BULLETIN

OF E.U. AND US INFLATION AND MACROECONOMIC ANALYSIS
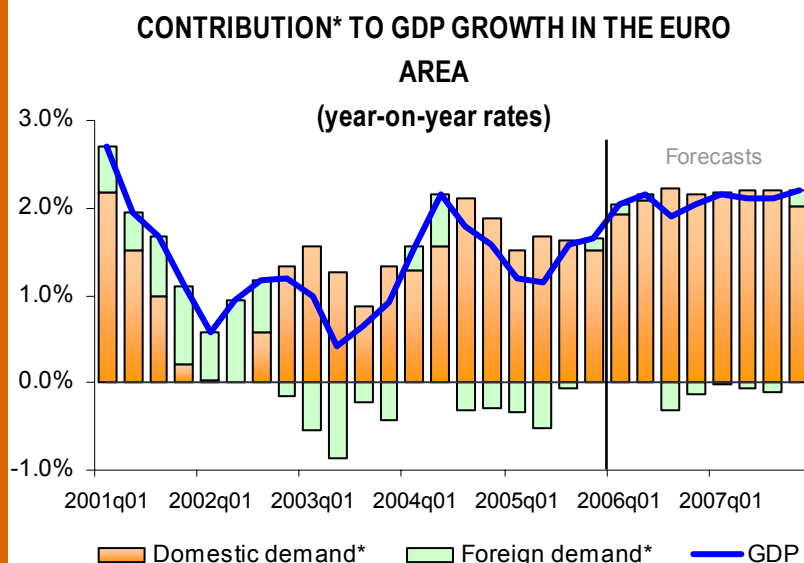
Universidad Carlos III de Madrid

Instituto Flores de Lemus

A New Era

Stabilisation of the euro area economy after the recovery experienced in the second half of 2005.

CONTRIBUTION* TO GDP GROWTH IN THE EURO AREA

(year-on-year rates)

Source: Eurostat & IFL (UC3M)   Date: March 23, 2006

The growth pattern of the Spanish economy: results obtained and perspectives (point III.3)

SOURCES OF GDP GROWTH (year-on-year rates)						
	2001	2002	2003	2004	2005	Average 2000-2005
SPAIN						
GDP	3,5	2,7	3,0	3,1	3,4	3,2
Employment (1)	3,2	2,4	2,5	2,6	3,1	2,8
Productivity	0,3	0,3	0,5	0,5	0,3	0,4
EURO AREA						
GDP	1,9	0,9	0,9	1,9	1,3	1,4
Employment	1,4	0,6	0,2	0,7	0,6	0,7
Productivity	0,5	0,3	0,7	1,2	0,7	0,6
IRELAND						
GDP	6,2	6,2	4,4	4,5	4,3	5,1
Employment	3,0	1,8	2,0	3,1	3,8	2,7
Productivity	3,1	4,3	2,4	1,4	0,6	2,3

(1) Full time Employment
Source: INE, Eurostat & AMECO

Monthly Debate:

INNOVATION AND INTELLECTUAL PROPERTY
By: Juan Urrutia   Page 55

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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 SERVT 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.

EDITORIAL: A NEW ERA

BULLETIN OF EU & US INFLATION AND MACROECONOMIC ANALYSIS: A NEW ERA

With issue number 138, the Bulletin is starting a new era in which its scope will be gradually increased, maintaining its content focused on analyses and diagnoses based on econometric forecasts for each of the areas considered: Spain, euro area, U.S. and the autonomous regions of Spain.

The study of the Spanish economy, one of the Bulletin's priorities, will be interrelating three levels, macroeconomic, sectorial and regional, all seen in the context of the euro area and using basic results related to the U.S. economy.

The forecasts and analyses of the different variables in each economic area will have a more connected structure, and a friendlier organisation. In this issue, an initial version of this new presentation is included for the Spanish economy.

Since 2000, the Bulletin has been presenting a section about the economy of the Madrid region, funded by the regional government's Department of Economy and Technological Innovation. We hope to include specific studies about other autonomous regions in the near future.

In the last twelve years, the team of analysts working for the Bulletin have configured a method for macroeconomic forecasting and specific aspects of this method have been published in several international and Spanish academic journals. The development of the forecasting method used is one of the principal objectives of the Bulletin's team of analysts in this new era.

One fundamental approach in such methodological development in the future is based on the construction of forecasting pathways in which, for different ranges of values of each specific forecast on a certain pathway, we estimate the probability of occurrence of future observations in each range, in turn considering that the uncertainty related to the future of an economic value can change over time.

This kind of forecasting result is what is needed by decision makers, for whom one-off forecasts are of limited interest. One of the principal objectives of the Bulletin in this new era is to obtain this kind of result for all our forecasts.

In this new era, the Bulletin will have an advisory board, the chairman of which, Mr Juan Urrutia, has prepared the presentation which follows this note.

Finally, a group of patrons is also being configured. It will be responsible for approving the Bulletin's annual budget and proposing new activities.

Antoni Espasa
Director of the Bulletin EU & US Inflation and Macroeconomic Analysis

PRESENTATION OF THE ADVISORY BOARD

In this new era, the Bulletin has an Advisor Board with different important functions. A list of members is provided below.

Firstly, the Advisory Board is responsible for making suggestions and discussing and approving the Bulletin's annual activities. In this respect, it will attempt to arrange for a yearly meeting with members of the business community in order to present the Bulletin's perspective of the Spanish economy.

Secondly, the Advisory Board, acting as a promoter of the Bulletin's new activities, will attempt to ensure the financial support required to guarantee its continuity. This support may consist of grants and sponsorships, but the Board should also contemplate the possibility of attracting subscribers or subscriber-patrons requiring projects focused on their specific problems within the Bulletin's overall scope.

Finally, the members of the Advisory Board will pay special attention to Debate Topics, a Bulletin section which, although previously explored in the previous era, needs to be decisively approached in order to become an important point of reference in subjects related to the Bulletin's regular content.

Juan Urrutia
Chairman of the Advisory Board

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I. EURO AREA AND EUROPEAN UNION

I.1. MAIN POINTS AND NEW RESULTS

The latest figures published about the euro area economy continue to indicate that inflation appears to be contained, with another slight improvement in the core inflation forecast with the February figure, derived from the favourable evolution of non-energy industrial good prices. With the new National Accounts data for the fourth quarter of 2005, we maintain our overall forecast for growth in 2006 and 2007 at 2% and 2.1%, respectively.

Graph I.1.1
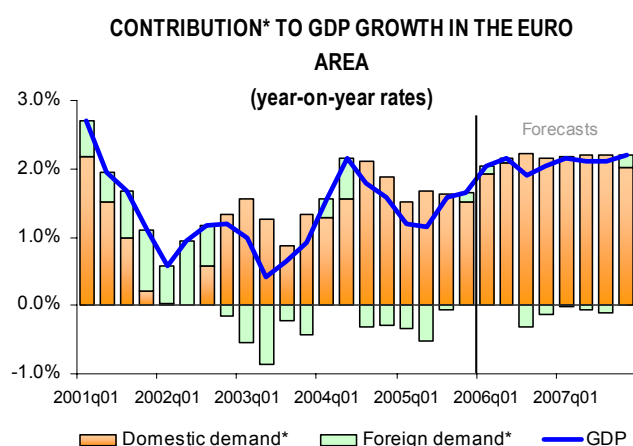
CONTRIBUTION* TO GDP GROWTH IN THE EURO AREA

(year-on-year rates)

Source: Eurostat & IFL (UC3M)
Date: March 23, 2006

Graph I.1.2

ANNUAL FORECASTS FOR THE CORE INFLATION IN THE EURO AREA

(year-on-year rates)
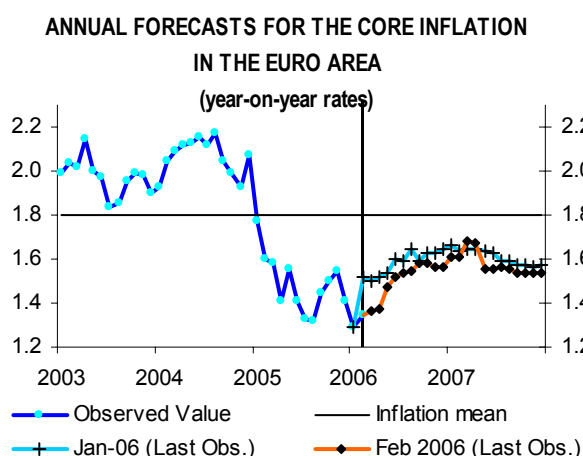
Source: Eurostat & IFL (UC3M)
Date: March 27, 2006

On the other hand, growth of the M3 monetary aggregate, as usual in recent years, is outside the 4.5% reference value, but with an accelerated evolution of household loans, which reached a rate of 9.4% in February, largely because of mortgage loan growth, with a rate of 11.8% in the month.

Graph I.1.3

YEAR-ON-YEAR RATES
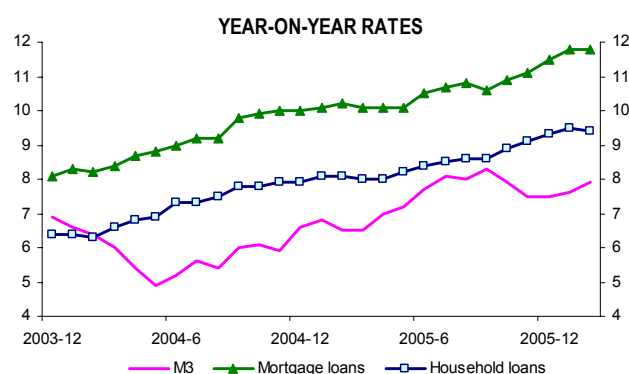
Source: ECB
Date: March 29, 2006

The data on inflation and real activity can be interpreted in the sense that no urgency is detected for the monetary authority to increase the reference interest rate. Nevertheless, we cannot rule out the possibility of the ECB increasing the interest rate to 2.75% in their coming meetings, based on the suspicion that the evolution of credit will push inflation higher more than other factors, such as the output gap, which may push it down. However, the situation does not yet seem to warrant the ECB making an uninterrupted series of interest rate increases.

Finally, the ECB's policy is also based on the belief that the inflation measurements available do not provide a biased view of growing inflation in the euro area. However, this issue cannot be approached without quantifying the effects of better quality on products whose prices are used to establish the HICP. A major project could be undertaken by Eurostat on a European scale in relation to this subject.

I.2. INFLATION, ECONOMIC GROWTH AND MONETARY POLICY

In the last quarter of 2005, the real GDP of the euro area registered a year-on-year growth rate of 1.7%, one tenth more than in the previous quarter. However, in terms of the quarter-on-quarter rate we observe some deceleration, with a growth rate of 0.3%, compared to the previous quarter's 0.6%. In any event, the figure observed was less than our forecast. After this result, the euro area economy closed last year with a mean annual growth rate of 1.4%, four tenths less than in the previous quarter; nevertheless, this mean annual growth rate includes a first semester of weak growth and an expansionary second half of the year.

GDP growth in the euro area last year was in line with the forecast published by the Bulletin EU & US Inflation and Macroeconomic Analysis, now we know the National Accounts figures for the second quarter. After analysing these results and the partial information available for some indicators in the first quarter of 2006, it would appear that the euro area economy is consolidating its recovery and the forecast is for 2.0% growth in 2006 and 2.1% in 2007; these rates are close to its potential growth.

Analysing the composition of this growth, we see that in the fourth quarter, private consumption showed considerable weakness, with its annual growth rate falling from the third quarter's 1.8% to 0.8%, interrupting the growing trends of the last few quarters. On the other hand, investment continued to show the same strength it has been showing since the second quarter of 2005, reaching a year-on-year rate of 3.1%, 0.4 pp more than the previous quarter; however, this evolution was not enough for internal demand to reduce its contribution to the GDP by one tenth.

The external demand performed well with a contribution of two tenths to GDP growth, a turning point after five consecutive quarters reducing the growth rate. This good performance of external demand was due both to growth in exports and a reduction in imports, consistent with internal demand. Indeed, exports registered an annual growth rate of 5.1%, two tenths higher than the previous quarter, whereas imports registered a year-on-year rate of 5.0%, four tenths less than in the previous quarter.

By production area, all non-agricultural fields made a positive contribution to growth in the fourth quarter of 2005, with the most dynamic being construction, with a GVA growth rate of 3.2% and heavy acceleration during the year. It was followed by industry with energy, which increased sharply in the last quarter to a year-on-year rate of 2.6% compared with the previous quarter's 1.4%, shaking off the weakness registered in the first half of the year. With regards to service activities, non-market services registered the highest year-on-year growth rate (2.4%). On the other hand, the GVA of agriculture registered a year-on-year reduction of 4.4%. From the perspective of the entire year, these were the service activities registering more growth, followed by construction.

From the information available about short-term indicators in the euro area for the first quarter of 2006, we can conclude that the euro area economy will continue to gradually gain strength and consolidate its recovery. The improvement in consumer confidence continues in the first two months of this year, and it is expected to continue based on the better expectations shown by opinion polls in relation to the creation of employment and falling unemployment. The results of opinion polls on manufactures and services are also positive, as is the industrial confidence index in the first few months of this year.

With the new National Accounts figures for the fourth quarter in the euro area and the partial information available about some indicators in the first quarter of this year, we again revise our forecasts for real GDP growth in the euro area for 2006 - 2007. The new estimates, in spite of the slight downwards innovation in the fourth quarter of 2005, do not alter our global forecast for GDP growth in 2006 and 2007, which remains at 2.0% and 2.1%, respectively. However, it does alter the forecast for some components but they cancel each other out. In both years, the forecast indicates a slightly larger contribution to GDP from internal demand, and an equivalently smaller contribution from external demand.

The forecast for mean annual growth of private consumption expenditure increases by one tenth from our previous report for each year, with 1.8% expected for this year and 2.0% for 2007. This increase is supported by the fact that the improvement in job creation is expected to continue, and the wealth effects derived from more costly housing and favourable stock market results. The forecast for public consumption increases similarly, to 1.8% and 1.6%, respectively. On the other hand, the forecast for the mean annual growth of gross fixed capital formation increases from the 3.3% of the previous forecast to 3.4% in 2006, maintaining the expansionary trend of the second quarter of 2005, and from 3.2% to 3.3% in 2007. After these changes, the contribution of internal demand increases by one tenth from our previous forecast, to 2.1 pp.

Goods and services exports reduce their forecast growth by two tenths for each forecasting year, to 5.8% and 5.9%, respectively. However, the forecast growth in imports remains unaltered at 6.2% for each forecasting year. After this new foreign trade forecast, the contribution of external demand to GDP growth worsens slightly, going from zero in the previous forecast for 2006 to a negative contribution of 0.1 pp. For 2006, the contribution goes from one tenth to zero.

Inflation

Inflation in the euro area in February was lower than expected, with a monthly growth rate of 0.29% instead of the forecast 0.40%. The annual inflation rate falls to 2.3% from the 2.4% observed in January. Core inflation was also less than expected, with an annual rate of 1.3%. The forecasting error in core inflation was largely due to the downwards innovation in non-energy industrial goods. This can be explained as a result of the sales in recent years, and the greater competitiveness affecting the sector, primarily footwear and apparel.

Table I.2.1

INFLATION RATES						
	Observed values			Forecasts		
INFLATION	Med[2] 2004	Med[2] 2005	2006 Feb[1]	2006 Mar[1]	Med[2] 2006	Med[2] 2007
CORE (83,82%)	**2,1**	**1,5**	1,3	1,4	**1,5**	**1,6**
TOTAL (100%)	**2,1**	**2,2**	2,3	2,3	**2,1**	**1,8**

Source: EUROSTAT & IFL (UC3M) [1] Growth of the month over the same
Date: March 27, 2006   month of the previous year
                          [2] Growth of the average of the
                          reference year over average
                          of the previous year

With the February figure, the core inflation forecast improves by one tenth of a percentage point from the previous month, with a mean annual rate of 1.5% for 2006. This improvement largely corresponds to a reduction in the expected inflation of non-energy industrial goods derived from the foreign competition affecting these products, with their annual rate falling by approximately 0.2 pp from the previous forecast, with a mean rate of 0.3% expected for 2006 (see graph I.2.1).

Outside core inflation, growth in energy consumer product prices continues similar to our previous forecasts, with rates of over 10% expected for the first few months of the year, subsequently falling in the second half of 2006. The mean inflation rate expected for these prices in 2006 is 7.0%, after the 10.1% and 4.5% registered in 2005 and 2004, respectively.

The mean inflation rate for unprocessed food has been revised and increased by four tenths of a percentage point for 2006.

The slight improvement in core inflation is compensated by the increase in the prices of unprocessed foods, so the total inflation rate forecast for 2006 remains unaltered at 2.1% (see graphs I.2.1 and I.2.2).

Graph I.2.2 shows the recent evolution of inflation in the euro area and the pathway expected up to the end of 2007, with different confidence intervals in each month. Although the graph shows that the likelihood of exceeding the ECB inflation target is over 60% in the first half of 2006, inflation is expected to gall in the second half and end the year with rates of around 2.0% and a probability of around 50%.

Graph I.2.1

ANNUAL FORECASTS FOR THE CORE INFLATION IN THE EURO AREA

(year-on-year rates)
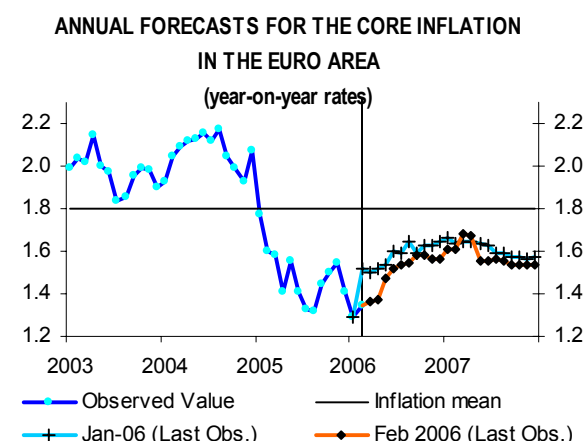
Source: Eurostat & IFL (UC3M)
Date: March 27, 2006

Within the euro area, the most inflationist countries for 2006 and 2007 will be Spain, Luxembourg and Portugal and, to a lesser extent, Italy, Ireland and Greece. The least inflationist will be Finland, Germany, France and Austria, with rates lower than those forecast for the euro area (see graph I.2.3). The dispersion between countries is expected to fall gradually in 2006 and 2007. The heterogeneous nature of the different inflation rates in the euro area is the reason for the large real interest rate differentials. Countries with real one-year interest rates significantly greater than 1 pp are Finland, Germany, France, Austria and Holland, whereas lower real interest rates can be found in Spain, Italy and Portugal (see table I.2.2).

Graph I.2.2

INFLATION IN THE EURO AREA
(year-on-year rates)

Confidence intervals at: ■ 95% ■ 80% ■ 60% ■ 40% ■ 20%

Inflation mean (1995-2005) : 1,95% ——
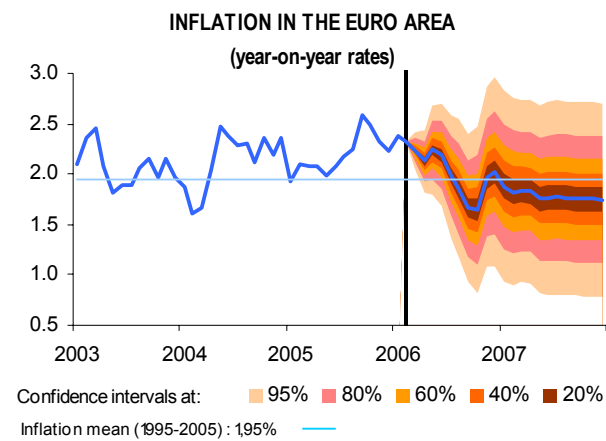
Source: Eurostat & IFL (UC3M)
Date: March 27, 2006

Table I.2.2

	INFLATIÓN EXPECTATIONS		ACTUAL REAL INTEREST RATES	
	Three Months	One year	Three Months	One year
Spain	3.16	3.05	-0.46	0.03
Portugal	2.96	2.84	-0.25	0.24
Luxembourg	2.79	2.56	-0.09	0.53
Ireland	2.78	2.71	-0.08	0.37
Belgium	2.77	2.59	-0.06	0.50
Greece	2.76	2.56	-0.05	0.52
Italy	2.61	2.92	0.09	0.16
Netherlands	1.69	1.83	1.02	1.25
Austria	1.68	1.74	1.02	1.35
France	1.65	1.70	1.06	1.38
Germany	1.35	1.28	1.36	1.80
Finland	1.00	1.01	1.70	2.07

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

Graph I.2.3

HICP ANNUAL AVERAGE OF GROWTH BY COUNTRIES IN 2006 WITH RESPECT TO THE EURO AREA INFLATION

Greater than euro area
Equal than euro area
Lower than euro area
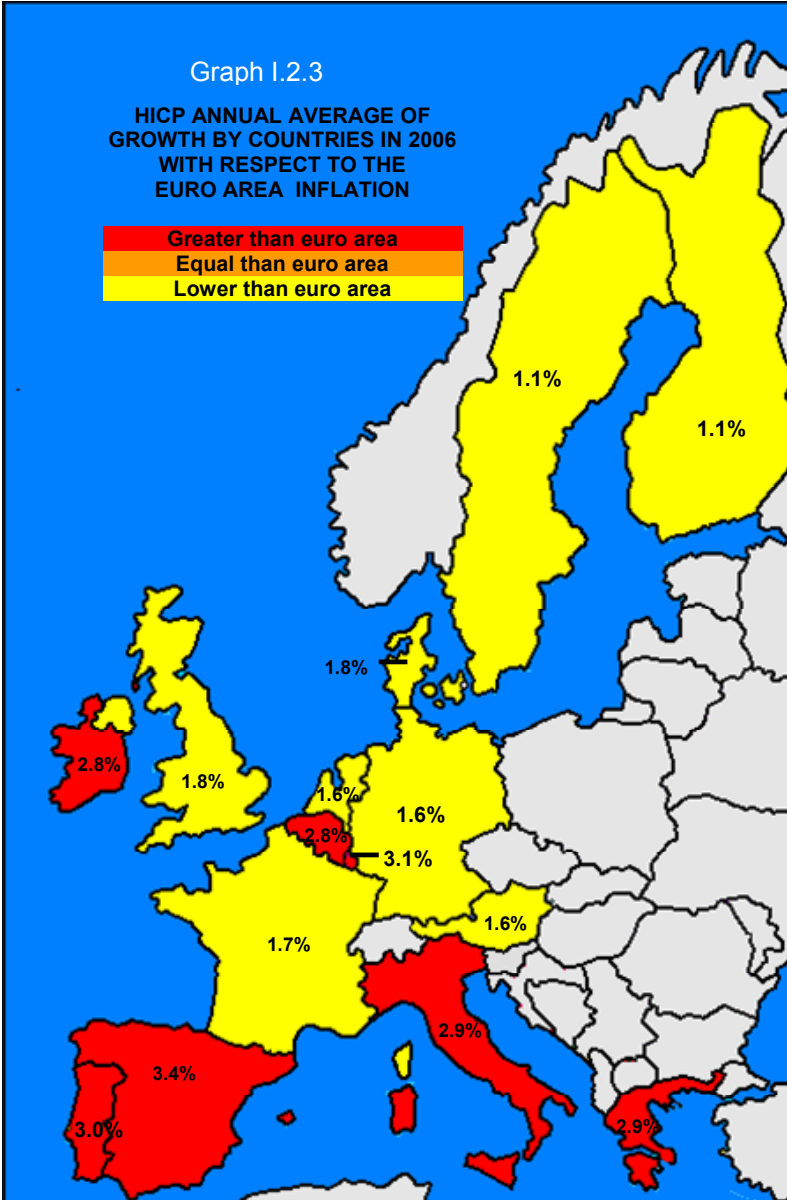
I.2.1. TABLES AND PLOTS

Tables:

- Euro area Harmonized Index of Consumer Price (HICP) desaggregation.
- 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 (observed and forecasts).
- 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.
- Box diagram of the euro area countries annual average rates of growth.
- Euro area , United Kingdom, France and Germany Inflation (year-on-year rate)

METHODOLOGY: ANALYSIS OF EURO AREA INFLATION BY SECTORS

BASIC COMPONENTS AGGREGATES	BASIC COMPONENTS
HICP TOTAL — **IPSEBENE** 83.365% 1 + 2 +3 +4 — **BENE** 42.582% 1 + 2 + 3 — CORE INFLATION (IT IS CALCULATED ON THE IPSEBENE INDEX) — **RESIDUAL INFLACION** 16.635% 5 + 6 — RESIDUAL INFLATION (IT IS CALCULATED ON THE RESIDUAL INDEX)	**(1) AE (a)** 9.335% HICP Processed Food **(2) TOBACCO** 2.505% HICP Tobacco **(3) MAN** 30.742% HICP Non Energy Industrial Goods **(4) SER** 40.783% HICP Services **(5) ANE** 7.436% HICP Non processed Food **(6) ENE** 9.199% HICP Energy

IPCA = 0.09335 **AE** + 0.02505 **TABACO** + 0.30742 **MAN** + 0.40783 **SER** + 0.07436 **ANE** + 0.09199 **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)
2006 weights

FORECAST ERRORS IN THE MONTHLY INFLATION RATE BY SECTORS IN THE EURO AREA IN FEBRUARY					
	Weights 2006	Observed Monthly Growth	Forecast	Confidence interval at 80%	Annual Growth Observed
HICP Processed Food	118.40	0.22	0.40	± 0.14	1.93
HICP Processed Food excluding tobacco	93.35	0.28	0.29	± 0.09	1.45
HICP Tobacco	25.05	0.00	0.80	± 0.13	3.73
HICP Non Energy Industrial Goods	307.42	0.00	0.40	± 0.10	0.27
HICP Non Energy Processed Goods	425.82	0.06	0.40	± 0.09	0.73
HICP Services	407.83	0.45	0.45	± 0.14	1.98
CORE INFLATION (1)	833.65	0.25	0.43	± 0.08	1.34
HICP Unprocessed Food	74.36	0.36	-0.05	± 0.46	1.68
HICP Energy (2)	91.99	0.41	0.57	± 0.60	12.53
RESIDUAL INFLATION (3)	166.35	0.40	0.30	± 0.39	7.48
GLOBAL INFLATION (4)	1000	0.29	0.40	± 0.09	2.32

(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: March 16, 2006

	Weights 2006 euro area	Weights 2006 EU	Observed Monthly Rate	Forecast	Confidence Intervals at 80%	Observed Annual Rate
FORECAST ERRORS IN THE MONTHLY INFLATION RATE IN THE EURO AREA AND EUROPEAN UNION IN FEBRUARY						
Spain	119.62		0.07	0.18	± 0.15	4.06
Germany	287.48		0.40	0.32	± 0.29	2.12
Austria	31.13		0.35	0.43	± 0.37	1.52
Belgium	33.60		2.29	1.82	± 0.32	2.85
Finland	15.83			0.48	± 0.37	
France	202.98		0.39	0.45	± 0.20	1.97
Greece	28.70		-1.57	-1.64	± 0.78	3.16
Netherlands	52.18		0.50	0.71	± 0.33	1.45
Ireland	13.40		1.20	0.94	± 0.30	2.73
Italy	190.51		-0.10	-0.46	± 0.23	2.24
Luxembourg	2.68		1.49	0.73	± 0.32	3.88
Portugal	21.89		0.20	-0.16	± 0.66	2.93
Denmark		11.73	0.70	0.39	± 0.27	2.13
United Kingdom		186.86	0.30	0.22	± 0.33	2.02
Sweden		18.74	0.36	0.28	± 0.50	1.06
(1) aggregation error -0.03%						
(2) aggregation error -0.08%						

Source: Eurostat & IFL(UC3M)
Date: March 16, 2006

HICP ANNUAL GROWTH BY SECTORS IN THE EURO AREA

		Harmonized Consumer Prices Index								TOTAL
		Core					Residual			
		Processed food excluding tobacco	Tobacco	Non energy industrial goods	Services	TOTAL	Non processed food	Energy	TOTAL	
	Weights 2006	9.3%	2.5%	30.7%	40.8%	83.4%	7.4%	9.2%	16.6%	100%
ANNUAL AVERAGE RATE	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	0.7	3.4	0.5	1.5	1.0	1.8	13.0	7.4	2.1
	2001	2.7	3.8	0.9	2.5	1.9	7.0	2.2	4.4	2.3
	2002	2.4	5.9	1.5	3.1	2.5	3.1	-0.6	1.2	2.2
	2003	2.1	8.4	0.8	2.5	2.0	2.1	3.0	2.6	2.1
	2004	1.3	12.2	0.8	2.6	2.1	0.6	4.5	2.6	2.1
	2005	0.5	7.8	0.3	2.3	1.5	0.8	10.1	5.7	2.2
	2006	**1.8**	**5.6**	**0.3**	**2.0**	**1.5**	**2.4**	**7.0**	**4.9**	**2.1**
	2007	**1.8**	**6.8**	**0.4**	**2.1**	**1.6**	**2.1**	**3.4**	**2.8**	**1.8**
ANNUAL RATES (growth of the month over the same month of the previous year) / **2005**	January	0.4	12.2	0.5	2.4	1.8	-0.6	6.2	2.9	1.9
	February	0.3	12.1	0.2	2.4	1.6	0.7	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	6.5	0.3	2.2	1.4	0.8	10.1	5.6	2.1
	May	0.3	5.9	0.3	2.5	1.6	1.0	6.8	4.1	2.0
	June	0.3	6.0	0.2	2.2	1.4	0.5	9.4	5.2	2.1
	July	0.2	6.6	0.0	2.3	1.3	0.3	11.7	6.3	2.2
	August	0.3	6.7	0.0	2.2	1.3	1.0	11.5	6.6	2.2
	September	0.5	9.1	0.2	2.2	1.4	1.0	15.0	8.5	2.6
	October	0.6	9.1	0.3	2.2	1.5	1.1	12.1	7.1	2.5
	November	0.9	9.0	0.4	2.1	1.5	1.5	10.0	6.1	2.3
	December	1.1	4.3	0.4	2.1	1.4	1.5	11.2	6.7	2.2
2006	January	1.3	4.0	0.2	2.0	1.3	2.0	13.6	8.2	2.4
	February	1.4	3.7	0.3	2.0	1.3	1.7	12.5	7.5	2.3
	March	**1.5**	**3.7**	**0.3**	**2.0**	**1.4**	**1.5**	**10.9**	**6.5**	**2.3**
	April	**1.6**	**3.2**	**0.3**	**2.0**	**1.4**	**2.4**	**8.6**	**5.8**	**2.1**
	May	**1.7**	**6.6**	**0.4**	**1.9**	**1.5**	**2.3**	**9.4**	**6.1**	**2.2**
	June	**1.8**	**6.4**	**0.4**	**2.0**	**1.5**	**2.5**	**7.8**	**5.4**	**2.2**
	July	**2.0**	**5.8**	**0.4**	**2.0**	**1.5**	**3.0**	**5.2**	**4.2**	**2.0**
	August	**2.0**	**5.7**	**0.4**	**2.0**	**1.5**	**2.7**	**4.1**	**3.5**	**1.9**
	September	**2.1**	**7.0**	**0.4**	**2.0**	**1.6**	**3.0**	**1.4**	**2.1**	**1.7**
	October	**2.1**	**6.9**	**0.4**	**2.0**	**1.6**	**3.1**	**1.4**	**2.1**	**1.6**
	November	**2.0**	**6.9**	**0.3**	**2.1**	**1.6**	**2.6**	**4.8**	**3.9**	**2.0**
	December	**1.9**	**6.9**	**0.3**	**2.1**	**1.6**	**1.9**	**5.9**	**4.1**	**2.0**
2007	**January**	**1.9**	**7.0**	**0.4**	**2.1**	**1.6**	**2.4**	**3.7**	**3.1**	**1.9**
	February	**1.8**	**7.0**	**0.4**	**2.1**	**1.6**	**2.1**	**3.6**	**2.9**	**1.8**
	March	**1.8**	**10.0**	**0.4**	**2.1**	**1.7**	**2.1**	**3.0**	**2.6**	**1.8**
	April	**1.8**	**10.0**	**0.3**	**2.1**	**1.7**	**2.1**	**3.1**	**2.6**	**1.8**
	May	**1.8**	**6.3**	**0.3**	**2.1**	**1.6**	**2.1**	**3.2**	**2.7**	**1.8**
	June	**1.8**	**6.3**	**0.3**	**2.1**	**1.6**	**2.1**	**3.4**	**2.8**	**1.8**
	July	**1.8**	**6.3**	**0.3**	**2.1**	**1.6**	**2.1**	**3.4**	**2.8**	**1.8**
	August	**1.8**	**6.3**	**0.3**	**2.1**	**1.6**	**2.1**	**3.4**	**2.8**	**1.8**
	September	**1.8**	**5.7**	**0.3**	**2.1**	**1.5**	**2.1**	**3.4**	**2.8**	**1.8**
	October	**1.8**	**5.7**	**0.3**	**2.1**	**1.5**	**2.1**	**3.4**	**2.8**	**1.8**
	November	**1.8**	**5.7**	**0.3**	**2.1**	**1.5**	**2.1**	**3.4**	**2.8**	**1.8**
	December	**1.8**	**5.7**	**0.3**	**2.1**	**1.5**	**2.1**	**3.4**	**2.8**	**1.7**

Source: EUROSTAT & IFL(UC3M)
Date: March 27, 2006

* The shaded area represents forecast digits

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 2006		9.3%	2.5%	30.7%	40.8%	83.4%	7.4%	9.2%	16.6%	100%
January	2004	0.2	1.7	-1.6	0.0	-0.5	1.1	0.9	1.0	-0.2
	2005	0.1	0.2	-1.8	-0.3	-0.8	0.4	0.3	0.4	-0.6
	2006	0.3	-0.1	-2.0	-0.4	-0.9	0.9	2.4	1.8	-0.4
	2007	0.2	0.0	-1.9	-0.3	-0.9	1.4	0.3	0.8	-0.6
February	2004	0.3	0.3	0.2	0.5	0.4	-0.6	-0.1	-0.3	0.2
	2005	0.1	0.2	-0.1	0.4	0.2	0.7	1.4	1.1	0.3
	2006	0.3	0.0	0.0	0.4	0.2	0.4	0.4	0.4	0.3
	2007	0.3	0.0	0.0	0.4	0.2	0.1	0.3	0.2	0.2
March	2004	0.0	5.3	1.1	0.1	0.6	0.3	1.3	0.8	0.7
	2005	0.1	0.0	1.3	0.2	0.6	0.9	2.3	1.7	0.7
	2006	0.1	0.0	1.3	0.2	0.6	0.8	0.8	0.8	0.6
	2007	0.1	2.8	1.3	0.2	0.7	0.7	0.3	0.5	0.6
April	2004	0.1	0.4	0.8	0.3	0.4	0.3	1.1	0.7	0.4
	2005	0.1	0.5	0.7	0.0	0.3	-0.2	2.3	1.1	0.4
	2006	0.2	0.0	0.8	0.0	0.3	0.6	0.2	0.4	0.3
	2007	0.2	0.0	0.8	0.0	0.3	0.6	0.3	0.4	0.3
May	2004	0.1	0.6	0.1	0.1	0.1	0.4	2.4	1.5	0.3
	2005	0.1	0.1	0.1	0.4	0.3	0.6	-0.6	-0.1	0.3
	2006	0.2	3.4	0.2	0.3	0.4	0.5	0.1	0.3	0.3
	2007	0.2	0.0	0.1	0.3	0.2	0.5	0.3	0.4	0.3
June	2004	0.0	0.1	-0.1	0.4	0.1	0.1	-0.7	-0.3	0.0
	2005	0.1	0.2	-0.2	0.1	0.0	-0.4	1.6	0.7	0.1
	2006	0.2	0.0	-0.2	0.2	0.0	-0.2	0.2	0.0	0.0
	2007	0.1	0.0	-0.2	0.2	0.0	-0.2	0.3	0.1	0.0
July	2004	0.1	0.0	-1.6	0.7	-0.2	-1.1	0.6	-0.2	-0.2
	2005	0.0	0.6	-1.8	0.7	-0.3	-1.3	2.7	0.9	-0.1
	2006	0.1	0.0	-1.8	0.7	-0.3	-0.9	0.2	-0.3	-0.3
	2007	0.1	0.0	-1.8	0.7	-0.3	-0.9	0.3	-0.2	-0.3
August	2004	0.0	0.0	0.1	0.3	0.2	-1.3	1.5	0.2	0.2
	2005	0.1	0.1	0.1	0.3	0.2	-0.6	1.3	0.5	0.2
	2006	0.1	0.0	0.1	0.3	0.2	-0.9	0.3	-0.2	0.1
	2007	0.1	0.0	0.1	0.3	0.2	-0.9	0.3	-0.2	0.1
September	2004	-0.2	0.0	1.1	-0.4	0.2	-0.1	-0.2	-0.1	0.2
	2005	0.0	2.2	1.3	-0.5	0.3	-0.1	3.0	1.6	0.5
	2006	0.1	3.4	1.2	-0.4	0.3	0.2	0.3	0.2	0.3
	2007	0.1	2.8	1.2	-0.4	0.3	0.2	0.3	0.2	0.3
October	2004	-0.1	0.0	0.6	-0.1	0.2	0.0	2.9	1.5	0.3
	2005	0.1	0.1	0.7	-0.1	0.2	0.1	0.2	0.2	0.3
	2006	0.1	0.0	0.7	-0.1	0.2	0.2	0.3	0.2	0.2
	2007	0.1	0.0	0.7	-0.1	0.2	0.2	0.3	0.2	0.2
November	2004	0.0	0.1	0.2	-0.1	0.0	0.1	-1.2	-0.6	-0.1
	2005	0.2	0.0	0.3	-0.1	0.1	0.4	-3.0	-1.5	-0.3
	2006	0.1	0.0	0.3	-0.1	0.1	-0.1	0.3	0.1	0.1
	2007	0.1	0.0	0.3	-0.1	0.1	-0.1	0.3	0.1	0.1
December	2004	0.0	4.6	-0.1	0.9	0.5	1.0	-1.8	-0.5	0.4
	2005	0.2	0.0	-0.1	0.9	0.4	1.1	-0.7	0.1	0.3
	2006	0.1	0.0	-0.1	0.9	0.4	0.4	0.3	0.3	0.4
	2007	0.1	0.0	-0.1	0.9	0.4	0.4	0.3	0.3	0.4

MONTHLY RATES (Growth of the month over the previous month)

Source: EUROSTAT & IFL(UC3M)
Date: March 27, 2006

* The shaded area represents forecast digits

HICP ANNUAL GROWTH BY COUNTRIES IN THE EURO AREA AND EU

		Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Greece	Portugal	Finland	Ireland	Luxembourg	United Kingdom	Sweden	Denmark
Weights 2005		28.7%	20.3%	19.1%	12.0%	5.2%	3.4%	3.1%	2.9%	2.2%	1.6%	1.3%	0.3%	18.7%	1.9%	1.2%
ANNUAL AVERAGE RATE	**1998**	0.6	0.7	2.0	1.8	1.8	0.9	0.8	4.5	2.2	1.3	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	2.2	2.2	1.3	2.5	1.0	2.2	0.5	2.1
	2000	1.4	1.8	2.6	3.5	2.3	2.7	2.0	2.9	2.8	2.9	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	1.4	1.9	2.6	3.6	3.9	1.6	1.7	3.9	3.7	2.0	4.7	2.1	1.3	1.9	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	1.9	1.9	2.2	3.4	1.5	2.5	2.1	3.5	2.1	0.8	2.2	3.8	2.0	0.8	1.7
	2006	**1.6**	**1.7**	**2.9**	**3.4**	**1.6**	**2.8**	**1.6**	**2.9**	**3.0**	**1.1**	**2.8**	**3.1**	**1.8**	**1.1**	**1.8**
	2007	**1.3**	**1.7**	**2.9**	**3.1**	**1.8**	**2.6**	**1.7**	**2.6**	**2.8**	**1.0**	**2.7**	**2.6**	**1.7**	**1.2**	**1.9**
ANNUAL RATES (growth of the month over the same month of the previous year) / **2005**	January	1.6	1.6	2.0	3.1	1.2	2.0	2.4	4.2	2.0	-0.2	2.1	2.9	1.6	0.5	0.8
	February	1.9	1.9	2.0	3.3	1.5	2.3	2.3	3.1	2.1	0.0	2.1	3.2	1.6	1.2	1.0
	March	1.6	2.1	2.2	3.4	1.5	2.8	2.4	2.9	2.3	0.9	1.9	3.5	2.0	0.5	1.3
	April	1.4	2.0	2.1	3.5	1.3	2.4	2.3	3.3	2.0	1.2	2.2	3.7	1.9	0.4	1.7
	May	1.6	1.7	2.3	3.0	1.0	2.3	2.0	3.3	1.8	0.6	2.1	3.7	1.9	0.2	1.2
	June	1.8	1.8	2.1	3.2	1.5	2.7	2.0	3.2	0.6	1.0	1.9	3.2	1.9	0.8	1.7
	July	1.8	1.8	2.1	3.3	1.5	2.7	2.1	3.9	1.9	0.9	2.2	4.0	2.4	0.7	1.8
	August	1.9	2.0	2.1	3.3	1.6	2.9	1.9	3.7	2.5	1.0	2.1	4.3	2.3	1.1	2.4
	September	2.5	2.4	2.2	3.8	1.7	3.0	2.6	3.8	2.7	1.1	2.7	4.7	2.4	1.1	2.3
	October	2.3	2.0	2.6	3.5	1.5	2.2	2.0	3.7	2.6	0.8	2.6	5.0	2.3	0.9	1.9
	November	2.2	1.8	2.4	3.4	1.6	2.3	1.7	3.4	2.5	1.0	2.2	3.6	2.1	1.2	1.8
	December	2.1	1.8	2.1	3.7	2.0	2.8	1.6	3.5	2.5	1.1	1.9	3.4	1.9	1.3	2.2
2006	January	2.1	2.3	2.2	4.2	1.8	2.8	1.5	3.0	2.6	1.7	2.5	4.1	1.9	1.1	2.0
	February	2.1	2.0	2.2	4.1	1.4	2.8	1.5	3.2	2.9	**1.2**	2.7	3.9	2.0	1.1	2.1
	March	**2.0**	**1.7**	**2.2**	**3.9**	**1.5**	**2.8**	**1.6**	**2.9**	**2.9**	**1.0**	**2.9**	**3.8**	**1.9**	**1.2**	**2.0**
	April	**2.0**	**1.8**	**2.2**	**3.5**	**1.7**	**2.8**	**1.6**	**2.8**	**3.0**	**0.9**	**2.9**	**3.3**	**2.0**	**1.1**	**1.8**
	May	**1.8**	**1.9**	**2.2**	**3.6**	**1.7**	**2.9**	**1.7**	**2.8**	**3.2**	**1.2**	**2.9**	**3.1**	**2.0**	**1.2**	**2.1**
	June	**1.6**	**1.8**	**2.4**	**3.4**	**1.6**	**2.8**	**1.6**	**2.8**	**3.5**	**1.0**	**2.9**	**3.2**	**1.9**	**1.1**	**1.9**
	July	**1.5**	**1.7**	**2.4**	**3.3**	**1.7**	**2.8**	**1.6**	**3.0**	**3.1**	**1.1**	**2.8**	**3.3**	**1.7**	**1.2**	**1.8**
	August	**1.3**	**1.5**	**2.4**	**3.2**	**1.6**	**2.6**	**1.7**	**3.0**	**2.9**	**1.0**	**2.8**	**2.6**	**1.7**	**1.1**	**1.6**
	September	**1.0**	**1.3**	**2.4**	**2.9**	**1.6**	**2.7**	**1.5**	**2.8**	**2.8**	**0.8**	**2.6**	**2.4**	**1.7**	**0.9**	**1.5**
	October	**1.0**	**1.3**	**2.1**	**2.9**	**1.6**	**2.8**	**1.6**	**2.7**	**2.8**	**0.9**	**2.7**	**2.0**	**1.7**	**0.9**	**1.6**
	November	**1.4**	**1.7**	**2.4**	**3.2**	**1.6**	**2.9**	**1.7**	**2.7**	**2.9**	**1.0**	**2.8**	**2.6**	**1.8**	**1.0**	**1.9**
	December	**1.5**	**1.7**	**2.6**	**3.3**	**1.5**	**2.8**	**1.7**	**2.7**	**2.9**	**1.0**	**3.0**	**3.1**	**1.8**	**1.0**	**1.7**
2007	January	**1.3**	**1.7**	**3.3**	**3.0**	**1.7**	**2.9**	**1.8**	**2.7**	**3.1**	**0.9**	**2.8**	**3.6**	**1.8**	**1.3**	**2.0**
	February	**1.3**	**1.7**	**3.1**	**3.1**	**1.8**	**2.7**	**1.8**	**2.9**	**2.9**	**1.0**	**2.7**	**2.6**	**1.8**	**1.2**	**1.9**
	March	**1.3**	**1.7**	**3.0**	**3.1**	**1.8**	**2.6**	**1.7**	**2.6**	**2.8**	**1.0**	**2.7**	**2.6**	**1.7**	**1.2**	**1.8**
	April	**1.2**	**1.6**	**2.9**	**3.1**	**1.8**	**2.6**	**1.7**	**2.5**	**2.8**	**1.0**	**2.7**	**2.5**	**1.7**	**1.2**	**1.9**
	May	**1.3**	**1.7**	**2.9**	**3.1**	**1.8**	**2.5**	**1.7**	**2.5**	**2.8**	**1.0**	**2.7**	**2.4**	**1.7**	**1.2**	**1.9**
	June	**1.3**	**1.7**	**2.9**	**3.1**	**1.8**	**2.5**	**1.7**	**2.5**	**2.8**	**1.0**	**2.7**	**2.6**	**1.7**	**1.2**	**1.9**
	July	**1.3**	**1.7**	**2.8**	**3.1**	**1.8**	**2.5**	**1.7**	**2.6**	**2.8**	**1.1**	**2.7**	**2.7**	**1.7**	**1.3**	**1.9**
	August	**1.3**	**1.7**	**2.8**	**3.1**	**1.8**	**2.5**	**1.7**	**2.7**	**2.8**	**1.0**	**2.7**	**2.3**	**1.7**	**1.3**	**1.9**
	September	**1.3**	**1.7**	**2.8**	**3.0**	**1.8**	**2.5**	**1.7**	**2.5**	**2.8**	**1.0**	**2.7**	**2.1**	**1.7**	**1.2**	**1.9**
	October	**1.3**	**1.7**	**2.8**	**3.0**	**1.8**	**2.5**	**1.7**	**2.4**	**2.8**	**1.0**	**2.7**	**2.0**	**1.7**	**1.1**	**1.9**
	November	**1.3**	**1.7**	**2.8**	**3.0**	**1.8**	**2.5**	**1.7**	**2.4**	**2.8**	**1.1**	**2.7**	**2.5**	**1.7**	**1.2**	**1.9**
	December	**1.3**	**1.7**	**2.8**	**3.0**	**1.8**	**2.5**	**1.7**	**2.4**	**2.8**	**1.1**	**2.7**	**2.7**	**1.7**	**1.2**	**1.9**

Note: European Monetary Union — Euro Area (Germany, France, Italy, Spain, Netherlands, Belgium, Austria, Greece, Portugal, Finland, Ireland, Luxembourg)

Source: EUROSTAT & IFL(UC3M)
Date: March 27, 2006

* The shaded area represents forecast digits

HICP MONTHLY GROWTH BY COUNTRIES IN THE EURO AREA AND EU

			European Monetary Union												United Kingdom	Sweden	Denmark
			Euro Area														
			Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Greece	Portugal	Finland	Ireland	Luxembourg	United Kingdom	Sweden	Denmark
Weights 2005			28.7%	20.3%	19.1%	12.0%	5.2%	3.4%	3.1%	2.9%	2.2%	1.6%	1.3%	0.3%	18.7%	1.9%	1.2%
January	2004		0.0	0.1	-0.6	-0.8	0.5	-1.3	0.1	-0.8	0.0	-0.3	-0.7	-0.3	-0.5	-0.2	-0.1
	2005		-0.6	-0.6	-1.0	-1.0	0.5	-1.3	0.0	0.2	-0.6	-0.5	-1.0	-1.0	-0.5	-0.5	-0.2
	2006		-0.6	-0.1	-0.9	-0.5	0.2	-1.3	-0.1	-0.2	-0.4	0.1	-0.5	-0.4	-0.5	-0.7	-0.4
	2007		-0.8	-0.1	-0.2	-0.7	0.4	-1.2	0.0	-0.2	-0.3	0.0	-0.6	0.2	-0.5	-0.4	-0.1
February	2004		0.2	0.4	-0.1	0.1	0.6	1.9	0.4	-0.6	-0.2	0.4	0.9	1.3	0.2	-0.2	0.4
	2005		0.4	0.7	-0.1	0.2	0.8	2.2	0.4	-1.7	-0.1	0.6	0.9	1.7	0.2	0.4	0.6
	2006		0.4	0.4	-0.1	0.1	0.5	2.3	0.3	-1.6	0.2	0.2	1.2	1.5	0.3	0.4	0.7
	2007		0.4	0.4	-0.3	0.1	0.6	2.1	0.4	-1.4	0.0	0.3	1.1	0.5	0.3	0.3	0.6
March	2004		0.5	0.4	1.0	0.7	0.8	0.1	0.4	2.8	0.2	-0.4	0.4	0.1	0.2	0.9	0.5
	2005		0.3	0.7	1.2	0.9	0.8	0.6	0.4	2.6	0.4	0.4	0.2	0.3	0.5	0.3	0.8
	2006		0.2	0.5	1.2	0.7	0.9	0.6	0.5	2.3	0.4	0.2	0.4	0.2	0.4	0.4	0.7
	2007		0.2	0.4	1.1	0.7	0.9	0.4	0.5	2.1	0.4	0.2	0.4	0.2	0.4	0.3	0.6
April	2004		0.2	0.3	0.8	1.4	0.3	0.5	-0.1	0.4	1.0	0.0	0.3	0.5	0.4	0.3	0.1
	2005		0.0	0.2	0.8	1.4	0.2	0.2	-0.2	0.8	0.7	0.3	0.6	0.7	0.4	0.2	0.5
	2006		-0.1	0.2	0.8	1.1	0.3	0.2	-0.1	0.7	0.8	0.2	0.5	0.3	0.4	0.2	0.2
	2007		-0.1	0.2	0.7	1.1	0.3	0.2	-0.1	0.6	0.8	0.2	0.5	0.2	0.4	0.2	0.3
May	2004		0.2	0.4	0.1	0.6	0.2	0.3	0.4	0.4	0.8	0.2	0.2	0.5	0.3	0.4	0.4
	2005		0.4	0.0	0.3	0.2	-0.1	0.2	0.0	0.4	0.6	-0.3	0.2	0.5	0.3	0.1	-0.1
	2006		0.3	0.2	0.3	0.2	0.0	0.2	0.1	0.4	0.7	-0.1	0.2	0.2	0.3	0.1	0.2
	2007		0.3	0.2	0.3	0.2	0.0	0.2	0.1	0.3	0.7	0.0	0.2	0.2	0.3	0.1	0.2
June	2004		0.0	0.1	0.2	0.2	-0.7	-0.1	0.2	-0.2	1.2	-0.1	0.5	0.4	0.0	-0.5	-0.3
	2005		0.2	0.2	0.0	0.3	-0.3	0.3	0.3	-0.3	0.1	0.3	0.3	-0.1	0.0	0.1	0.2
	2006		0.0	0.1	0.2	0.1	-0.4	0.3	0.2	-0.3	0.4	0.1	0.3	0.0	0.0	0.0	0.1
	2007		0.0	0.1	0.2	0.1	-0.4	0.2	0.2	-0.2	0.4	0.1	0.3	0.2	0.0	0.0	0.1
July	2004		0.4	-0.2	-0.2	-0.7	-0.3	-1.0	-0.3	-2.0	-0.9	-0.3	-0.4	-0.8	-0.3	-0.2	-0.3
	2005		0.4	-0.2	-0.2	-0.6	-0.3	-1.0	-0.3	-1.3	0.4	-0.3	-0.1	-0.1	0.1	-0.3	-0.2
	2006		0.2	-0.3	-0.2	-0.7	-0.3	-1.0	-0.3	-1.2	0.0	-0.2	-0.2	0.1	-0.2	-0.1	-0.4
	2007		0.2	-0.2	-0.2	-0.7	-0.3	-1.0	-0.3	-1.0	0.0	-0.2	-0.2	0.2	-0.2	-0.1	-0.3
August	2004		0.1	0.2	-0.2	0.5	0.2	1.7	0.4	-0.3	-0.4	0.3	0.6	1.1	0.3	-0.1	-0.4
	2005		0.2	0.4	-0.2	0.5	0.3	1.8	0.2	-0.5	0.2	0.4	0.5	1.4	0.3	0.3	0.1
	2006		0.0	0.2	-0.2	0.3	0.3	1.6	0.2	-0.5	0.0	0.2	0.5	0.6	0.3	0.1	0.0
	2007		0.0	0.2	-0.2	0.3	0.3	1.6	0.2	-0.4	0.0	0.2	0.5	0.2	0.3	0.1	0.0
September	2004		-0.3	0.1	0.5	0.2	0.8	-0.1	-0.1	2.2	-0.1	0.4	0.1	0.2	0.1	0.8	0.8
	2005		0.3	0.4	0.6	0.6	0.9	0.0	0.6	2.3	0.2	0.6	0.7	0.6	0.2	0.8	0.8
	2006		0.0	0.2	0.6	0.3	0.9	0.1	0.5	2.1	0.1	0.4	0.5	0.4	0.2	0.6	0.7
	2007		0.0	0.2	0.6	0.3	0.9	0.1	0.5	1.9	0.1	0.4	0.5	0.2	0.2	0.5	0.7
October	2004		0.2	0.4	0.3	1.0	0.2	0.5	0.5	0.7	0.5	0.4	0.1	0.5	0.2	0.4	0.4
	2005		0.0	0.0	0.7	0.8	0.0	-0.2	0.0	0.6	0.4	0.0	0.0	0.8	0.1	0.3	0.0
	2006		0.0	0.1	0.4	0.8	0.0	0.0	0.1	0.5	0.4	0.1	0.0	0.3	0.1	0.2	0.1
	2007		0.0	0.1	0.4	0.8	0.0	0.0	0.1	0.5	0.4	0.1	0.0	0.2	0.1	0.2	0.1
November	2004		-0.4	0.0	0.2	0.2	-0.4	-0.2	0.2	0.1	0.3	-0.5	0.2	0.3	0.2	-0.7	-0.3
	2005		-0.5	-0.3	0.0	0.2	-0.3	-0.1	-0.2	-0.2	0.2	-0.3	-0.2	-1.0	0.0	-0.3	-0.4
	2006		-0.1	0.1	0.3	0.4	-0.3	0.0	-0.1	-0.2	0.3	-0.2	-0.1	-0.4	0.0	-0.3	-0.1
	2007		-0.1	0.1	0.3	0.4	-0.3	0.0	-0.1	-0.1	0.3	-0.2	-0.1	0.2	0.0	-0.2	-0.1
December	2004		1.1	0.2	0.3	-0.1	-0.8	-0.3	0.4	0.5	0.1	0.0	0.1	-0.3	0.5	0.0	-0.3
	2005		1.0	0.2	0.0	0.2	-0.4	0.1	0.3	0.6	0.1	0.1	-0.2	-0.4	0.3	0.1	0.1
	2006		1.2	0.2	0.2	0.3	-0.5	0.0	0.4	0.5	0.1	0.1	0.0	0.0	0.3	0.1	-0.1
	2007		1.2	0.2	0.2	0.3	-0.5	0.0	0.4	0.5	0.1	0.1	0.0	0.2	0.3	0.1	-0.1

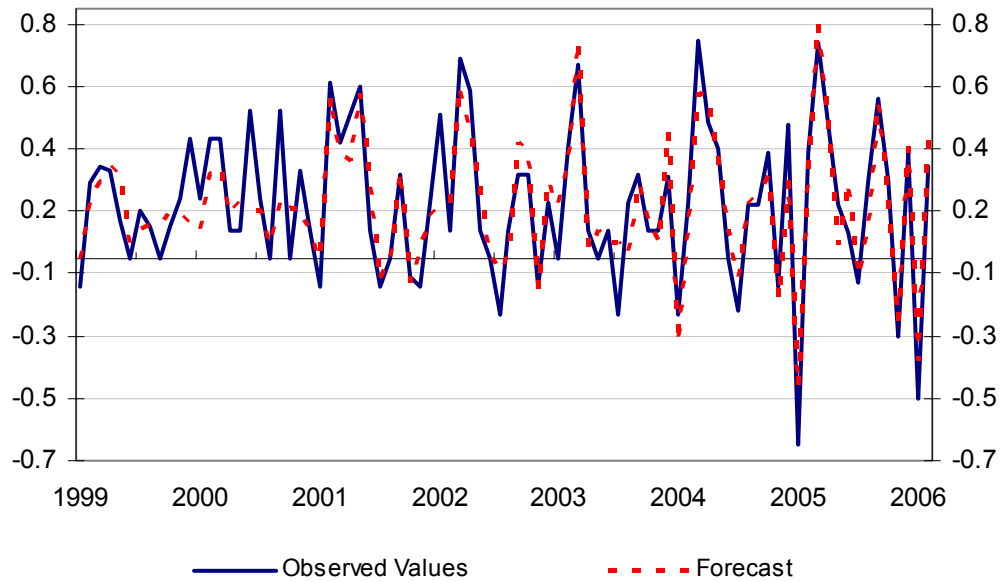**MONTHLY RATES** (Growth of the month over the previous month)

Source: EUROSTAT & IFL(UC3M)
Date: March 27, 2006

* The shaded area represents forecast digits

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

Observed Values   - - - Forecast

Source : Eurostat & IFL(UC3M)
Date: March 16, 2006

* the roof of mean square error for one month ahead is 0.09
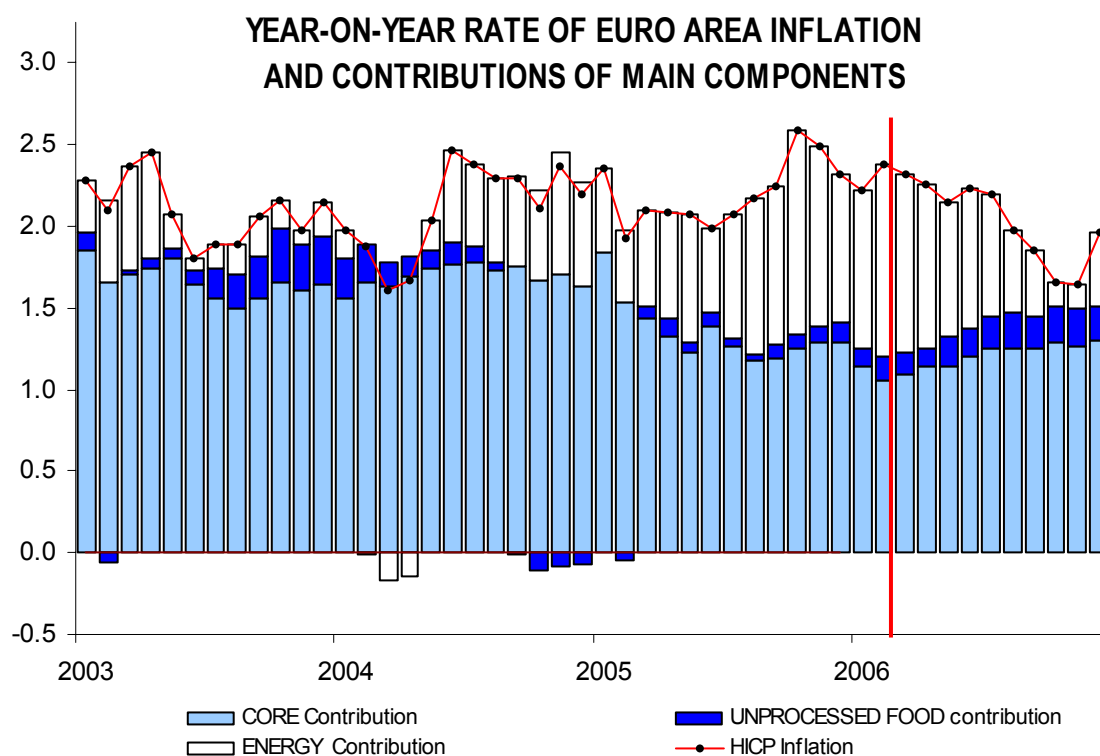
INFLATION IN THE EURO AREA
(year-on-year rates)

Observed Value   —— Inflation mean   + April-05 (Last Obs.)

November-05 (Last Obs.)   January 2006 (Last Obs.)

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

INFLATION IN THE EURO AREA
(year-on-year rates)

Confidence intervals at:

95% 80% 60% 40% 20%

Inflation mean (1995-2005) : 1.95%

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

YEAR-ON-YEAR RATE OF EURO AREA INFLATION
AND CONTRIBUTIONS OF MAIN COMPONENTS

CORE Contribution   UNPROCESSED FOOD contribution
ENERGY Contribution   HICP Inflation

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

BOX DIAGRAM OF EURO AREA COUNTRIES DISPERSION ON INFLATION

Legend:
- Italy
- France
- Germany
- Belgique
- Netherlands
- Portugal
- Austria
- Luxembourg
- Spain
- Weight Average
- Finland
- Ireland
- Greece

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

YEAR-ON YEAR HICP INFLATION RATES

Forecasts

Legend: France — Germany — Euro area — United kingdom

Source: Eurostat & IFL(UC3M)
Date: March 27, 2006

I.3 MACROECONOMIC TABLE OF EURO-AREA

| | Annual Averages Growths | | | | |
| | | | | Forecasts BIMA (*) | |
	2003	2004	2005	2006	2007
GDP mp	**0.7**	**1.8**	**1.4**	**2.0**	**2.1**
Demand					
Private Final Consumption	1.1	1.4	1.4	1.8	2.0
Public Final Consumption	1.7	1.1	1.4	1.8	1.6
Gross Capital Formation	1.7	3.5	2.7	3.4	3.3
Contribution Domestic Demand	1.3	1.7	1.6	2.1	2.1
Exports of Goods and Services	1.3	5.9	3.9	5.8	5.9
Imports of Goods and Services	2.9	6.2	4.7	6.2	6.2
Contribution Foreign Demand	-0.5	0.1	-0.2	-0.1	0.0
Supply					
Gross Value Added Total (market prices)	0.7	1.8	1.4	2.0	2.1
Gross Value Added Total (basic prices)	0.7	1.9	1.5	2.1	2.2
Gross Value Added Agriculture	-4.0	7.4	-3.4	-0.5	1.0
Gross Value Added Industry	0.2	1.6	1.3	2.4	2.5
Gross Value Added Construction	0.9	1.8	1.7	1.8	1.8
Gross Value Added Trade Services	0.6	1.9	2.3	2.4	2.5
Gross Value Added Financial Services	1.2	1.7	1.9	2.4	2.6
Gross Value Added Public Services	1.1	1.7	0.9	1.6	1.4
Prices					
CPI harmonized, annual average	2.1	2.1	2.2	2.1	1.8
CPI harmonized, dec./dec.	2.0	2.4	2.2	2.0	1.7
Employment					
Unemployment rate	8.7	8.9	8.6	8.2	8.0
Others Economic Indicators					
Production Index of Industry (excluding construction)	0.3	2.0	1.2	2.5	1.9

Source: EUROSTAT & UC3M
Date: March 27, 2006.

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

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

I.4. INDUSTRIAL PRODUCTION

Euro Area

The annual growth rate for Industrial Production in the Euro Area in January has behaved over it was expected (2.5% instead of 1.7%). This innovation has been the result of upwards innovations in Capital, Durable and Intermediate Goods and opposite innovations in the rest of the components.
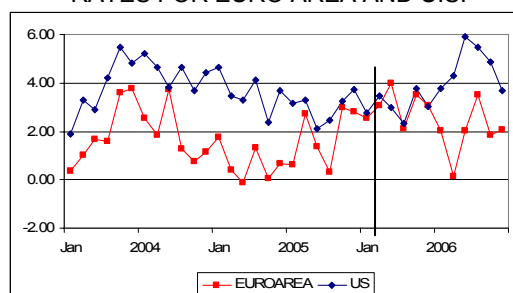
The expectations for 2006 have been also slightly upwards revised from 1.8% to 2.5% and in 2007 from 1.73% to 1.85%. The expectations of growth for the different sectors are shown in table I.4.1.

Table I.4.1

ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EMU[***]						
	2002	2003	2004	2005	**2006**	**2007**
Capital	-1.7	-0.2	3.0	2.5	**3.0**	**2.9**
Durable	-5.5	-4.6	-0.1	-0.9	**1.3**	**-0.1**
Intermediate	-0.1	0.4	1.8	0.8	**3.8**	**1.9**
Non Durable	0.7	0.2	0.6	0.8	**0.6**	**0.8**
Energy	1.1	2.9	2.6	1.1	**1.8**	**1.7**
Total EMU	-0.5	0.3	2.0	1.2	**2.5**	**1.9**

Source: Eurostat & IFL(UC3M)
Date: March, 17th, 2006

[***]Bold figures are forecasts. Working day adjusted data.

United States

In February 2006 the annual rate in the Production Industrial Index in the United States has been 3.48%, over the expected value of 2.17%. Also, upwards innovations have been observed in all the components analyzed in this publication: Durable and NonDurable Consumer Goods, Material and Equipment.

The average growth rates for IP forecasted for 2006 and 2007 settle in 3.87% and 4.13% respectively, very similar to the 3.8% and 4.1% previously expected for these years. Table I.4.2. shows the updated forecasts for the different sectors.

Table I.4.2.

ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN US[1]						
	2002	2003	2004	**2005**	**2006**	**2007**
Durable	6.3	4.0	2.8	2.2	**3.6**	**4.0**
Non Durable	0.7	-0.2	1.8	2.3	**2.0**	**1.8**
Equipment & Supplies	0.2	1.2	4.6	4.8	**5.4**	**4.1**
Materiales	1.0	0.4	4.2	2.0	**4.2**	**5.0**
TOTAL US	0.1	0.6	4.1	3.3	**3.9**	**4.1**

Source: Federal Reserve & IFL(UC3M).
Date: March, 17th, 2006

[1]Bold figures are forecasts.

Graph I.4.1 INDUSTRIAL PRODUCTION OBSERVED AND FORECASTED ANNUAL RATES FOR EURO AREA AND U.S.

Source: Eurostat, BLS &IFL
Date: March, 17th, 2006

Graph I.4.1 shows the annual rates observed until December and January for Euro zone and U.S. respectively, as well as forecasts for 2006. As in the previous reports, it is expected that, in despite of the reduction in the differential expected in the first half of the year 2006, this will increase afterwards in the second half.

II. UNITED STATES

II.1. INFLATION
II.1.1. MAIN POINTS AND NEW RESULTS

In February, prices in the US increased by 0.20% over the previous month, somewhat less than expected (0.29%)[1]. The annual rate fell considerably from 3.99% to 3.60%. On the other hand, the core index performed exactly as forecast, with a monthly increase of 0.49% and with its annual rate falling slightly from 2.12% to 2.06%.
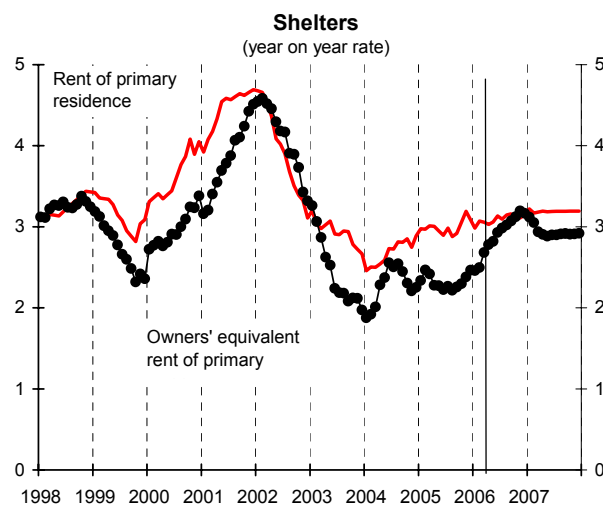
Graph II.1.1.1.

DIFFERENT ANNUAL INFLATION RATES IN THE US

Total inflation

Core inflation
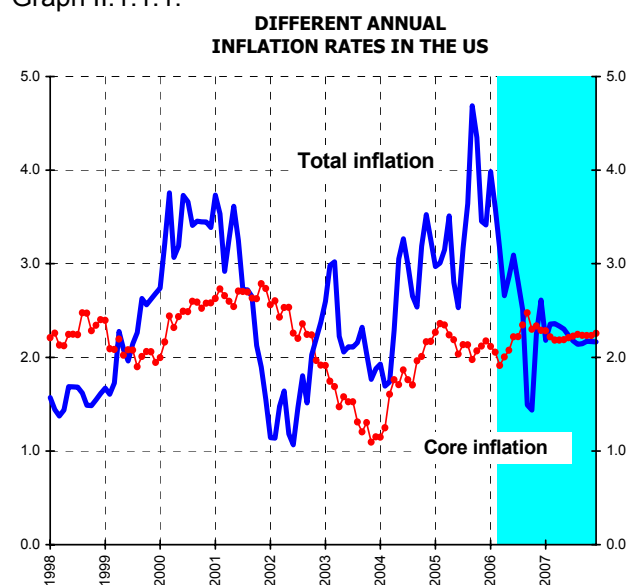
Source: BLS & IFL (UC3M)
Date: March 16, 2006

There are two aspects of the February CPI figures worth underlining. Firstly, the fall in the price of has which, as a result of the hurricanes, had registered an accumulated increase of 30% from August to January. However, as we saw in last month's report, in January there were heavy falls in the markets of origin (Henry Hub) which we expected to be transferred to the end consumer in February. And this has been the case. However, the fall was much greater than forecast (8.56% versus 5.41%), in spite of which the level remains very high in relation to raw material prices, so new significant falls are expected in the coming months.

Secondly, core inflation increased exactly as forecast, as a result of a downwards innovation in non-durable goods compensated by an upwards innovation in both real and estimated house rental prices. The downwards innovation in non-durable goods is due to apparel prices, which have been tending to fall since the 90's, a trend that has surprisingly not been affected by movements in the U.S. dollar. As for rental prices, both real and estimated, the upwards innovation in February was equal to the downwards innovation registered in January, so we shall have to wait a few months to see how this trend evolves. The forecast performance of these items is very important, in view of their weighting in the general CPI (25%) and the core index (33%). We expect estimated residence prices to grow from the current rate of 2.5% to 3.2% by the end of the year (see Grap II. 1.1.2). Although core inflation performed exactly as expected, the upwards innovation in rental prices has a more persistent effect than the innovation in apparel, which is highly volatile. So the profile forecast for core CPI inflation is an increase to 2.5% in September, subsequently falling to 2.2% (see Graph II.1.1.3.).

Graph II.1.1.2.

Shelters
(year on year rate)

Rent of primary residence

Owners' equivalent rent of primary
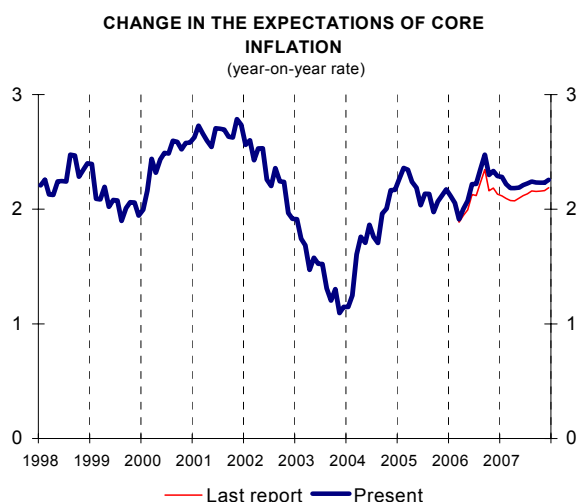
Source: BLS & IFL (UC3M)
Date: March 16, 2006

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[1] Un-seasonalised rates are used for prices in our reports.

With regards to import prices, the February figures were mixed. Non-durable consumer goods performed somewhat better than forecast, whereas durable goods performed somewhat worse.

On the other hand, the unemployment rate in February grew from 4.7% to 4.8%, in spite of heavy job creation. Along the same lines, the rate of use of productive capacity has reached its highest since 2000. In spite of this, and lacking more information, as we indicated in last month's report, no demand pressure is expected in 2006, and the second round effects are negligible. We estimate that the growth rate of the core PCE will tend towards 1.9%, similar to the target marked by the FED.

Graph II.1.1.3.

CHANGE IN THE EXPECTATIONS OF CORE INFLATION
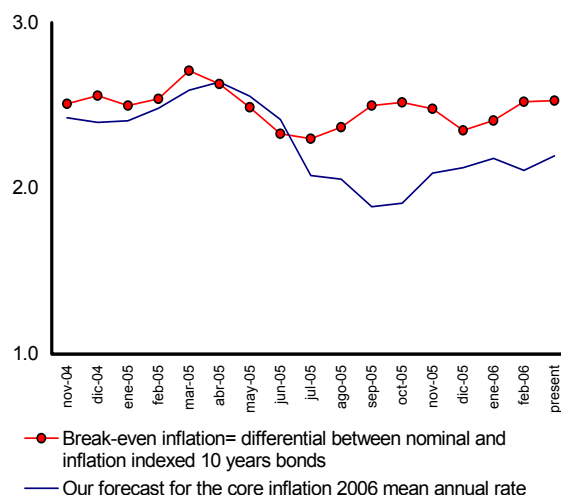(year-on-year rate)

Last report — Present

Source: BLS & IFL (UC3M)
Date: March 16, 2006

The observed performance of energy prices at origin, and the future prices on the markets, considerably condition our forecasts. Compared with last month's report, we now forecast a more negative evolution of energy prices. Based on these variables and considering the stable effective exchange rate, we forecast that the general inflation rate will be significantly moderated during the year, with a minimum of 1.4% in October, subsequently increasing to a 2.0-2.3% range (see Graph II.1.1.1).

For 2006 and 2007, we are forecasting mean annual total inflation rates of 2.7% and 2.2%, respectively, representing an increase of two tenths from last month's report for 2006 (see Table II.1.1.1).

Graph II.1.1.4.
EVOLUTION OF OUR INFLATION AND FIXED INCOME MARKET FORECASTS

Break-even inflation= differential between nominal and inflation indexed 10 years bonds
Our forecast for the core inflation 2006 mean annual rate
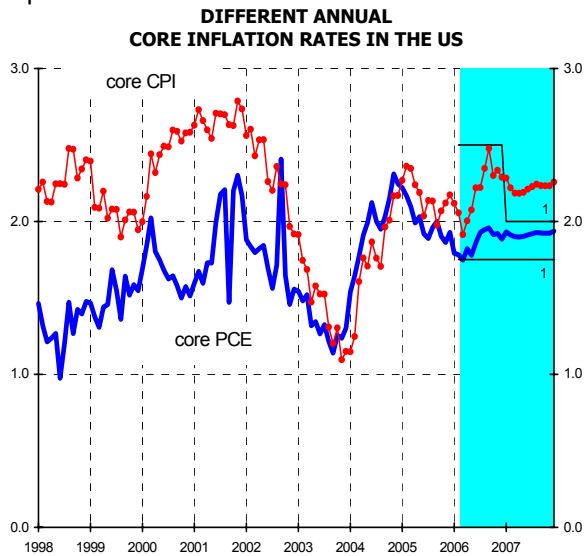
Source: BLS & IFL (UC3M)
Date: March 16, 2006

For March, we forecast that the total annual inflation rate will fall from the current 3.60% to 3.15%, whereas a fall from 2.6% to 1.91% is forecast for core inflation.

Inflation break-even, the term used to describe the differential returns between the nominal bond and the bond indexed to inflation for a certain period (10 years in our case), which would be approximately equivalent to the market inflation forecast for that period, has increased slightly from the monthly mean in February, and stabilised at values of around 2.5%. These figures, however, are hiding an upwards innovation in the last week of February and the first week in March, to 2.6%, subsequently falling to a stable value of 2.52%. Compared with this stability in the market's expectations, our forecast for the annual mean core index of the general CPI for 2006 have declined slightly from last month's report (see Graph change in the expectations of total inflation). We have two remarks to make in this regards. On the one hand, although the February core inflation figure could be considered to be positive in aggregate terms, the negative innovations occurred in the items with more inertia and the positive ones affected more volatile items, thus worsening the forecast. On the other, the market's inflation expectations, measured by the differential in 10-year returns, refer to the total CPI for the next 10 years so, in periods with rising energy prices there could be a discrepancy between changes in market expectations and our forecasts, as indeed was the case in the second half of last year.

Graph II.1.1.5.

**DIFFERENT ANNUAL
CORE INFLATION RATES IN THE US**

Source: BLS & IFL (UC3M)
Date: March 16, 2006

Table II.1.1.1.

**DIFFERENT ANNUAL
INFLATION RATE MEASURES IN THE US**

		CPI		PCE[1]	MB-PCE[2]
		Total	Core	Core	Core
		% annual	% annual	% annual	% annual
2005	June	2.5	2.0	1.9	1.6
	July	3.2	2.1	1.9	1.6
	August	3.6	2.1	2.0	1.7
	September	4.7	2.0	2.0	1.7
	October	4.3	2.1	1.9	1.6
	November	3.5	2.1	1.9	1.6
	December	3.4	2.2	1.9	1.7
2006	January	4.0	2.1	1.8	1.5
	February	3.6	2.1	1.8	1.5
	March	3.2	1.9	1.7	1.4
	April	2.7	2.0	1.8	1.5
	May	2.9	2.1	1.8	1.4
average annual					
2003		2.3	1.5	1.3	1.2
2004		2.7	1.8	2.0	1.5
2005		3.4	2.2	2.0	1.7
2006		2.7	2.2	1.9	1.5
2007		2.2	2.2	1.9	1.6

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

Source: BLS & IFL (UC3M)
Date: March 16, 2006

Tables:

- Annual Forecast for the US inflation.
- Forecast errors by sectors.
- Consumer Price Index (CPI) Annual Growth Rates by sectors.
- Consumer Price Index (CPI) 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.

OBSERVED VALUES AND FORECAST ON CPI IN US
February 2006

CONSUMER PRICES INDEX (CPI)	Relative importance Dec. 2005	Annual Growth (T^1_{12}) observed	Monthly Growth (T^1_1) observed (a)	Monthly Growth (T^1_1) forecasts (b)	Confidence Intervals at 80% level (+ -)
Food (1)	13.9	2.75	-0.05	**0.01**	0.37
Energy (2)	8.7	20.10	-1.64	**-0.98**	1.11
Residual Inflation (3=2+1)	**22.6**	**8.99**	**-0.68**	**-0.38**	**0.42**
Non-food and non-energy goods (4)	**22.3**	**0.00**	**0.29**	**0.50**	**0.29**
Less tobacco	21.6	-0.15	0.29	**0.47**	0.23
-Durable goods	11.6	-0.60	0.00	**-0.01**	0.32
-Nondurable goods	20.5	0.67	0.65	**1.06**	0.40
-Non-durable goods less tabacco	19.8	0.40	0.68	**0.99**	0.31
Non-energy services (5)	**55.1**	**2.90**	**0.58**	**0.49**	**0.15**
-Services less owner's equivalent rent of primary residence (5-a)	31.6	3.21	0.79	**0.67**	0.22
-Owner's equivalent rent of primary residence (a)	23.4	2.50	0.30	**0.23**	0.13
Core Inflation (6=4+5)	**77.4**	**2.06**	**0.49**	**0.49**	**0.14**
Core inflation less owner's equivalent rent of primary residence (6-a)	53.9	1.87	0.58	**0.60**	0.19
Core inflatión less owner's equivalent rent of primary residence and tobacco	53.2	1.84	0.58	**0.59**	0.17
Total Inflation (7=6+3)	**100.0**	**3.60**	**0.20**	**0.29**	**0.13**
All items less owner's equivalent rent of primary residence (7-a)	76.6	3.93	0.17	**0.31**	**0.17**

Source: BLS & IFL (UC3M)
Date: March 16, 2006

AVERAGE ANNUAL RATE OF GROWTH IN US (*)

CONSUMER PRICES INDEX (CPI)	2002	2003	2004	2005	2006 (forecasts)	2007 (forecasts)
Food (1)	1.8	2.1	3.4	2.4	**2.4**	**2.3**
Energy (2)	-5.9	12.2	10.9	16.9	**7.5**	**2.2**
Residual Inflation (3=2+1)	**-0.8**	**5.3**	**6.0**	**7.6**	**4.4**	**2.2**
Non-food and non-energy goods (4)	-1.1	-2.0	-0.9	0.5	**0.3**	**0.2**
Less tobacco	-1.5	-2.1	-1.0	0.3	**0.1**	**0.1**
-Durable goods	-2.6	-3.2	-2.3	0.4	**-0.2**	**0.2**
-Nondurable goods	0.4	-0.7	0.5	0.6	**0.9**	**0.3**
Non-energy services (5)	3.8	2.9	2.9	2.8	**3.0**	**3.0**
-Services less owner's equivalent rent of primary residence (5-a)	3.6	3.2	3.3	3.1	**3.1**	**3.1**
-Owner's equivalent rent of primary residence (a)	4.1	2.4	2.3	2.3	**2.9**	**2.9**
Core Inflation (6=4+5)	**2.3**	**1.5**	**1.8**	**2.2**	**2.2**	**2.2**
Core inflation less owner's equivalent rent of primary residence (6-a)	1.7	1.1	1.6	2.1	**1.9**	**1.9**
Core inflatión less owner's equivalent rent of primary residence and tobacco	1.6	1.1	1.6	2.1	**1.9**	**1.9**
Total Inflation (7=6+3)	**1.6**	**2.3**	**2.7**	**3.4**	**2.7**	**2.2**
All items less owner's equivalent rent of primary residence (7-a)	0.9	2.2	2.8	3.7	**2.6**	**2.0**

Source: BLS & IFL (UC3M)
Date: March 16, 2006

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				Food	Energy	ALL	
		durables	non durables less energy	ALL	Owner's equivalent rent of primary residence	Other services	ALL	ALL				
IR December 2004		11.6%	20.5%	32.1%	23.4%	31.6%	55.1%	87.2%	13.9%	8.7%	22.6%	109.8%
AVERAGE ANNUAL	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	0.4	0.6	0.5	2.3	3.1	2.8	2.2	2.4	16.9	7.6	3.4
	2006	-0.2	0.9	0.3	2.9	3.1	3.0	2.2	2.4	7.5	4.4	2.7
	2007	0.2	0.3	0.2	2.9	3.1	3.0	2.2	2.3	2.2	2.2	2.2
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	0.5	0.4	0.5	2.3	3.3	2.9	2.2	3.1	17.1	8.0	3.5
	May	0.8	0.5	0.6	2.3	3.1	2.7	2.2	2.4	9.9	5.1	2.8
	June	0.8	0.2	0.4	2.2	3.0	2.7	2.0	2.2	7.3	4.1	2.5
	July	0.7	0.3	0.5	2.3	3.1	2.8	2.1	2.1	14.2	6.5	3.2
	August	0.6	0.8	0.7	2.2	3.1	2.7	2.1	2.2	20.2	8.7	3.6
	September	0.4	0.7	0.6	2.3	2.7	2.5	2.0	2.5	34.8	14.2	4.7
	October	0.2	0.5	0.4	2.3	3.0	2.7	2.1	2.2	29.5	12.2	4.3
	November	-0.3	0.6	0.1	2.4	3.2	2.9	2.1	2.2	18.3	8.1	3.5
	December	-0.5	0.9	0.2	2.5	3.3	2.9	2.2	2.3	17.1	7.6	3.4
2006	January	-0.6	1.0	0.1	2.5	3.3	2.9	2.1	2.6	24.8	10.5	4.0
	February	-0.6	0.7	0.0	2.5	3.2	2.9	2.1	2.8	20.1	9.0	3.6
	March	-0.4	0.8	0.1	2.7	2.7	2.7	1.9	2.7	15.6	7.4	3.2
	April	-0.2	0.8	0.2	2.8	2.7	2.7	2.0	2.3	9.1	4.8	2.7
	May	-0.4	0.9	0.1	2.8	2.9	2.9	2.1	2.2	10.7	5.4	2.9
	June	-0.3	1.0	0.3	2.9	3.0	3.0	2.2	2.4	12.3	6.1	3.1
	July	-0.1	1.1	0.4	3.0	3.0	3.0	2.2	2.4	8.7	4.8	2.8
	August	0.2	0.9	0.5	3.0	3.2	3.1	2.3	2.5	4.4	3.2	2.5
	September	-0.1	1.0	0.4	3.1	3.5	3.3	2.5	2.4	-6.5	-1.5	1.5
	October	0.0	0.9	0.3	3.1	3.2	3.1	2.3	2.3	-6.3	-1.4	1.4
	November	0.2	0.8	0.4	3.2	3.1	3.1	2.3	2.3	1.5	1.9	2.3
	December	0.4	0.6	0.4	3.2	3.0	3.1	2.3	2.2	6.1	3.7	2.6
2007	January	0.1	0.4	0.2	3.1	3.1	3.1	2.3	2.1	1.7	1.9	2.2
	February	0.1	0.3	0.2	3.0	3.0	3.0	2.2	2.2	3.8	2.8	2.4
	March	0.2	0.3	0.2	2.9	3.0	3.0	2.2	2.2	4.1	3.0	2.4
	April	0.1	0.2	0.2	2.9	3.1	3.0	2.2	2.3	3.7	2.8	2.3
	May	0.1	0.3	0.2	2.9	3.1	3.0	2.2	2.3	3.2	2.7	2.3
	June	0.2	0.3	0.2	2.9	3.1	3.0	2.2	2.3	2.3	2.3	2.2
	July	0.3	0.2	0.2	2.9	3.1	3.0	2.2	2.4	1.5	2.0	2.2
	August	0.3	0.3	0.3	2.9	3.1	3.0	2.2	2.3	1.0	1.8	2.1
	September	0.2	0.2	0.2	2.9	3.1	3.0	2.2	2.4	1.1	1.9	2.1
	October	0.2	0.3	0.2	2.9	3.1	3.0	2.2	2.3	1.4	2.0	2.2
	November	0.2	0.3	0.3	2.9	3.1	3.0	2.2	2.3	1.3	1.9	2.2
	December	0.2	0.4	0.3	2.9	3.1	3.0	2.3	2.3	1.1	1.9	2.2

The shaded values are forecasts
Source: BLS & IFL (UC3M)
Date: March 16, 2006

USA MONTHLY RATES OF GROWTH ON CPI AND ITS COMPONENTS

|		CONSUMER PRICE INDEX										
		CORE INFLATION							RESIDUAL INFLATION			ALL
		Non energy commodities less food			Non energy services								
		durables	non durables less energy	ALL	Owner's equivalent rent of primary	Other services	ALL	ALL	Food	Energy	ALL	
IR December 2004		11.6%	20.5%	32.1%	23.4%	31.6%	55.1%	87.2%	13.9%	8.7%	22.6%	109.8%
January	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	0.3	-0.5	-0.1	0.3	0.5	0.4	0.2	0.6	5.3	2.4	0.8
	2007	0.1	-0.7	-0.3	0.2	0.6	0.4	0.2	0.5	0.9	0.7	0.3
February	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	0.0	0.6	0.3	0.3	0.8	0.6	0.5	-0.1	-1.6	-0.7	0.2
	2007	0.0	0.5	0.2	0.2	0.7	0.5	0.4	0.0	0.4	0.2	0.4
March	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	-0.1	1.5	0.7	0.3	0.4	0.4	0.5	0.1	-0.3	0.0	0.3
	2007	0.0	1.5	0.7	0.2	0.4	0.3	0.4	0.1	0.1	0.1	0.4
April	2004	-0.1	0.4	0.1	0.3	0.2	0.2	0.2	0.1	2.0	0.7	0.3
	2005	-0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.6	6.3	2.7	0.7
	2006	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.2
	2007	0.0	0.1	0.1	0.2	0.3	0.2	0.2	0.2	-0.1	0.1	0.2
May	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	-0.2	-0.1	0.2	-0.2	0.0	0.0	0.2	-0.9	-0.2	-0.1
	2006	-0.1	-0.2	-0.1	0.2	0.0	0.1	0.0	0.2	0.6	0.4	0.1
	2007	-0.1	-0.1	-0.1	0.2	0.0	0.1	0.0	0.3	0.1	0.2	0.1
June	2004	-0.3	-1.0	-0.6	0.2	0.3	0.3	0.1	0.1	3.6	1.4	0.3
	2005	-0.3	-1.2	-0.8	0.1	0.3	0.2	-0.1	-0.1	1.2	0.4	0.1
	2006	-0.1	-1.1	-0.6	0.2	0.4	0.3	0.0	0.1	2.6	1.1	0.3
	2007	-0.1	-1.1	-0.6	0.3	0.4	0.3	0.1	0.1	1.7	0.7	0.2
July	2004	-0.3	-1.3	-0.9	0.2	0.5	0.3	0.0	0.3	-2.1	-0.6	-0.2
	2005	-0.4	-1.2	-0.8	0.2	0.6	0.4	0.1	0.2	4.1	1.7	0.5
	2006	-0.2	-1.1	-0.6	0.3	0.5	0.4	0.1	0.2	0.9	0.5	0.2
	2007	-0.1	-1.2	-0.6	0.3	0.5	0.4	0.1	0.2	0.1	0.2	0.1
August	2004	-0.4	0.1	-0.1	0.3	0.1	0.2	0.1	0.0	-0.6	-0.2	0.1
	2005	-0.4	0.6	0.1	0.2	0.1	0.1	0.1	0.1	4.5	1.8	0.5
	2006	-0.1	0.4	0.1	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2
	2007	-0.1	0.5	0.2	0.3	0.3	0.3	0.2	0.1	-0.2	0.0	0.2
September	2004	0.4	1.6	0.9	0.2	0.0	0.1	0.3	-0.1	-0.6	-0.3	0.2
	2005	0.2	1.6	0.9	0.2	-0.4	-0.1	0.1	0.3	11.5	4.8	1.2
	2006	-0.1	1.6	0.7	0.3	0.0	0.1	0.3	0.1	-0.2	0.0	0.2
	2007	-0.1	1.6	0.7	0.3	0.0	0.1	0.3	0.2	0.0	0.1	0.2
October	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	0.8	0.6	0.2	0.6	0.4	0.5	0.4	-1.8	-0.5	0.2
	2006	0.3	0.7	0.5	0.3	0.2	0.2	0.3	0.3	-1.6	-0.5	0.1
	2007	0.3	0.8	0.5	0.3	0.2	0.2	0.3	0.3	-1.3	-0.3	0.2
November	2004	0.5	-0.4	0.1	0.1	-0.2	-0.1	-0.1	0.2	0.6	0.3	0.1
	2005	0.0	-0.3	-0.1	0.2	0.0	0.1	0.0	0.2	-8.2	-3.4	-0.8
	2006	0.2	-0.4	-0.1	0.3	-0.1	0.1	0.0	0.1	-0.5	-0.1	0.0
	2007	0.2	-0.3	0.0	0.3	-0.1	0.1	0.0	0.1	-0.5	-0.2	0.0
December	2004	0.2	-1.4	-0.6	0.2	-0.1	0.0	-0.2	0.2	-3.1	-1.0	-0.4
	2005	0.0	-1.1	-0.5	0.3	-0.1	0.0	-0.1	0.3	-4.1	-1.5	-0.4
	2006	0.2	-1.3	-0.5	0.2	-0.2	0.0	-0.1	0.2	0.3	0.3	-0.1
	2007	0.2	-1.2	-0.5	0.2	-0.1	0.0	-0.1	0.3	0.0	0.2	-0.1

The shaded values are forecasts
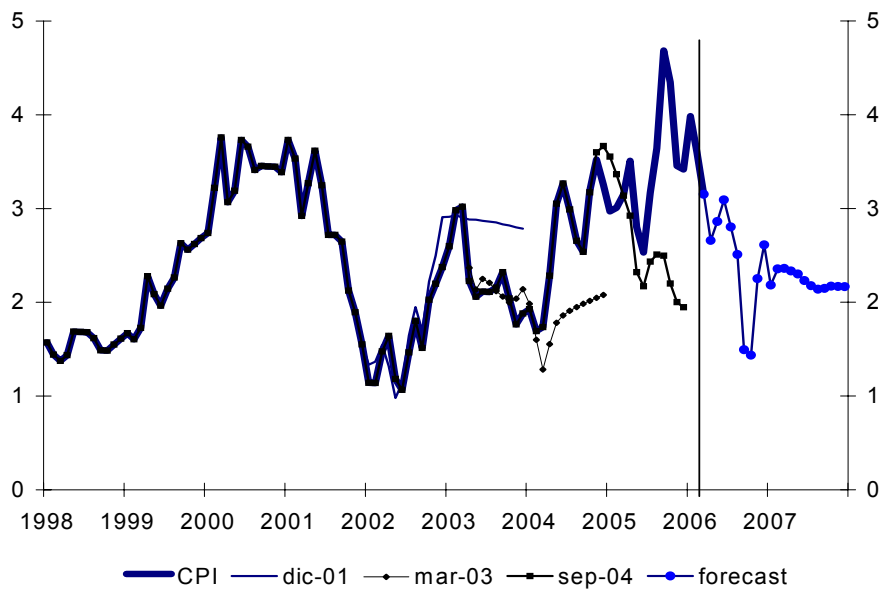Source: BLS & IFL (UC3M)
Date: March 16, 2006

CPI MONTHLY GROWTH RATES IN USA

● FORECAST ━━ OBSERVED VALUES
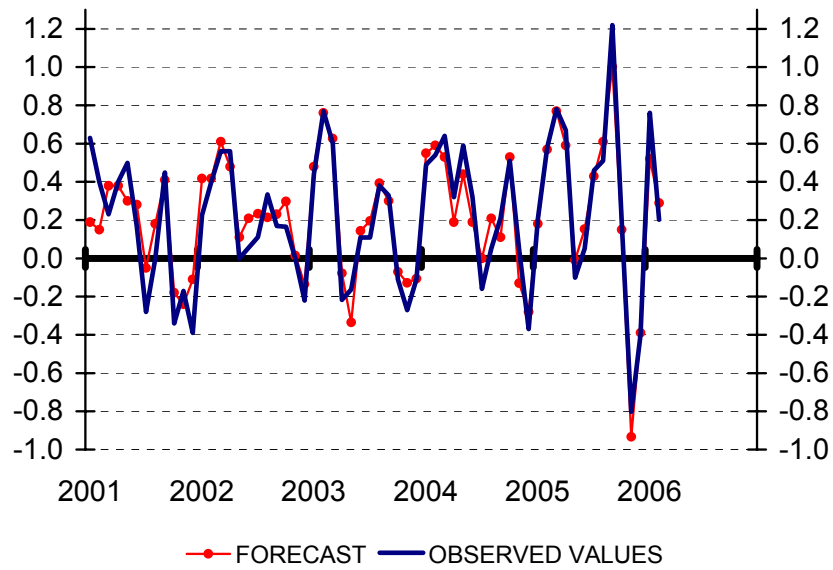
Source :BLS & IFL (UC3M)
Date: March 16, 2006

ANNUAL FORECASTS FOR US INFLATION

━━ CPI ── dic-01 ◆ mar-03 ■ sep-04 ● forecast

Source :BLS & IFL (UC3M)
Date: March 16, 2006

SOME COMMODITIES
(YEAR ON YEAR RATES)

Nondurable goods less energy and tobacco

Apparel

Source: BLS & IFL (UC3M)
Date: March 16, 2006

SOME COMMODITIES
(year-on-year rates)

New cars

durables

Used cars
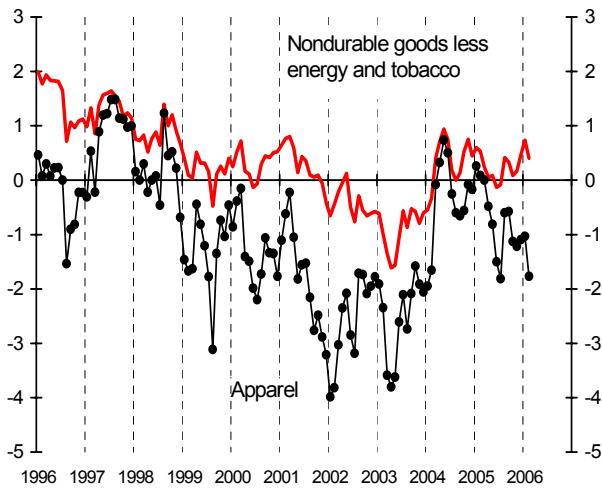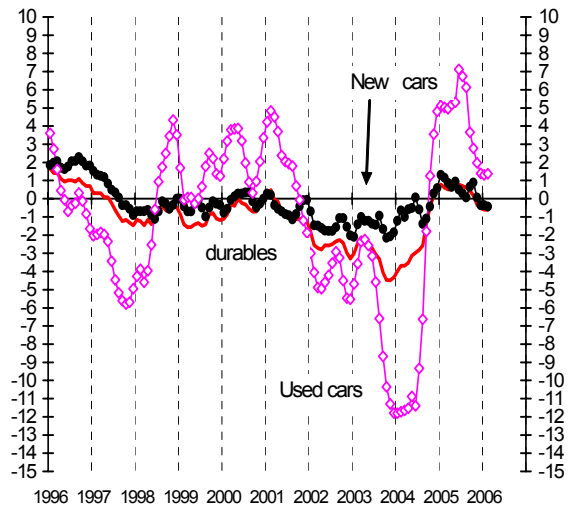
Source: BLS & IFL (UC3M)
Date: March 16, 2006

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

Rent of primary

Owners' equivalent rent of primary residence
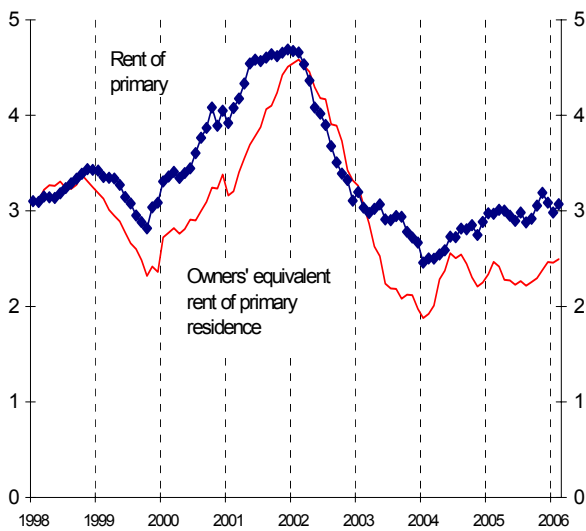
Source: BLS & IFL (UC3M)
Date: March 16, 2006

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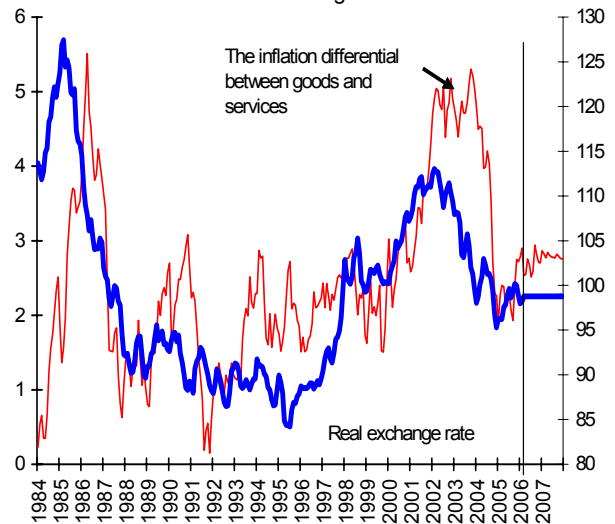
The inflation differential between goods and services

Real exchange rate

Source: BLS & IFL (UC3M)
Date: March 16, 2006
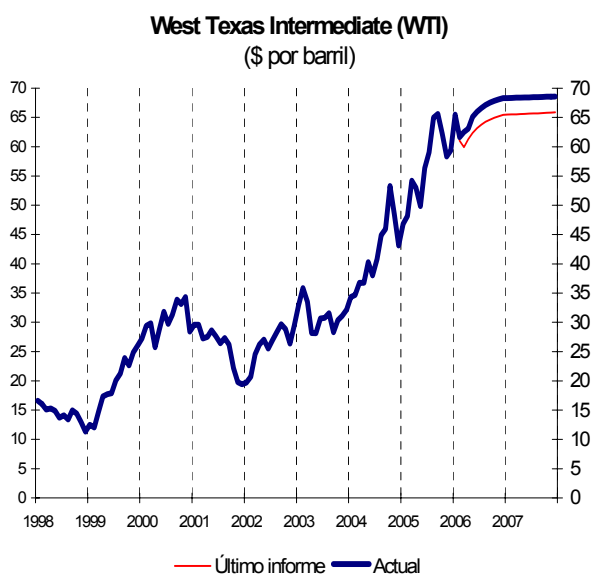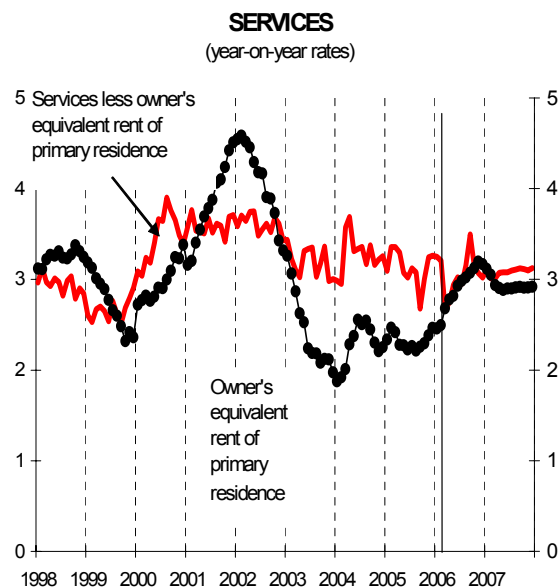
West Texas Intermediate (WTI)
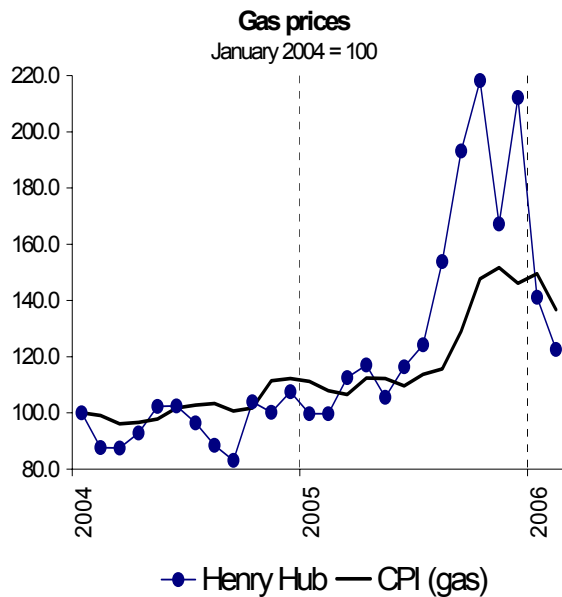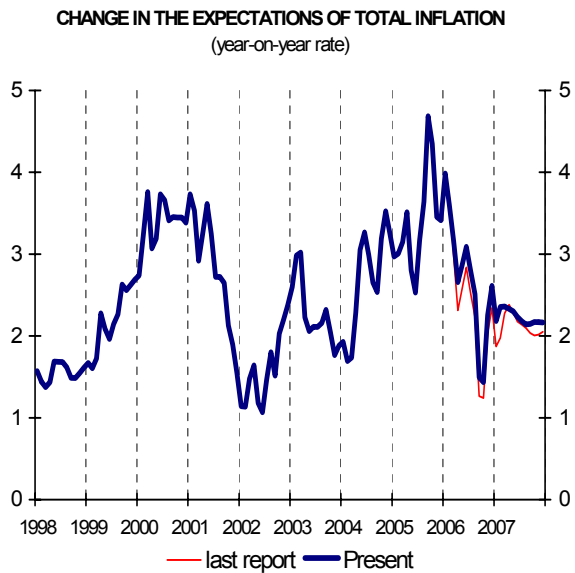### ($ por barril)

Legend: Último informe — Actual

Source: BLS & IFL (UC3M)
Date: March 16, 2006

SERVICES
(year-on-year rates)

Services less owner's equivalent rent of primary residence

Owner's equivalent rent of primary residence

Source: BLS & IFL (UC3M)
Date: March 16, 2006

Gas prices
January 2004 = 100

Legend: Henry Hub — CPI (gas)

Source: BLS & IFL (UC3M)
Date: March 16, 2006

CHANGE IN THE EXPECTATIONS OF TOTAL INFLATION
(year-on-year rate)

Legend: last report — Present

Source: BLS & IFL (UC3M)
Date: March 16, 2006

III.1 MAIN POINTS AND NEW RESULTS

In the last few years, the Spanish economy has grown significantly more than the euro area economy, largely because of comfortable monetary conditions for the Spanish situation, the effects of the reforms of the labour and goods and services markets, the correction of public account disequilibria and, in particular, the heavy increase in the immigrant population, which has increased the supply of labour and moderated labour costs.

The evolution of the real GDP per capita has also been better than in the euro area, enabling us to progress further in the convergence process. However, **this differential is substantially reduced from 1999 on,** coinciding with the heavy increases in the Spanish population derived from the spectacular growth of the immigrant population, but with no additional productivity.

The growth of the Spanish economy has been based on the growth of its domestic demand, which has more than compensated for the negative impact of the foreign sector. In 2005, we started to observe certain symptoms indicating that this growth pattern has come to an end, and the growth of domestic demand has started to show signs of slowing down.

Analysing the sources of this growth, **it has been based on intensive use of the labour factor**. Employment was the driving force behind growth in the 2000-2005 period, representing 88% of the total GDP growth rate, whereas productivity progressed little, with a very modest contribution to growth, the remaining 12%.

On the other hand, **the growth pattern has been inflationist,** since it has produced a very significant differential between the growth of our prices and those in the euro area and EU-15. The maintenance of positive inflation differentials between countries or economic areas over time has accumulative effects. With the last CPI figure published for February, the forecast for total inflation in 2006 and 2007 remains at 3.5% and 3%, respectively. According to the inflation forecasts, **the accumulated total inflation differentials will continue to grow to 11.0 pp in 2006 and 12.8 pp in 2007**. This inflation differential, if this is the case, should be corrected due to the reduction in the quality gap between euro area and Spanish products, but the resulting value can be expected to continue to be too high.

The reasons for higher inflation in Spain include the fact that its productivity is still sluggish, its higher increases in labour costs per employee and the heavy growth of the business surplus, which is growing at greater rates than labour costs. Our unit labour costs also show higher growth rates than those in the euro area.

The results of our loss of competitiveness are manifest in the high trade deficit, which reached a record high of 7.7% of the GDP in the last quarter of last year, pushing up the current account balance to a negative value of 6.8% of the GDP for the same period. To support this disequilibrium, we are increasingly forced to resort to foreign financing and, for the time being, this is represented by important property sales to non-residents.

The Spanish economy has a high economic growth rate, creates a lot of employment and is reducing the unemployment rate, but it is based on a growth pattern that it will be unable to maintain in the medium term. The Spanish economy needs **medium term economic policy measures,** which should be established immediately. Indeed, their **implantation changes the expectations of economic agents,** and without waiting for the measures to show results, this change in expectations alone has positive short term effects.

The **way to combat our loss of competitiveness** involves continuing to reform some markets in order to make them more flexible and taking steps to enhance productivity, such as better infrastructures, increasing capital endowment per worker, a better qualified work factor and more R&D and innovation investment in relation to the GDP.

III.2. MACROECONOMIC FORECASTS
III.2.1. MACROECONOMIC TABLE AND INDICATORS OF SPANISH ECONOMY: ANNUAL RATES

MACROECONOMIC TABLE AND INDICATORS (*)				
	Annual Rates			
	2004	**2005**	**Forecasts BIMA(*)**	
			2006	**2007**
Private Final Consumption Expenditure	4.4	4.4	4.0	3.9
Public Final Consumption Expenditure	6.0	4.5	4.6	4.5
Gross Fixed Capital Formation	4.9	7.2	5.2	4.6
Equipment	3.7	9.5	7.1	5.8
Building	5.5	6.0	4.0	3.6
Other products	4.4	7.6	7.1	6.5
Domestic Demand (1)	4.9	5.3	4.9	4.8
Exports of Goods and Services	3.3	1.0	3.0	3.6
Imports of Goods and Services	9.3	7.1	7.0	6.7
Foreign demand	-1.8	-1.9	-1.8	-1.6
GDP	**3.1**	**3.4**	**3.1**	**3.2**
GDP, current prices	7.3	7.5	7.5	7.5
Prices and Costs				
CPI, annual average	3.0	3.4	3.5	3.0
CPI, dec./dec.	3.2	3.7	3.3	3.0
Average earning per worker	3.3	2.5	3.0	3.2
Unit labour cost	2.7	2.1	2.8	2.9
Labour Market (Data poll labour force) (1)				
Labour Force (% variation)	3.3	3.2 / 3.5	3.3	3.5
Employment (EPA)				
Annual average variation in %	3.9	4.8 / 5.6	4.2	3.7
Annual average variation in thousands	674.9	870.3/1002.4	792.0	722.4
Unemployment rate	11.0	9.6 / 9.2	8.4	8.2
Basic balances				
Foreign sector				
Current Account (m.€.)	-49.318	-61.231	-63.227	-62.143
Net lending or borrowing (% GDP) (2)	-5.9	-7.4	-7.5	-7.2
AA.PP. (Total) / Public Administration				
Net lending or borrowing (% GDP) (2)	-0.3	1.1	0.5	0.0
Other Economic Indicators				
Industrial Production Index	1.8	0.1	2.5	2.8

(1)   Contribution to the GDP growth
(2)   Annual Rate EPA Testigo / Annual Rate EPA 2005
(3)   In term of national accounts

Source: INE & IFL
Date: March 23, 2006.
(*) Bulletin of E.U. and U.S. Inflation and Macroeconomic Analysis

III.2.2 QUARTERLY FORECASTS OF GDP AND COMPONENTS OF DOMESTIC AND FOREIGN DEMAND

Table III.2.2.1

ANNUAL RATES OF GROWTH IN GDP AND COMPONENTS														
	Observed		Forecasts											
			Annual		Quarterly*									
	2004	2005	2006	2007	2006 QI	2006 QII	2006 QIII	2006 QIV	2007 QI	2007 QII	2007 QIII	2007 QIV		
Private Final Consumption Expenditure	4.4	4.4	4.0	3.9	4.6	4.1	3.8	3.4	4.0	3.9	3.9	3.7		
Public Final Consumption Expenditure	6.0	4.5	4.6	4.5	5.3	5.0	4.4	3.4	4.8	4.7	4.4	4.1		
Gross Fixed Capital Formation	4.9	7.2	5.2	4.6	5.7	4.6	5.3	5.3	4.2	5.0	5.1	4.1		
Equipment	3.7	9.5	7.1	5.8	8.5	7.5	6.6	5.9	4.9	6.9	6.7	4.6		
Building	5.5	6.0	4.0	3.6	4.1	2.9	4.4	4.5	3.2	3.9	4.0	3.1		
Other products	4.4	7.6	7.1	6.5	7.4	6.7	6.9	7.2	6.5	6.4	6.6	6.5		
Domestic Demand (1)	4.9	5.3	4.9	4.8	5.5	4.7	4.8	4.5	4.7	4.8	4.9	4.7		
Exports of Goods and Services	3.3	1.0	3.0	3.6	3.7	2.5	2.5	3.3	4.4	3.3	2.7	4.1		
Imports of Goods and Services	9.3	7.1	7.0	6.7	9.0	6.3	6.2	6.6	7.2	6.4	6.4	7.0		
Foreign demand (1)	-1.8	-1.9	-1.8	-1.6	-2.2	-1.6	-1.6	-1.5	-1.5	-1.5	-1.7	-1.6		
Real GDP	3.1	3.4	3.1	3.2	3.3	3.1	3.2	3.0	3.2	3.3	3.2	3.2		

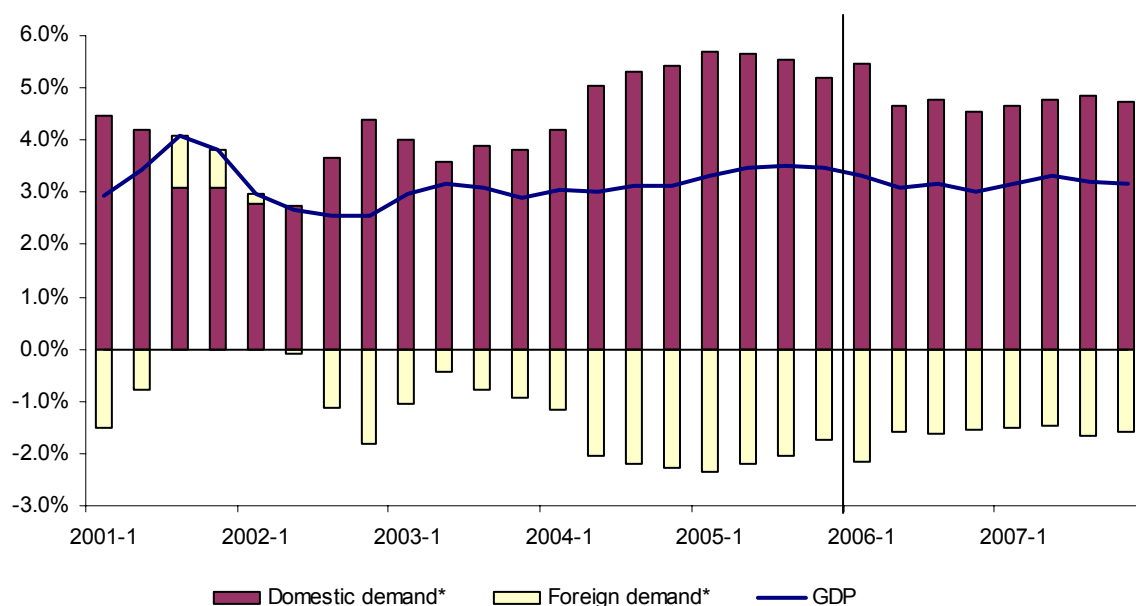(1)   Contribution to the GDP growth
(*)   Appreciation from same quarter one year earlier
Source: INE & IFL (UC3M)
Date: March 23, 2006

Graph III.2.2.1

CONTRIBUTION* TO GDP GROWTH IN SPAIN

Source INE & IFL (UC3M)
Date: March 23, 2006.

III.2.3 QUARTERLY FORECASTS OF INDUSTRIAL PRODUCTION INDEX AND PRODUCTION SECTORS

Table III.2.3.1

ANNUAL RATES OF GROWHT IN THE IPI AND SECTORS													
	Observed		Annual		Forecasts Quarterly*								
	2004	2005	2006	2007	2006 QI	2006 QII	2006 QIII	2006 QIV	2007 QI	2007 QII	2007 QIII	2007 QIV
Total	1.7	0.1	2.5	2.8	6.2	0.1	1.9	2.0	2.6	2.4	2.2	3.9
Consumer goods	0.0	0.1	0.1	0.6	4.5	-2.8	-0.7	-0.3	0.9	0.1	-0.5	1.7
Durable consumer goods	0.1	-1.0	2.2	2.0	9.5	-1.9	1.4	0.5	1.0	1.4	1.7	4.0
Non-durable consumer goods	0.0	0.3	-0.2	0.3	3.8	-2.9	-0.9	-0.5	0.9	-0.1	-0.8	1.4
Capital equipment	1.9	-0.7	5.5	5.8	10.4	1.4	4.9	5.7	4.7	5.4	6.0	7.3
Intermediate goods	1.9	-0.6	2.0	2.0	6.2	-0.3	1.2	1.2	2.0	1.6	1.4	3.1
Energy	4.9	2.9	4.9	5.1	4.2	5.8	5.6	3.9	4.9	4.8	5.0	5.7

 (*) Appreciation from same quarter one year earlier
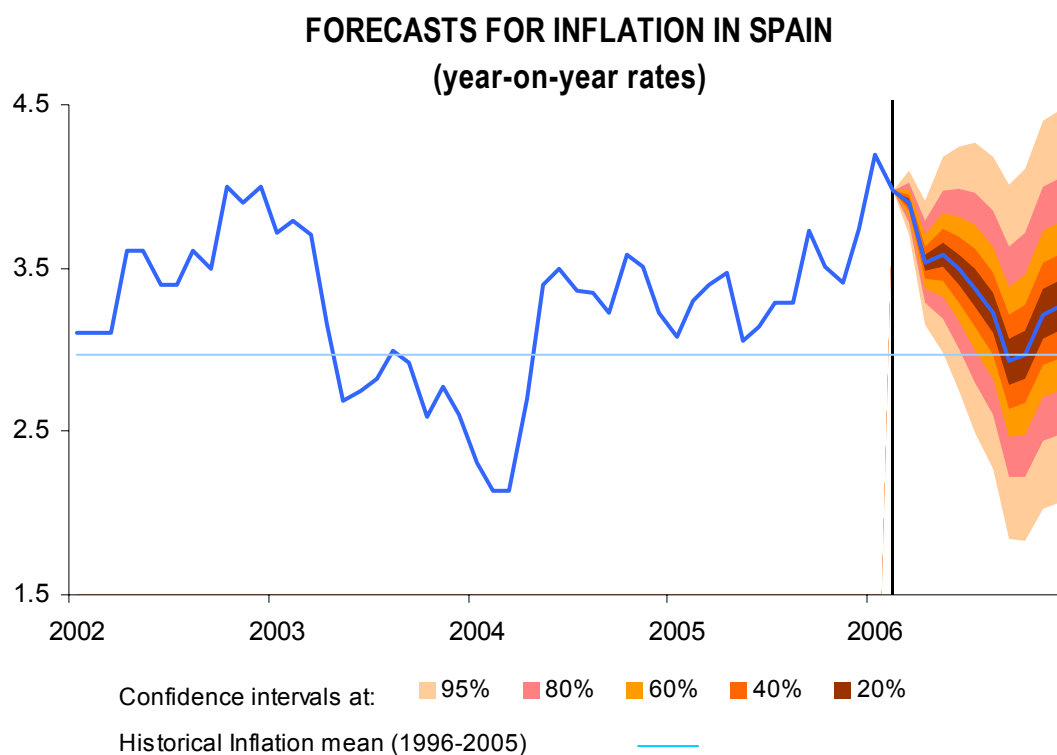Source: INE & IFL (UC3M)
Date: March 23, 2006

III.2.4 INFLATION

Table III.2.4.1

FORECASTS IN THE ANNUAL AVERAGE RATE IN INFLATION IN SPAIN					
Consumer Price Index (CPI)	2003	2004	2005	Forecast	
				2006	2007
TOTAL (100%)	3.0	3.0	3.4	**3.5**	**3.0**
CORE (82.3%)	2.9	2.7	2.7	**3.0**	**3.0**
Processed food (17.0%)	3.0	3.6	3.4	**3.8**	**3.7**
Non-energy industrial goods (29.5%)	2.0	0.9	0.9	**1.6**	**1.5**
Services (35.8%)	3.7	3.7	3.8	**3.9**	**4.0**
RESIDUAL (17.7%)	3.6	4.7	6.5	**5.4**	**3.0**
Non-Processed food (8.4%)	6.0	4.6	3.3	**4.3**	**4.2**
Energy (9,3%)	1.4	4.8	9.6	**6.4**	**2.0**

Source: INE & IFL (UC3M)
Date: March 14, 2006

Graph III.2.4.1

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

Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1996-2005)

Source INE & IFL (UC3M)
Date: March 14, 2006

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 2006	17.0%	29.5%	35.8%	82.3%	8.4%	9.3%	17.7%	
ANNUAL AVERAGE RATE	**1998**	1.3	1.5	3.6	2.3	2.1	-3.7	-0.2	1.8
	1999	2.1	1.5	3.4	2.4	1.2	3.5	2.2	2.3
	2000	0.9	2.1	3.7	2.5	4.2	13.5	8.8	3.4
	2001	3.4	2.4	4.2	3.5	8.7	-0.7	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	0.9	3.8	2.7	3.3	9.6	6.5	3.4
	2006	**3.8**	**1.6**	**3.9**	**3.0**	**4.3**	**6.4**	**5.4**	**3.5**
	2007	**3.7**	**1.5**	**4.0**	**3.0**	**4.2**	**2.0**	**3.0**	**3.0**
ANNUAL RATES (growth of the month over the same month of the previous year)	**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	1.0	3.5	2.8	3.8	9.6	6.8	3.5
	May	3.4	0.9	3.8	2.6	3.0	6.8	5.0	3.1
	June	3.2	0.8	3.7	2.5	3.4	8.2	5.9	3.1
	July	3.0	0.7	3.8	2.5	2.1	11.4	6.9	3.3
	August	2.8	0.7	3.7	2.4	2.7	11.5	7.2	3.3
	September	2.8	0.9	3.7	2.5	3.4	15.0	9.4	3.7
	October	2.9	1.1	3.8	2.6	3.6	11.2	7.6	3.5
	November	3.2	1.2	3.8	2.7	3.6	9.3	6.5	3.4
	December	3.8	1.1	3.9	2.9	5.2	9.9	7.7	3.7
	2006 January	3.7	1.4	3.8	2.9	5.3	14.8	10.1	4.2
	February	3.4	1.5	3.8	2.9	4.5	13.3	9.1	4.0
	March	**3.9**	**1.5**	**3.8**	**3.0**	**4.2**	**11.4**	**8.0**	**3.9**
	April	**3.5**	**1.5**	**4.0**	**3.0**	**3.4**	**8.6**	**6.1**	**3.5**
	May	**3.7**	**1.5**	**3.9**	**3.0**	**3.6**	**8.9**	**6.4**	**3.6**
	June	**3.8**	**1.5**	**3.9**	**3.0**	**3.5**	**7.5**	**5.6**	**3.5**
	July	**4.0**	**1.7**	**3.9**	**3.2**	**4.6**	**4.2**	**4.4**	**3.4**
	August	**4.2**	**1.8**	**3.9**	**3.2**	**4.5**	**2.4**	**3.4**	**3.2**
	September	**4.2**	**1.6**	**3.9**	**3.2**	**4.8**	**-0.6**	**1.9**	**2.9**
	October	**4.2**	**1.6**	**3.9**	**3.1**	**4.7**	**0.3**	**2.3**	**3.0**
	November	**4.0**	**1.5**	**3.9**	**3.1**	**4.7**	**3.4**	**4.0**	**3.2**
	December	**3.6**	**1.6**	**3.8**	**3.0**	**3.7**	**5.5**	**4.7**	**3.3**
	2007 January	**3.8**	**1.6**	**3.9**	**3.1**	**3.1**	**2.3**	**2.7**	**3.0**
	February	**4.2**	**1.5**	**4.0**	**3.2**	**4.0**	**1.8**	**2.8**	**3.1**
	March	**3.6**	**1.5**	**4.0**	**3.0**	**4.5**	**1.7**	**3.0**	**3.0**
	April	**3.9**	**1.5**	**3.9**	**3.1**	**4.5**	**1.8**	**3.1**	**3.1**
	May	**3.8**	**1.5**	**4.0**	**3.0**	**4.5**	**1.9**	**3.1**	**3.1**
	June	**3.8**	**1.5**	**4.0**	**3.0**	**4.4**	**2.0**	**3.1**	**3.0**
	July	**3.7**	**1.5**	**4.0**	**3.0**	**4.4**	**2.0**	**3.1**	**3.0**
	August	**3.6**	**1.5**	**4.0**	**3.0**	**4.5**	**2.0**	**3.1**	**3.0**
	September	**3.5**	**1.5**	**4.0**	**3.0**	**4.3**	**2.0**	**3.1**	**3.0**
	October	**3.5**	**1.5**	**4.0**	**3.0**	**4.2**	**2.0**	**3.0**	**3.0**
	November	**3.3**	**1.5**	**4.0**	**2.9**	**4.1**	**2.0**	**3.0**	**3.0**
	December	**3.2**	**1.5**	**4.0**	**2.9**	**4.2**	**2.0**	**3.0**	**3.0**

Source: INE & IFL (UC3M)
Date: March 14, 2006

*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 2006	17.0%	29.5%	35.8%	82.3%	8.4%	9.3%	17.7%	
January	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	0.3	-3.6	0.5	-1.0	1.0	3.5	2.4	-0.4
	2007	**0.6**	**-3.6**	**0.6**	**-0.9**	**0.4**	**0.4**	**0.4**	**-0.7**
February	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	-0.1	-0.1	0.5	0.1	-1.5	0.7	-0.3	0.0
	2007	**0.2**	**-0.1**	**0.5**	**0.2**	**-0.6**	**0.1**	**-0.2**	**0.1**
March	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	**0.9**	**1.1**	**0.6**	**0.8**	**0.0**	**0.2**	**0.1**	**0.7**
	2007	**0.3**	**1.1**	**0.6**	**0.7**	**0.5**	**0.2**	**0.3**	**0.6**
April	2004	0.5	3.0	0.7	1.5	0.3	1.3	0.8	1.4
	2005	0.9	3.0	0.2	1.3	1.1	2.6	1.9	1.4
	2006	**0.4**	**2.9**	**0.4**	**1.3**	**0.3**	**0.0**	**0.2**	**1.1**
	2007	**0.8**	**2.8**	**0.4**	**1.3**	**0.4**	**0.1**	**0.2**	**1.1**
May	2004	1.0	0.6	-0.1	0.4	0.8	2.5	1.7	0.6
	2005	0.1	0.5	0.1	0.3	0.0	-0.2	-0.1	0.2
	2006	**0.3**	**0.5**	**0.0**	**0.3**	**0.2**	**0.1**	**0.2**	**0.2**
	2007	**0.2**	**0.5**	**0.0**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
June	2004	0.4	-0.1	0.4	0.2	-0.5	0.0	-0.2	0.2
	2005	0.1	-0.1	0.4	0.1	-0.1	1.3	0.6	0.2
	2006	**0.3**	**-0.1**	**0.4**	**0.2**	**-0.2**	**0.1**	**0.0**	**0.1**
	2007	**0.2**	**-0.1**	**0.4**	**0.2**	**-0.3**	**0.2**	**0.0**	**0.1**
July	2004	0.2	-3.7	0.6	-1.1	0.8	0.3	0.5	-0.8
	2005	0.0	-3.7	0.6	-1.1	-0.5	3.3	1.5	-0.6
	2006	**0.2**	**-3.5**	**0.6**	**-0.9**	**0.5**	**0.1**	**0.3**	**-0.7**
	2007	**0.1**	**-3.5**	**0.6**	**-0.9**	**0.5**	**0.1**	**0.3**	**-0.7**
August	2004	0.2	-0.1	0.6	0.3	0.3	1.8	1.1	0.4
	2005	0.1	-0.1	0.6	0.2	0.9	1.9	1.4	0.4
	2006	**0.3**	**-0.1**	**0.6**	**0.3**	**0.8**	**0.2**	**0.4**	**0.3**
	2007	**0.2**	**-0.1**	**0.6**	**0.2**	**0.8**	**0.1**	**0.5**	**0.3**
September	2004	0.2	1.1	-0.4	0.2	-0.2	0.1	-0.1	0.2
	2005	0.2	1.3	-0.4	0.3	0.5	3.1	1.9	0.6
	2006	**0.2**	**1.2**	**-0.3**	**0.3**	**0.8**	**0.1**	**0.5**	**0.3**
	2007	**0.1**	**1.2**	**-0.4**	**0.3**	**0.7**	**0.1**	**0.4**	**0.3**
October	2004	0.1	2.6	0.0	0.9	0.0	2.6	1.4	1.0
	2005	0.2	2.8	0.1	1.1	0.2	-0.7	-0.3	0.8
	2006	**0.2**	**2.7**	**0.1**	**1.0**	**0.1**	**0.1**	**0.1**	**0.9**
	2007	**0.1**	**2.7**	**0.1**	**1.0**	**0.0**	**0.1**	**0.1**	**0.8**
November	2004	0.2	1.0	0.0	0.4	0.6	-1.2	-0.4	0.2
	2005	0.5	1.1	0.0	0.5	0.6	-2.9	-1.3	0.2
	2006	**0.3**	**1.0**	**0.0**	**0.4**	**0.5**	**0.2**	**0.3**	**0.4**
	2007	**0.2**	**1.0**	**0.0**	**0.4**	**0.5**	**0.2**	**0.3**	**0.4**
December	2004	0.2	-0.2	0.4	0.1	0.4	-2.5	-1.2	-0.1
	2005	0.7	-0.2	0.5	0.3	1.9	-1.9	-0.1	0.2
	2006	**0.4**	**-0.2**	**0.4**	**0.2**	**1.0**	**0.1**	**0.5**	**0.3**
	2007	**0.3**	**0.4**	**0.4**	**0.2**	**1.1**	**0.1**	**0.6**	**0.3**

Left margin label: MONTHLY RATES (Growth of the month over the previous month)

Source: INE & IFL (UC3M)
Date: March 14, 2006

*Bold figures are forecasts

				Weights 2006	2002	2003	2004	2005	2006	2007
HICP Total Inflation	Core Inflation	Processed food	AE less tobacco & fats	13.2	3.1	2.8	2.7	2.5	**3.2**	**3.4**
			Oils & Fats	3.1	15.2	3.5	14.7	10.5	**26.6**	**2.1**
			Tobacco	2.2	7.4	3.8	5.6	6.6	**-0.6**	**5.8**
			Processed food	**17.0**	**4.3**	**3.0**	**3.6**	**3.4**	**3.8**	**3.7**
		Non energy industrial goods	Vehicles	7.3	1.7	1.7	1.6	1.8	**2.7**	**2.5**
			Footwear	1.9	5.6	3.6	1.9	2.2	**1.9**	**3.0**
			Clothing	6.6	5.2	3.8	1.8	1.1	**1.1**	**1.7**
			Rest	13.8	2.4	0.9	0.3	0.5	**1.1**	**0.7**
			Non energy industrial goods	**29.5**	**2.5**	**2.0**	**0.9**	**0.9**	**1.6**	**1.5**
		Services	Postal services	4.0	13.3	3.3	3.1	2.7	**5.7**	**3.0**
			Cultural services	1.4	4.5	3.0	3.0	2.7	**1.4**	**1.8**
			Education	1.0	3.3	4.6	3.6	4.1	**3.2**	**3.3**
			Hotels	0.6	5.8	3.4	3.0	2.3	**2.6**	**4.9**
			Health	1.7	4.8	4.0	3.2	4.0	**3.8**	**3.6**
			Household equipment	1.3	4.8	5.1	4.4	4.5	**4.6**	**5.2**
			Restaurants	9.6	5.8	4.4	4.1	4.3	**4.6**	**4.6**
			Telephone	2.9	-3.1	-2.7	-1.1	-1.6	**-0.6**	**0.0**
			Transports	4.5	5.3	3.6	4.4	4.4	**4.0**	**4.1**
			Package hollidays	1.1	8.7	3.1	1.4	2.2	**5.2**	**7.1**
			University	0.5	5.0	5.4	4.9	4.6	**4.5**	**3.5**
			Housing	4.9	4.6	4.0	4.5	4.8	**4.8**	**4.7**
			Rest	2.2	4.2	3.9	4.2	3.8	**4.3**	**4.1**
			Services	**35.8**	**4.6**	**3.7**	**3.7**	**3.8**	**3.9**	**4.0**
	Core Inflation			**82.3**	**3.7**	**2.9**	**2.7**	**2.7**	**3.0**	**3.0**
	Residual Inflation	Non processed foods	Meat	3.2	1.7	4.7	3.6	3.8	**6.0**	**2.9**
			Fruits	1.4	9.8	11.6	6.3	2.7	**2.6**	**5.3**
			Eggs	0.2	1.7	8.4	11.6	-3.2	**1.9**	**0.6**
			Vegetables	0.9	18.0	5.1	3.6	5.4	**1.0**	**8.3**
			Mollusc	0.7	7.3	2.4	3.1	5.4	**3.7**	**5.0**
			Potatoes	0.3	0.4	2.5	16.2	-8.2	**4.5**	**6.1**
			Fish	1.6	5.0	4.4	2.0	3.8	**4.3**	**3.4**
			Non processed foods	**8.4**	**5.8**	**6.0**	**4.6**	**3.3**	**4.3**	**4.2**
		Energy	Heat energy	5.3	0.5	1.4	7.1	12.3	**4.8**	**2.5**
			Fuels	0.4	-3.1	6.1	12.0	26.8	**11.2**	**5.3**
			Electricity and gas	3.6	-1.4	0.8	0.8	4.0	**8.3**	**0.8**
			Energy	**9.3**	**-0.2**	**1.4**	**4.8**	**9.6**	**6.4**	**2.0**
	Residual Inflation			**17.7**	**2.6**	**3.6**	**4.7**	**6.5**	**5.4**	**3.0**
HICP Total Inflation				**100.0**	**3.5**	**3.0**	**3.0**	**3.4**	**3.5**	**3.0**

Source: INE & IFL (UC3M)
Date: March 14, 2006

*Bold figures are forecasts

III.3 THE PATTERN OF GROWTH AND THE FINANCING MODEL OF THE SPANISH ECONOMY: ADVANTAGES, RISKS AND MEDIUM-TERM PERSPECTIVES

III.3.1. Basic features of the performance of the Spanish economy in the last few years.

- The Spanish economy is registering a much higher growth rate than the euro area.

In the last few years, the Spanish economy is growing significantly more than the euro area economy (see graph III.3.1.1), with a growth differential of over two percentage points in some years. Last year, the real GDP of the Spanish economy registered 3.4% growth compared with the previous year, three tenths more than in 2004, whereas in the euro area growth registered a modest rate of 1.4%.

Graph III.3.1.1

GDP GROWTH IN SPAIN AND THE EURO AREA
(year-on-year rates)
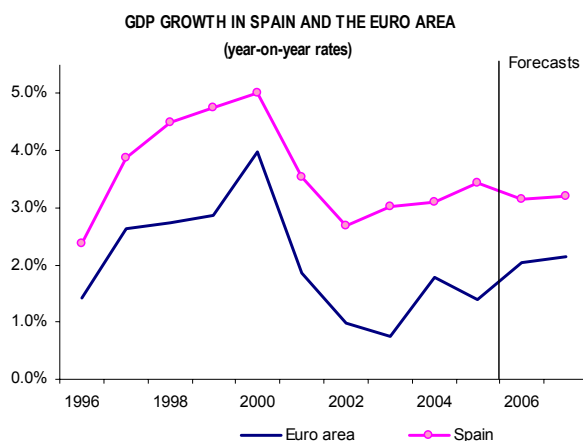
Source: INE, Eurostat & IFL (UC3M)

The reasons for this greater growth rate of the Spanish economy compared with the euro area in recent years are well known, and the most important of them include: very comfortable monetary conditions for the Spanish situation, the effect of reforms to the labour and goods and services markets, the correction of the disequilibria in the public accounts, with a superavit in 2005 and, in particular, the heavy growth in the immigrant population, which has significantly increased the supply of labour and moderated labour costs.

Graph III.3.1.2 shows the evolution of the GDP per capita (GDPpc) in the last few years, both in Spain and the euro area. It shows how the GDPpc of the Spanish economy was also higher than in the euro area, helping us to significantly advance towards convergence. This differential, however, is substantially smaller from 1999 on, coinciding with the heavy growth in the Spanish population derived from the spectacular increase in the immigrant population, with productivity remaining unaltered.

Graph III.3.1.2

GROWTH IN GDPpc IN SPAIN AND THE EURO AREA
(year-on-year rates)
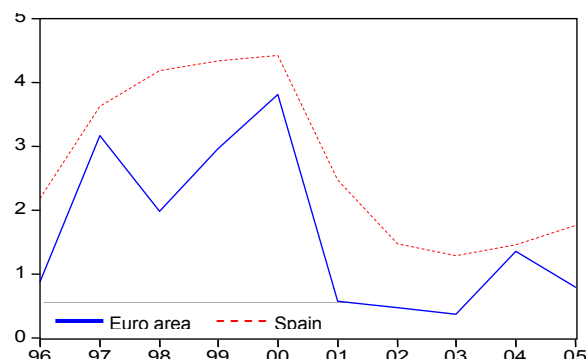
Source: INE, Eurostat & IFL(UC3M)
Date: March 2006

- Growth is supported by domestic demand.

Analysing the composition of the growth of the Spanish economy in the last few years, we can see that it has been based on domestic demand, which has registered high growth rates. This has more than compensated for the negative performance of the foreign sector, which has registered growing negative contributions to GDP growth (see macro table III.2.1 and graph III.3.1.3). On the demand side, GDP growth has been supported by household consumption and housing investment, together with equipment investment in 2004 and 2005. Imports have also shown some dynamism, consistent with the strength of the national demand; however, exports have registered very low growth rates, substantially lower than world trade, showing a clear loss of competitiveness.

Graph III.3.1.3

CONTRIBUTION* TO GDP GROWTH IN SPAIN
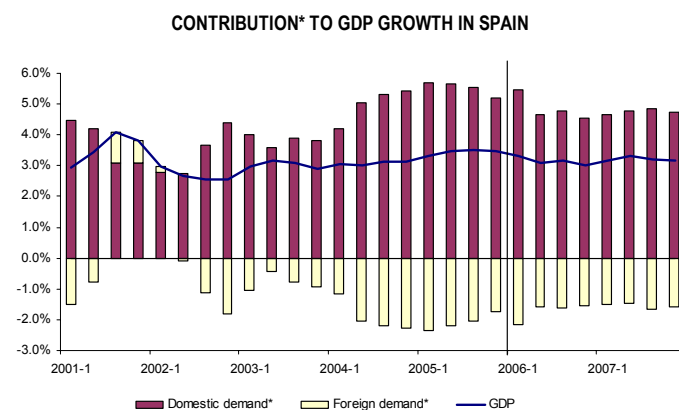
(*) Contributions in p.p
Source: Ine & IFL (UC3M)

On the supply side (see table III.3.1.1), we can see that growth is supported by construction and services, both sectors with low productivity and low exposure to international competition. However, in view of the heterogeneous nature of the service sector, some of its fields, such as banking services, which are probe to technological innovation, show considerably higher productivity rates than most industrial fields. In this period, these sectors have registered very high growth rates, whereas industry has registered modest growth rates close to zero, revealing the sector's structural problems and heavy competition from abroad, especially China and south-east Asia.

Table III.3.1.1

GDP AND COMPONENTS ON THE SUPPLY SIDE (year-on-year rates)				
	2002	2003	2004	2005
Agriculture	0,4	-0,1	-1,1	-0,7
Industry	0,7	0,9	0,3	0,6
Energy	2,3	1,3	2,0	4,4
Construction	6,3	5,0	5,1	5,5
Services	2,6	2,9	3,6	3,9
GVA (current prices)	2,5	2,6	2,9	3,3
GDP	**2,7**	**3,0**	**3,1**	**3,4**

Source: INE & IFL (UC3M)

- Internal demand became more sluggish in 2005 and GDP growth showed a certain degree of stabilisation towards the end of the year.

In 2005, we started to see certain signs indicating that this growth pattern is over, with consumption and housing investment already slowing down. Therefore, internal demand has started to become more sluggish (see graph III.3.1.3). On the other hand, the last few months of the year revealed certain symptoms of more moderate growth. Indeed, in the fourth quarter, the year-on-year GDP growth rate (3.5%) was the same as in the third. A possible moderation in GDP growth is also indicated by the recent evolution of some indicators such as the economic and consumer sentiment.

- GDP growth was based on intensive use of the labour factor

Analysing the origins of the growth of the Spanish economy in the last few years, we can see that the growth patent was based on the intensive use of the labour factor, largely due to the plentiful supply derived from immigration. Indeed, table III.3.1.2 shows that employment was the driving force behind growth in the 2000-2005 period, with a mean annual rate of 2.8% compared with a GDP growth rate of 3.2%, showing that employment represented 88.0% of the total GDP growth rate, whereas productivity

grew little and made only a modest contribution to GDP growth, the remaining 12%. In the euro area, the contribution of these factors to GDP growth was much better balanced, and practically the same for employment and productivity. It may be interesting to make a comparison with Ireland, a country with high growth rates in the last few years: according to the data in table III.3.1.2, the contribution to growth of employment and productivity was much more balanced than in Spain, with productivity representing nearly 50% of total GDP growth.

Table III.3.1.2

| SOURCES OF GDP GROWTH (year-on-year rates)						
	2001	2002	2003	2004	2005	Average 2000-2005
SPAIN						
GDP	3,5	2,7	3,0	3,1	3,4	3,2
Employment (1)	3,2	2,4	2,5	2,6	3,1	2,8
Productivity	0,3	0,3	0,5	0,5	0,3	0,4
EURO AREA						
GDP	1,9	0,9	0,9	1,9	1,3	1,4
Employment	1,4	0,6	0,2	0,7	0,6	0,7
Productivity	0,5	0,3	0,7	1,2	0,7	0,6
IRELAND						
GDP	6,2	6,2	4,4	4,5	4,3	5,1
Employment	3,0	1,8	2,0	3,1	3,8	2,7
Productivity	3,1	4,3	2,4	1,4	0,6	2,3

(1) Full time Employment
Source: INE, Eurostat & AMECO

- The pattern of growth is inflationist.

The growth pattern has been inflationist, since it has produced a very significant price increase differential between us and the euro area and EU15. At the end of 2005, Spanish inflation, measured as the rate of year-on-year variation of the harmonised consumer price index (HICP) was 3.7%, four tenths more than a year previously. On the other hand, core inflation

Graph III.3.1.4

YEAR-ON-YEAR RATES OF TOTAL INFLATION
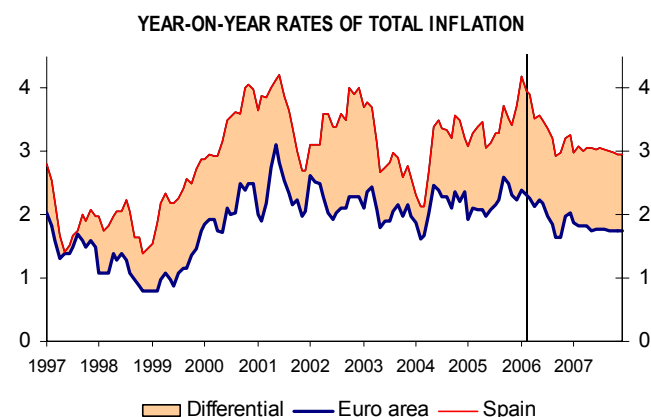
Source: INE, Eurostat & IFL (UC3M)
Date: March 27, 2006

Table III.3.1.3

Inflation (1999 – 2005)
Total

Accumulated	Year-on-year rates (1)						
	Dec-99	Dec-00	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05
Euro Area	16.1	1.75	2,48 (4,27)	2,05 (6,41)	2,28 (8,84)	1,96 (10,97)	2,36 (13,59)	2,22 (16,11)
Germany	12.1	1.37	2,13 (3,53)	1,42 (5,00)	1,12 (6,18)	1,11 (7,35)	2,19 (9,70)	2,14 (12,05)
France	13.9	1.37	1,74 (3,13)	1,43 (4,61)	2,16 (6,78)	2,39 (9,42)	2,33 (11,97)	1,75 (13,93)
Spain	25.4	2.78	4,10 (6,90)	2,51 (9,58)	4,02 (13,99)	2,69 (17,06)	3,27 (20,88)	3,72 (25,38)

Differential in total inflation between Spain and the Euro Area

| Euro Area | 9.3 | 1 | 1,6 (2,63) | 0,5 (3,17) | 1,7 (5,15) | 0,73 (6,09) | 0,9 (7,29) | 1,5 (9,27) |

Core

Accumulated	Year-on-year rates (1)						
	Dec-99	Dec-00	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05
Euro Area	13.3	1.06	1,33 (2,61)	2,36 (5,05)	2,30 (7,44)	1,89 (9,47)	2,03 (11,70)	1,47 (13,34)
Germany	8.0	0.39	0,97 (1,36)	1,63 (3,02)	1,04 (4,09)	0,84 (4,96)	2,04 (7,10)	0,82 (7,98)
France	11.6	0.59	0,97 (1,57)	1,92 (3,52)	2,08 (5,67)	2,98 (8,50)	1,71 (10,36)	1,15 (11,63)
Spain	23.2	2.38	2,98 (5,43)	3,53 (9,15)	3,67 (13,16)	2,70 (16,21)	2,87 (19,54)	3,03 (23,17)

Differential in total inflation between Spain and the Euro Area

| Euro Area | 9.9 | 1.32 | 1,45 (2,82) | 1,17 (4,12) | 1,37 (5,72) | 0,81 (6,74) | 0,84 (7,84) | 1,56 (9,83) |

1) Accumulated rates in parenthesis

Source INE & Eurostat.
Date:: March 2, 2006

last December was 3.0%, one tenth more than in December, 2004 (see table III.3.1.3). In the euro area, these inflation indicators performed more favourably last year, and in December the figures were significantly lower, 2.2% and 1.4%, respectively. But, unlike in Spain, these inflation rates also decreased during the year; global inflation fell by two tenths and core inflation registered a significant cut of 0.7 pp.

The maintenance of positive inflation differentials between countries or economic areas over time has accumulative effects. So an analysis in terms of the
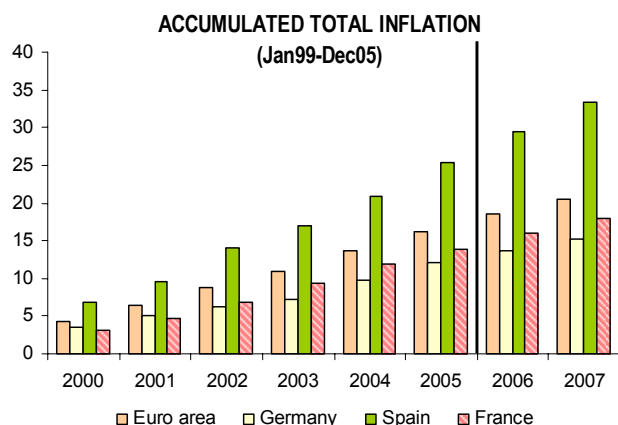
inflation accumulated over a period of time tells us more about the true effect of maintained inflation differentials on competitiveness. Table III.3.1.3 and graphs III.3.1.5 and III.3.1.6 show the accumulated inflation in Spain, the euro area, France and Germany for the 1999-2005 period, particularly significant because of the introduction of the euro.

According to the information shown in the table and the graphs, our global inflation grew by 25.38% in this period, whereas growth in the euro area was significantly lower (16.1%). In terms of core inflation, the inflation accumulated by our economy in the
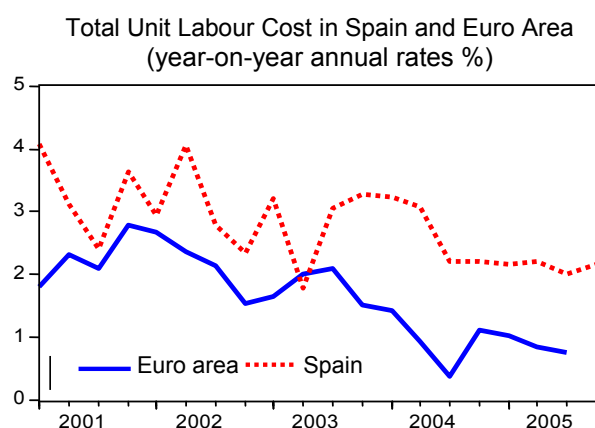
Graph III.3.1.5

ACCUMULATED TOTAL INFLATION
(Jan99-Dec05)

Source:Eurostat & IFL (UC3M)
Date: March 27, 2006

Graph III.3.1.6

ACCUMULATED CORE INFLATION
(Jan99-Dec05)

Source:Eurostat & IFL (UC3M)
Date: March 27, 2006

Graph III.3.1.7

Total Unit Labour Cost in Spain and Euro Area
(year-on-year annual rates %)

Graph III.3.1.8

Unit Labour Cost in manufactures in Spain and Euro Area
(year-on-year annual rates %)
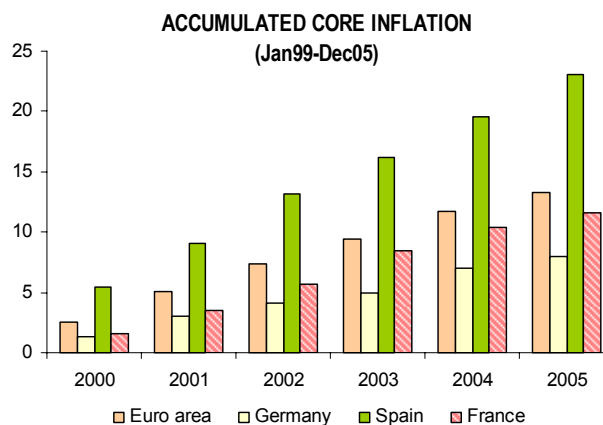
period was 23.17% versus 13.3% in the euro area. According to this information, the accumulated inflation differentials between this area and Spain was 9.27 pp for that period for global inflation and 9.83 pp for core inflation.

In the same period, and in terms of accumulated inflation, Spain was the most inflationist country in the euro area, except for Ireland, with a total of 27.4%.
The reasons for higher inflation in Spain include the fact that its productivity is still sluggish, its higher increases in labour costs per employee and the heavy growth of the business surplus, which is growing at greater rates than labour costs. Our unit labour costs also show higher growth rates than those in the euro area.

It is evident that these high inflation differentials between Spain and the euro area in the last few years are having a considerable negative impact on our competitiveness. With regards to inflation forecasts for Spain, the performance of tobacco prices in February has altered the monthly inflation profile in 2006, but we maintain our forecast of an annual mean inflation rate of 3.5%. The drop in tobacco prices affects core inflation, although the other prices considered performed much as expected, although most of them were slightly lower. With the February figure, the forecast for inflation of non-energy industrial goods increases slightly to

Table III.3.1.4

INFLATION RATES						
	Observed values			Forecasts		
INFLATION	Ave[2] 2004	Ave[2] 2005	2006 Feb[1]	2006 Mar[1]	Ave[2] 2006	Ave[2] 2007
CORE (83,82%)	2,7	2,7	2,9	3,0	3,0	3,0
TOTAL (100%)	3,0	3,4	4,0	3,9	3,5	3,0

Source:INE & IFL (UC3M)
Date: March 16, 2006

[1] Growth of the month over the same month of the previous year
[2] Growth of the average of the reference year over average of the previous year
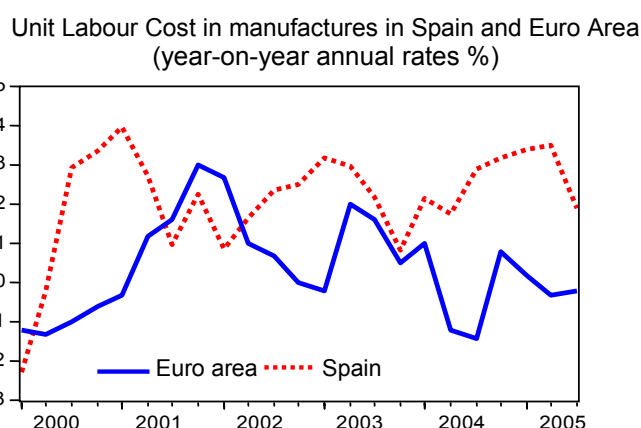
1.6%, whereas the service inflation forecast remains unaltered. Therefore, the mean annual growth rate of core inflation will be 3% for 2006 and 2007. As for total inflation, we maintain our forecast for mean annual rates in 2006 and 2007 of 3.5% and 3%, respectively (see table III.3.1.4 and graph III.3.1.9).

These inflation forecasts for Spain in 2006 and 2007 indicate that this differential will continue to be high, with 1.4 pp in 2006 and 1.2 pp in 2007 (see table III.3.1.4 and graph III.3.1.4), so the accumulated total inflation differentials will continue to grow to 11.0 pp in 2006 and 12.8 pp in 2007. If this is the case, this inflation differential should be corrected by the reduction in the quality gap between euro area and Spanish products, but the resulting value continues to be too high.

Graph III.3.1.9

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

Confidence intervals 95% 80% 60% 40% 20%

Inflation mean (1996-2005)
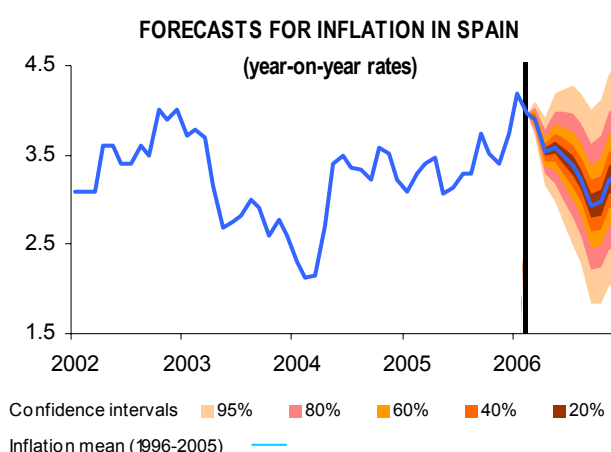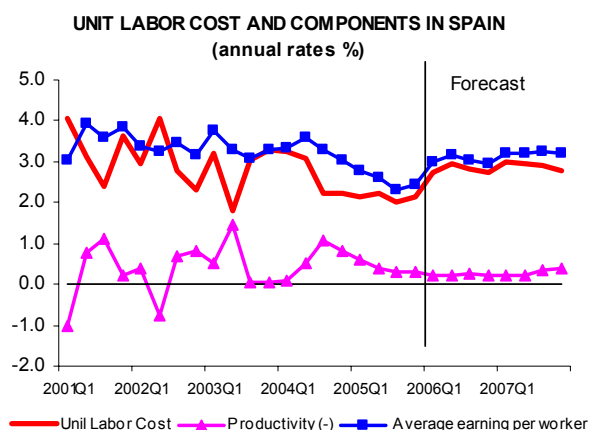
Source:INE & IFL (UC3M)
Date: March 16, 2006

- Labour costs are growing faster than in the euro area

Our labour costs have also registered higher growth rates than those of our principal competitors; together with prices, this is another example of the economy's loss of competitiveness.

According to recent National Accounts estimated, employee compensation grew by 2.5% last year, with productivity growing by only 0.3%. Global unit labour cost growth was therefore 2.2%, six tenths less than in 2004. In turn, this growth was more than 2 pp less that the GDP deflator, continuing to strengthen the business surplus, as usual in recent years.

Analysing the causes of this growth differential, we see that the weak growth of productivity in Spain, much less than in the euro area, is the main reason for greater growth of unit labour costs. This is clearly shown on graph III.3.1.7.

Graph III.1.3.10

UNIT LABOR COST AND COMPONENTS IN SPAIN
(annual rates %)

Legend: Unil Labor Cost — Productivity (-) — Average earning per worker

Source INE & Eurostat.
Date:: March 2, 2006

The above analysis refers to the ULC of the entire economy, including part of the goods and services which cannot be marketed abroad. Therefore, analyses of foreign competitiveness based on costs usually consider primarily the sector of goods eligible for foreign trade, especially manufactured goods.

Graph III.3.1.8 and table III.3.1.5 show the growth of ULCs in this sector of the Spanish economy and the euro area. We can see how, since 2003, this indicator in Spain has been showing a slightly upwards evolution, whereas the opposite is the case in the euro area, and Spanish ULCs show a significant positive growth differential which has become even greater in the last two years. Indeed, in the second and third quarters of 2005 in Spain, the growth rates registered were 3.5% and 1.9%,

respectively, whereas the euro area experienced falls of 0.3% and 0.2%.

Table III. 3.1.5

ULC Spain and the Euro - Area
(year-on-year rates)

	02	03	04	05	2004				2005			
					I	II	III	IV	I	II	III	IV
Total												
Spain	3,0	2,8	2,7	2,1	3,0	2,8	2,7	2,6	2,5	2,4	2,0	2,2
Euro area	2,2	1,8	1,0	0,7	1,4	0,9	0,4	1,1	1,0	0,84	0,75	
Manufactures												
Spain	1,9	2,3	2,5	2,5	2,2	1,8	2,9	3,2	3,4	3,5	1,9	1,2
Euro area	1,1	0,5	-0,2	-0,1	1,0	-1,2	-1,4	0,8	0,2	-0,30	-0,20	

Source: INE & ECB

This deviation of ULC growth in Spanish manufactured goods from the euro area rate represents a loss of competitiveness that will lead to a smaller market share, eventually harming both employment and production.

As we showed in the case of prices, a more precise way of seeing the true effect of falling competitiveness consists of showing ULC growth in accumulated terms. Graphs III.3.1.11 and III.3.1.12 show the accumulated growth of the ULCs of the entire economy and the manufacturing sector for the 1999 IV- 2005 IV period, and we can see how the total ULC of Spain grew by 18.3% versus a much lower figure in the euro area (9.6%). For manufactured goods, the accumulated differential in this period was much greater, with an increase in Spain of 14.1% compared with a quarter of that figure for the euro area. It is evident that, regardless of the evolution of salary growth in Spain and the euro area, the basic factor explaining this high differential is the lower rate of productivity of the Spanish economy.

This analysis of the performance of ULCs also support the results of our previous inflation differential analysis. They both show that the Spanish economy has clearly lost competitiveness with its leading competitors, and this problem has become more severe in the last two years. Behind this loss of competitiveness is the weak growth of productivity, which is pushing ULCs up. Given the rigid structures of many markets, this cost increase is easily passed on to prices.

- High trade deficit due to less competitiveness

The results of this loss of competitiveness are seen in our high trade deficit, with its highest rate ever registered in the last quarter, 7.7% of the GDP. This pushed the current account balance up to a negative value of 6.8% of the GDP for this period.

Graph III.3.1.11

ACCUMULATED TOTAL ULC IN SPAIN AND THE EURO AREA
(1999-2005)

Source: INE & ECB

Graph III.3.1.12

ACCUMULATED ULC IN MANUFACTURES IN SPAIN AND THE
EURO AREA (1999-2005)
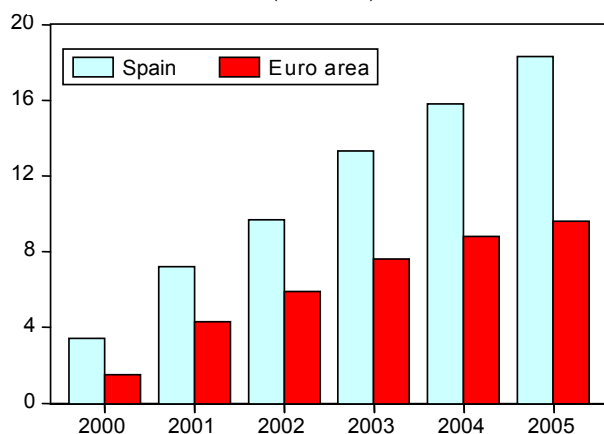
Source: INE & ECB

The high trade deficit of the Spanish economy creates disequilibrium in the current account balance, which requires us to increasingly obtain financing from abroad and a growing business surplus. Since the balance of payments must show equilibrium, this gap caused by current operations has to be compensated by the influx of capital. This type of financing is no longer a problem since we have been part of the euro area, and this is an important change compared with beforehand. However, we need to ask ourselves whether it is sustainable to increasingly resort to surplus savings from other countries.

If we consider the different sectors of the economy, households, firms and the public sector, we know that the public sector ended the year with a superavit of 1.1% of the GDP in 2005, but the other two sectors need financing because households have high indebtedness because of their excessive consumer expenditure and their only investment item, housing, and firms also need financing to make their investments.

The Spanish economy has a high economic growth rate, creates a lot of employment and is reducing its unemployment rate, but this is all based on a growth pattern which cannot be maintained in the medium term. The Spanish economy needs medium-term economic policy measures to be applied immediately. Indeed, their implantation would change the expectations of economic agents and, without waiting for the measures in question to produce results, this alone would have a positive effect in the short term. The way to combat this loss of competitiveness consists of continuing to reform some markets to make them more flexible, and taking steps to enhance productivity, including better infrastructures, a higher capital allowance per
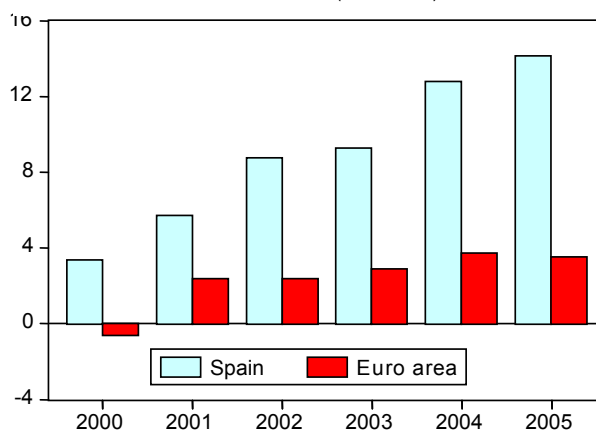
employee, a better qualified labour factor and, above all, more investment in R&D and innovation in relation to the GDP.

III.3.2. Comparison with other countries: the Irish case.

This growth pattern which has been maintained by the Spanish economy in the last few years has apparently had good results and we can classify it as beneficial. However, we have to remember that the primary determinant of income and GDP growth in the future is based on more productivity and this is where this growth pattern has failed.

The Spanish economy has to try to continue to grow at a good pace but with greater productivity increases, so that GDP growth does not depend solely on employment. In a few years time, growth in the occupation rate may be much lower because of demographic constraints, so the contribution of employment to growth will be much smaller and in this case productivity should take over as the driving force behind growth.

We can ask ourselves whether this growth pattern has been chosen by the Spanish economy or was inevitable. The answer is that there were other alternatives. The Irish case is paradigmatic in this respect. In this country, which also registered high GDP growth rates (5.1%), even higher than Spain, in the 2000-2005 period, productivity's contribution to growth was decisive (see table III.3.2.1). The reasons for this higher growth rate lie in the fact that Ireland made more investments in equipment, in R&D and innovation and in technological assets, enabling it to grow with large advances in both productivity and employment. Spain, however, has specialised in construction and services, sectors

Graph III.3.2.1

TOTAL FACTOR PRODUCTIVITY
(Change in %)

Source AMECO

Graph III.3.2.2

CAPITAL PER WORKER

Source :AMECO
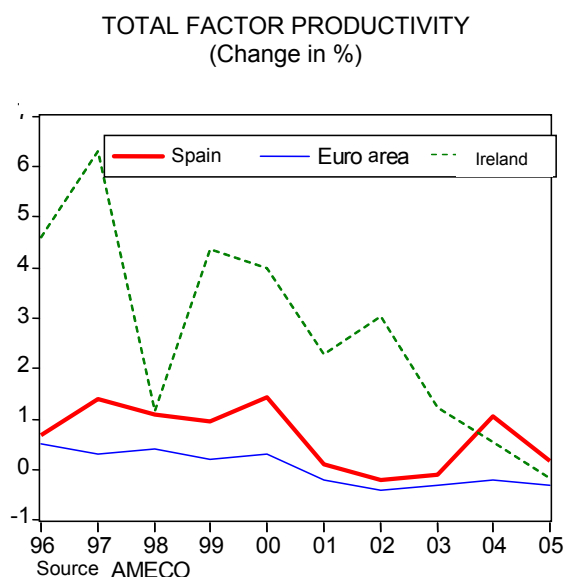
which are initially not very capital intensive, except for some services. In particular, they make limited use of the latest technologies and therefore register small advances in productivity.

In this respect, graphs III.3.2.1 and III.3.2.2 show information about the evolution of total factor productivity (TFP) and capital endowment per employee, the variables which largely determine productivity.

These graphs show that TFP has been falling in the euro area, Spain and Ireland since 1996, but that growth of this variable was significantly smaller in Spain, except for the last two years. As for capital endowment, Spain is far beneath the euro area and Ireland, where moderate salary growth since the mid-nineties has possible discouraged replacing labour with capital.
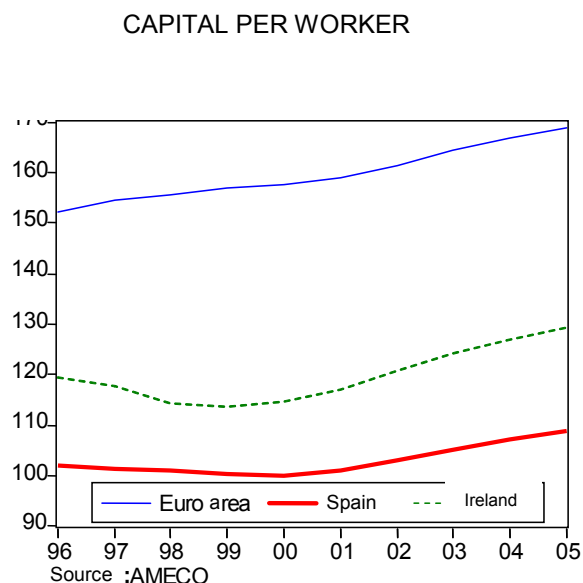
III.3.3. Advantages and disadvantages of this growth pattern.

It is evident that this growth pattern has both advantages and disadvantages.

- Advantages of the growth pattern

- It has allowed Spain to progress with some speed in the process of convergence with EU15.
- The unemployment rate has fallen considerably to EU15 levels, just over 8.0%.
- Employment has increased considerably, with significant growth in the rate of occupation and activity rate.

- Disadvantages of the growth pattern

- Low growth of productivity, nearly zero in 2005.
- Loss of competitiveness in relation to both prices and costs.
- Historically high current account deficit.
- High household indebtedness.

III.3.4. Medium-term viability of this growth pattern

This model involves certain risks making it non-viable in the long term. GDP growth per capita is conditioned by low productivity and per capita employment, but the latter is limited by the rate of occupation and the activity rate, in turn conditioned by demographic characteristics which may start to present constraints in the next few years. Table III.3.4.1 shows the breakdown of per capita GDP growth in Spain and EU15 according to productivity and the employment rate or per capita employment. We can see that, since 1995, per capita GDP growth depends solely on an increase in the number of people employed, whereas in EU15 the driving force was productivity.

Table III.3.4.1

DETERMINANTS OF THE ANNUAL GROWTH OF GDPpc
(year-on-year rates)

Period	Spain			EU 15		
	GDPpc	Labour Productivity	Employ-ment rate	GDPpc	Labour Productivity	Employ-ment rate
95 – 99	3,6	0,3	3,2	2,3	1,3	0,9
99 – 05	2,1	0,2	1,8	1,5	1,1	0,4
95 – 05	2,7	0,3	2,4	1,8	1,2	0,6

Fuente: Eurostat, INE & AMECO

Besides the possible future limitations of the demographic factors, growing interest rates and the maintenance of high energy prices will also reduce growth in the future.

Low productivity is primary responsible for our loss of competitiveness in prices and costs and will continue to harm exports, so it needs to be corrected.

III.3.5. Causes of the low productivity growth rate.

Labour factor productivity depends directly on the capital endowment per employee and total factor productivity (TFP); that is, the efficiency with which productive factors are used, everything in the production function that cannot be explained by labour and capital and is in a way associated to technical progress, known as Solow's residue. The previous graphs show the disadvantage of these two variables with our comparative countries.

The reasons for this low productivity growth rate in the Spanish economy compared to the EU are numerous and of several types. They include:

1. The Spanish economy specialises in the service and construction sectors, in which productivity is usually low compared with others. They are not the most ideal sectors in which to use assets of high technological content.

2. The low growth of total factor productivity (TFP), which was the same in 2005 as in 1995.

3. The intense creation of employment, making the economy make intensive use of the labour factor, which is the primary source of growth. This has also been favoured by other factors:

- The large proportion of temporary contracts among employees, affecting 33.0% of the work force, which has increased over the last two years. This ratio is nearly triple the mean rate for EU15 and the euro area. Temporary contracts discourage firms from investing in staff training.

-Much of the employment created affected inexperienced workers with few qualifications, largely young people, immigrants and women.

The growing labour supply derived from immigration has moderated labour costs so, in spite of low productivity, ULC growth has been limited. In turn, this has enabled us to maintain or increase our commercial margins, which can discourage investment in equipment.

4. Lower capital/labour ratio growth than the euro area since 1997.

5. Less investment in R&D and innovation and employment qualifications.

III.3 6. Possible solutions.

There is an urgent need to increase productivity and halt the loss of competitiveness of our goods and services markets, for which a series of measures are required.

- Increase capital endowment per employee and continue to improve infrastructures.

- Improve the qualification of the labour factor.

- Continue with structural reforms in certain sectors such as the labour market, particularly the collective bargaining process, and also in some goods markets.

- Increase investment in R&D and innovation in relation to the GDP.

The figures related to the situation of R&D investment in Spain and the most important European countries are shown on table III.3.6.1 and graphs III.3.6.1 and III.3.6.2. According to this information, total R&D expenditure was only just over 1.0%, precisely 1.07%. This ratio shows a slightly upwards trend and is significantly lower than our leading competitors, in spite of the progress we have made in the last few years.

This aspect of the convergence process with this group of countries is very low, especially when we consider the income level. Our country currently represents approximately 85% of the mean per capita income of EU15, but R&D expenditure as a % of the GDP is only just only half the amount spent in the area (see table III.3.6.1).
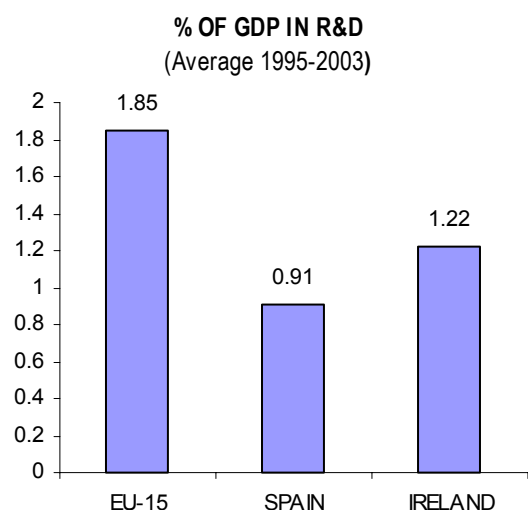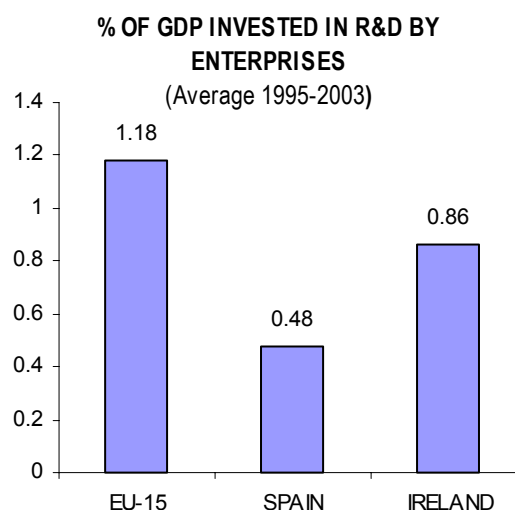
Table III.3.6.1

Year	SPAIN		EU		IRELAND		GERMANY	FRANCE	USA
	TOTAL	ENTERPRISES	TOTAL	ENTERPRISES	TOTAL	ENTERPRISES			
EFFORT IN R&D IN SPAIN AND SOME EUROPEAN COUNTRIES (Expenditure on research % GDP)									
1994	0.81	0.41	1.82	1.13	1.26	0.87	2.26	2.34	2.43
1995	0.81	0.40	1.80	1.12	1.26	0.89	2.26	2.31	2.51
1996	0.83	0.41	1.80	1.12	1.30	0.93	2.26	2.30	2.55
1997	0.82	0.41	1.80	1.13	1.28	0.91	2.29	2.22	2.58
1998	0.89	0.48	1.81	1.14	1.25	0.90	2.31	2.17	2.60
1999	0.88	0.47	1.86	1.19	1.22	0.87	2.44	2.18	2.65
2000	0.92	0.51	1.89	1.22	1.15	0.83	2.49	2.18	2.72
2001	0.99	0.55	1.90	1.25	1.11	0.82	2.46	2.20	2.76
2002	1.03	0.56	1.91	1.28	1.12	0.81	2.49	2.23	2.65
2003	1.05	0.57	1.91	1.29	1.19	0.82	2.52	2.18	2.68
2004	1.07	0.58	- - -	- - -	1.21	- - -	2.49	2.16	2.68

Source: INE & OECD

Graph III.3.6.1

% OF GDP IN R&D
(Average 1995-2003)

Graph III.3.6.2

% OF GDP INVESTED IN R&D BY ENTERPRISES
(Average 1995-2003)

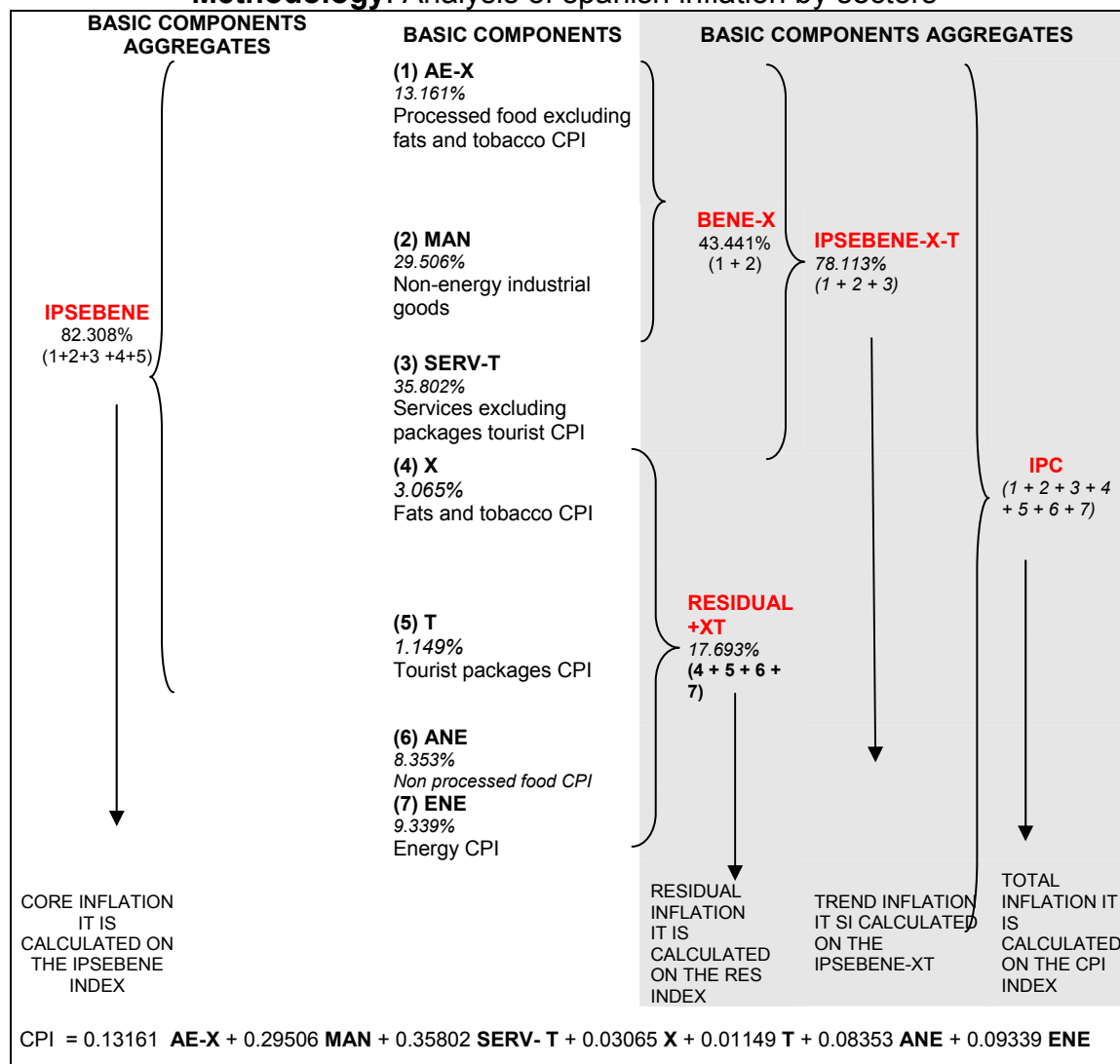## III.4. OTHER TABLES AND PLOTS

Tables:

- Spain Consumer Price Index (CPI) desegregation.

- Forecast errors by sectors for Spain.

Plots:

- CPI monthly growth rates in Spain.

- Annual Forecasts 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	

IPSEBENE
82.308%
(1+2+3 +4+5)

(1) AE-X
13.161%
Processed food excluding fats and tobacco CPI

(2) MAN
29.506%
Non-energy industrial goods

BENE-X
43.441%
(1 + 2)

IPSEBENE-X-T
78.113%
(1 + 2 + 3)

(3) SERV-T
35.802%
Services excluding packages tourist CPI

(4) X
3.065%
Fats and tobacco CPI

IPC
(1 + 2 + 3 + 4 + 5 + 6 + 7)

(5) T
1.149%
Tourist packages CPI

RESIDUAL +XT
17.693%
(4 + 5 + 6 + 7)

(6) ANE
8.353%
Non processed food CPI

(7) ENE
9.339%
Energy CPI

CORE INFLATION IT IS CALCULATED ON THE IPSEBENE INDEX

RESIDUAL INFLATION IT IS CALCULATED ON THE RES INDEX

TREND INFLATION IT SI CALCULATED ON THE IPSEBENE-XT

TOTAL INFLATION IT IS CALCULATED ON THE CPI INDEX

CPI = 0.13161 **AE-X** + 0.29506 **MAN** + 0.35802 **SERV-T** + 0.03065 **X** + 0.01149 **T** + 0.08353 **ANE** + 0.09339 **ENE**

Source: INE & IFL (UC3M)   Weights 2006

FORECAST ERRORS IN THE MONTHLY INFLATION RATE BY SECTORS IN FEBRUARY IN SPAIN				
	Weights 2006	Observed Monthly Growth	Forecast	Confidence interval at 80%
Processed food	17.00	-0.15	0.80	0.38
Non energy industrial goods	29.51	-0.11	-0.14	0.15
Services	35.80	0.45	0.50	0.04
CORE	82.31	0.13	0.34	0.12
Non-processed food	8.35	-1.48	-1.00	0.61
Energy	9.34	0.67	0.74	1.45
RESIDUAL	17.69	-0.33	-0.07	0.33
TOTAL INFLATION	100.00	0.05	0.26	0.09

Source INE & IFL (UC3M)
Date: March 14, 2006

CPI MONTH-ON-MONTH RATES OF GROWTH IN SPAIN

Observed Values   ---- Forecast
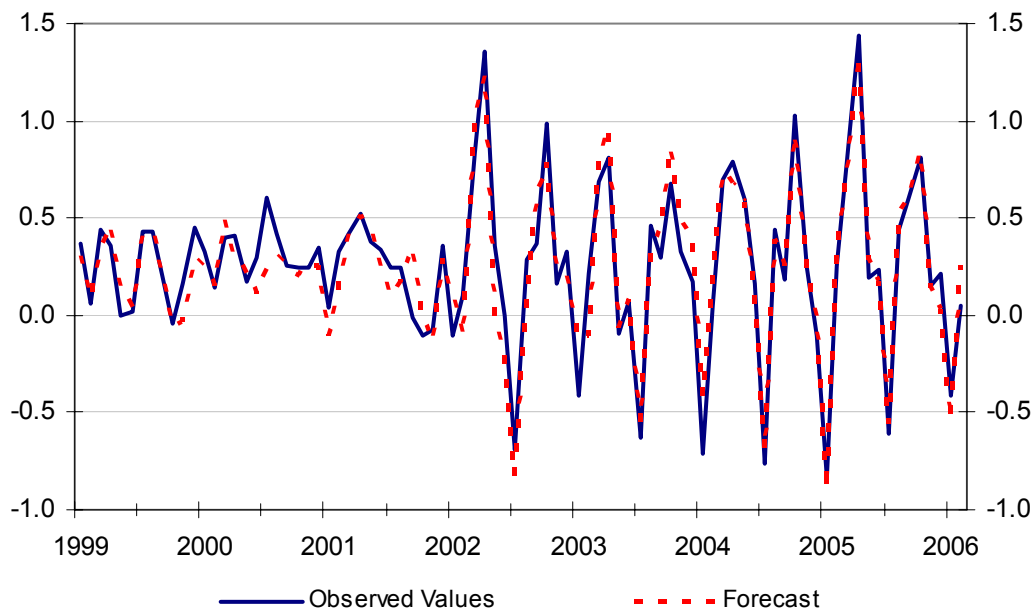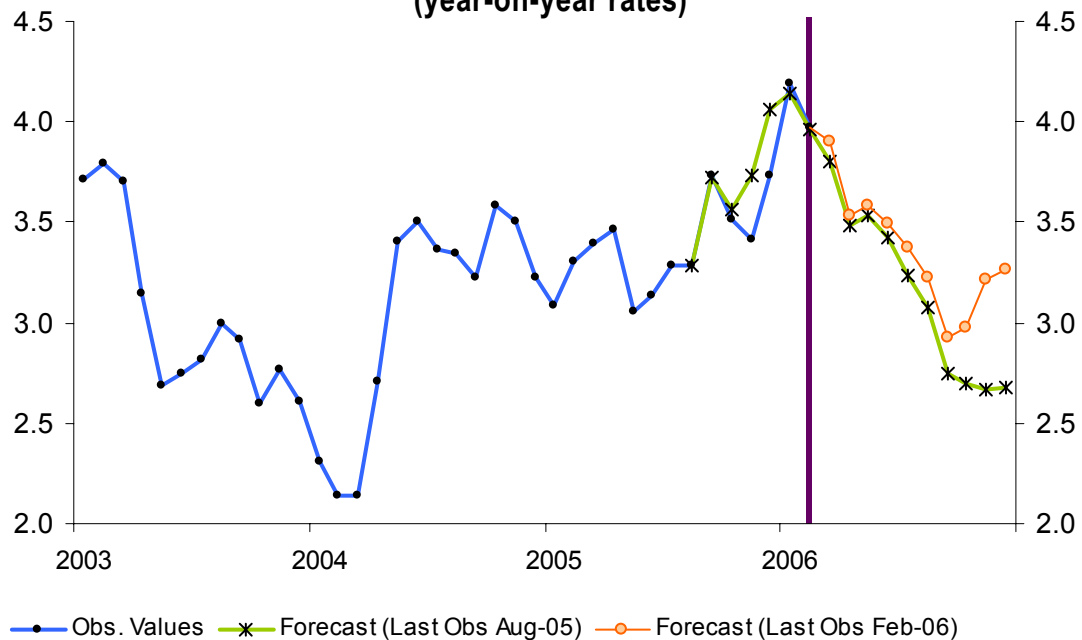
Source: INE & IFL (UC3M)
Date: March 14, 2006

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

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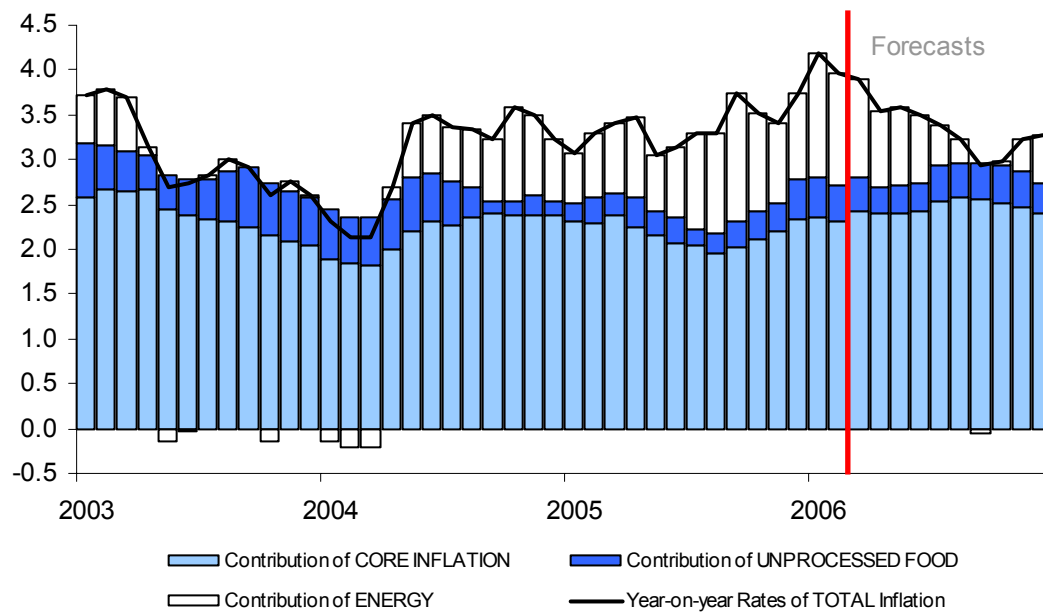## (year-on-year rates)

Obs. Values   Forecast (Last Obs Aug-05)   Forecast (Last Obs Feb-06)

Source INE & IFL (UC3M)
Date: March 14, 2006

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

Forecasts

Contribution of CORE INFLATION · Contribution of UNPROCESSED FOOD · Contribution of ENERGY · Year-on-year Rates of TOTAL Inflation

Source INE & IFL (UC3M)
Date: March 14, 2006

IV.1 EURO AREA AND USA

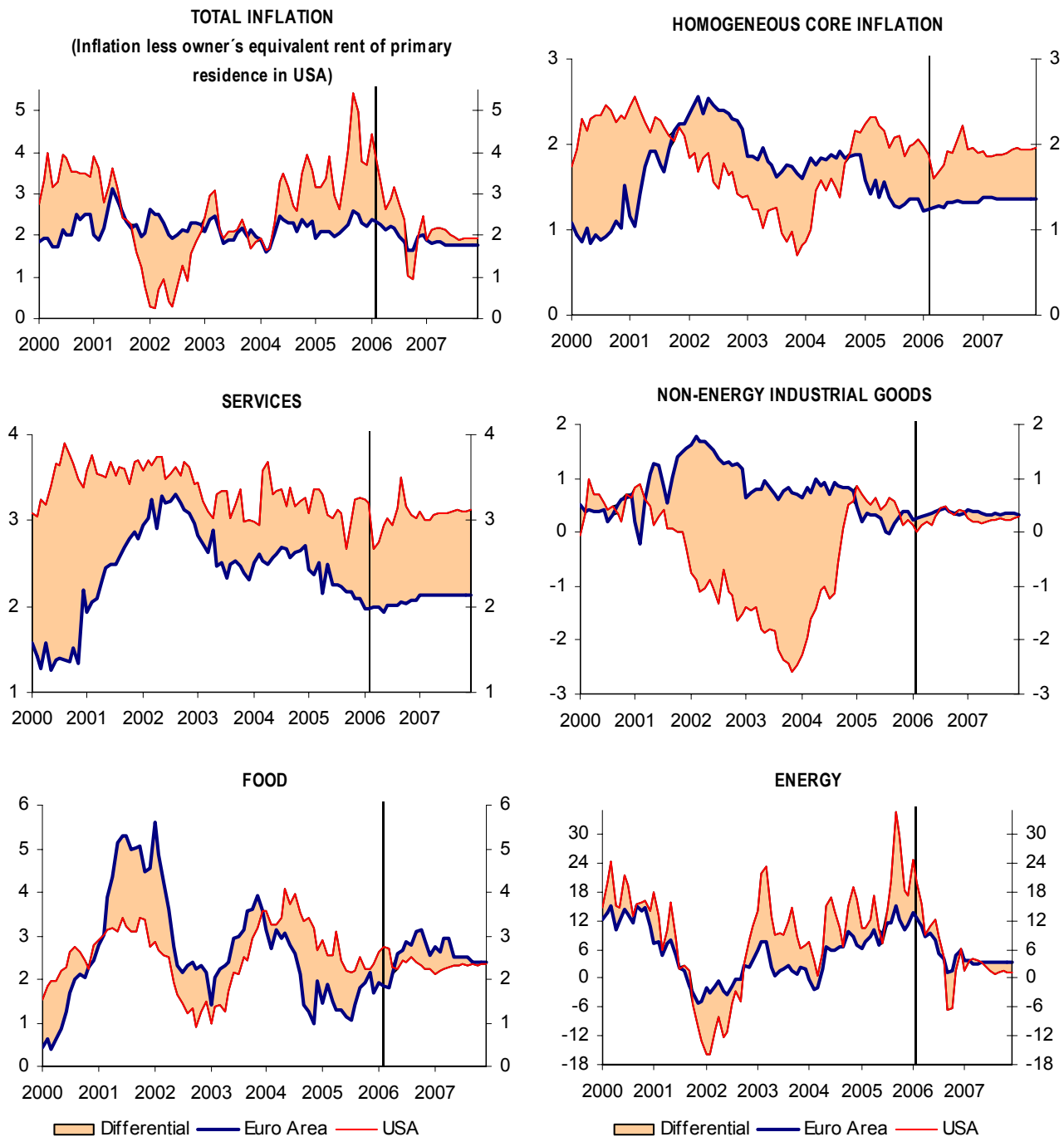| INFLATION FORECASTS AND EVOLUTION IN THE EURO AREA AND USA								
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**Forecast**	
							2006	**2007**
TOTAL INFLATION								
Euro-area (100%).	2.1	2.3	2.2	2.1	2.1	2.2	**2.1**	**1.8**
USA (81.5%). [1]	3.5	2.6	0.9	2.2	2.8	3.7	**2.6**	**2.0**
A HOMOGENEOUS MEASURE OF CORE INFLATION [2]								
Services and Non-energy industrial goods excluding food and tobacco.								
Euro- area (71.52%).	1.0	1.8	2.4	1.8	1.8	1.4	**1.3**	**1.4**
USA (55.6%).[1]	2.1	2.1	1.6	1.1	1.6	2.1	**1.9**	**1.9**
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Services.								
Euro- area (40.78%).	1.5	2.5	3.1	2.5	2.6	2.3	**2.0**	**2.1**
USA (27.4%).[1]	3.5	3.6	3.6	3.2	3.3	3.1	**3.1**	**3.1**
(2) Non-energy industrial goods excluding food and tobacco.								
Euro- area (30.74%).	0.5	0.9	1.5	0.8	0.8	0.3	**0.3**	**0.4**
USA (29.0%).	0.5	0.3	-1.1	-2.0	-0.9	0.5	**0.3**	**0.2**
INFLATION IN EXCLUDED COMPONENTS FROM THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Food.								
Euro- area (19.28%).	1.4	4.5	3.1	2.8	2.3	1.5	**2.5**	**2.6**
USA (14.9%).	2.3	3.1	1.8	2.1	3.4	2.4	**2.4**	**2.3**
(2) Energy.								
Euro- area (9.20%).	13.0	2.2	-0.6	3.0	4.5	10.1	**7.0**	**3.4**
USA (9.90%).	16.9	3.8	-5.9	12.2	10.9	16.9	**7.5**	**2.2**

[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 Euro area and in the USA.

Source: EUROSTAT, BLS & IFL (UC3M)
Date: March 27, 2006

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

TOTAL INFLATION
(Inflation less owner´s equivalent rent of primary residence in USA)

HOMOGENEOUS CORE INFLATION

SERVICES

NON-ENERGY INDUSTRIAL GOODS

FOOD

ENERGY

Differential — Euro Area — USA

Source: EUROSTAT, BLS & IFL (UC3M)

Date: March 27, 2006

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 Euro area and in the USA.
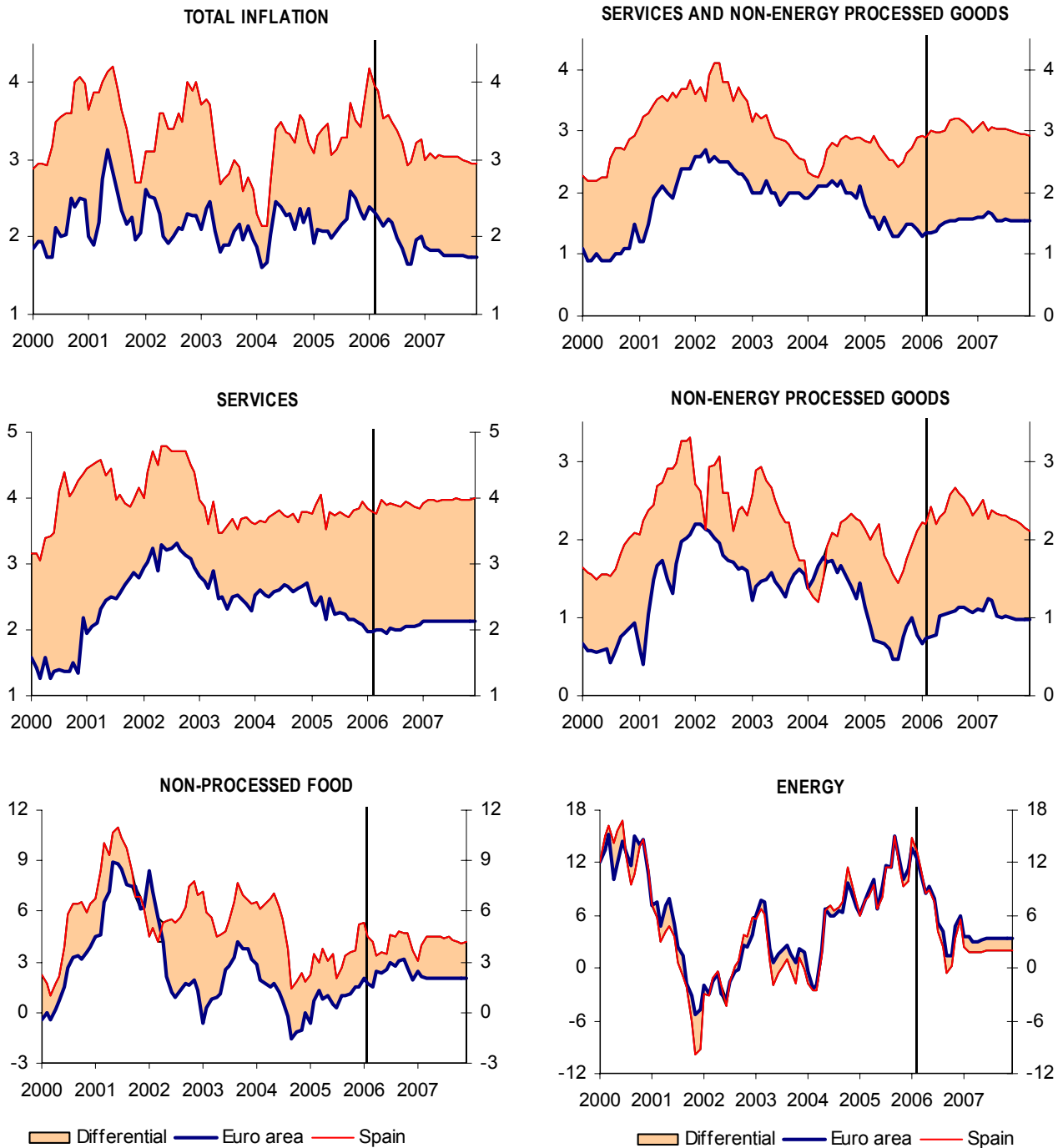
IV.2 EURO AREA AND SPAIN

INFLATION FORECASTS AND EVOLUTION IN THE EURO AREA AND SPAIN								
	2000	2001	2002	2003	2004	2005	Forecasts	
							2006	2007
TOTAL INFLATION								
Spain (100%).	3.4	3.6	3.5	3.0	3.0	3.4	**3.5**	**3.0**
Euro-area (100%).	2.1	2.3	2.2	2.1	2.1	2.2	**2.1**	**1.8**
CORE INFLATION								
Services and Non-energy processed goods.								
Spain (82.31%).	2.5	3.5	3.7	2.9	2.7	2.7	**3.0**	**3.0**
Euro-area (83.37%).	1.0	1.9	2.5	2.0	2.1	1.5	**1.5**	**1.6**
DIFFERENT COMPONENTS OF CORE INFLATION								
(1) Services.								
Spain (35.80%).	3.7	4.2	4.6	3.7	3.7	3.8	**3.9**	**4.0**
Euro- area (40.78%)	1.5	2.5	3.1	2.5	2.6	2.3	**2.0**	**2.1**
(2) Non-energy processed goods.								
Spain (46.51%).	1.7	2.8	2.6	2.4	1.9	1.9	**2.4**	**2.3**
Euro- area (42.84%).	0.7	1.5	1.9	1.4	1.5	0.7	**1.0**	**1.1**
INFLATION IN EXCLUDED COMPONENTS FROM CORE INFLATION								
1) Non-processed food.								
Spain (8.35%).	4.2	8.7	5.8	6.0	4.6	3.3	**4.3**	**4.2**
Euro- area (7.69%).	1.8	7.0	3.1	2.1	0.6	0.8	**2.4**	**2.1**
(2) Energy.								
Spain (9.34%).	13.3	-1.0	-0.2	1.4	4.8	9.6	**6.4**	**2.0**
Euro- area (8.13%).	13.0	2.2	-0.6	3.0	4.5	10.1	**7.0**	**3.4**

Source: EUROSTAT, INE & IFL
Date: March 27, 2006

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

TOTAL INFLATION

SERVICES AND NON-ENERGY PROCESSED GOODS

SERVICES

NON-ENERGY PROCESSED GOODS

NON-PROCESSED FOOD

ENERGY

Differential — Euro area — Spain

Source: EUROSTAT, BEA & IFL (UC3M)
Date: March 27, 2006

V. INFLATION FORECASTS OF DIFFERENT INSTITUTIONS

FORECASTS OF DIFFERENT INSTITUTIONS[1]									
INFLATION									
	BIAM[2]		CONSENSUS FORECASTS[3]		FMI[4]		BCE[5]		OCDE[6]	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
EURO AREA	2,1	1,8	2,0	2,0	1,8	-	2,0	2,0	1,6	1,7
USA	2,7	2,2	2,9	2,3	2,8	-	-	-	2,3	2,5
SPAIN	3,5	3,0	3,3	2,9	3,0	-	-	-	2,5	2,9
REAL GDP (Percentage change from previous year)									
	BIAM		CONSENSUS FORECASTS		FMI		BCE		OCDE	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
EURO AREA	2,0	2,1	2,1	1,8	1,8	-	1,7-2,5	1,5-2,5	2,1	2,2
USA			3,3	3,0	3,3	-	-	-	3,5	3,3
SPAIN	3,1	3,2	3,1	2,8	3,0	-	-	-	3,2	3,3

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, March 2006.
3   March 13, 2006
4   IMF. World Economic Outlook. September, 2005.
5   Inflation: ECB. Monthly Bulletin February 2006. Real GDP growth: ECB. Monthly Bulletin March 2006.
6   OECD Economic Outlook 78. November 29, 2005. For the Euro area and Spain the forecast are for the 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.

INNOVATION AND INTELLECTUAL PROPERTY

Juan Urrutia
Chairman of the Editorial Board of EXPANSION

I will begin with two introductory remarks, the first concerning innovation and the second about intellectual property.

Instead of focusing on the origin of our concern for technological progress, I will concentrate on what is now known as innovation, understood as the systematic activity of different agents. This notion comes from the Theory of Endogenous Growth, according to which the driving force behind growth lies in the Solow residue or total factor productivity (TFP) which in turn depends on human assets and R&D expenditure. Paul Romer was the first to emphasise the idea that this R&D expenditure increases productivity and is the origin of continuous economic growth. This notion of innovation is of enormous importance now that we are living in a globalised world in a knowledge society governed by information and communication technologies (ICT). In a globalised world competition is not only based on price but also on innovation, on novel products and product quality. In the knowledge society, true value added is to be found in the intangibles in which innovation is easier and more critical. And the ICTs, which make such a knowledge society possible, are in themselves a sector in which innovation is crucial.

The fact that the ICTs consist of computer programmes means that a code is a language that can be perfectly reproduced at zero cost, a characteristic that has generated many doubts and considerable uncertainty with regards to the ownership of such intangibles. This leads me to my second introductory remark in relation to the notion of intellectual property. I understand intellectual property to mean what, in a Latin regime, would be classified as both civil (copyright) and business (patents). Here we find a series of paradoxes delimiting a field in which economists necessarily have to move but to which we have been blind, unlike the legal experts who generally claim to have a clear understanding of things, with some nuances.

What problems does this issue of intellectual property cause for economists? Fifty years ago, an economist that most of us recognise as a genius, Kenneth Arrow, considered the problem of the intellectual property of inventions that do not fall within the scope of innovations, in such a way that it has remained on all economists' hard drives: the only way in which the incentive to create is compatible with the socially beneficial diffusion of what is created is by granting the inventor a temporary monopoly. This temporary monopoly can go by the name of patent or copyright. We find, then, that, paradoxically, a supposed leftist (Arrow) wants to increase the scope of ownership of intangible assets and ideas and, at the same time, reduce the public domain. On the other hand, since the mid-90's some economists who would place themselves further to the right (Boldrin and Levine) have realised that the temporary monopoly granted by a patent could be worse than the problem of lack of incentives. They also formally prove that the open market is capable of obtaining the desired social benefits without the need for granting a monopoly and show that intellectual property, objectively speaking, may be an impediment for innovation. These supposedly right-wing economists, then, want to reduce the scope of ownership, eliminating part of intellectual property while broadening public space at the same time.

It is in this paradoxical framework where I will be moving. I want us to unlearn the conventional wisdom that is stored on our hard drives and start to thing differently. Alternatively, I want to focus on a good combination of **cooperation** and **rivalry** which could nonetheless be prevented or hindered by too much poorly conceived legislation on intellectual property. Note that I do not aim to innovate but to scandalise a little. Indeed, I am to generate a couple of apparent heresies by providing arguments attempting to convince you that too many patents can be an impediment for innovation and, in any event, could slow down its pace.

I will do this in two parts. In the first, I will attempt to show how **cooperation** and competitive **rivalry** can be compatible in a world without intellectual property that is with neither patents nor copyright. In the second part, I will return to the world as it is and attempt to understand what can happen when we have intellectual property – patents and copyright – but can waive our rights to it as a sign of the quality of the product.

As for **cooperation** and **rivalry**, the most complicated part of my strategy, can we have a world of innovation similar to the open science system, where there are no patents related to basic science? The answer is by no means simple. For the time being, allow me not to distinguish between culture and industry and refer generically to creativity. Now all I have to do is to prove that there will be a supply, and a positive price to be paid because there will be a demand. I am interested in focusing on the conditions in which the demand will arise; but let me first affirm that the supply is guaranteed because creators and investigators are strange individuals who operate with not necessarily monetary stimuli and who, therefore, do not necessarily demand intellectual property rights.

But I don't even need to refer to such peculiarities. They can be as interested in money as anyone else, but the case is that there are intermediate institutions that will demand the services that these creators are capable of developing. In computing, for example, Linux followers working with open source, design programs for a company called Red Hat which is capable of taking part of those programs, package them and deliver them to the end clients at a positive price, thus enabling them to pay the creators. What is crucial, then, is to know where to find the demand for such intangible products. Eric S. Raymond, an author famous for his book **The Cathedral and The Bazaar**, emphasises in a book, which continues to be written on the Web and is called **The Magic Cauldron,** the following conditions in which a company is willing to pay an amount to an intermediary for his creative services so that that intermediary can then pay the creators themselves. The conditions are as follows, in each case with an industrial example and a cultural example.

The first condition is that (confidence in) the quality of the result is critical for the company concerned, a pharmaceutical firm for example. In this type of firm, as in creative cuisine, quality is indeed critical, although it is not necessarily critical for an editor.

The second characteristic for a firm to demand an intangible product is that the best way to verify such critical quality is a peer review. This type of assessment is standard in a technologically-based firm, but I get the impression that in the cultural world, editors or critics are not peers in a relevant sense, but they can nonetheless guide and "guarantee" the quality of the film we will be seeing tomorrow.

The third important condition is that quality is such a critical input that it cannot depend on a single supplier. Pharmaceutical firms cannot depend on a single supplier, but The Globe does not find it difficult to survive by only producing plays by Shakespeare.

The fourth condition is that creativity has to be the basis of the firm's internal communications. A pharmaceutical company or a group of creative chefs can only work if they communicate according to the language generated in relation to their creative product. On the other hand, a newspaper editor does not necessarily have to understand the language of journalism.

Finally, the fifth condition is that the creation must be fully understood by all company members. This is convenient and even necessary for a pharmaceutical firm, but editors do not actually need to share the knowledge of literature of his authors.

In these conditions, it seems quite clear that there will be a positive demand. Given the creative idiosyncrasy of investigators and creators, and the existence of intermediaries, there must be a market for intellectual production of one type or the other. There are more sophisticated arguments (mathematical, formal, etc.) proving that there is no strict need for intellectual property in order to guarantee the existence of inventions, but the above five conditions will have to be sufficient. Most economists have not even started to reformat their hard drives, but I can assure you that our children will have no alternative, if they have not done so already.

So far I have been referring to a world in which there is no intellectual property, attempting to show that it is not necessary. In this second part, I will be referring to a world in which there is intellectual property, and I will be clearly separating culture and industry. To simplify, what I call industry is the set of firms that meet the above conditions, and culture is the set of firms that do not meet them entirely.

What I want to know now is whether waiving the right to patents or copyright is a sign of something. For economists, a <u>sign</u> is an action that would be irrational if it were not for the qualities that we wish to emphasise. The fact that El Bulli is in Cala Monjoi, passing Rosas, makes the price of dinner less important. What is important is that it is difficult to get there, in which case its location is a sign that the dinner must be fantastic or else no one would ever go. Such a location is a <u>sign</u>: I am so good that I can be practically inaccessible.

The question now is: if I waive my rights to copyright or patents am I giving out a sign about my product? The answer is different in one case or the other.

The five conditions described earlier are met in the industrial world, so intellectual property in the form of patents is not obviously necessary. If it is not necessary, waving one's right to it is not a sign of anything. What would an economist expect to happen in such a world? When no sign of quality can be given, this gives rise to a situation in which equilibrium does not separate. In other words, prices do not reveal different product qualities. And this is bad because the consumer does not know what he is buying and because <u>innovation</u>, based on buying intermediate products and changing them into other things, does not know which road to follow. So <u>innovation</u> will slow down and productivity will not grow at the expected rate. Consequently, the country will not be as competitive as could be desired and growth will be limited. In view of this consideration, I would be so bold as to declare a heresy: I would put a possibly gradual end to patents. Who would it hurt? Pharmaceutical firms, of course, but not the consumer.

Let's take a look at the cultural world. It is completely different because it does not meet all our conditions. Here, waiving one's right to copyright is indeed a <u>sign</u>. In this case, as none of the above five conditions is met, the market would not work and waiving one's right to copyright is indeed a <u>sign</u> of the quality of the product. What happens in such a world? Well, once the right to copyright has been waived, the equilibrium could be totally different, a <u>separating</u> equilibrium: the prices are such that we can easily distinguish the grain from the chaff. Whether this separating equilibrium exists depends on the elasticity of the demand. In any event, it is quite clear that it would be a good thing because it would enable the consumer to tell good from bad and because the innovator would know which road to take. Innovation would then be faster, productivity would increase and we would all be wealthier. So I would not eliminate intellectual property and copyright although I would adapt today's excessively rigid legislation. I would go so far as to defend the Anglo-Saxon idea of the Creative Commons, sponsored by L. Lessig, a lawyer from Stanford, which enables us to modulate our waiver of copyright and broaden the public domain. If we could just modify and restrict copyright, I am sure that we would progress greatly. It would be good for consumers and it would only be bad for certain copyright managers.

And now for our conclusions. What is happening in the patent field? Everyone is realising that their scope of application and duration have increased so much that it is starting to seem scandalous. Just consider that well known firm that has patented anything that can be used to move things at a distance by thought. It is also starting to be clear that the license market does not obtain the same result as would be possible without patents because it is not, and cannot be, perfect. On the other hand, everyone realises that firms are starting to share patents. But in this case, the same applies to international trade, in that if sharing is not complete, trade may diminish and, in this case, so may welfare. What we have to do is to eliminate patents, which would be the same as everyone sharing them. In general, and to conclude, patents, like all monopolies, are one more example of what are known as "rents" in the technical economic meaning of the word. These rents are both untouchable and unnecessary.

In relation to copyright, the situation is indeed scandalous. A CD costs 20 euros in a shop and the production costs are less than two euros. The rest is the cost of the copyright. In this case, the pirates are the innovators. And then there is the example of Caouette's film Tarnation, which was a complete success at Cannes in 2002. Its total cost was 500,218 dollars, only 218 of which represented its real cost. The remaining 500,000 are the cost of the copyright of frames and music from other films.

And to end, suffice it to say that the Spanish Competition Court is starting to listen to economists, to the despair of lawyers everywhere. This is something which, in any event, deserves the maximum attention.

VII. INDICATORS CALENDAR

MARCH

			1	2	3	4	5
6	7	8	9	10	11	12	
13	14 **Spanish CPI** (February)	15	16 **Euro area HICP** **USA CPI** (February)	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30 **Spanish HICP** (A.D- March)	31 **Euro area HICP** (A.D. March)			

APRIL

					1	2
3	4	5	6	7	8	9
10	11	12 **Spanish CPI** (March)	13	14	15	16
17	18	19 **USA CPI** (March)	20 **Euro area HICP** (March)	21	22	23
24	25	26	27	28 **Spanish HICP** **Euro area HICP** (A.D. April)	29	30

* ESI: Economic Sentiment Indicator
F.E.: Flash estimate
CPI: Consumer Prices Index
HICP: Harmonised Consumer Price Index
N.A: National Accounts

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MAIN MACROECONOMIC INDICATORS

(Observed values and forecasts)

| | Observed Values | | Forecasts | | | | | | | | | | |
| | | | Annual | | Quarterly (*) | | | | | | | | |
	2004	2005	2006	2007	06 QI	06 QII	06 QIII	06 QIV	07 QI	07 QII	07 QIII	07 QIV
Real GDP	1.8	1.4	2.0	2.1	2.0	2.2	1.9	2.0	2.2	2.1	2.1	2.2
Private Final Consumption	1.4	1.4	1.8	2.0	1.7	1.8	1.6	2.2	2.0	2.0	2.0	2.1
Public Final Consumption	1.1	1.3	1.8	1.6	1.7	1.7	1.8	1.8	1.5	1.6	1.6	1.5
Gross Capital Formation	3.5	2.7	3.4	3.3	3.9	3.3	2.9	2.7	2.5	2.4	2.3	2.3
Contribution Domestic Demand	1.7	1.6	2.1	2.1	1.9	2.1	2.2	2.2	2.2	2.2	2.2	2.0
Exports of Goods and Services	5.9	3.9	5.7	5.9	7.8	6.6	3.9	4.9	5.8	5.8	5.8	6.4
Imports of Good and Services	6.2	4.7	6.2	6.2	7.8	6.7	4.9	5.4	6.1	6.2	6.2	6.2
Contribution Foreign Demand	0.1	-0.2	-0.1	0.0	0.1	0.1	-0.3	-0.1	0.0	-0.1	-0.1	0.2
Industrial Production Index	2.0	1.2	2.5	1.9	3.2	2.9	1.5	2.5	1.8	1.9	1.8	1.9
			Values at the end of the period									
Economic Sentiment Indicator	99.6	100.5	104.9	105.1	103.4	104.5	104.8	104.9	105.0	105.0	105.1	105.1

(*) Appreciation from same quarter one year earlier

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