

INTERNATIONAL
ORGANIZACIÓN INTERNACIONAL DEI
ORGANIZAÇÃO INTERNACIONAL DO
ORGANISATION INTERNATIONALE DU

DEL CAFÉ
DO CAFÉ
DU CAFÉ

ICC 104-1

10 February 2010 Original: French

Study

International Coffee Council 104<sup>th</sup> Session 2 – 4 March 2010 Guatemala, Guatemala **Coffee consumption in selected importing countries** 

## **Background**

- 1. According to the objectives of the 2001 International Coffee Agreement, the International Coffee Organization shall "facilitate the expansion and transparency of international trade in coffee" and "act as a centre for and promote the collection, dissemination and publication of economic and technical information, statistics and studies, as well as research and development, in coffee matters."
- 2. With the above in mind, Activity 7 of the programme of activities of the Organization for 2009/10 (document ICC-103-11) includes provision for the preparation of a study on coffee consumption patterns in selected importing countries.
- 3. The Annex contains notes on Methodology and Data Sources.

#### Action

The Council is requested to take note of this document.



#### COFFEE CONSUMPTION IN SELECTED IMPORTING COUNTRIES

#### Introduction

- 1. The aim of this study is to analyse the development of consumption in selected importing countries and to determine its significance. The analysis will focus on the structure of consumption in seven importing countries namely France, Germany, Italy, Japan, Spain, Sweden, and the United States of America. It will seek to provide answers to a number of questions including the following:
  - How has coffee consumption developed in these countries and what are the determining factors involved?
  - Have there been changes in coffee consumption particularly in relation to types of coffee used?
- 2. The analysis will be based on data covering the period from 1975 to 2008, subdivided into four sub-periods, namely: 1975-79, 1980-89, 1990-99 and 2000-08.
- 3. The selection of importing countries for the purpose of this study is based on a number of parameters, including: the volume of consumption; the availability of statistical data; and geographical distribution. Table 1 below shows average consumption in the selected countries and the evolution of their share in world consumption.

Table 1
Consumption in selected importing Members
Volume and share in world total

		Averag	ge volume (	000 bags)	
	1975-79	1980-89	1990-99	2000-08	1975-2008
USA	18 696	17 981	18 297	20 327	18 800
Germany	6 924	8 720	9 998	9 141	8 943
Japan	2 475	4 087	5 796	7 007	5 126
Italy	3 399	4 099	4 707	5 495	4 544
France	4 869	5 267	5 424	5 261	5 253
Spain	1 531	1 983	2 884	2 975	2 444
Sweden	1 677	1 624	1 448	1 229	1 476
Sub-total	39 571	43 762	48 555	51 435	46 586
World total	75 301	87 558	97 717	117 756	96 030

		S	hare in Wo	orld	
	1975-79	1980-89	1990-99	2000-08	1975-2008
USA	24.8%	20.5%	18.7%	17.3%	19.6%
Germany	9.2%	10.0%	10.2%	7.8%	9.3%
Japan	3.3%	4.7%	5.9%	6.0%	5.3%
Italy	4.5%	4.7%	4.8%	4.7%	4.7%
France	6.5%	6.0%	5.6%	4.5%	5.5%
Spain	2.0%	2.3%	3.0%	2.5%	2.5%
Sweden	2.2%	1.9%	1.5%	1.0%	1.5%
Share in World	52.6%	50.0%	49.7%	43.7%	48.5%

4. Although consumption in the selected countries grew from 39.6 million bags to 51.4 million bags between the periods 1975-79 and 2000-08, it did so at a lower rate than that of the rest of the world. As a result, the combined share of these countries in world consumption fell from 52.6% to 43.7%. More specifically, their share in world consumption declined from 52.6% during the period 1975-79 to 50% in 1980-89, and then to 49.7% in 1990-99 before falling to 43.7% during the period 2000-08.

## I. Coffee consumption in the United States of America

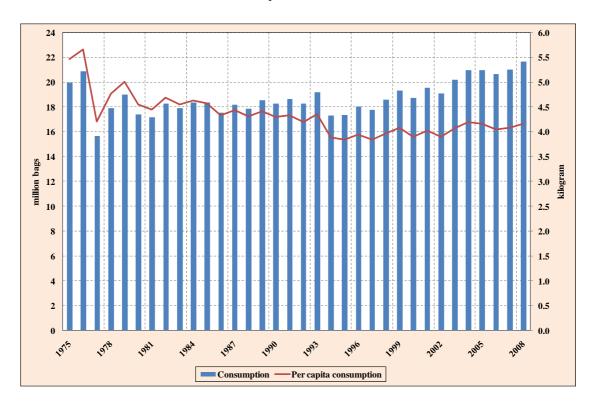
## A. Evolution of consumption

5. With a total population estimated at 311.7 million inhabitants and per capita Gross Domestic Product (GDP) of US\$45,767 in 2008, the United States of America has remained the world's biggest coffee market throughout the period covered by this study. Its annual consumption averaged 18.8 million bags during the last 34 years (Table I-1 and Graph I-1). After a period of stagnation during the 1980s and 1990s, consumption has shown signs of recovery in recent years, with the annual average in the 2000-08 period at 20.3 million bags. The country's share in world consumption has fallen, however, from 24.8% in 1975-79 to 17.3% during the period 2000-08, representing a fall of 7.5%.

Table I-1 Consumption indicators

	Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008	
Consumption (000 bags)	18 696	17 981	18 297	20 327	18 800	
Consumption index (2000=100)	99.73	95.92	97.61	108.43	100.29	
Consumption growth rate (period)	-1.2%	0.6%	0.6%	1.6%	0.2%	
Share in world consumption	24.8%	20.5%	18.7%	17.3%	19.6%	
Annual per capita consumption (kg)	5.03	4.50	4.08	4.07	4.34	
Per capita consumption index (2000=100)	128.70	115.13	104.44	104.06	111.05	
Retail prices (US cents/lb)	253.97	283.14	329.97	322.40	303.02	

Graph I-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



- 6. The USA recorded an anaemic growth rate of only 0.2% p.a. from 1975 to 2008. However, consumption has shown signs of recovery in recent years, with growth rate of 1.6% p.a. between 2000 and 2008 and a level of 21.7 million bags recorded in 2008.
- 7. Average annual per capita consumption was 4.07 kg during the period 2000-08, representing a fall of 19.1% in relation to the 5.03 kg recorded in 1975-79. Despite this significant decline in per capita consumption, the United States continues to be the world's leading coffee market.

8. From 1990-99 to 2000-08, the shares of Other Milds and Robustas in the estimated composition of blend fell by 7.6% and 2.4%, respectively (Table I-2). Conversely, the shares of Colombian Milds and Brazilian Naturals increased by 2.5% and 7.4%, respectively. During the period as a whole, the share of Robustas averaged 19.5% and remained fairly constant, with a minimum of 18.1% during the 1980s and a maximum of 21.1% in the 1990s.

Table I-2
Estimated composition of blend

Composition of blend by group of	Share in total						
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008		
Colombian Milds	17.9%	14.5%	17.7%	20.2%	17.5%		
Other Milds	42.9%	43.9%	46.3%	38.7%	43.0%		
Brazilian Naturals	18.9%	23.5%	15.0%	22.4%	20.1%		
Robustas	20.3%	18.1%	21.1%	18.7%	19.5%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%		

- C. Coffee consumption, retail prices and income
- 9. The average retail price for the period 1975-2008 was 303.02 US cents per lb. After falling since 1997, retail prices have begun to rally in recent years. The average price level for 2008 was 385 US cents per lb, whereas the average for the period 2000-08 was 322.40 cents compared to 329.97 cents for the period 1990-99.
- 10. A correlation test between the retail price index and consumption (total and per capita) indexes was carried out to determine the nature of the relationship among these variables (Table I-3). This established a strong negative correlation between retail prices and consumption during the three sub-periods from 1975 to 1999. However, the correlation coefficient for the most recent period (2000-08) indicates a change in consumer behaviour in relation to retail prices, such that there no longer appears to be a strong link between higher retail prices and decreased consumption. Indeed, the level of retail prices no longer appears to be a determining factor in consumption. The shift in consumer behaviour in the United States may be due to the fact that consumption has reached saturation point or could equally be a phenomenon attributable to increasing out-of-home consumption, where prices do not necessarily correlate closely with retail (supermarket) prices.

Table I-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	-0.85	-0.17	-0.52	0.36	-0.16
Retail price and annual per capita consumption	-0.90	-0.60	-0.90	0.14	-0.78
GDP per capita and consumption	-0.34	0.52	0.13	0.90	0.60

11. A correlation test was also carried out to determine the nature of the relationship between income and per capita coffee consumption. Over the entire period studied (1975-08) there was a strong correlation (0.60) between GDP per capita and consumption, especially during the period from 2000-08 when it rose to 0.90.

# II. Coffee consumption in Germany

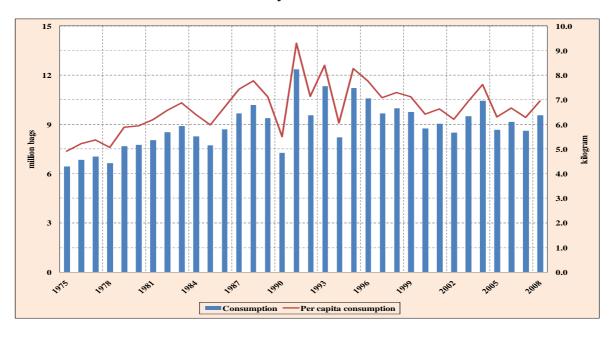
#### A. Evolution of consumption

12. With a population of 82.3 million inhabitants, Germany is the biggest coffee market in Western Europe. Total consumption was 9.6 million bags in 2008 with an average per capita consumption of 6.95 kg. Per capita GDP was estimated at US\$44,303 in 2008. From 1975 to 2008, consumption grew at an annual rate of 1.2%. Average per capita consumption for the most recent period (2000-08) was 6.7 kg, which is in line with the figure for the entire period under analysis, but represents a fall in relation to the figure of 7.4 kg recorded in the 1990s. Table II-1 presents consumption indicators for Germany and Graph II-1 shows the evolution of consumption since 1975.

**Table II-1 Consumption indicators** 

	Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008	
Consumption (000 bags)	6 924	8 720	9 998	9 141	8 943	
Consumption index (2000=100)	78.96	99.43	114.01	104.23	101.98	
Consumption growth rate (period)	4.5%	1.9%	3.0%	1.0%	1.2%	
Share in world consumption	9.2%	10.0%	10.2%	7.8%	9.3%	
Annual per capita consumption (kg)	5.29	6.70	7.39	6.66	6.69	
Per capita consumption index (2000=100)	82.48	104.49	115.32	103.94	104.29	
Retail prices (US cents/lb)	409.86	392.29	403.20	365.59	391.01	

Graph II-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



13. The composition of green coffee absorbed by the German market has changed substantially over time. However, Germany's imports of coffee are substantially higher than consumption, since it is the world's largest re-exporter of coffee. This characteristic presents a special challenge to the statistical analysis of the German market, and conclusions drawn from the available data should be regarded as less definitive than those for countries that do not have such a large re-export trade. In general terms, there has been a significant shift from washed Arabicas to Naturals and Robustas. In particular, the combined shares of Colombian Milds and Other Milds fell from 75.9% in 1975-79 to 42% in 2000-08 (Table II-2). By contrast, the shares of Brazilian Naturals and Robustas increased by 21.8% and 12.1% respectively. This evolution appears to indicate a structural change in the German coffee market, but may also be partly attributable to increased use of Brazilian Naturals and Robustas for processing and re-export.

Table II-2
Estimated composition of blend

Composition of blend by group of	Share in total						
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008		
Colombian Milds	36.1%	37.5%	32.0%	13.5%	28.0%		
Other Milds	39.8%	33.0%	32.5%	28.5%	32.1%		
Brazilian Naturals	14.1%	18.0%	18.8%	35.9%	23.5%		
Robustas	10.1%	11.5%	16.7%	22.2%	16.4%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%		

# C. Coffee consumption, retail prices and income

14. The results of a correlation tests between the retail price index and consumption (total and per capita) indexes are presented in Table II-3. These show that consumption is not significantly influenced by retail prices, since the correlation coefficient is insignificant for the period as a whole as well as in the three sub-periods from 1980 to 2008.

Table II-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	0.54	0.19	0.05	0.06	0.04
Retail price and annual per capita consumption	0.55	0.18	0.04	0.04	0.05
GDP per capita and consumption	0.75	0.82	0.34	0.26	0.56

15. The level of income had a marked influence on consumption during the periods 1975-79 and 1980-89. This influence has diminished considerably over the last twenty years. Coffee consumption in Germany has undoubtedly reached saturation point.

## III. Coffee consumption in Japan

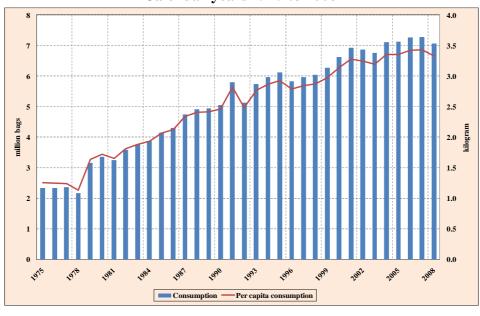
# A. Evolution of consumption

16. The rapid expansion of coffee consumption in Japan since 1975 is striking since the country is known for its tea-drinking tradition. Average consumption increased from 2.5 million bags at the start of the period to 7 million bags in 2000-08. Although the average annual growth rate was a strong 3.3% from 1975 to 2008, the rate of increase has slackened sharply over time and dropped to only 0.7% in the 2000-08 period (Table III-1 and Graph III-1).

**Table III-1 Consumption indicators** 

		Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008		
Consumption (000 bags)	2 475	4 087	5 796	7 007	5 126		
Consumption index (2000=100)	37.35	61.69	87.48	105.76	77.36		
Consumption growth rate (period)	7.9%	3.9%	2.2%	0.7%	3.3%		
Share in world consumption	3.3%	4.7%	5.9%	6.0%	5.3%		
Annual per capita consumption (kg)	1.30	2.04	2.78	3.30	2.48		
Per capita consumption index (2000=100)	41.54	64.88	88.60	105.33	79.13		
Retail prices (US cents/lb)	not available	859.94	1 400.42	882.03	1 067.48		

Graph III-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



17. Annual per capita consumption has increased steadily, from 1.3 kg in 1975-79 to 3.3 kg in 2000-08, although growth appears to have stagnated in recent years. It should be noted, however, that current levels of per capita consumption are still below that of most mature markets in the industrialized world, indicating a potential for further increases in the future.

# B. Composition of blend

18. The structure of Japan's estimated composition of blend has changed significantly since 1975-79 (Table III-2). The shares of Other Milds and Robustas in total Japanese imports are down by 6.2% and 15.4% respectively, while those of Colombian Milds and Brazilian Naturals have increased by 10.5% and 11% respectively.

Table III-2 Estimated composition of blend

Composition of blend by group of	Share in total						
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008		
Colombian Milds	13.7%	16.3%	23.6%	24.2%	21.3%		
Other Milds	26.0%	24.7%	21.0%	19.8%	21.8%		
Brazilian Naturals	25.1%	30.4%	31.7%	36.1%	32.5%		
Robustas	35.3%	28.7%	23.7%	19.9%	24.3%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%		

#### C. Coffee consumption, retail prices and income

- 19. Having risen steadily during the 1990s, retail prices of coffee in Japan began to decrease somewhat at the beginning of the 2000s. There was a slight recovery in 2008 when the average rose to 832 US cents per lb. The average price for the period from 2000-08 was 882.03 US cents per lb.
- 20. The correlation coefficient between retail price and coffee consumption in Japan was –0.64 between 2000 and 2008 reflecting a close link between the two variables (Table III-3). Whereas in previous periods a retail price increase could lead to a fall in consumption, the situation has been different during the last few years.

Table III-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	not available	0.95	0.74	-0.64	0.16
Retail price and annual per capita consumption	not available	0.95	0.72	-0.63	0.16
GDP per capita and consumption	0.48	0.94	0.64	0.12	0.94

21. Japan's economic and industrial performance seems to be the basis for the rapid growth of coffee consumption. There is a strong correlation between GDP per capita and coffee consumption over the period as a whole (Table III-3). Nevertheless, the evolution of consumption since 2000 indicates that this relationship is weakening. The correlation coefficient is now 0.12 compared to 0.64 for the period 1990-99.

## **IV.** Coffee consumption in Italy

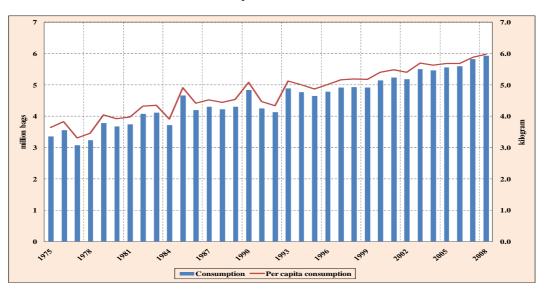
# A. Evolution of consumption

22. With a population of 60 million inhabitants and an estimated GDP of US\$38,501, Italy is Western Europe's second largest coffee consumer after Germany. Annual consumption since 2000 is 5.5 million bags and average per capita consumption is 5.6 kg. The annual growth rate of consumption since 2000 is 1.6%. (Table IV-1 and Graph IV-1)

**Table IV-1 Consumption indicators** 

	Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008	
Consumption (000 bags)	3 399	4 099	4 707	5 495	4 544	
Consumption index (2000=100)	66.02	79.61	91.41	106.71	88.26	
Consumption growth rate (period)	3.07%	1.59%	0.18%	1.60%	1.69%	
Share in world consumption	4.5%	4.7%	4.8%	4.7%	4.7%	
Annual per capita consumption (kg)	3.66	4.33	4.95	5.65	4.76	
Per capita consumption index (2000=100)	67.72	80.10	91.43	104.49	88.07	
Retail prices (US cents/lb)	348.00	382.26	538.29	579.16	475.23	

Graph IV-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



23. The estimated composition of blend remained stable over the period as a whole, albeit with some substitution of Brazilian Naturals by Robustas. The shares of Colombian Milds and Brazilian Naturals fell by 1.5% and 5.1% respectively, while those of Robustas and Other Milds increased by 4.5% and 2.1% respectively. As with Germany, Italian imports are significantly higher than consumption, especially in recent years, reflecting the growing importance of re-exports.

Table IV-2 Estimated composition of blend

Composition of blend by group of	Share in total				
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008
Colombian Milds	6.9%	6.5%	6.8%	5.4%	6.2%
Other Milds	11.3%	11.3%	14.3%	13.4%	13.0%
Brazilian Naturals	38.7%	35.2%	31.4%	33.6%	33.8%
Robustas	43.1%	47.0%	47.5%	47.6%	47.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

## C. Coffee consumption, retail prices and income

- 24. The annual average of the retail price increased by 12.1% in 2008 from 701.64 US cents per lb in 2007 to 786.58 cents. The average price in the period 2000-08 was 579.16 US cents per lb.
- 25. Both overall and per capita consumption show a high positive correlation (0.72 and 0.70 respectively) with retail prices during the period as a whole (Table IV-3). This relationship has been particularly strong in the period 2000-08, but was weaker and inconsistent in preceding years.

Table IV-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	-0.21	0.21	-0.48	0.98	0.72
Retail price and annual per capita consumption	-0.29	0.20	-0.47	0.96	0.70
GDP per capita and consumption	0.50	0.42	-0.30	0.98	0.91

26. There is a strong positive relationship (0.91) between GDP per capita and consumption from 1975 to 2008. However, as in the case of the relationship between consumption and prices analysed in the paragraph above, this coefficient is higher (0.98) in the 2000-08 period than in previous years. This coefficient would seem to indicate that the Italian market has not yet reached saturation level and that an increase in consumption may still be possible.

# V. Coffee consumption in France

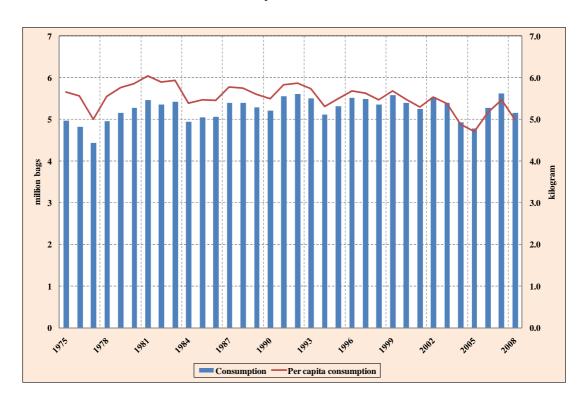
#### A. Evolution of consumption

27. With a population of 60 million inhabitants and a GDP of US\$45,986, France had a coffee consumption level of 5.2 million bags in 2008. The average consumption during the period 2000-08 was 5.3 million bags and average per capita consumption was 5.2 kg (Table V-1 and Graph V-1). Consumption grew by only a weak 0.1% p.a. between 1975 and 2008 and recorded negative growth during the period 2000-08 (-0.6% p.a.). Nevertheless, coffee remains France's leading beverage.

Table V-1
Consumption indicators

		Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008		
Consumption (000 bags)	4 869	5 267	5 424	5 261	5 253		
Consumption index (2000=100)	90.14	97.49	100.40	97.39	97.24		
Consumption growth rate (period)	0.9%	0.0%	0.7%	-0.6%	0.1%		
Share in world consumption	6.5%	6.0%	5.6%	4.5%	5.5%		
Annual per capita consumption (kg)	5.51	5.72	5.62	5.21	5.53		
Per capita consumption index (2000=100)	100.48	104.37	102.59	95.07	100.81		
Retail prices (US cents/lb)	328.19	348.30	289.68	271.32	307.72		

Graph V-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



28. All types of Arabicas increased their participation in the estimated composition of blend, with the shares of Colombian Milds, Other Milds and Brazilian Naturals in 2000-08 rising by 1.7%, 7.3% and 15.5%, respectively, in relation to their levels for the period 1975-79 (Table V-2). Over the same period the share of Robustas fell by 24.6%.

Table V-2 Estimated composition of blend

Composition of blend by group of	Share in total					
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008	
Colombian Milds	5.0%	5.7%	11.0%	6.7%	7.4%	
Other Milds	9.7%	10.7%	17.4%	17.0%	13.9%	
Brazilian Naturals	15.4%	23.0%	16.6%	30.9%	21.6%	
Robustas	69.9%	60.5%	55.0%	45.3%	57.2%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	

- C. Coffee consumption, retail prices and income
- 29. Retail prices began to increase in 2002 reaching a level of 385.92 US cents per lb in 2008. Nevertheless, the average for the period 2000-08 is lower than that for 1990-99 at 271.32 US cents per lb compared to 289.68 cents.
- 30. The retail price has a very weak influence on consumption since the correlation coefficient is -0.23 for the period as a whole and -0.11 for the period 2000-08 (Table V-3). The relationship between retail price and per capita consumption is effectively neutral. Once more, consumption does not systematically follow price movements.
- 31. Over the period as a whole (1975-2008), the correlation between GDP and consumption (Table V-3) is weak (0.32) and has become progressively weaker over time. Consumption is, therefore, no longer influenced by changes in income.

Table V-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	-0.32	-0.05	-0.27	-0.11	-0.23
Retail price and annual per capita consumption	-0.50	-0.19	-0.17	-0.38	0.00
GDP per capita and consumption	0.57	0.33	0.04	-0.20	0.32

## VI. Coffee consumption in Spain

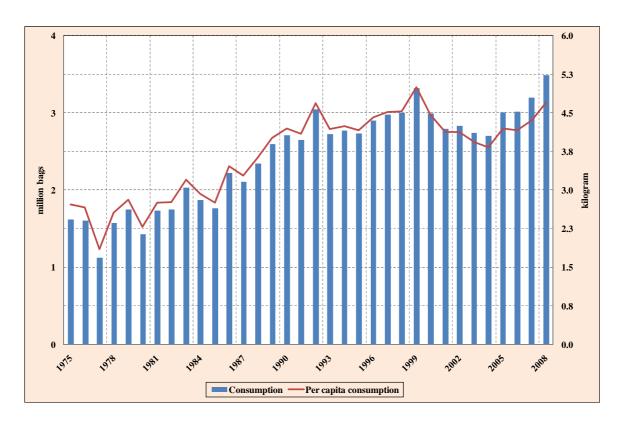
#### A. Evolution of consumption

32. Consumption in Spain totalled 3.5 million bags in 2008 for a population of 44.5 million inhabitants and a per capita GDP of US\$36,052. For the period from 1975 to 2008 this growth rate in consumption was 2.3% p.a. (Table VI-1 and Graph VI-1). Despite recording a considerable decline from 1999 to 2004, consumption has recovered in recent years. For 2000-08, the growth rate was 1.7% p.a. and average annual consumption was almost 3 million bags. Average per capita consumption was 4.20 kg for the period 2000-08.

**Table VI-1 Consumption indicators** 

	Period average					
	1975-79	1980-89	1990-99	2000-08	1975-2008	
Consumption (000 bags)	1 531	1 983	2 884	2 975	2 444	
Consumption index (2000=100)	51.18	66.30	96.42	99.44	81.71	
Consumption growth rate (period)	2.0%	6.1%	2.0%	1.7%	2.3%	
Share in world consumption	2.0%	2.3%	3.0%	2.5%	2.5%	
Annual per capita consumption (kg)	2.52	3.10	4.40	4.20	3.69	
Per capita consumption index (2000=100)	56.50	69.64	98.64	94.32	82.77	
Retail prices (US cents/lb)	383.98	320.81	352.20	320.57	336.47	

Graph VI-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



33. The share of Robustas in Spain's composition of blend has increased markedly, from 34.5% in 1975-79 to 58.2% in 2008-08 (Table VI-2). The expansion of Robustas has come at the expense of all types of Arabicas. Colombian Milds lost 12% of market share, Other Milds lost 2.9%, and Brazilian Naturals lost 8.7% in the same periods.

Table VI-2 Estimated composition of blend

Composition of blend by group of	Share in total				
coffee	1975-79	1980-89	1990-99	2000-08	1975-2008
Colombian Milds	20.1%	17.1%	14.3%	8.0%	13.3%
Other Milds	14.1%	21.3%	17.5%	11.2%	16.0%
Brazilian Naturals	31.3%	32.5%	22.5%	22.6%	25.8%
Robustas	34.5%	29.2%	45.7%	58.2%	44.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

- C. Coffee consumption, retail prices and income
- 34. The retail price was 430.62 US cents per lb in 2008 but the average for the period 2000-08 was 320.57 cents.
- 35. Over the 1975-2008 period as a whole, consumption (overall and per capita) shows a weak correlation (0.05 and 0.03 respectively) with retail price. However, consumption trends since 2000 show an increased sensitivity to price (Table VI-3).
- 36. As regards the impact of income on consumption in Spain, the correlation coefficient indicates that there is a strong link between consumption and per capita GDP (Table VI-3). This result indicates that there is still scope for additional increases in coffee consumption in Spain, which is consistent with the fact that per capita consumption still lags below that of other major markets in Europe.

Table VI-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	-0.92	0.23	-0.06	0.81	0.05
Retail price and annual per capita consumption	-0.92	0.21	-0.08	0.52	0.03
GDP per capita and consumption	0.42	0.75	0.62	0.74	0.83

## VII. Coffee consumption in Sweden

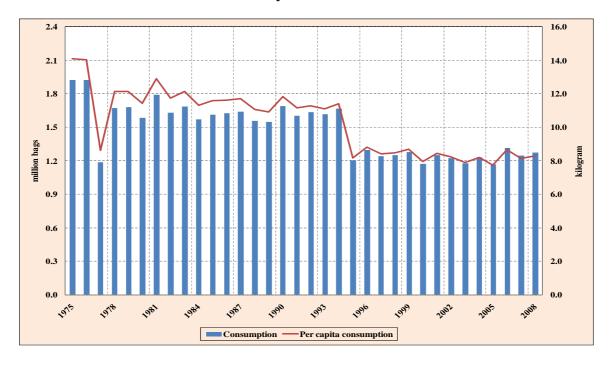
- A. Evolution of consumption
- 37. Sweden is traditionally one of the world's leading coffee-drinking countries in per capita terms. The country has an average consumption of 1.6 million bags for a population of 7 million inhabitants (Table VII-1 and Graph VII-1). Its per capita GDP is one of the highest in Europe (US\$52,004). During the period as a whole, annual per capita consumption averaged 10.3 kg. This figure has fallen since the early 1990s, reaching 8.2 kg in 2000-08,

but remains comparatively high. The growth rate in consumption was -1.2% p.a. during the period as a whole, but 0.9% p.a. for 2000-08. These figures can be seen as indicative of a saturated market.

**Table VII-1 Consumption indicators** 

	Period average				
	1975-79	1980-89	1990-99	2000-08	1975-2008
Consumption (000 bags)	1 677	1 624	1 448	1 229	1 476
Consumption index (2000=100)	142.94	138.48	123.47	104.78	125.80
Consumption growth rate (period)	-3.3%	-0.2%	-2.7%	0.9%	-1.2%
Share in world consumption	2.2%	1.9%	1.5%	1.0%	1.5%
Annual per capita consumption (kg)	12.21	11.64	9.93	8.17	10.30
Per capita consumption index (2000=100)	153.64	146.58	125.03	102.87	129.71
Retail prices (US cents/lb)	312.01	350.21	373.57	306.42	339.87

Graph VII-1
Evolution of consumption and per capita consumption
Calendar years 1975 to 2008



## B. Composition of blend

38. Sweden is traditionally known as a consumer of Arabica coffee. The share of Robustas in the composition of blend attained its highest point in the 2000-08 period, but still accounted for only 2.1% of the total (Table VII-2). Meanwhile, important changes occurred

in the relative shares of different types of Arabicas, as Colombian Milds fell from 41.8% in 1975-79 to 25.5% in 2000-08 and the shares of Mild Arabicas and Brazilian Naturals both rose (by 10.6% and 5.4% respectively).

Table VII-2 Estimated composition of blend

Composition of blend by group of coffee	Share in total					
	1975-79	1980-89	1990-99	2000-08	1975-2008	
Colombian Milds	41.8%	40.8%	41.3%	25.5%	37.0%	
Other Milds	9.7%	7.6%	15.9%	20.3%	13.6%	
Brazilian Naturals	46.8%	51.4%	42.6%	52.2%	48.4%	
Robustas	1.6%	0.2%	0.3%	2.1%	1.0%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	

# C. Coffee consumption, retail prices and income

- 39. Although retail prices have increased over the last three years, the average of 306.42 US cents per lb recorded in the period 2000-08 is the lowest in the sub-periods under analysis.
- 40. There is a weak negative correlation of overall and per capita consumption with retail price, measuring -0.30 and -0.28 respectively (Table VII-3), indicating that price does not play a large role in consumption behaviour.
- 41. Over the period of the study as a whole there was a strong negative correlation between income and consumption (Table VII-3). For the most recent period (2000-08), however, the correlation coefficient was positive, although relatively weak. These results, coupled with the high level of per capita consumption, demonstrate that consumption in Sweden is not driven by income levels and that a point of market saturation has been reached.

Table VII-3
Correlation coefficients

	1975-79	1980-89	1990-99	2000-08	1975-2008
Retail price and consumption	-0.86	-0.39	-0.77	0.31	-0.30
Retail price and annual per capita consumption	-0.87	-0.44	-0.76	0.02	-0.28
GDP per capita and consumption	-0.21	-0.43	-0.43	0.42	-0.66

#### Conclusion

- 42. Consumption seems to have reached saturation point in many major coffee importing countries. Despite population increases, growth in consumption has been very slow. The fact is that although there is no immediate substitute for coffee, it is subject to competition from alternative beverages, including cola-based products, tea, bottled water and energy drinks. These competitors enjoy large marketing budgets, which are especially targeted to young people in many countries. It is increasingly evident that links between prices and consumption are growing weaker.
- 43. The relationship between income and consumption is becoming less and less significant, since the market for coffee has become saturated in most of the countries analysed, although some still show potential for development. At saturation point, an increase in income or a fall in price does not lead to an increase in consumption.
- 44. At this stage many higher-income consumers look for better quality or other attributes in their coffee. This tendency explains the high growth rates of niche markets, such as those for speciality and certified coffees, in recent years. Changes in the composition of the blend in some countries may be attributable to this type of consumer behaviour.
- 45. Within this overall context, there are still markets with a growth potential on account of the link with income increases. More specifically, the markets in Spain and Italy do not yet seem to have reached saturation level and coffee consumption in these two countries is continuing to develop. The Japanese market, which has its own special characteristics, can also grow further.
- 46. Overall, this study confirms that coffee consumption in most developed country markets has reached maturity and that their future growth is likely to be relatively low. Despite the vitality of some niche markets, the greatest potential for future increases in the volume of world consumption lies elsewhere, in emerging markets and in producing countries themselves.

#### NOTES ON METHODOLOGY AND DATA SOURCES

All data are derived from information provided by ICO Members, except where otherwise specified.

Consumption: Imports minus exports and adjusted for changes in visible stocks

Estimated composition of blend: In the absence of information by type of coffee in import data provided by importing Members, the estimated composition of blend is based on exports of green coffee by origin (and by type of coffee, in cases where an origin exports more than one type of coffee from 1990 onwards). The accuracy of this estimate may be influenced by factors such as: destination reported by exporting country not corresponding to actual destination; the greater the proportion of industrialized coffee in total imports of a certain country, the less representative the estimated blend will be; the greater the volume of green coffee imported from importing countries (re-exports by importing countries), the less representative the estimated blend will be; and the greater the volume of coffee that is re-exported by an importing country, the less likely it is that the estimated blend will reflect actual consumption within that country.

Retail price: Retail price of roasted and ground coffee (in US cents per lb).

Population and Gross Domestic Product: 'International Financial Statistics', published by the International Monetary Fund.