



OF E.U. AND US INFLATION AND MACROECONOMIC ANALYSIS

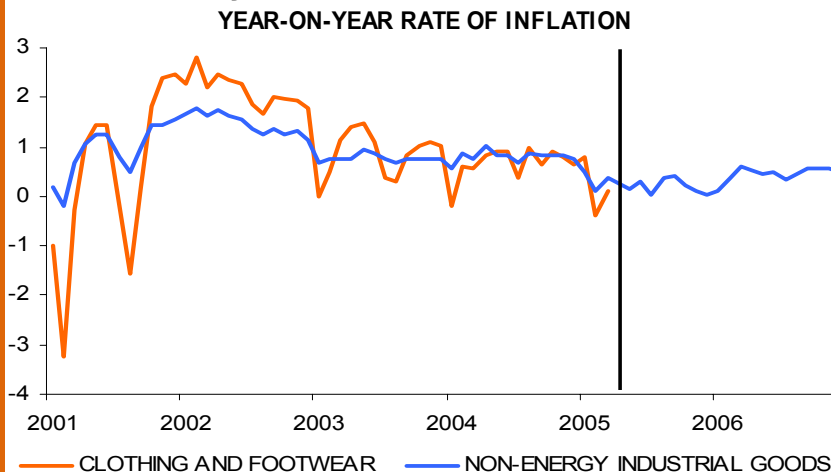


Universidad Carlos III de Madrid

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Recent, very moderate growth in apparel and footwear prices reduces inflation in the non-energy industrial goods sector in the euro area to nearly zero in 2005.

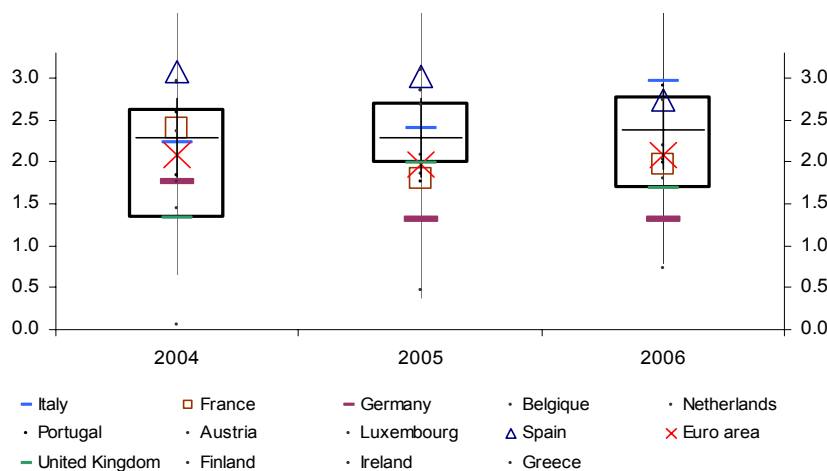


Source: Eurostat & IFL (UC3M)

Date: April 18, 2005

In 2005, Spain is among the most inflationist euro area countries and Germany among the least. The results expected for the United Kingdom are very similar to those forecast for the euro area.

Box diagram of EU countries dispersion on inflation



Source: Eurostat, BLS & IFL(UC3M)

Date: April 20, 2005

Monthly Debate

The Capitalism to Come.

PART IV: ECONOMIC POLICY, DEVELOPMENT AND HUMANISM

IV.2.1. DEVELOPMENT AND INSTITUTIONS: DEMOCRACY AND OPENNESS

by Juan Urrutia Elejalde. University professor in Economics See Page. 42

CONTENTS

I. EURO AREA AND EUROPEAN UNION

I.1 Inflation

I.1.1 Main points and new results p.1

I.1.2 Tables and plots p.3

I.2 Macroeconomic table p.13

I.3 Industrial production p.15

II. UNITED STATES

II.1 Inflation

II.1.1 Main points and new results p.16

II.1.2 Tables and plots p.18

III. SPAIN

III.1 Inflation

III.1.1 Main points and new results p.25

III.1.2 Tables and plots p.27

III.2 Macroeconomic table p.34

IV. FORECAST SUMMARY

IV.1 Euro area and USA p.36

IV.2 Euro area and Spain p.38

V. INFLATION FORECAST OF DIFFERENT INSTITUTIONS p.40

VI. INDICATORS CALENDAR p.41

VII. MONTHLY DEBATE

The Capitalism to Come p.42

PART IV: ECONOMIC POLICY,
DEVELOPMENT AND HUMANISM
IV.2 DEVELOPMENT AND INSTITUTIONS
IV.2.1. DEMOCRACY AND OPENNESS
by Juan Urrutia Elejalde
University professor in Economics

Nº127



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TERMINOLOGY USED:

In inflation analysis it is advisable to break down a consumer price index for a country or an economic area in price indexes corresponding to homogenous markets. An initial basic breakdown used in this publication is 1) Non-processed Food price index (ANE) 2) Energy price index (ENE), 3) Processed Food (AE), 4) Other commodities (MAN), 5) Other services (SERV). The first two are more volatile than the others, and in Espasa et al. (1987) a **core inflation** measure exclusively based on the latter ones was proposed; the Spanish Statistical Institute and Eurostat proceed in the same way. Later, in the BULLETIN EU & US INFLATION AND MACROECONOMIC ANALYSIS was proposed to eliminate from components of core inflation those indexes which are excessively volatile.

Thus, the previous basic breakdown has been amplified for Spain in the following manner: a) ANE, b) ENE, c) Tobacco, Oils and Fats, and Tourist Packages, d) Processed Foods excluding Tobacco, Oils and Fats, (AEX).ge) Other Goods (MAN), and f) Other services, excluding Tourist Packages (SERT). The measure of inflation obtained with the AEX, MAN, and SERV indexes we term **trend inflation**, as an alternative indicator similar to core inflation, but termed trend inflation to indicate a slightly different construction. The measure of inflation established with the price indexes excluded from the CPI to calculate trend inflation or core inflation, depending on the case, is termed **residual inflation**.

For the United States the breakdown by markets is principally based on four components: Food, Energy, Services, and Commodities. **Trend inflation** or **core inflation** is based in this case as the aggregation of services and non-energy commodities.

I. EURO AREA AND EUROPEAN UNION

I.1. INFLATION

I.1.1 MAIN POINTS AND NEW RESULTS

For April, we forecast a monthly increase of 0.4% in the HICP in the euro area – with a [0.30, 0.56] 80% confidence interval – with annual inflation remaining at the 2.1% registered in the two previous months with an [1.96, 2.22] interval (see Table I.1.1.1).

Inflation in the euro area in March performed much as expected, as did core inflation which registered an annual rate of 1.6%. In the components outside core inflation, energy prices and unprocessed food, there were slight upwards innovations.

Table I.1.1.1

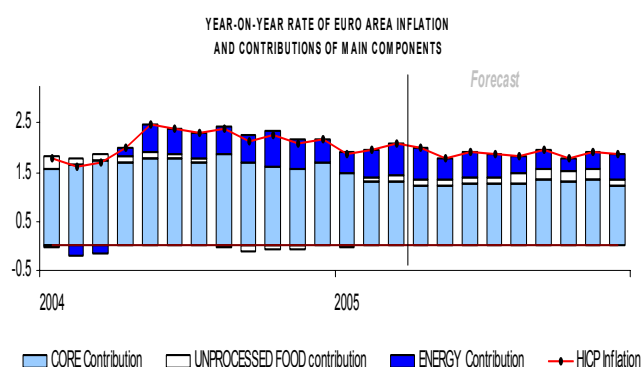
INFLATION RATES						
INFLATION	Observed values			Forecasts		
	Ave ⁽²⁾ 2003 ⁽¹⁾	Ave ⁽²⁾ 2004	2005 Mar ⁽¹⁾	2005 Apr ⁽¹⁾	Ave ⁽²⁾ 2005	Ave ⁽²⁾ 2006
CORE (83,83%)	2,0	2,0	1,6	1,5	1,6	1,8
TOTAL (100%)	2,1	2,1	2,1	2,1	2,0	1,8

Source: EUROSTAT & IFL (UC3M) ⁽¹⁾ Growth of the month over the same month of the previous year
Date: April 18, 2005

⁽²⁾ Growth of the average of the reference year over average of the previous year

As for core inflation, annual rates are expected to fluctuate gently around a forecast mean rate of 1.6% for 2005. This value was reached last month for the first time since 2001. The improvement in core inflation largely occurred in the good prices component, excluding tobacco, affecting both processed food and other goods, for which a mean rate of 0.8% is forecast for 2005.

Graph I.1.1.1



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

The reforms applied in the different national economies in Europe, greater imports from countries such as China, the appreciation of the euro and the moderate growth of internal demand,

etc., are the main reasons for the goods component in core inflation in the euro area being 0.35%, tending towards a mean value of 0.6% in 2006. This acts as an important factor moderating total inflation in the euro area, of particularly relevance in view of the rising prices of energy (see Graph I.1.1.1).

The recent behaviour of the Brent crude oil market has led to a forecast mean annual rate for 2005 of 6.3%. On the other hand, unprocessed food continues with mean rates similar to our last forecast with a mean rate of 1.8% expected for 2005. The increase in the forecast for energy prices is partly compensated by the fall in core inflation, with total HICP inflation for 2005 remaining at the 2.0% forecast in the previous bulletin. Mean total inflation for 2006 is forecast at 1.8%.

In the last three years, the differential in core inflation between U.S. and the euro area – using a homogeneous measure for the two areas – has favoured the euro area (see graph I.1.1.2). We have discussed the possible causes for these price evolutions in the U.S. in this bulletin, mentioning that they enabled a series of monetary policy possibilities not available to the ECB. The current differential in core inflation favours the euro area. This trend started at the end of 2004 and is not expected to change during 2005. This is largely due to the considerable rise in non-energy industrial good prices in the U.S. compared with moderate inflation in the euro area, more intense since January this year due to the elimination of premium paid on European imports of some Chinese products, particularly processed textiles. Graph I.1.1.2 shows the evolution of apparel and footwear consumer prices in the euro area.

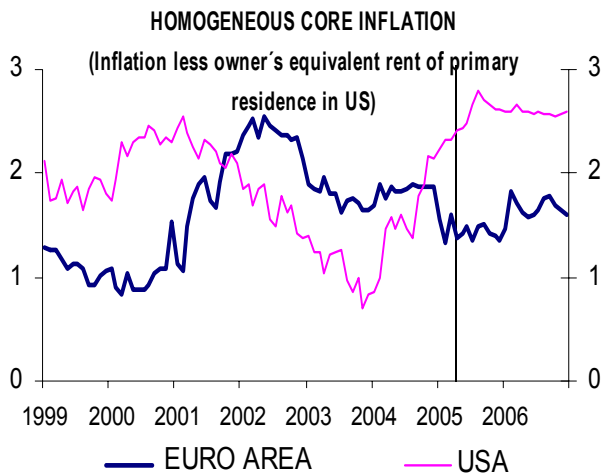
Table I.1.1.2.

ANNUAL AVERAGE INFLATION RATES					
HICP	Observed			Forecasts	
	2002	2003	2004	2005	2006
SPAIN (11.4%)	2.9	3.0	3.1	3.2	3.1
GERMANY (29.0%)	1.7	1.3	1.8	1.6	1.2
FRANCE (20.7%)	1.9	1.8	2.3	1.9	1.9
ITALY (19.2%)	2.1	3.0	2.3	2.6	3.3
EURO AREA (100%)	2.0	1.8	2.1	2.0	1.8
UNITED KINGDOM	1.3	1.4	1.3	2.0	1.7

Source : Eurostat & IFL(UC3M)
Date: April 20, 2005

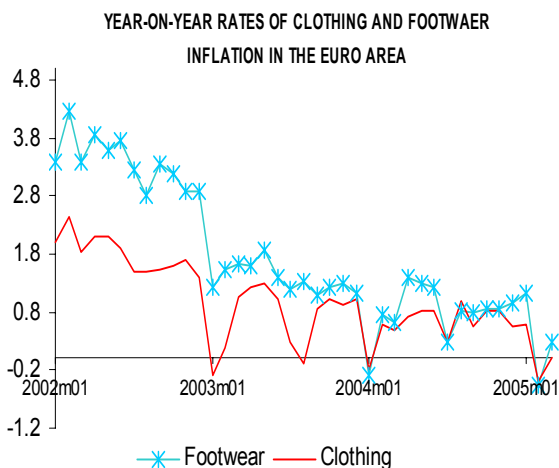


Graph I.1.1.2.



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

Graph I.1.1.3.



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

By country, the forecasts for 2005 indicate that, as in 2004, the worst results in the euro area will be for Luxembourg, Greece and Spain with 3.4%, 3.0% and 3.2%, respectively. The lowest inflation rates are expected for Finland with 1.0% and Germany and Holland with 1.6%. For the United Kingdom the forecast is a mean annual rate of 2.0% and 1.7% for 2005 and 2006, respectively. These rates are very similar to those forecast for the euro area. (See table I.1.1.2)

The real one-year interest rates calculated with our inflation forecasts show differences of up to 2.0 p.p., 1.2% in Germany and a negative value of 0.8% in Italy. However, half the countries continue to show interest rates close to zero on both sides (See Table I.1.1.3)..

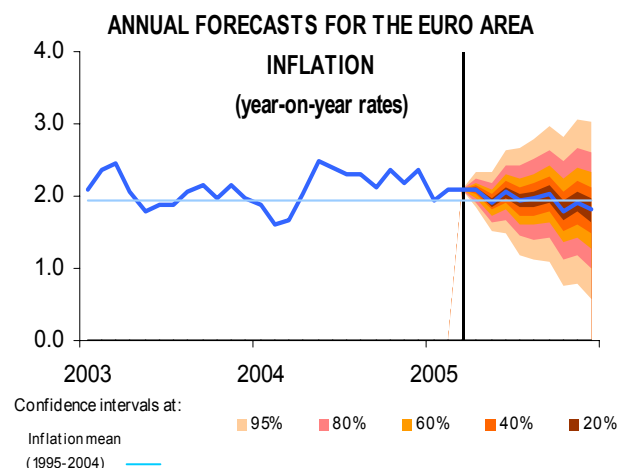
Table I.1.1.3.

	INFLATION EXPECTATIONS		ACTUAL REAL INTEREST RATES	
	Three Months	One Year	Three Months	One Year
Italy	3.25	3.12	-1.10	-0.83
Spain	3.20	2.97	-1.05	-0.68
Portugal	2.54	2.70	-0.39	-0.41
Luxembourg	3.49	2.69	-1.35	-0.39
Greece	2.76	2.54	-0.62	-0.25
Belgium	2.68	2.38	-0.54	-0.08
Austria	2.29	2.25	-0.15	0.04
Ireland	1.93	2.17	0.21	0.13
Netherlands	1.91	2.02	0.24	0.27
France	1.92	1.85	0.23	0.44
Finland	1.44	1.46	0.70	0.84
Germany	1.36	1.14	0.79	1.16

Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

The forecasts in this bulletin and the Bulletin of Inflation and Macroeconomic Analysis in February and March on economic growth, show that the probability of the ECB varying its reference interest rate in 2005 is practically zero. This message about monetary policy in the euro area has been appearing in the Bulletin since the end of 2004. The fan chart shows that there is a probability of around 50% that mean annual inflation will remain at 2.0% during 2005. For December 2005, the inflation rate is expected to be at 1.8%, with an 80% confidence interval of [1.34%, 2.26%]. (See graph I.1.1.4)

Graph I.1.1.4.



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005



I.1.2. TABLES AND PLOTS

Tables:

- Euro area Harmonized Index of Consumer Price (HICP) disaggregation.
- Europe Forecast errors by sectors for euro area.
- Europe Forecast errors by countries for EU.
- Harmonized Index of Consumer Price (HICP) Annual Growth Rates by sectors in the euro area.
- Harmonized Index of Consumer Price (HICP) Monthly Growth Rates by sectors in the euro area.
- Harmonized Index of Consumer Price (HICP) Annual Growth Rates by countries in the euro area and EU.
- Harmonized Index of Consumer Price (HICP) Monthly Growth Rates by countries in the euro area and EU.

Plots:

- HICP monthly growth rates in the euro area.
- Annual forecast for the euro area Inflation.
- Fan chart of annual forecast for the euro area Inflation.
- Year-on-year rate of euro area inflation and contributions of main components.
- Year-on-year rate of euro area inflation and contributions of main explanatory variables.
- Box diagram of the euro area countries annual average rates of growth.



METHODOLOGY: ANALYSIS OF EURO AREA INFLATION BY SECTORS

BASIC COMPONENTS AGGREGATES		BASIC COMPONENTS			
HICP TOTAL	IPSEBENE 83.834% 1 + 2 + 3 + 4	BENE 42.845% 1 + 2 + 3	(1) AE (a) 9.463% HICP Processed Food		
			(2) TOBACCO 2.373% HICP Tobacco		
			(3) MAN 31.009% HICP Non Energy Industrial Goods		
	CORE INFLATION (IT IS CALCULATED ON THE IPSEBENE INDEX)	RESIDUAL INFLACION 15.822% 5 + 6	(4) SER 41.334% HICP Services		
				RESIDUAL INFLATION (IT IS CALCULATED ON THE RESIDUAL INDEX)	(5) ANE 7.689% HICP Non processed Food
					(6) ENE 8.133% HICP Energy
IPCA = 0.09463 AE + 0.02373 TABACO + 0.31009 MAN + 0.41334 SER + 0.07689 ANE + 0.08133 ENE					

(a) To date the aggregate AE, following Eurostat methodology, included tobacco prices. From now on, our definition of AE, processed food, is more accurate and does therefore not include tobacco prices.

Source: Eurostat & IFL (UC3M)

FORECAST ERRORS IN THE MONTHLY INFLATION RATE BY SECTORS IN THE EURO AREA IN MARCH					
	Weights 2005	Observed Monthly Growth	Forecast	Confidence interval at 80%	Annual Growth Observed
HICP Processed Food	120.19	0.08	0.30	± 0.14	1.60
HICP Processed Food excluding tobacco	93.94	0.09	0.05	± 0.09	0.31
HICP Tobacco	26.25	0.06	1.17	± 0.13	6.41
HICP Non Energy Industrial Goods	308.03	1.33	1.27	± 0.10	0.38
HICP Non Energy Processed Goods	428.22	0.97	0.99	± 0.09	0.72
HICP Services	410.11	0.25	0.19	± 0.14	2.53
CORE INFLATION (1)	838.34	0.61	0.60	± 0.08	1.58
HICP Unprocessed Food	76.18	0.91	0.78	± 0.46	1.33
HICP Energy (2)	85.48	2.30	2.17	± 0.60	8.79
RESIDUAL INFLATION (3)	161.66	1.67	1.52	± 0.39	5.19
GLOBAL INFLATION (4)	1000	0.69	0.75	± 0.09	2.09
(1) aggregation error 0.02%					
(2) aggregation error -0.03%					
(3) aggregation error 0.04%					
(4) aggregation error -0.09%					

Source : Eurostat & IFL(UC3M)
Date: April 18, 2005



**FORECAST ERRORS IN THE MONTHLY INFLATION RATE IN THE EURO AREA AND EUROPEAN UNION
IN MARCH**

	Weights 2005 euro area	Weights 2005 EU	Observed Monthly Rate	Forecast	Observed Annual Rate	Confidence Intervals at 80%
Spain	114.39		0.88	0.78	3.44	± 0.15
Germany	289.56		0.36	0.57	1.72	± 0.29
Austria	31.11		0.53	0.33	2.50	± 0.37
Belgium	33.40		0.60	0.10	2.81	± 0.32
Finland	15.89		0.44	0.06	0.88	± 0.37
France	206.96		0.70	0.65	2.13	± 0.20
Greece	27.45		2.55	2.28	2.85	± 0.78
Netherlands	51.53		0.81	0.93	1.47	± 0.33
Ireland	13.21		0.23	0.53	1.87	± 0.30
Italy	192.41		1.25	0.98	2.10	± 0.23
Luxembourg	2.79		0.33	0.04	3.49	± 0.32
Portugal	21.29		0.40	0.30	2.27	± 0.66
Denmark		11.43	0.77	0.52	1.29	± 0.27
United Kingdom		184.47	0.45	0.24	1.90	± 0.33
Sweden		18.63	0.26	0.64	0.53	± 0.50
(1) aggregation error -0.03%						
(2) aggregation error -0.08%						

Source : Eurostat & IFL(UC3M)
Date: April 20, 2005



HICP ANNUAL GROWTH BY SECTORS IN THE EURO AREA											
		Harmonized Consumer Prices Index									
		Core					Residual			TOTAL	
		Processed food excluding tobacco	Tobacco	Non energy industrial goods	Services	TOTAL	Non processed food	Energy	TOTAL		
Weights 2005		9.4%	2.6%	30.8%	41.0%	83.8%	7.6%	8.5%	16.2%	100%	
ANNUAL AVERAGE RATE	1997	0.6	5.6	0.6	2.4	1.5	1.3	2.7	2.0	1.6	
	1998	0.9	4.0	0.9	1.9	1.4	2.0	-2.6	-0.3	1.1	
	1999	0.5	3.1	0.7	1.5	1.1	0.0	2.4	1.2	1.1	
	2000	0.6	3.4	0.4	1.5	1.0	1.7	13.0	7.5	2.1	
	2001	2.7	3.8	0.9	2.5	1.9	7.0	2.3	4.4	2.3	
	2002	2.4	5.9	1.5	3.1	2.5	3.1	-0.6	1.1	2.3	
	2003	2.1	8.4	0.8	2.6	2.0	2.2	3.0	2.6	2.1	
	2004	1.3	12.2	0.8	2.6	2.0	0.6	4.5	2.6	2.1	
	2005	0.8	7.6	0.2	2.4	1.6	1.8	6.3	4.2	2.0	
	2006	1.8	5.8	0.6	2.4	1.8	2.2	1.8	2.0	1.8	
ANNUAL RATES (growth of the month over the same month of the previous year)	2004	January	1.9	9.0	0.6	2.5	1.9	2.9	-0.3	1.2	1.9
		February	1.9	8.3	0.9	2.7	2.0	1.9	-2.3	-0.2	1.6
		March	1.7	13.9	0.8	2.5	2.1	1.7	-2.0	-0.2	1.7
		April	1.7	13.1	1.0	2.5	2.1	1.6	2.0	1.8	2.0
		May	1.5	13.8	0.8	2.6	2.1	1.8	6.7	4.2	2.5
		June	1.4	13.8	0.8	2.6	2.1	1.3	5.9	3.6	2.4
		July	1.4	13.7	0.7	2.7	2.1	0.7	6.0	3.4	2.3
		August	1.2	13.5	0.9	2.6	2.2	-0.3	6.4	3.2	2.3
		September	0.9	13.2	0.8	2.6	2.0	-1.5	6.4	2.6	2.1
		October	0.6	11.7	0.8	2.6	2.0	-1.3	9.8	4.4	2.4
		November	0.6	9.2	0.8	2.7	1.9	-1.0	8.6	4.0	2.2
		December	0.5	13.8	0.7	2.7	2.0	0.0	7.0	3.5	2.4
	2005	January	0.4	12.2	0.5	2.4	1.8	-0.7	6.2	2.9	1.9
		February	0.3	12.0	0.1	2.3	1.6	0.8	7.7	4.3	2.1
		March	0.3	6.4	0.4	2.5	1.6	1.3	8.8	5.2	2.1
		April	0.4	7.2	0.2	2.2	1.5	1.7	8.8	5.4	2.1
		May	0.5	7.2	0.1	2.4	1.4	1.9	6.3	4.3	1.9
		June	0.6	7.1	0.3	2.4	1.5	1.6	7.3	4.6	2.1
		July	0.7	7.2	0.0	2.3	1.5	2.0	6.7	4.5	1.9
		August	0.9	7.3	0.4	2.3	1.5	2.5	5.3	4.0	2.0
		September	1.1	7.5	0.4	2.3	1.6	2.8	5.6	4.2	2.0
		October	1.2	7.6	0.2	2.3	1.6	3.0	2.7	2.9	1.8
		November	1.4	7.6	0.1	2.4	1.6	2.7	4.1	3.4	1.9
		December	1.5	3.0	0.0	2.3	1.4	2.0	6.0	4.2	1.8
	2006	January	1.5	7.1	0.2	2.4	1.6	3.1	5.8	4.5	2.0
		February	1.7	7.0	1.0	2.5	2.0	2.4	4.4	3.5	2.1
		March	1.7	7.0	0.7	2.4	1.9	2.1	2.1	2.2	1.9
		April	1.8	5.9	0.5	2.4	1.8	2.1	1.1	1.6	1.7
		May	1.8	5.4	0.4	2.4	1.7	2.1	1.0	1.6	1.7
		June	1.8	5.4	0.5	2.4	1.7	2.1	1.0	1.6	1.7
		July	1.8	5.4	0.6	2.4	1.8	2.1	1.0	1.5	1.7
		August	1.8	5.4	0.8	2.4	1.9	2.1	1.0	1.5	1.8
		September	1.8	5.4	0.9	2.4	1.9	2.1	1.0	1.5	1.8
		October	1.8	5.4	0.7	2.4	1.8	2.1	1.0	1.5	1.8
		November	1.8	5.4	0.6	2.4	1.8	2.1	1.0	1.5	1.7
		December	1.8	5.4	0.5	2.4	1.7	2.1	1.1	1.5	1.7

Source : Eurostat & IFL(UC3M)

Date: April 18, 2005



HICP MONTHLY GROWTH BY SECTORS IN THE EURO AREA											
		Harmonized Consumer Prices Index									
		Core					Residual			TOTAL	
		Processed food excluding tobacco	Tobacco	Non energy industrial goods	Services	TOTAL	Non processed food	Energy	TOTAL		
Weights 2005		9.4%	2.6%	30.8%	41.0%	83.8%	7.6%	8.5%	16.2%	100%	
MONTHLY RATES (Growth of the month over the previous month)	January	2003	0.2	4.2	-1.4	-0.2	-0.5	1.4	3.1	2.3	-0.1
		2004	0.2	1.7	-1.6	0.0	-0.5	1.1	1.0	1.0	-0.2
		2005	0.1	0.2	-1.9	-0.3	-0.8	0.4	0.2	0.4	-0.6
		2006	0.2	4.2	-1.7	-0.2	-0.6	1.5	0.1	0.7	-0.4
	February	2003	0.3	1.0	0.0	0.3	0.3	0.3	1.9	1.1	0.4
		2004	0.2	0.3	0.3	0.5	0.4	-0.7	-0.1	-0.3	0.2
		2005	0.1	0.2	-0.1	0.4	0.2	0.8	1.4	1.0	0.3
		2006	0.2	0.1	0.7	0.4	0.5	0.0	0.1	0.0	0.4
	March	2003	0.2	0.1	1.1	0.2	0.5	0.5	1.0	0.8	0.6
		2004	0.0	5.3	1.0	0.0	0.6	0.3	1.3	0.8	0.7
		2005	0.1	0.1	1.3	0.2	0.6	0.9	2.3	1.7	0.7
		2006	0.1	0.1	1.1	0.2	0.5	0.7	0.1	0.4	0.5
	April	2003	0.1	1.2	0.6	0.3	0.4	0.4	-2.9	-1.3	0.1
		2004	0.1	0.4	0.8	0.3	0.4	0.3	1.1	0.7	0.4
		2005	0.2	1.2	0.7	0.0	0.3	0.7	1.1	0.9	0.4
		2006	0.2	0.1	0.5	0.0	0.2	0.7	0.1	0.4	0.3
	May	2003	0.2	0.1	0.3	0.0	0.1	0.3	-2.1	-0.9	-0.1
		2004	0.0	0.6	0.1	0.1	0.2	0.4	2.5	1.4	0.3
		2005	0.2	0.6	0.0	0.2	0.1	0.5	0.2	0.4	0.2
		2006	0.2	0.1	-0.1	0.2	0.1	0.5	0.1	0.3	0.1
	June	2003	0.2	0.1	-0.2	0.3	0.1	0.6	0.0	0.3	0.1
		2004	0.1	0.1	-0.2	0.3	0.1	0.1	-0.8	-0.3	0.0
		2005	0.2	0.1	0.0	0.3	0.2	-0.2	0.1	0.0	0.1
		2006	0.2	0.1	0.0	0.3	0.2	-0.2	0.1	0.0	0.1
	July	2003	0.1	0.1	-1.4	0.6	-0.2	-0.6	0.5	0.0	-0.1
		2004	0.1	0.0	-1.6	0.8	-0.3	-1.2	0.6	-0.2	-0.2
		2005	0.2	0.1	-1.8	0.7	-0.3	-0.8	0.1	-0.3	-0.3
		2006	0.2	0.1	-1.7	0.7	-0.3	-0.8	0.1	-0.3	-0.3
	August	2003	0.2	0.1	-0.1	0.3	0.1	-0.4	1.1	0.3	0.2
		2004	0.0	0.0	0.1	0.2	0.3	-1.3	1.5	0.2	0.2
		2005	0.2	0.1	0.4	0.2	0.3	-0.9	0.1	-0.3	0.2
		2006	0.2	0.1	0.7	0.2	0.4	-0.9	0.1	-0.4	0.3
	September	2003	0.1	0.3	1.1	-0.3	0.4	1.2	-0.1	0.5	0.4
		2004	-0.2	0.0	1.1	-0.3	0.2	-0.1	-0.2	-0.1	0.2
		2005	0.1	0.1	1.2	-0.3	0.3	0.2	0.1	0.1	0.3
		2006	0.1	0.1	1.2	-0.3	0.3	0.2	0.1	0.1	0.3
	October	2003	0.2	1.4	0.6	-0.1	0.3	-0.3	-0.3	-0.3	0.1
		2004	0.0	0.0	0.6	-0.1	0.2	-0.1	2.9	1.5	0.3
		2005	0.1	0.1	0.3	-0.1	0.1	0.2	0.1	0.1	0.1
		2006	0.1	0.1	0.1	-0.1	0.0	0.2	0.1	0.1	0.0
	November	2003	0.1	2.3	0.3	-0.1	0.1	-0.2	-0.2	-0.2	0.1
		2004	0.0	0.1	0.3	-0.1	0.0	0.1	-1.2	-0.6	-0.1
		2005	0.1	0.1	0.2	-0.1	0.0	-0.2	0.1	0.0	0.0
		2006	0.1	0.1	0.1	-0.1	0.0	-0.2	0.1	0.0	0.0
	December	2003	0.0	0.3	-0.1	0.9	0.4	0.0	-0.2	-0.1	0.3
		2004	-0.1	4.6	-0.2	0.9	0.5	1.0	-1.8	-0.6	0.4
		2005	0.0	0.1	-0.3	0.9	0.3	0.3	0.1	0.2	0.3
		2006	0.0	0.1	-0.4	0.9	0.3	0.3	0.1	0.2	0.3

Source : Eurostat & IFL(UC3M)

Date: April 18, 2005



HICP ANNUAL GROWTH BY COUNTRIES IN THE EURO AREA AND EU																	
		European Monetary Union															
		Euro Area															
		Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Greece	Portugal	Finland	Ireland	Luxembourg	United Kingdom	Sweden	Denmark	
Weights 2005		29.0%	20.7%	19.2%	11.4%	5.2%	3.3%	3.1%	2.7%	2.1%	1.6%	1.3%	0.3%	18.4%	1.9%	1.1%	
ANNUAL AVERAGE RATE	1997	1.5	1.3	2.0	1.9	1.9	1.5	1.2	5.4	1.9	1.2	1.2	1.4	5.4	1.8	1.9	
	1998	0.6	0.7	1.9	1.8	1.8	0.9	0.8	4.5	2.2	1.4	2.1	1.0	4.5	1.0	1.3	
	1999	0.6	0.6	1.7	2.2	2.0	1.1	0.5	2.1	2.2	1.3	2.5	1.0	2.1	0.6	2.1	
	2000	1.4	1.8	2.6	3.5	2.3	2.7	2.0	2.9	2.8	3.0	5.3	3.8	0.8	1.3	2.7	
	2001	1.9	1.8	2.3	2.8	5.1	2.4	2.3	3.7	4.4	2.7	4.0	2.4	1.2	2.7	2.3	
	2002	1.3	1.9	2.6	3.6	3.9	1.6	1.7	3.9	3.7	2.0	4.7	2.1	1.3	2.0	2.4	
	2003	1.0	2.2	2.8	3.1	2.2	1.5	1.3	3.5	3.3	1.3	4.0	2.5	1.4	2.3	2.0	
	2004	1.8	2.3	2.3	3.1	1.4	1.9	2.0	3.0	2.5	0.1	2.3	3.2	1.3	1.0	0.9	
	2005	1.6	1.9	2.6	3.2	1.6	2.6	2.4	3.0	2.2	1.0	1.8	3.4	2.0	0.6	1.6	
	2006	1.2	1.9	3.3	3.1	2.0	2.5	2.3	2.6	2.7	1.5	2.1	3.0	1.7	1.1	1.9	
ANNUAL RATES (growth of the month over the same month of the previous year)	2004	January	1.2	2.2	2.2	2.3	1.5	1.4	1.2	3.1	2.2	0.8	2.3	2.3	1.4	1.3	1.0
		February	0.8	1.9	2.4	2.2	1.3	1.2	1.5	2.6	2.1	0.4	2.2	2.4	1.3	0.2	0.7
		March	1.1	1.9	2.3	2.2	1.2	1.0	1.5	2.9	2.2	-0.4	1.8	2.0	1.1	0.4	0.0
		April	1.7	2.4	2.3	2.7	1.5	1.7	1.5	3.1	2.4	-0.4	1.7	2.7	1.2	1.1	0.5
		May	2.1	2.8	2.3	3.4	1.7	2.4	2.1	3.1	2.4	-0.1	2.1	3.4	1.5	1.5	1.1
		June	1.9	2.7	2.4	3.5	1.5	2.0	2.3	3.0	3.7	-0.1	2.5	3.8	1.6	1.2	0.9
		July	2.0	2.6	2.2	3.3	1.2	2.1	2.1	3.1	2.9	0.2	2.5	3.8	1.4	1.2	1.1
		August	2.1	2.5	2.4	3.3	1.2	2.0	2.2	2.8	2.4	0.3	2.5	3.6	1.3	1.3	0.9
		September	1.9	2.2	2.1	3.2	1.1	1.8	1.8	2.9	2.1	0.2	2.4	3.1	1.1	1.2	0.9
		October	2.2	2.3	2.1	3.6	1.5	2.7	2.4	3.3	2.4	0.6	2.5	4.1	1.2	1.4	1.6
		November	2.0	2.2	2.0	3.5	1.5	2.3	2.4	3.0	2.6	0.2	2.8	4.0	1.5	1.1	1.0
		December	2.2	2.3	2.4	3.3	1.2	1.9	2.5	3.1	2.6	0.1	2.4	3.5	1.6	0.9	1.0
	2005	January	1.6	1.6	2.0	3.1	1.2	2.0	2.4	4.2	2.0	-0.2	2.1	2.8	1.6	0.5	0.8
		February	1.8	1.9	2.0	3.3	1.5	2.3	2.3	3.2	2.1	0.0	2.0	3.2	1.6	1.2	1.0
		March	1.7	2.1	2.1	3.4	1.5	2.8	2.5	2.9	2.3	0.9	1.9	3.5	1.9	0.5	1.7
		April	1.6	2.2	2.2	3.4	1.5	2.6	2.5	2.9	2.1	1.0	1.9	3.3	2.0	0.4	1.5
		May	1.5	1.9	2.5	3.0	1.4	2.5	2.4	2.8	2.1	0.9	1.8	3.3	2.0	0.3	1.5
		June	1.6	2.0	2.6	3.0	1.6	2.6	2.4	2.9	1.5	1.1	1.7	3.2	2.1	0.5	1.8
		July	1.6	2.0	2.8	3.1	1.7	3.0	2.4	3.1	2.1	1.5	1.7	4.3	2.1	0.6	1.7
		August	1.4	1.9	2.8	3.0	1.8	2.7	2.3	3.1	2.4	1.4	1.7	3.6	2.1	0.6	2.0
		September	1.5	2.0	2.9	3.2	1.8	2.8	2.4	2.9	2.4	1.1	1.7	3.5	2.3	0.5	1.9
		October	1.2	1.8	3.0	2.9	1.7	2.3	2.3	2.8	2.4	0.9	1.8	3.5	2.2	0.4	1.6
		November	1.4	1.9	3.2	3.1	1.8	2.6	2.3	2.8	2.4	1.4	1.7	3.4	2.0	0.7	1.9
		December	1.7	1.9	3.0	3.4	2.0	2.9	2.3	2.7	2.4	1.6	1.8	3.6	1.9	0.8	2.1
	2006	January	1.5	2.4	4.0	3.8	2.1	3.0	2.3	2.7	2.8	2.2	2.0	4.4	1.8	1.1	2.3
		February	1.4	2.1	3.8	3.6	1.9	2.8	2.3	2.9	2.8	1.7	2.0	3.4	1.9	0.9	2.1
		March	1.2	1.8	3.5	3.3	2.0	2.5	2.2	2.6	2.7	1.4	2.1	3.4	1.7	1.0	1.9
		April	1.1	1.7	3.4	3.0	2.0	2.5	2.2	2.6	2.7	1.4	2.2	3.2	1.7	1.0	1.9
		May	1.1	1.8	3.3	3.0	2.0	2.5	2.2	2.5	2.7	1.4	2.2	3.0	1.6	1.0	1.9
		June	1.1	1.8	3.2	3.0	2.0	2.5	2.2	2.6	2.7	1.4	2.2	2.8	1.6	1.1	1.9
		July	1.1	1.8	3.2	3.0	2.0	2.3	2.3	2.7	2.7	1.5	2.2	2.8	1.6	1.1	1.9
		August	1.1	1.9	3.1	3.0	2.0	2.3	2.3	2.8	2.7	1.5	2.2	2.6	1.6	1.1	1.9
		September	1.1	1.9	3.1	3.0	2.0	2.4	2.3	2.6	2.7	1.4	2.2	2.7	1.6	1.1	1.9
		October	1.1	1.9	3.1	2.9	2.0	2.4	2.3	2.5	2.7	1.4	2.2	2.4	1.6	1.0	1.9
		November	1.1	1.8	3.0	2.9	2.0	2.4	2.3	2.5	2.7	1.5	2.2	2.4	1.6	1.1	1.9
		December	1.1	1.9	3.0	2.9	2.0	2.3	2.3	2.4	2.7	1.5	2.2	2.6	1.6	1.1	1.9

Source : Eurostat & IFL(UC3M)

Date: April 20, 2005



HICP MONTHLY GROWTH BY COUNTRIES IN THE EURO AREA AND EU																
		European Monetary Union														
		Euro Area														
		Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Greece	Portugal	Finland	Ireland	Luxembourg	United Kingdom	Sweden	Denmark
Weights 2005		29.0%	20.7%	19.2%	11.4%	5.2%	3.3%	3.1%	2.7%	2.1%	1.6%	1.3%	0.3%	18.4%	1.9%	1.1%
MONTHLY RATES (Growth of the month over the previous month)	January	2003	-0.1	0.3	-0.3	-0.4	0.6	-1.0	0.2	-0.8	0.1	0.2	-0.3	-0.6	0.3	0.2
		2004	0.0	0.1	-0.6	-0.8	0.5	-1.3	0.1	-0.8	0.0	-0.3	-0.3	-0.5	-0.3	-0.1
		2005	-0.5	-0.6	-1.0	-1.0	0.5	-1.3	0.0	0.2	-0.6	-0.5	-1.0	-0.5	-0.6	-0.3
		2006	-0.6	-0.1	-0.1	-0.6	0.5	-1.2	0.0	0.2	-0.2	0.1	-0.8	-0.6	-0.3	0.0
	February	2003	0.6	0.7	-0.4	0.2	0.8	2.1	0.2	-0.2	0.0	0.9	1.0	0.4	1.0	0.7
		2004	0.2	0.4	-0.2	0.1	0.6	1.9	0.5	-0.7	-0.2	0.4	0.9	0.3	-0.1	0.4
		2005	0.4	0.7	-0.2	0.2	0.8	2.2	0.4	-1.7	-0.1	0.6	0.9	0.3	0.5	0.7
		2006	0.3	0.4	-0.4	0.1	0.7	1.9	0.4	-1.5	-0.1	0.2	0.9	0.3	0.3	0.5
	March	2003	0.2	0.5	1.2	0.8	0.9	0.3	0.3	2.5	0.1	0.4	0.7	0.4	0.6	0.8
		2004	0.5	0.4	1.1	0.7	0.8	0.1	0.4	2.9	0.2	-0.4	0.4	0.2	0.9	0.1
		2005	0.4	0.7	1.3	0.9	0.8	0.6	0.5	2.5	0.4	0.4	0.2	0.4	0.3	0.8
		2006	0.1	0.4	1.0	0.6	0.9	0.3	0.5	2.3	0.3	0.2	0.3	0.3	0.4	0.6
	April	2003	-0.3	-0.2	0.8	0.8	0.1	-0.2	-0.1	0.2	0.8	-0.1	0.5	0.3	-0.4	0.0
		2004	0.3	0.3	0.8	1.4	0.3	0.5	-0.1	0.4	1.0	0.0	0.3	0.4	0.3	0.5
		2005	0.2	0.3	0.9	1.3	0.4	0.4	-0.1	0.4	0.9	0.1	0.3	0.5	0.1	0.3
		2006	0.1	0.3	0.8	1.0	0.4	0.4	-0.1	0.4	0.9	0.1	0.4	0.5	0.1	0.3
	May	2003	-0.3	-0.1	0.2	-0.1	-0.1	-0.4	-0.2	0.5	0.7	-0.1	-0.2	0.0	-0.1	-0.3
		2004	0.2	0.4	0.2	0.6	0.2	0.3	0.4	0.4	0.8	0.2	0.2	0.4	0.4	0.3
		2005	0.0	0.1	0.5	0.2	0.1	0.2	0.3	0.4	0.8	0.1	0.2	0.4	0.2	0.3
		2006	0.0	0.2	0.4	0.2	0.1	0.2	0.3	0.4	0.8	0.1	0.2	0.3	0.2	0.3
	June	2003	0.2	0.2	0.1	0.1	-0.5	0.4	0.0	-0.2	0.0	-0.1	0.1	-0.1	-0.2	0.0
		2004	0.0	0.1	0.2	0.2	-0.7	-0.1	0.2	-0.2	1.2	-0.1	0.5	-0.1	-0.5	-0.3
		2005	0.2	0.1	0.2	0.1	-0.5	0.0	0.1	-0.2	0.6	0.1	0.4	0.0	-0.3	0.0
		2006	0.2	0.1	0.2	0.1	-0.5	0.0	0.1	-0.2	0.6	0.1	0.4	0.0	-0.2	0.0
	July	2003	0.3	-0.1	-0.1	-0.6	-0.1	-1.2	-0.1	-2.1	-0.2	-0.5	-0.4	-0.1	-0.2	-0.6
		2004	0.4	-0.2	-0.2	-0.7	-0.3	-1.0	-0.3	-1.9	-0.9	-0.3	-0.4	-0.3	-0.2	-0.3
		2005	0.3	-0.1	-0.1	-0.6	-0.2	-0.7	-0.3	-1.7	-0.3	0.1	-0.4	-0.3	-0.1	-0.4
		2006	0.3	-0.1	-0.1	-0.6	-0.2	-0.9	-0.3	-1.6	-0.3	0.1	-0.4	-0.3	-0.1	-0.4
	August	2003	0.1	0.3	-0.3	0.5	0.2	1.7	0.3	0.0	0.1	0.2	0.6	0.4	-0.1	-0.1
		2004	0.2	0.2	-0.2	0.5	0.2	1.7	0.4	-0.3	-0.4	0.3	0.6	0.3	0.0	-0.3
		2005	0.0	0.1	-0.2	0.4	0.2	1.4	0.3	-0.3	-0.1	0.1	0.6	0.3	0.0	0.0
		2006	0.0	0.1	-0.2	0.4	0.2	1.5	0.3	-0.2	-0.1	0.1	0.6	0.3	0.0	-0.1
	September	2003	-0.2	0.5	0.8	0.2	0.8	0.2	0.3	2.0	0.2	0.5	0.2	0.3	0.8	0.8
		2004	-0.4	0.1	0.5	0.2	0.8	-0.1	-0.1	2.1	-0.1	0.4	0.1	0.1	0.7	0.8
		2005	-0.2	0.1	0.6	0.3	0.9	0.0	0.0	1.9	0.0	0.2	0.1	0.2	0.6	0.6
		2006	-0.3	0.2	0.6	0.3	0.9	0.1	0.0	1.7	0.0	0.1	0.1	0.2	0.5	0.6
	October	2003	-0.1	0.2	0.3	0.7	-0.2	-0.4	0.0	0.4	0.2	-0.1	0.0	0.2	0.1	-0.3
		2004	0.2	0.4	0.3	1.0	0.2	0.5	0.5	0.7	0.5	0.4	0.1	0.3	0.4	0.4
		2005	-0.1	0.1	0.5	0.8	0.1	0.0	0.4	0.7	0.4	0.1	0.1	0.1	0.2	0.1
		2006	-0.1	0.1	0.4	0.8	0.1	0.1	0.4	0.6	0.4	0.1	0.1	0.1	0.2	0.1
	November	2003	-0.2	0.1	0.3	0.3	-0.4	0.2	0.2	0.4	0.1	-0.1	0.0	-0.1	-0.3	0.2
		2004	-0.4	0.0	0.2	0.2	-0.4	-0.2	0.2	0.1	0.3	-0.5	0.2	0.2	-0.6	-0.3
		2005	-0.1	0.1	0.3	0.4	-0.4	0.1	0.2	0.1	0.4	0.1	0.2	0.1	-0.3	0.0
		2006	-0.1	0.0	0.3	0.4	-0.4	0.0	0.2	0.1	0.4	0.1	0.2	0.1	-0.2	0.0
	December	2003	0.9	0.1	0.0	0.2	-0.6	0.0	0.3	0.4	0.1	0.1	0.4	0.4	0.2	-0.2
		2004	1.1	0.2	0.3	-0.1	-0.8	-0.3	0.4	0.5	0.1	0.0	0.1	0.5	0.0	-0.3
		2005	1.3	0.2	0.2	0.2	-0.6	0.0	0.4	0.5	0.1	0.1	0.2	0.4	0.1	-0.1
		2006	1.3	0.2	0.2	0.3	-0.6	-0.1	0.4	0.4	0.1	0.1	0.2	0.4	0.1	-0.1

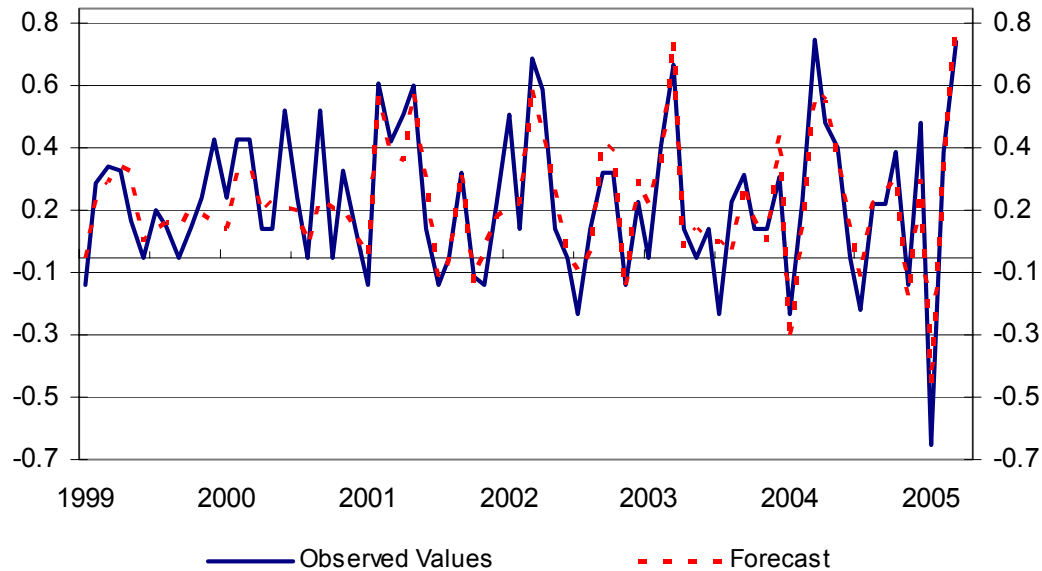
Source : Eurostat & IFL(UC3M)

Date: April 20, 2005



HICP MONTH-ON-MONTH RATES OF GROWTH IN THE EURO AREA

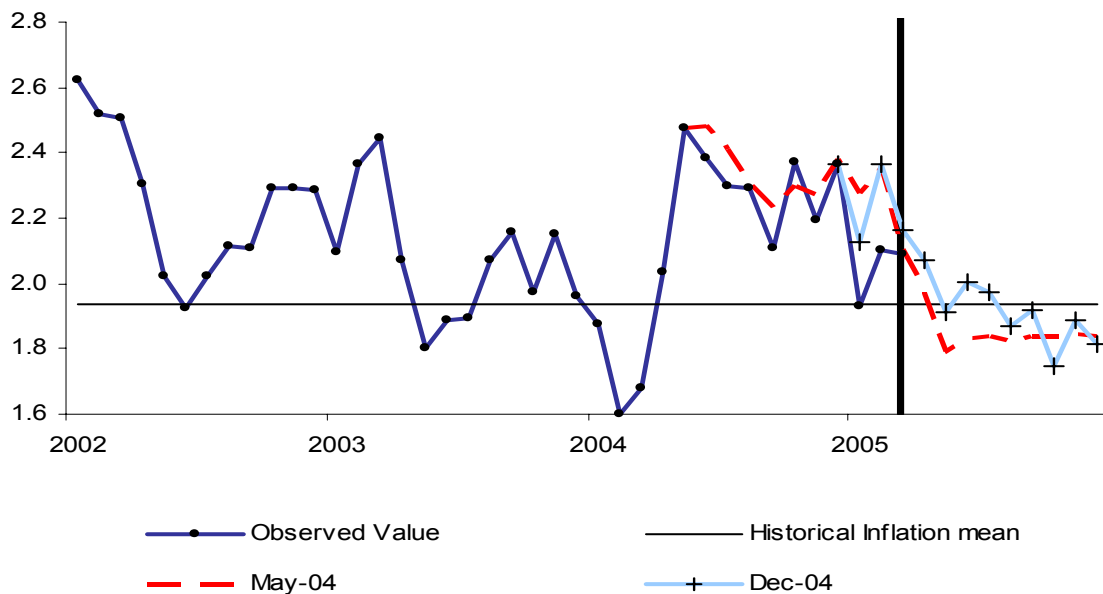
Observed values and forecasts



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

* the roof of mean square error for one month ahead is 0.09

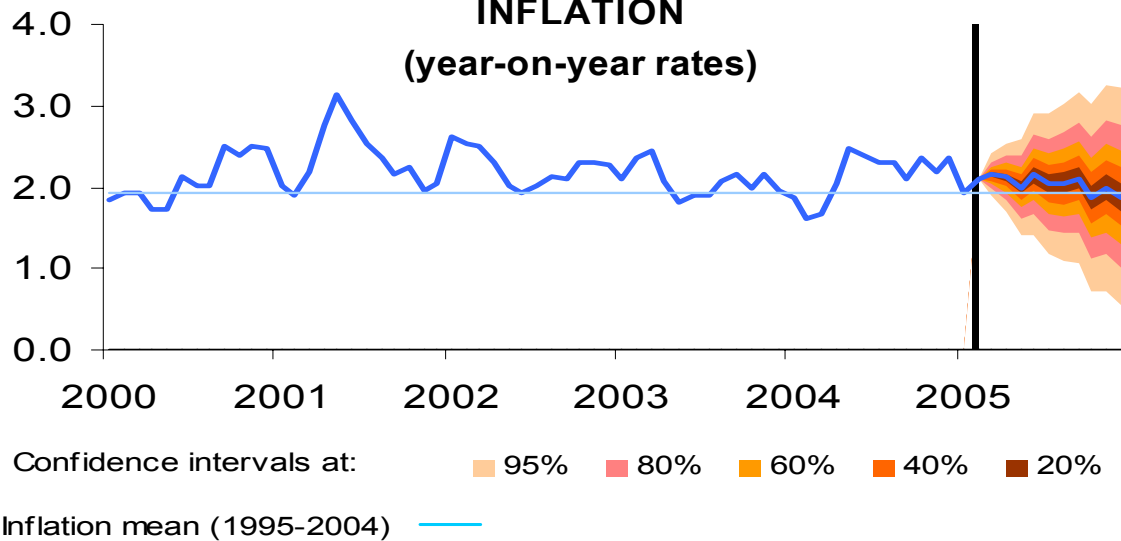
ANNUAL FORECASTS FOR THE EURO AREA INFLATION (year-on-year rates)



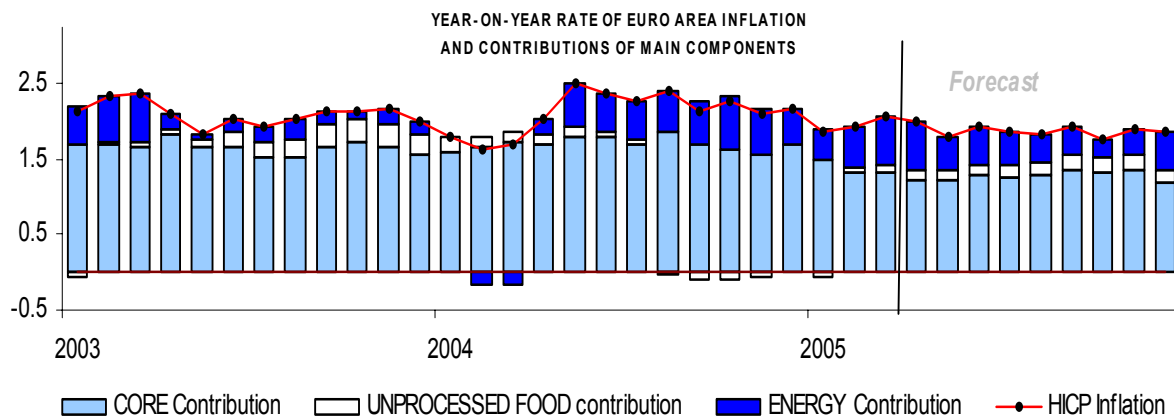
Source : Eurostat & IFL(UC3M)
Date: April 18, 2005



ANNUAL FORECASTS FOR THE EURO AREA INFLATION (year-on-year rates)



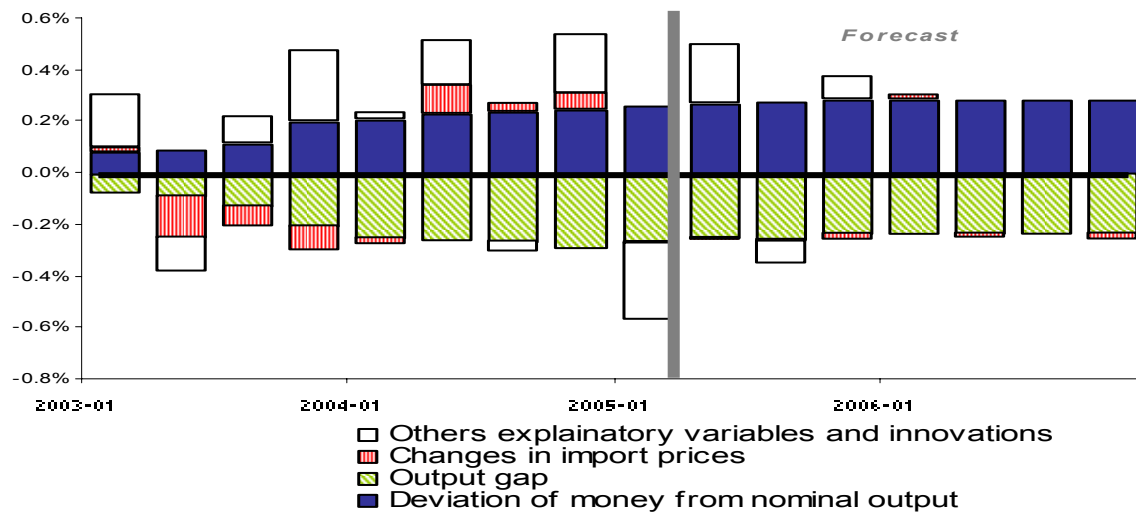
Source : Eurostat & IFL(UC3M)
Date: April 18, 2005



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

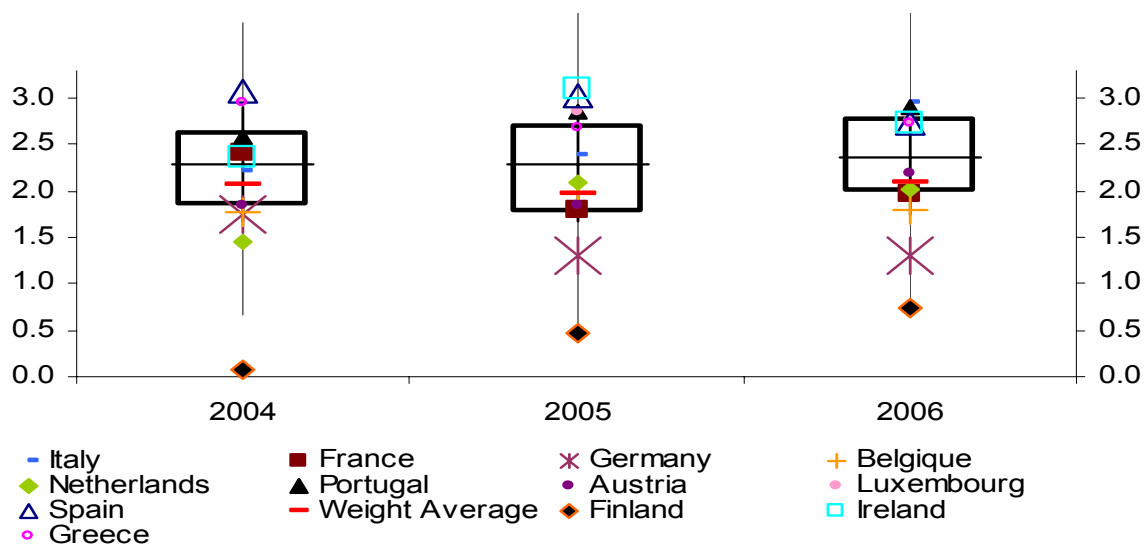


Contributions to the deviation respect to the mean (0.48%) of the seasonally adjusted quarter-to-quarter inflation rate in the euro area



Source : Eurostat & IFL(UC3M)
Date: April 18, 2005

Box diagram of euro area countries dispersion on inflation



Source : Eurostat & IFL(UC3M)
Date: April 20, 2005



I.2 MACROECONOMIC TABLE OF EURO-AREA

	Annual Averages Growths				
	2002	2003	2004	Forecasts BIMA (*)	
				2005	2006
GDP p m	0.9	0.5	2.0	1.6	1.9
Demand					
Final Consumption	1.3	1.1	1.3	1.6	1.8
Capital Investment	-2.7	-0.5	1.3	1.0	1.7
Contribution Domestic Demand	0.3	1.2	2.0	1.5	1.8
Exports of Goods and Services	1.9	0.2	6.1	5.6	5.5
Imports of Goods and Services	0.5	2.0	6.3	5.8	5.6
Contribution Foreign Demand	0.6	-0.6	0.0	0.1	0.1
Supply					
Gross Value Added Total (market prices)	0.9	0.5	2.0	1.6	1.9
Net Taxes	-1.0	0.6	1.0	1.2	1.4
Gross Value Added Total (basic prices)	1.0	0.5	2.1	1.6	1.9
Gross Value Added Agriculture	0.6	-3.8	5.2	3.2	1.3
Gross Value Added Industry	0.2	0.1	2.9	-0.2	1.1
Gross Value Added Construction	-0.5	-0.5	0.7	0.4	0.4
Gross Value Added Services	1.4	0.9	1.8	2.2	2.3
Private	1.0	1.0	2.1	2.4	2.5
Public	2.2	0.6	1.2	1.6	1.8
Prices					
CPI harmonized, annual average	2.3	2.1	2.1	2.0	1.8
CPI harmonized, dec./dec.	2.3	2.0	2.4	1.8	1.7
Employment					
Unemployment rate	8.2	8.7	8.8	8.9	9.1
Others Economic Indicators					
Production Index of Industry (excluding construction)	-0.5	0.2	1.9	1.1	1.7

Source: EUROSTAT & UC3M

Date: April 20, 2005.

(*) Bulletin EU & US Inflation and Macroeconomic Analysis.

Section Sponsorship:
Cátedra Fundación Universidad Carlos III de Predicción y Análisis Macroeconómico.





I.3. INDUSTRIAL PRODUCTION IN THE EURO AREA

The figure corresponding to February has been an downwards innovation when compared to the forecast performed in the last Bulletin (the observed 0.56% instead of the expected 1.29%). This downwards innovation has also been observed in all the components except for Energy and Durable Consumer Goods. However, the Durable Consumer Goods still register negative variation rates of certain magnitude (-4.12%). This information is shown in table I.3.1.

Table I.3.1

FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO FEBRUARY		
	Forecast for February	Observed in February ⁽¹⁾
Capital	2.84	1.15
Durable	-4.80	-4.12
Intermediate	2.18	0.38
Non Durable	0.78	0.54
Energy	-1.44	2.04
Total	1.29	0.56

Source: Eurostat & IFL(UC3M) * Working day adjusted data.
Date: April, 2005.

The expectations for 2005 and 2006 have been slightly downwards revised from 1.45% to 1.08% and from 1.76 to 1.70% respectively. The expectations of growth for the different sectors are shown in table I.3.2.

Table I.3.2

ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EMU ^(**)						
	2001	2002	2003	2004	2005	2006
Capital	1.6	-1.6	-0.1	2.9	0.5	2.7
Durable	-2.1	-5.6	-4.3	-0.1	-1.9	-0.3
Intermediate	-0.6	0.2	0.2	1.8	1.6	1.7
Non Durable	0.8	0.6	0.2	0.7	1.1	0.9
Energy	1.3	1.1	3.0	2.4	1.7	1.8
Total EMU	0.4	-0.5	0.2	1.9	1.1	1.7

Source: Eurostat & IFL(UC3M) ^(**)Bold figures are forecasts.
Date: April, 21st, 2005 Working day adjusted data.

In US, the last published data corresponds to March 2005 and it has been an upwards innovation with respect to the forecast given in the last Bulletin (3.23% instead of 3.0% in annual rates). This innovation is due to the same behavior observed in Non Durable Consumer Goods and downwards in Durable and Materials Goods. This information is shown in table I.3.3.

Table I.3.3

FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO MARCH		
	Forecast for March	Observed in March
Durable Consumer Goods	0.68	-2.64
Non Durable Consumer Goods	2.77	3.12
Equipment and Supplies	4.09	4.03
Materials	3.23	2.89
TOTAL US	3.09	3.23

Source: Federal Reserve & IFL(UC3M)
Date: April, 2005

The average rate of growth for IP in 2005 has been revised from 2.8 to 3.1% and for 2006 from 3.0 to 3.1%. Table I.3.4. shows the updated forecasts for the different sectors.

Table I.3.4.

ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN US ⁽¹⁾						
	2001	2002	2003	2004	2005	2006
Durable	-5.8	4.7	4.9	2.9	2.1	3.6
Non Durable	0.4	-0.6	-0.0	2.7	2.7	1.6
Equipment & Supplies	-4.1	-0.6	0.7	5.0	4.0	3.1
Materials	-4.5	0.4	-0.5	3.7	2.9	3.3
TOTAL US	-3.5	-0.6	0.05	4.2	3.1	3.1

Source: Federal Reserve & IFL(UC3M). ⁽¹⁾Bold figures are forecasts.
Date: April, 21st, 2005



II. UNITED STATES

II.1. INFLATION

II.1.1. MAIN POINTS AND NEW RESULTS

Import, production and consumer prices have performed in March in line with our forecasts. These data confirm that inflationist pressure has been contained throughout the month, in spite of market behaviour, which will enable the FED to maintain its policy of gradual rate increases.

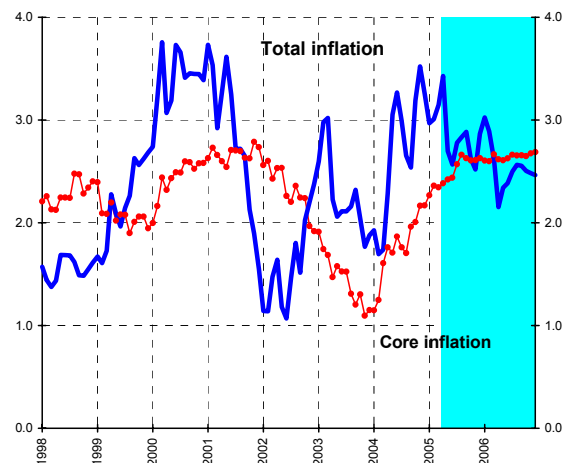
Indeed, the March CPI increased by 0.78%, as expected, with the annual rate going from 3.01% to 3.15%. All CPI components have evolved as forecast. Core inflation rose as forecast by 0.60%, with the annual rate remaining at 2.35%. Likewise, the annual rate of the chained core index (C-CPI-U) remains at 1.95%. This index, given how it is constructed, evolves more in line with the chained personal consumer expenditure price index (PCE), which is the price indicator that the Federal Reserve appears to monitor more closely.

Within the core index, services registered an increase of 0.60%, similar to the 0.57% forecast, with the annual rate going from 2.99% to 2.97%. On the other hand, non-energy industrial good prices registered an increase of 0.57% versus the 0.65% forecast, with the annual rate falling from 0.72% to 0.57%.

Consequently, inflation forecasts remain unaltered, with mean annual rates of 2.9% and 2.5% expected for 2005 and 2006, respectively, as in last month's report. For the core PCE, a FED objective, we forecast annual rates of 1.8% and 1.9%, respectively, as in last month's report (see Table II.1.1.1 and Graph II.1.1.5).

For April, the forecasts for the general index are an increase of 0.59%, with the annual rate rising from 3.15% to 3.43%. This increase in the annual rate would be explained by fuel prices. Core inflation is expected to increase very slightly to 2.38%.

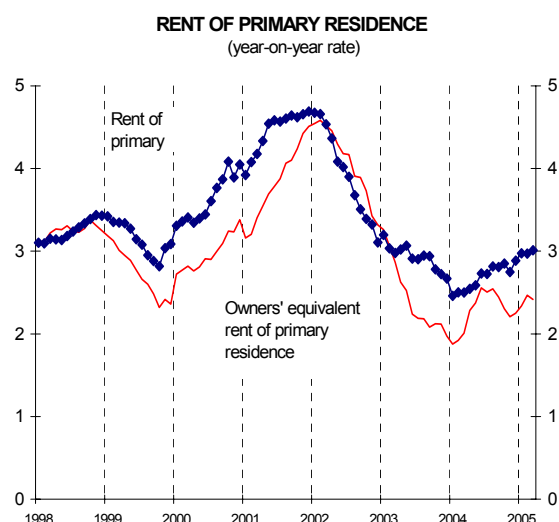
Graph II.1.1.1.



Source: BLS & IFL (UC3M)
Date: April 20, 2005

Although the aggregate indices have evolved as forecast, some small innovations have been observed to compensate each other. In the service group, performance tended to rise in hotels and fall in equivalent rent of primary residence (see Graph II.1.1.2). However, in the group of non-energy industrial goods, downwards innovation has occurred in durable goods and upwards in non-durable goods.

Graph II.1.1.2.

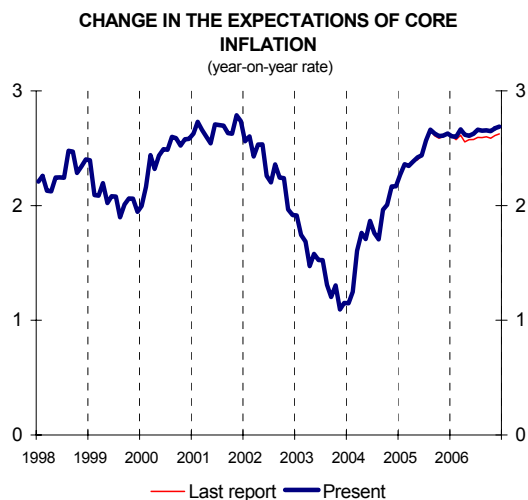


Source: BLS & IFL (UC3M)
Date: April 20, 2005



As we can see from Graph II.1.1.3, the forecast for core inflation remains unaltered, except for a slight increase at the end of the forecasting period.

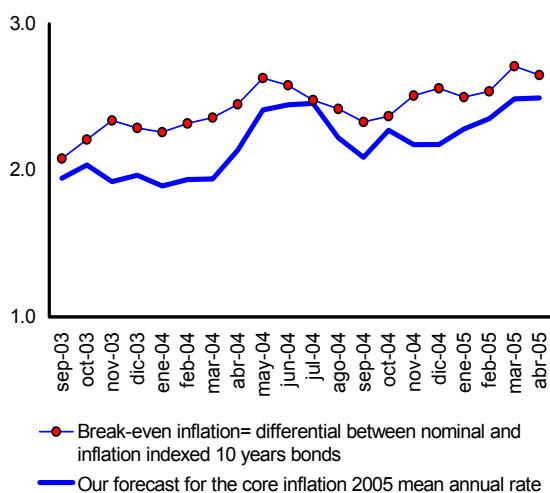
Graph II.1.1.3.



Source: BLS & IFL (UC3M)
Date: April 20, 2005

For 2005 and 2006, in relation to last month's report, there are expected improvements in crude oil prices (see Graphs in the Annex).

Graph II.1.1.4.

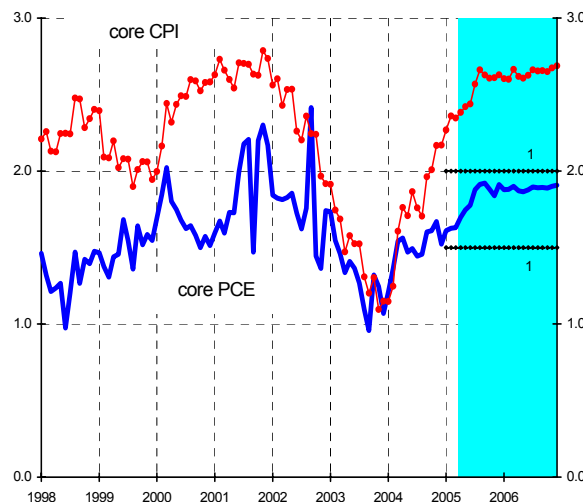


Source: BLS & IFL (UC3M)
Date: April 20, 2005

Inflation break-even, a term referring to the return differential at 10 years between nominal bond values and values indexed for inflation, providing an approximation to market forecasts, has fallen over the last few weeks to 2.65%, as a result of the price cuts in crude oil and the good import and production price figures. Comparing our forecasts of the mean annual rate of core inflation for 2005 with this indicator, we can observe a strong correlation. Nevertheless, the reduced bond differential in the

last month, resulting from a less pessimistic view of the evolution of prices, does not correspond to our forecasts (see Graph II.1.1.4).

Graph II.1.1.5.



Source: BLS & IFL (UC3M)
Date: April 20, 2005

Table II.1.1.1.

	CPI		PCE ¹ MB-PCE ²	
	Total	Core	Core	Core
	% annual	% annual	% annual	% annual
October	3.2	2.0	1.6	1.5
November	3.5	2.2	1.7	1.7
December	3.3	2.2	1.5	1.7
2005 January	3.0	2.3	1.6	1.7
February	3.0	2.4	1.6	1.7
March	3.1	2.3	1.6	1.7
April	3.4	2.4	1.7	1.7
May	2.7	2.4	1.7	1.7
June	2.6	2.4	1.8	1.6
July	2.8	2.6	1.9	1.7
August	2.8	2.7	1.9	1.8
September	2.9	2.6	1.9	1.8
October	2.6	2.6	1.9	1.8
November	2.5	2.6	1.8	1.7
December	2.9	2.6	1.9	1.7
average annual				
2002	1.6	2.3	1.8	1.5
2003	2.3	1.5	1.3	1.2
2004	2.7	1.8	1.5	1.5
2005	2.9	2.5	1.8	1.7
2006	2.5	2.6	1.9	1.7

- (1) PCE: chain-type price index for personal consumption expenditures
(2) MB-PCE: Market-based components of PCE prices

Source: BLS & IFL (UC3M)
Date: April 20, 2005



II.1.2. TABLES AND PLOTS ABOUT USA INFLATION

Tables:

- Index of Consumer Price (ICP) desagregation.
- Forecast errors by sectors.
- Index of Consumer Price (ICP) Annual Growth Rates by sectors.
- Index of Consumer Price (ICP) Monthly Growth Rates by sectors.

Plots:

- CPI monthly growth rates.
- Annual Forecast for the USA Inflation.
- Annual rates of different components for the USA inflation.



METHODOLOGY: ANALYSIS OF USA INFLATION BY SECTORS

BASIC COMPONENTS AGGREGATES		BASICS COMPONENTS	
TOTAL CPI	CORE CPI 77.71% (1+2+3+4+5)	SERVICES LESS ENERGY 56.04% (1+2)	(1) OWNERS' EQUIVALENT RENT OF PRIMARY RESIDENCE 23.16%
			(2) SERVICES LESS OWNER' EQUIVALENT RENT OF PRIMARY RESIDENCE 32.88%
	COMMODITIES LESS FOOD AND ENERGY 21.67% (3+4+5)		(3) TOBACCO 0.80%
			(4) NON DURABLES LESS TOBACCO 9.90%
			(5) DURABLES 10.97%
			(6) FOOD 14.30%
			(7) GAS 1.30%
			(8) ELECTRICITY 2.42%
			(9) MOTOR FUEL AND FUEL OIL 3.97%
	RESIDUAL CPI 22.29% (6+7+8+9)	ENERGY 7.99% (7+8+9)	

Source: BLS & IFL (UC3M)

OBSERVED VALUES AND FORECAST ON CPI IN US
March 2005

CONSUMER PRICES INDEX (CPI)	Relative importance Dec. 2004	Annual Growth (T ₁₂) observed	Monthly Growth (T ₁)		Confidence Intervals at 80% level (+ -)
			observed (a)	forecasts (b)	
Food (1)	14.3	2.55	0.16	0.01	0.37
Energy (2)	8.0	12.37	3.61	3.90	1.14
Residual Inflation (3=2+1)	22.3	5.96	1.40	1.41	0.43
Non-food and non-energy goods (4)	21.7	0.57	0.57	0.65	0.29
Less tobacco	20.9	0.41	0.59	0.68	0.24
-Durable goods	11.0	0.52	-0.26	-0.05	0.33
-Nondurable goods	10.7	0.58	1.42	1.36	0.41
-Non-durable goods less tobacco	9.9	0.24	1.53	1.28	0.31
Non-energy services (5)	56.0	2.97	0.60	0.57	0.15
-Services less owner's equivalent rent of primary residence (5-a)	32.9	3.36	0.92	0.77	0.22
-Owner's equivalent rent of primary residence (a)	23.2	2.42	0.13	0.28	0.13
Core Inflation (6=4+5)	77.7	2.35	0.60	0.59	0.15
Core inflation less owner's equivalent rent of primary residence (6-a)	54.6	2.32	0.80	0.72	0.19
Core inflation less owner's equivalent rent of primary residence and tobacco	53.8	2.28	0.81	0.74	0.17
Total Inflation (7=6+3)	100.0	3.15	0.78	0.77	0.13
All items less owner's equivalent rent of primary residence (7-a)	76.8	3.37	0.98	0.92	0.17

Source: BLS IFL (UC3M)
Date: April 20, 2005



USA ANNUAL RATES OF GROWTH ON CPI AND ITS COMPONENTS												
		CONSUMER PRICE INDEX										
		CORE INFLATION						RESIDUAL INFLATION			ALL	
		Non energy commodities less food			Non energy services			ALL	Food	Energy		ALL
		durables	non durables less energy	ALL	Owner's equivalent rent of primary residence	Other services	ALL					
IR December 2004		11.0%	10.7%	21.7%	23.2%	32.9%	56.0%	77.7%	14.3%	8.0%	22.3%	100.0%
AVERAGE ANNUAL	1997	-0.5	1.7	0.7	2.9	3.2	3.1	2.4	2.6	1.3	2.1	2.3
	1998	-0.9	2.3	0.6	3.2	2.9	3.1	2.3	2.2	-7.7	0.1	1.6
	1999	-1.2	2.4	0.7	2.7	2.7	2.7	2.1	2.1	3.6	0.8	2.2
	2000	-0.5	1.4	0.5	3.0	3.5	3.3	2.4	2.3	16.9	6.8	3.4
	2001	-0.6	1.1	0.3	3.8	3.6	3.7	2.7	3.1	3.8	3.3	2.8
	2002	-2.6	0.4	-1.1	4.1	3.6	3.8	2.3	1.8	-5.9	-0.8	1.6
	2003	-3.2	-0.7	-2.0	2.4	3.2	2.9	1.5	2.1	12.2	5.3	2.3
	2004	-2.3	0.5	-0.9	2.3	3.3	2.9	1.8	3.4	10.9	6.0	2.7
	2005	1.1	0.7	0.9	2.4	3.5	3.1	2.5	2.3	7.4	4.1	2.9
	2006	1.2	0.8	1.0	2.8	3.6	3.3	2.6	2.5	1.7	2.2	2.5
2004	January	-4.0	-0.5	-2.3	1.9	3.0	2.5	1.1	3.5	7.8	4.9	1.9
	February	-3.7	-0.3	-2.0	1.9	2.9	2.5	1.2	3.3	3.8	3.5	1.7
	March	-3.7	0.5	-1.6	2.0	3.6	2.9	1.6	3.2	0.4	2.3	1.7
	April	-3.5	0.8	-1.4	2.3	3.7	3.1	1.8	3.4	5.6	4.2	2.3
	May	-3.1	1.0	-1.1	2.4	3.3	2.9	1.7	4.1	15.0	7.8	3.1
	June	-3.0	0.9	-1.0	2.6	3.3	3.0	1.9	3.7	17.0	8.3	3.3
	July	-2.8	0.3	-1.2	2.5	3.4	3.0	1.8	4.0	14.2	7.5	3.0
	August	-2.6	0.1	-1.1	2.5	3.2	2.9	1.7	3.5	10.5	6.0	2.7
	September	-1.4	0.4	-0.6	2.4	3.4	3.0	2.0	3.3	6.7	4.6	2.5
	October	-0.4	0.7	0.1	2.3	3.2	2.8	2.0	3.4	15.2	7.5	3.2
	November	0.2	0.9	0.5	2.2	3.2	2.8	2.2	3.2	19.2	8.5	3.5
	December	0.4	0.6	0.6	2.3	3.3	2.8	2.2	2.7	16.6	7.3	3.3
2005	January	0.8	0.9	0.9	2.3	3.1	2.8	2.3	2.9	10.6	5.5	3.0
	February	0.6	0.9	0.7	2.5	3.4	3.0	2.4	2.6	10.4	5.2	3.0
	March	0.5	0.6	0.6	2.4	3.4	3.0	2.3	2.5	12.4	6.0	3.1
	April	0.6	0.9	0.7	2.3	3.4	3.0	2.4	2.7	15.3	7.1	3.4
	May	0.9	0.6	0.7	2.4	3.5	3.0	2.4	2.0	6.8	3.8	2.7
	June	1.2	0.6	0.8	2.3	3.5	3.0	2.4	2.1	4.4	3.0	2.6
	July	1.6	0.9	1.2	2.3	3.5	3.0	2.6	2.0	5.7	3.4	2.8
	August	2.0	0.9	1.4	2.3	3.6	3.1	2.7	2.2	5.6	3.4	2.8
	September	1.6	0.8	1.2	2.4	3.6	3.1	2.6	2.3	6.7	3.9	2.9
	October	1.4	0.6	0.9	2.5	3.7	3.2	2.6	1.9	3.7	2.6	2.6
	November	1.1	0.6	0.8	2.6	3.7	3.2	2.6	1.9	2.8	2.2	2.5
	December	1.2	0.8	0.9	2.7	3.6	3.2	2.6	1.9	6.6	3.6	2.9
2006	January	0.9	0.8	0.8	2.6	3.7	3.3	2.6	2.2	8.7	4.5	3.0
	February	1.0	0.9	0.9	2.6	3.7	3.2	2.6	2.4	6.5	3.9	2.9
	March	1.2	1.0	1.1	2.7	3.7	3.3	2.7	2.5	2.4	2.5	2.6
	April	1.3	0.7	1.0	2.7	3.6	3.2	2.6	2.4	-2.5	0.6	2.2
	May	1.2	0.8	1.0	2.7	3.6	3.2	2.6	2.5	-0.3	1.4	2.3
	June	1.2	0.8	1.0	2.8	3.6	3.2	2.6	2.5	0.0	1.6	2.4
	July	1.2	0.8	1.0	2.8	3.6	3.3	2.7	2.5	1.0	1.9	2.5
	August	1.1	0.8	1.0	2.8	3.6	3.3	2.7	2.5	1.8	2.3	2.6
	September	1.1	0.8	1.0	2.9	3.6	3.3	2.7	2.5	1.7	2.2	2.6
	October	1.2	0.8	1.0	2.9	3.6	3.3	2.6	2.6	1.1	2.0	2.5
	November	1.2	0.8	1.0	2.9	3.6	3.3	2.7	2.5	0.6	1.8	2.5
	December	1.3	0.8	1.0	2.9	3.6	3.3	2.7	2.6	0.2	1.7	2.5

Source: BLS IFL (UC3M)

Date: April 20, 2005



USA MONTHLY RATES OF GROWTH ON CPI AND ITS COMPONENTS

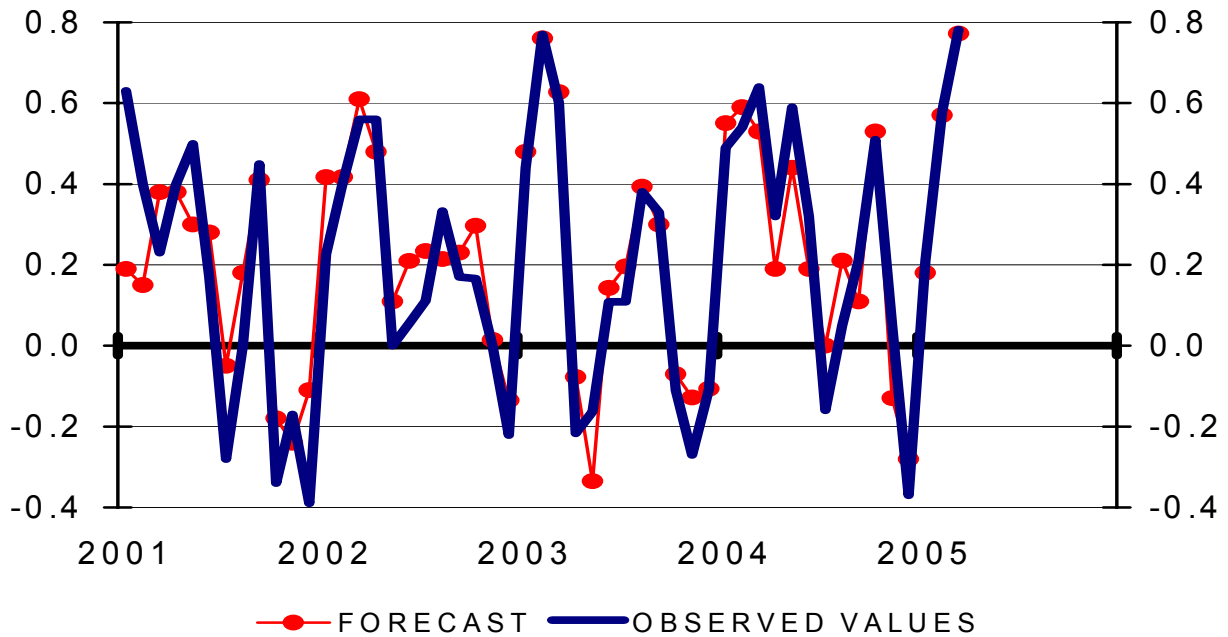
IR December 2004			CONSUMER PRICE INDEX											
			CORE INFLATION							RESIDUAL INFLATION			ALL	
			Non energy commodities less food			Non energy services			ALL	Food		Energy		ALL
			durables	non durables less energy	ALL	Owner's equivalent rent of primary residence	Other services	ALL						
			11.0%	10.7%	21.7%	23.2%	32.9%	56.0%	77.7%	14.3%	8.0%	22.3%	100.0%	
January	2003	-0.2	-0.9	-0.6	0.3	0.7	0.5	0.2	0.1	3.4	1.2	0.4		
	2004	0.1	-0.8	-0.4	0.2	0.7	0.5	0.2	0.1	4.2	1.5	0.5		
	2005	0.4	-0.6	-0.1	0.3	0.5	0.4	0.3	0.3	-1.2	-0.2	0.2		
	2006	0.2	-0.6	-0.2	0.2	0.6	0.5	0.3	0.5	0.8	0.7	0.4		
February	2003	-0.2	0.8	0.3	0.1	0.6	0.4	0.4	0.5	6.2	2.3	0.8		
	2004	0.2	1.0	0.6	0.1	0.6	0.4	0.5	0.2	2.3	0.9	0.5		
	2005	0.0	1.0	0.4	0.3	0.8	0.6	0.6	-0.2	2.2	0.7	0.6		
	2006	0.1	1.1	0.5	0.2	0.8	0.6	0.5	0.1	0.0	0.1	0.4		
March	2003	-0.2	0.9	0.4	0.1	0.3	0.2	0.3	0.2	5.3	1.9	0.6		
	2004	-0.2	1.7	0.7	0.2	0.9	0.6	0.6	0.2	1.8	0.7	0.6		
	2005	-0.3	1.4	0.6	0.1	0.9	0.6	0.6	0.2	3.6	1.4	0.8		
	2006	0.0	1.5	0.7	0.2	0.9	0.6	0.7	0.2	-0.4	0.0	0.5		
April	2003	-0.3	0.1	-0.1	0.0	0.1	0.0	0.1	-0.1	-3.2	-1.2	-0.2		
	2004	-0.1	0.4	0.1	0.3	0.2	0.2	0.2	0.1	2.0	0.7	0.3		
	2005	0.0	0.6	0.3	0.2	0.2	0.2	0.2	0.2	4.6	1.8	0.6		
	2006	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.1	-0.4	-0.1	0.1		
May	2003	-0.6	-0.5	-0.6	0.1	0.4	0.3	0.1	0.2	-3.0	-0.9	-0.2		
	2004	-0.2	-0.3	-0.2	0.2	0.0	0.1	0.0	0.9	5.6	2.5	0.6		
	2005	0.1	-0.6	-0.2	0.2	0.1	0.1	0.0	0.2	-2.2	-0.7	-0.1		
	2006	0.0	-0.5	-0.2	0.2	0.1	0.1	0.0	0.3	0.0	0.2	0.1		
June	2003	-0.4	-0.9	-0.6	0.0	0.3	0.2	-0.1	0.4	1.9	0.9	0.1		
	2004	-0.3	-1.0	-0.6	0.2	0.3	0.3	0.1	0.1	3.6	1.4	0.3		
	2005	0.0	-1.0	-0.5	0.2	0.4	0.3	0.1	0.2	1.4	0.6	0.2		
	2006	0.0	-1.0	-0.5	0.3	0.3	0.3	0.1	0.1	1.8	0.7	0.2		
July	2003	-0.5	-0.7	-0.6	0.2	0.4	0.4	0.1	0.1	0.3	0.1	0.1		
	2004	-0.3	-1.3	-0.9	0.2	0.5	0.3	0.0	0.3	-2.1	-0.6	-0.2		
	2005	0.0	-1.0	-0.5	0.2	0.5	0.4	0.1	0.2	-0.9	-0.2	0.0		
	2006	0.0	-1.0	-0.5	0.3	0.5	0.4	0.2	0.2	0.0	0.2	0.2		
August	2003	-0.6	0.3	-0.1	0.2	0.3	0.3	0.2	0.4	2.7	1.2	0.4		
	2004	-0.4	0.1	-0.1	0.3	0.1	0.2	0.1	0.0	-0.6	-0.2	0.1		
	2005	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.2	-0.8	-0.2	0.1		
	2006	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.0	0.1	0.2		
September	2003	-0.9	1.4	0.4	0.3	-0.2	0.0	0.1	0.2	2.8	1.1	0.3		
	2004	0.4	1.6	0.9	0.2	0.0	0.1	0.3	-0.1	-0.6	-0.3	0.2		
	2005	0.0	1.5	0.7	0.3	0.0	0.1	0.3	0.1	0.4	0.2	0.3		
	2006	0.0	1.5	0.7	0.3	0.0	0.1	0.3	0.1	0.3	0.2	0.3		
October	2003	-0.4	0.7	0.1	0.3	0.5	0.4	0.4	0.6	-5.3	-1.5	-0.1		
	2004	0.5	1.0	0.8	0.2	0.2	0.2	0.4	0.6	2.2	1.2	0.5		
	2005	0.3	0.9	0.6	0.2	0.4	0.3	0.4	0.2	-0.7	-0.1	0.3		
	2006	0.3	0.9	0.6	0.2	0.3	0.3	0.4	0.3	-1.3	-0.3	0.2		
November	2003	-0.1	-0.6	-0.4	0.2	-0.3	-0.1	-0.2	0.4	-2.8	-0.7	-0.3		
	2004	0.5	-0.4	0.1	0.1	-0.2	-0.1	-0.1	0.2	0.6	0.3	0.1		
	2005	0.3	-0.3	0.0	0.3	-0.3	-0.1	0.0	0.1	-0.3	-0.1	-0.1		
	2006	0.3	-0.3	0.0	0.3	-0.2	0.0	0.0	0.1	-0.8	-0.2	-0.1		
December	2003	-0.1	-1.1	-0.6	0.1	-0.2	0.0	-0.2	0.7	-1.0	0.1	-0.1		
	2004	0.2	-1.4	-0.6	0.2	-0.1	0.0	-0.2	0.2	-3.1	-1.0	-0.4		
	2005	0.2	-1.2	-0.5	0.2	-0.2	0.0	-0.1	0.2	0.5	0.3	0.0		
	2006	0.3	-1.2	-0.4	0.2	-0.2	0.0	-0.1	0.3	0.1	0.2	0.0		

Source: BLS IFL (UC3M)

Date: April 20, 2005

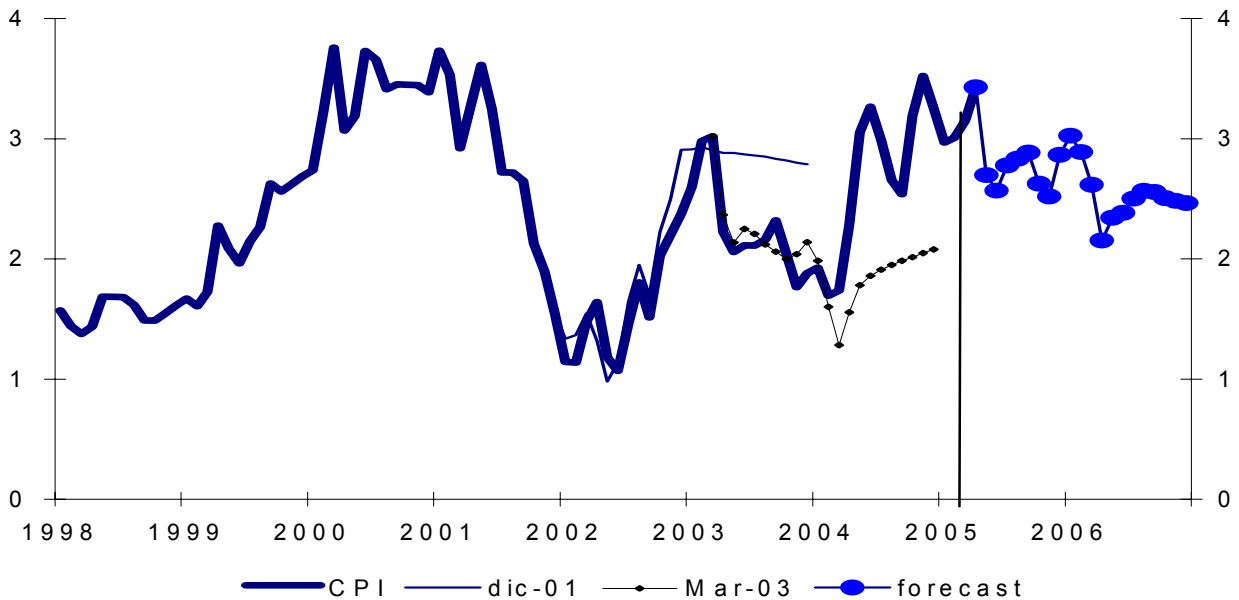


CPI MONTHLY GROWTH RATES IN USA



Source :BLS & IFL (UC3M)
Date: April 20, 2005

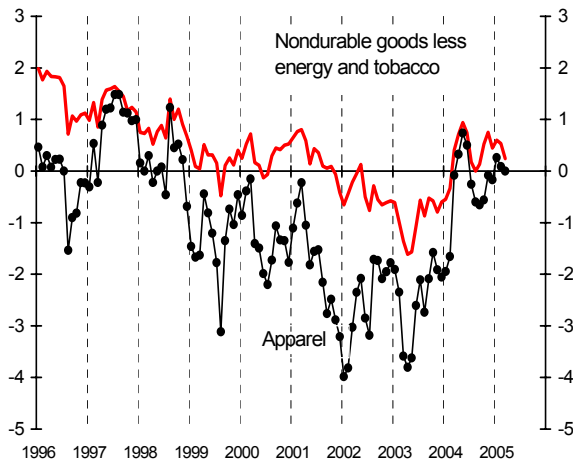
ANNUAL FORECASTS FOR US INFLATION



Source :BLS & IFL (UC3M)
Date: April 20, 2005

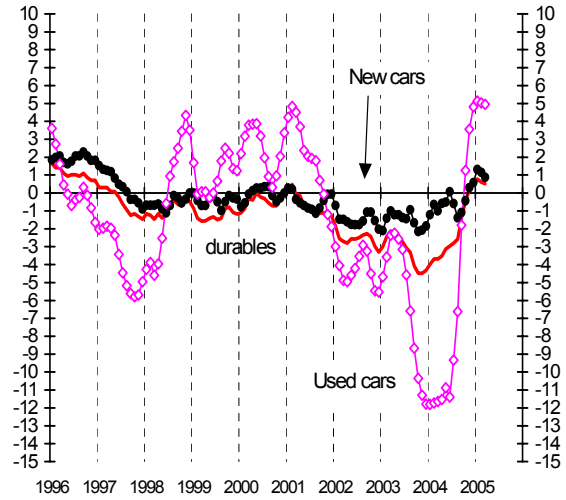


.SOME COMMODITIES.
(YEAR ON YEAR RATES)



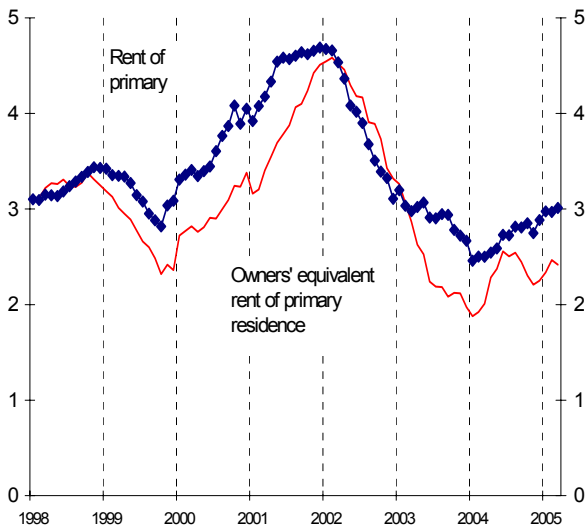
Source: BLS IFL (UC3M)
Date: April 20, 2005

.SOME COMMODITIES.
(YEAR ON YEAR RATES)



Source: BLS IFL (UC3M)
Date: April 20, 2005

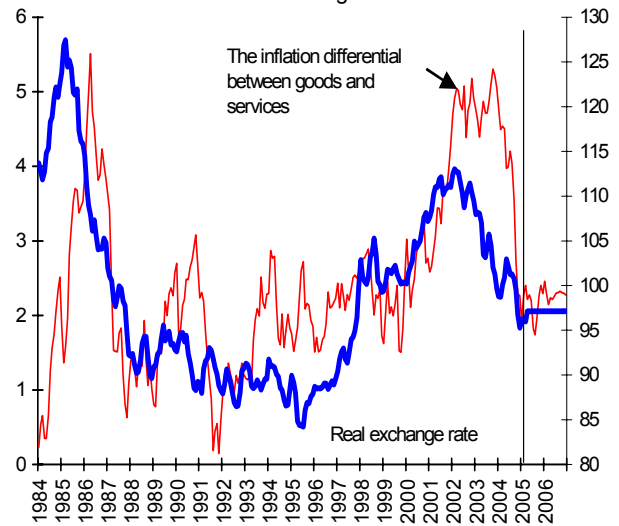
RENT OF PRIMARY RESIDENCE
(year-on-year rate)



Source: BLS IFL (UC3M)
Date: April 20, 2005

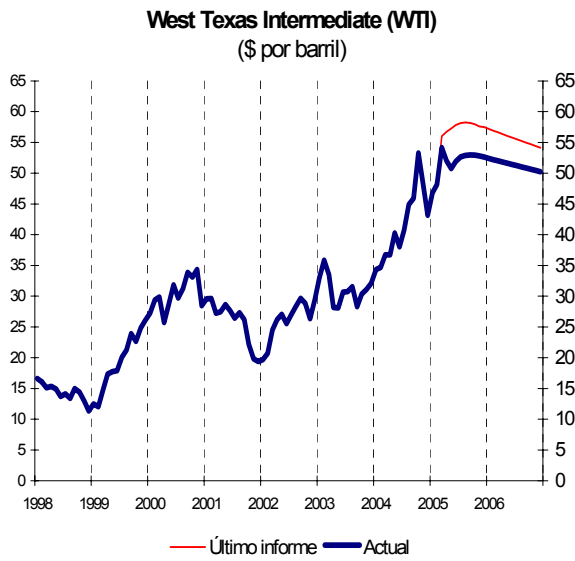
RELATION BETWEEN:

1. The inflation differential between goods and services
2. Real exchange rate

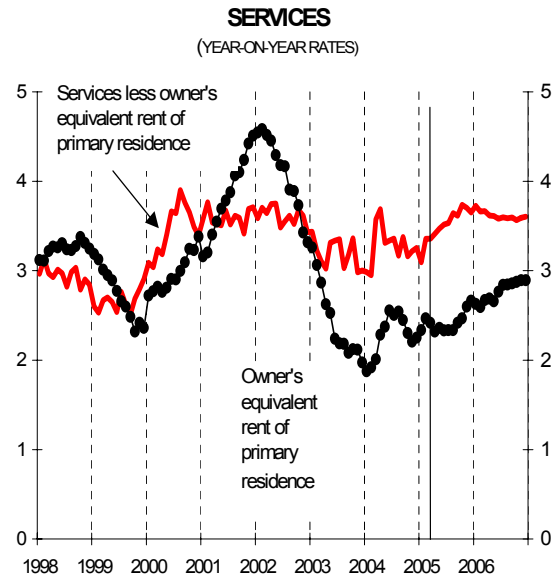


Source: BLS IFL (UC3M)
Date: April 20, 2005

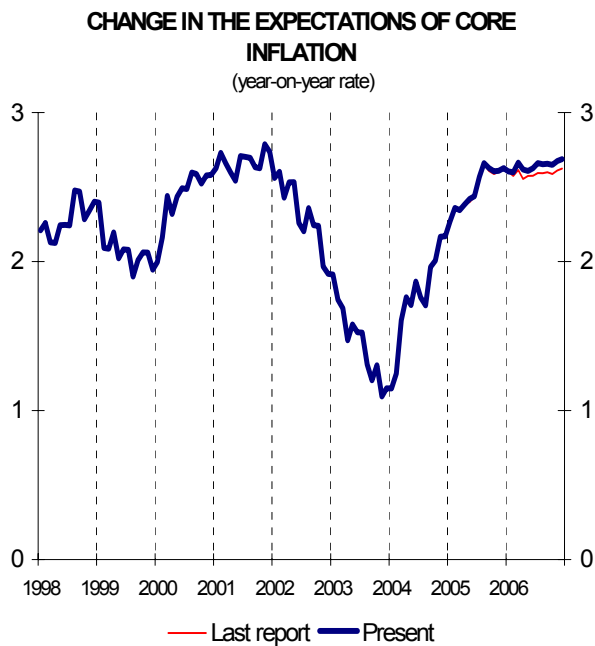




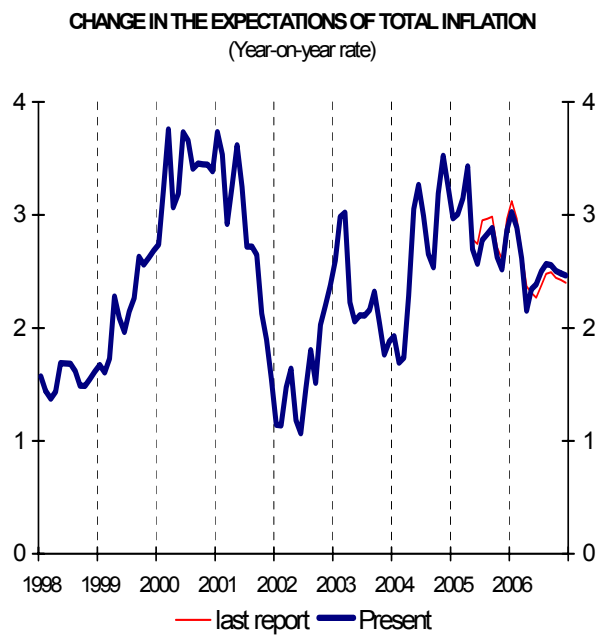
Source: BLS IFL (UC3M)
Date: April 20, 2005



Source: BLS IFL (UC3M)
Date: April 20, 2005



Source: BLS IFL (UC3M)
Date: April 20, 2005



Source: BLS IFL (UC3M)
Date: April 20, 2005



III. SPAIN

III.1. INFLATION

III.1.1 MAIN POINTS AND NEW RESULTS

The monthly total inflation rate forecast for Spain for April, 2005 is 1.3%. The annual inflation rate will remain at the 3.4% observed in March (Table III.1.1.1).

Table III.1.1.1

CPI Inflation	Observed values			Forecasts		
	Ave ⁽²⁾ 2003	Ave ⁽²⁾ 2004	2005 Mar ⁽¹⁾	2005 Apr ⁽¹⁾	Med ⁽²⁾ 2005	Med ⁽²⁾ 2006
	2003	2004	Mar ⁽¹⁾	Apr ⁽¹⁾	2005	2006
Core (82,28%)	2.9	2.7	2.9	2.8	2.7	2.9
Total (100%)	3.0	3.0	3.4	3.4	3.1	2.9

Source: INE & IFL (UC3M)
Date: April 13, 2005

⁽¹⁾ Growth of the month over the same month of the previous year
⁽²⁾ Growth of the average of the reference year over previous average of the

The monthly inflation rate in March, 2005 increased slightly more than expected, with 0.79% growth instead of 0.74% (Table III.1.1.2). A worse than forecast performance of core inflation was compensated with a downwards innovation in residual inflation calculated with the consumer prices excluded from core inflation.

Table III.1.1.2

OBSERVED AND FORECAST VALUES ON CPI COMPONENTS				
CPI Inflation	Weights 2005 (%)	Monthly Observed Rates	Monthly Forecast Rates	Confidence Interval 80%
Total	100	0.79	0.74	± 0.15
Core	82,28	0.71	0.63	± 0.13
Residual	17,72	1.13	1.27	± 0.22

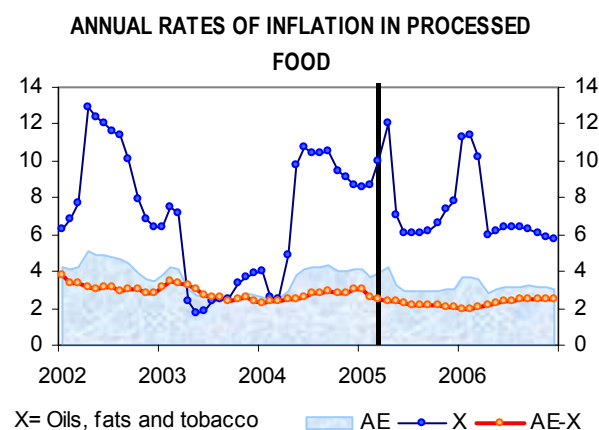
Source: INE & IFL (UC3M)
Date: April 13, 2005

In core inflation it is important to emphasise the upwards innovation observed in oil and fat prices. Graph III.1.1.1 shows the stability of the consumer index of prices of processed food excluding oils, fats and tobacco (AE-X), compared with the high volatility of oil, fats and tobacco prices (X). This volatility in the X index is expected to continue to values of around 6% at the end of 2006, versus rates of 2.4% in the AE-X index.

The annual rate of non-energy industrial goods will remain at around 1.0% until the end of the year. This less inflationist behaviour is because we do not forecast such a strong recovery in apparel and footwear prices as we observed at the end of sales

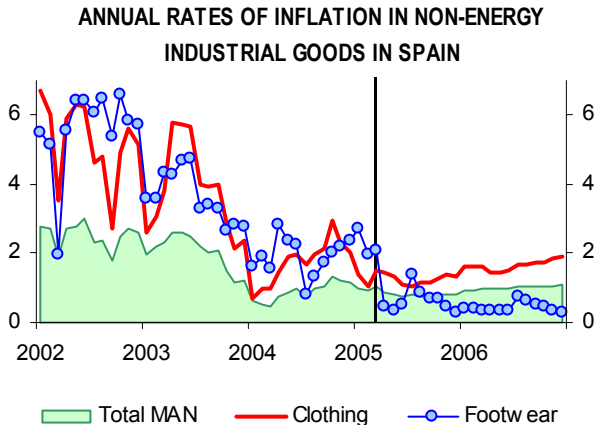
periods in previous years. Graph III.1.1.2 shows this more moderate trend in the annual rates of all non-energy industrial goods and especially those affected by sales.

Graph III.1.1.1



Source : INE & IFL
Date: April 13, 2005

Graph III.1.1.2



Source : INE & IFL (UC3M)
Date: April 13, 2005

Inflation in the joint index (BENE) of processed food and non-energy industrial goods is expected to counter arrest the upwards trend in service prices, so that core inflation will remain at an annual rate of around 2.8% as observed since May, 2004 (graph III.1.1.3 and table III.1.1.3).



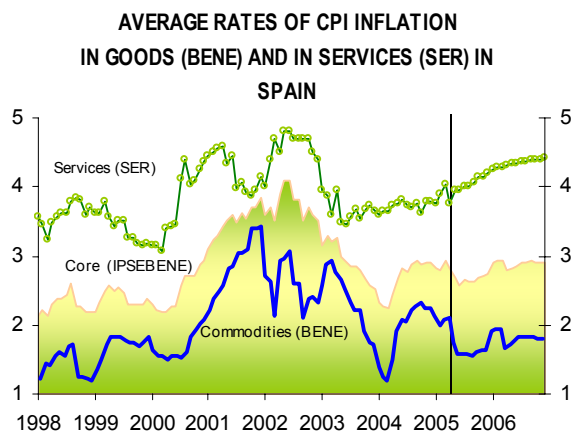
Table III.1.1.3

CPI inflation	INFLATION RATES				
	Observed			Forecasts	
	2002	2003	2004	2005	2006
Total (100%)	3.5	3.0	3.0	3.1	2.9
Core (82,3%)	3.7	2.9	2.7	2.7	2.9
Processed Food (17,2%)	4.3	3.0	3.6	3.4	3.2
Non-energy Industrial goods (30,1%)	2.5	2.0	0.9	0.8	1.0
Services (35,1%)	4.6	3.7	3.7	4.0	4.3
Residual (17,7%)	2.6	3.6	4.7	4.7	3.0
Non-processed Food (8,6%)	5.8	6.0	4.6	4.2	4.5
Energy (9,1%)	-0.2	1.4	4.8	5.3	1.6

Source: INE & IFL (UC3M)

Date: April 13, 2005

Graph III.1.1.3

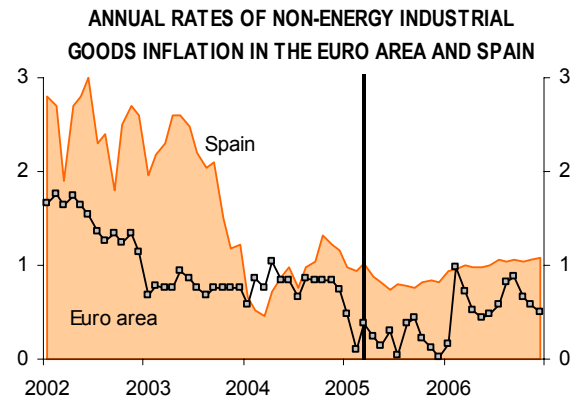


Source: INE & IFL

Date: April 13, 2005

The performance of consumer prices of non-energy industrial goods is currently especially relevant in the euro area and its countries, because the appreciation of the euro and growing imports from China have given rise to an important reduction in inflation in this sector. However, this reduction has been greater in Germany, France and Italy than in Spain, so there again tends to be an inflation differential of half a percentage point in this sector, although less than in the first three years of this decade (graph III.1.1.4).

Graph III.1.1.4

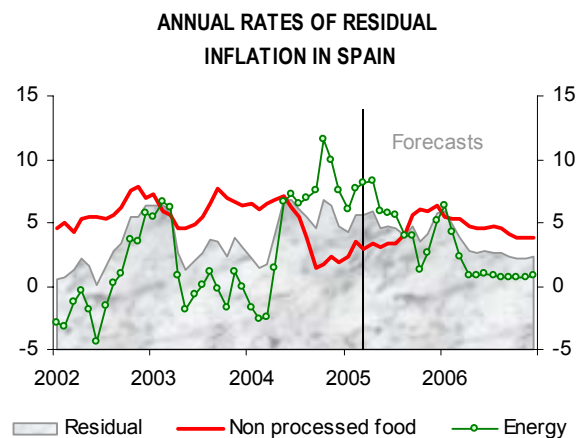


Source : INE & IFL (UC3M)

Date: April 13, 2005

As for residual inflation, calculated with energy and unprocessed food prices, it has registered growth rates of over 5.0% and will remain at this level until the beginning of 2006 followed by a gradual decrease to around 2.5% (Graph III.1.1.4). Due to this reduction in residual inflation, total inflation is expected to fall from 3.3% in December 2005 to 2.8% from April 2006 on.

Graph III.1.1.5



Source : INE & IFL(UC3M)

Date: April 13, 2005



III.1.2. TABLES AND PLOTS ABOUT SPAIN INFLATION

Tables:

- Spain Index of Consumer Price (CPI) disaggregation.
- Forecast errors by sectors for Spain.
- CPI annual average rates of growth by components in Spain.
- Index of Consumer Price (CPI) Annual Growth Rates by sectors in the Spain.
- Index of Consumer Price (CPI) Monthly Growth Rates by sectors in the Spain.

Plots:

- CPI monthly growth rates in Spain.
- Annual Forecast for the Spain Inflation.
- Year-on-year rate of Spain inflation and contributions of main components



Methodology: Analysis of spanish inflation by sectors

BASIC COMPONENTS AGGREGATES		BASIC COMPONENTS	BASIC COMPONENTS AGGREGATES		
<div>IPSEBENE 81.401% (1+2+3 +4+5)</div> <div>↓</div> <div>CORE INFLATION IT IS CALCULATED ON THE IPSEBENE INDEX</div>		<div>(1) AE-X 13.331% Processed food excluding fats and tobacco CPI</div> <div>(2) MAN 30.150% Non-energy industrial goods</div> <div>(3) SERV-T 33.725% Services excluding packages tourist CPI</div> <div>(4) X 3.046% Fats and tobacco CPI</div> <div>(5) T 1.149% Tourist packages CPI</div> <div>(6) ANE 9.142% Non processed food CPI</div> <div>(7) ENE 9.142% Energy CPI</div>	<div>BENE-X 44.481% (1 + 2)</div> <div>IPSEBENE-X-T 77.206% (1 + 2 + 3)</div> <div>↓</div> <div>RESIDUAL 22.735% (4 + 5 + 6 + 7)</div> <div>↓</div> <div>RESIDUAL INFLATION IT IS CALCULATED ON THE RES INDEX</div>	<div>IPC (1 + 2 + 3 + 4 + 5 + 6 + 7)</div> <div>↓</div> <div>TREND INFLATION IT SI CALCULATED ON THE IPSEBENE-XT</div> <div>↓</div> <div>TOTAL INFLATION IT IS CALCULATED ON THE CPI INDEX</div>	
	IPC = 0.13331 AE-X + 0.3150 MAN + 0.3715 SERV- T + 0.03046 X + 0.01149 T + 0.093498 ANE + 0.09142 ENE				

Source: INE & IFL (UC3M) Weights 2005.

FORECAST ERRORS IN THE MONTHLY INFLATION RATE BY SECTORS IN MARCH IN SPAIN				
	Weights 2005	Observed Monthly Growth	Forecast	Confidence interval at 80%
Processed food	17.17	0.41	0.19	0.38
Non energy industrial goods	30.05	1.01	1.00	0.15
Services	35.05	0.63	0.55	0.04
CORE	82.28	0.71	0.63	0.12
Non-processed food	8.60	0.26	0.73	0.61
Energy	9.12	1.95	1.77	1.45
RESIDUAL	17.72	1.13	1.27	0.33
TOTAL INFLATION	100.00	0.79	0.74	0.09

Source: INE & IFL (UC3M)
Date: April 13, 2005



CPI ANNUAL AVERAGE GROWTH BY COMPONENTS IN SPAIN														
				Weights 2005	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
HICP Total Inflation	Core Inflation	Processed food	AE less tobacco & fats	133.3	1.3	1.4	0.8	1.4	4.1	3.1	2.8	2.7	2.3	2.3
			Oils & Fats	7.6	-26.8	-11.1	15.0	-7.6	-7.3	15.2	3.5	14.7	10.4	13.0
			Tobacco	22.8	16.3	7.9	4.3	2.5	4.9	7.4	3.8	5.6	6.8	5.4
		Non energy industrial goods	Vehicles	77.6	1.4	0.6	0.6	1.7	1.8	1.7	1.7	1.6	1.7	1.7
			Footwear	19.5	2.5	2.5	2.6	2.7	4.0	5.6	3.6	1.9	1.0	0.4
			Clothing	63.8	2.0	2.0	2.2	2.0	2.4	5.2	3.8	1.8	1.3	1.7
			Rest	140.6	1.5	1.4	1.2	2.2	3.0	2.4	0.9	0.3	0.4	0.5
		Services	Postal services	0.3	8.1	31.0	0.0	0.0	13.1	13.3	3.3	3.1	2.7	2.5
			Cultural services	16.0	1.1	2.3	2.5	2.6	3.8	4.5	3.0	3.0	2.3	3.1
			Education	11.0	5.5	4.0	3.3	4.1	4.0	3.3	4.6	3.6	4.1	4.0
			Hotels	6.5	3.1	6.1	6.5	10.6	9.9	5.8	3.4	3.0	3.2	4.0
			Health	19.1	4.2	4.0	2.8	3.4	4.7	4.8	4.0	3.2	4.3	4.3
			Household equipment	14.6	3.9	4.3	3.8	3.8	3.7	4.8	5.1	4.4	5.5	5.8
			Restaurants	105.9	3.0	3.0	3.5	3.9	4.7	5.8	4.4	4.1	4.3	4.4
			Telephone	29.6	-0.3	1.9	2.1	-5.6	-1.1	-3.1	-2.7	-1.1	-0.5	0.0
			Transports	50.1	2.5	2.5	3.5	4.2	4.1	5.3	3.6	4.4	5.1	6.7
			Package holidays	11.5	14.8	15.4	7.2	12.3	7.1	8.7	3.1	1.4	6.1	6.7
			University	5.7	4.1	3.1	2.4	2.1	3.9	5.0	5.4	4.9	4.2	3.5
			Housing	54.7	4.2	3.7	2.7	3.8	4.5	4.6	4.0	4.5	4.4	4.4
			Rest	23.7	3.4	2.9	2.3	2.6	3.4	4.2	3.9	4.2	3.7	3.6
	Inflación Residual	Non processed foods	Meat	36.0	1.4	-2.1	-2.1	5.8	10.5	1.7	4.7	3.6	4.0	2.7
			Fruits	15.6	-3.1	3.7	7.0	-0.7	7.8	9.8	11.6	6.3	5.7	8.6
			Eggs	2.4	0.0	-0.9	-5.0	9.3	3.4	1.7	8.4	11.6	-3.8	-1.0
			Vegetables	10.7	-0.2	9.6	3.7	5.9	5.7	18.0	5.1	3.6	9.3	7.2
			Mollusc	7.9	5.6	4.1	-0.9	6.2	7.3	7.3	2.4	3.1	6.1	5.2
			Potatoes	3.6	-2.6	19.6	7.5	-1.0	23.4	0.4	2.5	16.2	-7.9	4.7
			Fish	17.8	5.9	4.6	2.0	4.8	3.3	5.0	4.4	2.0	3.0	3.4
		Energy	Heat energy	50.5	3.4	-3.3	5.2	18.1	-2.1	0.5	1.4	7.1	6.9	2.2
			Fuels	4.0	4.7	-8.9	13.3	39.0	-6.1	-3.1	6.1	12.0	18.5	1.9
			Electricity and gas	36.9	0.5	-3.6	-1.6	0.2	2.4	-1.4	0.8	0.8	1.7	0.8

Source: INE & IFL (UC3M)
Date: April 13, 2005

*Bold figures are forecasts



CPI ANNUAL GROWTH BY SECTORS IN SPAIN										
		Consumer Prices Index								
		Core				Residual			TOTAL 100%	
		Processed food	Non energy industrial goods	Services	TOTAL	Non processed food	Energy	TOTAL		
Weights 2004		17.2%	30.1%	35.1%	82.3%	8.6%	9.1%	17.7%		
ANNUAL AVERAGE RATE	1997	0.3	1.7	3.5	2.1	0.9	2.4	1.5	2.0	
	1998	1.3	1.5	3.6	2.3	2.1	-3.8	-0.2	1.8	
	1999	2.1	1.5	3.4	2.4	1.2	3.2	2.2	2.3	
	2000	0.9	2.1	3.7	2.5	4.2	13.3	8.8	3.4	
	2001	3.4	2.6	4.2	3.5	8.7	-1.0	3.6	3.6	
	2002	4.3	2.5	4.6	3.7	5.8	-0.2	2.6	3.5	
	2003	3.0	2.0	3.7	2.9	6.0	1.4	3.6	3.0	
	2004	3.6	0.9	3.7	2.7	4.6	4.8	4.7	3.0	
	2005	3.4	0.8	4.0	2.7	4.2	5.3	4.7	3.1	
	2006	3.2	1.0	4.3	2.9	4.5	1.6	3.0	2.9	
ANNUAL RATES (growth of the month over the same month of the previous year)	2004	January	2.5	0.7	3.6	2.3	6.5	-1.7	2.2	2.3
		February	2.4	0.5	3.6	2.3	6.1	-2.5	1.5	2.1
		March	2.4	0.5	3.6	2.2	6.5	-2.5	1.6	2.1
		April	2.9	0.7	3.7	2.4	6.8	1.4	3.9	2.7
		May	3.7	0.9	3.8	2.7	7.0	6.6	6.8	3.4
		June	4.0	1.0	3.8	2.8	6.2	7.2	6.8	3.5
		July	4.2	0.8	3.7	2.8	5.5	6.6	6.1	3.4
		August	4.2	1.0	3.7	2.9	3.8	7.0	5.5	3.3
		September	4.3	1.0	3.8	2.9	1.4	7.5	4.6	3.2
		October	4.0	1.3	3.6	2.9	1.8	11.6	6.8	3.6
		November	4.1	1.2	3.8	2.9	2.3	9.9	6.3	3.5
		December	4.1	1.2	3.8	2.9	1.8	7.6	4.8	3.2
	2005	January	4.2	1.0	3.8	2.8	2.3	6.0	4.2	3.1
		February	3.8	0.9	3.9	2.8	3.5	7.6	5.6	3.3
		March	4.0	1.0	4.0	2.9	2.9	8.2	5.6	3.4
		April	4.3	0.9	3.8	2.8	3.4	8.3	5.9	3.4
		May	3.3	0.8	4.0	2.7	3.0	5.9	4.5	3.0
		June	3.1	0.7	3.9	2.6	3.4	5.8	4.6	2.9
		July	3.0	0.8	4.0	2.6	3.3	5.6	4.5	3.0
		August	3.0	0.8	4.0	2.6	4.1	3.9	4.0	2.9
		September	2.9	0.8	4.1	2.6	5.6	3.9	4.7	3.0
		October	3.0	0.8	4.1	2.7	6.0	1.3	3.5	2.8
		November	3.0	0.8	4.2	2.7	5.9	2.6	4.1	3.0
		December	3.1	0.8	4.2	2.7	6.4	5.1	5.7	3.3
	2006	January	3.6	0.9	4.2	2.9	5.5	6.3	5.9	3.4
		February	3.7	1.0	4.3	2.9	5.3	4.3	4.8	3.3
		March	3.6	1.0	4.3	2.9	5.3	2.3	3.8	3.1
		April	2.9	1.0	4.3	2.8	4.8	0.9	2.7	2.8
		May	3.0	1.0	4.3	2.8	4.6	0.8	2.6	2.8
		June	3.1	1.0	4.3	2.9	4.6	1.0	2.7	2.8
		July	3.2	1.1	4.4	2.9	4.7	0.8	2.7	2.9
		August	3.2	1.0	4.4	2.9	4.5	0.7	2.5	2.8
		September	3.2	1.1	4.4	2.9	4.1	0.7	2.3	2.8
		October	3.2	1.0	4.4	2.9	3.8	0.7	2.2	2.8
		November	3.1	1.1	4.4	2.9	3.7	0.7	2.2	2.8
		December	3.1	1.1	4.4	2.9	3.9	0.8	2.3	2.8

Source: INE & IFL (UC3M)
Date: April 13, 2005

*Bold figures are forecasts



CPI MONTHLY GROWTH BY SECTORS IN SPAIN										
			Consumer Prices Index							
			Core				Residual			TOTAL 100%
			Processed food	Non energy industrial goods	Services	TOTAL	Non processed food	Energy	TOTAL	
Weights 2004			17.2%	30.1%	35.1%	82.3%	8.6%	9.1%	17.7%	
MONTHLY RATES (Growth of the month over the previous month)	January	2003	0.5	-3.1	0.6	-0.8	0.4	2.2	1.4	-0.4
		2004	0.4	-3.6	0.6	-1.0	0.6	0.6	0.6	-0.7
		2005	0.4	-3.8	0.6	-1.0	1.0	-0.8	0.1	-0.8
		2006	1.0	-3.7	0.6	-0.9	0.1	0.3	0.2	-0.7
	February	2003	0.6	0.0	0.4	0.3	-1.5	1.3	0.0	0.2
		2004	0.5	-0.2	0.4	0.2	-1.9	0.4	-0.7	0.0
		2005	0.1	-0.2	0.5	0.2	-0.7	2.0	0.7	0.3
		2006	0.2	-0.2	0.5	0.2	-0.9	0.0	-0.4	0.1
	March	2003	0.3	1.0	0.5	0.6	0.5	1.4	1.0	0.7
		2004	0.3	0.9	0.5	0.6	0.8	1.5	1.2	0.7
		2005	0.4	1.0	0.6	0.7	0.3	1.9	1.1	0.8
		2006	0.3	1.1	0.6	0.7	0.3	0.0	0.1	0.6
	April	2003	0.1	2.7	0.7	1.3	0.0	-2.6	-1.4	0.8
		2004	0.5	3.0	0.7	1.5	0.3	1.3	0.8	1.4
		2005	0.9	2.8	0.5	1.4	0.7	1.4	1.1	1.3
		2006	0.2	2.8	0.5	1.3	0.2	0.0	0.1	1.0
	May	2003	0.1	0.5	-0.2	0.1	0.6	-2.5	-1.1	-0.1
		2004	1.0	0.6	-0.1	0.4	0.8	2.5	1.7	0.6
		2005	0.0	0.5	0.0	0.2	0.5	0.1	0.3	0.2
		2006	0.2	0.5	0.1	0.3	0.3	0.1	0.2	0.2
	June	2003	0.1	-0.2	0.4	0.1	0.3	-0.6	-0.2	0.1
		2004	0.4	-0.1	0.4	0.2	-0.5	0.0	-0.2	0.2
		2005	0.1	-0.1	0.4	0.2	-0.1	-0.1	-0.1	0.1
		2006	0.2	-0.1	0.4	0.2	-0.1	0.1	0.0	0.1
	July	2003	0.1	-3.5	0.7	-1.0	1.5	0.9	1.2	-0.6
		2004	0.2	-3.7	0.6	-1.1	0.8	0.3	0.5	-0.8
		2005	0.1	-3.6	0.6	-1.0	0.7	0.1	0.4	-0.8
		2006	0.2	-3.6	0.7	-1.0	0.8	0.0	0.4	-0.7
	August	2003	0.2	-0.3	0.7	0.2	1.9	1.4	1.6	0.5
		2004	0.2	-0.1	0.6	0.3	0.3	1.8	1.1	0.4
		2005	0.2	-0.1	0.7	0.3	1.1	0.2	0.6	0.3
		2006	0.2	-0.1	0.7	0.3	0.9	0.1	0.5	0.3
	September	2003	0.1	1.0	-0.5	0.2	2.2	-0.4	0.8	0.3
		2004	0.2	1.1	-0.4	0.2	-0.2	0.1	-0.1	0.2
		2005	0.1	1.1	-0.3	0.2	1.2	0.1	0.6	0.3
		2006	0.1	1.1	-0.3	0.3	0.8	0.1	0.4	0.3
	October	2003	0.3	2.3	0.2	1.0	-0.4	-1.1	-0.8	0.7
		2004	0.1	2.6	0.0	0.9	0.0	2.6	1.4	1.0
		2005	0.1	2.6	0.1	1.0	0.3	0.0	0.2	0.9
		2006	0.1	2.6	0.1	1.0	0.1	0.1	0.1	0.8
	November	2003	0.2	1.1	-0.2	0.4	0.0	0.3	0.1	0.3
		2004	0.2	1.0	0.0	0.4	0.6	-1.2	-0.4	0.2
		2005	0.3	1.0	0.0	0.4	0.5	0.0	0.3	0.4
		2006	0.2	1.0	0.0	0.4	0.4	0.1	0.2	0.4
	December	2003	0.1	-0.1	0.4	0.1	0.9	-0.3	0.3	0.2
		2004	0.2	-0.2	0.4	0.1	0.4	-2.5	-1.2	-0.1
		2005	0.2	-0.2	0.4	0.2	0.8	0.0	0.4	0.2
		2006	0.2	-0.2	0.4	0.2	0.9	0.0	0.5	0.2

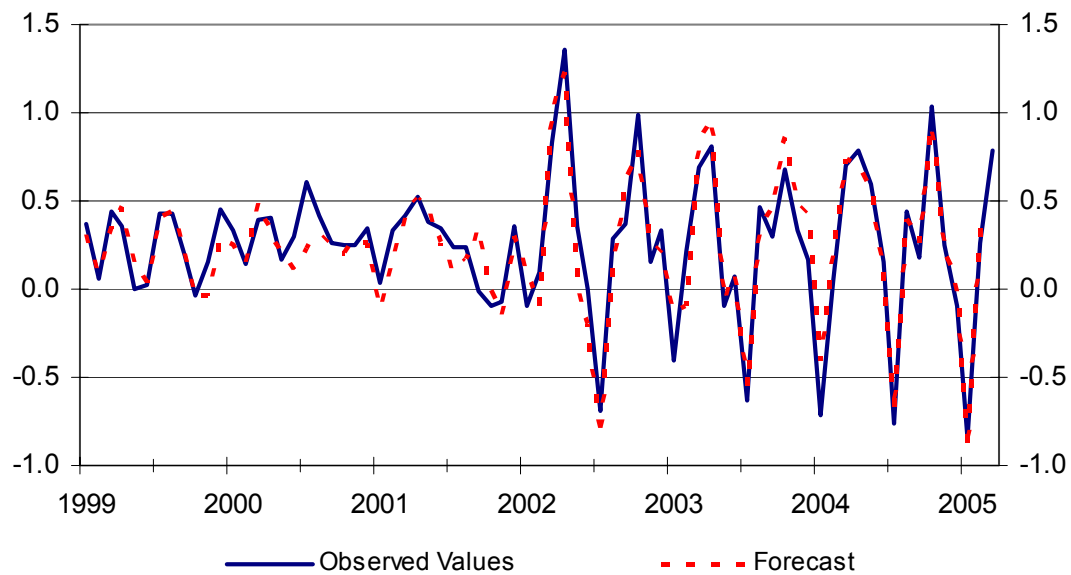
Source: INE & IFL (UC3M)

Date: April 13, 2005

*Bold figures are forecasts



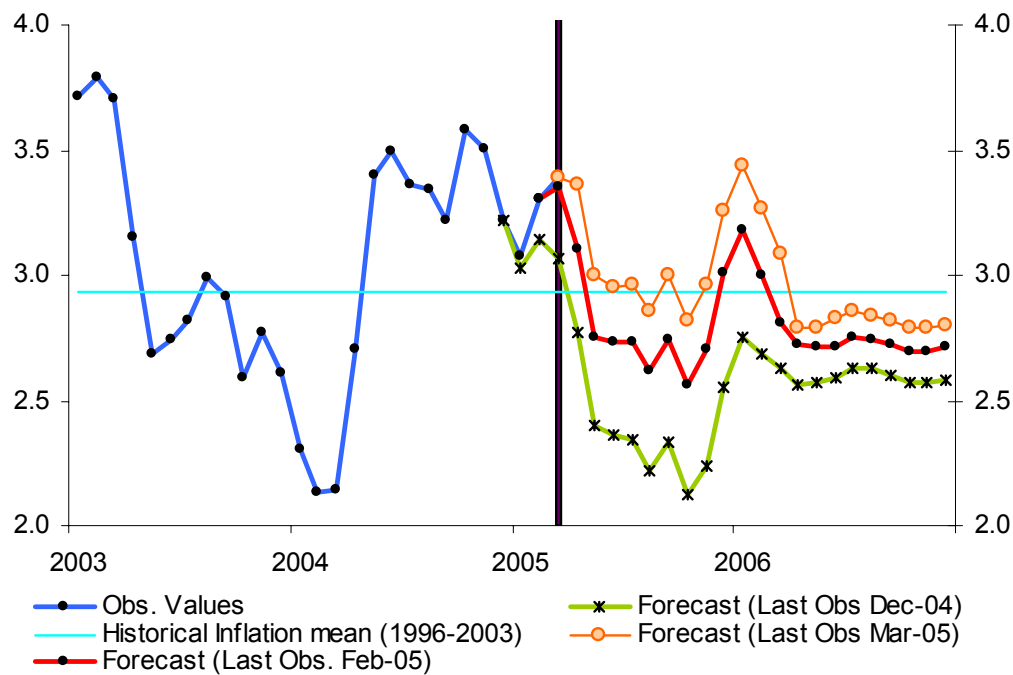
CPI MONTH-ON-MONTH RATES OF GROWTH IN SPAIN



Source: INE & IFL (UC3M)
Date: April 13, 2005

*The roof of mean square error for one period a head is 0.09

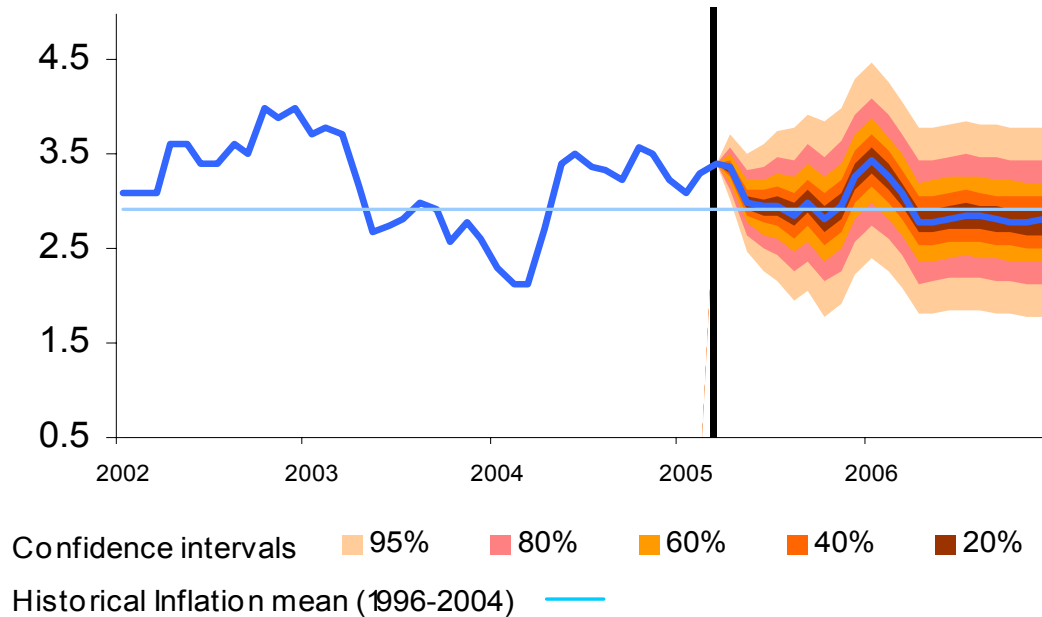
ANNUAL FORECASTS FOR TOTAL INFLATION IN SPAIN (year-on-year rates)



Source: INE & IFL (UC3M)
Date: April 13, 2005

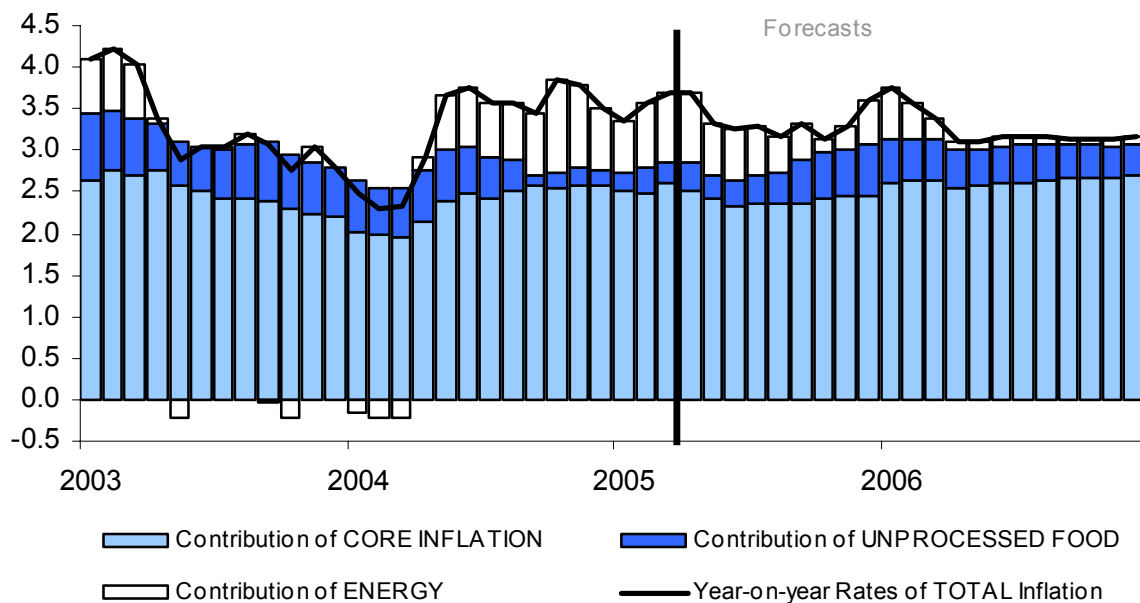


ANNUAL FORECASTS FOR TOTAL INFLATION IN SPAIN (year-on-year rates)



Source: INE & IFL (UC3M)
Date: April 13, 2005

YEAR-ON-YEAR RATE OF INFLATION IN SPAIN AND CONTRIBUTIONS OF MAIN COMPONENTS



Source: INE & IFL (UC3M)
Date: April 13, 2005



III.2. MACROECONOMIC TABLE OF SPANISH ECONOMY

MACROECONOMIC TABLE AND INDICATORS (*)					
	Annual Rates				
	2003	2004	Forecasts BIMA(*)		Budget
			2005	2006	2005
<i>Private Final Consumption Expenditure</i>	2.9	3.5	3.4	3.3	3.2
<i>Public Final Consumption Expenditure</i>	3.9	4.9	4.5	4.2	3.5
<i>Gross Fixed Capital Formation</i>	3.2	4.6	4.5	3.6	4.0
Equipment	1.0	5.8	7.1	5.8	(3)
Building	4.3	4.4	3.2	2.3	3.2
Other products	3.0	3.2	4.9	4.6	(3)
<i>Inventory change (1)</i>	0.1	0.2	-0.2	0.0	0.0
<i>Domestic Demand</i>	3.2	4.2	3.7	3.5	3.4
<i>Exports of Goods and Services</i>	2.6	4.5	6.3	7.7	6.4
<i>Imports of Goods and Services</i>	4.8	9.0	8.7	8.7	7.3
<i>Net Exports (1)</i>	-0.8	-1.7	-1.2	-0.8	-0.6
GDP	2.5	2.7	2.7	2.9	3.0
GDP, current prices	6.6	6.4	6.5	6.1	6.3
Prices and Costs					
CPI, annual average	3.0	3.0	3.1	2.9	
CPI, dec./dec.	2.6	3.2	3.3	2.8	
Average earning per worker	4.2	4.1	4.2	4.2	
Unit labour cost	3.5	3.4	3.7	3.6	
Labour Market (Data poll labour force)					
Labour Force (% variation)	4.0	3.3	3.4	3.2	
Employment (EPA)					
Annual average variation in %	4.0	3.9	3.8	4.0	
Annual average variation in thousands	665.6	674.9	682.9	746.1	
Unemployment rate	11.5	11.0	10.6	9.9	10.8
Basic balances					
Foreign sector					
Current Account (m. €.)	-24.634	-45.437	-37.224	-33.436	
Net lending or borrowing (% GDP) (2)	-3.3	-5.7	-4.4	-3.7	
AA.PP. (Total) / Public Administration					
Net lending or borrowing (% GDP) (2)	0.0	-0.8	-1.2	-1.0	
Other Economic Indicators					
Industrial Production Index	1.6	1.8	0.0	0.8	

(1) Contributions to GDP growth

(2) In term of national accounts

(3) Equipment goods and other goods: Forecast PGE, 5.1; Forecast BIAM, 6.3.

Source: INE & UC3M

Date: April 20, 2005.

(*) Bulletin EU & US Inflation and Macroeconomic Analysis.

The Labour Market information has been updated with the EPA review (1996-2004) published by the INE to adapt the results to the increase of the resident population in Spain. This review means an increase in the employment level, so that the annual average variation in thousands has been corrected from 436,9 to 665,6 in 2003 and from 422,0 to 674,9 in 2004.

Section Sponsorship:
Cátedra Fundación Universidad Carlos III de Predicción y Análisis Macroeconómico.





IV. FORECAST SUMMARY

IV.1. EURO AREA AND USA

INFLATION FORECASTS AND EVOLUTION IN THE EURO AREA AND USA								
	1999	2000	2001	2002	2003	2004	Forecast	
							2005	2003
TOTAL INFLATION								
Euro-area (100%).	1.1	2.1	2.3	2.3	2.1	2.1	2.0	1.8
USA (81.5%). ⁽¹⁾	2.1	3.5	2.6	0.9	2.2	2.8	3.0	2.5
A HOMOGENEOUS MEASURE OF CORE INFLATION ⁽²⁾								
Services and Non-energy industrial goods excluding food and tobacco.								
Euro- area (72.34%).	1.1	1.0	1.8	2.4	1.8	1.8	1.4	1.7
USA (55.6%). ⁽¹⁾	1.4	2.1	2.1	1.6	1.1	1.6	2.5	2.6
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Services.								
Euro- area (41.33%).	1.5	1.5	2.5	3.1	2.6	2.6	2.4	2.4
USA (27.4%). ⁽¹⁾	2.7	3.5	3.6	3.6	3.2	3.3	3.5	3.6
(2) Non-energy industrial goods excluding food and tobacco.								
Euro- area (31.01%).	0.7	0.4	0.9	1.5	0.8	0.8	0.2	0.6
USA (29.0%).	0.7	0.5	0.3	-1.1	-2.0	-0.9	0.9	1.0
INFLATION IN EXCLUDED COMPONENTS FROM THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Food.								
Euro- area (19.53%).	0.6	1.4	4.5	3.1	2.8	2.3	2.1	2.5
USA (14.3%).	2.1	2.3	3.1	1.8	2.1	3.4	2.3	2.5
(2) Energy.								
Euro- area (8.13%).	2.4	13.0	2.3	-0.6	3.0	4.5	6.3	1.8
USA (8.00%).	3.6	16.9	3.8	-5.9	12.2	10.9	7.4	1.7

⁽¹⁾ less owner's equivalent rent of primary residence.

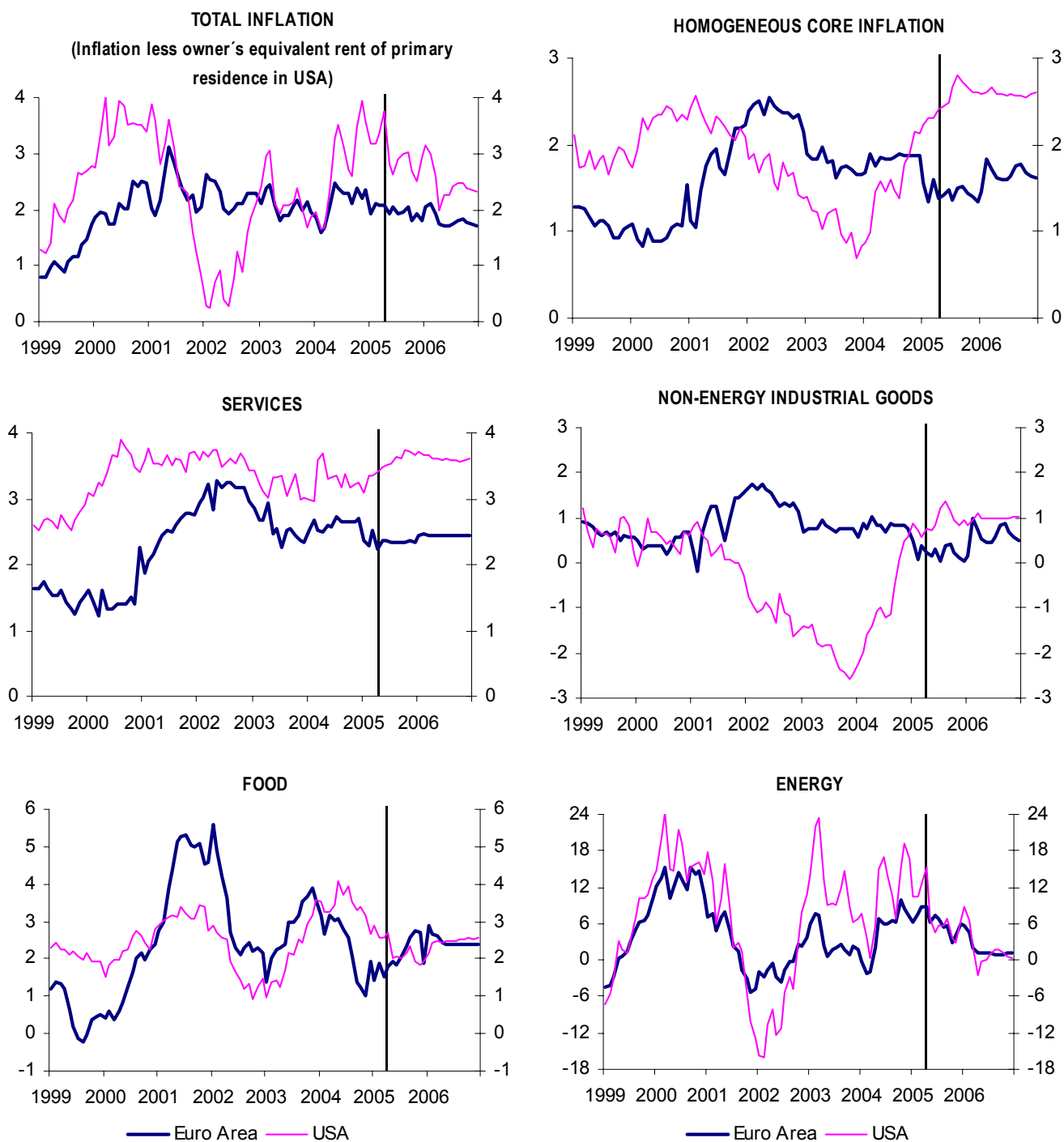
⁽²⁾ This homogeneous measure of underlying inflation does not coincide with the usual measure of core inflation for the EMU nor for the USA. It has been constructed in order to compare the data in the EMU and in the USA.

Source: EUROSTAT, BLS & IFL

Date: April 20, 2005



YEAR-ON-YEAR RATES OF INFLATION IN THE EURO AREA AND USA



Source: EUROSTAT, BLS & IFL

Date: April 20, 2005

Total inflation is less owner's equivalent rent of primary residence. The core inflation has been constructed in order to compare the data in the EMU and in the USA.



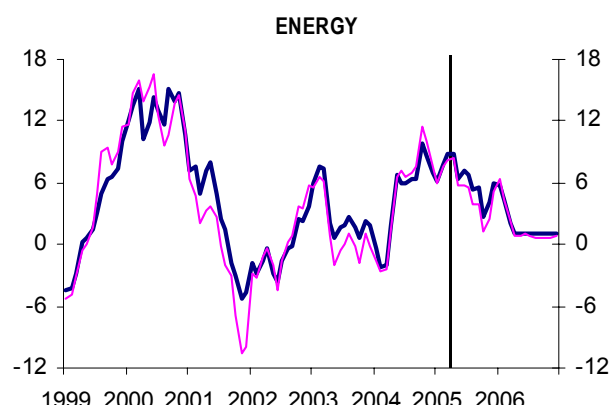
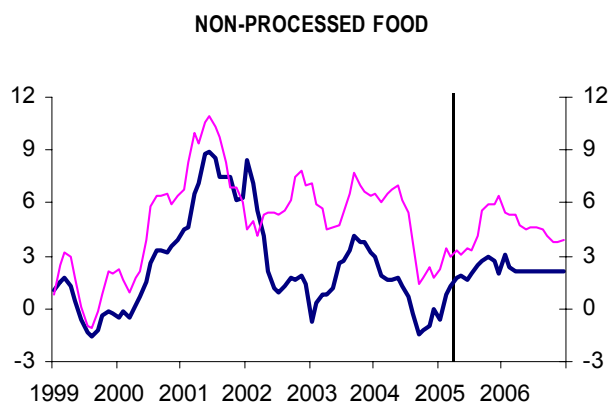
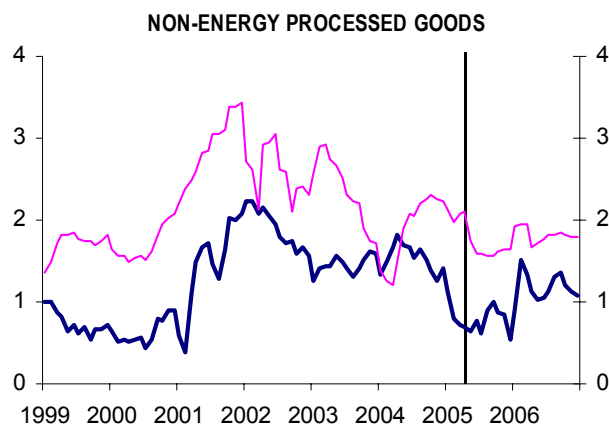
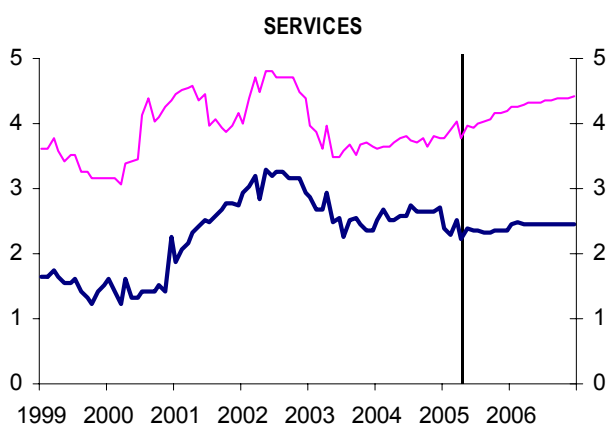
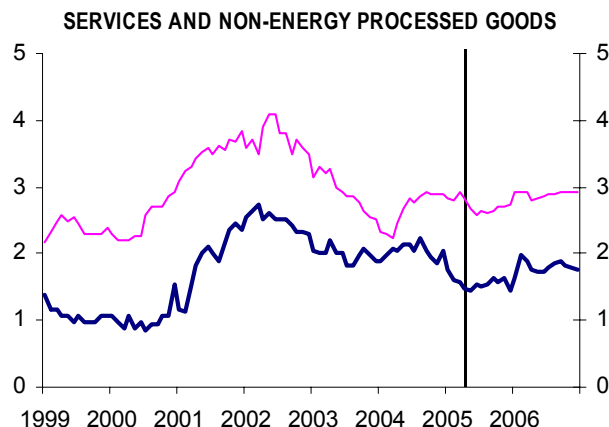
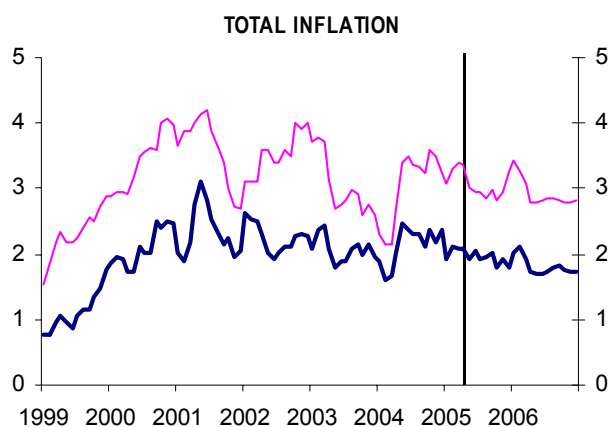
IV.2. EURO AREA AND SPAIN

INFLATION FORECASTS AND EVOLUTION IN THE EURO AREA AND SPAIN (1998-2005)								
	1999	2000	2001	2002	2003	2004	Forecasts	
							2005	2006
TOTAL INFLATION								
Spain (100%).	2.3	3.4	3.6	3.5	3.0	3.0	3.1	2.9
Euro-area (100%).	1.1	2.1	2.3	2.3	2.1	2.1	2.0	1.8
CORE INFLATION								
Services and Non-energy processed goods.								
Spain (81.40%).	2.4	2.5	3.5	3.7	2.9	2.7	2.7	2.9
Euro-area (84.18%).	1.1	1.0	1.9	2.5	2.0	2.0	1.6	1.8
DIFFERENT COMPONENTS OF CORE INFLATION								
(1) Services.								
Spain (34.87%).	3.4	3.7	4.2	4.6	3.7	3.7	4.0	4.3
Euro- area (41.33%)	1.5	1.5	2.5	3.1	2.6	2.6	2.4	2.4
(2) Non-energy processed goods.								
Spain (46.53%).	1.7	1.7	2.9	2.6	2.4	1.9	1.8	1.8
Euro- area (43.26%).	0.7	0.6	1.5	1.9	1.5	1.5	0.8	1.2
INFLATION IN EXCLUDED COMPONENTS FROM CORE INFLATION								
1) Non-processed food.								
Spain (9.40%).	1.2	4.2	8.7	5.8	6.0	4.6	4.2	4.5
Euro- area (7.69%).	0.0	1.7	7.0	3.1	2.2	0.6	1.8	2.2
(2) Energy.								
Spain (9.14%).	3.2	13.3	-1.0	-0.2	1.4	4.8	5.3	1.6
Euro- area (8.13%).	2.4	13.0	2.3	-0.6	3.0	4.5	6.3	1.8

Source: EUROSTAT, INE & IFL
Date: April 18, 2005



YEAR-ON-YEAR RATES OF INFLATION IN THE EURO AREA AND SPAIN



— Euro area — Spain

— Euro area — Spain

Source: EUROSTAT, INE & IFL

Date: April 18, 2005



V. INFLATION FORECASTS OF DIFFERENT INSTITUTIONS

INFLATION FORECASTS OF DIFFERENT INSTITUTIONS ¹										
	BIAM ²		CONSENSUS FORECASTS ³		IMF ⁴		ECB ⁵		OCDE ⁶	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
EURO AREA	2.0	1.8	1.8	1.7	1.9	1.7	1.9	1.8	2.0	1.7
EE.UU.	2.9	2.5	2.7	2.4	2.7	2.4	-	-	2.4	2.1
ESPAÑA	3.1	2.9	2.8	2.6	3.1	2.7	-	-	3.2	2.7

1 The forecasts are based on CPI in USA and Spain and on HICP in the Euro area

2 Bulletin EU & US Inflation and Macroeconomic Analysis, April 2005.

3 April, 2005.

4 IMF. World Economic Outlook. April, 2005.

5 ECB. Monthly Bulletin. Survey of Professional Forecasters. February 2005.

6 OECD Economic Outlook 76. November 2005. For the euro area aggregate and Spain, harmonized index of consumer prices (HICP).

Our forecasts for total inflation in the euro area and Spain are slightly greater than the previsions derived from other institutions because with the methodology applied in our Bulletin, total inflation is breaking down in core and residual inflation. Last one is composed by inflation in non-processed food and energy prices.

The innovations come in different components are transferred in future thorough different multipliers. The innovations derived from residual inflation are less persistent.

Our forecast of total inflation for euro area in 2005 is 2.0%, three p.p. greater than the prediction in the previous bulletin. For Spain the forecasts are the same registered the last month. The forecasts in USA also have maintained the same figure published in the March bulletin.



VI. INDICATORS CALENDAR

APRIL

				1	2	3
4	5 IPI Spain (February)	6	7	8	9	10
11	12	13 CPI Spain (March)	14	15	16	17
18 HICP Euro area (March)	19	20 CPI USA (March)	21	22	23	24
25	26	27	28 HICP Spain (Flash estimate April)	29 HICP Euro area (Flash estimate April) ESI Euro area	30	

MAY

						1
2	3	4	5	6 IPI Spain (march)	7	8
9	10	11	12	13 CPI Spain (April) IPI Spain	14	15
16	17	18 CPI USA (April)	19 HICP Euro area (April)	20	21	22
23	24	25	26	27	28	29
30 HICP Spain (Flash estimate May) Page 41	31 HICP Euro area (Flash estimate May) ISE(may)	* ESI Economic Sentiment Indicator CPI Consumer Prices Index HICP Harmonised Consumer Price Index				



THE CAPITALISM TO COME:

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April 2005

CHAPTER IV. 2. DEVELOPMENT AND INSTITUTIONS**I. DEMOCRACY AND OPENNESS****IV.2.1. STYLISED FACTS OF DEVELOPMENT**

V.2.1. A. Facts about the wealth of nations.

IV.2.1. B. Explanations of the evolution of the wealth of nations.

a. Neoclassic growth models.

b. Endogenous growth models.

IV.2.2. DEMOCRACY, DEVELOPMENT AND GROWTH.

IV.2.2.A. Participation, private initiative and development.

IV.2.2.B. Democracy and growth.

a. Democratic institutions

b. Government stability

c. Electoral legislation

IV.2.3. DEVELOPMENT, OPENNESS AND REGIONALISATION

IV.2.3.A. Openness

a. Basic results in international trade

b. The free trade discussion and commercial policy

c. Multilateralism and regional unions

IV.2.3.B. Dangers of globalisation?

a. Financial contagion

b. Multilateral agencies

Summary

SUMMARY

In this chapter, we have started to analyse the impact that ICTs, the knowledge society and globalisation (the three factors whose effects on capitalism I aim at discovering) can have on economic development by means of their impact on the institutions conditioning such development, explaining both the constant and broad disparity between countries and the possibility of unexpected development miracles or disasters occurring.

Democracy is one of the institutions that can effect the endogenous growth required for development, and ICTs can condition some forms of democracy. The ICTs facilitate the forming of a public opinion which hinders the work of pressure groups and reinforces the possibility of accepting sacrifices which can be explained more independently and in more detail. The possible advantage of authoritarian regimes with regard to the speed as which decisions are made is diluted by informed public opinion sustained by the ICTs and the political cycle cannot be avoided but should not be considered as a curse for development, but as the price to pay for the political involvement which itself is part of development.

Globalisation, on the other hand, will foster greater government instability, but the most frequent changes will be normal and less traumatic, partly because of the exposure to the world that countries have to accept in the information society and partly because of the gradual establishment of rules of thumb emerging from much freer and more spontaneous political behaviour. This freedom is partly explained by the tendency towards a proportional election of candidates, associated to a kind of direct democracy, albeit approximate, which ICTs enable and foster. And this freedom means that it is much less important to obtain power in order to present it as the status quo.

As for the openness (international trade) brought about by globalisation, in this chapter I have studied the changes in international trade patterns and commercial policies and their impact on economic development, emphasising the hazards of financial contagion. ICTs and widespread information reduce the likelihood of financial crises and hinder the damaging conversion of multilateral agencies into easily captured regulatory agencies or the issuers of fixed rules which are insensitive to the specific characteristics of each case. All this calls for the participation of a growing number of States in world decisions.

Economic development is the true challenge of capitalism, the key to its pertinence as an economic system. Private ownership of the means of production, the free business system, the market as a way of allocating resources and providing an incentive for innovation, and the regulation and security which the market itself can provide, form a quite complex system the future of which we are attempting to predict. In the previous chapter, I attempted to discover what we can expect from economic policy as a way for the State to operate in the system. The State is an institution; but it is not the only one related to whether the economic system works better or worse. It is not easy to judge the quality of the system's operation. It cannot only be based on the rate of GDP growth because we have seen on several occasions that how the GDP is obtained is also important, because it can affect the satisfaction of whoever obtains it. But it cannot be ignored, because it is needed for us to say that capitalism works. Consider, then, economic development as a multifaceted phenomenon which, besides growth and participation, also depends on other aspects of growth. We need to identify the trade-offs between such growth and democracy, the degree of openness, income distribution, poverty, education or the guaranteed coverage of some basic needs. In this and the following chapter, I will attempt to satisfy this wish for knowledge. In the following chapter, I will be concerned with the combined ideas of education, inequality, poverty and welfare state as "institutions" conditioning growth and features of development. In this chapter, I will be concentrating on openness and democracy. Commercial openness is not only the most significant milestone of the economic liberalism which promotes growth and development, but it also has an enormous civilising effect caused by the contact between cultures that has always been associated to trade. With regards to democracy, I will attempt to show that it is a set of institutions, with its pros and cons for growth, but which is essential for development in as much as it involves participation.



As for the new factors conditioning the future of capitalism, they also have a role to play here. Openness has many aspects in common with globalisation. And on the other hand, it seems obvious that the emergence of digital goods and ICTs will have an indirect, and possibly a direct, impact on development by influencing institutions which are decisive for growth, whether they are democracy, the welfare State, education, poverty or inequality.

IV.2.1. STYLISTED FACTS OF DEVELOPMENT

In this introductory section, I intend to describe the stylised facts characterising development in the light of the evidence, and then go on to emphasise that we need to modify our explanatory theories and that the introduction of the institutions in these theories appears to be a good intellectual strategy.

IV.2.1.A Facts about the wealth of nations

To start with, it is interesting to learn about the evolution of the per capita GDP of different countries in some detail, however imperfect this figure may seem as an indicator of a country's overall welfare. Thanks to the work of Summers and Heston (later enriched in Heston, Summers and Aten), in the early 90's we had fragmentary per capita GDP figures for 138 countries covering the 40 years from 1950 to 1988. Parente and Prescott (1993 a), eliminating the countries with under a million inhabitants and countries with statistical gaps which are impossible to fill, work with the 102 countries for which they were able to complete the statistics for the 1960-85 periodⁱ. Technical measuring issues on one side, what is interesting about this is that it established what we could call the (new) stylised facts of economic development.

We can distinguish between facts relating to the disparity between countries and facts relating to their mobility. Starting with the former, we find two aspects which attract our attention. First, this disparity is considerable. Second, it remains more or less constant over time. One way of measuring it is by the simple difference between the mean of the 5 richest countries and the mean of the 5 poorest. Well, the first is 29 times greater than the second in 1985. To obtain albeit an approximate idea of the size of this per capita GDP divide, it is considerably greater than the disparity between Spanish regions, but smaller than the range of salaries in Spain. More surprising is the fact that the magnitude of this disparity is constant when measured according to the range of distribution and nearly constant when measured by typical deviationⁱⁱ.

If we now consider the facts relating to the mobility of countries, we observe some remarkable figures. The mean distribution of absolute wealth increased at an equivalent rate of nearly 2% per annum during the sample period, with no "absolute poverty trap" detected (only Zaire diminished its per capita GDP during the period) at least until the final year. It would appear that some other African countries are also suffering the same fate as Zaire.ⁱⁱⁱ

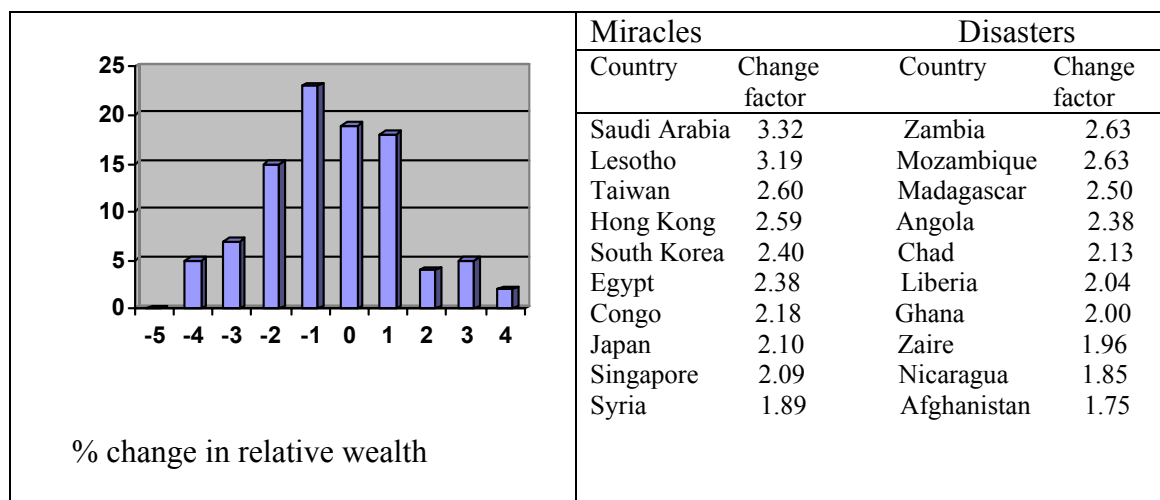
Much more interesting is the performance of per capita wealth in relation to that of the US figure. The distribution of its changes (shown on panel a) of table 1), besides being nearly normal, appears to feed the possibility of major changes, either upwards or downwards, in relative wealth (per capita). Indeed, there are miracles and disasters which, expressed as change factors, are shown on panel b) of table 1.



Table 1. Changes in relative wealth^{iv}.

a) Distribution of changes in relative wealth

b) Miracles and disasters



Given the normal form of the distribution of panel a), typical of random phenomena, and the countries on panel b), a pessimist would say that it is not worth worrying about it, because it appears to depend a great deal either on luck or geography. But an optimist might think that if we knew the reasons for these facts, we could possibly produce a miracle, or at least prevent a major disaster. Let's be optimists and attempt to understand the reasons behind these facts, so that we can identify the shortcomings of the available theories and convince ourselves of the need to introduce other variables in the analysis, inevitably including institutions.

IV.2.1.B. Explanations of the evolution of the wealth of nations.

In order to approach a satisfactory theory, we first have to imagine a globalised world in which each country, with its differentiated productive system, competes with the rest based on freely accessed technology and science and with total mobility of physical capital. We can distinguish between two major families in this generic development model. The first is based on a conception of capital limited to consider it as aggregate investment: physical capital. The second realises that to reconcile the stylised facts we need an additional notion of capital: missing capital^v.

a. Neoclassic growth models.

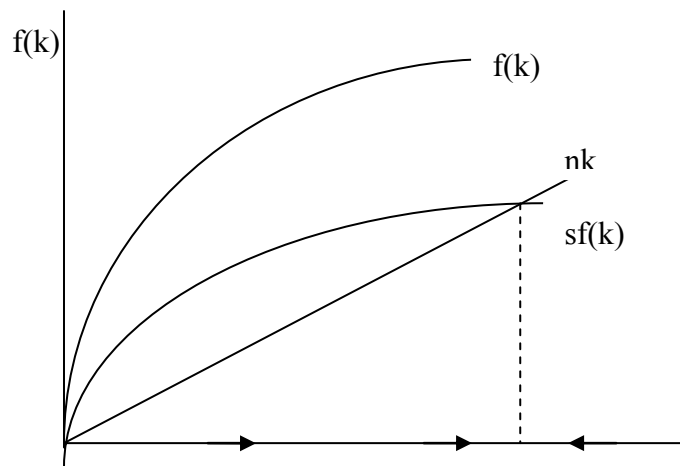
If we consider the first family of models, the working hypotheses established enable us to think in terms of Solow's well-known model and the ideas of convergence which have been explored in its context. Firstly, consider the possibility of absolute convergence, regardless of the structure (demographic and technological) of the different countries and their initial conditions in terms of physical capital per capita. There is no model implying such absolute convergence and, if there was, it would be refuted by the stylised facts to which we have referred.

Consider conditional convergence, that which could possibly arise between countries with the same structure (demographic and technological) but possibly with different initial conditions. This convergence arises from Solow's model, the most elementary of the neoclassic growth models. It is represented in the following figure, which is one of the best known in economic theory, nearly as popular as supply and demand curves. With constant returns to scale, the production function (per capita) is represented by $f(k)$, where k is the capital/labour ratio. The population, fully employed, grows at a rate n and saves a constant proportion s of the income produced. It is easy to show that the evolution of the capital/labour ratio gives rise to the following differential equation:

$$\dot{k} = sf(k) - nk$$

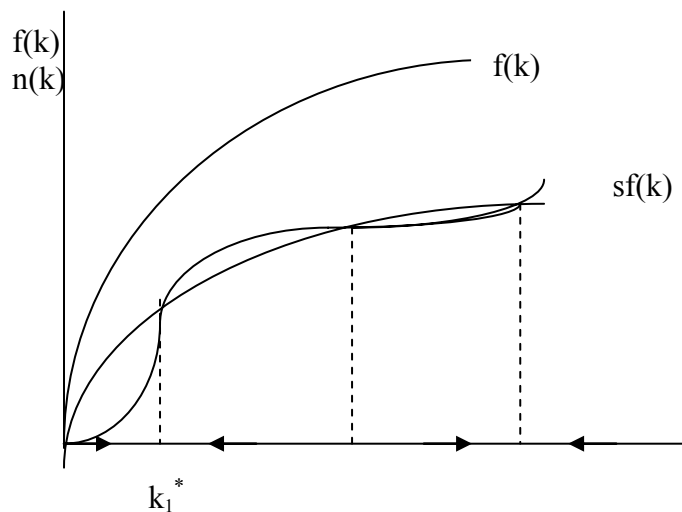
The qualitative characteristics of this model are immediately seen on the graph. At the point of equilibrium ($\dot{k} = 0$), we find





an equilibrium capital/labour ratio (k^*) towards which the model tends whatever its initial conditions (k_0) and for which the output growth rate, g , is identical to n . However, this model does evidently not replicate the stylised facts, since it forecasts the same g for all countries although we know that there are different g s and also that there are miracles or disasters which disassociate the output growth rate, g , from the population growth rate, n .

It is not easy to change the Solow model to make it consistent with the stylised facts we have mentioned. We could have expected, for instance, the introduction of more complex demographics to help to make n a function of k itself. If we look at the graph, we notice that this could explain the dispersion among countries, because we could say that there are different classes; but it is not consistent with the possibility of surprises (miracles or disasters) which would require jumps from one class to another that cannot be explained in the model.



The problem in this case with this type of model is that the stagnation of the accumulation of capital ($\dot{k} = 0$) inevitably means that per capita output is also stagnant ($\dot{f}(k^*) = 0$). To replicate the stylised facts we need to disassociate per capita output growth from the accumulation of physical capital. This happens whenever we have increasing returns to scale, which can occur both on the supply side (as in the case of learning by doing) and on the demand side (as in the network effect to which we have often referred in the previous chapters) and also when we are referring to digital goods for which reproduction costs are practically zero. In these cases, which always involve multiple points of equilibrium, we can explain continued or even accelerated (miracle) growth and, consequently, the dispersion that the convergence results denied; but we need something more if we are to explain the stability of dispersion compatible with miracles and disasters.

This leads us to the second family of models that we mentioned earlier, in which we want to



introduce a specification of missing capital.

b. Endogenous growth models.

We could start by introducing different tax rates on capital income in the first family, but this wouldn't be of much help because a reasonable disparity of rates would only generate a smaller disparity in per capita output than is observed. So we take a look at other candidates. The first obvious candidate is human capital. Lucas (1988) explored the possibilities derived from its introduction in a growth model of many countries connected by trade. As Schmitz explains, the Lucas model enables us to explain the differences in per capita output, but not their persistence: they may well increase.

Parente and Prescott (1993b), in a later work, introduce the idea of Business Capital, something like the different capacity of countries to remove the barriers preventing entrepreneurs from creating new firms and using new technologies. They construct a model in which technological innovation requires investing in physical capital, but in which the investment required for the new technology is smaller, given prevailing scientific-technological know-how, the greater this Business Capital is. If, somewhat innocently in my opinion, we measure the differences in Business Capital between countries as the differences in taxation on capital income, we find that the model is consistent with large differences in per capita output which remain constant and that it also allows for the existence of miracles.

To conclude this, in a way, introductory section, note that both human capital (derived from education) and the Business Capital referring to a country's legal organisation, are two examples of what we could call institutions. And these institutions should provide an explanation for the cause both of increasing returns and the stability of dispersion. However, some order is required in this world of institutions. On the one hand, we could refer to lost factors of production. Education and infrastructures are the most obvious. Their inclusion in a growth model could explain non-convergence (both conditional and absolute) and suggest structural policies to obtain it. My overall impression is that investment in education would particularly help if it takes place in the first few years, and that investment in infrastructures will only be useful if they are able to promote private initiative and not only where they generate more regional equality. The urbanisation process, with the agglomeration economies it involves, is also another production factor, institutional if you like, that could be useful in explaining some aspects of the stylised facts, especially in connection to other intangible institutions such as mentality or general culture. On the other hand, we would refer to forgotten institutions which nevertheless have been remembered as explaining dispersion and its stability. The independence of the Central Banks and its influence on inflation or growth (an issue that we broadly covered in the previous chapter), and the relationship between democracy and development, are two examples of the issues studied in this area with unequal academic results. In my opinion, the real non-convergence we are seeking will depend, in this institutional context, on both basic institutions such as the taxation or science and technology systems and on others which are more subtle, such as creativity, business talent or judicial security.

In the next sections in this and the following chapter, we will be paying specific attention to two of these institutions: democracy and education, the latter in connection with inequality, which should itself be considered a lost factor rather than a forgotten "institution". Although opening to international trade would appear to be neither of these, but a central aspect of the economic activity considered in any basic model, the commercial policies and strategies of each country do have an institutional flavour and, as such, they will also be studied in this chapter.

IV.2.2. DEMOCRACY, DEVELOPMENT AND GROWTH

Democracy is many things. It is, of course, a division of powers (legislative, judicial and executive) guaranteeing the free performance of the individual in the State. But we could not conceive a democracy without regular elections which could change both the executive and legislative powers – and occasionally even the judicial powers. Neither can we imagine a democracy without respect for minorities or protection for individual freedoms. I will be referring to all this in this section, but in two different parts. In the first, which is very brief, I will attempt to clearly explain how the private initiative typical of capitalism should explain the need for political participation if true development is to result. In the second, I will directly describe how some of the



characteristic features of liberal democracy affect growth.

IV.2.2.A. Participation, private initiative and development.

I will start by attempting to provide a brief and superficial explanation on which to base this “air of the times” in which democracy may not be at stake, but certainly some of its characteristics will, together with the greater or smaller impact of conservatism, liberalism or libertarian acrary on its workings. In my opinion, we are surrounded by the aroma of proliferation: of objects, or ideas, of trademarks, of images, of different meanings revealed by the archaeology of power, of traces discovered by frenetic deconstruction, of the media, of blogs, of news, of rumours. This proliferation transforms our sensitivity into a pin-ball following a stochastic process with no serial correlation, a martingale which prevents us from learning from the past in order to predict the future. The consequent radical uncertainty generates anguish and fear and in view of this fear, which is ultimately caused from this proliferation that we perceive as unordered, there are two possible attitudes which polarise social life and, in confrontation, create this “air of the times” that I am attempting to characterise: modern authoritarianism and postmodern acrary^{vi}, to give them two rotund names. The first wants to put an end to uncertainty once and for all (a lemma which is deep set in the neoconservative mentality as it loses its links to liberalism) whereas acrary rejoices to a certain extent the novelties of such radical uncertainty.

In an attempt to clearly distinguish between the two reactions to today's radical uncertainty, which is not unrelated to globalisation, the knowledge society and ICTs, I will make use of a local reference: Spanish politics in the first few months after the socialist party's victory in March 2004 and the immediate past comprising the last few months of the conservative government.

Modern authoritarianism is typical of the modernity which believes that it is in possession of the truth and which, like American “neocons” or a faction of the PP surrounding ex-president Aznar, also believes that such knowledge it is based on common sense and that to question it is a symptom of ill will, a maliciousness represented by the postmodern acrary which enjoys making mountains out of molehills. Since this common sense is, together with once and for all, one of the leading neoconservative lemmas, we may be able to come close to understanding the difference between authoritarian conservatism and postmodern acrary if we take a brief look at the teachings of ethics professor G.E. Moore. Keynes studied under Moore in Cambridge and dedicated him most of “My early Beliefs”, an unbeatable description of the intellectual environment surrounding him at the time. Moore is a thinker who has gone down in the history of philosophy as the common sense philosopher, since it was the subject of his best known work “A defence of common sense”, an state of affairs which unfairly ignores many of his other contributions. However, if we forget the rest and concentrate on his conception of common sense we can approach it through Manuel Cruz, who claims to be loyal to Moore, underlining its complexity, because “if common sense needs defending...it is because it is not sufficient in itself – it is neither self-sufficient nor transparent” (*Filosofía Contemporánea*. Taurus, 2002, p.36). Not all issues can be solved by applying common sense, and common sense does not avoid the conceptualising effort which, however great, will never be able to solve anything once and for all. This effort can be made in many ways and one of them, associated to continental philosophy - as opposed to the island version - could lead to what I have called libertarian or postmodern acrary, the cognitive correlate of which has nothing to do with common sense, but rather with the philosophy of suspicion that was born with Nietzsche and is a reaction to the illustrated rationalism underlying liberalism which is unaware of its own internal dangers.

For today's conservative authoritarianism, public debate is not only unnecessary but a clear sign that there is something wrong in politics. Oft-quoted Fareed Zakaria believes that in the political field, democracy has gone too far in an America (he is referring to the United States) that may be betraying its “founding fathers”. According to this author, who does not appear to have much time or respect for political scientist, possibly because they are too much like democrats in the party-related sense, politics needs to be released from democracy. With arguments that we have presented, and criticised, in the previous chapter, he wants to make us realise that both the legislative and executive powers can easily be captured, whereas the Federal Reserve, as an example of an independent agency, can easily defend itself from politics. So he believes that there is too much public debate on complex issues that should only be analysed by experts.



A local but evident example of this attitude contrary to public debate is the PP's reaction to the meeting of regional presidents which took place in the Senate on October 29 last year. Although some time has passed, we can remember that it was the first meeting ever of its kind, and the presidents belonging to the PP initially objected because there was no prior agreement concerning its conclusions. The meeting may not have been prepared with exquisite care, but from that to saying that the only conclusion reached was to hold another meeting there is a large difference. An agenda was established, including healthcare financing, regional participation in the EU and constitutional and statute reforms, in addition to other important issues which seemed less significant at the time, related to immigration, security or research. And the regional presidents did indeed agree to meet again, evidence, according to some media close to the PP which show clear signs of modern authoritarianism, of the meeting's inanity. For liberalism or postmodern anarchism, however, proceeding head on towards a pre-established solution is not the most effective way to learn something or become satisfactorily organised. On the contrary, the most successful way to achieve their purposes, especially to reach a satisfactory agreement concerning the troublesome territorial issue, is probably to meet and meet again until, as if by chance, we find that we have learned a great deal and are now organised to continue to learn about the territorial issue which will never be perfectly solved.

Returning to the principal argument leading us from once and for all and common sense to the rejection of political debate as signs of the modern authoritarianism that I am referring to as conservative, I would now like to denounce its parallelism with the rejection of private initiative. In fact, meeting to discuss issues is a form of debate which is at the very heart of participation, and appears as natural in order to adumbrate the most satisfactory solution to any problem, besides being a mark of identity, together with public opinion as profiled by the media, of liberal democracy. For an economist this participation through debate is to political activity what private initiative is to economic activity. A specific economy may lead to efficient allocations in a static sense, but if they are not the result of private initiative they are not as appreciated (given that they are imposed) and do not guarantee dynamic efficiency (because they may inhibit innovation). Similarly, a specific political system may be legislating correctly through a democratic Parliament or correctly administered through an elected government or an agency in which the latter has delegated, but if there is no participative public debate and I do not feel that either the legislation or the administration are mine, or expect my genuine concerns to be expressed in parliamentary initiatives or the government's agenda. I find it strange when those who would appear to be most appreciative of private initiative as a way to create wealth are those who appear to reject public debate as a means of public participation, to go by some events at the end of 2004 which, although local again, illustrate what I am trying to say. Besides the rejection of the 2005 budget in the Senate (for reasons unknown to public opinion) or the PP's decision not to vote for the bill changing the percentages for the election of the members of some judicial organisations – and the subsequent rupture with the Ministry of Justice-, a similar rupture has occurred with the Ministry for Foreign Affairs – with explicit refusal to agree upon foreign policy if minister Moratinos does not resign – and criticism has hailed on the Secretary of State for Public Finance, Miguel Ángel Fernández Ordóñez. Moratinos said on a TVE programme that Aznar encouraged the coup against Chávez and Fernández Ordóñez used different forums to wonder out aloud about personal income tax in relation to the elimination of pension and housing deductions and making explicit the dilemma between a flat rate and the undoing the tangle of fiscal benefits sedimented over time.

However, I believe that those opinions which the PP have criticised so much are praiseworthy because they promote the public debate which represents political participation beyond parliamentary discussion. The claims made by Moratinos may have been offensive in that they were highly questionable and inopportune and the opinions of Fernández Ordóñez may seem unelaborated (or even destined to “burn out” issues) but they open the debate about foreign policy and responsible fiscal policy, and foster participation.



IV. 2.2.B. Democracy and growth

I will now attempt to briefly and precisely summarise a paper by Alesina^{vii} which enables us to form an opinion about the impact of democracy on growth. I will explain how we have to view three different problems related to three different features of democracy: its political and social institutions, governmental stability and electoral legislation.

a. Democratic institutions

Within what we could call democratic institutions, we have to distinguish between those which refer to political democracy and those which form social democracy. The former include the division of power and electoral practices, for example, while the latter are related to what are known as individual freedoms.

According to Alesina, empirical analyses show that there are no great differences in terms of growth between average democracy and average dictatorship. The variance, however, is very different in each case. It is much larger in dictatorships where we find the greatest economic disasters; but also the observed miracles which support conservatism and of which Singapore and China are obvious examples.

There are many attempts to explain this, summarised by Alesina in five blocks. Consider the first four, relating to political democracy. In the first place, we would say that pressure groups can slow down and even steer legislation in their own favour and that their activity tends to increase the scope of the State (using the terminology introduced in chapter), in order to satisfy them each so that they more than likely artificially increase distributive programmes. In our own language, we would say that in democracy, there is danger of the State being captured, as we have referred extensively both in this part IV and in the previous part; but this way of understanding the issue shows us that in dictatorship, capture is total by definition, so we should not expect authoritarianism to mitigate the weakness of democracy in relation to pressure groups, weaknesses that could only be mitigated with a well-informed public opinion, the potential of which can be supported by ICTs.

Since the lift-off of an underdeveloped economy generally requires many kinds of sacrifice, it would secondly appear that a strong or dictatorial political regime would have it easier; but this ignores both the fact that dictatorships are usually populists and that democracy cannot generally be characterised as a weak regime, especially when citizen participation, strengthened by information and its availability independent of the State, flourishes. Although thirdly, it is usually claimed that democratic procedures cause unnecessary delays in decision-making processes related to specific shocks affecting a country's economy, this speed of reaction would depend more on the demands of globalisation and the spread of information fostered by ICTs than on the more or less authoritarian nature of the political regime of which its supposedly agile decision-making can also be affected by these same technologies which are capable of warning public opinion.

What does in principle appear to be a more serious argument against democracy as a regime fostering economic development is the well-documented effect of the political cycle. This phenomenon inevitably fosters concentration in projects completed in the legislature in which power is exercised. This "short-sightedness" required by the need to win elections and remain in power could, fourthly, justify a certain antidemocratic tendency and in this case we are unable to identify a similar effect in the authoritarian regimes against which, in any case, it can always be argued that they are little inclined to participation (which is much less than what today's technology allows), which reduces the value of any economic success achieved.

To end with a remark about social democracy we could, fifthly, say that individual freedoms foster a series of virtues which are essential for economic progress and release from underdevelopment. Without democratic freedom it is difficult to conceive the growth of risk-taking, an entrepreneurial spirit willing to innovate and create wealth, or the market itself because it demands private initiative which, as we have mentioned before, does not seem much encouraged, in spite of appearances, in authoritarian regimes. It is also true, as we shall see in the



next chapter, that civil liberties permit protest and it can be exercised against the possible inequalities that market freedom and innovation can generate. With regards to this fifth block, we should be aware of the contrast between China and India. Whereas the new technologies appear to be flourishing in the latter, there are objective difficulties to the spread and use of the WWW in China. Intuition, albeit somewhat unreliable, would tell us that China may have an initial advantage due to its ability to stop protests or the possibility of ignoring them, but that its achievements will be more precarious and fragile than those obtained in India^{viii}.

b. Governmental stability.

For authoritarian thinking, political stability is extremely important. In developed countries, we are simply referring with this expression to the volatility of the principal macroeconomic aggregates, a volatility that it is believed (mistakenly in my opinion, as I argued at the end of chapter IV.1) can be reduced by designer institutions forcing the existence of fixed rules. In underdeveloped countries, political stability refers to rogue strikes, political assassinations or armed insurrections which, not surprisingly, reduce foreign investment and make demands for more direct aid useless. As we shall now see, this socio-political variable may explain some significant differences between Latin America and south-east Asia.

We now consider political stability as such with reference to changes of government. The following table, taken from Alesina et al. (1991) reveals some interesting facts.

SELECTED SAMPLE PERIOD: 1960-1982*

	ALL	LATIN.	AFRICA	ASIA	INDUST.	OTHERS
GCHANGE	.28 (.45)	.29 (.45)	.21 (.41)	.30 (.46)	.39 (.49)	.37 (.48)
MJCHANGE	.11 (.32)	.16 (.36)	.11 (.31)	.07 (.25)	.12 (.32)	.16 (.37)
COUP	.048 (.21)	.078 (.27)	.057 (.23)	.040 (.20)	.00 (.00)	.058 (.23)
DEM	2.24 (.93)	2.18 (.92)	2.83 (.50)	2.33 (.89)	1.07 (.37)	2.33 (.91)
GR	.024 (.069)	.022 (.065)	.015 (.84)	.033 (.068)	.029 (.035)	.041 (.060)
Countries	113	24	41	21	21	6
Observations	2592	552	943	476	483	138

* the division by region uses the International Monetary Fund code system. Therefore, the "others" category refers to European non-industrialised countries. Taken from Alesina et al. (1991).

To understand the table, we need to know the following equivalences. GR is the GDP growth rate. DEM is a variable which takes value 1 for democracies, 3 for dictatorships and 2 for intermediate situations. GCHANGE is any change of government, with a value of 1 for change and 0 for no change. MJCHANGE takes a value of 1 for important or unconstitutional changes carrying a change in the governing political party. Finally COUP has a value of 1 when the unconstitutional change is military.

The table highlights some revealing facts. We can see that in Latin America in the period studied the total changes are the same as the worldwide average (one every 3 years), whereas it



shows the highest frequency in both major changes (two against one every 10 years in the world) and military coups (1.5 against one every twenty years in the world). This Latin American situation contrasts with Asia in which we see that, although its general political changes coincide with the worldwide average, there are few major changes and a minimal number of coups. It is very tempting to attribute this difference to the latter region better performance.

The other fact revealed by the above table is the different situation of Africa. There are very few changes of government in the continent, although the few that there are seem to be major changes, most of them military coups. This does not seem very promising for the development of Africa, since it hardly encourages foreign investment and seems to foster rapid gains for local investors, followed by their immediate flight.

These overall impressions are confirmed on the following table, which speaks for itself. It is clear that executive instability in underdeveloped countries is an obstacle for development, even more so when a vicious circle arises going from instability to sluggish growth due to lack of investment to the instability fostered by this lack of growth.

CHANGES OF GOVERNMENT AND GROWTH: AVERAGE PERCENTAGE PER CAPITA GROWTH RATE IN YEARS BY COUNTRY, WITH OR WITHOUT CHANGE OF GOVERNMENT. SAMPLE PERIOD: 1960-1982

	ALL	LATIN.	AFRICA	ASIA	INDUST.	OTHERS
Year without any						
GCHANGE	2.8	2.9	2.0	2.9	3.9	5.2
No. de observations	1860	393	745	295	340	87
Year w/on GCHANGE	1.3	1.5	-0.4	2.7	1.7	2.0
No. de observations	739	159	198	188	143	51
Year with MJCHANGE	0.1	0.2	-1.9	2.3	1.4	1.3
No. de observations	299	86	100	57	34	22
Year with COUP	-1.3	-0.6	-2.7	n.d.	1.3	-2.2
No. de observations	125	43	54	0	20	8

Taken from Asesina et. Al. (1992)

CHANGE: Change of government

MJCHANGE: Significant (important) change

COUP: Military coup

In view of these remarks, we could question whether the factors whose influence I am attempting to analyse can play a role here. I do not believe it risky to adventure the opinion that globalisation, by enabling the free movement of goods and people, can at some time lead to greater governmental instability even in developed countries, due to immigration; but what is important is the nature of that instability, and that is conditioned by the other factors. The greater the information available to the electorate, we will find less radical changes and coups because the country in question will be less isolated and feel more under surveillance by the international community to which it belongs and, on the other hand, interaction between individuals will be easier, permitting the generation of rules of thumb which are accepted and end up being naturally applied, thus organising society.

We could question whether these remarks are also valid for Africa or it has to be considered as a special case in which the lack of foreign investment and the poor use of the little direct aid



received are responsible for the poverty that appears to have no solution. I will leave this problem for the next chapter and complete this section with a reference to the influence of electoral laws.

b. Electoral legislation

The case of Allende in the Chile of the 70's and the more recent case of Caldera in Venezuela which possibly fostered, with their political, economic and social extremisms, a reaction which, although democratically unjustifiable in the Chilean case, ended up by generating a coup which triumphed with Pinochet or a questionably democratic change in the case of Chávez in Venezuela. It has been said that in both cases the electoral system is part of the explanation, especially in Chile, a country with a great democratic tradition and a history of parliamentary supremacy. However, with a majority-based electoral system, according to which the most voted party's representatives are elected for each circumscription, Parliament ends up with a small number of parliamentary groups. This fosters the aforementioned extremism which enabled Allende to organise what was practically a revolution from Parliament, and it later enabled Pinochet to remain in power with a democratic appearance. At the same time, and for similar reasons, this majority-based system facilitates the adoption of the reforms required for take-off.

Proportional systems have just the opposite characteristics. Many small groups are represented in Parliament, and this fragmentation is evidently due to the fact that each jurisdiction has a number of representatives which is more or less in proportion to the votes obtained in that jurisdiction. In these conditions, there has either to be a coalition government or one based on consensus. But this makes it very difficult to approach reforms which really break with the status quo thus hindering take-off, although this proportional system has the advantage that it gets rid of the extremism which could, in turn, incubate coups which could represent an obstacle for the necessary foreign investment.

It is clear that the new digital technologies are in principle neutral with regards to electoral systems; but it also seems evident that they will end up pushing legislative decisions towards direct democracy. In a way, however, direct democracy is like the limit of the proportional system, so we have to consider that our collective decision-making systems will reflect various consensuses and diverse coalitions, depending on the issue in question. Election forecasts will not be very reliable – we are already starting to see this – and it will be difficult to progress away from the status quo. This last characteristic leads us to think that we will probable see serious movements aimed at conserving power and special efforts by those who believe that it will be difficult to obtain it in the future. This has, however, to be considered carefully and in detail. All this will occur providing that the possibilities of capturing the State to which we referred in the last chapter of Part III continue. Since, however, it is easy to detect institutional excuses for capture – such as stable rules in economic policy – it follows that in THE CAPITALISM TO COME, the possibilities of capture will no longer exist and there will have been a complete change in the incentive to defend the status quo. Since it will evidently not be defensible, it is sensible to believe that we will each prefer a system in which we each have our share of power over time.

This last remark shows how careful one has to be when considering the effects of digital technologies or ICTs in many features of the capitalist economic systems to which we are accustomed. So far, we have seen two examples of this need for interpretative accuracy. We saw how the probable elimination of fixed economic policy rules, since they cease to be credible in a new environment, could lead to less growth potential, because established firms do not face a clear horizon; but also how, at the same time, this elimination will promote the renovation and rotation of firms, and a reduction in their mean life span, providing the possibility (but not certainty) of equal opportunities. We now see a second example of the need for care when we attack the problem we are considering here. As I have just suggested, the status quo ceases to represent an advantage in the struggle for power, because it will involve no possibility of capturing the State. Both examples share the belief that capitalism as we know it will not be able to survive in view of the force of knowledge of what is going on, the possibility of forming and undoing identity-based communities and the changes in the structure of the population and the electorate that immigration – promoted by globalisation – will bring about.



IV.2.3. DEVELOPMENT, OPENNESS AND REGIONALISATION

Globalisation and open trade are practically synonymous in as much as the former requires the latter, understood as open borders. And they are both conceptually based on one of the most profound and original ideas of economic science: the advantages of international trade. However, the proposition that being open to international trade is always good and that openness is the best development strategy are two different things which have to be considered as such. Similarly, it is not easy to decide whether openness should be sudden or gradual, involving regional steps. In the first part of this section we shall attempt to clarify these issues, whereas in the second we shall be attempting an initial discussion about the dangers of globalisation, including financial dangers and the initial doubts concerning the multilateral agencies which try to maintain globalisation.

IV.2.3.A Openness^{ix}

We begin by briefly remembering the most evident theoretical results and the continuous increase in world trade, to continue with openness as a commercial policy and the pros and cons of regional customs unions.

a. Basic results of international trade

Although the theoretical bases of the advantages of international trade are well known, it is important to remember them in order to be able to evaluate the theoretical changes and better judge supposedly well-confirmed facts.

a.1. Theoretical results.

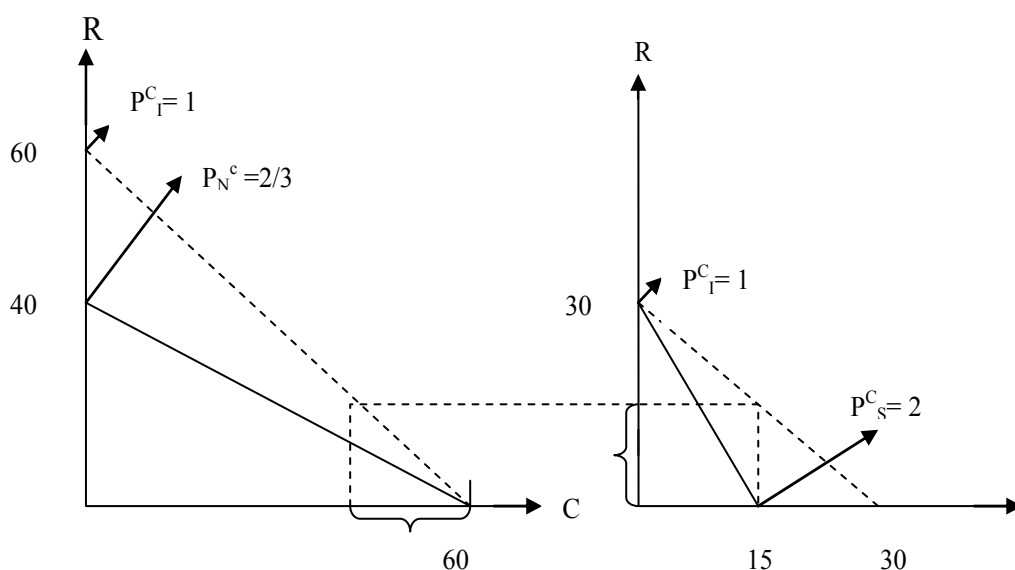
Consider the two basic problems of international trade which have always been at the heart of economic science: the direction of trade (who exports what) and the free trade issue, leaving the famous equality of production factor prices on one side even though they are not perfectly movable (labour, for instance).

If we begin with the Ricardian comparative advantage theory, we find the proposition that a country exports the good in the production of which it has a comparative advantage. An example will clarify this. Imagine two countries, N and S, which can be interpreted as North and South. They both have the same allocation of the only productive input: 600 labour units. And the production technology to transform this labour into two possible goods, C (computers) and A (rice) is as shown in the following table, where the numbers indicate the labour required in each country to produce each of the goods.

	C	A
N	10	15
S	40	20

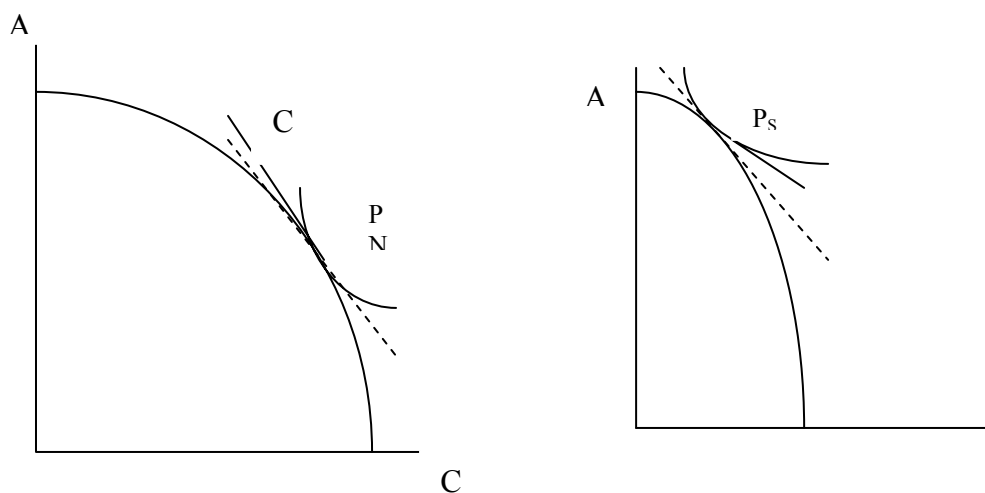
The example has been designed so that it is obvious that North has an absolute advantage in the production of both goods, but that its comparative advantage lies in the production of computers. So we expect North to specialise in the production of these computers, of which part is exported, and South to specialise in rice production, of which part is also exported so that it can pay to import computers at the established international prices. All this can easily be represented in graph form. The left (right) panel of the following figure shows the productive possibilities of N (S) delimited by the continuous straight lines.





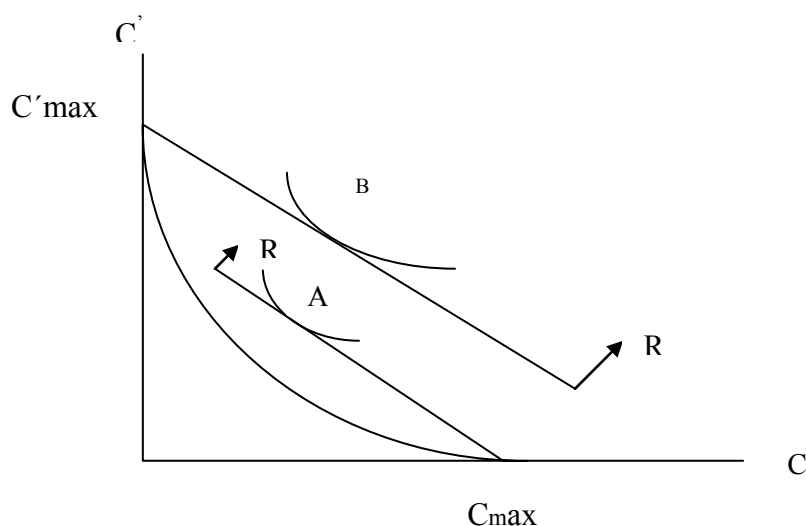
In the absence of trade, each country would produce both goods and the relative price (of computers in terms of rice) would be, respectively, $P_N^C = \frac{2}{3}$ y $P_S^C = 2$. What each country would produce of each good at these prices will depend on their respective preferences; but what is important is to understand that if borders are open to international trade, each of the countries will be able to consume outside its original production and consumption possibilities. So, given each country's preferences, the international price of computers in terms of rice must be among the relative prices established in each country before the borders were opened. If we denote by P_I^C at that international price, we find that $P_N^C < P_I^C < P_S^C$. Let $P_I^C = 1$, so that it is easily represented on the above graphs as indicated by the dotted lines. At that international price there will be equilibrium between production and consumption. Country N will produce 60 computer units and export 20, thus consuming 40, whereas country S will produce 30 units of rice, exporting 20 and consuming 10.

Naturally, the world is a little more complicated than we have shown in our example. We can complicate it by saying that besides labour (L), there is another productive input called capital (K) with which country N is relatively better endowed. There are still two outputs, computers and rice, represented by C and R, and the production of C is intensive in the use of capital and R production is labour-intensive. The possible production curves are no longer straight lines, as in the previous case with only one productive input. Assuming that in either of the productions there are decreasing returns to scale, we find the two following situations.



This analysis is very similar to the previous one. If there is no international trade each country, N on the left and S on the right of the figure, will produce and consume according to its preferences at the two points represented by P_N or P_S on the corresponding production possibility curve, the tangent of which determines the corresponding relative price. If international trade is now opened, the international price will again be intermediate and country N (S) will export computers to and import rice from country S. This now occurs because in country N the relative abundant factor, capital, is what is most intensively used in computer production.

The problem with these international trade models, which we could describe as classic, is that they involve trade patterns and directions of trade which are not the same as those observed. Indeed, much of the international trade observed is between industrialised countries (which supposedly have similar factor endowments), between manufactured products (and not between the latter and raw materials, like in our examples) and within the same industry (with identical factor endowments) between products with slight brand or design differences. To accommodate these patterns, we have to cease to assume constant returns and admit the possibility of increasing returns to scale. The following figure shows the production set of two supposedly identical countries, concave towards their origin precisely due to the increasing returns, with an international price as indicated by the RR curve slope. One country is completely specialised in producing good C (cars) and the other in producing good C' (computers), consuming outside the production set wherever its utility is maximised.



It is easy to see on the graph what in each country, the car producer (C) and the computer producer (C') imports and exports. The example has been designed to emphasise the fact that trading is between manufactured products and countries with no absolute or relative advantage in the production of one product or the other and with similar preferences. The reason for this type of pattern in international trade lies simply in increasing returns to scale. If we were to add product differentiation ideas (by brand or design details) and the monopolistic competition which naturally accompanies such differentiation, we would find a variant of the Krugman (1980, 1981) models explaining the other feature of today's international trade consisting of the fact that trading does not only take place between manufactured products but also between products manufactured by the same industry.

Two remarks are of interest here. The first is that when there are increasing returns in the production of the two goods, increasing returns which could be due to positive externalities of the production of one in the other or miscellaneous supplementary reasons, equilibrium can be multiple. The same real rate of exchange can be compatible with more or less specialisation. The subsequent equilibrium will depend on the relative size of the two markets, and there may not be sufficient demand to take specialisation to the extreme. As usual, this multiple equilibrium means that there is room for governmental intervention, which may attempt to intervene in free trade for the



dynamic reasons to which we shall shortly be referring.

The second remark is that, in the circumstances giving rise to trading between manufactured products, or even industries, it may be impossible to trade between underdeveloped countries rich in raw materials or agricultural products and developed countries rich in manufactured products. This remarks should be added to our comments concerning Africa when, in the next chapter, we contemplate the difficulty of overcoming poverty.

a.2. World trade

After World War II and thanks to the GATT (General Agreement for Trade and Tariffs), replaced years ago by the World Trade Organisation (WTO) and on the basis of the deregulatory impulse of the two institutions, world trade has shown continuous, although volatile, growth in developed countries. The following table shows both that this is the case and also demonstrates the negative importance of the two oil shocks. This trend would be strengthened if we were to add the data from the last fifteen years. This is a clear sign that globalisation is a reality.

Growth of international trade (exports + imports)	
Developed countries	
1960-1968	7.3% per annum
1968-1973	9.7% per annum
1973-1981	3.3% per annum
1980-1985	2.3% per annum
1985-1990	4.5% per annum

If we now take a look at underdeveloped countries, we find that the facts agree with the theoretical results. The following table (taken from Ray) shows the growth in exports by region, providing us with evidence that globalisation works.

Table 16.1 Annual average percentage growth of exports in developing countries

Region	1973-82	1983-86	1987-90
All LDCs	0.2	4.7	5.7
Africa	-2.4	4.4	2.3
Asia	9.2	10.5	11.8
Europe	4.3	5.1	-4.2
Middle East	-5.1	-1.1	5.4
Western Hemisphere	1.9	2.6	7.2
Sub-Saharan Africa	-1.0	1.7	1.0
Four Asian NIEs	13.3	13.4	11.4

Source: International Monetary Fund, Issues and Developments in International Trade Policy (1992).

Eastern Europe and the former Soviet Union
Hong Kong, Korea, Singapore, and Taiwan

As the following table (from the same source) shows, most underdeveloped countries



export raw materials which, in general, are intensive in the use of the labour factor which is relatively more abundant in these countries, thus confirming Heckscher-Ohlin.

Table 16.2 Export composition and principal exports for selected developing countries.

Country	Shares (%)		Major Exports
	Primary	Manuf.	
Ethiopia	96	4	Coffee, tea, hides & skins
Burundi	70	30	Coffee & substitutes, tea
C. African Rep.	56	44	Pearls & semiprecious stones, coffee & substitutes
Egypt	67	33	Petroleum & products, mineral fuels, textile yarn
India	25	75	Textile yarn & fabrics, industrial extractives, Precious & semiprecious stones.
Turkey	29	72	Fruit & nuts, clothing & accessories, iron & steel
China	19	81	Footwear, toys, textiles, metal manufactures
Indonesia	47	53	Crude petroleum, natural gas, veneers & plywood
Thailand	28	72	Rice, transistors, valves, office machines, clothing & accessories
Philippines	24	76	Transistors, valves, vegetable oils, fruits & nuts
South Korea	7	93	Footwear, synthetic fabrics, transistors & valves, ships & boats .
Nicaragua	93	7	Coffee & substitutes, meat, cotton
Mexico	47	53	Crude petroleum, passenger road vehicles, vegetables
Costa Rica	67	33	Vegetables & fruits, coffee, basic manufactures.
Guatemala	70	30	Coffee, sugar & honey, fruits & nuts, pharmaceutical products
Brazil	40	60	Meat & preparations, metalliferous ores, coffee
Bolivia	81	19	Natural & manufactured gas, base metal ores, tin
Colombia	60	40	Coffee, crude petroleum, coal

Source: World Development Report (World Bank (1995) and the Handbook of International Trade and Development Statistics (United Nations - 1992).

Since the relative prices of raw materials versus manufactured products have fallen, exports from developed countries have increased their share in total export value. On the other hand, as the following table (again taken from Ray) shows, the participation of manufactured good exports from underdeveloped countries as increased as the opposite phenomenon occurred in developed countries; so much so that manufactured goods exports in these countries are not much greater than in underdeveloped countries, providing an example of trading between manufactured products.



Table 16.3 Trends in the share of LDC manufactured exports (percentages)

	1970	1975	1980	1985	1990
Share in world total					
All LDCs	7.0	7.4	10.0	13.3	17.1
Asia	3.7	4.7	7.2	9.5	14.1
Latin America	1.8	1.7	2.0	2.5	2.0
Africa	1.4	0.7	0.6	0.4	0.5
Share in LDC total					
Asia	52.4	62.8	71.8	71.2	82.7
Latin America	26.2	23.4	20.3	18.5	11.6
Africa	19.5	9.3	5.8	3.2	2.8

b. The free trade and commercial policy discussion.

The basic argument for free trade is based on the theories of Ricardo or Heckscher-Ohlin showing how each country, when open to international trade, can consume beyond the limits of its production possibilities. As we shall see, this argument is exactly the same as the one based on the convenience of trading between two individual agents with different initial endowments. However, in the case of countries, there are counter arguments which are of considerable practical importance and underlie some commercial practices.

b.1. First, consider that the distribution of the gains of international trade can be unequal within a country. For example, if Heckscher-Ohlin works between two countries, we find that in North (to continue to use the same terms) the salary will diminish whereas the profit rate will rise, just the opposite of what will occur in South. This gives us an idea of who will be for and who against the border between the two countries being opened. In the case of the NAFTA (North America Free Trade Agreement) between the United States and Mexico, the advantages were for U.S. capitalists and Mexican workers, whereas Mexican capitalists were at a loss, as were the U.S. unions which, logically, were who most objected to the agreement's ratification.

Secondly, we can find a good theoretical reason for interventionism when the idea is to progress dynamically from one equilibrium to another. As we have seen, in the presence of increasing returns there are multiple equilibria due to positive externalities and the existence of complementarities. Consider a country that wishes to progress from exporting bananas to export computers simply because the price of the latter fluctuates less than the price of fruit. This requires progressing from one equilibrium to another; but this may require capital which can only be obtained on markets to which banana producers have no access. In this situation, the government's financial intervention may be required to reach the new equilibrium.

b.2. These dynamic considerations are the ones underlying certain more or less successful commercial policies leading to different strategies to encourage development. Consider the contrast between the old Brazilian import substitution strategy and the more recent Korean export promotion strategy. In Brazil, the idea was to enliven a domestic sector which was considered to be strategic (for reasons associated to the learning by doing which underlies increasing returns, for instance), for which there was an internal market but for which Brazil had no static comparative advantage, so it should have been imported. Korea was also attempting to use preferential credits to enliven a strategic domestic sector (for the same reasons) for which there was no internal demand, so it was not imported but could be exported. In the Korean example, the idea was to produce and export cars (for instance), reducing the custom duties applicable to imported components or other raw or intermediate materials. In the Brazilian case, the authorities were making it difficult to import luxury goods, thus saving foreign currency destined to import components and putting an end to imports of the good in question (cars, for instance). If Korea was successful and Brazil failed, this was possibly because they had different attitudes to openness. Brazil has to close trade and it made use of quotas and tariffs with different distributive effects. Quotas, particularly, are an invitation to



corruption.

c. Multilateralism and regional unions

If, for the above dynamic reasons, countries aim at a certain degree of protectionism, the favourite way is to apply tariffs changing relative international prices, which can have an impact on the direction of trade. Assume that three countries, N, S and C, produce rice, among other things. The rice trade should be directed according to any version of comparative advantage, but the possibility of establishing tariffs can distort the trade direction.

Let's continue with Ray and assume that, in any of these countries, there are three possible tariff levels: low (non-existent) T, medium T and high T. Consider the static relation between two countries, N and S. The following pay-off matrix shows the results for each country derived from the established couple of tariffs:

		N		
		Low T	Medium T	High T
S	Low T	100.100	50.125	30.80
	Medium T	125.50	70.70	20.90
	High T	80.30	90.20	40.40

It is immediate that the only Nash equilibrium occurs when both countries establish a high tariff for rice imports. In any other square, one of the countries would want to change the tariff. On the other hand, it is obvious that this Nash equilibrium is not a Pareto optimum. It is as if we were playing the prisoner's dilemma.

However, this situation could be less extreme if we assume that the results of each couple of strategies comprise a game of coordination shown on the following pay-off matrix in which pairs (A,A'), (B,B') and (C,C') are the increments that can be added to the results in each country subsequent to the lobbies formed to influence the tariff level.

	Low T	Medium T	High T
Low T	100 , 100	50 , 80+A	30+50 + A'
Medium T	80+A , 54	40 + B , 40 +B	25+ C , 30 +B'
High T	50 + A' , 30	30+B' , 25 + C	20 + C' + 20 + C

Note that if the lobbies are eliminated, $A = A' = B = B' = C = C' = 0$ and, given the resulting



pay-offs, the Nash equilibrium occurs for the free trade situation in which all the countries eliminate tariffs. This would be the desideratum of the WTO. However, if we introduce tariffs there are three possible scenarios. The first scenario arises when the lobbies achieve (A, A') . If A and A' are small, we are in a situation similar to free trade status and we continue to obtain $(100, 100)$. But if the protectionist environment starts to be imposed, we enter the second scenario in which B and B' are higher but not high enough to eliminate the possibility of the central square being a Nash equilibrium. In a highly protectionist environment, C and C' could be so high that the trade regime would again be closed to the Nash equilibrium; and all this in a game of coordination. Naturally, all this can happen because the tariffs represent income for the State, which is tempted, and often succumbs to temptation, to establish tariffs which, on the other hand, benefit the lobbies which are protecting their production from foreign competition. What happens to world trade, then, will depend on the strength of the lobbies.

A multilateral organisation like the WTO is created precisely to attempt to eliminate the harmful effects which incentives to the establishment of tariffs may carry (remember that the WTO comes from the GATT, which was an agreement to get rid of tariffs). It therefore intervenes in the repetition of the prisoner's dilemma, for instance, attempting to establish a game of threats to sustain the Pareto optimum as we saw in the first part of this book. It also aims at what we have described as the prisoner's dilemma becoming the game of coordination which, as we have just seen, enables lobbies to operate in such a way as to also obtain the Pareto optimum identified with free trade. One instrument for this was the establishment of the MFN (most favoured nation) clause which should ban discrimination between countries by means of tariffs but nevertheless enables the regionalisation of trade.

This regionalisation consists of establishing free trade in certain areas or regions, a strategy which is not the same as globalisation and cannot be considered as a set of mere preparatory measures. There are many examples of this regionalisation. The EU is an example of freedom of trade between northern countries, NAFTA exemplifies the north/south relationship and the ASFAN or MERCOSUR represents trade between southern countries. It is well known that these regional unions can either create trade or simply deviate trade. Consider our three rice-producing countries, N , S and C , which produce and sell it on their internal markets at the respective prices of 35, 26 and 20. If we take the first scenario in which N has established a 100% tariff, this country consumes its own rice and a free trade agreement with either S or C immediately generates rice imports from the country in question, creating trade where there was none. This is an improvement for consumers, who see their budgets increased due to the fall in the relative price of rice, and is worse for the State, which ceases to receive revenue from tariffs. This is not the case on a second scenario. N may have established a 50% tariff for rice imports. In these conditions, N is consuming rice imported from C but not from S . If a free trade treaty is now signed with S , there is a deviation of trade because N stops importing from C and only imports from S . The State loses its fiscal income and the consumer is not much better, because the price of rice has only fallen from 30 to 26.

There is considerable literature about these regional agreements and it emphasises that north/south agreements should be normal, because they are complementary, but that they are in fact exceptional for the distributive reasons internal to each country that we have mentioned above. These complementarities aspects are not found between similar countries, but they may be other reasons for establishing such regional unions. In the case of the EU, or any other case involving rich countries, unions are formed with a view to product diversification. They make sense when, say, they enable us to enjoy both Rioja and Bordeaux wine. Between poor countries, as is the case of MERCOSUR, this diversification advantage is absent unless the countries involved practice the previously criticised policy of import substitution; but, furthermore, in a case like this the tendency to concentrate production by agglomeration economies (which, as we have seen, generate increasing returns) makes trade irrelevant.

These traditional viewpoints, however, seem to be outdated. If we consider world trade as an evolutive game in real time and commercial policies as possible strategies, we know, because of what we have seen in chapter 1 in part I and in chapter 3 in part II, that what we would expect is an evolutionarily stable equilibrium which is indeed one of the possible Nash equilibria but hardly a Pareto optimum. In these conditions, we have to expect path dependence so the way in which regional unions are formed is not irrelevant.



Globalisation represents the start of a true game of this type and it would not appear that multinational organisations like the WTO, which we have discussed in this section, will have much of a say unless they effectively ban regional unions. But this is not easy because in the knowledge society all countries know which is their best pathway to the most favourable evolutive equilibrium. On the other hand, to consider the coordination of these unions or see the WTO as a true regulatory agency is not only premature but also inadvisable, as were the identical intrusions in tax fiscal policy that we criticised in the previous chapter. It is consistent with the position we have adopted to expect, and even recommend, free regionalisation to be permitted. In other words, the idea is not for the WTO to design the pathway and timing of increasingly large regional unions until international trade is completely deregulated. The idea is for this pathway to arise from contact between each country's initiative. The WTO, however, could act as a coordinator and possibly a guarantor of what is agreed between countries, and also as an external agency identifying the existence of path dependence and indicating which are the initial movements associated to a better final outcome in terms of international specialisation.

IV. 2.3. B. Dangers of globalisation?

This is not the first time that the world has “suffered” an outbreak of globalisation, but never before has it “threatened” to be really universal, even though it will not be instantly developed. Therefore, we wonder whether, besides the relative advantages of openness that we have identified, we can detect dangers which justify removing the quotes from the words suffer and threat. The anti-globalisation movements to which we will be referring in some detail in the last chapter of this volume, would not hesitate to answer in the affirmative. Globalisation may bring inequalities (to which we will refer in the next chapter), eliminate diversity and opportunities to make use of complementarities aspects. It may exclude entire populations from its expected benefits and leave them in the utmost poverty (this will also be considered in the next chapter) and it may, in general, change lifestyles and generate a certain degree of discomfort or discontent which is underlined in Stiglitz's book entitled Globalisation and its discontents. To end this chapter, we will be considering the danger of financial contagion, which has not been mentioned before and is present throughout Stiglitz's book, and starting to consider the role of multilateral agencies.

a. Financial contagion

Although I have just mentioned some of the possible contradictions of openness, the basic arguments in this section are in favour of globalisation considered as borders open to the movement of goods^x. However, there are other dangers of globalisation, now considered as open financial markets. In this respect, it is interesting to briefly discuss chapter 9 of Guillermo de la Dehesa's book entitled Comprender la Globalización, precisely referring to financial crises^{xi}. Based on the consideration of financial contagions and banking crises - in which the panic created by one bank's lack of liquid assets spreads like wildfire to other banks - as equivalent, the chapter to which I am referring attempts to understand, with the help of recent literature, if the financial crisis in south-east Asia was transmitted to Russia, Latin America and nearly to the OECD economies, or if the phenomenon was of a more sociological or psychological nature, and whether this possible contagion is rational or irrational. The question is important because if we have witnessed a case of contagion, it would seem sensible to protect ourselves in the future from the danger of being affected by a systematic crisis by slowing down financial globalisation, for instance by establishing a tax on short-term capital movements. It is worth considering some papers related to contagion such as, for example, the recent article published by Allen and Gale in the Journal of Political Economy.

The idea is very simple, and although I am explaining it with reference to banks, it can be immediately applied to world regions. If a bank has deposits in another bank and the former receives a negative liquidity shock because its customers queue to withdraw their money for some reason, this first bank would normally not cash in its profitable investments but withdraw its deposits in the second bank. The bank crisis would become widespread – there would be contagion - if the second bank now also suffers from a liquidity crisis, due to the public being aware that its deposits have diminished, and follows the first bank in withdrawing its deposits from a third, and so on. It is



easy to see that if the first bank had distributed its deposits among many other banks instead of only one, the likelihood of any of these banks having a liquidity problem would have been much smaller and there would probably have been no contagion. The moral, applicable both to banks and regions, is obvious: the more interbank and interregional markets there are, less likely is contagion. A financial crisis is not the result of open markets, as the anti-globalisation movements often claim, but rather the result of the absence of markets.

From this brief analysis, it follows that globalisation exorcises its own dangers. And this process is faster and more effective the easier it is to establish open markets and configure a growing network of intermarket contacts. And the birth and fast growth of such a network, which in fact acts as a safety net, will be more likely the lower the transaction costs to which we have repeatedly referred in part III and, therefore, the more ICTs develop. Consequently, the development and implantation of these new information and communication technologies (the ability of which to create networks has been mentioned continuously here) work in favour of the success of globalisation, eliminating one of its serious risks.

b. Multilateral agencies.

The principal truly multilateral agencies such as the World Trade Organisation (WTO), headquartered in Geneva, and the International Monetary Fund (IMF) and World Bank (WB), both headquartered in Washington, are at the heart of economic development management, warding off the dangers of globalisation.

Although our remarks on the WB will have to wait for us to consider the fight against poverty in the next chapter, what I have just said about financial crises leads us to consider the IMF as the multilateral agency which has been at the centre of the financial crisis controversy. Although it originally aimed at preventing and eliminating international liquidity crises, it is now a great study centre which also makes recommendations to countries with debt problems, conditioning its aid which initially prevents the contagion to which we have referred. What is largely criticised about the IMF is precisely the conditions that it imposes while ignoring the peculiarities of each country and even seriously erring in its diagnosis on some occasions, as Stiglitz explains in his book.

The Monetary Fund and the WTO should be and are coordinated. If a country has reserves problems due to an unhealthy balance of payments, it can request permission from the WTO to momentarily ban imports. The organisation will agree to this or not depending on a report from the IMF, and if it approves the measure, it provides details of how it should be carried out.

What interests us in this chapter is not to summarise how these multilateral agencies operate; but what we have to say about their nature. I am specifically interested in considering whether these multilateral agencies can be seen as the regulatory agencies to which we have been referring as providing excuses for capturing the State, or whether they are also under pressure to make regulated and not discretionary decisions as we saw in the case of central banks.

It seems evident that the conditions imposed by the IMF to grant aid, designed by the so-called Washington consensus, could be interpreted precisely as the fixed rule considered to be appropriate in a world in which no one can be deceived and in which attempts at deceit only lead to more uncertainty and volatility of the relevant aggregates. I would say that this is precisely their intention and my criticism of regulated policy is now joined by a criticism of the Washington consensus which is well described in Stiglitz's book. Commitment to a regulated policy could end up making the problem worse.

It also seems obvious that these multilateral agencies, and especially the IMF, have in the last few years demonstrated an independent regulatory agency vocation imposing solutions which could not credibly be adopted by a single country with problems. As with a central bank, we could say, possibly exaggerating a little, that such supposed independence could be an excuse for capturing the world. As we have seen in this chapter, there are reasons to believe that in the capitalism to come there will neither be incentives for nor possibilities of such a capture even in a



State, and even less so in a world without a system of global government.

One immediate conclusion from these two comments is that these multilateral agencies could perform their functions carefully without the need for rules, independently without the need to be formally independent. This is possible because, given the number of States involved, in the sense that they contribute to their budgets as members, it is difficult to prevent them from participating in their decisions. In other words, I would not expect someone like Stiglitz to be able to repeat his criticisms in the future. This conclusion is sustained by many of the small results or intuitions that we have obtained; but we need to remember the combination of result and intuition underlying the tendency to increase the number of States.

NOTES

ⁱ All this section comes from some of the ideas included in a couple of articles (Urrutia (1993) and Urrutia (2000)) to which I have added a few remarks aimed at adapting them to our current purpose. Even though the data are now outdated, because of the date when Urrutia (1993) was published they still express the ideas I want to describe.

ⁱⁱ Some remarks on this point and something of an update of the data, appear in the following chapter when I refer to inequality between countries, following Sutcliffe's work.

ⁱⁱⁱ These suspicions will be examined more closely in the following chapter when we refer to the situation in Africa and the spectacular development of China and India in the last few years.

^{iv} See Parente and Prescott (1993 a) pages.12 and 13. Other interesting facts are that no "relative poverty trap" is observed, but countries which do not experience miracles in their relative income, even when they are not rich, tend to be "richer" than those experiencing disasters in their relative income.

^v This terminology is owed to Schmitz.

^{vi} I published a very brief article on this "air of the times" in *Actualidad Económica*: Urrutia (2004) which I reproduce here.

^{vii} I am referring to Alesina (1994) in which there is a summary of others of his works, generally in collaboration, which will be quoted whenever necessary for clarification.

^{viii} M. Wolf has dedicated several columns in the *F.T.* to comparing the performance of these two countries.

^{ix} In relation to the problems of international trade, the book by Bajo (1191) is highly recommendable for its clear explanations, although it was not followed here. The following is based on Ray's book on development, in my opinion the best there is on the subject. In the following paragraphs, we abstract from a highly questioned proposition in international trade, referring to the equalisation of factor prices in spite of the absence of labour mobility. Although there is more labour mobility in a globalised world, this problem continues; but it is not necessary to refer to it for my strategy.

^x See Wolf (2004) This book is, firstly, an interesting update on the generally admitted complementary nature of the market and its operating rules, supposedly guaranteed, ultimately, by the State and, secondly, an original affirmation that if globalisation does not favour a certain country, it is because the State in question has not been doing its job properly, an idea repeated by Fukuyama. In my opinion, neither of these ideas is completely correct. That markets can operate properly in the absence of the State has been "proved" by the detailed studies of Avner Greif, of the University of Stanford, on the non-simultaneous trading across the Mediterranean before the historic appearance of the State. The key to this unprecedented fact is that each of the two communities involved, although they had no State, disciplined its members without the need for coercing a shared State controlling the two sides. This community discipline prior to the State is precisely the key to understanding why the second of Wolfe's ideas that I have mentioned is also incorrect.

Note that a State works properly when it is really not needed. This is the case for western democratic countries in which the community is structured around rules of thumb which no one is going to question. In these cases I fear that the State, although it provides a safety net for unexpected contingencies, cannot



share the glory of a good adjustment to globalisation. Consider what happens when a State that is needed because of the lack of a sufficiently developed social fabric based on accepted rules of conduct. Wolf appears to be saying that, in these circumstances, the State will probably be captured by a few who would reap the benefits of the international division of labour and make globalisation fail as a means of development. However, the State can also be used to dynamise the establishment of appropriate rules of thumb for the country to reap the benefits of globalisation. Because what is important is not, as Wolf would have us believe, for the State to work properly, but for society to work properly.

^{xi} What follows is from Urrutia (2003), included in Economía en Porciones.

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	APRIL 2005		AVERAGE ANNUAL RATES				
	Monthly Rate	Annual Rate	2002	2003	2004	2005	2006
EURO AREA							
Total Inflation	0.4	2.1	2.3	2.1	2.1	2.0	1.8
Core Inflation	0.3	1.5	2.5	2.0	2.0	1.6	1.8
Non-energy industrial goods	0.7	0.2	1.5	0.8	0.8	0.2	0.6
Services	0.0	2.2	3.1	2.6	2.6	2.4	2.4
GDP			0.9	0.5	2.0	1.6	1.9
Private Final Consumption Expenditure			1.3	1.1	1.3	1.6	1.8
Gross Fixed Capital Formation			-2.7	-0.5	1.3	1.0	1.7
Exports of Goods and Services			1.9	0.2	6.1	5.6	5.5
Imports of Goods and Services			0.5	2.0	6.3	5.8	5.6
Gross Value Added Total			0.9	0.5	2.0	1.6	1.9
Gross Value Added Agriculture			0.6	-3.8	5.2	3.2	1.3
Gross Value Added Industry			0.2	0.1	2.9	-0.2	1.1
Gross Value Added Construction			-0.5	-0.5	0.7	0.4	0.4
Gross Value Added Services			1.4	0.9	1.8	2.2	2.3
OTHER ECONOMIC INDICATOR							
Industrial Production Index (excluding construction)			-0.5	0.2	1.9	1.1	1.7
Unemployment rate			8.2	8.7	8.8	8.9	9.1
UNITED STATES							
Total Inflation	0.6	3.4	1.6	2.3	2.7	2.9	2.5
Core Inflation	0.2	2.4	2.3	1.5	1.8	2.5	2.6
Goods	0.3	0.7	-1.1	-2.0	-0.9	0.9	1.0
Services	0.2	3.0	3.8	2.9	2.9	3.1	3.3

SPANISH ECONOMY FORECASTS

	APRIL 2005		AVERAGE ANNUAL RATES				
	Monthly Rate	Annual Rate	2002	2003	2004	2005	2006
Total Inflation	1.3	3.4	3.5	3.0	3.0	3.1	2.9
Core Inflation	1.4	2.8	3.7	2.9	2.7	2.7	2.9
Non-energy industrial goods	2.8	0.9	2.5	2.0	0.9	0.8	1.0
Services	0.5	3.8	4.6	3.7	3.7	4.0	4.3
GDP			2.0	2.5	2.7	2.7	2.9
OTHER ECONOMIC INDICATOR							
Industrial Production Index			0.1	1.6	1.8	0.0	0.8
Unemployment rate			11.4	11.5	11.0	10.6	9.9

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