohibition, the number is known only for the subsample of federal agents (64 from 1921 to 1928). A better impression of the direct costs of enforcement is given by the number of illegal distilleries which were seized: 16,220 in 1928 (Schmolders, 1930, p.126). Many more remained undetected, but as they did not enjoy any kind of legal protection, the very unproductive and violent business of racketeering boomed. Prohibition deprived the market of most mechanisms which usually help the consumers to overcome the problem of asymmetric information, such as reputation and guaranties. Just as this results in the problem of occasional overdose in today's heroin market, it led to the sale of adulterated alcohol and poisonous substitutes such as methyl alcohol, which in the mid-twenties caused about 200 deaths yearly (Schmolders, 1930, p.164), not to mention those who went blind. And finally prohibition produced incentives for corruption: with a very instructive back-of-the-envelope calculation, Schmolders (1930, p.144) shows that a policeman who had to supervise the denaturalization of industrial alcohol destroyed, if honest, a possible profit of \$10,000,000 per year, while receiving an annual salary of \$2000 for his duties.

Die Prohibition in den Vereinigten Staaten is a lively book full of anecdotal evidence - one nice story, however, Schmolders reserved for his autobiography: in Chicago, the capital of rival gangs, he met by chance a fellow student from Berlin, Wilhelm Fellner, born as Vilmos Fellner in Hungary and later known as William Fellner. Fellner also worked on prohibition, but their ways soon parted when a bomb exploded in an illegal tavern ("speakeasy") next to the hotel where Fellner and Schmolders were staying. Unlike Schmolders, Fellner decided to leave Chicago (Schmolders, 1988, p.41). Judging from the result, Fellner had intended a much more plain and concise book on prohibition than Schmolders anyway, its purpose being to be sufficient as a doctoral thesis (Fellner, 1929). It must be noted, however, that Fellner avoids a mistake (or serious inaccuracy, at least) which Schmolders makes when he includes foregone beverage taxes in his outline of the costs of prohibition for the economy. Though this is an isolated slip, the strength of Schmolders in his later career always remained the originality and relevance of his research rather than analytical precision.

SCHMÖLDERS' CAREER AFTER 1930

The many facets of Schmolders' career and personality cannot easily be characterized in a few words. Whatever the impression after a first reading of Schmolders' work or biography, a contradictory aspect is soon likely to emerge. The following three points serve to illustrate that it is almost impossible to portrait him without using phrases like "on the other hand".

To begin with, Schmölders received his first professorship in Breslau in 1934, and he made sure that his academic career could proceed smoothly through the Nazi era, meaning that he became a party member and was even involved in ideological indoctrination⁹. What he wrote at that time on regional economics is not entirely free of Nazi terminology and thought, though this is more pronounced in writings with coauthors (e.g., Schmölders and Vogel, 1937). Well adapted and inconspicuous, one might think, but after accepting a call to the University of Cologne in 1940, we find him as a member of the *Kreisauer Kreis* around Helmut James Graf von Moltke and Peter Graf Yorck von Wartenburg, a resistance group which helped persecutees, supported a military coup d'état and - mainly - planned a new, humanistic order for the time thereafter¹⁰. Schmölders served as an economic adviser and sought to advocate competition and reliance on the market mechanism against more or less socialist ideas of some other members. He was a prospective finance secretary of state (Schmölders, 1988, p.73), but military service kept him from becoming more deeply involved in the activities of the *Kreisauer Kreis*, and from the fate of about half of its inner circle, who were executed in 1944 and 1945.

Second, no doubt he was a conservative - he had a conservative attitude towards (for example) state activity, public debt and the organization of universities and higher education. In 1968, he was elected President of the Mont Pelerin Society. On the occasion of a reception in Bonn, Germany's first post-war chancellor, the conservative Konrad Adenauer, makes a most trivial remark to Schmölders ("Got through well?"), but Schmölders felt honoured enough to take this as the title of his autobiography ("*Gut durchgekommen?*" - Schmölders, 1988). You would not expect such a conservative economist to pioneer an innovative branch of research, entirely disregarding the economic mainstream and running the risk of being disregarded by many colleagues. But this is what Schmölders did. Not so much with his policy advice and textbooks on public finance and monetary policy, but with his way of research in these areas: he regarded deductions from highly simplified assumptions as useless, not explaining reality, but what would be if reality were different (Kirsch, 1993, p.10). Instead, Schmölders incorporated psychological considerations in his economic analysis, the starting point of which was often empirical. E.g., he used survey research to find out how households *really* make their saving decisions, or what politicians knew about principles of

⁹ According to the handbook "Die wirtschaftswissenschaftlichen Hochschullehrer an den reichsdeutschen Hochschulen und an der TH. Danzig", Stuttgart and Berlin 1938, p.228. He also was a member of the SS, which he explains by his membership in a riding club completely taken over by the SS. Later he managed to leave (Schmölders, 1988, p.62).

¹⁰ On the *Kreisauer Kreis* see, e.g., van Roon (1967), who sees Schmölders only as a close associate, or von Moltke (1989), who counts him as one of 21 members.

money and finance (not much according to Schmolders, 1959b; for a more general account of his survey research see Schmolders, 1963). His research on "fiscal psychology" is of particular and lasting interest. According to Schmolders, for the design of a tax system, it should be taken into account how people perceive tax incidence and the resulting (dis)incentives: he is interested in the influence of taxation technique on economic behaviour, which does not necessarily equal "rational" behaviour in the neoclassical sense. Hence mere deduction is not an appropriate research method, and Schmolders (e.g., 1959, 1966b) argues for the need to approach this question with empirical inquiries of the psychology of the tax payer. Though Schmolders' notion of a national "tax mentality" is still alien to neoclassical economists, by now resistance to direct taxation, for example, is definitely a mainstream research topic. However, at his time Schmolders should have built bridges, as Kirsch (1993, p.14) put it, to enable his fellow economists to see that his questions and his answers do matter.

And third, he knew that his work was as unknown to Anglo-Saxon economists as it was and still is well-known in Germany¹¹. And he seemed to regret it (Schmolders, 1988, p.169). However, was there anything else to be expected from his publication strategy? In English he published only one book and 16 articles, including some very minor ones (given in the list of references below). Comparing this to his total output, which can be quantified only in so far as it exceeds the 457 items given in the incomplete and inaccurate bibliography in Schmolders (1973), one gains the impression that he was not very keen on addressing his Anglo-Saxon colleagues. Despite this, and despite the fact that there is a research institute in Cologne founded by Schmolders¹², he took care that his papers, in 176 boxes, are now kept in America - he transferred them to the Hoover Institution some years before he died on 11th November 1991.

¹¹ For example, in a recent German volume on the psychology of finance (Smekal and Theurl, 1994), 8 out of 10 authors more or less extensively refer to Schmolders. The latest surveys on Psychology and Economics (Rabin, 1998) and the History of Economic Psychology (van Raaij, 1999) do not even mention him.

¹² The *Forschungsstelle für empirische Sozialökonomik e.V.*, founded in 1958. The existence of this institute is the reason why Schmolders remained in Cologne until his retirement in 1972.

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