

SCOMM

#6:27

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THE PRICING OF ALCOHOLIC BEVERAGES AS AN INSTRUMENT OF
CONTROL POLICY

1) The purpose of the inquiry

In examining the ^{ing}prices of alcoholic beverages as an instrument of control policy, one's interest is drawn ultimately to the question of whether alcohol consumption can be curtailed and guided by an active pricing policy. An attempt is made in the following to elucidate the problems involved by reviewing econometric studies dealing with the consumption and prices of alcoholic beverages and examining the price trends in certain countries.

2) Have the prices of alcoholic beverages any effect on consumption?

Although doubts have often been expressed, especially in everyday discussion, about the effect of pricing policy on the consumption of alcoholic beverages, it can be stated on the strength of many econometric studies that price changes are bound up with changes perceived in the consumption of alcoholic beverages (Appendices 1A-1D). The effect of prices has been reported in econometric studies in precise numerical terms, price elasticities, besides which it has been sought to explain the changes taking place in alcohol consumption. In the following, then, consideration will be given to the explanation of consumption and the interpretation, generalization and application of the results

of the econometric studies.

3) On explaining alcohol consumption

On quite a general level, it may be observed that the consumption of alcoholic beverages is based in a very complicated way on factors that may be designated as the "use value" of the beverages. There are two distinguishable sides to the use values of alcoholic beverages: on the one side, human beings have preferences or needs, which they seek to satisfy; and, on the other side, alcoholic beverages have properties by means of which human beings are able to satisfy their needs. It is quite significant in this connection to note that human needs are not psychological constants but are bound to time, place and social circumstance. Inasmuch as needs are historically determined, they change in the course of time, in response to evolutionary progress and upon the persons' concerned moving from one region to another. Nor are the properties of alcoholic beverages beneficial to people constant, either, for they likewise change with progress - and they are developed knowingly, too.

By way of example, it may be stated that alcoholic beverages presumably have at least the following use values: ^{as a}nutriment (wine, in France and Italy; beer, in Germany), ^{as an}essential commodity for alcoholics, ^{as a}medicine, and ^{as an}agent intended to enhance pleasure by, among other things, aiding in the making of contacts, releasing from inhibitions, breaking the everyday routine and escaping from realities. The significance of these use values varies with different classes of people, different regions and different periods of time. Further, it may be stated that in its many practical ap-

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plications, alcohol can be replaced by other commodities, and that the relationship with such substitutes is variable, too. Alcohol consumption and the changes taking place in the consumption of alcoholic beverages may be considered to be connected with the following circumstances: 1) (varying) human needs, which are bound up with time and place, 2) the (varying) properties of alcoholic beverages, or their capability of satisfying human needs, 3) the (varying) capability of other products to satisfy the same needs as alcoholic beverages do, 4) the (varying) real incomes of people and the (varying) distribution of income, 5) the (varying) restrictions imposed on the production and retail distribution of various alcoholic beverages and surrogates, and 6) the (changing) prices of alcoholic beverages in relation to the prices of near substitutes.

When it has been endeavored in econometric studies to interpret the changes taking place in the consumption of alcoholic beverages in the light of changes taking place in consumer incomes, alcohol prices, the prices of near substitutes and the general price level as well as in the distribution systems and sales restrictions, what is involved is only statistical interpretation. In econometric research, explaining consumption in the ordinary sense is therefore not in question.

4. On the problems and limitations of econometric studies

Many problems are involved in econometric studies aimed at interpreting changes in the consumption of alcoholic beverages. First, it should be noted that the analyses performed do not in

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themselves produce any new information — but only organize the information that exists in latent form in the basic data used (SOU 1972:91). This circumstance highlights the significance of accuracy and veracity in the primary information. On the other hand, it also means that the results of the analyses apply in principle only to the regions, times and conditions that produced the primary data. If, for instance, the prices used as the dependent variable had risen at an even rate during the period under investigation, the econometric analysis would not reveal what might have happened had the prices risen abruptly or if the prices had decreased steadily.

In the second place, it is obvious that all the relevant dependent variables could not be taken into account in econometric studies. Thus, for example, the behavior of the market has in most cases been perforce assumed to have been constant. This means that in econometric studies, preferences or needs, the properties of alcoholic beverages, the properties of other commodities and the distribution of income have in most cases been assumed to remain constant. If the influence of these factors has been included in a trend, the assumption will have been that the effects have been rectilinear.

In econometric studies, also the effect of dependent variables on the independent variable — or elasticities — has most frequently been assumed to be constant. Since, moreover, it has been necessary, on account of the procurement of basic information, to resort to a large aggregate level with respect to both the consumers and the alcoholic beverages, the constant price elasticity depicts the average reaction of different indi

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viduals and of the same individual to the average change in the prices of alcoholic beverages taking place during the period under investigation. In reality, different individuals and groups react in different ways to changes in the prices of alcoholic beverages, and the reaction of the same individual is also apt to change in the course of time.

In the fourth place, it is apparently difficult to distinguish the influence of different dependent factors if the dependent variables have developed along parallel lines during the period under investigation. This is true, for instance, when an increase in consumption is connected with rising incomes, falling prices and a rising trend brought about by non-economic variables.

5. On the results of econometric studies

Although econometric studies include many problems, they can also be made to yield useful information, provided their limitations are borne in mind. The econometric studies carried out show fairly consistently that alcoholic beverages have behaved on the market like other commodities: as prices have risen, the consumption of alcoholic beverages has generally declined, and as prices have fallen, the consumption of alcoholic beverages has generally increased (Appendices 1 A-1 D). Studies have shown, furthermore, that the magnitude of the effect of prices varies in different groups of beverages, different countries, different regions (Appendix 1 C) and different periods even within the same country (Appendix 1 A).

From econometric studies it is obvious that there exist no universal values for elasticities of different beverage groups. For instance the price elasticity for beer seems to be very low in Canada (-0.03), Ireland (-0.17) and in Finland (-0.20), but very high in Sweden (-3.0). Also the elasticities for spirits vary a great deal in different countries (-0.3 to -2.0). The same is true for wine (-0.3 to -1.72). Although part of the observed differences is due to the different models and methods which have been applied, to the nature of the estimated elasticities (long- and short term elasticities) and also to the method of aggregating the basic data, it is obvious that elasticities are no properties of the beverage types themselves. The values of the elasticities and the differences in these values must be seen in the light of relative prices of alcoholic beverages, systems of distribution and use values. As a moderate conclusion it might perhaps be suggested that price elasticity may be greater for off-sales than for on-sales (Sweden and Finland) and that price elasticity may increase at the lifting of sales restrictions (Sou 1972:91). It seems, however, that the results of econometric studies apply only for the area with which the study is concerned.

If econometric demand analysis has sufficiently explained the observed variation in consumption and if other circumstances can be assumed to be constant, econometric models may be of help to predict the consumption of alcohol. Then also the elasticities may be used in planning price policies. The price elasticity expresses the effect of price changes in consumption and therefore it can be used in estimating how large price rises are required to attain the wanted level of consumption. Price elasticities can also be used to foresee how much an attainable price rise will cut off the consumption and to decide what are the most sensitive objects of restrictive price policies.

6. The development of prices in some countries

CANADA: From 1949 to 1971 the real prices of alcoholic beverages have slightly fallen with exception of wine. The real price of beer has fallen mostly (1949-1971, 1971-90). The yearly changes have been small. (Appendix 2 A)

NETHERLANDS: From 1952 to 1967 the real prices of alcoholic beverages have fallen. The real price of wine have fallen mostly (1952-1967, 1967-89). There are some big changes in prices, for example the real price of genever rose 20 % in 1966 and the consumption of spirits (alcools) decreased 23 %. (Appendix 2 B)

ITALY: From 1951 to 1966 the real prices of alcoholic beverages have slightly risen. The development of real prices have not been even and in 1965 there are big changes. (Appendix 2 C)

BELGIUM: From 1953 to 1964 the real prices of alcoholic beverages have slightly fallen. After 1964 the development differs. There are quite large yearly changes in late 1950s and after 1965. (Appendix 2 D)

GERMANY, FED. REP.: From 1955 to 1965 the real prices of alcohol beverages have fallen quite a lot. After 1965 the development of prices differs and there are big yearly changes especially in 1966. (Appendix 2 E)

SWEDEN: From 1956 to 1968 the real prices of alcoholic beverages have risen with exception of light wine (constant) and strong beer (fallen prices). In 1956 and 1957 there are big changes in prices and in consumption. (Appendix 2 G and 2 E)

FINLAND: In the period 1951-1973 the real price of alcohol have been constant. The real prices of wine and other spirits have fallen and the real price of vodka has risen. The yearly changes of prices have been small. (Appendix 2 I)

Appendix 1 A

Demand elasticities

Author	Country and time-period	Beverage	Income Elasticity	Price Elasticity	Trend (%/year)
Almqvist (1948) ¹	Sweden 1927-1939	Spirits	0.3	-0.3	
"	"	Wine	1.2	-0.9	
"	"	Liquor	0.30	-0.37	
"	"	Wine	1.32	-0.72	
Andström-Ekström ¹ (1952)	Sweden 1931-1954	Spirits	0.9	-0.3	
"	"	Wine	2.0	-1.6	
Byding-Rosen ¹ (1959)	Sweden 1920-1951	Spirits (Renad Brännvin)	0.6	-0.4	
"	"	Wine	0.9	-0.1	
"	"	Medium Beer	0.6	-1.6	
Stiftfeldt-Jorner ¹ (1972:91)	Sweden 1956-1968	Off-sale Vodka	0.0	-0.9	-0.3
"	"	" Other Spirits	1.4	-2.9	-
"	"	" Fortified Wine	0.2	-0.7	-
"	"	" Light Wine	-	-0.6	-
"	"	" Strong Beer	1.9	-3.0	+7.3
"	"	" Spirits	0.4	-1.2	-
"	"	" Wine	(0.9)	-0.7	-
"	"	" Spirits + Wine	0.7	-1.0	+5.8
"	"	On-Sale Vodka	1.0	-0.3	-
"	"	" Other Spirits	0.2	-0.5	-7.0
"	"	" Strong Beer	2.0	-0.1	-
					+2.0

Appendix 1 B

Demand elasticities

Author	Country and time-period	Beverage	Income Elasticity	Price Elasticity	Trend (% year)
Stone (1954) ¹	United Kingdom 1920-1938	Spirits	0.6	-0.6	
		Wine (imported)	1.4	-0.6	
		Wine (domestic)	1.7	-0.3	
"- 2	"-	Spirits	0.54	-0.72	
		Beer	0.14	-0.73	
Simon (1966) ^{1,2}	USA 1955-1961	Spirits	-	-0.79	
Niskanen (1960) ²	USA 1934-1954	Spirits	-	-1.74	
Niskanen (1962) ²	USA	Spirits	-	-1.42	
Niskanen ¹	USA 1934-41, 47-60	Spirits	-	-2.0	
Walsh -Walsh (1970) ²	Ireland 1953-1967	Spirits	1.94	-0.57	
		(after correcting for serial correlation bias)	2.06	-0.44	
		Beer	0.78	-0.17	
Schweitzer (1969) ²	Canada	Alcoholic Beverages	0.88	-0.19	
Lau (1973) ²	Canada 1949-1969	Spirits	0.68	-1.45	+0.94
		Wine	1.43	-1.65	+2.1
		Beer	0.20	-0.03	+0.2

Sources: ¹ Efterfrågan på rusdrycker i Sverige, SOU 1972:91, Stockholm 1972

² H. H. Lau: Time Series Regression Analysis of Per Adult Consumption of Alcoholic Beverages I. Canada 1949-1969

H. H. Lau: Cost of Alcoholic Beverages as a Determinant of Alcohol Consumption

Spirits			
Province and time-period	Income Elasticity	Price Elasticity	Trend (% year)
Nova Scotia 1933-1969	1.50	-1.19	-2.90
New Brunswick 1955-1969	1.35	-0.80	negative
Quebec 1939-1969	1.89	-0.60	-4.17
Ontario 1935-1969	1.38	-1.60	no
Manitoba 1944-1969	0.62	-0.58	+2.41
Saskatchewan 1946-1969	0.19	-0.23	+4.03
Alberta 1953-1963	0.00	-1.30	+2.86
British Columbia 1953-1969	0.94	-1.74	-1.24

Wine			
Province and time-period	Income Elasticity	Price Elasticity	Trend (% year)
Nova Scotia 1933-1969	0.82	-1.52	no
New Brunswick 1955-1969	0.78	+1.67	no
Quebec 1939-1969	2.25	-0.40	-0.36
Ontario 1935-1969	0.69	-0.15	no
Manitoba 1944-1969	1.37	-0.56	+2.45
Saskatchewan 1946-1969	0.01	-0.90	positive
Alberta 1953-1969	0.03	-2.75	+7.77
British Columbia 1953-1969	1.94	-4.56	no

Beer			
Province and time-period	Income Elasticity	Price Elasticity	Trend (% year)
Nova Scotia 1933-1969	1.51	-0.95	-2.57
New Brunswick 1955-1969	1.16	-0.58	no
Quebec 1939-1969	2.02	-1.08	-4.45
Ontario 1935-1969	2.11	-0.55	-2.17
Manitoba 1944-1969	0.70	-0.17	no
Saskatchewan 1946-1969	0.07	-0.38	+1.24
Alberta 1953-1969	0.00	-1.19	no
British Columbia 1953-1969	0.53	-1.36	+0.60

Author: Nyberg (1967)

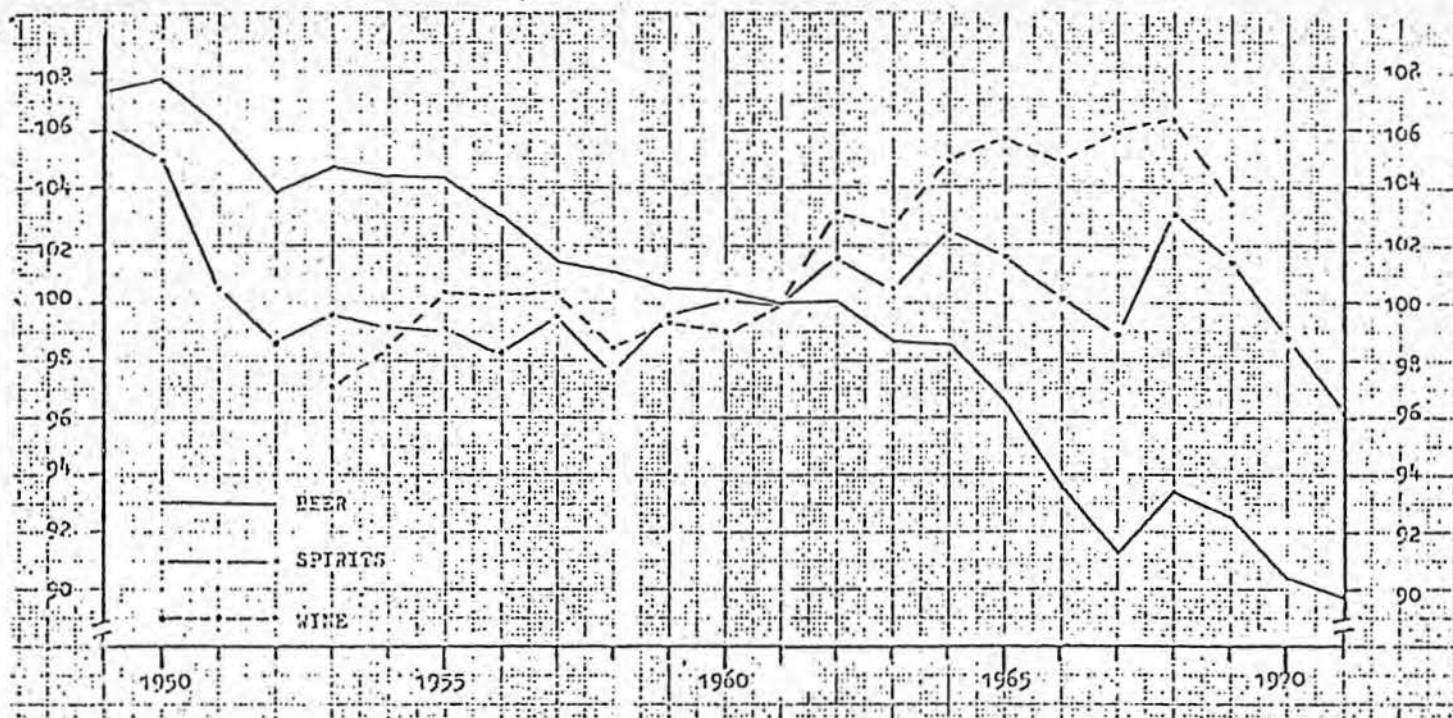
Country and time period: Finland 1949-1962

Static Model		
Beverage	Income Elasticity	Price Elasticity
Vodka	0.42	-0.13
Other Spirits	1.30	-0.95
Wine	0.97	-0.83
Beer	0.97	-0.49
Total Off-Sales	1.05	-1.17
Total On-Sales	0.94	-0.99
Total Sales	1.01	-1.11

Dynamic Model			
Beverage	Income Elasticity		Price Elasticity
	Long run	Short run	
Vodka	0.84	0.25	-0.60
Other Spirits	1.62	0.49	-1.10
Wine	1.29	0.39	-0.99
Beer	0.64	0.17	(+0.01) -0.20
Total Off-Sales	1.14	0.34	-0.99
Total On-Sales	0.87	0.26	-0.38
Total Sales	1.03	0.31	-0.75

Price and cross elasticities $e_{p, ij}$ (estimated by preference funktion)				
i	j			
	1	2	3	4
1. Vodka	0.91	-0.19	-0.09	-0.05
2. Other Spirits	-0.21	1.40	-0.10	-0.05
3. Wine	-0.33	-0.31	1.72	-0.09
4. Beer	-0.17	-0.15	-0.08	0.60

Price Indexes in 1961 Prices, Canada 1949-1971, 1961=100



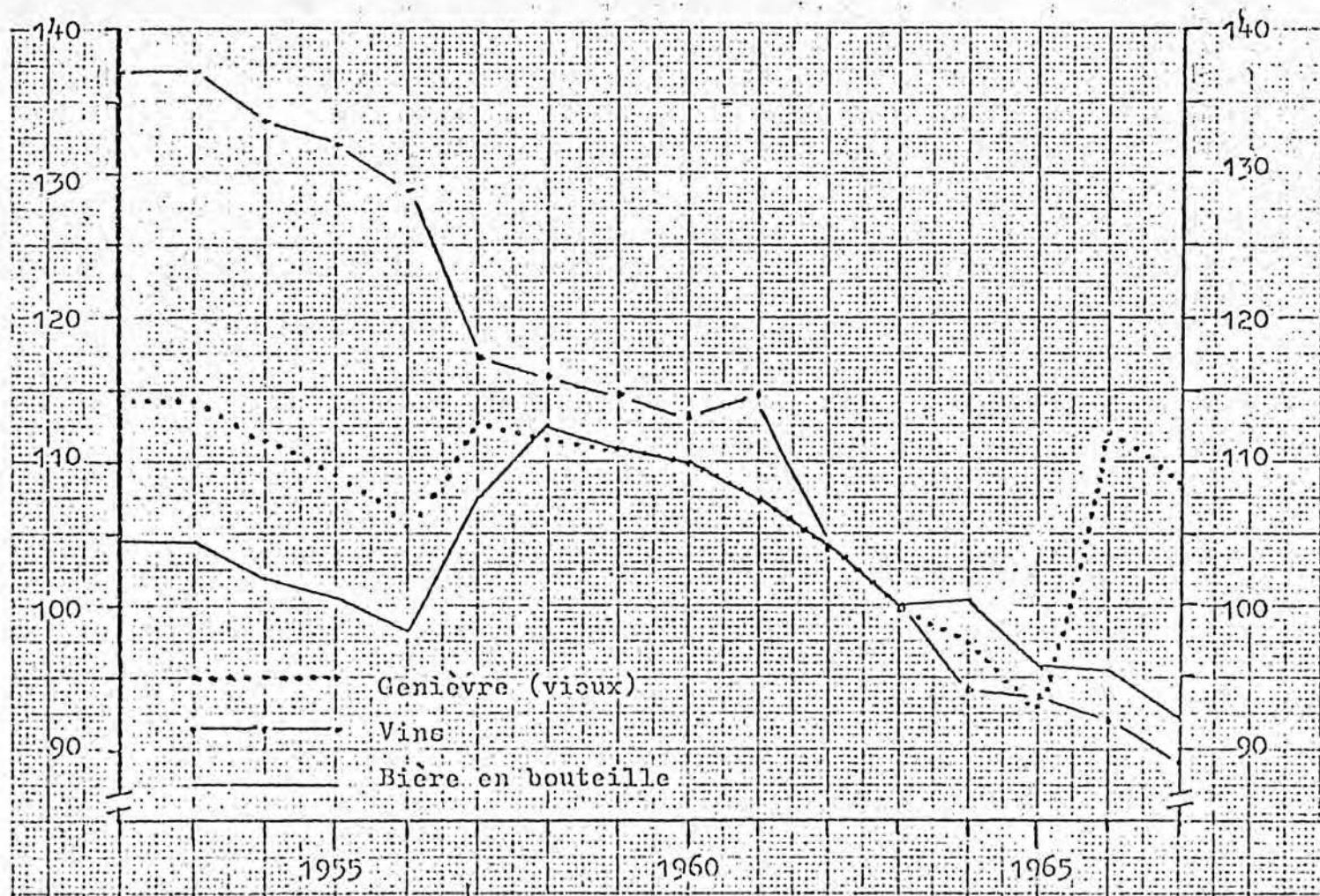
Per Adult Consumption of Alcoholic Beverages (gallons) and Price Indexes in 1961 Prices (1961=100), Canada 1949-1971

YEAR	Per Adult Consumption				Price Indexes		
	BEER	SPIRITS	WINE	ABSOLUTE ALCOHOL	BEER	WINE	SPIRITS
1949	18.0910	0.952386	0.506235	1.36650	107.313		106.163
1950	17.8443	0.987085	0.517351	1.36982	107.709		104.907
1951	18.2279	1.01160	0.523763	1.39984	106.102		100.568
1952	19.3673	1.05261	0.523668	1.47319	103.769		98.6505
1953	19.8296	1.07654	0.526125	1.50627	104.693	97.1730	99.6309
1954	19.0271	1.07206	0.541305	1.46679	104.394	98.5936	99.2658
1955	19.3979	1.11360	0.556040	1.50430	104.351	100.403	99.1343
1956	19.7854	1.17682	0.576087	1.55217	103.002	100.392	98.3479
1957	19.8897	1.19957	0.601678	1.57958	101.548	100.413	99.5970
1958	19.1007	1.25842	0.659578	1.56393	101.074	98.4930	97.6136
1959	19.7640	1.24240	0.668543	1.59212	100.531	99.4609	99.6220
1960	19.8996	1.24303	0.692230	1.60220	100.494	99.0351	100.161
1961	19.9502	1.26439	0.719573	1.61840	100.000	100.000	100.000
1962	20.3272	1.29970	0.743381	1.65538	100.049	103.294	101.060
1963	20.8522	1.36130	0.789456	1.71344	98.7172	102.715	100.534
1964	21.2357	1.34956	0.781154	1.72659	98.5879	104.533	102.557
1965	21.2909	1.49174	0.978154	1.80174	96.5922	105.726	101.676
1966	21.6642	1.56576	0.931782	1.85060	93.5369	104.967	103.130
1967	21.9082	1.63053	0.973926	1.90345	91.3345	105.921	98.9501
1968	21.7415	1.61724	1.008410	1.89532	93.4222	106.350	103.164
1969	22.1904	1.62661	1.131800	1.94125	92.5100	103.477	101.434

Sources: H. H. Lau: Time Series Regression Analysis of Per Adult Consumption of Alcoholic Beverages J. Canada 1949-1969

H. H. Lau: Cost of Alcoholic Beverages as a Determinant of Alcohol Consumption

Price Indexes in 1963 Prices, Netherlands 1952-1967, 1963=100

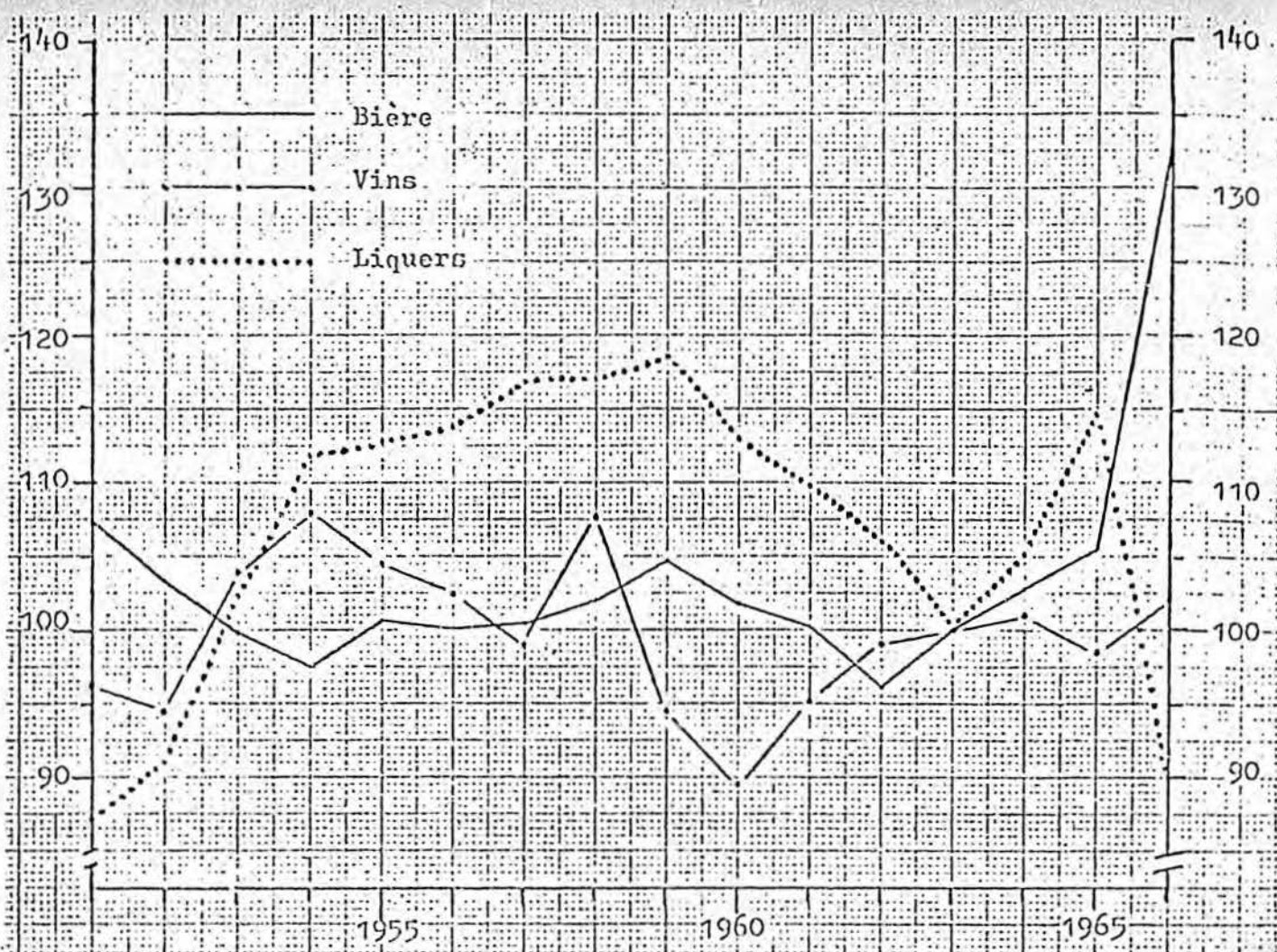


Volume and price indexes, Netherlands 1952-1967, 1963=100

Année	Volume			Indice volume de la consommation privée intérieure	Price				Consommation privée
	Bière	Vins	Alcools		Boissons non alcoolisées	Bière en bouteille	Vins	Genièvre (vieux)	
1952	30,3	19,3	66,9	57	86,0	82,5	103,2	90,3	79
1953	34,6	22,9	65,8	60	86,8	82,5	103,2	90,3	79
1954	38,4	31,5	70,9	64	85,1	82,5	103,2	90,3	81
1955	46,7	40,5	72,5	63	85,1	82,5	103,2	89,7	82
1956	50,5	49,9	81,6	74	84,3	82,5	103,2	88,7	84
1957	58,8	53,0	67,9	74	90,9	94,4	103,2	89,2	88
1958	60,6	52,7	70,2	74	97,5	100,0	103,2	99,7	89
1959	70,0	55,6	69,2	78	100,0	100,0	103,2	100,0	90
1960	73,6	69,2	76,1	82	100,8	100,0	103,2	100,0	91
1961	82,4	87,3	80,5	87	100,8	100,0	106,7	100,0	93
1962	87,6	93,4	92,6	93	100,0	100,0	100,0	100,0	96
1963	100,0	100,0	100,0	100	100,0	100,0	100,0	100,0	100
1964	113,8	111,9	104,2	106	103,3	106,3	100,0	103,2	105
1965	122,6	131,6	135,7	114	109,9	106,3	104,0	103,2	111
1966	130,2	139,1	104,0	117	114,0	112,7	109,0	132,3	118
1967	149,4	107,2	120,1	122	117,4	112,7	109,0	132,3	122

Source: Effets du prix et du revenu sur la consommation des boissons dans les Etats membres des Communautés. Bruxelles 1972

Price Indexes in 1963 Prices, Italy 1951-1966, 1963=100

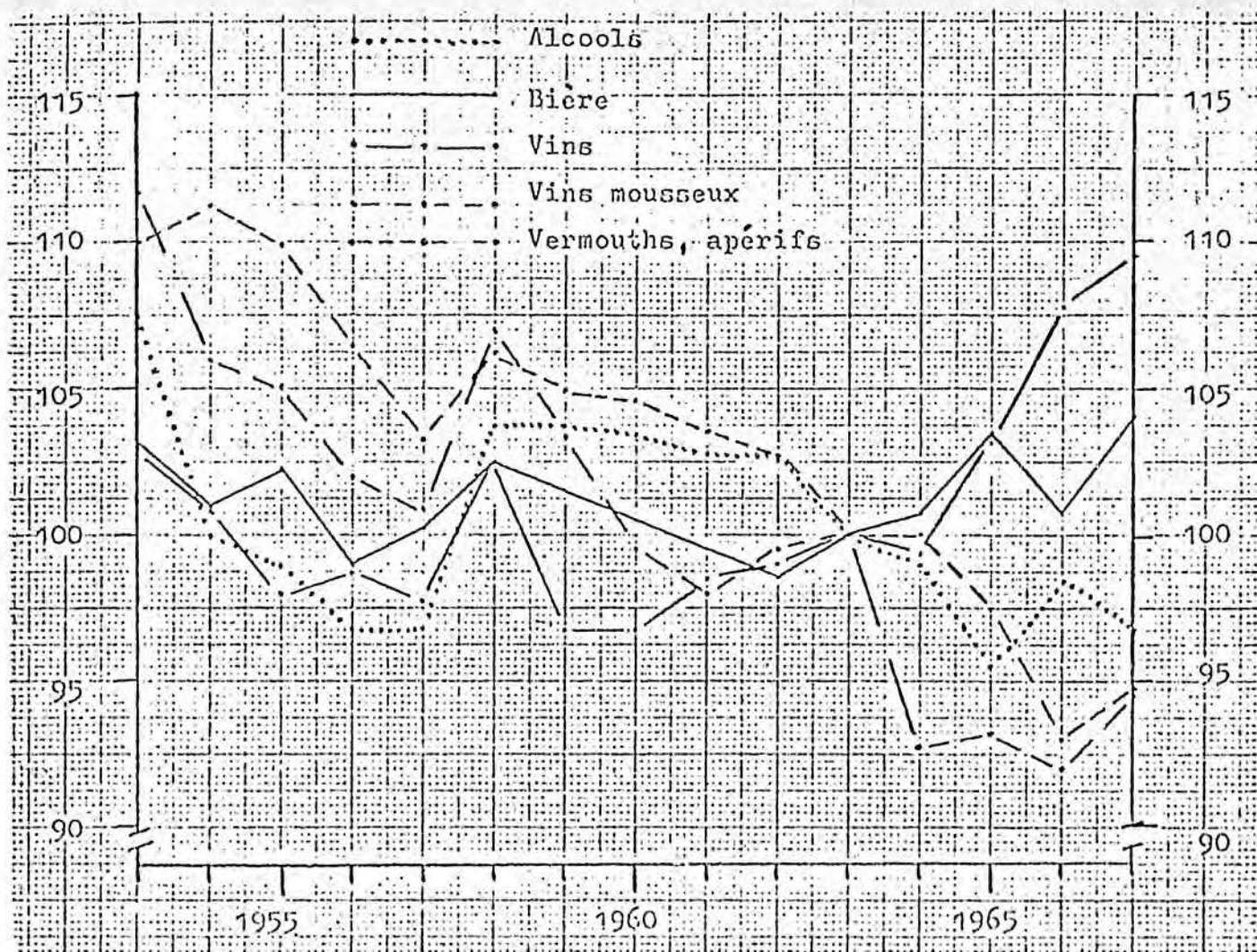


Volume and price indexes, Italy 1951-1966, 1963=100

	Volume				Price				Ensemble des boissons	Consommation totale
	Vins	Bière	Liqueurs	Ensemble des boissons alcoolisées	Vins	Bière	Liqueurs	Ensemble des boissons alcoolisées		
1951	63,9	34,1	39,0	57,9	65,1	72,4	58,7	64,8	70,0	67,5
1952	68,3	35,3	40,7	61,7	67,0	73,3	64,6	67,1	72,2	70,9
1953	72,7	37,6	44,1	65,8	78,2	75,0	76,9	77,9	80,9	75,2
1954	77,2	38,8	45,8	69,6	84,0	75,8	87,0	83,9	87,7	77,8
1955	81,9	41,2	49,2	73,9	83,1	80,0	89,7	83,5	88,4	79,5
1956	85,9	41,2	51,7	77,3	84,2	82,3	93,4	84,9	88,5	82,1
1957	87,0	42,4	53,4	78,5	82,1	83,3	96,8	83,5	87,6	82,9
1958	88,1	45,9	55,9	80,0	92,2	87,2	100,0	92,6	94,7	85,5
1959	91,2	55,3	58,5	83,6	80,8	89,4	101,4	83,2	87,4	85,5
1960	92,6	62,4	62,7	85,9	78,1	88,7	98,6	80,7	85,9	87,2
1961	94,3	75,3	67,5	89,1	84,8	89,1	97,5	86,4	89,9	88,9
1962	96,2	91,8	81,4	93,9	92,4	89,7	99,0	92,9	94,7	93,2
1963	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1964	97,1	103,5	102,5	93,4	107,2	109,1	111,6	108,0	108,1	106,0
1965	102,0	103,2	103,4	102,7	108,7	116,3	126,2	111,7	113,0	110,3
1966	103,1	125,9	103,1	109,4	115,3	149,5	101,6	117,2	117,5	112,8

Source: Effets du prix et du revenu sur la consommation des boissons dans les États membres des Communautés Européennes.

Price Indexes in 1963 Prices, Belgium 1953- 1967, 1963=100

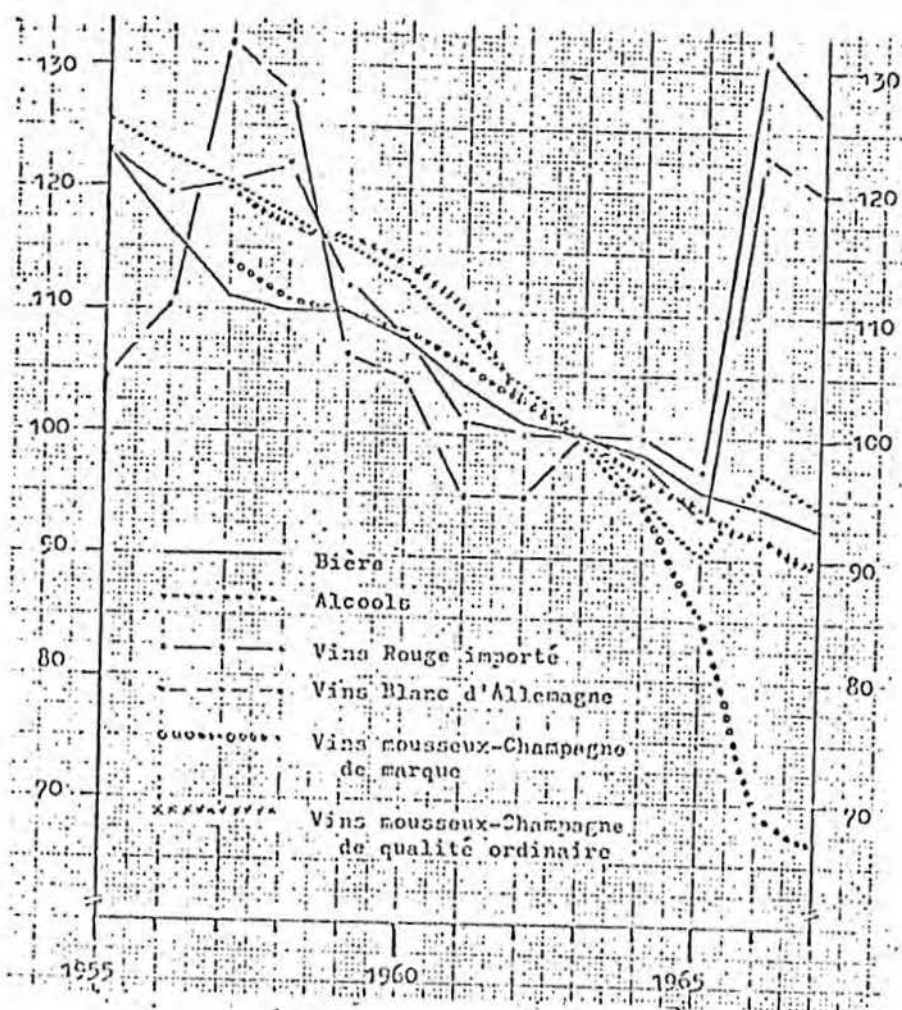


Volume and Price Indexes, Belgium 1953-1967, 1963=100

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967		
VOLUME	Vins	62,4	71,7	73,3	81,5	83,3	77,4	81,4	83,3	101,0	91,2	100,0	105,2	116,0	112,7	110,0	
	Vins mousseux	69,6	75,7	79,3	78,8	83,0	79,9	80,2	89,4	85,4	92,5	100,0	124,9	133,1	143,9	155,9	
	Vins et vins mousseux (3)	63,4	72,2	74,1	81,2	83,2	77,8	81,3	92,8	85,9	91,4	100,0	102,6	120,7	115,6	116,3	
	Vermouths, apéritifs (4)	58,9	58,9	58,9	100,0	105,6	107,9	109,5	118,8	119,6	116,5	100,0	101,1	114,0	88,0	130,1	
	Ensemble des vins (3+4)	66,6	74,6	76,4	82,9	89,9	89,5	83,9	95,2	100,8	93,7	100,0	107,9	122,2	114,1	117,5	
	Bière	99,3	94,3	96,9	94,5	98,4	99,2	103,5	93,5	101,7	99,5	100,0	104,8	102,6	102,5	105,1	
	Alcoolés	58,5	60,3	61,6	61,7	65,7	62,3	60,0	75,3	74,4	87,8	100,0	103,5	122,1	103,1	95,2	
	ENSEMBLE DES BOISSONS ALCOOLISÉES	84,9	83,5	85,7	85,4	89,8	87,9	90,6	93,5	95,5	95,9	100,0	104,4	109,7	104,6	107,6	
	PRIX	Vins	89,5	89,5	86,0	89,5	91,3	95,7	92,3	93,1	95,8	97,2	100,0	104,0	112,0	122,0	127,0
		Vins mousseux	97,0	93,8	92,2	92,2	94,2	100,8	93,4	95,8	95,4	97,4	100,0	97,2	101,2	104,1	109,7
Vins et vins mousseux (3)		90,4	90,0	86,8	89,8	91,7	97,2	93,0	93,4	95,9	97,3	100,0	103,0	110,9	119,2	124,0	
Vermouths, apéritifs (4)		96,4	98,6	96,4	96,4	96,4	100,1	100,0	100,6	100,6	100,7	100,0	101,7	105,7	109,3	110,9	
Ensemble des vins (3+4)		91,0	90,9	87,7	90,5	92,1	97,4	93,7	94,0	94,2	97,4	100,0	103,2	109,9	118,3	122,6	
Bière		89,7	89,7	89,7	89,7	93,6	96,7	96,7	96,7	96,7	96,7	100,0	103,5	112,4	114,1	122,7	
Alcoolés		92,3	88,7	86,7	87,6	90,4	97,9	93,9	99,5	100,0	100,8	100,0	103,7	103,6	111,4	112,2	
ENSEMBLE DES BOISSONS ALCOOLISÉES	90,7	89,9	89,1	89,7	93,0	97,2	96,9	96,9	97,4	97,7	100,0	104,7	109,9	114,3	119,4		

Source: Effets du prix et du revenu sur la consommation des boissons dans les États membres de la Communauté. Bruxelles, 1968.

Price Indexes in 1963 Prices, Germany, Fed. Rep. 1955-1967, 1963=100



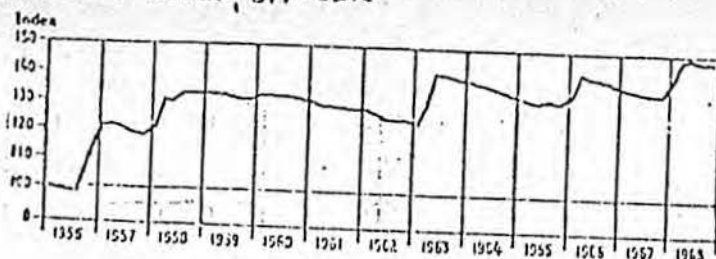
Volume and Price Indexes, Germany, Fed. Rep. 1955-1967, 1963=100.

		BOISSONS													
		1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	
Volume	Vins mousseux	27,9	35,0	42,2	49,3	58,4	70,3	75,3	90,2	100,0	124,9	154,2	125,1	127,7	
	Vins	62,9	64,1	54,2	53,0	73,0	79,2	93,5	94,4	100,0	89,0	103,2	118,9	116,6	
	Vins et vins mousseux ...	59,6	61,3	53,1	52,7	71,6	78,4	95,3	94,0	100,0	52,4	112,6	119,5	117,6	
	Bière	52,3	57,1	65,9	69,5	75,5	80,5	37,4	93,4	100,0	107,1	110,2	114,8	116,5	
	Alcool	46,2	52,7	57,7	55,2	53,3	72,6	81,2	92,5	100,0	95,5	110,2	95,6	91,2	
Price	Vins mousseux-Champagne de marque			99,9	99,9	99,9	99,9	100,0	100,1	100,0	97,0	90,2	76,3	74,6	
	Vins mousseux-Champagne de qualité ordinaire			105,4	105,4	105,4	104,9	103,8	100,2	100,0	59,1	59,3	100,5	100,0	
	Vins Blanc d'Allemagne ..	87,6	94,5	115,6	115,0	96,8	96,2	89,8	92,5	100,0	100,5	53,4	134,9	133,9	
	Vins Rouge importé	103,3	102,6	103,9	109,9	102,0	99,3	95,4	97,4	100,0	102,0	102,6	144,1	140,2	
	Bière	103,2	100,0	97,6	99,2	100,0	99,2	98,4	93,4	100,0	100,8	103,8	103,2	103,2	
	Alcool	105,2	105,2	105,7	106,1	105,1	105,5	102,2	101,2	100,0	97,0	95,4	105,4	101,9	

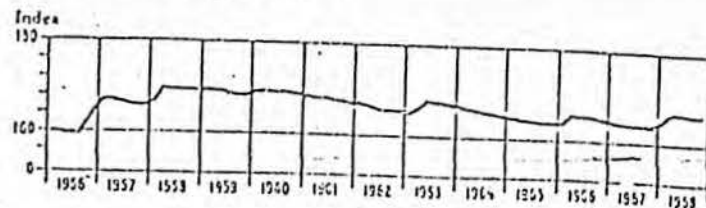
Source: Effets du prix et du revenu sur la consommation des boissons dans les Etats membres des Communautés, Bruxelles 1972.

Price Indexes in 1956 Prices, Sweden 1956-1968, I/1956=100

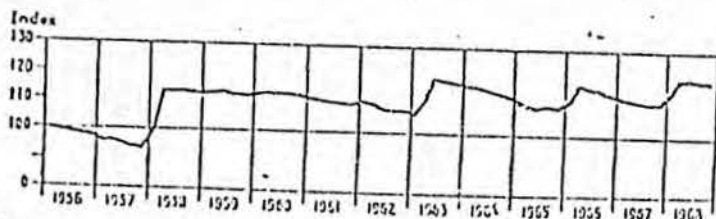
a. Vodka, off-sale



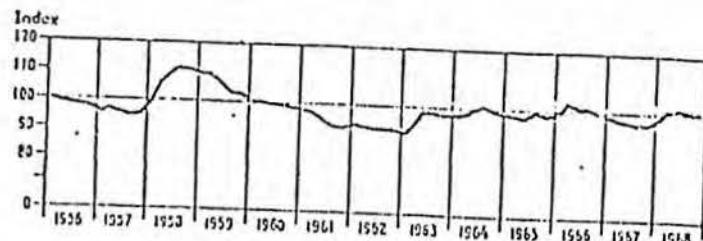
b. Other Spirits, off sale



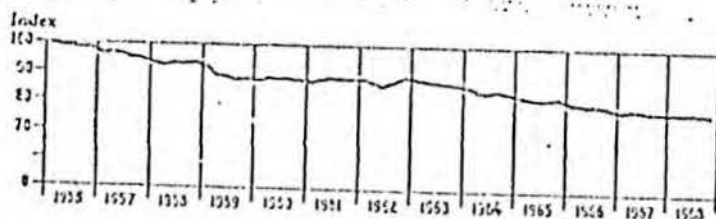
c. Fortified Wine, off sale



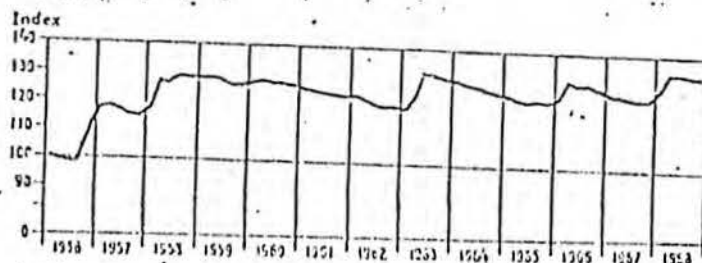
d. Light Wine, off sale



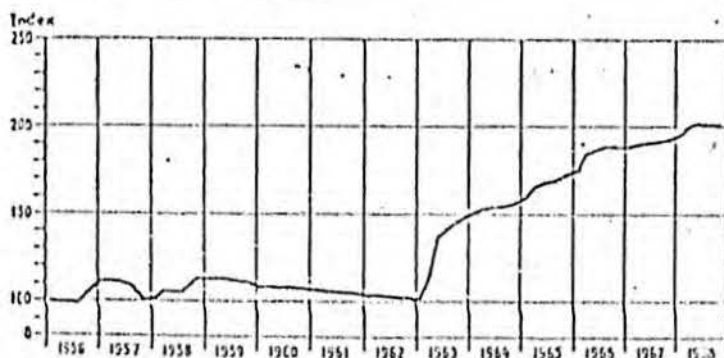
e. Strong Beer, off sale



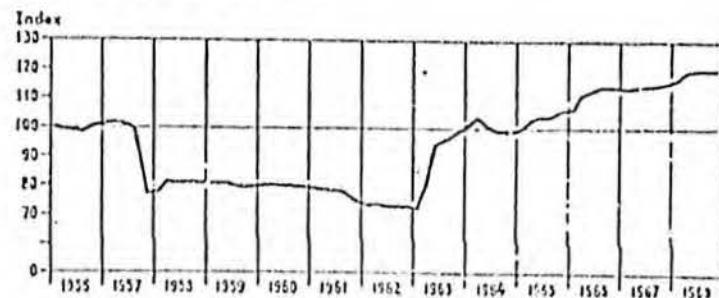
f. All Beverages, off-sale



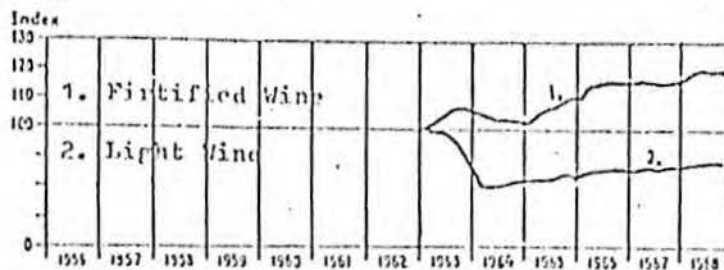
g. Vodka, on-sale



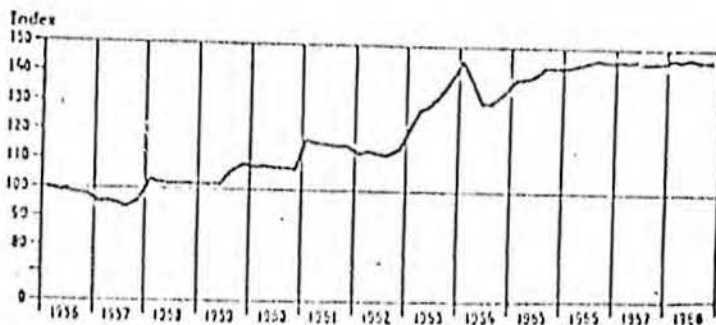
h. Other Spirits, on-sale



i. Fortified and Light Wine, on-sale



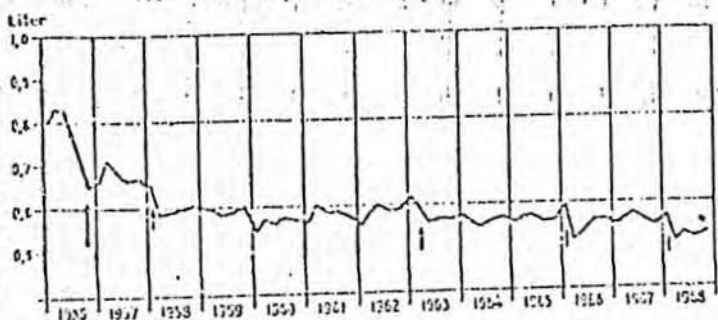
j. Strong Beer, on-sale



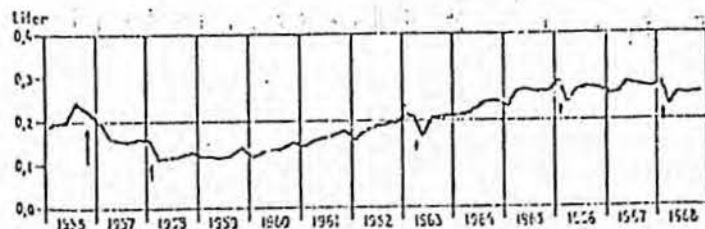
Appendix 2 G. SWEDEN

Consumption of Alcoholic Beverages litres per capita, Sweden 1956-1968

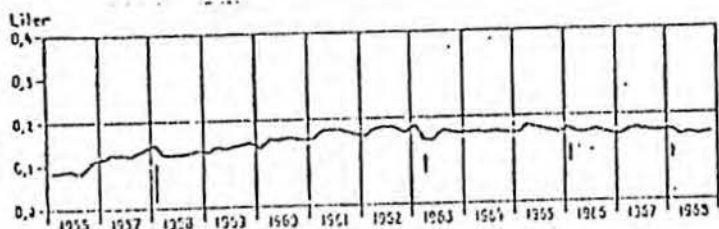
a. Vodkas, off-sale



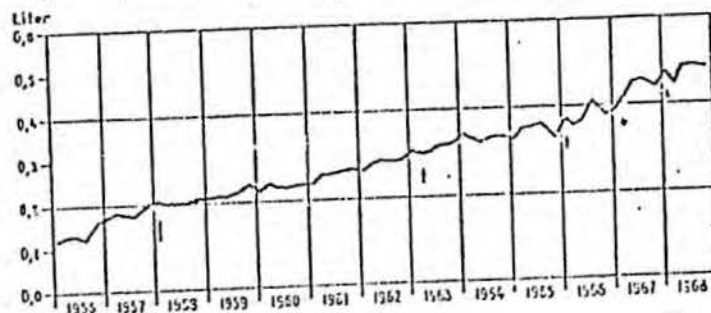
b. Other Spirits, off-sale



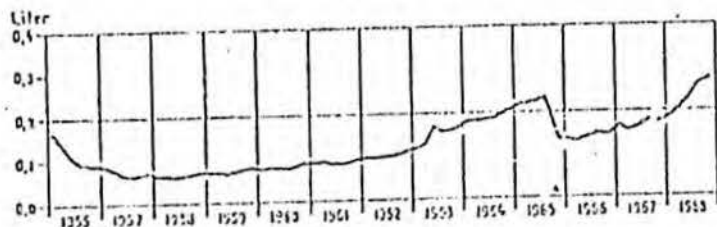
c. Fortified Wine, off-sale



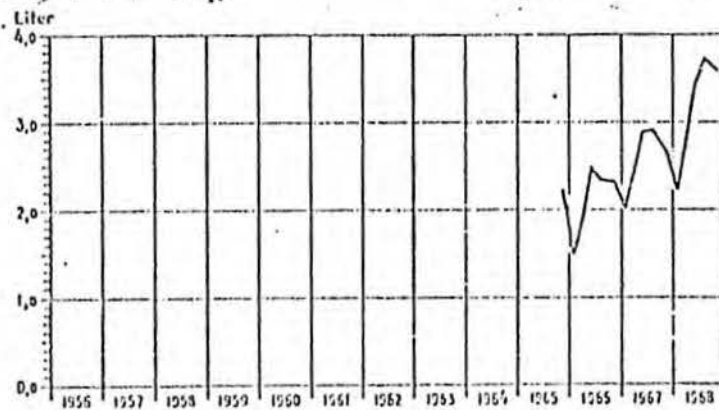
d. Light Wine, off-sale



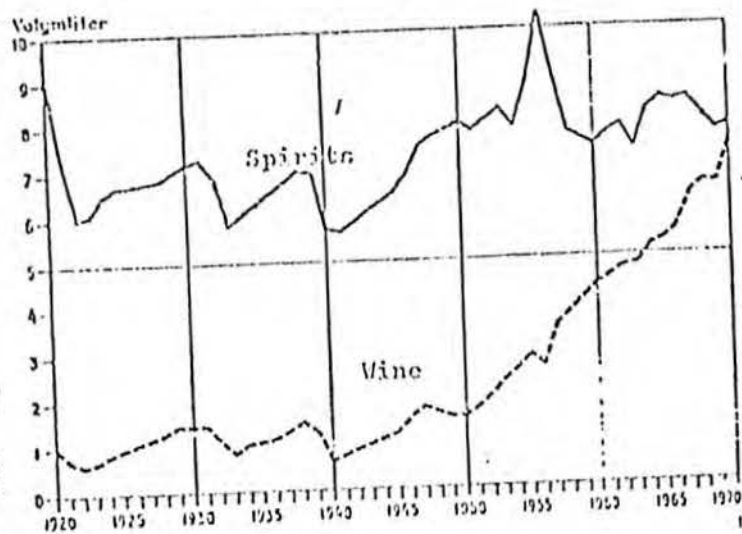
e. Strong Beer, off-sale



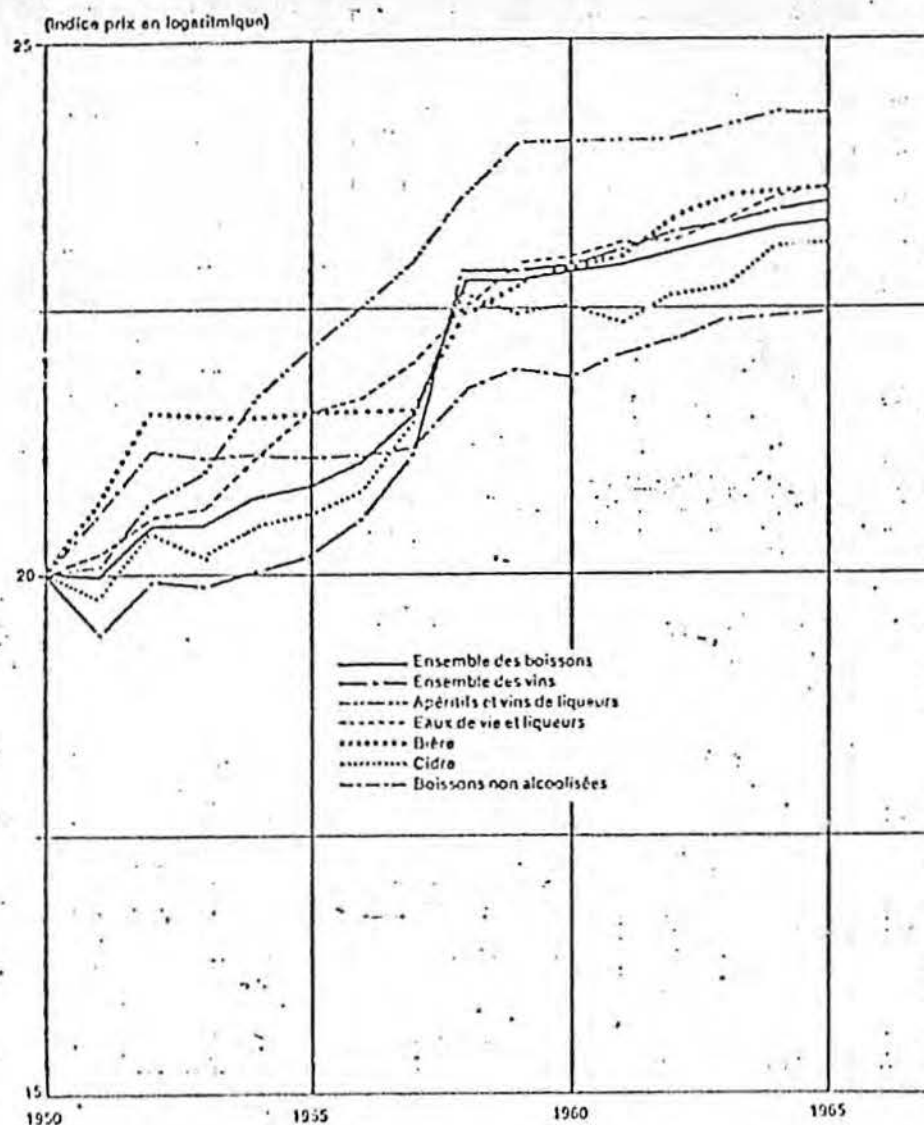
f. Medium Beer, off-sale



g. Total sales, litres per adult



EVOLUTION DU PRIX DES BOISSONS EN FRANCE DE 1950 A 1965



Indices des prix à la consommation, 1951=100

1948	77
1951	100
1952	111
1953	110
1954	110
1955	111
1956	113
1957	116
1958	133
1959	142
1960	147
1961	152
1962	159
1963	167
1964	173
1965	177

TABLÉAU I

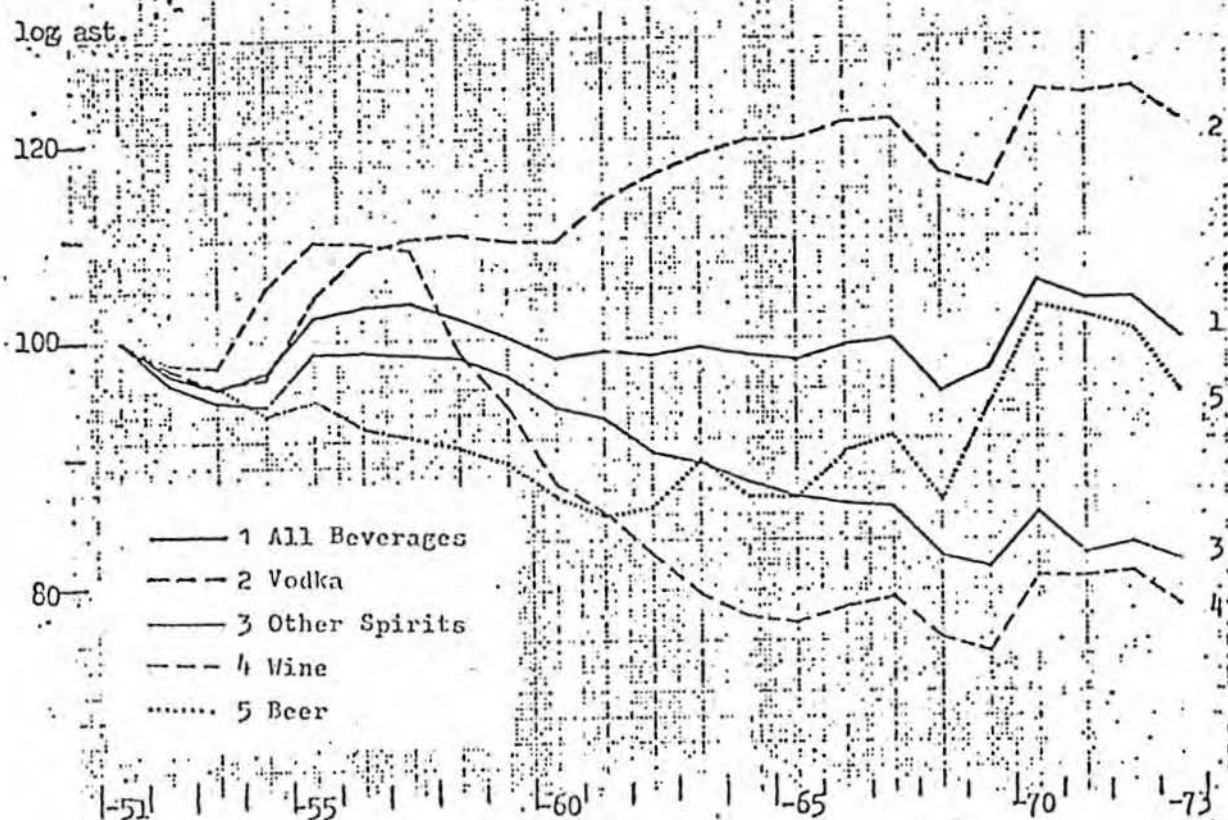
EVOLUTION DE LA CONSOMMATION DES BOISSONS ET DE LA CONSOMMATION TOTALE EN FRANCE DE 1950 A 1965

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
Vins courants	100,0	95,6	100,9	102,7	107,3	110,0	111,4	117,7	113,7	103,5	110,0	110,5	114,1	114,4	116,6	117,2
Vins Champagne	100,0	100,0	100,0	100,0	117,0	133,0	155,0	176,0	136,0	141,0	172,0	190,8	29,7	231,1	256,5	295,0
V.D.N.	100,0	100,0	111,4	121,4	161,4	187,1	221,3	248,6	173,6	240,0	235,7	278,1	293,7	310,1	325,0	341,2
Vins A.O.C.	100,0	133,2	147,5	149,3	162,3	177,7	194,7	177,0	164,0	180,0	225,4	207,2	225,6	239,6	244,6	258,2
Ensemble vins	100,0	105,6	109,9	111,8	116,4	123,6	122,1	124,1	115,9	117,9	125,9	125,5	130,4	134,8	138,2	141,7
Apér. et vins de liqueurs	100,0	105,5	104,7	94,1	87,6	78,1	82,6	84,8	76,7	75,3	77,8	85,9	92,8	104,3	119,7	135,2
Eaux de vie et liqueurs	100,0	116,8	112,9	107,4	100,0	88,1	96,5	94,6	88,9	87,1	90,3	94,4	99,3	112,8	113,1	121,0
Bière	100,0	104,4	115,2	123,9	130,4	143,5	150,0	187,0	210,9	228,3	204,3	252,3	250,5	253,8	293,1	231,4
Cidre	100,0	102,0	103,4	93,9	87,2	84,5	71,6	67,6	58,8	62,2	59,1	57,1	54,2	54,4	57,5	45,8
Boissons non alcoolisées	100,0	108,4	119,6	132,9	143,4	179,7	195,8	227,3	215,4	232,9	244,5	289,2	309,2	344,8	397,6	390,1
Ensemble des boissons	100,0	106,3	108,8	110,1	111,5	115,4	117,3	121,3	116,4	119,5	123,8	129,0	134,7	142,5	151,5	156,3
Consommation totale	100,0	105,7	110,4	116,4	121,2	128,0	136,5	144,8	145,3	148,1	156,1	165,0	176,7	188,9	197,4	204,0

Source: Effets du prix et du revenu sur la consommation des boissons dans les Etats membres des Communautés, Bruxelles 1972.

Appendix 2 I. FINLAND

Price Indexes in 1951 Prices, Finland 1951-1973, 1951=100.



The Consumption of Alcoholic Beverages in 100 % alcohol litres per capita, Finland 1951-1972

	Vodka			Other Spirits			Wine			Beer			All Beverages		
	off	on	Σ	off	on	Σ	off	on	Σ	off	on	Σ	off	on	Σ
Koko maa 1972	0,997	0,251	1,248	0,723	0,213	0,941	0,530	0,104	0,634	1,410	0,817	2,277	3,655	1,415	5,100
Vuonna 1971	1,019	0,224	1,243	0,658	0,182	0,820	0,521	0,081	0,602	1,281	0,774	2,055	3,459	1,261	4,720
« 1970	0,582	0,211	1,093	0,499	0,166	0,665	0,487	0,078	0,565	1,250	0,729	1,979	3,118	1,184	4,302
« 1969	0,801	0,182	0,983	0,446	0,153	0,601	0,436	0,051	0,517	1,407	0,697	2,101	3,020	1,118	4,208
« 1968	0,732	0,115	0,817	0,441	0,141	0,582	0,440	0,070	0,510	0,577	0,361	0,938	2,190	0,667	2,677
« 1967	0,711	0,090	0,801	0,475	0,150	0,625	0,409	0,068	0,477	0,465	0,270	0,735	2,060	0,578	2,638
« 1966	0,695	0,061	0,756	0,482	0,177	0,659	0,377	0,070	0,447	0,408	0,225	0,633	1,962	0,533	2,495
« 1965	0,701	0,016	0,747	0,460	0,184	0,644	0,335	0,067	0,402	0,363	0,196	0,559	1,859	0,493	2,352
« 1964	0,700	0,015	0,745	0,426	0,184	0,610	0,295	0,067	0,362	0,316	0,179	0,495	1,737	0,475	2,212
« 1963	0,736	0,017	0,733	0,433	0,191	0,624	0,247	0,067	0,314	0,280	0,170	0,450	1,696	0,475	2,171
Kokonaan 1972	0,762	0,052	0,814	0,413	0,197	0,610	0,196	0,063	0,259	0,259	0,168	0,427	1,630	0,480	2,110
Vuonna 1961	0,779	0,059	0,858	0,350	0,185	0,535	0,166	0,060	0,226	0,227	0,168	0,395	1,512	0,472	2,014
» 1960	0,795	0,061	0,856	0,279	0,169	0,448	0,140	0,054	0,194	0,186	0,163	0,349	1,409	0,447	1,847
» 1959	0,785	0,063	0,848	0,221	0,156	0,377	0,115	0,046	0,161	0,170	0,160	0,330	1,291	0,435	1,716
» 1958	0,703	0,063	0,771	0,229	0,151	0,380	0,112	0,040	0,152	0,159	0,158	0,317	1,208	0,412	1,620
» 1957	0,662	0,052	0,724	0,272	0,153	0,430	0,195	0,043	0,238	0,167	0,165	0,332	1,296	0,428	1,724
» 1956	0,662	0,055	0,727	0,321	0,161	0,485	0,248	0,051	0,299	0,153	0,170	0,323	1,384	0,450	1,834
» 1955	0,701	0,069	0,773	0,351	0,171	0,525	0,259	0,057	0,346	0,153	0,169	0,322	1,509	0,466	1,966
» 1954	0,625	0,067	0,692	0,375	0,161	0,536	0,288	0,059	0,317	0,134	0,175	0,309	1,422	0,462	1,884
» 1953	0,529	0,061	0,590	0,432	0,155	0,587	0,313	0,057	0,370	0,133	0,174	0,307	1,407	0,417	1,824
» 1952	0,565	0,072	0,617	0,502	0,163	0,685	0,198	0,055	0,253	0,149	0,170	0,219	1,414	0,460	1,874
» 1951	0,624	0,042	0,656	0,459	0,207	0,706	0,058	0,042	0,100	0,150	0,174	0,324	1,331	0,555	1,886
» 1948	0,846	0,014	0,860	0,133	0,088	0,221	0,018	0,010	0,088	0,037	0,232	0,264	1,059	0,374	1,433