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Correlation between prices and coffee consumption in importing countries

Background

In the context of the programme of activities approved by the International Coffee Council in May 2002 (document EB-3817/02) the Organization aims to promote, encourage and increase the consumption of coffee as a means of contributing towards the re-establishment of a balance between supply and demand with a view to improving the world coffee economy. Special attention is to be given to the problem of increasing coffee consumption in importing countries. The purpose of this study is to analyze the relationship between consumption in importing countries and movements in world coffee prices and retail prices of coffee.

Action

The Executive Board is requested to take note of this document.

1. The coffee crisis which has been afflicting exporting countries as a result of the low levels of international market prices has reached alarming proportions, with negative social, economic and political consequences. While world coffee prices continue to tumble to record lows, demand remains stagnant and consumption in traditional importing countries shows signs of having reached saturation point. These low current price levels call for an analysis of the relationship between prices and consumption. The problem is to determine whether low world prices are passed on to the final consumer in order to encourage consumption. As a determining factor in the search for a balanced coffee market, the situation of consumption in importing countries is a matter of major concern.

2. The purpose of this study is to analyse the relationship between coffee prices and consumption in importing countries and to determine the significance of this relationship. It seeks to provide answers to the following questions:

- To what extent do price levels influence coffee consumption?
- To what extent do world coffee prices influence consumption in importing countries?
- To what extent have changes in blends or changes in the behaviour of roasters influenced consumption?

3. The following points will be covered:

I. Pattern of consumption in coffee importing countries
II. Analysis of the correlation between prices and consumption in importing countries
III. Impact of other factors affecting consumption in importing countries

I. Pattern of consumption in coffee importing countries

A. Steady growth in consumption

4. Coffee has not been replaced by any industrially-derived substitutes, which would have entailed a sharp fall in demand, as happened in the case of other primary products like cotton or natural rubber for which synthetic substitutes were found. On the other hand, apart from food outlets and the use of caffeine in the pharmaceutical industry, no new industrial uses have been found for coffee, which would have caused an increase in demand. Figures for total consumption in importing countries since 1965 indicate that here has been slow but steady growth, interrupted only by a significant fall in 1977 and two slight falls in 1986 and 1994. In fact, the pattern of demand for green coffee indicates that, with the exception of the slight fall following the Brazilian frost in 1977, there have been no sharp fluctuations (see Graph 1). Total annual consumption exceeded 80 million bags in the last two years compared to 75.87 million bags during the 1990s. Average consumption in the period 1965 – 2002 was 65 million bags. Total consumption in importing countries increased steadily and without any marked fluctuations. The growth rate for the period as a whole was 1.46%.

Over four decades, consumption in importing countries increased by around 25 million bags. The sharpest fall in total consumption was recorded in 1977 (-17.18%) following the drastic reduction in world production as a result of frosts in Brazil, which sparked off an explosion in coffee prices. Consumption in the European Union countries seems to have reached saturation point at around 35 million bags since the level of 35.5 million bags recorded in 1993 has not been reached again since then despite the fall in prices over the last five years.

5. Figures for individual countries indicate that consumption in the USA, which was high in the 1960s with an annual average of 22 million bags, has been falling since the end of that decade and has never again reached an average annual level of 22 million bags. The average for the period 1965 – 2002 was 18.20 million bags. In the 1970s and 1980s average consumption was 20 and 17.88 million bags respectively while the annual average in the 1990s was 18.27 million bags. Consumption in Japan grew considerably rising from an average of 731,000 bags in the 1960s to 6.88 million bags in recent years. Table 1 shows average consumption in importing countries.

Table 1: Average consumption (000 bags of 60 kg)

	Averages						
	1965-02	**1965-69**	**1970-79**	**1980-89**	**1990-99**	**1990-92**	**2000-02**
World consumption	**65,244**	**50,664**	**57,025**	**66,153**	**75,877**	**73,588**	**81,003**
TOTAL	**53,881**	**44,405**	**48,861**	**55,000**	**60,377**	**60,188**	**61,024**
U.S.A.	19,190	22,000	19,992	17,981	18,273	18,417	18,921
European Community	***29,412***	***20,524***	***25,552***	***31,340***	***34,518***	***34,526***	***33,654***
Austria	836	337	545	1,003	1,172	1,285	963
Belgium/Luxembourg	1,172	1,159	1,201	1,272	1,011	910	1,302
Denmark	925	907	1,011	940	865	911	822
Finland	966	817	964	1,027	981	1,022	966
France	4,943	3,789	4,583	5,264	5,430	5,458	5,378
Germany	8,100	5,398	6,526	8,712	10,073	10,109	9,238
Greece	418	207	290	470	504	446	742
Ireland	74	21	43	84	108	108	122
Italy	3,890	2,364	3,234	4,103	4,704	4,406	5,198
Netherlands	1,978	1,397	1,747	2,254	2,281	2,529	1,788
Portugal	395	115	292	325	609	496	727
Spain	2,011	921	1,403	1,983	2,911	2,803	2,945
Sweden	1,584	1,695	1,729	1,624	1,449	1,642	1,225
United Kingdom	2,119	1,395	1,983	2,279	2,422	2,402	2,238
Cyprus	35	21	23	33	48	39	59
Japan	3,841	731	2,029	4,214	5,923	5,515	6,881
Norway	679	583	648	712	724	740	687
Switzerland	723	546	618	720	891	951	823
All other importing countries	11,363	6,259	8,164	11,154	15,500	13,400	19,979

6. During the period 1965 – 2002, the most significant increase in consumption was recorded in Japan, with an annual growth rate of 7.22%. The USA recorded a negative annual growth rate in consumption for this period, namely -0.40% but in the more recent period from 1990 to 2002 it was 0.26%, indicating a recovery in the country's coffee industry. Table 2 shows annual growth rates in the consumption of importing countries.

Table 2: Growth rates in the consumption of importing countries

Importing country	**1965-02**	**1990-02**
Total	**0.98%**	**0.25%**
U.S.A.	-0.40	0.26
European Community	***1.56***	***-0.08***
Austria	3.29	-2.81
Belgium/Luxembourg	0.72	2.33
Denmark	-0.10	-0.46
Finland	0.42	-0.78
France	1.13	0.45
Germany	1.52	-0.10
Greece	4.30	2.66
Ireland	6.14	1.12
Italy	2.51	0.53
Netherlands	0.74	-3.24
Portugal	2.86*	3.82
Spain	3.61	0.58
Sweden	-0.66	-2.58
United Kingdom	1.68	-0.67
Other importing countries		
Cyprus	4.34	3.77
Japan	7.22	2.38
Norway	0.68	-0.41
Switzerland	0.82	-0.81

7. A number of countries have recorded negative or very low growth rates both over the period 1965 – 2002 and during the more recent period from 1990 to 2002. During the latter period negative growth rates were recorded in the European Union as a whole (-0.08%) and in the following nine countries: Austria (-2.29%), Denmark (-0.46%), Finland (-0.78%), Germany (-0.10%), the Netherlands (-3.24%), Norway (-0.41%), Sweden (-2.58%), Switzerland (-0.81%) and the United Kingdom (-0.67%). The different rates of growth in the individual countries account for the slow growth of consumption in importing countries as a whole. On the basis of a growth rate of 1% for the period 1990 – 2002, total consumption in 2003 will be around 82.56 million bags.

B. Per capita consumption

8. The graphs in Annex II show per capita consumption since 1965. These graphs also show retail prices which will be analysed in Section II. Table 3a shows average per capita consumption in importing countries.

Table 3a: Per capita consumption of importing countries

	Averages						
	1965-02	**1965-69**	**1970-79**	**1980-89**	**1990-99**	**1990-92**	**2000-02**
TOTAL	**4.46**	**4.14**	**4.30**	**4.52**	**4.70**	**4.78**	**4.55**
U.S.A.	5.03	6.76	5.71	4.59	4.22	4.41	3.99
European Community	***4.91***	***3.68***	***4.40***	***5.23***	***5.58***	***5.65***	***5.34***
Austria	6.48	2.76	4.34	7.93	8.82	9.86	7.12
Belgium/Luxembourg	6.85	7.02	7.12	7.45	5.76	5.26	7.29
Denmark	10.89	11.26	12.05	11.01	9.94	10.61	9.22
Finland	11.90	10.66	12.32	12.64	11.57	12.23	11.17
France	5.40	4.59	5.24	5.73	5.64	5.74	5.45
Germany	6.12	4.21	5.00	6.70	7.44	7.58	6.73
Greece	2.54	1.43	1.91	2.85	2.90	2.62	4.30
Ireland	1.27	0.43	0.81	1.43	1.79	1.83	1.89
Italy	4.14	2.69	3.51	4.32	4.93	4.63	5.40
Netherlands	8.24	6.65	7.72	9.34	8.91	10.08	6.69
Portugal	2.42	0.75	1.90	1.97	3.68	3.01	4.31
Spain	3.18	1.68	2.37	3.10	4.46	4.32	4.38
Sweden	11.38	12.94	12.69	11.65	9.95	11.44	8.28
United Kingdom	2.23	1.53	2.13	2.41	2.48	2.49	2.25
Other importing countries							
Cyprus	3.10	2.15	2.28	3.03	3.98	3.41	4.73
Japan	1.90	0.44	1.09	2.10	2.84	2.67	3.25
Norway	9.84	9.23	9.75	10.29	10.00	10.41	9.13
Switzerland	6.57	5.47	5.84	6.67	7.67	8.39	6.83

9. Graph 2 shows per capita consumption in importing countries as a whole and the ICO composite indicator price from 1965 to 2002. It will be seen that the low levels of world coffee prices have not led to a significant increase in consumption in importing countries since the average for these countries as a whole has not reached the level of 4.87 kg/per capita recorded in 1993. A downward, albeit somewhat irregular trend has been recorded since that year (see Graph 2).

10. By country (see graphs in Annex II), consumption has shown a downward trend in relation to past performance in Austria, Denmark, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland and the USA. The sharpest fall was recorded in the USA, where consumption was down from around 6.76 kg/per capita in the 1960s to an average of below 4 kg/per capita since 2000. The steadiest growth in per capita consumption during the

period concerned was recorded in Japan. Italy, Portugal and Spain have also recorded a growth in per capita consumption. A comparison of average per capita consumption figures for the period 1990 – 1992 with those for the period 2000 – 2002, representing an interval of ten years, shows that per capita consumption fell in the following 11 countries: Austria, Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden, Switzerland, United Kingdom and the USA (see Table 3b).

Table 3b: Average per capita consumption (1990 – 1992 and 2000 – 2002)

	Average		
Importing country	**1990-92**	**2000-02**	**% change**
Greece	2.62	4.30	63.99
Portugal	3.01	4.31	43.30
Cyprus	3.41	4.73	38.85
Belgium/Luxembourg	5.26	7.29	38.53
Japan	2.67	3.25	21.88
Italy	4.63	5.40	16.70
Ireland	1.83	1.89	3.27
Spain	4.32	4.38	1.31
France	5.74	5.45	-5.00
Finland	12.23	11.17	-8.67
U.S.A.	4.41	3.99	-9.45
United Kingdom	2.49	2.25	-9.63
Germany	7.58	6.73	-11.21
Norway	10.41	9.13	-12.29
Denmark	10.61	9.22	-13.04
Switzerland	8.39	6.83	-18.63
Sweden	11.44	8.28	-27.62
Austria	9.86	7.12	-27.85
Netherlands	10.08	6.69	-33.58

II. Analysis of the correlation between prices and consumption in importing countries

A. Relationship between international prices and retail prices

11. Before analysing the relationship between retail prices and consumption we must determine the nature of the relationship between retail prices and world market prices represented by the ICO composite indicator price. In many cases the retail price reflects movements in world market prices. Table 4 shows the correlation coefficients between the ICO composite indicator price and retail prices in importing countries.

Table 4: Correlation between retail prices and ICO composite indicator price

Importing country	1965-02	1965-79	1980-89	1990-02
U.S.A.	0.68	0.99	0.33	0.89
European Community				
Austria	0.55	0.98	-0.23	0.39
Belgium/Luxembourg	0.66	0.96	0.37	0.95
Denmark	0.81	0.98	0.38	0.96
Finland	0.60	1.00	0.22	0.94
France	0.59	0.86	0.21	0.87
Germany	0.83	0.97	0.22	0.84
Greece				
Ireland				
Italy	0.43	0.97	-0.16	0.57
Netherlands	0.79	0.99	0.33	0.89
Portugal	0.23	1.00	0.31	0.77
Spain	0.39	0.87	0.05	0.77
Sweden	0.76	0.98	0.27	0.96
United Kingdom	0.31	0.95	-0.21	0.66
Other importing countries				
Cyprus				
Japan	-0.05	-----	-0.36	0.69
Norway	0.78	0.44	0.49	0.86
Switzerland	0.59	0.97	-0.01	0.81

12. The recent period (1990 – 2002) shows a strong correlation between retail prices and the ICO composite indicator price in almost all importing countries. In view of the low levels of current coffee prices this situation could have led to an increase in consumption.

B. Retail prices and consumption in importing countries

13. Graph 1 shows total consumption in importing countries and the ICO composite indicator price. Consumption responded in different ways to variations in the ICO composite indicator price. The most significant price increases were recorded in 1977, 1986, 1994 and 1997. Sharp fall in price did not necessarily lead to significant increases in consumption. In fact, the price-elasticity of demand for coffee is asymmetrical since consumption is cut back only when there is a sharp rise in prices, as was the case in 1977, whereas prolonged periods of depressed prices, like the period since 1998, fail to stimulate any marked growth in consumption.

C. Correlation between retail prices and per capita consumption

14. The relationship between retail prices and per capita consumption was analysed for the period 1965 – 2002 as a whole and for various sub-periods. The results of the correlation test are shown in Table 5.

Table 5: Correlation between retail prices and per capita consumption in importing countries

Importing country	1965-02	1965-79	1980-89	1990-02
U.S.A.	-0.95	-0.94	-0.58	-0.68
European Community				
Austria	0.83	0.74	0.29	0.57
Belgium/Luxembourg	-0.12	-0.23	-0.46	0.24
Denmark	-0.59	-0.40	-0.27	-0.29
Finland	-0.39	-0.64	-0.32	-0.53
France	-0.69	0.64	0.10	0.10
Germany	0.68	0.85	0.05	0.35
Greece				
Ireland				
Italy	0.80	0.54	0.15	-0.75
Netherlands	0.44	0.15	0.05	0.35
Portugal	0.25	1	-0.27	-0.02
Spain	-0.06	-0.93	0.21	0.06
Sweden	-0.64	-0.63	-0.43	-0.24
United Kingdom	0.43	0.05	-0.49	-0.27
Other importing countries				
Cyprus				
Japan	0.60	------	0.95	-0.29
Norway	0.12	0.01	-0.45	-0.22
Switzerland	0.62	-0.13	0.56	0.18

15. The results of the test show a strong negative correlation for the USA, Sweden and Denmark for the period 1965 – 2002. However, results for the recent period (1990 – 2002) indicate that changes have occurred in a number of countries. In the USA, per capita consumption continues to be sensitive to retail price levels but the degree of sensitivity is lower. Other countries showing a negative correlation between retail prices and per capita consumption are Denmark, Finland, Italy, Japan, Norway, Sweden and the United Kingdom. Portugal shows a very weak negative correlation. Positive correlations were recorded for Austria, Belgium/Luxembourg, France, Germany, the Netherlands, Spain (very weak) and Switzerland. The graphs in Annex II show retail prices and per capita consumption.

16. The main observation to be made on the basis of this test is that countries with a negative correlation coefficient should have recorded an increase in per capita consumption since retail prices have fallen in response to low world market coffee prices. But these

countries have reacted differently and sometimes very timidly to falls in price. Income levels and the behaviour of roasters, characterised mainly by changes in blends, may also have an influence on per capita consumption figures since in most of these countries the level of prices is no longer a determining factor in demand.

III. Impact of other factors affecting consumption in importing countries

A. Income and consumption

17. Since coffee is regarded as a luxury product in many low-income countries, increased coffee consumption in these countries is frequently the result of a growth in real incomes. Changes in real incomes have a far greater impact, therefore, in low-income countries than in countries where incomes are already higher. Table 6 shows correlation coefficients between consumption and GNP. A number of sub-periods were also taken into account in order to highlight changes over time.

Table 6: Correlation coefficients between per capita consumption and GNP

Importing country	1965-02	1965-79	1980-89	1990-02
U.S.A.	-0.85	-0.90	-0.55	-0.65
European Community				
Austria				
Belgium/Luxembourg	-0.41	0.17	-0.54	0.45
Denmark	-0.79	-0.14	-0.77	-0.69
Finland	0.00	0.44	-0.34	-0.06
France	0.59	0.86	-0.49	0.02
Germany	0.88	0.94	0.85	0.21
Greece				
Ireland				
Italy	0.87	0.75	0.58	-0.05
Netherlands	0.61	0.56	0.64	0.41
Portugal	0.66	-0.68	0.84	0.62
Spain	0.75	0.72	0.91	-0.44
Sweden	-0.82	-0.35	-0.78	-0.90
United Kingdom	0.61	0.50	0.01	-0.34
Other importing countries				
Cyprus				
Japan	0.99	0.94	0.97	0.66
Norway	0.09	0.23	-0.18	-0.54
Switzerland	0.75	0.24	0.80	-0.68

18. The figures in Table 6 indicate that in certain countries the positive impact of income on consumption has practically ceased to exist. In other countries, increases in income have been accompanied by a stagnation in the consumption of coffee (very weak correlation coefficient) or a decline (negative correlation coefficient).

B. Structure of imports and coffee groups

19. A comparative analysis of the structure of green coffee imports was carried out for traditional importing countries which recorded a fall of more than 5% in per capita consumption over the last ten years (see Table 3b). The countries concerned are: Austria, Denmark, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland, United Kingdom and USA. It should be noted that the underlying argument generally put forward by a number of operators is that changes made to blends by roasters, who have increased the proportion of coffees with a high caffeine content or poorer quality coffees, have contributed towards a reduction in coffee consumption among traditional consuming countries. In order to clarify this issue, a comparative analysis of the composition of imports in countries which have recorded falls in consumption was carried out.

20. Annex III shows the structure of imports of green coffee for the four coffee groups for two periods (1990 – 1992 and 2000 – 2002) representing an interval of ten years. Distinctions should be made among the various markets. For example, Scandinavian countries have historically shown very high levels of per capita consumption. The U.S. market is characterised by its proximity to the major Arabica producing countries in Latin America. Austria is the distribution centre for Central Europe. However, in most of these countries consumption was historically orientated towards "filter coffee". (The United Kingdom traditionally consumes instant coffee). Table 7 shows that in the ten countries selected, with the exception of Austria and two Scandinavian countries, imports of Mild Arabicas have been reduced.

Table 7: Imports of Mild Arabicas

	Per capita consumption Average (kg)			Mild coffee imports % on total imports		
Importing country	**1990-92**	**2000-02**	**% change**	**1990-92**	**2000-02**	**% change**
Netherlands	10.08	6.69	-33.58	48.29	45.73	-2.56
Austria	9.86	7.12	-27.85	35.06	40.34	5.27
Sweden	11.44	8.28	-27.62	53.57	53.95	0.38
Switzerland	8.39	6.83	-18.63	61.73	53.94	-7.79
Denmark	10.61	9.22	-13.04	33.85	38.57	4.72
Norway	10.41	9.13	-12.29	45.64	54.77	9.13
Germany	7.58	6.73	-11.21	68.32	47.99	-20.33
United Kingdom	2.49	2.25	-9.63	42.81	36.64	-6.17
U.S.A.	4.41	3.99	-9.45	64.29	60.07	-4.22
Finland	12.23	11.17	-8.67	71.47	56.73	-14.74

21. Since the Scandinavian countries and Austria have special characteristics, a tentative conclusion is that in countries where consumption is traditionally orientated towards filter coffee there seems to be a correlation between the decline in per capita consumption and the reduction in the share of Mild Arabicas in the country's total imports.

22. It should be noted that this analysis merely gives some indications and would be much more precise if importing countries were in a position to provide information on the structure of their imports, particularly on distribution by type and grade of coffee coming from exporting countries.

D. Competition and coffee image

23. Although coffee has no immediate substitute, it is subject to competition from alternative beverages such as colas, which benefit from greater publicity and are preferred by young people in a number of countries. In the USA, coffee which was once the country's favourite beverage, now takes second place after soft drinks. According to some professional opinions, the fall in consumption in the USA is attributable, among other things, to social changes in consumer habits, changes in family relationships and working conditions and the increase in concerns about health. The latter factor also affects the behaviour of consumers in Europe.

24. Apart from the competition of soft drinks, other reasons for the decline in coffee consumption include: improved yields in roasting, which make it possible to obtain more final product from the same quantity of green coffee, and an increase in the extraction rate, which makes it possible to obtain more liquid coffee per portion of roasted or soluble coffee. In fact, technical innovations have enabled roasters to economise on the quantity of green coffee used. They work increasingly with just-in-time buying which reduces the quantity of stocks held. The decline in consumption could also reflect consumer response to the average quality of coffee on offer.

Conclusion

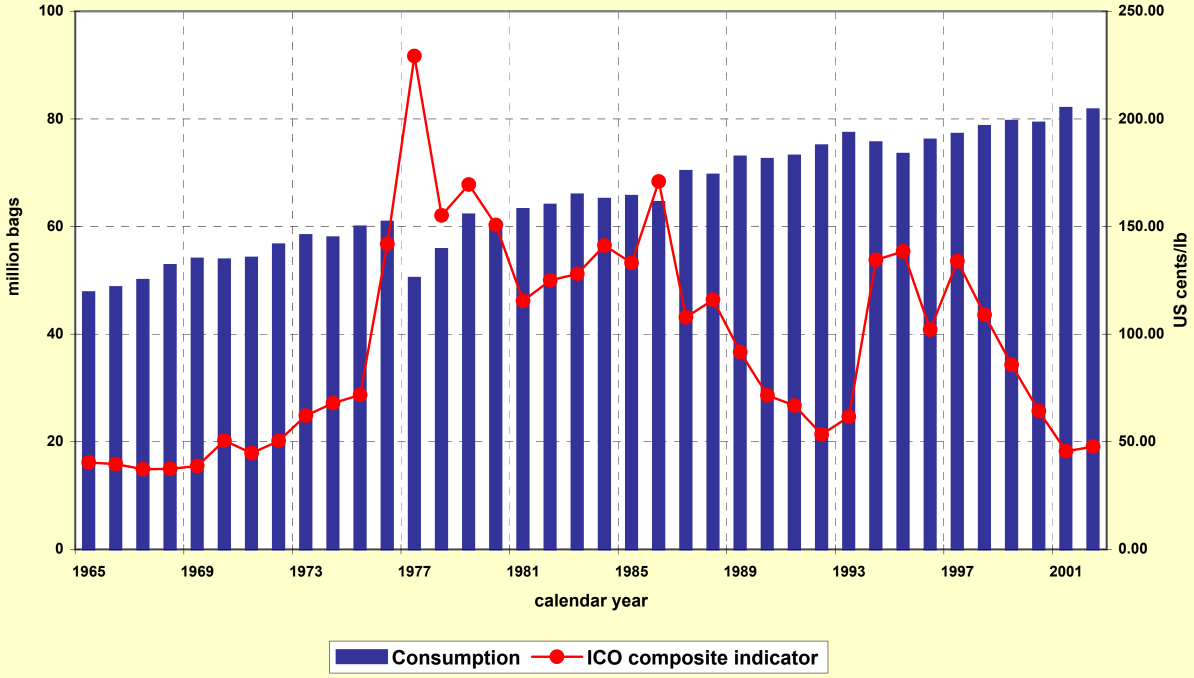
25. The retail price is not the only factor having a major influence on consumption. In most traditional consuming countries coffee consumption has reached saturation point. When this happens a rise in incomes or a fall in prices does not lead to an increase in coffee consumption. The value of the coffee consumed in these countries could increase if good quality coffee were available and appropriate promotion campaigns were carried out.

26. It would seem that the image of coffee and scientific information are determining factors in any consumption increase. The relationship between coffee and health does not

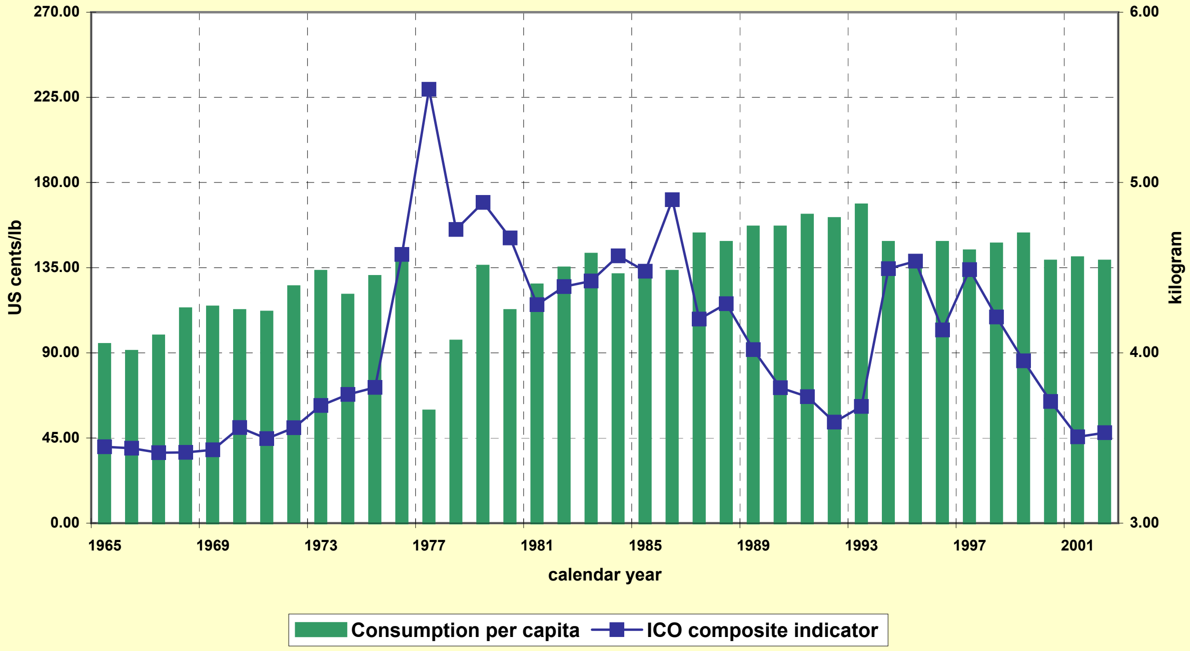
seem to have been properly understood because of a lack of information both among the general public and among public health personnel. A generic promotion campaign should cover health concerns which have a negative effect on consumption.

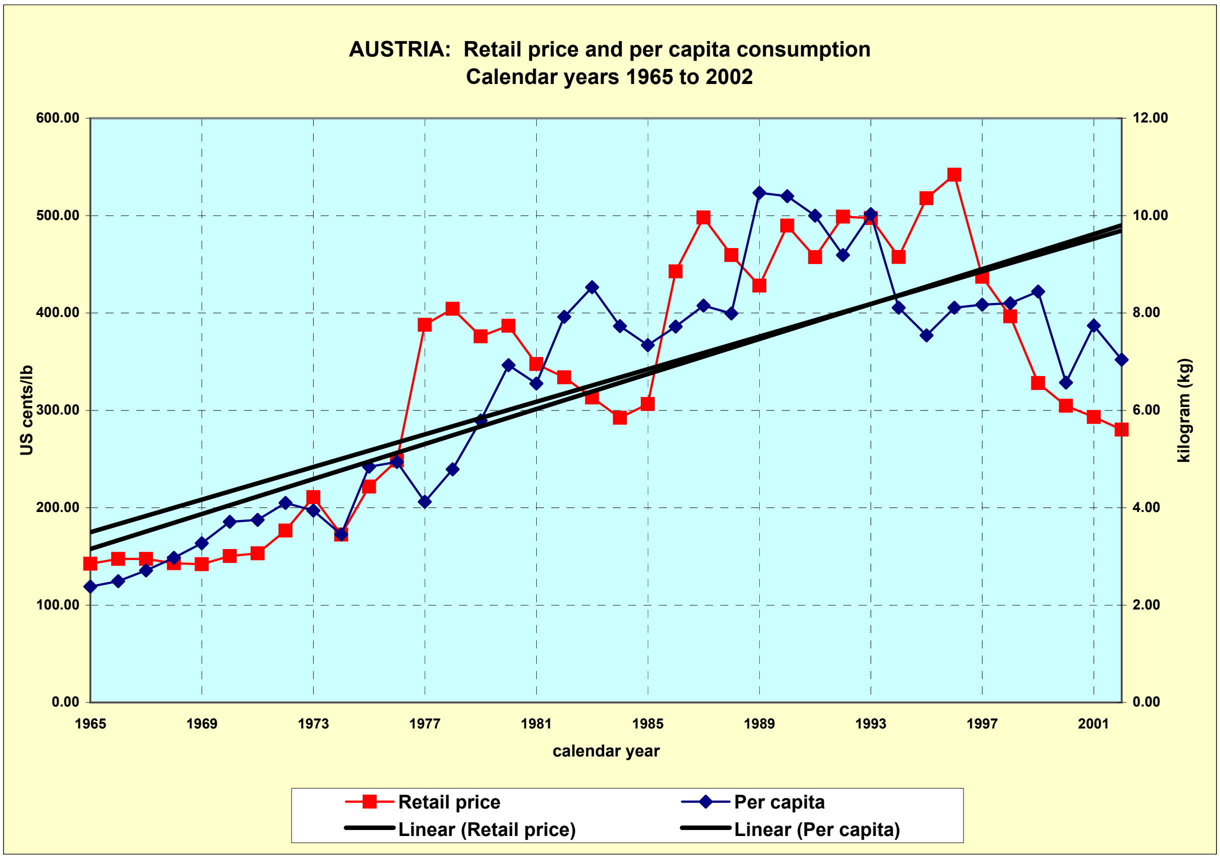
27. Generic promotion, which may seem ineffective and costly in some respects, is needed to bring about a significant increase in demand consequent upon educational activities aimed at potential consumers. A robust coffee industry is dependent on maintaining and increasing consumption in regions not yet familiar with the beverage. It is vital for the world coffee industry to take action in both traditional and non-traditional markets, including certain coffee producing countries, in order to stimulate demand and encourage consumers to have a positive image of coffee.

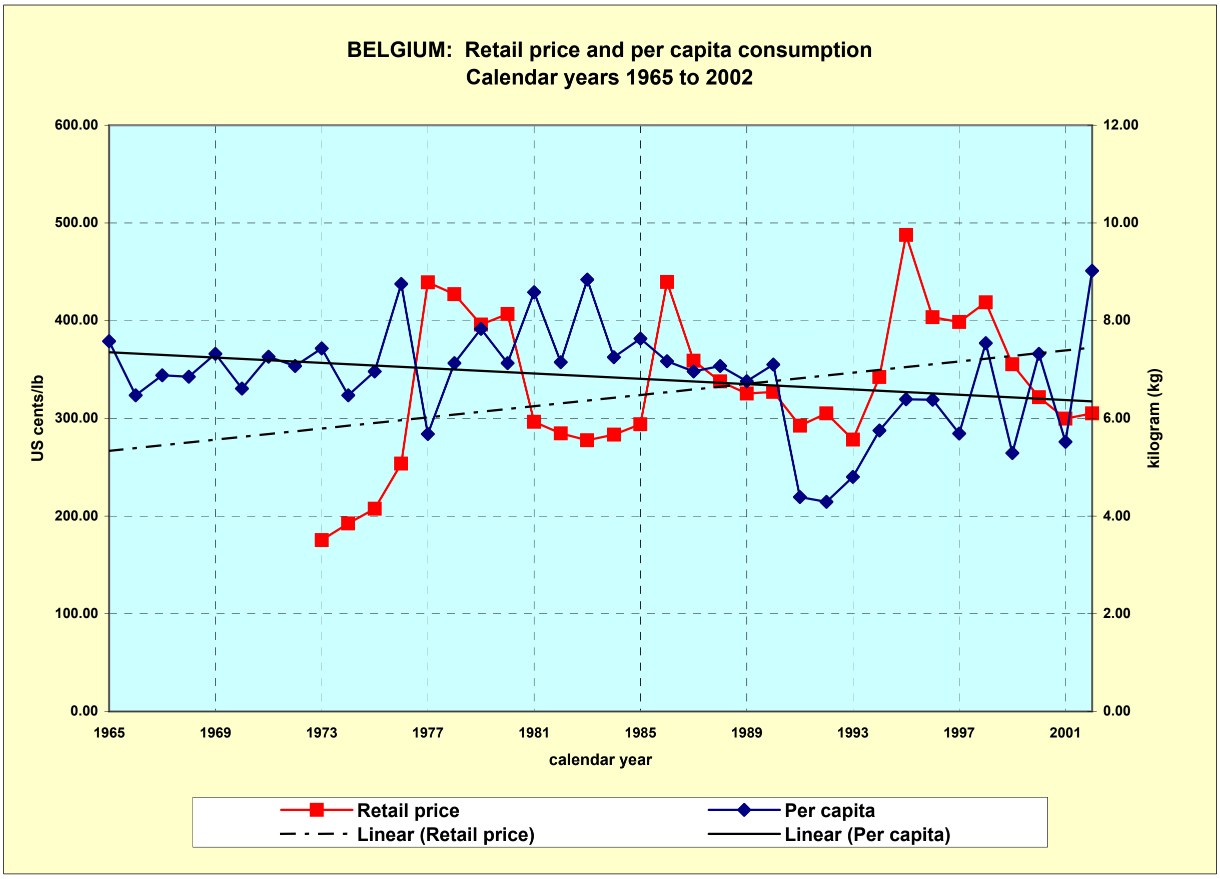
GRAPH 1: Consumption in importing countries and ICO composite indicator price
Calendar years 1965 to 2002

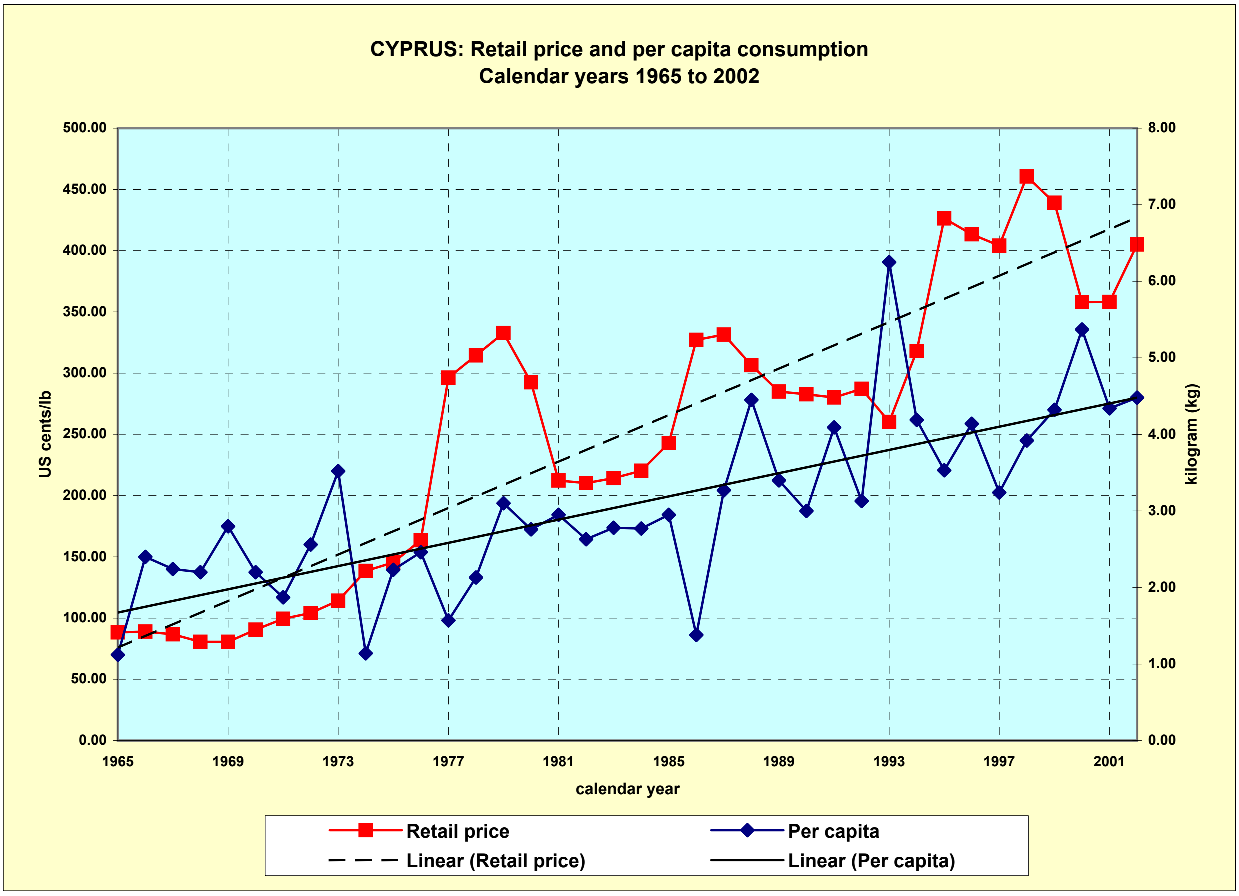


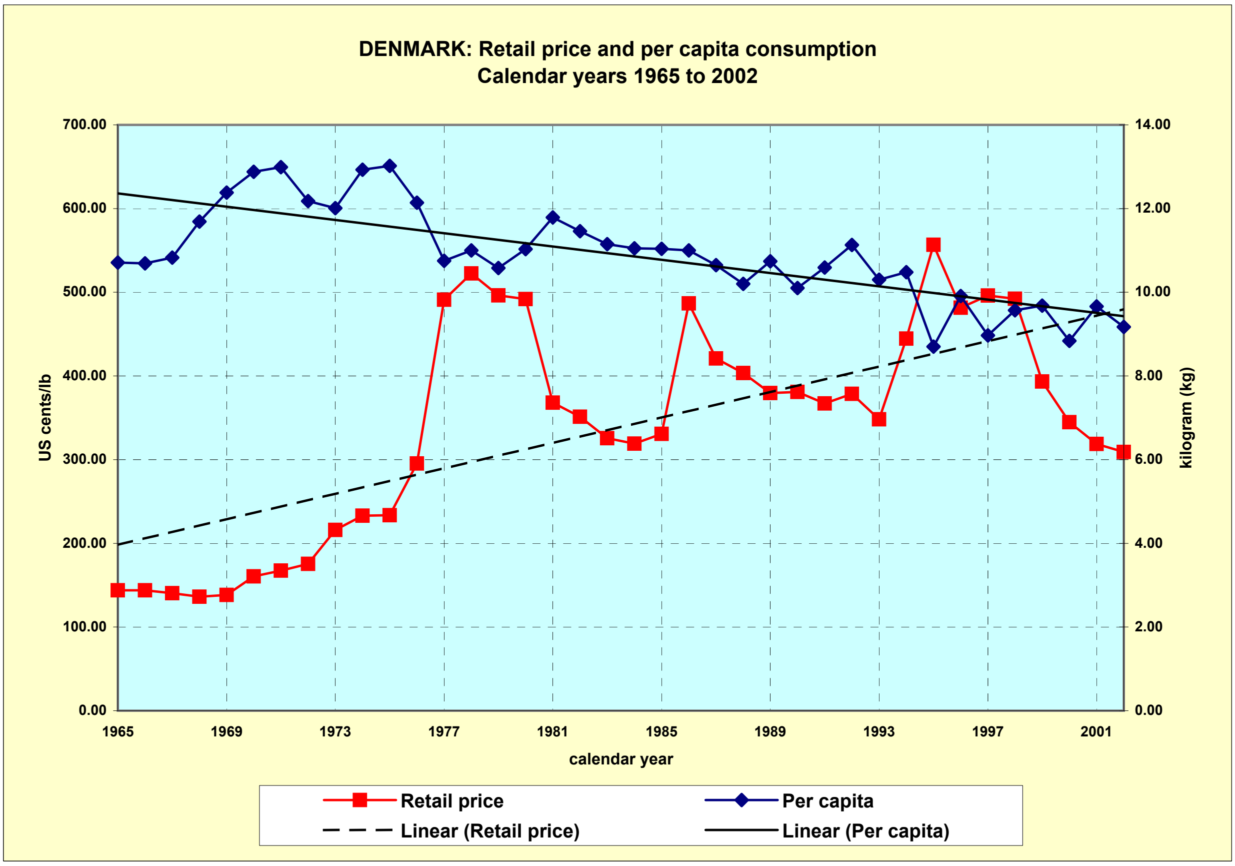
Graph 2: Consumption per capita in importing countries and
ICO composite indicator price
Calendar years 1965 to 2002

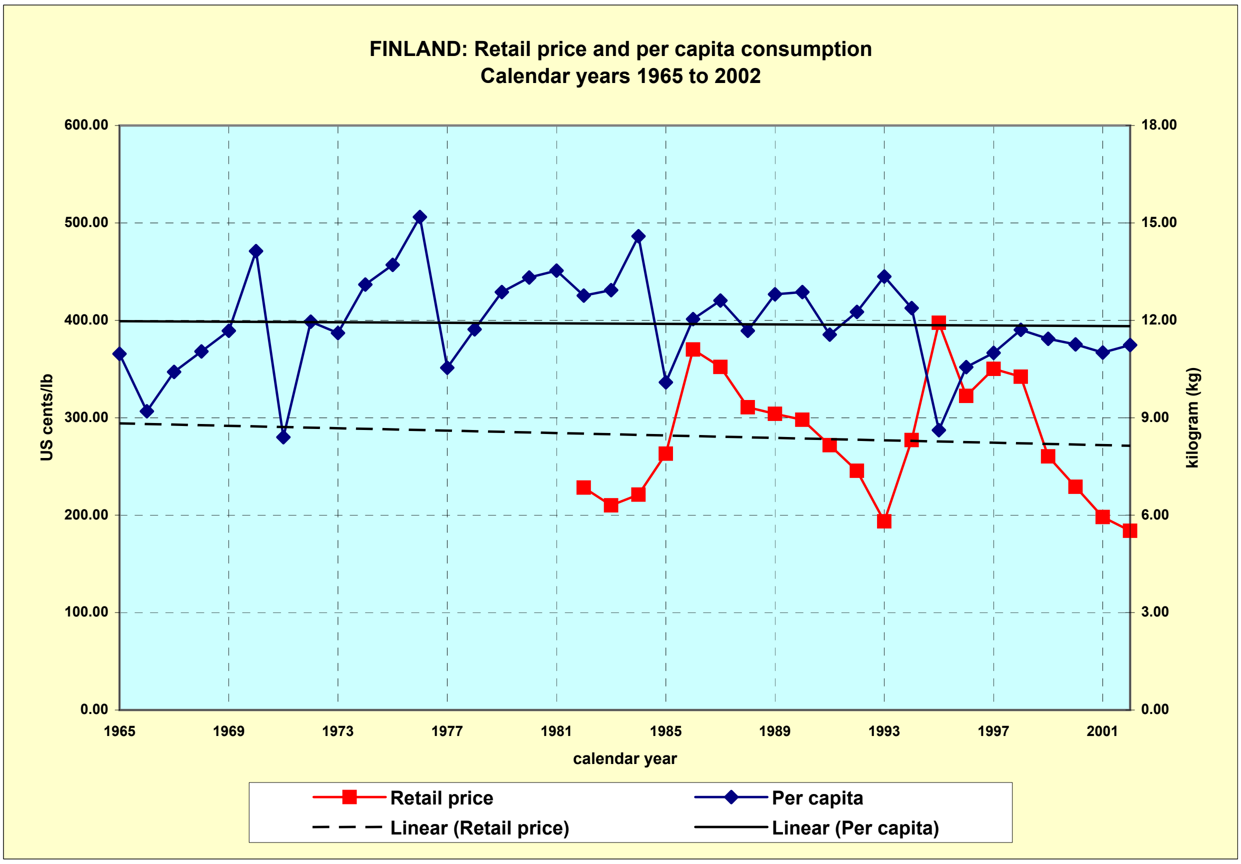


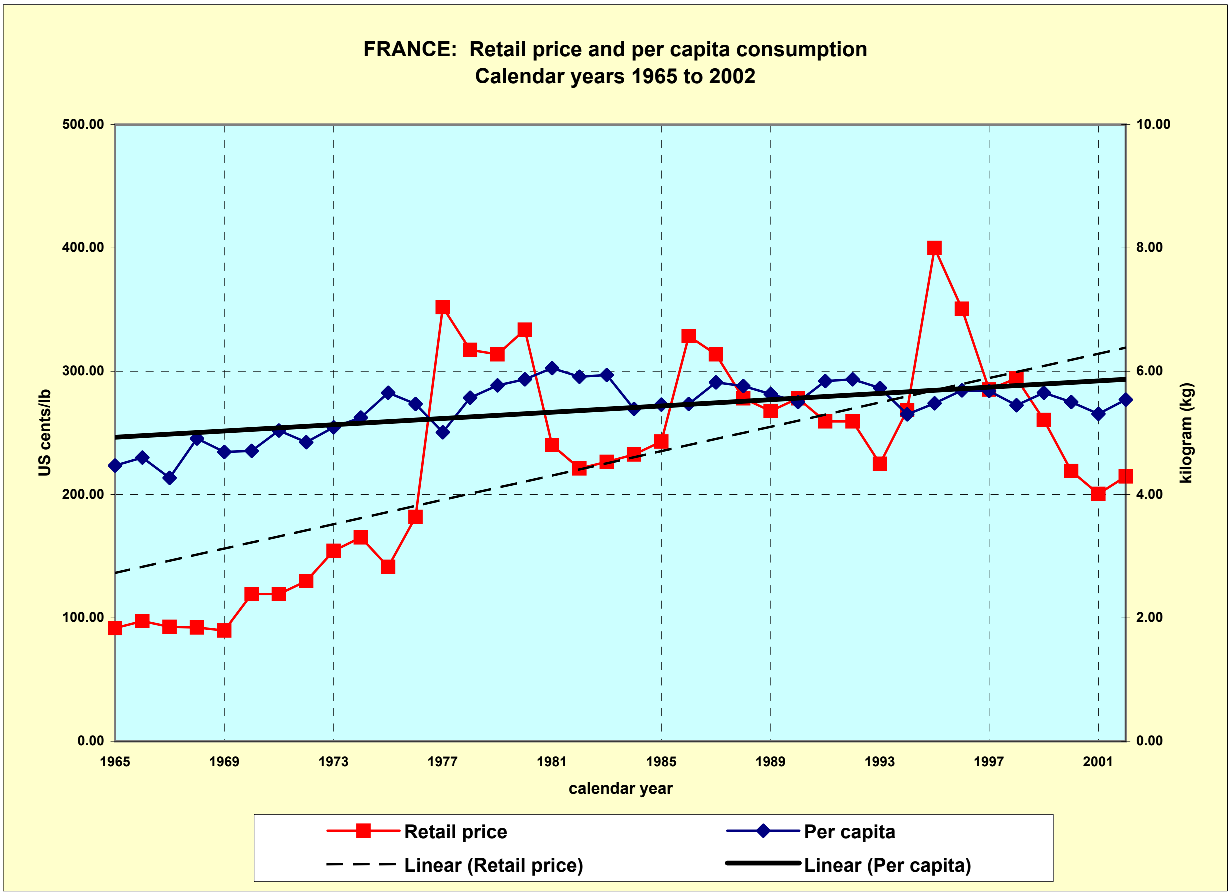

AUSTRIA: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
600.00
500.00
400.00
300.00
200.00
100.00
0.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

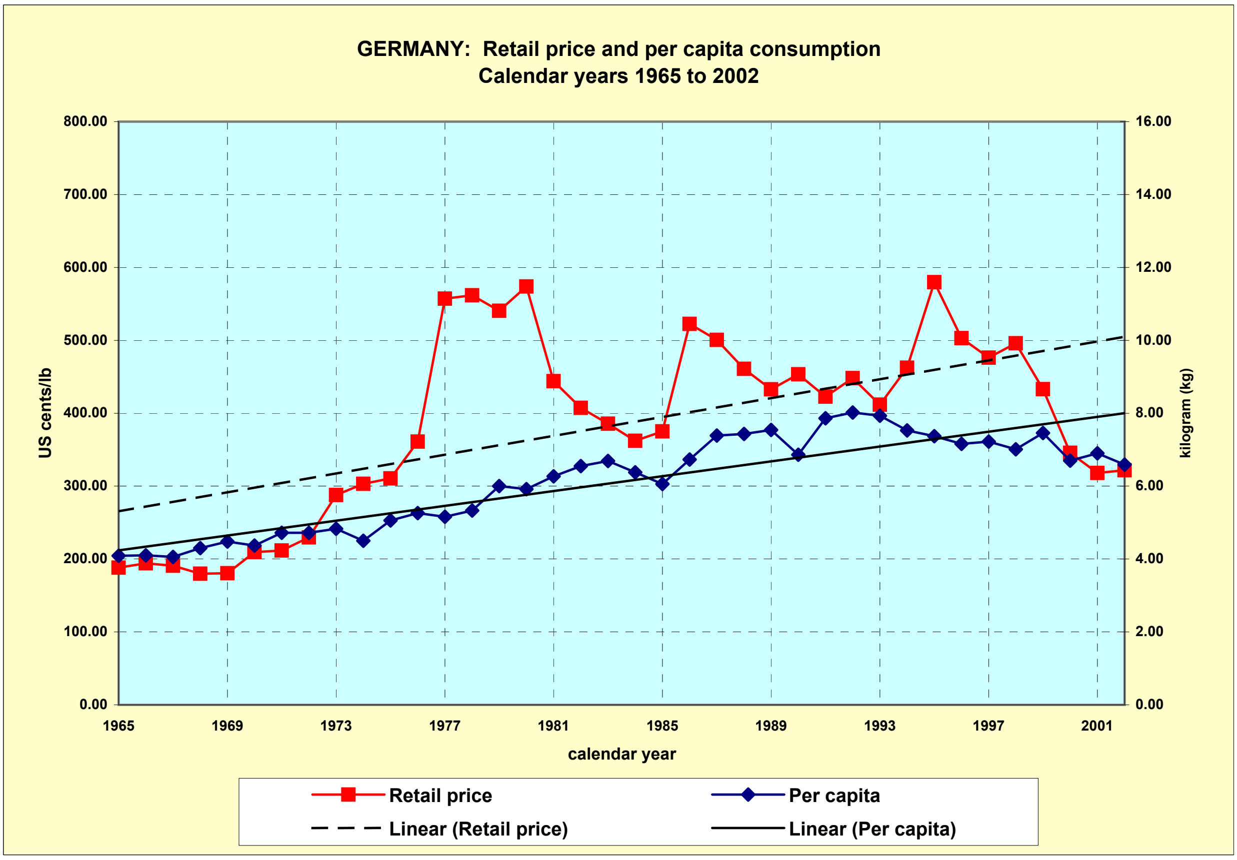

BELGIUM: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
600.00
500.00
400.00
300.00
200.00
100.00
0.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

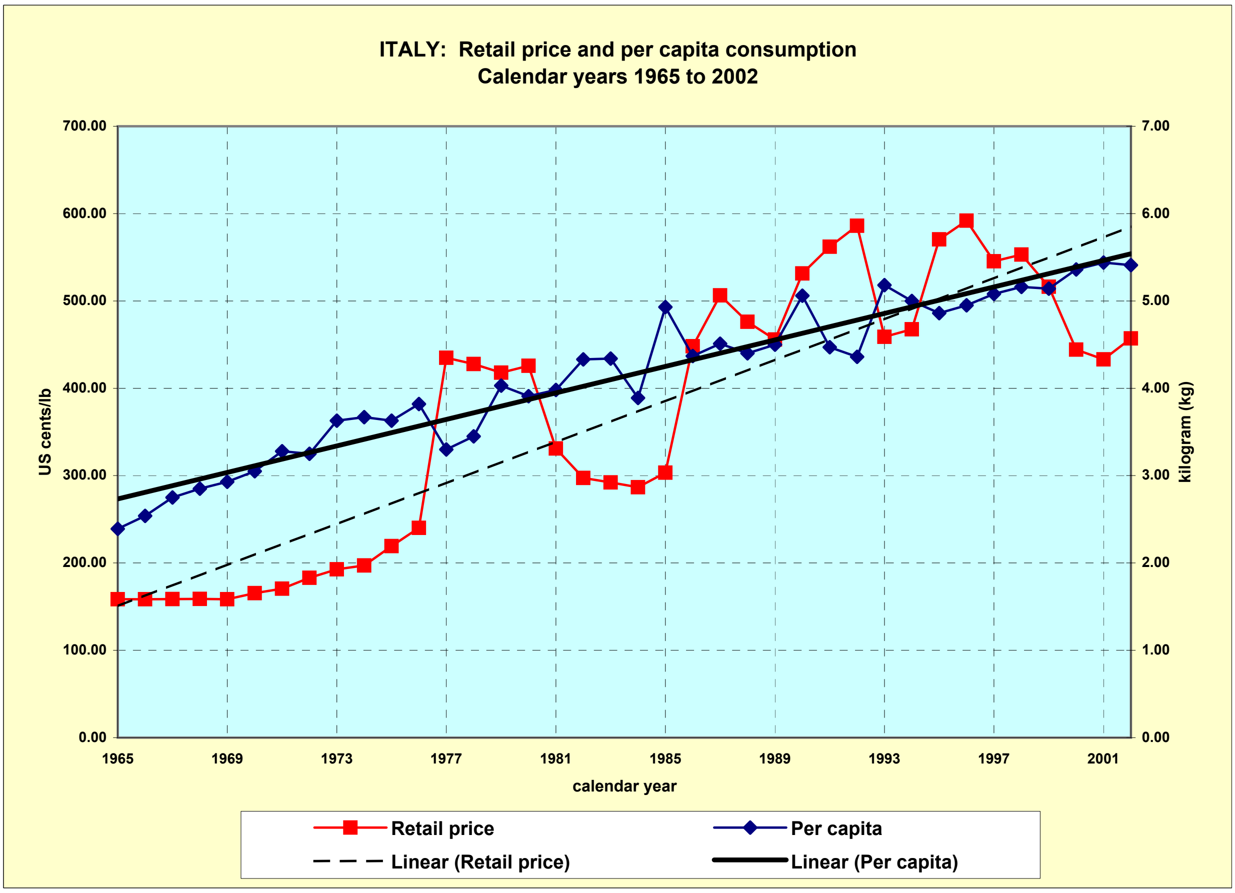

CYPRUS: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
500.00
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

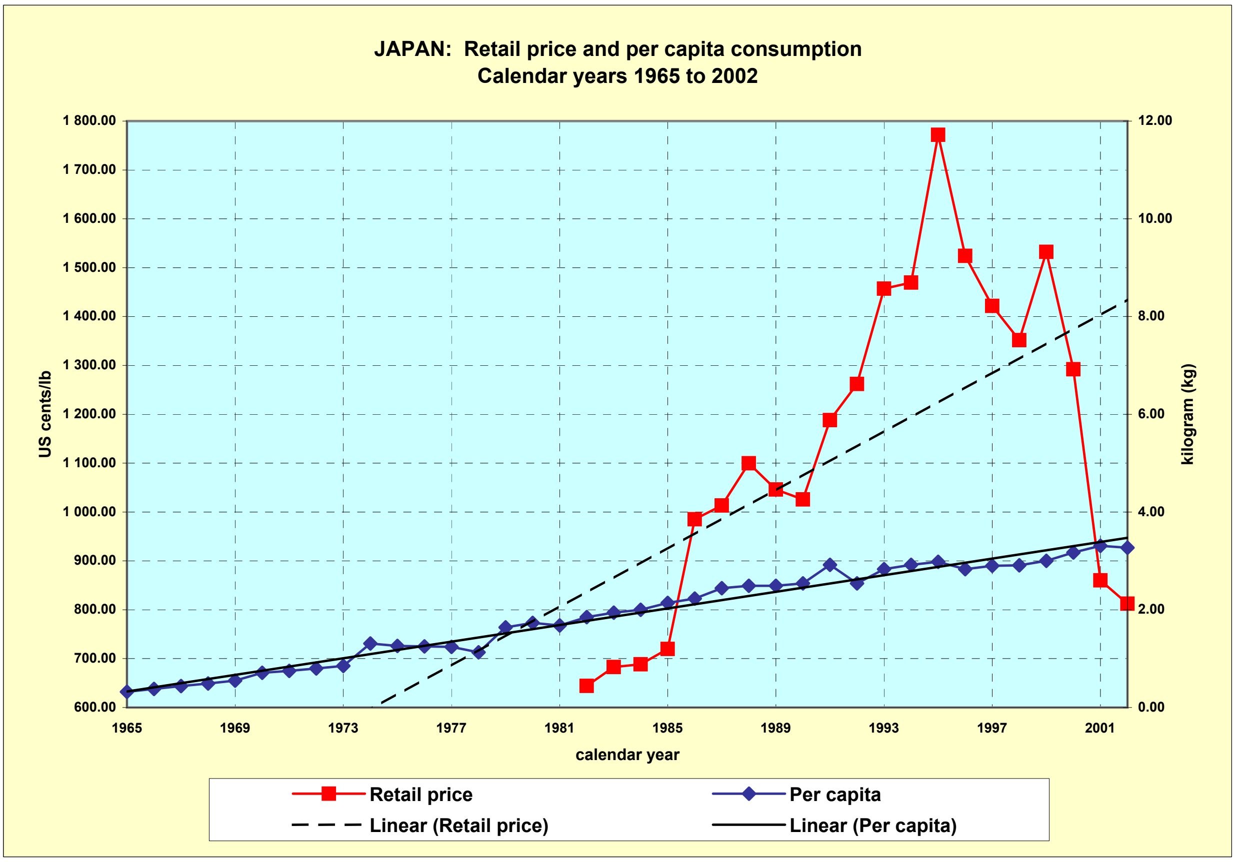

DENMARK: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

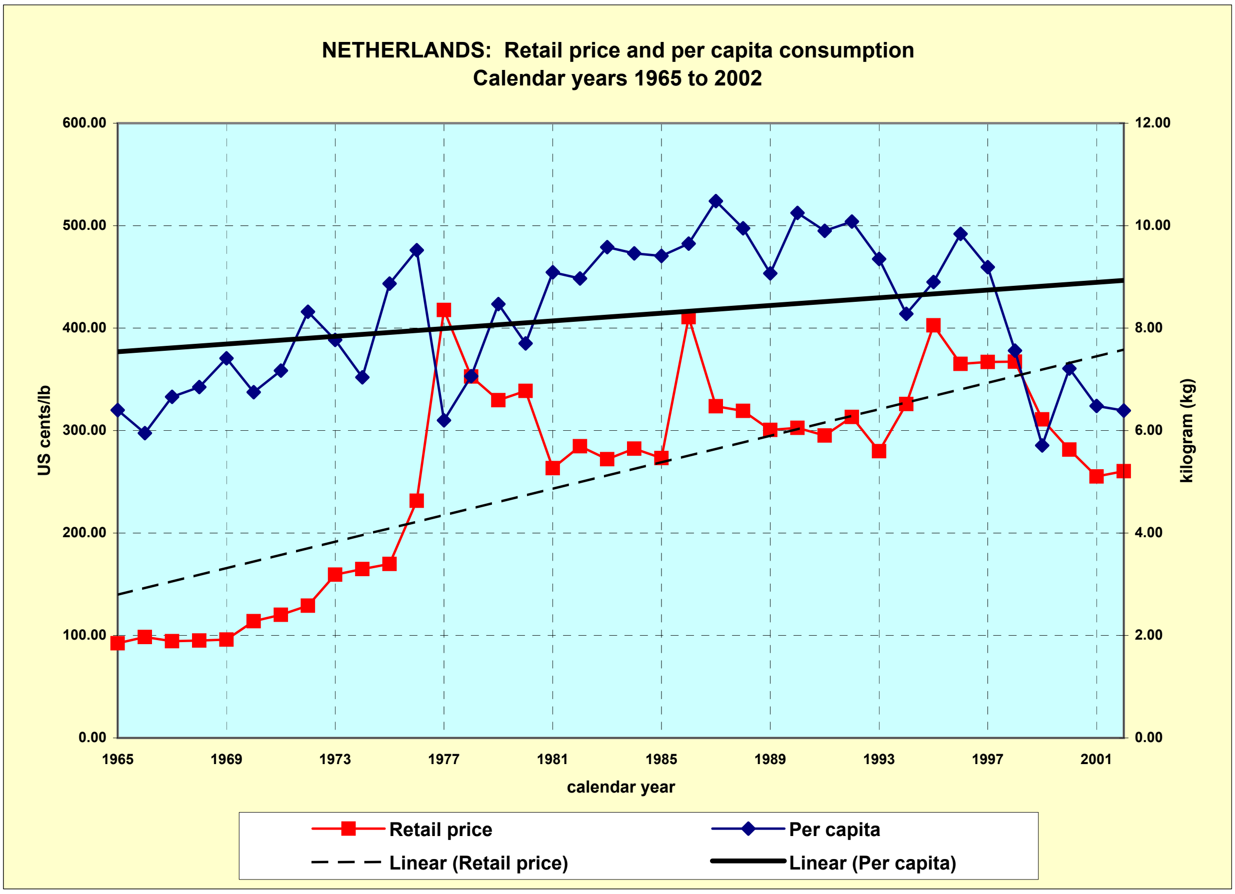

FINLAND: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
600.00
500.00
400.00
300.00
200.00
100.00
0.00
18.00
15.00
12.00
9.00
6.00
3.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

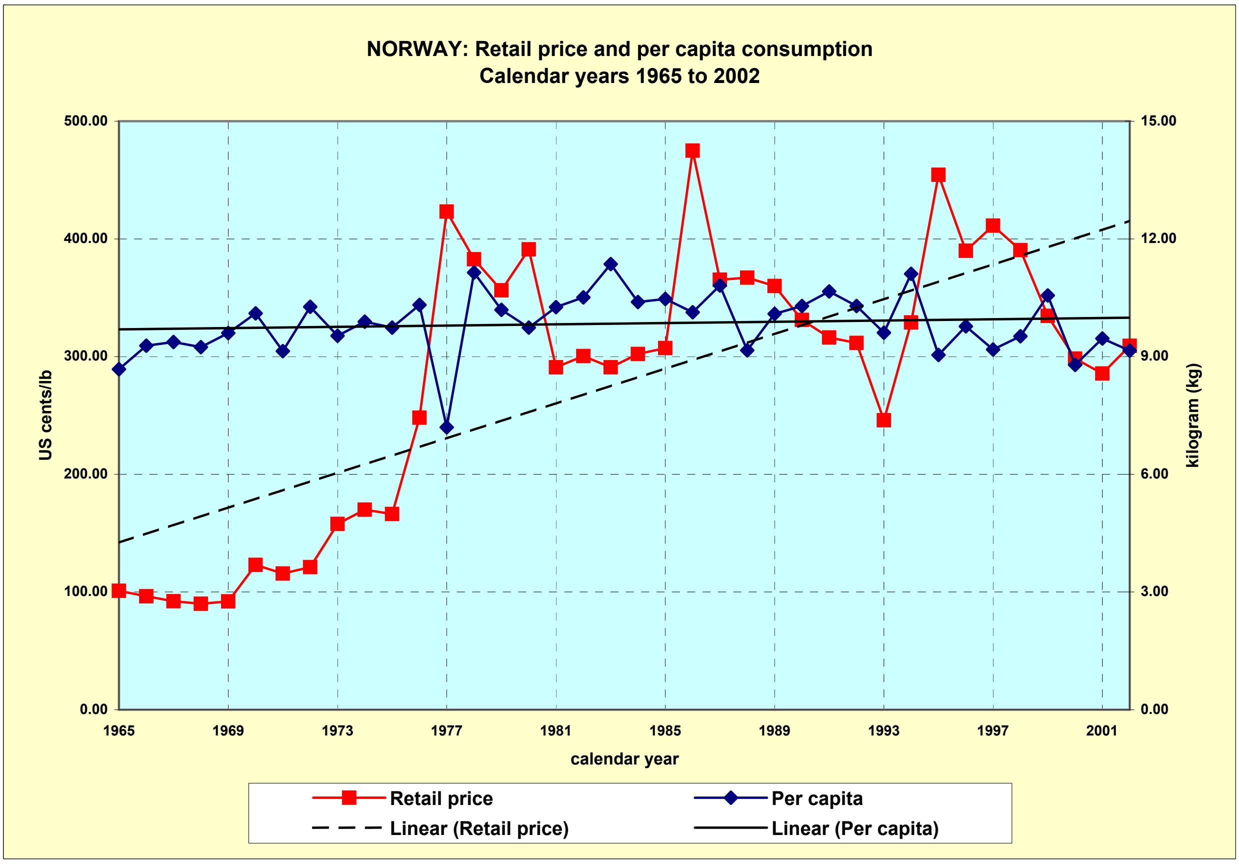

FRANCE: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
500.00
400.00
300.00
200.00
100.00
0.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

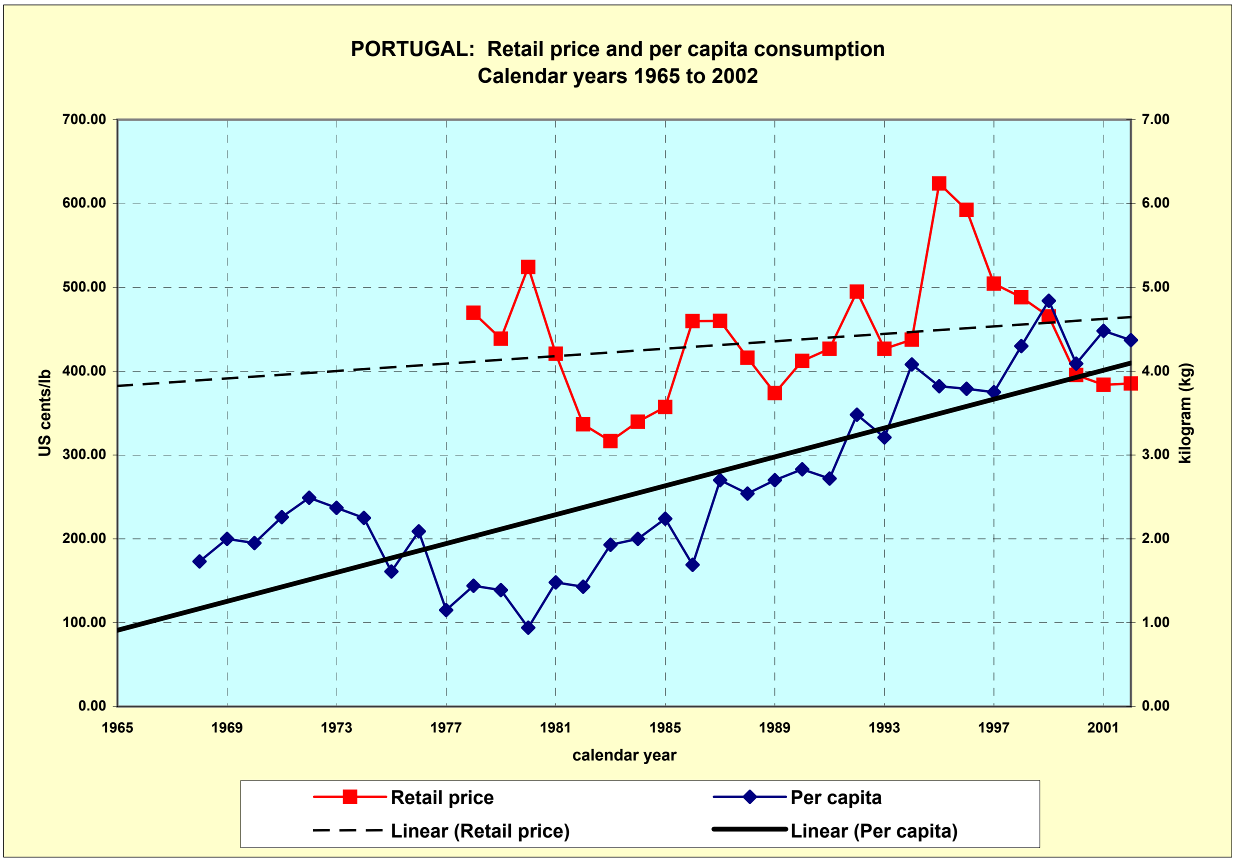

GERMANY: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

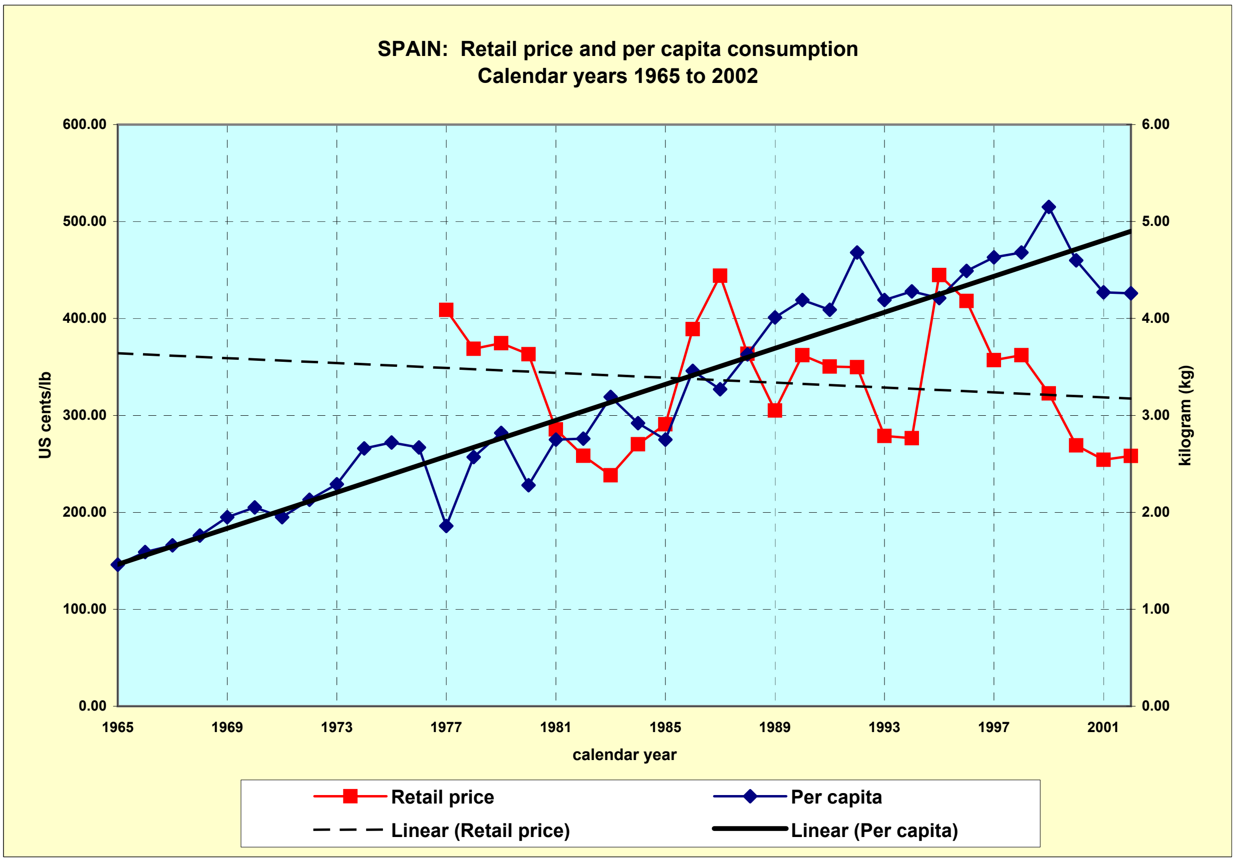

ITALY: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

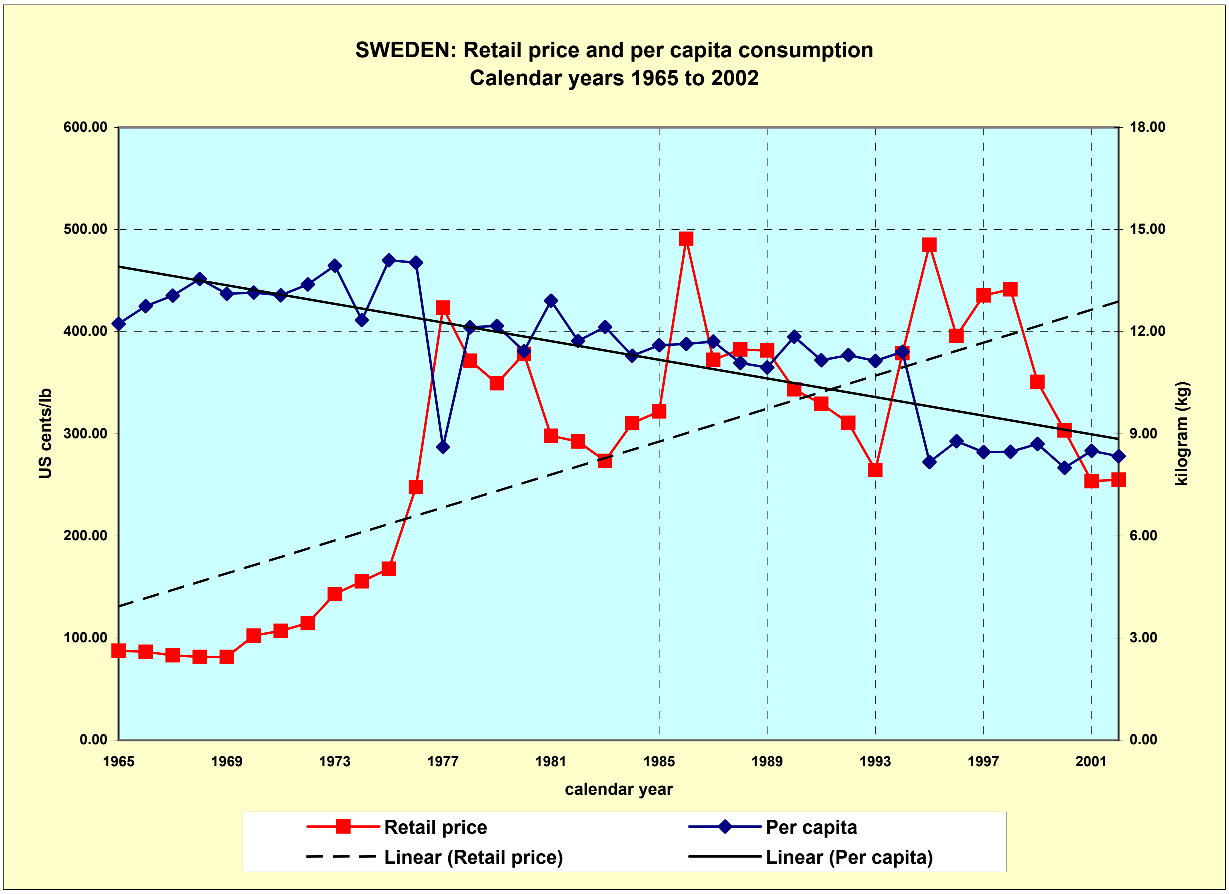

JAPAN: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

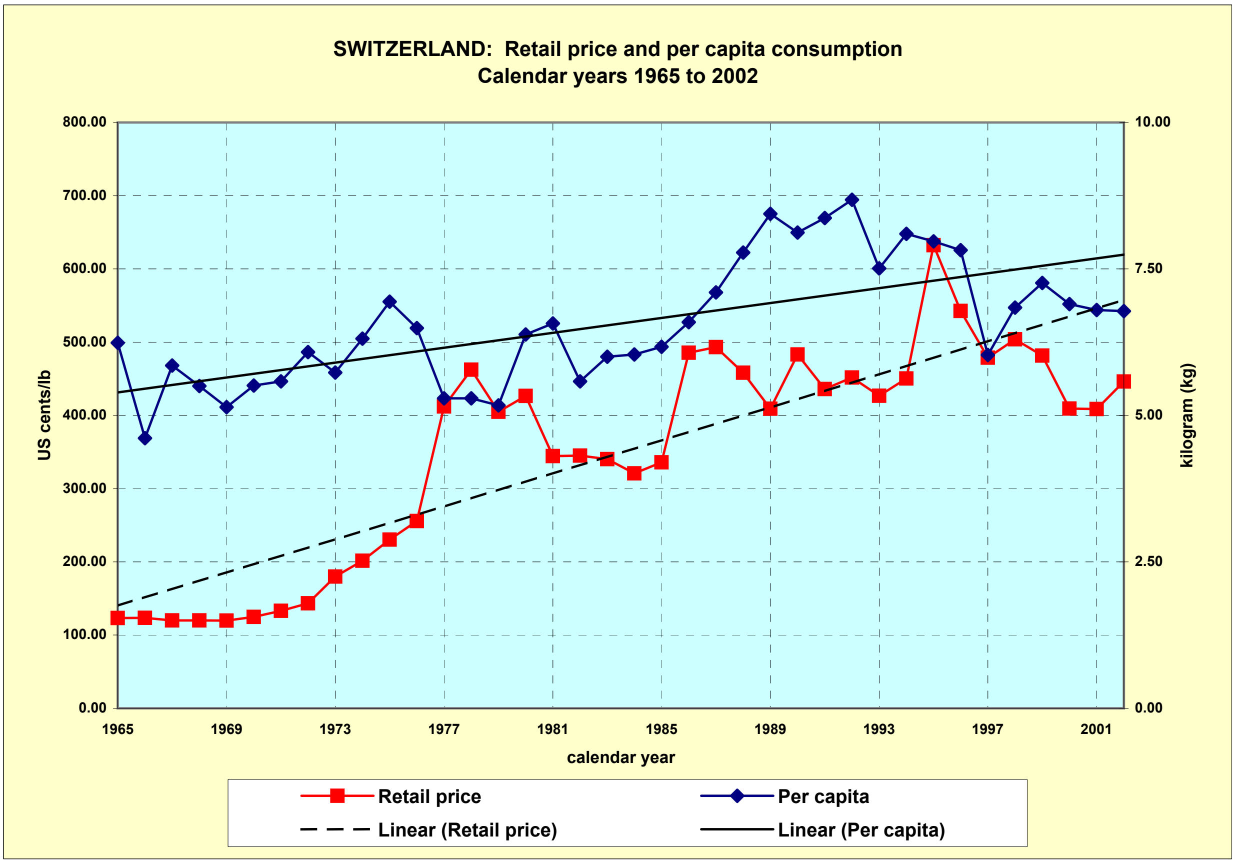

NETHERLANDS: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

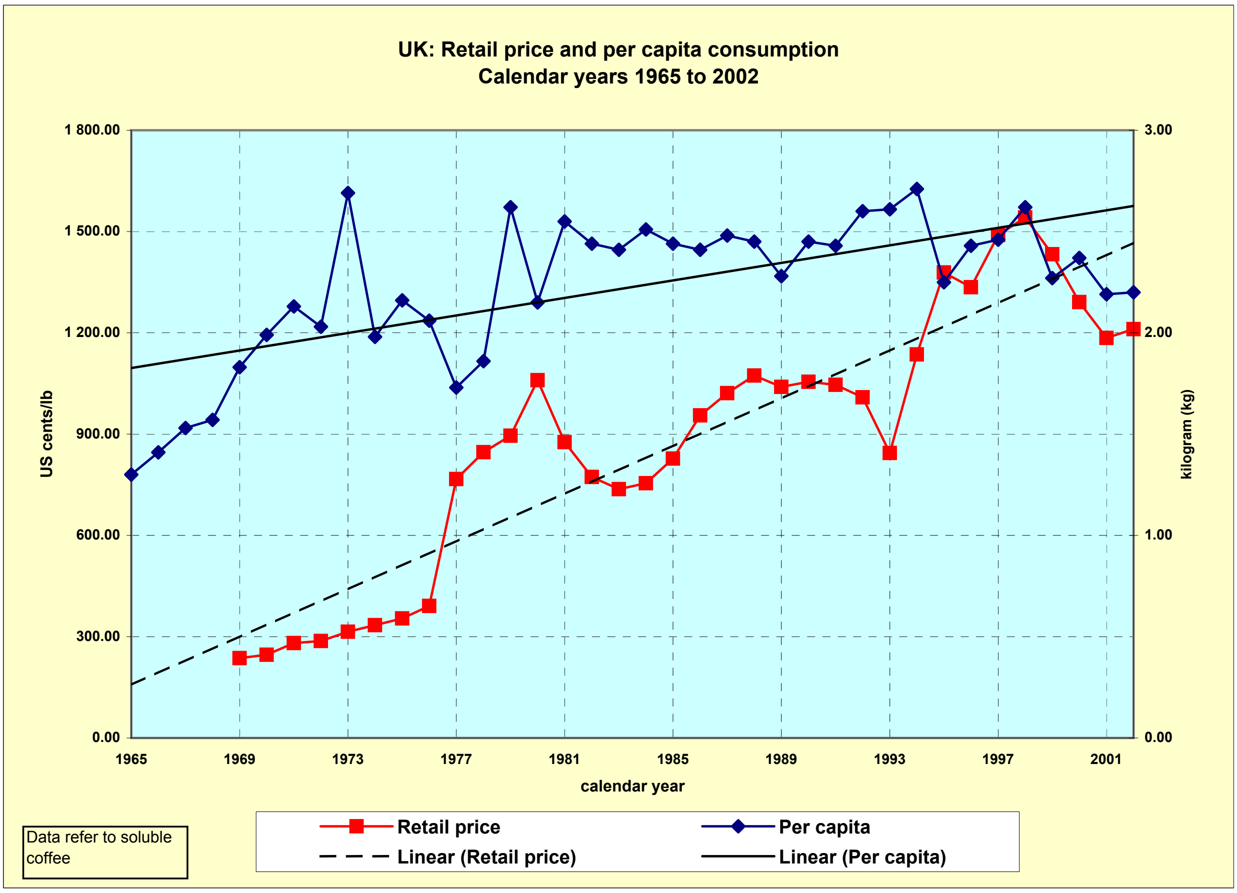

NORWAY: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
500.00
400.00
300.00
200.00
100.00
0.00
15.00
12.00
9.00
6.00
3.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

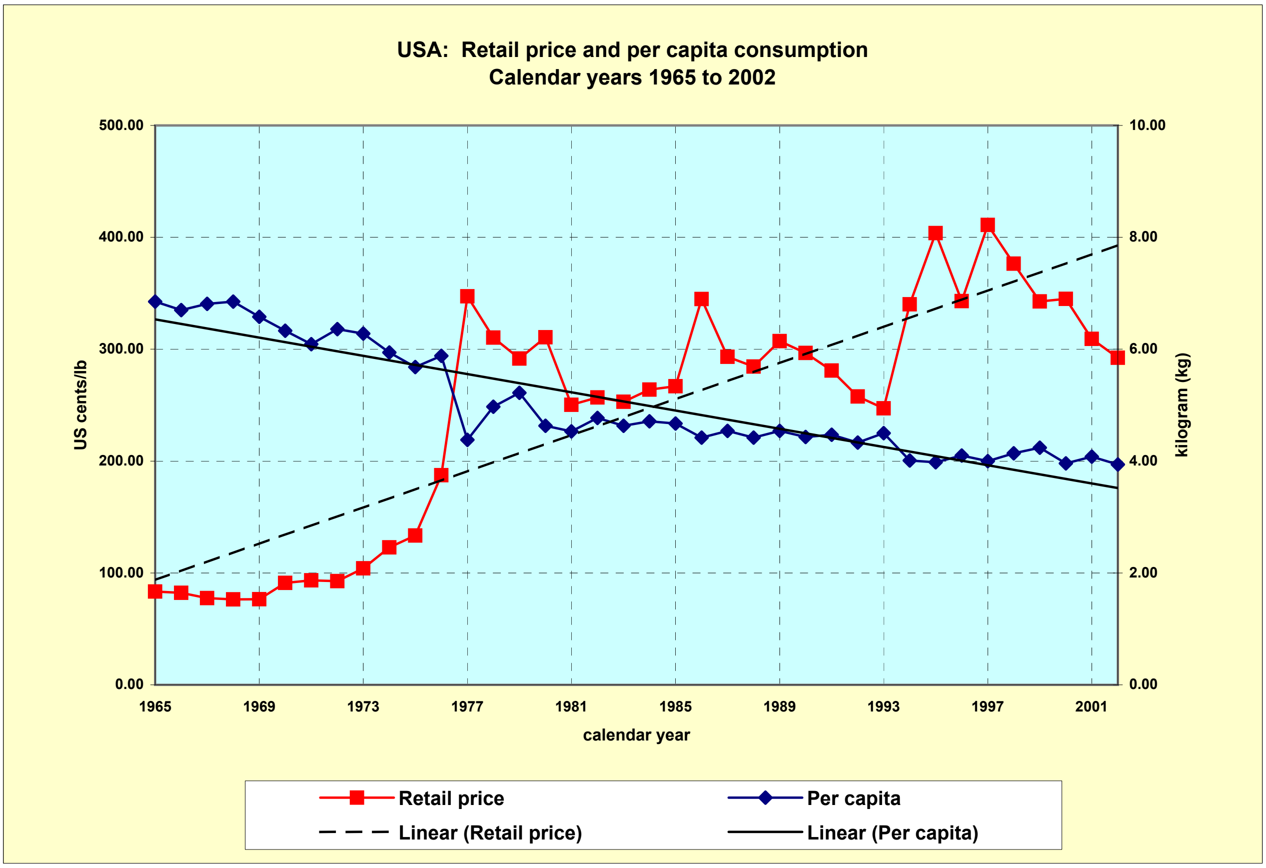

PORTUGAL: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)


SPAIN: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
600.00
500.00
400.00
300.00
200.00
100.00
0.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)


SWEDEN: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
600.00
500.00
400.00
300.00
200.00
100.00
0.00
18.00
15.00
12.00
9.00
6.00
3.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)


SWITZERLAND: Retail price and per capita consumption
Calendar years 1965 to 2002
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
US cents/lb
10.00
7.50
5.00
2.50
0.00
kilogram (kg)
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)


UK: Retail price and per capita consumption
Calendar years 1965 to 2002
1 800.00
1 500.00
1 200.00
900.00
600.00
300.00
0.00
US cents/lb
3.00
2.00
1.00
0.00
kilogram (kg)
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Data refer to soluble coffee
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)


USA: Retail price and per capita consumption
Calendar years 1965 to 2002
US cents/lb
kilogram (kg)
500.00
400.00
300.00
200.00
100.00
0.00
10.00
8.00
6.00
4.00
2.00
0.00
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
calendar year
Retail price
Per capita
Linear (Retail price)
Linear (Per capita)

IMPORTS OF COFFEE BY ORIGIN AND BY GROUP
BY SELECTED IMPORTING COUNTRIES
VOLUME (60-KG BAGS) AND PERCENTAGE
AVERAGES 1990-92 AND 2000-02

AUSTRIA				
	Average 1990-92		**Average 2000-02**	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**1 883 229**	**100.00**	**1 003 132**	**100.00**
Exporting countries	***1 872 775***	***99.44***	***980 092***	***97.70***
Colombian Milds	194 726	10.34	135 725	13.53
Other Milds	465 603	24.72	268 910	26.81
Brazilian Naturals	469 624	24.94	380 451	37.93
Robustas	742 822	39.44	195 006	19.44
Mild coffees	*660 329*	*35.06*	*404 635*	*40.34*
Natural coffees	*469 624*	*24.94*	*380 451*	*37.93*
Robustas	*742 822*	*39.44*	*195 006*	*19.44*
Importing Members	***3 005***	***0.16***	***14 975***	***1.49***
Non-members	***6 621***	***0.35***	***7 401***	***0.74***
Unspecified	***828***	***0.04***	***663***	***0.07***

DENMARK				
	Average 1990-92		**Average 2000-02**	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**881 173**	**100.00**	**960 316**	**100.00**
Exporting countries	***874 608***	***99.25***	***910 354***	***94.80***
Colombian Milds	237 584	26.96	129 108	13.44
Other Milds	60 693	6.89	241 301	25.13
Brazilian Naturals	435 002	49.37	424 340	44.19
Robustas	141 329	16.04	115 605	12.04
Mild coffees	*298 277*	*33.85*	*370 409*	*38.57*
Natural coffees	*435 002*	*49.37*	*424 340*	*44.19*
Robustas	*141 329*	*16.04*	*115 605*	*12.04*
Importing Members	***545***	***0.06***	***43 623***	***4.54***
Non-members	***6 020***	***0.68***	***6 324***	***0.66***
Unspecified	***0***	***0.00***	***15***	***0.00***

FINLAND				
	Average 1990-92		**Average 2000-02**	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**1 025 910**	**100.00**	**999 428**	**100.00**
Exporting countries	***1 025 754***	***99.98***	***995 196***	***99.58***
Colombian Milds	465 923	45.42	210 976	21.11
Other Milds	267 315	26.06	356 032	35.62
Brazilian Naturals	287 659	28.04	405 907	40.61
Robustas	4 857	0.47	22 281	2.23
Mild coffees	*733 238*	*71.47*	*567 008*	*56.73*
Natural coffees	*287 659*	*28.04*	*405 907*	*40.61*
Robustas	*4 857*	*0.47*	*22 281*	*2.23*
Importing Members	***0***	***0.00***	***1 958***	***0.20***
Non-members	***156***	***0.02***	***2 275***	***0.23***

FRANCE				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**5 326 340**	**100.00**	**5 061 510**	**100.00**
Exporting countries	***5 283 396***	***99.19***	***4 658 569***	***92.04***
Colombian Milds	613 195	11.51	400 667	7.92
Other Milds	728 081	13.67	916 267	18.10
Brazilian Naturals	1 168 876	21.95	1 294 272	25.57
Robustas	2 773 244	52.07	2 047 363	40.45
Mild coffees	*1 341 276*	*25.18*	*1 316 934*	*26.02*
Natural coffees	*1 168 876*	*21.95*	*1 294 272*	*25.57*
Robustas	*2 773 244*	*52.07*	*2 047 363*	*40.45*
Importing Members	***23 533***	***0.44***	***326 366***	***6.45***
Non-members	***9 225***	***0.17***	***50 908***	***1.01***
Unspecified	***10 186***	***0.19***	***25 667***	***0.51***

GERMANY				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**13 073 606**	**100.00**	**13 795 968**	**100.00**
Exporting countries	***12 740 894***	***97.46***	***13 678 405***	***99.15***
Colombian Milds	5 447 262	41.67	2 112 722	15.31
Other Milds	3 484 585	26.65	4 508 085	32.68
Brazilian Naturals	1 720 616	13.16	4 003 128	29.02
Robustas	2 088 431	15.97	3 054 471	22.14
Mild coffees	*8 931 847*	*68.32*	*6 620 806*	*47.99*
Natural coffees	*1 720 616*	*13.16*	*4 003 128*	*29.02*
Robustas	*2 088 431*	*15.97*	*3 054 471*	*22.14*
Importing Members	***308 210***	***2.36***	***17 034***	***0.12***
Non-members	***17 387***	***0.13***	***93 328***	***0.68***
Unspecified	***7 115***	***0.05***	***7 201***	***0.05***

NETHERLANDS				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**2 637 055**	**100.00**	**2 131 011**	**100.00**
Exporting countries	***2 487 348***	***94.32***	***1 927 285***	***90.44***
Colombian Milds	747 756	28.36	309 199	14.51
Other Milds	525 641	19.93	665 345	31.22
Brazilian Naturals	440 486	16.70	483 577	22.69
Robustas	773 465	29.33	469 164	22.02
Mild coffees	*1 273 397*	*48.29*	*974 544*	*45.73*
Natural coffees	*440 486*	*16.70*	*483 577*	*22.69*
Robustas	*773 465*	*29.33*	*469 164*	*22.02*
Importing Members	***144 305***	***5.47***	***179 763***	***8.44***
Non-members	***5 307***	***0.20***	***23 957***	***1.12***
Unspecified	***95***	***0.00***	***7***	***0.00***

NORWAY				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**688 910**	**100.00**	**604 499**	**100.00**
Exporting countries	***687 555***	***99.80***	***602 224***	***99.62***
Colombian Milds	253 829	36.85	153 568	25.40
Other Milds	60 609	8.80	177 535	29.37
Brazilian Naturals	360 100	52.27	263 046	43.51
Robustas	13 017	1.89	8 075	1.34
Mild coffees	*314 438*	*45.64*	*331 103*	*54.77*
Natural coffees	*360 100*	*52.27*	*263 046*	*43.51*
Robustas	*13 017*	*1.89*	*8 075*	*1.34*
Importing Members	***699***	***0.10***	***718***	***0.12***
Non-members	***656***	***0.10***	***1 557***	***0.26***

SWEDEN				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**1 625 923**	**100.00**	**807 238**	**100.00**
Exporting countries	***1 603 496***	***98.62***	***801 797***	***99.33***
Colombian Milds	699 310	43.01	349 677	43.32
Other Milds	171 716	10.56	85 863	10.64
Brazilian Naturals	724 582	44.56	362 313	44.88
Robustas	7 888	0.49	3 944	0.49
Mild coffees	*871 026*	*53.57*	*435 540*	*53.95*
Natural coffees	*724 582*	*44.56*	*362 313*	*44.88*
Robustas	*7 888*	*0.49*	*3 944*	*0.49*
Importing Members	***18 065***	***1.11***	***1 665***	***0.21***
Non-members	***1 584***	***0.10***	***3 277***	***0.41***
Unspecified	***2 778***	***0.17***	***498***	***0.06***

SWITZERLAND				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**1 078 308**	**100.00**	**1 119 744**	**100.00**
Exporting countries	***1 034 907***	***95.98***	***1 022 372***	***91.30***
Colombian Milds	206 960	19.19	144 584	12.91
Other Milds	458 656	42.53	459 388	41.03
Brazilian Naturals	228 570	21.20	214 046	19.12
Robustas	140 721	13.05	204 354	18.25
Mild coffees	*665 616*	*61.73*	*603 972*	*53.94*
Natural coffees	*228 570*	*21.20*	*214 046*	*19.12*
Robustas	*140 721*	*13.05*	*204 354*	*18.25*
Importing Members	***40 267***	***3.73***	***38 782***	***3.46***
Non-members	***1 399***	***0.13***	***58 590***	***5.23***
Unspecified	***1 735***	***0.16***	***0***	***0.00***

U.S.A.				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**20 029 277**	**100.00**	**20 100 592**	**100.00**
Exporting countries	***19 595 808***	***97.84***	***19 391 192***	***96.47***
Colombian Milds	3 679 312	18.37	3 413 333	16.98
Other Milds	9 198 189	45.92	8 660 790	43.09
Brazilian Naturals	4 503 064	22.48	3 497 155	17.40
Robustas	2 215 243	11.06	3 819 914	19.00
Mild coffees	*12 877 501*	*64.29*	*12 074 124*	*60.07*
Natural coffees	*4 503 064*	*22.48*	*3 497 155*	*17.40*
Robustas	*2 215 243*	*11.06*	*3 819 914*	*19.00*
Importing Members	***416 162***	***2.08***	***675 157***	***3.36***
Non-members	***17 307***	***0.09***	***34 243***	***0.17***
Unspecified	***135***	***0.00***	***0***	***0.00***

UNITED KINGDOM				
	Average 1990-92		Average 2000-02	
Origin	volume (bags)	percentage	volume (bags)	percentage
TOTAL	**1 942 376**	**100.00**	**1 973 943**	**100.00**
Exporting countries	***1 761 936***	***90.71***	***1 790 068***	***90.68***
Colombian Milds	502 272	25.86	278 141	14.09
Other Milds	329 226	16.95	445 140	22.55
Brazilian Naturals	294 496	15.16	329 301	16.68
Robustas	635 942	32.74	737 486	37.36
Mild coffees	*831 498*	*42.81*	*723 281*	*36.64*
Natural coffees	*294 496*	*15.16*	*329 301*	*16.68*
Robustas	*635 942*	*32.74*	*737 486*	*37.36*
Importing Members	***180 243***	***9.28***	***171 958***	***8.71***
Non-members	***197***	***0.01***	***9 840***	***0.50***
Unspecified	***0***	***0.00***	***2 077***	***0.11***