

OF E.U. AND U.S INFLATION AND MACROECONOMIC ANALYSIS

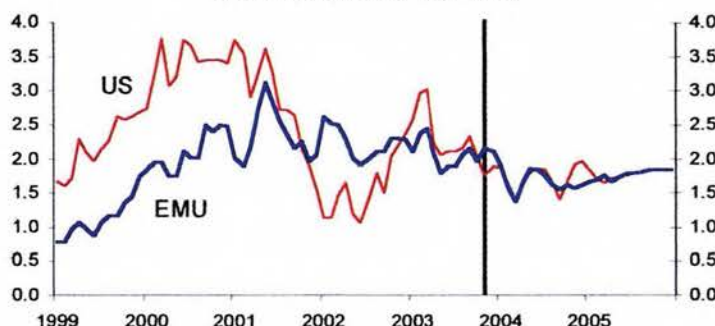


Macroeconomic Forecast and Analysis Laboratory N° 111 December, 2003.

In 2004 and 2005 total inflation in the EMU and USA are expected to be below 2%

Graph R3

YEAR-ON-YEAR RATES OF TOTAL INFLATION IN THE EMU AND THE USA



Source: BLS, EUROSTAT & IFL
Date: December 18 / 2003

The forecasts for the economic growth rates in the euro zone are 1.8% in 2004 and 2.1% in 2005"

MACROECONOMIC FORECASTS OF EURO-ZONE			
	2003	2004	2005
GDP	0.5	1.8	2.1
Contributions GDP growth			
Demand Components			
Domestic Demand	0.6	1.0	1.7
Private Consumption	1.3	1.4	1.7
Gross Fixed Capital Formation	-2.0	-0.4	2.3
Foreign Demand	-0.1	0.8	0.4
Production Sectors			
Gross Value Added Industry	0.6	2.3	3.5
Gross Value Added Construction	-1.2	-0.3	0.0
Gross Value Added Services	0.9	2.2	2.1

Source: EUROSTAT & IFL Date: December 22/2003

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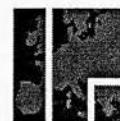
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PUBLICATION MANAGEMENT COMMITTEE:

Michele Boldrin, Juan José Dolado, Antoni Espasa and Juan Urrutia.

DIRECTOR: Antoni Espasa.

COORDINATION: Rebeca Albacete.

INFLATION ANALYSIS AND FORECASTS:

EUROPE AND SPAIN: Rebeca Albacete.

UNITED STATES: Ángel Sánchez

MACROECONOMIC ANALYSIS AND FORECASTS: Nicolás Carrasco, Coordination, and Román Mínguez

INDUSTRIAL PRODUCTION ANALYSIS: Eva Senra

MADRID STOCK EXCHANGE MARKET: Pablo Gaya.

COLLABORATOR IN INFLATION FORECASTS: César Castro, Agustín García.

COMPOSITION: Mónica López.

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TERMINOLOGY USED:

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

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

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

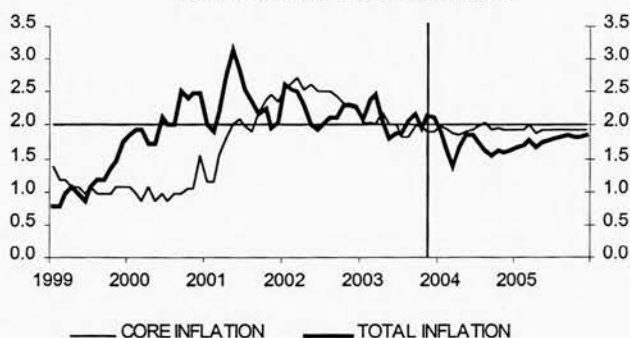
I. MAIN POINTS AND NEW RESULTS

I.1. ECONOMIC AND MONETARY UNION

- The December month-on-month inflation rate in the EMU is forecast at 0.4%. The corresponding year-on-year rate will stay at 2.1% compared to the 2.2% registered in November (graph R1).
- Total inflation in November registered a slight upward innovation of 0.04 percentage points (see tables 1 in section II.1 and A2 in the appendix).
- The forecast average annual **total inflation** rates do not change with respect the previous Bulletin remaining at 2.1% for 2003 and 1.7% for 2004. For 2005 the forecast for the mean annual rate decreases slightly to 1.8% (see table R2).
- The average annual rate of **core inflation** decreased to around 2.0% at the very beginning of 2003, compared to the 2.5% registered in 2002. This was due to the favourable evolution of prices of non-energy industrial goods and services and the absence of the euro-rounding effect in the year-on-year rates of 2003. Core inflation is expected to stay at around 1.9% in 2004-2005.

Graph R1

YEAR-ON-YEAR RATES OF CORE AND TOTAL INFLATION IN THE EMU



Source: EUROSTAT & INSTITUTO FLORES DE LEMUS
Date: December 18/ 2003

Table R1

CONTRIBUTIONS TO THE FORECASTS OF THE AVERAGE INFLATION RATE

	2003(4Q)	2004(1Q)- 2004(4Q)
Average quarter-to-quarter inflation rate	0.57	0.40
Contributions		
Constant Term	0.53	0.53
Changes in import prices	-0.11	-0.03
Lagged Inflation	0.05	-0.08
Output Gap	-0.07	-0.09
Deviations from unit labour costs	0.00	-0.03
Deviation of money from nominal output	0.11	0.13
Heterogeneous inflation situations through markets	0.06	-0.03

Source: EFN & IFL
Date: December 18, 2003

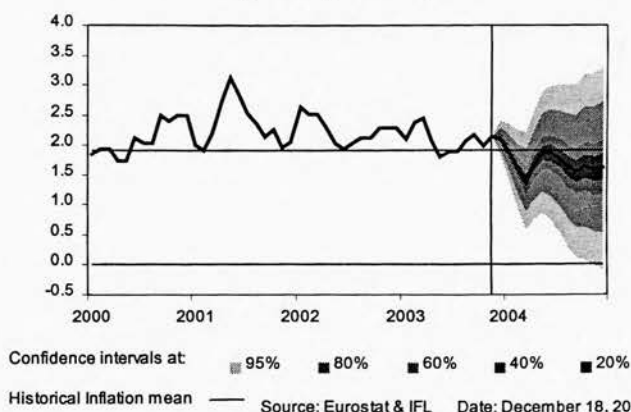
- The forecast average annual **total inflation** rate is 1.7% for 2004, so the probability of not reaching 2.0% in the average for 2004 is high and depends a great deal on the evolution of energy and unprocessed food prices. As the fan chart shows, graph R2, at a 95% confidence level a deflation risk in the EMU is practically null in 2004.

□ In order to obtain a causal explanation for the inflation forecasts derived from this Bulletin, a regression between these forecasts and the forecasts resulting from the macroeconomic model shown in Dreger (2002)¹ is performed. It can be concluded that, the monetary factors pushing up inflation are compensated by the performance of unit labour costs, the negative output gap and the appreciation of the euro. Consequently, for several months ahead there is no need for deviating from the current expansionary stance of monetary policy (see table R1).

□ The erratic evolution of energy prices also leads to variations in total inflation evolution, which from the 2.4% observed in February and March 2003, decreased to 1.8% in May and is expected to increase slightly to around 2.1% at the end of 2003.

Graph R2

ANNUAL FORECASTS FOR THE EMU INFLATION (year-on-year rates)



Source: Eurostat & IFL Date: December 18, 2003

¹ Dreger, C. (2002) "A macroeconomic model for the Euro economy". Institute for Economic Research Halle (IWH).

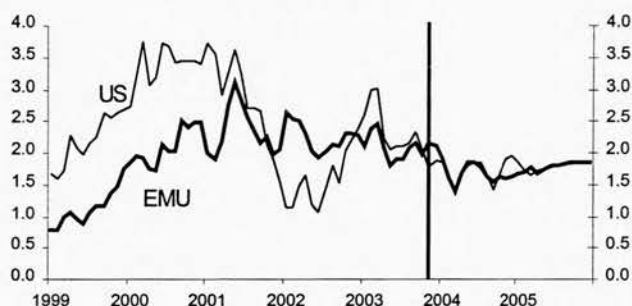


- Prices of tobacco put upwards pressure on total inflation in the EMU. Its forecast is uncertain due to possible future tax changes. Our expected average annual rates for prices of tobacco will reach 8.4% in 2003, 8.7% in 2004 and 5.3% in 2005. The average annual rate for prices of processed food excluding tobacco is expected to stay at 2.1% in 2003, 2.2% in 2004 and 2.4% in 2005.

- The inflation differential between the Economic Monetary Union and the United States has systematically been a percentage point in favour of the EMU before 2002, as can be observed in graph R3. The year-on-year rate of growth in November in the USA was 1.8%, less than in the EMU, 2.2% (graph R3). It is expected that inflation in the EMU will reach a 2.1% in the average for 2003 and in the USA will be around 2.3%. Inflation in both geographical areas will converge below 2.0% in 2004. If owner's equivalent rents of primary residence are excluded from total inflation in the USA in order to obtain a homogenous measure of total inflation in the EMU and in the USA, we would expect this homogeneous measure of total USA inflation to perform better than inflation in the EMU.

Graph R3

**YEAR-ON-YEAR RATES OF TOTAL INFLATION
IN THE EMU AND THE USA**



Source: BLS, EUROSTAT & IFL
Date: December 18 / 2003

- In order to obtain a homogeneous measure of core inflation in the EMU and the USA, which only considers prices of non-energy industrial goods and services, prices of processed food and tobacco have been excluded from the usual core inflation in the EMU and prices of owner's equivalent rents and tobacco have been eliminated from the usual core inflation in the USA. The expectations for the average rate of growth of the homogeneous core inflation in the EMU are 1.8% in 2003, 1.7% in 2004 and 1.8% in 2005, compared to the 2.4% observed in 2002. The mean annual rate of the homogeneous core inflation in the USA is expected to reach 1.1% in 2003, 1.5% in 2004 and 1.8% in 2005.
- This inflation differential is favourable for the EMU in services, and for the USA in goods. The expectations of the average annual rate for prices of services excluding owner's equivalent rents in USA are 3.2% in 2003-2005 but in the EMU are 2.6% in 2003, 2.4% in 2004 and 2.5% in 2005. The performance of non-energy industrial goods prices, excluding tobacco in any case, is noticeably different, with expectations for the average annual rate in the US falling to a negative rates of 2.1% in 2003, 1.1% in 2004 and 0.5% in 2005; and positive rates of 0.8% in 2003-2004 and 0.9% in 2005 for the EMU, possibly showing a lower level of technological implantation in the EMU.

Table R2

FORECASTS FOR THE MEAN ANNUAL RATES IN THE HICP OF THE EMU

Harmonised Indices of Consumer Prices (HICP)	2000*	2001*	2002*	Forecasts		
				2003	2004	2005
TOTAL INFLATION (100%)	2.1	2.3	2.3	2.1	1.7	1.8
CORE INFLATION (84,17%)	1.0	1.9	2.5	2.0	1.9	1.9
Non energy processed goods HICP (43,27%)	0.6	1.5	1.9	1.4	1.5	1.4
Services HICP (40,91%)	1.5	2.5	3.1	2.6	2.4	2.5
RESIDUAL INFLATION (15,83%)	7.5	4.4	1.1	2.6	0.0	0.9
Non Processed Food HICP (7,58%)	1.7	7.0	3.1	2.3	2.0	1.6
Energy HICP (8,25%)	13.0	2.3	-0.6	3.0	-1.8	0.3

* Observed Values (revised)

(1) Monthly and annual rates can be found in tables A5A and A5B in the appendix.

Source: Eurostat & IFL / Date: December 18, 2003



I.2 MACROECONOMIC TABLE OF EURO-ZONE

	Annual Averages Growths				
	2001	2002	Forecasts BIMA (*)		
			2003	2004	2005
GDP p m	1.6	0.9	0.5	1.8	2.1
Demand					
Final Consumption	2.0	0.8	1.3	1.4	1.7
Capital Investment	-0.1	-2.9	-2.0	-0.4	2.3
Contribution Domestic Demand	1.0	0.2	0.6	1.0	1.7
Exports of Goods and Services	3.3	1.7	1.0	7.7	4.8
Imports of Goods and Services	1.8	0.1	1.4	6.0	4.2
Contribution Foreign Demand	0.6	0.7	-0.1	0.8	0.4
Supply					
Gross Value Added Total (market prices)	1.6	0.9	0.5	1.8	2.1
Net Taxes	-1.2	-3.9	-1.0	-2.0	-0.9
Gross Value Added Total (basic prices)	1.8	1.2	0.6	2.0	2.3
Gross Value Added Agriculture	-1.4	-0.8	-2.6	0.2	0.9
Gross Value Added Industry	0.6	1.0	0.6	2.3	3.5
Gross Value Added Construction	-0.6	-0.9	-1.2	-0.3	0.0
Gross Value Added Services	2,5	1,5	0,9	2,2	2,1
Wholesale and Retail Trade	3,1	1,2	0,8	2,0	2,1
Financial Intermediation	2,7	2,2	0,6	2,1	2,3
Public Administration	1,6	0,8	1,4	2,5	1,8
Prices					
CPI harmonized, annual average	2.3	2.3	2.1	1.7	1.8
CPI harmonized, dec./dec.	2.1	2.3	2.1	1.6	1.8
Employment					
Unemployment rate	8.0	8.4	8.8	8.8	8.7
Others Economic Indicators					
Production Index of Industry (excluding construction)	0.5	-0.5	0.4	1.7	1.9

Source: EUROSTAT & I. FLORES DE LEMUS

Date: December 22/ 2003

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

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I.3. UNITED STATES

- The general index forecast for **December** is a 0.11% decrease, increasing the annual rate by one tenth from 1.77% to 1.88%. We expect a 0.11% fall in core inflation, with the annual rate rising from 1.09% to 1.19%. The translation of crude oil prices to end product prices has been carried out using atypical methods, which has hindered its monitoring, conditioning forecasts, particularly in the short term.

Table R3
OBSERVED VALUES AND FORECAST ON CONSUMER PRICE
FIGURES IN US
-November 2003-

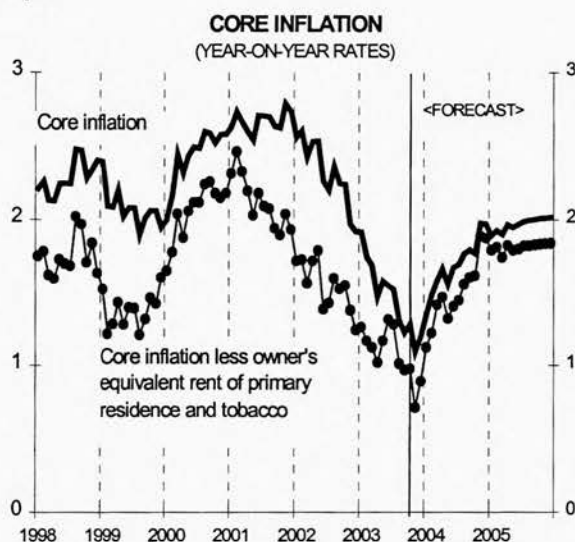
CONSUMER PRICES INDEX (CPI)	Monthly Growth (T^1_1)		Confidence Intervals at 80 level (+ -)
	observed (a)	forecasts (b)	
Residual Inflation	-0.67	-0.72	0.42
Core Inflation	-0.19	0.04	0.15
All items	-0.27	-0.13	0.13

Source: BLS & INSTITUTO FLORES DE LEMUS

Data: December 16, 2003

prices.

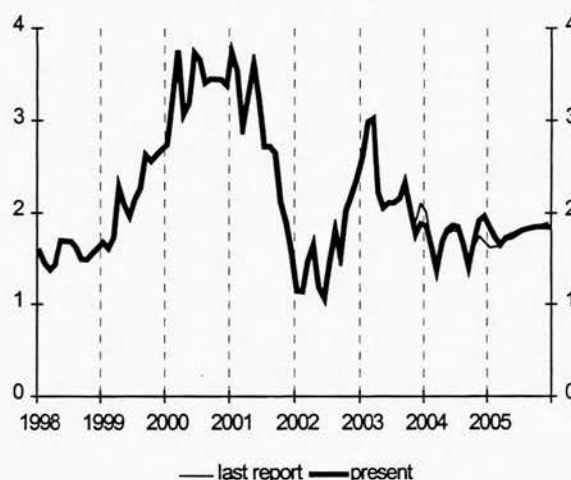
Graph R4



Source: IFL & BLS / Date: December 16, 2003

Graph R5

CHANGE IN THE EXPECTATIONS OF GLOBAL CPI
(Year-on-year rate)



Source: IFL & BLS / Date: December 16, 2003

- As for the core inflation figures observed in November, it fell 0.19% from last month, compared with a forecast increase of 0.04%, which has given rise to the lowest rate in the last 40 years: 1.09%. The decrease in non-energy manufactured products was 0.36% compared to a forecast -0.11%, with the annual rate falling from -2.43% to -2.58% (this negative rate is heavily conditioned by the collapse of used car prices). On the other hand, service prices fell 0.09% compared with the forecast 0.10% increase, with the annual rate falling from 2.87% to 2.64%. Core inflation, not including owner's equivalent rent of primary residence and tobacco, and therefore comparable with the underlying rate in Europe excluding food, fell by 0.35%, three tenths more than expected (-0.06%), with the annual rate falling from 0.98% to 0.71% (see **Graph R4**).

- By components, the index for commodities less food and energy without tobacco decreased by 0.37% instead of the -0.19% expected, with the annual rate going from -2.53% to -2.68%. Durable goods prices

2 The official information provided is with one decimal aggregation error



declined by 0.09% as opposed to the forecast -0.06%, with the annual rate going from -4.48% to -4.47%. Specifically the used car index explains this deviation from the forecast, the annual rate of which fell from -10.35% to -11.29%. With regards to durable goods, the annual rate of the new car index went from the previous month's -2.15% to -2.07%. Non-durable goods prices, excluding the index for tobacco, decreased by 0.61%, instead of the 0.32% expected, with the annual rate going from -0.58% to -0.79%. Regarding non-durable goods, the annual rate of the apparel index went from -1.58% to -1.91%. And the index for tobacco decreased by 0.09% as opposed to the forecast of +1.45%, with the annual rate going from -0.23% to -0.28%.

- The index for services shows a decrease of 0.09% instead of the forecast +0.10%. The annual rate decreased from 2.87% to 2.64%. The index for services excluding owner's equivalent rent of primary residence decreased by 0.29%, which was more than the expected -0.02%, with the annual rate going from 3.36% to 2.98%. The index for owner's equivalent rent of primary residence increased by 0.23%, instead of the forecast of 0.28%, with the annual rate going from 2.12% to 2.13%.
- For **2003, 2004 and 2005**, we forecast mean total annual inflation rates of 2.3%, 1.7% and 1.8%, respectively, maintaining our last month's forecast. The excellent inflation figure published for November is compensated in our forecast by worse crude oil price expectations, the heavy depreciation in the real effective exchange rate and the greater economic growth expected (see **Table R4** and **Graph R5**).

Table R4

AVERAGE ANNUAL RATE OF GROWTH IN US

CONSUMER PRICES INDEX (CPI)	2000	2001	2002	2003 (forecasts)	2004 (forecasts)	2005 (forecasts)
Food (1)	2.3	3.1	1.8	2.1	3.3	2.6
Energy (2)	16.9	3.8	-5.9	12.2	-1.1	-2.0
Residual Inflation (3=2+1)	6.8	3.3	-0.9	5.3	1.8	1.1
Non-food and non-energy goods (4)	0.5	0.3	-1.1	-1.9	-1.1	-0.6
Less tobacco	-0.1	-0.2	-1.5	-2.1	-1.1	-0.5
-Durable goods	-0.5	-0.6	-2.6	-3.2	-2.2	-0.9
-Nondurable goods	1.4	1.1	0.5	-0.7	-0.1	-0.3
Non-energy services (5)	3.3	3.7	3.8	2.9	2.9	2.9
-Services less owner's equivalent rent of primary residence (5-a)	3.5	3.6	3.6	3.2	3.2	3.2
-Owner's equivalent rent of primary residence (a)	3.0	3.8	4.1	2.4	2.3	2.5
Core Inflation (6=4+5)	2.4	2.7	2.3	1.5	1.7	2.0
Core inflation less owner's equivalent rent of primary residence (6-a)	2.2	2.3	1.7	1.1	1.4	1.7
Core inflation less owner's equivalent rent of primary residence and tobacco	2.1	2.1	1.6	1.1	1.5	1.8
All items (7=6+3)	3.4	2.8	1.6	2.3	1.7	1.8
All items less owner's equivalent rent of primary residence (7-a)	3.5	2.6	0.9	2.2	1.5	1.6

Source: **BLS & INSTITUTO FLORES DE LEMUS**

Data: December 16, 2003

(*) Monthly and annual growth rates can be found in tables A6A and A6B in Appendix



I.4. SPAIN

- The month-on-month inflation rate in December is expected to reach a value of 0.4%. The year-on-year rate will stay at 2.8%, the same as the value observed in November (graph R6).

- The month-on-month rate observed in November, 0.33%, was below our forecast, 0.48%. Trend inflation registered a downward innovation derived from non-energy industrial goods, mainly from car prices. Residual inflation registered a downward innovation too, derived from the unprocessed prices, mainly from prices of meat and fish (table R5).

Table R5 OBSERVED VALUES AND FORECASTS IN THE MONTH-ON-MONTH RATE OF GROWTH IN THE COMPONENTS OF THE CPI IN SPAIN			
Consumer Price Index (CPI)	Observed growth November 2003	Forecast	Confidence interval at 80%
Total Inflation(100%)	0.33	0.48	± 0.15
Trend inflation (77.49%)	0.51	0.61	± 0.13
Residual inflation (22.51%)	-0.14	0.04	± 0.22

(*) Al 80% de significación

Source : INE & IFL / Date: December 12, 2003.

- **Trend inflation** in November stayed at 2.6%, the same as in November. Most components in trend inflation in services registered year-on-year rates above or around 4% for example prices of universities, restaurants, education, housing, services for households, culture and medicine services. The year-on-year rate of inflation in processed food in November increased to 2.6%, compared to the 2.5% observed in October. Taking prices of non-energy industrial goods into account, the year-on-year rate decreased to 1.5% in November, compared to the 1.8% registered in October. Therefore, there is an important differential with the EMU in prices of non-energy industrial goods, with annual average rates of 0.8% in 2003 and 2004 and 0.9% in 2005; and above all with the USA, with negative annual average rates of 2.1%, 1.1% and 0.5%, respectively, possibly reflecting less technology incorporation in Spain and the EMU.

Table R6 FORECASTS FOR THE MEAN ANNUAL RATES OF GROWTH IN THE CPI IN SPAIN						
Consumer Prices Index (CPI)	2000*	2001*	2002*	Forecasts		
				2003	2004	2005
TOTAL INFLATION (100%)	3.4	3.6	3.5	3.1	3.0	3.1
TREND INFLATION (77.49%)	2.5	3.5	3.4	2.9	2.9	3.2
Non energy processed goods, excluding tobacco, oils and fats CPI (44.34%)	1.9	3.1	2.6	2.3	2.2	2.8
Services excluding tourism CPI (33.15%)	3.5	4.1	4.3	3.5	3.7	3.6
RESIDUAL INFLATION (22.51%)	6.7	3.7	3.2	3.6	4.0	3.1
Non processed food CPI (9.05%)	4.2	8.7	5.6	5.7	7.5	5.9
Energy CPI (9.26%)	13.3	-1.0	-0.2	1.3	-1.0	-0.5

* Observed Values

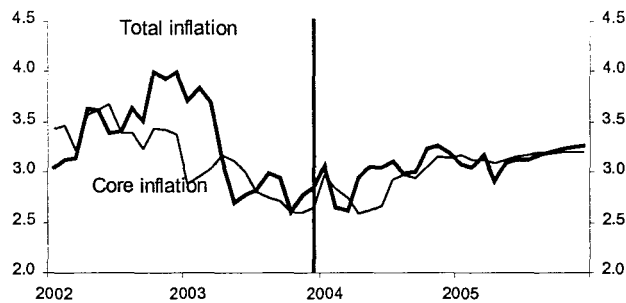
• Monthly and annual rates can be found in tables A7A and A7B in the appendix

Source: INE & IFL / Date: December 15, 2003



Graph R6

ANNUAL RATES OF TOTAL AND CORE INFLATION IN SPAIN



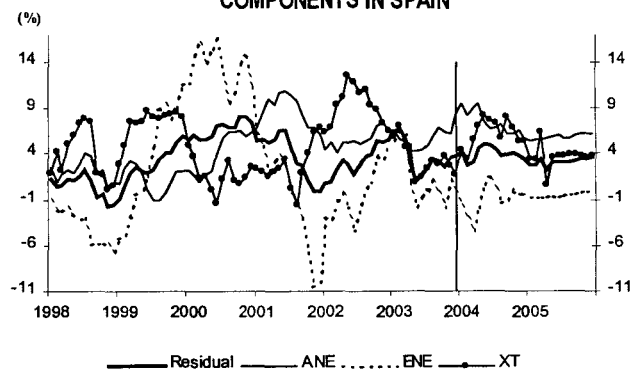
Source: INE & IFL / Date: December 15, 2003

□ Trend inflation in December is expected to increase to 2.7%, as the result of the expected year-on-year rate in non-energy processed goods prices, excluding tobacco and fat and oils, 1.9%, and in services excluding tourist packages prices, 3.6%. The mean annual rate will stay to 2.9% in 2003, compared to the observed 3.4% in 2002, and it will stay at 2.9% in 2004 and increase slightly to 3.2% in 2005 (table R6).

- Core inflation in the EMU in November decreased to 1.9%, respect to 2,0% registered since September. The expectations for the average annual rate are around 1.9% in 2004-2005, so there is still a consolidated core inflation differential between Spain and the EMU of around one percentage point.
- With regards to **residual inflation**, the forecasts for the average annual rates of inflation of prices of non-processed food are 5.7% for 2003, 7.5% in 2004 and 5.9% in 2005. This sector shows the highest inflation in Spain.
- Considering the new expectations for crude oil prices and the euro/dollar exchange rate, the year-on-year rate of energy prices in December 2003 will stay at 0.0%. The first positive value in 2002 was registered in August and the positive rates continued till May 2003. Average annual rates of growth are forecast to increase to 1.3% in 2003 and fall to negative rates of 1.0% in 2004 and of 0.5% in 2005.
- Due to energy and non-processed food price fluctuations, a more erratic evolution of commodities prices due to the incorporation of sales prices, and the especially worrisome evolution in services, with a weight of 33% and expected annual rates of growth at the end of 2003 around 3.6% to increase to 3,7% in 2004-2005, the year-on-year rate of growth of **total inflation** will fluctuate significantly. From the 3.8% observed in February 2003, it reduced to 2.6% in October, and it will increase again to 2.8% in December 2003.
- Average annual rates of growth will stay at 3.1% in 2003, it will decrease to 3,0% in 2004 and it will stay at 3,1% in 2005, compared to the previous forecasts, 3.1% in 2003-2005 (table R6 and graph R7).

Graph R7

ANNUAL RATES OF RESIDUAL INFLATION AND ITS COMPONENTS IN SPAIN



Source: INE & IFL / Date: December 15, 2003

I.5. MACROECONOMIC TABLE OF SPANISH ECONOMY

MACROECONOMIC TABLE AND INDICATORS (*)					
	2002	Annual Rates			
		Forecasts BIMA (*)			Budget (*)
		2003	2004	2005	2004
Private Final Consumption Expenditure	2.6	3.1	3.3	3.5	3.1
Public Final Consumption Expenditure	4.4	4.0	3.9	3.2	2.9
Gross Fixed Capital Formation	1.0	3.4	3.9	3.7	3.8
Equipment	-5.5	2.7	6.2	6.3	(3)
Building	4.2	3.8	2.9	2.5	3.0
Other products	2.6	3.0	3.3	3.3	(3)
Inventory change (1)	0.0	0.2	0.0	0.1	0.0
Domestic Demand	2.6	3.5	3.5	3.6	3.3
Exports of Goods and Services	0.0	4.9	6.5	6.9	6.3
Imports of Goods and Services	1.8	8.2	8.3	7.7	7.0
Net Exports (1)	-0.6	-1.2	-0.9	-0.6	-0.4
GDP	2.0	2.4	2.8	3.1	3.0
GDP, current prices	6.6	5.8	6.1	6.5	5.9
Prices and Costs					
CPI, annual average	3.5	3.1	3.0	3.1	
CPI, dec./dec.	4.0	2.8	3.2	3.3	
Average earning per worker	3.8	3.9	3.7	3.5	
Unit labour cost	3.1	2.9	2.8	2.7	
Labour Market (Data poll labour force)					
Labour Force (% variation)	3.0	2.5	2.2	2.0	
Employment: Data adjusted from changes in the employment survey					
Annual average variation in %	2.0	2.6	2.9	2.9	
Annual average variation in thousands	312.5	422.6	481.7	512.1	
Unemployment rate	11.4	11.2	10.3	10.0	11.0
Basic balances					
Foreign sector					
Current Account (m. €.)	-18.691	-21.150	-20.456	-19.214	
Net lending or borrowing (% GDP) (2)	-1.6	-2.6	-2.6	-2.3	-2.6
AA.PP. (Total) / Public Administration					
Net lending or borrowing (% GDP) (2)	-0.1	0.0	-0.1	-0.1	
Other Economic Indicators					
Industrial Production Index	0.1	1.5	2.4	2.9	

(1) Contribución al crecimiento del PIB, en puntos porcentuales.

(2) En términos de Contabilidad Nacional.

(3) Bienes de equipo y otros productos: Predicción PGE, 5.0; Predicción BIAM, 5.2.

Source: INE & I. FLORES DE LEMUS

Date: December 22/ 2003.

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

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





I.6 FORECAST SUMMARY

INFLATION FORECASTS AND EVOLUTION IN THE EMU AND USA (1998-2005)								
	1998	1999	2000	2001	2002	Forecasts		
						2003	2004	2005
TOTAL INFLATION								
Euro-zone (100%).	1.1	1.1	2.1	2.3	2.3	2.1	1.7	1.8
USA (81.5%). ⁽¹⁾	1.1	2.1	3.5	2.6	0.9	2.2	1.5	1.6
A HOMOGENEOUS MEASURE OF CORE INFLATION ⁽²⁾								
Services and Non-energy industrial goods excluding food and tobacco.								
Euro-zone (72.46%).	1.4	1.1	1.0	1.8	2.4	1.8	1.7	1.8
USA (55.6%). ⁽¹⁾	1.8	1.4	2.1	2.1	1.6	1.1	1.5	1.8
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Services.								
Euro-zone (40.91%).	1.9	1.5	1.5	2.5	3.1	2.6	2.4	2.5
USA (27.4%). ⁽¹⁾	2.9	2.7	3.5	3.6	3.6	3.2	3.2	3.2
(2) Non-energy industrial goods excluding food and tobacco.								
Euro-zone (31.55%).	0.9	0.7	0.4	0.9	1.5	0.8	0.8	0.9
USA (29.0%).	-0.1	-0.5	-0.1	-0.2	-1.5	-2.1	-1.1	-0.5
INFLATION IN EXCLUDED COMPONENTS FROM THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Food.								
Euro-zone (19.30%).	1.6	0.6	1.4	4.5	3.1	2.9	2.9	2.4
USA (14.9%).	2.2	2.1	2.3	3.1	1.8	2.1	3.3	2.6
(2) Energy.								
Euro-zone (8.25%).	-2.6	2.4	13.0	2.3	-0.6	3.0	-1.8	0.3
USA (9.90%).	-7.7	3.6	16.9	3.8	-5.9	12.2	-1.1	-2.0

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

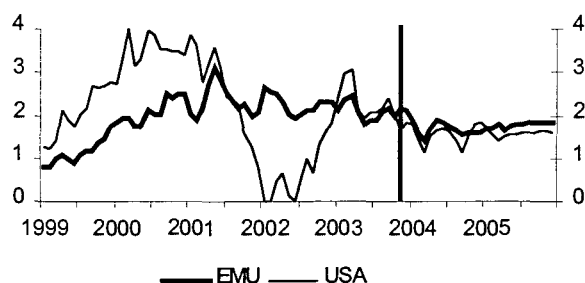
⁽²⁾ This homogeneous measure of underlying inflation does not coincide with the usual measure of core inflation for the EMU nor for the USA. It has been constructed in order to compare the data in the EMU and in the USA.

Source: EUROSTAT & BLS & IFL.
Date: December 18/ 2003.

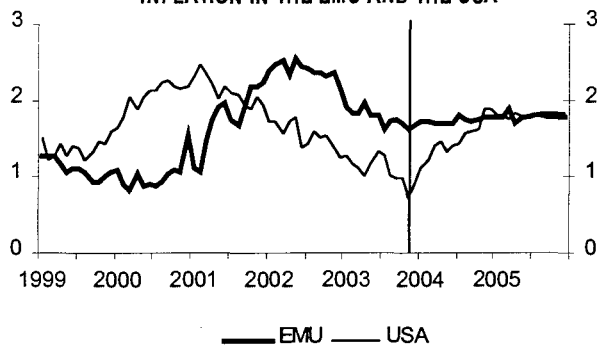


YEAR-ON-YEAR RATES OF INFLATION IN THE EMU AND USA

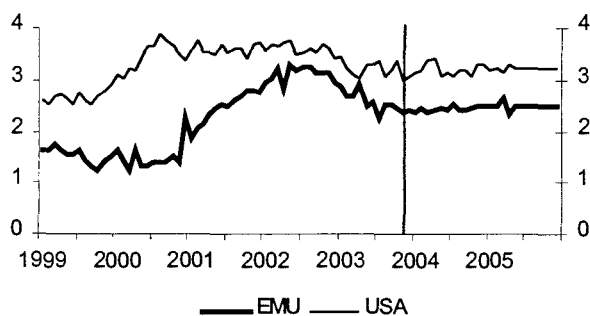
YEAR-ON-YEAR RATES OF TOTAL INFLATION IN THE EMU AND TOTAL INFLATION LESS OWNER'S EQUIVALENT RENT OF PRIMARY RESIDENCE IN USA



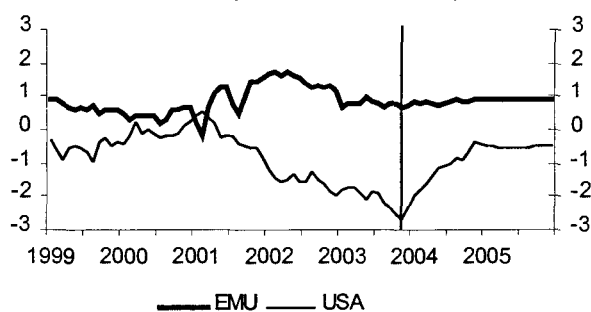
YEAR-ON-YEAR RATES OF HOMOGENEOUS CORE INFLATION IN THE EMU AND THE USA



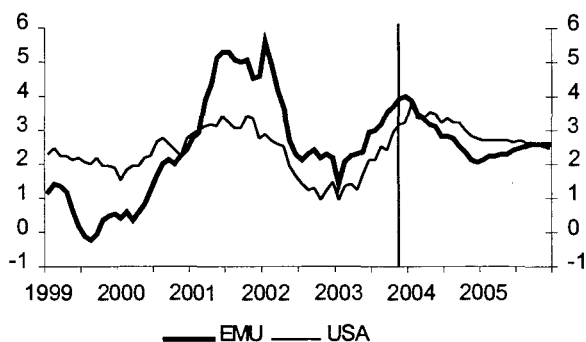
YEAR-ON-YEAR RATES OF SERVICES INFLATION IN THE EMU AND THE USA



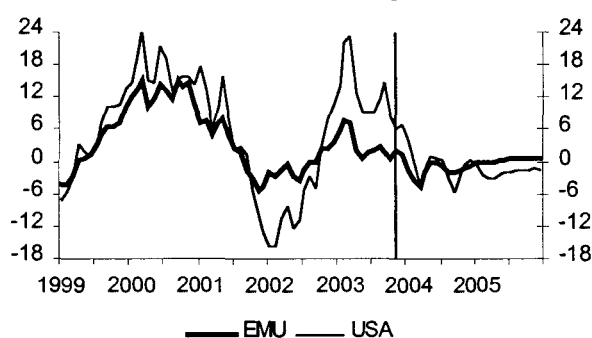
YEAR-ON-YEAR RATES OF NON-ENERGY INDUSTRIAL GOODS INFLATION IN THE EMU AND THE USA (EXCLUDING TOBACCO)



YEAR-ON-YEAR RATES OF FOOD INFLATION IN THE EMU AND THE USA



YEAR-ON-YEAR RATES OF ENERGY INFLATION IN THE EMU AND THE USA



Source: EUROSTAT & BLS & IFL
Date: December 18/ 2003



INFLATION FORECASTS AND EVOLUTION IN THE EMU AND SPAIN (1998-2005)								
	1998	1999	2000	2001	2002	Forecasts		
						2003	2004	2005
TOTAL INFLATION								
Spain (100%).	1.8	2.3	3.4	3.6	3.5	3.1	3.0	3.1
Euro-zone (100%).	1.1	1.1	2.1	2.3	2.3	2.1	1.7	1.8
CORE INFLATION								
Services and Non-energy processed goods.								
Spain (81.70%).	2.2	2.3	2.4	3.4	3.8	2.9	3.1	3.2
Euro-zone (84.17%).	1.4	1.1	1.0	1.9	2.5	2.0	1.9	1.9
DIFFERENT COMPONENTS OF CORE INFLATION								
(1) Services.								
Spain (34.32%).	3.6	3.4	3.7	4.2	4.5	3.5	3.9	3.8
Euro-zone (40.91%)	1.9	1.5	1.5	2.5	3.1	2.6	2.4	2.5
(2) Non-energy processed goods.								
Spain (47.38%).	1.4	1.7	1.7	2.9	3.1	2.4	2.5	2.7
Euro-zone (43.26%).	1.1	0.7	0.6	1.5	1.9	1.4	1.5	1.4
INFLATION IN EXCLUDED COMPONENTS FROM CORE INFLATION								
1) Non-processed food.								
Spain (9.05%).	2.1	1.2	4.2	8.7	5.6	5.7	7.5	5.9
Euro-zone (7.58%).	2.0	0.0	1.7	7.0	3.1	2.3	2.0	1.6
(2) Energy.								
Spain (9.26%).	-3.8	3.2	13.3	-1.0	-0.2	1.3	-1.0	-0.5
Euro-zone (8.25%).	-2.6	2.4	13.0	2.3	-0.6	3.0	-1.8	0.3

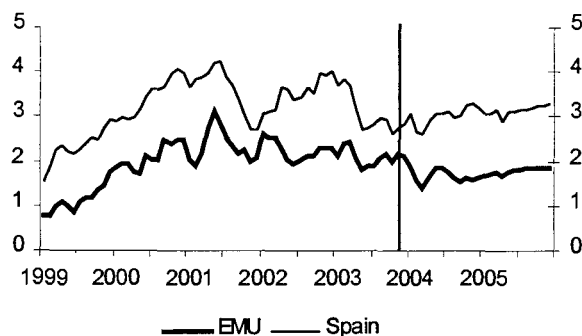
Source: EUROSTAT & BLS & IFL.

Date: December 18/ 2003.

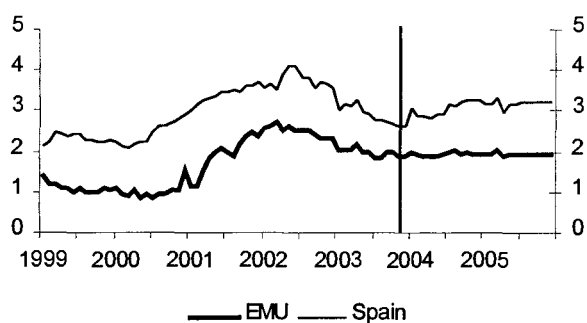


YEAR-ON-YEAR RATES OF INFLATION IN THE EMU AND SPAIN

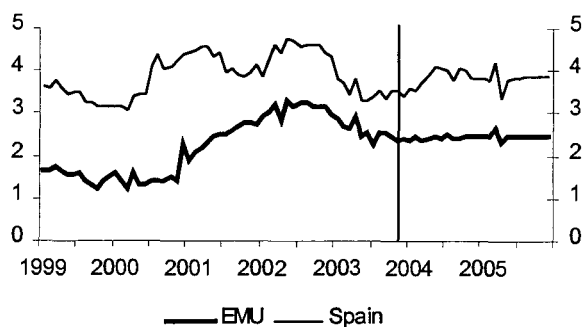
YEAR-ON-YEAR RATES OF TOTAL INFLATION IN THE EMU AND SPAIN



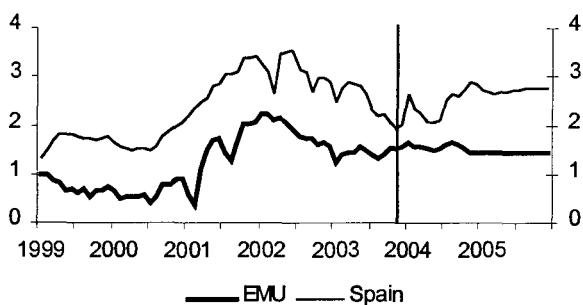
YEAR-ON-YEAR RATES OF SERVICES AND NON-ENERGY PROCESSED GOOS IN THE EMU AND SPAIN



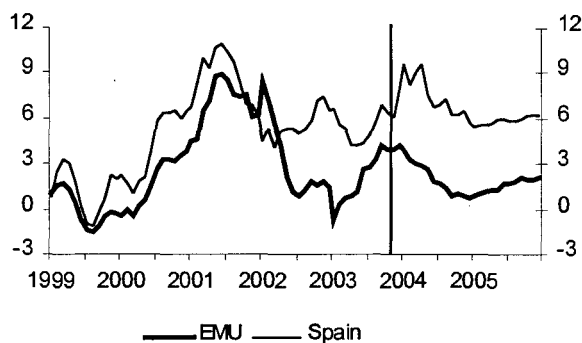
YEAR-ON-YEAR RATES OF SERVICES INFLATION IN THE EMU AND SPAIN



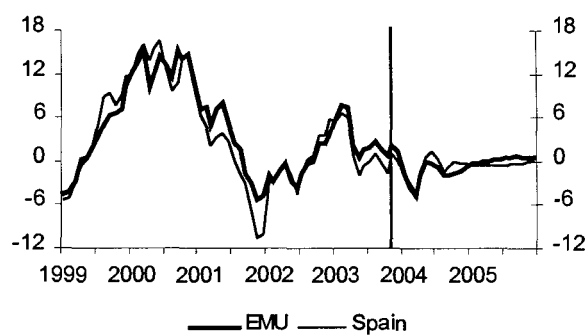
YEAR-ON-YEAR RATES OF NON-ENERGY PROCESSED GOODS INFLATION IN THE EMU AND SPAIN



YEAR-ON-YEAR RATES OF NON-PROCESSED FOOD IN THE EMU AND SPAIN



YEAR-ON-YEAR RATES OF ENERGY INFLATION IN THE EMU AND SPAIN



Source: EUROSTAT & BLS & IFL.
Date: December 18/ 2003.



I.7 INFLATION FORECASTS OF DIFFERENT INSTITUTIONS

INFLATION FORECASTS OF DIFFERENT INSTITUTIONS ¹															
	BIAM ²			CONSENSUS FORECASTS ³			IMF ⁴			ECB ⁵			OCDE ⁶		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
EMU	2.1	1.7	1.8	2.1	1.7	-	2.0	1.6	-	2.0- 2.2	1.3- 2.3	1.0- 2.2	2.0	1.5	1.4
USA	2.3	1.7	1.8	2.3	1.8	-	2.1	1.3	-	-	-	-	2.3	1.7	1.8
SPAIN	3.1	3.0	3.1	3.0	2.6	-	3.1	2.7	-	-	-	-	3.2	2.8	2.9

1 The forecasts are based on CPI in USA and Spain and on HICP in the EMU.

2 Bulletin of EU & US Inflation and Macroeconomic Analysis, December 2003

3 December 8, 2003.

4 IMF. World Economic Outlook. October 2003

5 ECB. Monthly Bulletin. Macroeconomic Projections. December 2003.

6 OECD Economic Outlook. December, 2003.

Our forecasts for total inflation in the EMU 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.

Core inflation in the EMU and Spain is expected to be quite stable, around 2.0% in 2003 and 1.9% in 2004-2005, in the EMU and 2.9% in 2003-2004, and 3.2% in 2005, in the case of Spain, due to the fact that rounding effects will not influence any more the year-on-year rates and a better expected evolution in prices of goods and services, compared to the observed values in 2002. Total inflation in 2003 is benefit from an expected lower inflation rate in non-processed food prices but energy prices are expected to increase due to the evolution of crude prices, compared to the value observed in 2002.



II. ANALYSIS OF INFLATION, MONETARY POLICY AND INTERNATIONAL ANALYSIS

II.1 Economic and Monetary Union

In November 2003, inflation in the EMU registered a monthly rate of 0.1% with a year-on-year rate of 2.2%.

In November 2003 inflation in the Monetary Union registered a month-on-month rate of 0.09% instead of the 0.05% expected; with a year-on-year rate of 2.2%, compared to the 2.0% registered last October.

Table 1 summarises the discrepancies between observed and forecasted values for the different basic aggregations in the Euro- Zone (see table A1B in the appendix for the disaggregation scheme followed in this Bulletin).

Table 1 OBSERVED AND FORECAST VALUES ON CONSUMER PRICE FIGURES IN THE EMU			
Consumer Price Index (HICP)	Current growth November 03	Forecast	Confidence intervals (a)
(1) Alimentos Elaborados - AE (9.432%) ^(b)	0.07	0.25	± 0.09
(2) Tobacco (2.282%)	2.26	0.10	± 0.13
(3) Commodities - MAN (31.550%)	0.19	0.27	± 0.10
Non-Energy Manufactured Goods - BENE [1+2+3] (43.264%)	0.28	0.26	± 0.09
(4) Services - SERV (40.909%)	-0.09	-0.01	± 0.14
Core Inflation:			
Non-Energy Manufactured Goods and Services, (excluding fats, oils, tobacco and tourist packages) - IPSEBENE [1+2+3+4] (84.173%)	0.09	0.13	± 0.08
(5) Non-Processed Food - ANE (7.577%)	-0.08	-0.54	± 0.46
(6) Energy Goods - ENE (8.249%)	-0.25	-0.14	± 0.60
Residual Inflation:			
Fats, Oils, Tobacco, Tourist Packages, Non- Processed Food and Energy - R [5+6] (15.827%)	-0.17	-0.33	± 0.39
Total Inflation:			
HICP [1+2+3+4+5+6] (100%)	0.09	0.05	± 0.09

(a) At 80% confidence level

(b) Excluding tobacco prices

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: December 17/ 2003.

By sector, prices have performed differently.

As shown in table 1, total inflation in November registered a monthly rate of 0.09% instead of the 0.05% forecast. The upwards innovations derived from tobacco and unprocessed food prices. The significant increase registered by tobacco prices in the EMU, 2.26%, derives, as it did in October, exclusively from the 10.10% increase in tobacco prices observed in France in November, which follows from a previous increase of 6.73% in October, (tables 1 and A2 in the appendix).

It is important to note the existence of rounding errors in the aggregation of different sectors of HICP in the EMU. Eurostat publishes data with one decimal point and apparently they use more decimals in obtaining the aggregate indexes. The question is that the aggregate values can not be exactly reproduced up to a decimal point by the users of Eurostat data. For this reason, in the forecast errors tables in the appendix (table A2) the errors in the aggregation are pointed out.

Eurostat has revised data corresponding to the HICP for food, processed and unprocessed, tobacco and fuels for September 2003. The HICP data for Greece for October and November 2003 were not available. Due to this fact, HICP for EMU and EU15 were



calculated using Eurostat estimates for these two months.

The breakdown of the harmonised consumer price index into basic market groups shows that the prices of processed food (the AE index) registered a monthly growth of 0.07% instead of the 0.25% growth predicted. The prices of tobacco registered a relevant increase of 2.26%, above the 0.10% forecast, due to the significant increment registered in France. The prices of the remaining processed goods excluding energy prices (the MAN index) registered a 0.19%, less than was forecast, 0.27%. With this, core inflation in goods calculated on the basis of the aggregation of the previous indexes, (the BENE index) registered a 0.28%, practically coinciding with the 0.26% forecast. The services prices (the SERV index) registered a negative monthly rate of 0.09% below the forecast, -0.01%, so that finally core inflation registered a slight downward innovation.

In Residual inflation (non-processed food and energy), the upward innovation came in prices of unprocessed food.

Table 2 shows annual observed HICP rates for energy and those corresponding to the remainder of goods and services – denominated HICP excluding energy

ANNUAL GROWTH HICP												
	HICP excluding Energy						HICP energy					
	Observed			Forecasts			Observed			Forecasts		
	Nov. 2003	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005	Nov. 2003	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005
Germany	1.0	1.5	1.4	0.8	1.1	0.7	4.3	5.7	0.3	4.0	0.4	0.6
Spain	3.0	4.0	3.4	3.2	3.5	3.5	1.1	-1.0	-0.2	1.3	-1.0	-0.5
France	2.7	2.1	2.3	2.2	2.5	1.8	0.2	-1.5	-1.5	2.3	1.7	-1.0
Italy	2.9	2.4	3.0	2.8	2.9	2.7	1.7	1.6	-2.6	3.1	-0.5	1.0
Monetary Union	2.1	2.3	2.6	2.0	2.0	1.9	2.2	2.3	-0.6	3.0	-1.8	0.3

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: December 19, 2003.

There is an important inflation differential among countries.

Year-on-year rates of energy prices in November 2003 registered positive values, as shown in table 2. For the non-energy prices, Germany registered in November a year-on-year rate of 1.0%; forecasts for the annual average rates will be around 0.8% in 2003, 1.1% in 2004 and 0.7% in 2005. France registered for the HICP excluding energy a year-on-year rate of 2.7% in November and the forecasts for the annual average rate are 2.2% in 2003, 2.5% in 2004 and 1.8% in 2005. Observed value for the annual rate in Italy was 2.9% and forecasts are 2.8% in 2003, 2.9% in 2004 and 2.7% in 2005. In the case of Spain, the annual rate was 3.0% in November and a mean annual rate of 3.2% is expected in 2003 and 3.5% in 2004-2005. Therefore, in the HICP excluding energy, Germany registered annual average rates below 1%, France around 2.5%, Italy around 2.8% and finally Spain presents greater annual mean rates above 3%.

ANNUAL GROWTH IN ENERGY HICP												
	Fuels						IPCA Elgas					
	Observed			Forecasts			Observed			Forecasts		
	Nov. 2003	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005	Nov. 2003	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005
Germany	3.4	-0.3	0.3	4.4	-0.7	0.2	5.0	12.1	0.3	3.5	1.4	1.1
Spain	0.7	-2.1	0.5	1.4	-2.6	-0.8	1.6	2.4	-1.4	0.7	1.6	0.2
France	-0.4	-5.7	-3.1	2.8	0.8	-2.1	0.8	4.7	0.7	1.7	2.7	0.4
Monetary Union	1.1	-2.5	-1.1	2.9	-4.3	-0.5	3.5	8.2	0.1	3.1	1.0	1.1

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: December 19, 2003.



Table 3 shows the average annual rates of growth for the different components of energy prices.

The inflation forecast for December 2003 in the Monetary Union is 0.4%. The year-on-year rate will stay at 2.1%, compared to the 2.2% registered last November. The expectations for the average annual rate are 2.1% for 2003, 1.7% in 2004 and 1.8% in 2005.

The forecast for the year-on-year rate of inflation in December 2003 is 2.1%.

By countries, the expectation for month-on-month inflation for next December is a rate of 1.0% for Germany, 0.1% in France and Italy and 0.4% in Spain.

Table 4 summarises the forecasts for the different components in the Monetary Union. Monthly and annual rates may be found in tables A5A and A5B in the appendix.

Table 4. AVERAGE ANNUAL RATE OF GROWTH IN MONETARY UNION							
	Observed				Forecasts		
	1999	2000	2001	2002	2003	2004	2005
Residual Inflation 15.827%	1.2	7.5	4.4	1.1	2.6	0.0	0.9
Non-Processed Food 7.577%	0.0	1.7	7.0	3.1	2.3	2.0	1.6
Energy 8.249%	2.4	13.0	2.3	-0.6	3.0	-1.8	0.3
Core Inflation 84.173%	1.1	1.0	1.9	2.5	2.0	1.9	1.9
Processed Food ^(a) 9.432%	0.5	0.6	2.7	2.4	2.1	2.2	2.4
Tobacco 2.282%	3.1	3.4	3.8	5.9	8.4	8.7	5.3
Non-Energy Commodities 31.550%	0.7	0.4	0.9	1.5	0.8	0.8	0.9
Non-Energy Services 40.909%	1.5	1.5	2.5	3.1	2.6	2.4	2.5
Total Inflation 100%	1.1	2.1	2.3	2.3	2.1	1.7	1.8

(a) Excluding tobacco prices

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: December 18/ 2003.

The expectations of the average annual rate in 2003, 2.1%, is achieved through decreases in core inflation in 2003 to 2.0% and increases in residual inflation, due to prices of energy and unprocessed food, compared with the values registered in 2002.

The results derived from the causality analysis show that the strong upwards pressure on inflation derived from the monetary policy implemented by the ECB is compensated by the downwards pressure derived from the output gap and unit labour cost. Therefore, in these economic conditions, it appears that in the short-term, the ECB will have scope to maintain interest rates.

Table 5 summarises average annual growth rates for the main countries. Monthly and annual forecasts for all the countries can be found in tables A4A, A4B, A4C and A4D in the appendix.



Table 5							
ANNUAL AVERAGE RATES OF GROWTH							
	Observed				Forecasts		
	1999	2000	2001	2002	2003	2004	2005
Spain HICP (10.87%) *	2.2	3.5	2.8	3.6	3.1	3.1	3.1
Germany HICP (29.87%)	0.6	1.4	1.9	1.3	1.1	1.0	0.7
France HICP (20.46%)	0.6	1.8	1.8	1.9	2.2	2.4	1.6
Italy HICP (19.164%)	1.7	2.6	2.3	2.6	2.8	2.6	2.6
EMU HICP (100%)	1.1	2.1	2.3	2.3	2.1	1.7	1.8
United kingdom HICP	2.1	0.8	1.2	1.3	1.4	1.3	1.3

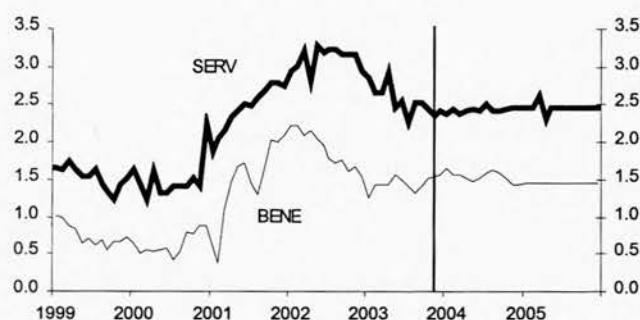
* country weights in the total HICP for the EMU

Source: Eurostat & I. Flores de Lemus / Date: December 19/ 2003.

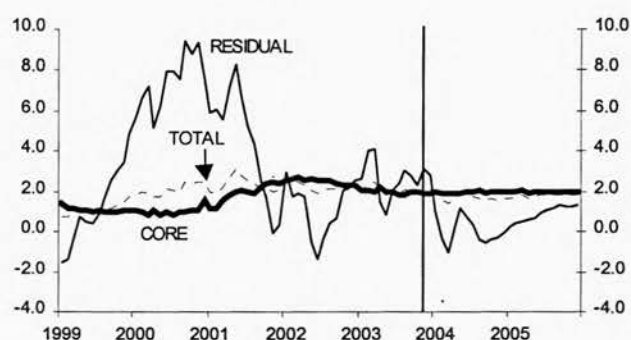
HICP YEAR-ON-YEAR RATES OF GROWTH IN THE EMU

Graph 1

Non Energy Processed Commodities
(BENE) and Services (SERV)



CORE, Residual and total inflation



Source: Eurostat & IFL
Date: December 18/ 2003



II.2 Industrial Production in the EMU and USA.

The Industrial Production Index published for October 2003 has behaved as forecasted. However, there have been innovations in different senses in the components (upwards in energy and downwards in the rest), as it can be seen in table 6.

Table 6 FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO OCTOBER		
	Forecast for October	Observed in October ^(*)
Capital	1.6	2.1
Durable	-1.8	-2.4
Intermediate	1.2	1.0
Non Durable	1.2	-0.9
Energy	-0.2	2.3
Total	1.0	1.0

Working day adjusted data.
Source: Eurostat and IFL.

The expectations of growth for the different sectors are shown in table 7.

Table 7 ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EMU ^(**)							
	1998	1999	2000	2001	2002	2003	2004
Capital	7.4	2.3	8.4	1.5	-1.9	0.1	3.6
Durable	4.6	1.5	6.1	-1.8	-5.3	-4.2	-0.1
Intermediate	4.2	2.0	5.9	-0.5	0.4	0.4	1.4
Non Durable	2.6	1.6	1.2	1.2	0.6	-0.1	0.1
Energy	1.3	0.9	2.0	1.6	1.1	3.7	2.0
Total EMU	4.3	1.9	5.3	0.5	-0.5	0.4	1.7

^(**) Bold figures are forecasts. Working day adjusted data.
Source: Eurostat and IFL.
Date: December 22nd 2003

In US, the last published data corresponds to November and has been an upwards innovation in all the different components, as it can be seen in table 8.

Table 8 FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO NOVEMBER		
	Forecast for November	Observed in November
Durable Consumer Goods	0.1	3.1
Non Durable Consumer Goods	-3.0	-2.5
Equipment and Supplies	-1.7	-0.6
Materials	3.8	4.7
TOTAL US	0.8	1.9

Source: Federal Reserve and IFL

Table 9 shows the updated forecasts. The expectation for the average rate of growth for IP have been revised from 0.4 and 2.3% for 2003 and 2004, made last month, to 0.6 and 3.1% respectively. Revisions in the different components have all been upwards.



Table 9 ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN US ⁽¹⁾							
	1998	1999	2000	2001	2002	2003	2004
Durable Consumer goods	7.2	6.9	3.9	-5.8	4.6	0.7	4.4
Non Durable Consumer Goods	2.3	-0.1	1.7	0.4	-0.2	-2.6	0.2
Equipment and Supplies	8.1	4.8	5.9	-4.1	-0.6	-1.6	2.7
Materials	5.2	5.7	5.3	-4.5	0.3	3.2	4.2
TOTAL US	5.6	4.3	4.7	-3.5	-0.7	0.6	3.1

(1) Bold figures are forecasts.
Source: Federal Reserve and IFL.
Date: December 22nd 2003



II.3 United States

In November, the U.S. CPI fell by 0.27% from the previous month's figure, around a tenth more than expected: -0.13%, with the annual rate going from 2.04% to 1.77%.

In November, the U.S. CPI fell by 0.27% from the previous month's figure, around a tenth more than expected: -0.13%, with the annual rate going from 2.04% to 1.77%.

There were considerable forecasting errors in some items. In fact, there have been significant downwards innovations in non-durable industrial goods not including energy (due to apparel and footwear, among others), in transport services (due to public transport), in recreational services and others (due to lodging expenses). Overall, performance was better than expected in nearly all the items included in the index, except for gas and meat prices.

Table 10

OBSERVED VALUES AND FORECAST ON CPI IN US November 2003

CONSUMER PRICES INDEX (CPI)	Relative importance Dec. 2002	Annual Growth (T ¹ ₁₂) observed	Monthly Growth (T ¹ ₁)		Confidence Intervals at 80% level (+ -)
			observed (a)	forecasts (b)	
Food (1)	14.6	3.17	0.39	0.12	0.33
Energy (2)	6.7	6.23	-2.78	-2.40	1.05
Residual Inflation (3=2+1)	21.3	4.15	-0.67	-0.72	0.42
Non-food and non-energy goods (4)	22.9	-2.58	-0.36	-0.11	0.35
Less tobacco	22.0	-2.68	-0.37	-0.19	0.17
-Durable goods	11.4	-4.48	-0.09	-0.06	0.27
-Nondurable goods	11.5	-0.75	-0.57	-0.16	0.33
-Non-durable goods less tobacco	10.5	-0.79	-0.61	-0.32	0.21
-Tobacco	1.0	-0.28	-0.09	1.45	3.32
Non-energy services (5)	55.8	2.64	-0.09	0.10	0.13
-Services less owner's equivalent rent of primary residence (5-a)	33.5	2.98	-0.29	-0.02	0.17
-Owner's equivalent rent of primary residence (a)	22.2	2.12	0.23	0.28	0.11
Core Inflation (6=4+5)	78.7	1.09	-0.19	0.04	0.15
Core inflation less owner's equivalent rent of primary residence (6-a)	56.5	0.70	-0.35	-0.06	0.16
Core inflation less owner's equivalent rent of primary residence and tobacco	55.5	0.71	-0.35	-0.09	0.12
All items (7=6+3)	100.0	1.77	-0.27	-0.13	0.13
All items less owner's equivalent rent of primary residence (7-a)	77.8	1.66	-0.41	-0.24	0.11

Source: BLS & INSTITUTO FLORES DE LEMUS

Data: December 16, 2003

Overall, performance was better than expected in nearly all the items included in the index, except for gas and meat prices.

As for the core inflation figures observed in November, it fell 0.19% from last month, compared with a forecast increase of 0.04%, which has given rise to the lowest rate in the last 40 years: 1.09%. The decrease in non-energy manufactured products was 0.36% compared to a forecast -0.11%, with the annual rate falling from -2.43% to -2.58% (this negative rate is heavily conditioned by the collapse of used car prices). On the other hand, service prices fell 0.09% compared with the forecast 0.10% increase, with the annual rate falling from 2.87% to 2.64%. Core inflation, not including owner's equivalent rent of primary

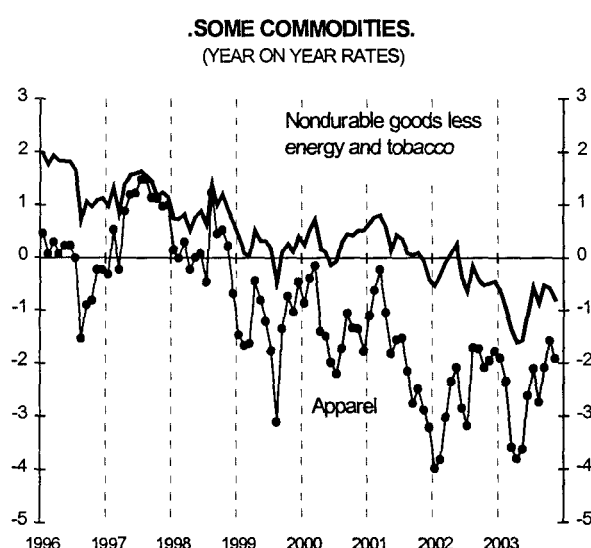


The core rate fell 0.19% from last month, compared with a forecast increase of 0.04%, which has given rise to the lowest rate in the last 40 years: 1.09%

residence and tobacco, and therefore comparable with the underlying rate in Europe excluding food, fell by 0.35%, three tenths more than expected (-0.06%), with the annual rate falling from 0.98% to 0.71%.

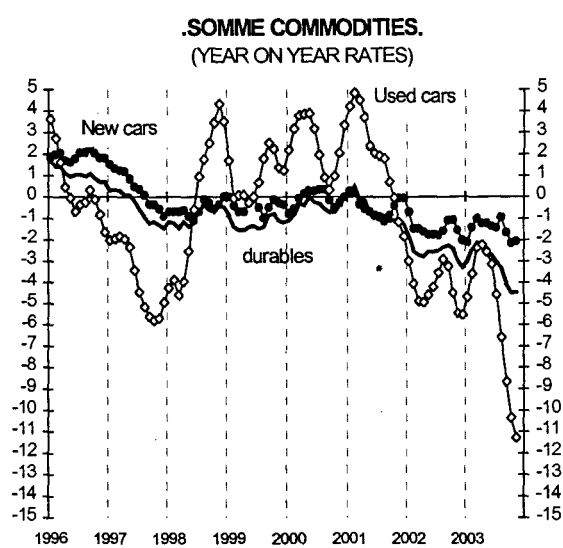
By components, the index for commodities less food and energy without tobacco decreased by 0.37% instead of the -0.19% expected, with the annual rate going from -2.53% to -2.68%. Durable goods prices declined by 0.09% as opposed to the forecast -0.06%, with the annual rate going from -4.48% to -4.47%. Specifically the used car index explains this deviation from the forecast, the annual rate of which fell from -10.35% to -11.29%. With regards to durable goods, the annual rate of the new car index went from the previous month's -2.15% to -2.07% (see **Graph 3**). Non-durable goods prices, excluding the index for tobacco, decreased by 0.61%, instead of the 0.32% expected, with the annual rate going from -0.58% to -0.79%. Regarding non-durable goods, the annual rate of the apparel index went from -1.58% to -1.91% (see **Graph 2**). And the index for tobacco decreased by 0.09% as opposed to the forecast of +1.45%, with the annual rate going from -0.23% to -0.28%.

Graph 2



Source: **BLS & IFL** / Date: December 16, 2003.

Graph 3



Source: **BLS & IFL** / Date: December 16, 2003.

The index for services shows a decrease of 0.09% instead of the forecast +0.10%. The annual rate decreased from 2.87% to 2.64%. The index for services excluding owner's equivalent rent of primary residence decreased by 0.29%, which was more than the expected -0.02%, with the annual rate going from 3.36% to 2.98%. The index for owner's equivalent rent of primary residence increased by 0.23%, instead of the forecast of 0.28%, with the annual rate going from 2.12% to 2.13% (see **Graph 5**).

The difference between the index for services (excluding the index for owner's equivalent rent of primary residence) and the index for commodities less food and energy (excluding tobacco prices) decreased by two tenths to 5.7 points, from the previous month's figure. This is explained by the annual rate of the index for commodities which decreases 2 tenths in the year-on-year, and the 4 tenths fall in the index for services.

Residual inflation decreased by 0.67%, less than the expected -0.72%, with the annual rate falling from 4.83% to 4.15%. By components, food prices have increased by 0.39%, which was more than expected, as the forecast percentage was 0.12%, increasing the annual rate from 2.95% to 3.17%. The index for energy has performed better than expected, with a decrease of 2.78% as opposed to the forecast -2.40%. Its annual rate has gone from 8.82% to 6.28%.

The general index forecast for **December** is a 0.11% decrease,

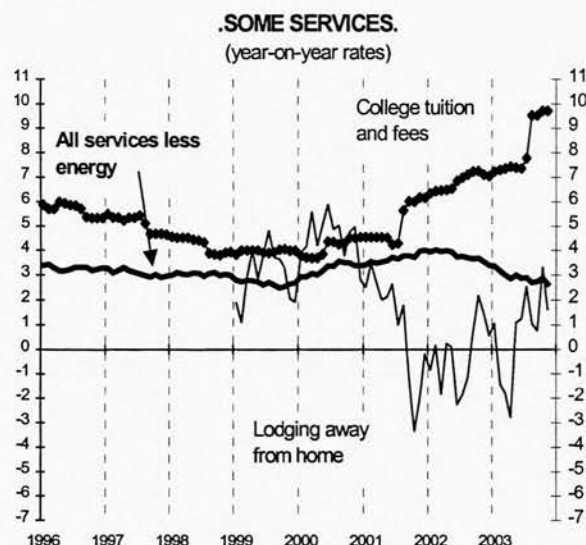
The general index forecast for **December** is a 0.11% decrease, increasing the annual rate by one tenth from 1.77% to 1.88%. We expect a 0.11% fall in core inflation, with the annual rate rising from 1.09% to 1.19%.



increasing the annual rate by one tenth from 1.77% to 1.88%. We expect a 0.11% fall in core inflation, with the annual rate rising from 1.09% to 1.19%.

By components, the expected increase in the index for services is 0.03%, 0.22% for the index for owner's equivalent rent of primary residence and -0.09% for the rest. The annual rate of the index for owner's equivalent rent of primary residence will decrease to 2.06%. The year-on-year rate for the index for all other services, on the whole, will increase from 2.98% to 3.08% (see Graph 5).

Graph 4



Source: BLS & IFL / Date: December 16, 2003.

Graph 5



Source: BLS & IFL / Date: December 16, 2003.

Taking commodities less food and energy into consideration, the expected decrease is 0.47%, with the annual rate going from -2.58% to -2.29%. Excluding the index for tobacco, the predicted rise is -0.47%, which would leave the year-on-year rate at -2.33%, as opposed to last month's -2.68%. Durable goods prices are expected to increase 0.31%, leaving the annual rate at -3.95%. Non-durable goods prices are forecast to rise -1.20%, bringing the annual rate from -0.75% to -0.70%. Within the index of non-durable goods, tobacco prices are predicted to decrease by 0.52%, which would leave the year-on-year rate at -1.23%.

The expected decrease in residual inflation is 0.11%, which would leave the year-on-year rate at 4.37%. With regards to residual inflation, the expected increase for the food index is 0.35%. Energy prices are expected to decrease by 1.06%, bringing the annual rate up from 6.63% to 6.81%.

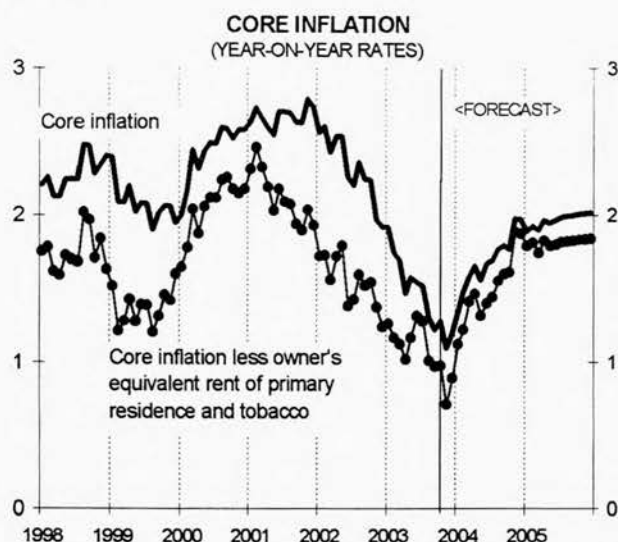
For 2003, 2004 and 2005, we forecast mean total annual inflation rates of 2.3%, 1.7% and 1.8%, respectively, maintaining our last month's forecast. The excellent inflation figure published for November is compensated in our forecast by worse crude oil price expectations, the heavy depreciation in the real effective exchange rate and the greater economic growth expected (see Graph 7).

For 2003, 2004 and 2005, we forecast mean annual total inflation rates of 2.3%, 1.7% and 1.8%, respectively, maintaining our last month's predictions

Core inflation in the US excluding the index for owner's equivalent rent of primary residence and tobacco, which would be equivalent to core inflation less food in the EMU and Spain, is expected to accelerate slightly from the current 0.71% to 1.84% in December 2005 (see Graph 6).



Graph 6



Source: BLS & IFL / Date: December 16, 2003.

Graph 7



Source: BLS & IFL / Date: December 16, 2003.

Table 11 shows the average annual growth rate forecasts for 2003 and 2004 for the different components of the US Consumer Price Index (monthly and annual rates can be found in **Tables A6A and A6B** in the Appendix).

Table 11

AVERAGE ANNUAL RATE OF GROWTH IN US (*)

CONSUMER PRICES INDEX (CPI)	2000	2001	2002	2003 (forecasts)	2004 (forecasts)	2005 (forecasts)
Food (1)	2.3	3.1	1.8	2.1	3.3	2.6
Energy (2)	16.9	3.8	-5.9	12.2	-1.1	-2.0
Residual Inflation (3=2+1)	6.8	3.3	-0.9	5.3	1.8	1.1
Non-food and non-energy goods (4)	0.5	0.3	-1.1	-1.9	-1.1	-0.6
Less tobacco	-0.1	-0.2	-1.5	-2.1	-1.1	-0.5
-Durable goods	-0.5	-0.6	-2.6	-3.2	-2.2	-0.9
-Nondurable goods	1.4	1.1	0.5	-0.7	-0.1	-0.3
Non-energy services (5)	3.3	3.7	3.8	2.9	2.9	2.9
-Services less owner's equivalent rent of primary residence (5-a)	3.5	3.6	3.6	3.2	3.2	3.2
-Owner's equivalent rent of primary residence (a)	3.0	3.8	4.1	2.4	2.3	2.5
Core Inflation (6=4+5)	2.4	2.7	2.3	1.5	1.7	2.0
Core inflation less owner's equivalent rent of primary residence (6-a)	2.2	2.3	1.7	1.1	1.4	1.7
Core inflation less owner's equivalent rent of primary residence and tobacco	2.1	2.1	1.6	1.1	1.5	1.8
All items (7=6+3)	3.4	2.8	1.6	2.3	1.7	1.8
All items less owner's equivalent rent of primary residence (7-a)	3.5	2.6	0.9	2.2	1.5	1.6

(*) Monthly and annual growth rates can be found in tables A6A and A6B in Appendix

Source: BLS & INSTITUTO FLORES DE LEMUS

Data: December 16, 2003



II.4 Spain

The CPI for November 2003 showed a monthly rate of 0.3% with a year-on-year rate of 2.8%.

Trend inflation registered a downward innovation

The CPI for November 2003 showed a monthly-on-monthly rate of 0.33%, below our predicted 0.48%, with a year-on-year rate of 2.8%, respect to the 2.6% registered in October.

Trend inflation, calculated on the basis of the IPSEBENE-XT index, registered a year-on-year rate of 2.6% in November, less than the corresponding to total inflation, 2.8%. Since November 2002, residual inflation has been 3.6%.

Trend inflation registered a downward innovation in the goods market derived from prices of non-energy industrial goods; residual inflation also registered a downward innovation derived from prices of non-processed food.

In order to analyse this in greater detail, it is necessary to refer to tables 12 and 13. Table 12 shows the breakdown used in this Bulletin to study inflation behaviour (there is a more detailed version in table A1A at the end of the document) and table 13 summarises prediction errors made for different components.

Table 12			
SPANISH CPI DISAGGREGATION ^(*)			
1. Processed Foods CPI (excluding Fats and Tobacco)	AE-X (13.03%)	Trend Inflation (1+2+3) IPSEBENE-XT (77.49%)	CPI (100%)
2. Non Energy Commodities CPI	MAN (31.31%)		
3. Non Energy Services CPI (excluding Tourism)	SERV-T (33.15%)		
4. Fats, Tobacco and Tourism	XT (4.20%)	Residual Inflation (4+5+6) R (22.51%)	
5. Non Processed Foods CPI	ANE (9.05%)		
6. Energy CPI	ENE (9.26%)		
(*) More detailed information can be found in table A1 in Appendix.			

Table 13 OBSERVED VALUES AND FORECASTS ON CONSUMER PRICE FIGURES IN SPAIN			
Consumer Price Index (CPI)	Current growth November 03	Forecast	Confidence Intervals ^(*)
(1) AE-X (13.03%)	0.20	0.12	± 0.18%
(2) MAN (31.31%)	1.18	1.40	± 0.16%
BENE-X [1+2] (44.34%)	0.90	1.03	± 0.14%
(3) SERV-T (33.15%)	0.02	0.07	± 0.17%
IPSEBENE-X-T [1+2+3] (77.49%)	0.51	0.61	± 0.13%
(4) X+T (4.20%)	-1.43	-2.11	
(5) ANE (9.05%)	0.09	0.98	± 1.09%
(6) ENE (9.26%)	0.29	0.09	
R [4+5+6] (22.51%)	-0.14	0.04	± 0.22%
IPC [1+2+3+4+5+6] (100%)	0.33	0.48	± 0.15%
(*) At 80% confidence level.			

Source: INE & INSTITUTO FLORES DE LEMUS Date: December 12, 2003.



Trend inflation in goods (measured by the BENE-X index) registered a month-on-month rate of 0.90%, below our prediction, 1.03%.

Prices of **non-energy industrial goods** registered a month-on-month rate of 1.18% in November, below our predicted 1.40%. The year-on-year rate registered in November was 1.5%, compared to the 1.8% observed in October. This contrasts with these prices in the Euro-zone, with a year-on-year rate of growth of 0.7% in November. The inflation differential in the commodities market with the EMU has decreased in November below 1.0 percentage points, compared to the 1.0 p.p. observed in October. The year-on-year rates of growth in apparel and footwear are 2.2% and 2.8%, respectively. If these increases in prices are not reflected in improved quality of corresponding goods, the Spanish economy will suffer a loss of competitiveness in relation to Europe, which will translate to lower economic growth. The predictions for average annual rates in commodity prices are 2.1% in 2003, 1.8% in 2004, and 2.7% in 2005 with respect to the 2.6% registered in 2002.

The annual inflation differential in commodities market with the EMU has decreased below 1% in November.

The offers picked up by the INE derive in a more erratic evolution of trend inflation in food.

The month-on-month rate of **trend inflation in food** in November was 0.20%, above our prediction, 0.12%. Prices of processed food are now affected by offers that the National Statistics Institute (INE) picks up; this fact derives a more erratic evolution of this kind of prices. The year-on-year rate in November increased to 2.6%, compared to the 2.5% registered in October. The mean growth expectations of trend inflation in food stay at 2.9% in 2003, 3.1% in 2004, and 3.0% in 2005, with respect to the 3.1% observed in 2002.

The mean growth expectations for trend inflation in goods will stay at 2.3%, 2.2% and 2.8%, in 2003, 2004 and 2005 respectively.

Trend inflation expectations for goods (measured by the BENE-X index) are 2.3% in 2003, 2.2% in 2004 and 2.8% in 2005.

Table 14 shows a summary of average annual predictions for the different components that make up core and residual inflation (more detailed information may be found in tables A7A and A7B at the end of the document.)

Table 14 SPANISH AVERAGE RATES OF GROWTH								
	1998	1999	2000	2001	2002	Forecasts		
						2003	2004	2005
Residual Inflation	0.4	2.8	6.7	3.7	3.2	3.6	4.0	3.1
Fats	-11.1	14.9	-7.6	-7.3	15.2	3.4	8.7	6.3
Tobacco	7.9	4.3	2.5	4.9	7.4	3.8	4.6	0.0
Tourism	15.4	7.2	12.3	7.1	8.7	2.8	7.8	8.8
Non Processed Foods	2.1	1.2	4.2	8.7	5.6	5.7	7.5	5.9
Energy	-3.8	3.2	13.3	-1.0	-0.2	1.3	-1.0	-0.5
Trend Inflation	2.3	2.1	2.5	3.5	3.4	2.9	2.9	3.2
BENE-X	1.6	1.3	1.9	3.1	2.6	2.3	2.2	2.8
Processed Food excluding fats and tobacco	1.4	0.8	1.4	4.1	3.1	2.9	3.1	3.0
Non-energy industrial goods	1.5	1.5	2.1	2.6	2.6	2.1	1.8	2.7
SERV-T	3.3	3.3	3.5	4.1	4.3	3.5	3.7	3.6
CPI Inflation	1.8	2.3	3.4	3.6	3.5	3.1	3.0	3.1

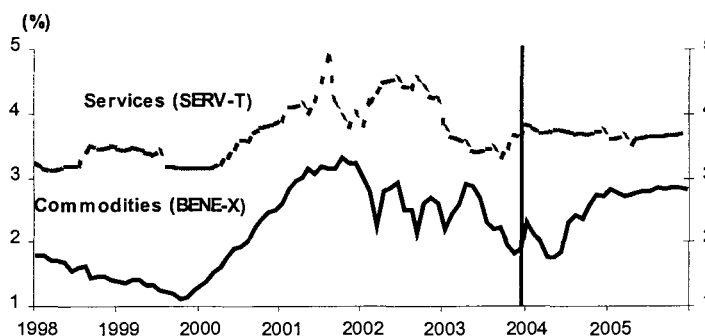
(*) More detailed information can be found in tables A6A and A6B in Appendix.

Source: INE & Institute Flores of Lemus / Date: December 15 / 2003.



Graph 8

AVERAGE RATES OF GROWTH OF CPI INFLATION IN GOODS (BENE-X) AND IN SERVICES (SERV-T)



Source: INE & IFL / Date: December 15 / 2003

The inflation differential between trend inflation in services and trend inflation in goods is 1.9 p.p. in November.

With regards to the **services sector**, excluding those components known as **tourist packages** (the SERV-T index), registered a month-on-month rate of inflation of 0.02%, slightly below was foreseen, 0.07%. The evolution of prices of services is especially worrisome in university, restaurants, education, housing and medicine, which show annual rates of growth greater than 4%. The inflation differential between the market of non-energy processed goods, excluding fats and tobacco, and the services market, excluding tourism, increases in November to 1.9 percentage points, compared to the 1.6 p.p. observed in October. This differential is greater than the corresponding of the EMU, 0.9 p.p. The year-on-year rate of growth of services in November was 3.6%, while that corresponding to the Euro-zone was 2.4%. The year-on-year trend inflation in services (SERV-T) increased in November by 3.7%, respect to the 3.5% observed in October. Mean growth expectations will decrease to 3.5% in 2003, 3.7 % in 2004 and 3.6% 2005, compared to the 4.3% observed in 2002.

The mean annual rate of trend inflation will stay at 2.9% in 2003 and 2004 and 3.2% in 2005.

With the aforementioned innovations in the goods and the services market, trend inflation, calculated on the IPSEBENE-XT index, registered a year-on-year rate of 2.6% in November, the same registered in October. It is predicted that **trend inflation** will reduce to 2.9% in 2003 and 2004 due to the better evolution in prices of goods and euro-rounding effects will cease to have an impact on the year-on-year rates, compared to 3.4% observed in 2002.

Residual inflation registered a null innovation.

Those prices which serve as a basis for calculating **residual inflation** have registered an upward innovation in the sectors of tourist packages, oils and fats and energy but a downward innovation in non-processed food.

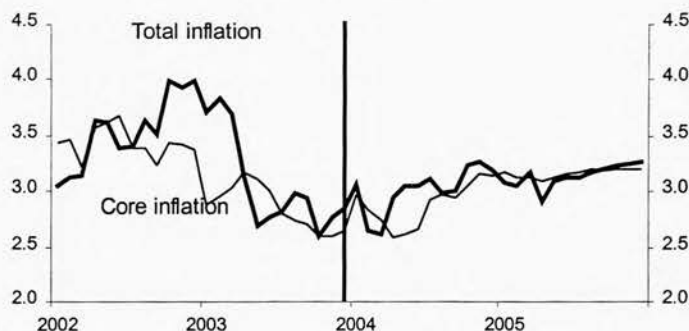
With all of this, residual inflation registered a year-on-year rate of growth of 3.6% in November, respect to the 2.6% in October. The expectations for the average annual rate of growth are 3.6% in 2003, 4.0% in 2004 and 3.1% in 2005, due to the erratic behaviour of non-processed and energy prices, as with the rest of the EMU.

As a consequence of the current evolution in prices of crude and the exchange rate, the expectations of average growth in consumer energy prices are 1.3% in 2003, a negative value of 1.0% in 2004, and a negative value of 0.5% in 2005, compared to the -0.2% observed in 2002. Average annual variation rates for oils and fats are expected to increase by 3.4% in 2003, 8.7% in 2004 and 6.3% in 2005, compared to the 15.2% observed in 2002. As far as average growth of non-processed foods, expectations are 5.7% for 2003, 7.5% in 2004 and 5.9% in 2005, compared to the 5.6% observed in 2002. Lastly, tourist package prices will reach average values of 2.8% in 2003, 7.8% in 2004 and 8.8% in 2005, compared to the 8.7% observed in 2002. Therefore, **the estimated average growth of residual inflation** is 3.6% in 2003, 4.0% in 2004 and 3.1 % in 2005, compared to the 3.3% observed in 2002.



Graph 9

ANNUAL RATES OF TOTAL AND CORE INFLATION IN SPAIN



Source: INE & IFL / Date: December 15, 2003

The monthly inflation prediction for December 2003 is 0.4%; the annual rate will stay at 2.8%.

As a result, the prediction of the month-on-month inflation rate for December 2003 is 0.4%; the year-on-year rate will stay at 2.8%, the same observed last November. The month-on-month trend inflation rate will be 0.1% and residual inflation will be 1.4%. The average inflation rate within the overall CPI is placed at 3.1% in 2003, 3.0% in 2004 and 3.1% in 2005, compared to 3.5% observed in 2002. The average rate of trend inflation will be 2.9% in 2003 and 2004 and 3.2% in 2005.

The year-on-year rates of total inflation in November and December are used in order to review wages, contracts, and other type of contracts. These year-on-year rates show an extremely variable evolution. For example, in 2001 they moved from 2.7% in November and December to 4.2% in June, in contrast to the average annual rate of 3.6%. Nevertheless, the year-on-year rate in November 2002 was 3.9% and in December 4.0%, greater than the average annual rate of 3.5%.

Table 15 shows the average annual rates for 2000, 2001, 2002 and 2003 of the different sectors in the EMU and Spain, where the relevant differential in non-energy industrial goods and services can be observed.

		2000	2001	2002	Forecasts		
					2003	2004	2005
AE ^(a)	EMU	1.1	2.9	3.0	3.3	3.4	2.9
	SPAIN	0.9	3.4	4.4	3.0	3.7	2.8
MAN	EMU	0.4	0.9	1.5	0.8	0.8	0.9
	SPAIN	2.1	2.6	2.6	2.1	1.8	2.7
BENE	EMU	0.6	1.5	1.9	1.4	1.5	1.4
	SPAIN	1.7	2.9	3.1	2.4	2.5	2.7
SERV	EMU	1.5	2.5	3.1	2.6	2.4	2.5
	SPAIN	3.7	4.2	4.5	3.5	3.9	3.8
IPSEBENE	EMU	1.0	1.9	2.5	2.0	1.9	1.9
	SPAIN	2.4	3.4	3.8	2.9	3.1	3.2
ANE	EMU	1.7	7.0	3.1	2.3	2.0	1.6
	SPAIN	4.2	8.7	5.6	5.7	7.5	5.9
ENE	EMU	13.0	2.3	-0.6	3.0	-1.8	0.3
	SPAIN	13.3	-1.0	-0.2	1.3	-1.0	-0.5
RESIDUAL	EMU	7.5	4.4	1.1	2.6	0.0	0.9
	SPAIN	6.7	3.7	3.2	3.6	4.0	3.1
HICP CPI	EMU	2.1	2.3	2.3	2.1	1.7	1.8
	SPAIN	3.4	3.6	3.5	3.1	3.0	3.1

(a) Including tobacco prices

Source: INE, EUROSTAT & Instituto Flores de Lemus / Date: December 18/ 2003.



TABLES & PLOTS

TABLES:

- A1A: Spanish CPI disaggregation.
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PLOTS:

- A1A: HICP monthly growth rates in EMU.
- A1B: CPI monthly growth rates in US.
- A1C: CPI monthly growth rates in Spain
- A2A: Annual Forecast For The EMU Inflation
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METHODOLOGY: ANALYSIS OF SPANISH INFLATION BY SECTORS

BASIC COMPONENTS AGGREGATES		BASIC COMPONENTES	BASIC COMPONENTS AGGREGATES	
IPSEBENE 81.696% 1 + 2 + 3 + 4 + 5	BENE 47.377% 1 + 2 + 4	(1) AE-X 13.029% processed food excluding fats and tobacco CPI	BENE-X 44.341% 1 + 2	IPSEBENE-X-T 77.491% 1 + 2 + 3
	AE 16.065% 1 + 4	(2) MAN 31.312% non-energy industrial goods CPI		
		(3) SERV-T 33.15% services excluding packages tourist CPI		
		(4) X 3.036% fats and tobacco CPI		
		(5) T 1.169% tourist packages CPI	R 22.508% 4 + 5 + 6 + 7	
		(6) ANE 9.048% non-processed food CPI		
		(7) ENE 9.256% energy CPI		
CORE INFLATION IT IS CALCULATED ON THE IPSEBENE INDEX			RESIDUAL INFLATION IT IS CALCULATED ON THE R INDEX	TREND INFLATION IT IS CALCULATED ON THE IPSEBENE-X-T INDEX
				IPC 1 + 2 + 3 + 4 + 5 + 6 + 7 GLOBAL INFLATION IT IS CALCULATED ON THE IPC INDEX
$IPC = 0.13029 \text{ AE-X} + 0.31312 \text{ MAN} + 0.3315 \text{ SERV-T} + 0.03036 \text{ X} + 0.01169 \text{ T} + 0.09048 \text{ ANE} + 0.09256 \text{ ENE}$			(weights 03)	

Source: INE & Instituto Flores de Lemus, Universidad Carlos III

Methodology: Analysis of EMU inflation by SECTORS

BASIC COMPONENTS AGGREGATES		BASIC COMPONENTS	
<div>IPSEBENE 84.173% 1 + 2 + 3 + 4</div> <div>↓</div>	<div>BENE 43.264% 1 + 2 + 3</div>	<div>(1) AE ^(a) 9.432% HICP Processed Food</div> <div>(2) TOBACCO 2.282% HICP Tobacco</div> <div>(3) MAN 31.550% HICP Non Energy Industrial Goods</div> <div>(4) SERV 40.909% HICP Services</div> <div>(5) ANE 7.577% HICP Non processed Food</div> <div>(6) ENE 8.249% HICP Energy</div>	
	<div>RESIDUAL INFLATION 15.828% 5 + 6</div>		
CORE INFLATION (IT IS CALCULATED ON THE IPSEBENE INDEX)			
IPCA = 0.09432 AE + 0.02282 TOBACCO + 0.31550 MAN + 0.43264 SERV + 0.07577 ANE + 0.08249 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.

Fuente / Source: EUROSTAT & Instituto Flores de Lemus, Universidad Carlos III

Methodology: Analysis of USA inflation by SECTORS

BASIC COMPONENTS AGGREGATES		BASICS COMPONENTS	
CORE CPI 75.28% 1 + 2 +3+4+5	SERVICES LESS ENERGY 45.91% 1+2	(1) OWNERS' EQUIVALENT RENT OF PRIMARY RESIDENCE 18.47%	(2) SERVICES LESS OWNER' EQUIVALENT RENT OF PRIMARY RESIDENCE 27.44%
	COMMODITIES LESS FOOD AND ENERGY 29.37% 3+4+5	(3) TOBACCO 0.38%	(4)NON DURABLES LESS TOBACCO 11.81%
RESIDUAL CPI 24.72% 6 +7 +8 +9	ENERGY 9.86% 7 + 8+9	(5) DURABLES 17.19%	(6) FOOD 14.86%
		(7) GAS 1.27%	(8) ELECTRICITY 3.42%
		(9) MOTOR FUEL AND FUEL OIL 5.18%	
HIPC =0.4591(SERV. – ENERGY) + 0.2937(COMM. - FOOD AND ENERGY) + 0.1486FOOD + 0.0986ENERGY			

Fuente / Source: EUROSTAT & Instituto Flores de Lemus, Universidad Carlos III

Table A2

FORECAST ERRORS IN THE MONTHLY INFLATION RATE FOR NOVEMBER 2003 IN THE EUROZONE AND IN THE EUROPEAN UNION

	<i>Weights 2003 MU</i>	<i>Weights 2003 EU</i>	<i>Observed Monthly Rate</i>	<i>Forecast</i>	<i>Observed Annual Rate</i>	<i>Confidence Intervals at 80%</i>
Spain	108.72		0.33	0.48	2.87	± 0.15
Germany	298.68		-0.18	-0.09	1.31	± 0.29
Austria	31.52		0.18	0.02	1.28	± 0.37
Belgium	33.47		0.18	-0.05	1.80	± 0.32
Finland	15.66		-0.09	-0.16	1.16	± 0.37
France	204.58		0.09	-0.08	2.48	± 0.20
Greece	25.66		-	0.07	-	± 0.78
Netherlands	53.70		-0.41	-0.27	2.02	± 0.33
Ireland	12.71		0.00	-0.05	3.25	± 0.30
Italy	191.62		0.25	0.44	2.78	± 0.23
Luxembourg	2.60		0.43	0.32	2.02	± 0.32
Portugal	21.07		0.08	0.53	2.32	± 0.66
Denmark		13.08	0.17	-0.08	1.40	± 0.27
United Kingdom		167.61	-0.09	0.06	1.29	± 0.33
Sweden		17.82	-0.27	-0.08	1.99	± 0.50

Source: EUROSTAT & IFL

Date: December 17, 2003

Elaborated by: Rebeca Albacete
albacete@est-econ.uc3m.es

FORECAST ERRORS IN THE MONTHLY INFLATION RATE FOR NOVEMBER 2003 BY SECTORS IN THE EMU					
	Weights 2003	Observed Monthly Growth	Forecast	Annual Growth Observed	Confidence interval at 80%
HICP Processed Food	117.14	0.52	0.22	3.93	± 0.14
HICP Processed Food excluding tobacco	94.32	0.07	0.25	2.08	± 0.09
HICP Tobacco	22.82	2.26	0.10	11.57	± 0.13
HICP Non Energy Industrial Goods	315.50	0.19	0.27	0.66	± 0.10
HICP Non Energy Processed Goods	432.64	0.28	0.26	1.54	± 0.09
HICP Services	409.09	-0.09	-0.01	2.36	± 0.14
CORE INFLATION ⁽¹⁾	841.73	0.09	0.13	1.90	± 0.08
HICP Unprocessed Food	75.77	-0.08	-0.54	4.01	± 0.46
HICP Energy ⁽²⁾	82.49	-0.25	-0.14	2.21	± 0.60
RESIDUAL INFLATION ⁽³⁾	158.27	-0.17	-0.33	3.10	± 0.39
GLOBAL INFLATION ⁽⁴⁾	1000	0.09	0.05	2.15	± 0.09
(1) aggregation error -0.01%					
(2) aggregation error 0.00%					
(3) aggregation error 0.00%					
(4) aggregation error 0.03%					

Source : EUROSTAT & IFL
Date: December 17, 2003

HARMONIZED CPI (HICP) ANNUAL GROWTH FOR EMU COUNTRIES (1)

Table A4A

	Weight		Rates	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Average Rates (2)		
	EMU12	EU15														03/02	04/03	05/04
Spain HICP	10.87%		2003	3.8	3.8	3.7	3.2	2.7	2.8	2.9	3.1	3.0	2.7	2.9	2.9	3.1		
			2004	3.2	2.8	2.7	3.0	3.1	3.1	3.1	2.9	3.0	3.2	3.3	3.2		3.1	
			2005	3.1	3.1	3.2	2.9	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3			3.1
Germany HICP	29.87%		2003	0.9	1.2	1.2	1.0	0.6	0.9	0.8	1.1	1.1	1.1	1.3	1.2	1.1		
			2004	1.0	0.8	0.6	0.9	1.2	1.2	1.2	0.9	1.0	1.0	1.0	1.1		1.0	
			2005	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8			0.7
Austria HICP	3.15%		2003	1.7	1.8	1.8	1.3	0.9	1.0	1.0	1.0	1.4	1.1	1.3	1.3	1.3		
			2004	1.2	1.3	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4		1.4	
			2005	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4			1.4
Belgium HICP	3.35%		2003	1.2	1.6	1.7	1.4	0.9	1.5	1.4	1.6	1.7	1.4	1.8	2.1	1.5		
			2004	2.1	1.4	1.5	1.7	2.3	2.1	2.2	1.8	1.9	2.1	2.0	1.8		1.9	
			2005	1.8	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8			1.9
Finland HICP	1.57%		2003	1.4	2.1	1.9	1.3	1.1	1.2	1.0	1.2	1.2	0.9	1.2	1.2	1.3		
			2004	1.2	0.9	0.8	0.9	1.0	1.0	1.3	1.3	1.1	1.2	1.3	1.3		1.1	
			2005	1.3	1.1	1.1	1.1	1.2	1.2	1.4	1.4	1.3	1.3	1.4	1.4			1.3
France HICP	20.46%		2003	1.9	2.5	2.6	1.9	1.8	1.9	1.9	2.0	2.3	2.3	2.5	2.4	2.2		
			2004	2.6	2.2	2.1	2.5	2.8	2.7	2.6	2.5	2.3	2.2	2.1	2.2		2.4	
			2005	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6			1.6
Netherlands HICP	5.37%		2003	2.7	2.9	2.8	2.2	2.3	2.1	2.1	2.2	2.0	1.9	2.0	1.9	2.3		
			2004	1.9	1.8	1.9	2.2	2.3	2.4	2.4	2.4	2.4	2.6	2.7	2.7		2.3	
			2005	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7			2.7
Ireland HICP	1.27%		2003	4.7	5.1	4.9	4.6	3.9	3.8	3.9	3.9	3.8	3.3	3.3	3.2	4.0		
			2004	3.1	3.0	3.0	3.1	3.4	3.5	3.5	3.4	3.5	3.6	3.6	3.6		3.4	
			2005	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6			3.6
Italy HICP	19.16%		2003	2.9	2.6	2.9	3.0	2.9	2.9	2.9	2.7	3.0	2.8	2.8	2.6	2.8		
			2004	2.8	2.8	2.4	2.4	2.5	2.6	2.6	2.7	2.4	2.6	2.6	2.7		2.6	
			2005	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6			2.6
Luxembourg HICP	0.26%		2003	3.3	3.2	3.7	3.0	2.3	2.0	1.9	2.3	2.7	1.8	2.0	2.3	2.5		
			2004	2.6	1.9	1.7	1.9	2.1	2.2	2.8	2.1	1.8	2.1	1.9	2.0		2.1	
			2005	2.2	1.9	1.7	2.0	2.1	2.2	2.6	2.2	2.0	2.4	2.3	2.3			2.1
Portugal HICP	2.11%		2003	4.0	4.1	3.8	3.7	3.7	3.4	2.9	2.9	3.2	2.8	2.3	2.3	3.3		
			2004	2.3	2.2	2.4	2.4	2.4	2.6	2.8	2.8	2.6	2.7	3.0	3.1		2.6	
			2005	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1			3.1
Greece HICP	2.57%		2003	3.3	4.2	3.9	3.3	3.5	3.6	3.5	3.3	3.3	3.2	3.2	3.2	3.4		
			2004	3.2	3.3	3.0	3.0	2.9	2.9	3.2	3.2	3.0	2.9	2.9	2.8		3.0	
			2005	2.9	2.9	2.7	2.7	2.6	2.6	2.8	2.8	2.7	2.6	2.6	2.5			2.7

* The annual rate of growth reflects fundamental changes in prices with respect to monthly growth rates

(1) Figures in bold type are forecasted values.

(2) Annual average rate of growth.

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS

Date: December 19, 2003

Table A4B

HARMONIZED CPI (HICP) ANNUAL GROWTH FOR EU COUNTRIES (1)

	Weight		Rate	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Average Rates (2)		
	EMU12	EU15														03/02	04/03	05/04
Denmark HICP	1.31%		2003	2.6	2.9	2.8	2.5	2.1	2.0	1.8	1.5	1.7	1.1	1.4	1.5	2.0		
			2004	1.3	1.1	1.0	1.2	1.7	1.8	2.0	2.1	1.9	2.2	2.1	2.1		1.7	
			2005	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1			2.1
UK HICP	16.76%		2003	1.4	1.6	1.6	1.5	1.2	1.1	1.3	1.4	1.4	1.4	1.3	1.2	1.4		
			2004	1.2	1.1	1.1	1.2	1.5	1.6	1.3	1.3	1.3	1.2	1.3	1.3		1.3	
			2005	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3			1.3
Sweden HICP	1.78%		2003	2.6	3.3	2.9	2.3	2.0	2.0	2.4	2.2	2.3	2.0	2.0	1.8	2.3		
			2004	1.6	1.2	1.1	1.4	1.6	1.7	1.7	1.8	1.6	1.7	1.8	1.8		1.6	
			2005	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.8			1.7

* The annual rate of growth reflects fundamental changes in prices with 6 months lags with respect to monthly growth rates.

(1) Figures in bold type are forecasted values.

(2) Annual average rate of growth.

Source:

EUROSTAT & INSTITUTO FLORES DE LEMUS

Date: December 19, 2003

Table A4C

Table A4C

HARMONIZED CPI (HICP) MONTHLY GROWTH FOR EMU COUNTRIES ⁽¹⁾																		
	Weight		Rate	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Annual Rates (2)		
	MU	EU15														D03/D02	D04/D03	D05/D04
Spain HICP	10.87%		2003	-0.4	0.2	0.8	0.8	-0.1	0.1	-0.6	0.5	0.2	0.7	0.3	0.4	2.9	3.2	3.3
			2004	-0.2	-0.2	0.7	1.1	0.0	0.1	-0.6	0.3	0.3	0.9	0.4	0.3			
			2005	-0.3	-0.2	0.8	0.9	0.2	0.1	-0.6	0.4	0.4	0.9	0.4	0.4			
Germany HICP	29.87%		2003	-0.1	0.6	0.2	-0.3	-0.3	0.2	0.3	0.1	-0.2	-0.1	-0.2	1.0	1.2	1.1	0.8
			2004	-0.3	0.4	0.0	0.0	0.0	0.1	0.3	-0.1	-0.1	-0.1	-0.2	1.1			
			2005	-0.7	0.3	0.0	0.0	0.0	0.1	0.3	-0.1	-0.1	-0.1	-0.1	1.1			
Austria HICP	3.15%		2003	0.2	0.2	0.3	-0.1	-0.2	0.0	-0.1	0.3	0.3	0.0	0.2	0.3	1.3	1.4	1.4
			2004	0.1	0.2	0.2	0.0	-0.1	0.0	-0.1	0.2	0.2	0.1	0.1	0.3			
			2005	0.1	0.2	0.2	0.0	-0.1	0.0	-0.1	0.2	0.2	0.1	0.1	0.3			
Belgium HICP	3.35%		2003	-1.0	2.1	0.3	-0.2	-0.4	0.4	-1.2	1.7	0.2	-0.4	0.2	0.3	2.1	1.8	1.8
			2004	-1.0	1.4	0.3	0.1	0.2	0.1	-1.0	1.3	0.3	-0.2	0.0	0.1			
			2005	-0.9	1.6	0.3	0.1	0.1	0.1	-1.0	1.3	0.2	-0.2	0.1	0.1			
Finland HICP	1.57%		2003	0.2	0.9	0.4	-0.1	-0.1	-0.1	-0.5	0.2	0.5	-0.1	-0.1	0.1	1.2	1.3	1.4
			2004	0.2	0.6	0.3	0.0	0.0	0.0	-0.3	0.2	0.4	0.0	0.0	0.1			
			2005	0.1	0.4	0.2	0.0	0.0	0.0	-0.1	0.1	0.3	0.0	0.0	0.1			
France HICP	20.46%		2003	0.3	0.7	0.5	-0.2	-0.1	0.2	-0.1	0.3	0.5	0.2	0.1	0.1	2.4	2.2	1.6
			2004	0.4	0.4	0.4	0.2	0.1	0.1	-0.2	0.1	0.2	0.1	0.0	0.2			
			2005	-0.1	0.3	0.4	0.2	0.2	0.1	-0.2	0.2	0.2	0.2	0.0	0.2			
Netherlands HICP	5.37%		2003	0.6	0.8	0.9	0.1	-0.1	-0.5	-0.1	0.2	0.8	-0.2	-0.4	-0.3	1.9	2.7	2.7
			2004	0.6	0.7	1.0	0.4	0.0	-0.4	-0.1	0.3	0.9	0.0	-0.3	-0.3			
			2005	0.6	0.7	1.0	0.4	0.0	-0.4	-0.1	0.3	0.9	0.0	-0.3	-0.3			
Ireland HICP	1.27%		2003	0.0	1.0	0.7	0.5	-0.2	0.1	-0.4	0.6	0.2	0.0	0.0	0.7	3.2	3.6	3.6
			2004	-0.1	0.9	0.8	0.6	0.1	0.2	-0.4	0.6	0.2	0.1	0.0	0.7			
			2005	-0.1	0.9	0.8	0.6	0.1	0.2	-0.4	0.6	0.2	0.1	0.0	0.7			
Italy HICP	19.16%		2003	-0.3	-0.4	1.2	0.8	0.2	0.1	-0.1	-0.3	0.8	0.3	0.3	0.1	2.6	2.7	2.6
			2004	-0.1	-0.4	0.9	0.7	0.3	0.1	-0.1	-0.2	0.5	0.5	0.3	0.2			
			2005	-0.1	-0.4	0.8	0.7	0.3	0.1	-0.1	-0.2	0.5	0.5	0.3	0.2			
Luxembourg HICP	0.26%		2003	-0.3	1.1	0.5	-0.2	-0.2	0.0	-0.8	1.2	0.7	-0.4	0.4	0.1	2.3	2.0	2.3
			2004	0.0	0.5	0.4	0.0	0.1	0.1	-0.2	0.5	0.4	-0.1	0.3	0.2			
			2005	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2			
Portugal HICP	2.11%		2003	0.1	0.0	0.1	0.8	0.7	0.0	-0.2	0.1	0.2	0.2	0.1	0.1	2.3	3.1	3.1
			2004	0.1	-0.1	0.3	0.8	0.7	0.2	0.1	0.1	0.1	0.3	0.4	0.1			
			2005	0.1	0.0	0.3	0.8	0.7	0.2	0.1	0.1	0.1	0.3	0.4	0.1			
Greece HICP	2.57%		2003	-0.8	-0.2	2.5	0.2	0.5	-0.2	-2.1	0.0	2.0	0.5	0.1	0.6	3.2	2.8	2.5
			2004	-0.7	-0.2	2.3	0.2	0.4	-0.1	-1.9	0.0	1.8	0.4	0.1	0.6			
			2005	-0.6	-0.2	2.0	0.2	0.4	-0.1	-1.7	0.0	1.6	0.4	0.1	0.5			

(1) Figures in bold type are forecasted values

(2) December over December rate of growth

(1) Figures in bold type are forecasted values.
(2) December over December rate of growth.

Source:

EUROSTAT & INSTITUTO FLORES DE LEMUS

Date: December 19, 2003

Table A4D																		
HARMONIZED CPI (HICP) MONTHLY GROWTH FOR EU COUNTRIES (1)																		
	Weight		Rate	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Annual Rates (2)		
	MU	EU15														D03/D02	D04/D03	D05/D04
Denmark HICP	1.31%		2003	0.2	0.7	0.8	0.0	-0.3	0.0	-0.6	-0.1	0.8	-0.3	0.2	0.1	1.5	2.1	2.1
			2004	0.0	0.5	0.6	0.2	0.2	0.1	-0.4	0.0	0.6	0.1	0.1	0.0			
			2005	0.1	0.5	0.6	0.2	0.2	0.1	-0.4	0.0	0.6	0.1	0.1	0.0			
UK HICP	16.76%		2003	-0.6	0.4	0.4	0.3	0.0	-0.1	-0.1	0.4	0.3	0.2	-0.1	0.3	1.2	1.3	1.3
			2004	-0.6	0.3	0.4	0.4	0.3	0.0	-0.3	0.3	0.3	0.1	0.0	0.3			
			2005	-0.6	0.3	0.4	0.4	0.3	0.0	-0.3	0.3	0.3	0.1	0.0	0.3			
Sweden HICP	1.78%		2003	0.3	1.0	0.6	-0.4	-0.1	-0.2	-0.2	-0.1	0.8	0.1	-0.3	0.2	1.8	1.8	1.8
			2004	0.0	0.6	0.6	0.0	0.1	-0.1	-0.2	0.0	0.6	0.1	-0.1	0.2			
			2005	0.0	0.5	0.5	0.0	0.1	-0.1	-0.1	0.0	0.5	0.1	-0.1	0.2			
(1) Figures in bold type are forecasted values. (2) Annual average rate of growth.																		

Source:

EUROSTAT & INSTITUTO FLORES DE LEMUS

Date: December 19, 2003

Table A5A

HARMONIZED CPI (HICP) ANNUAL GROWTH BY SECTORS IN THE EMU 2003-2004-2005 (a)

	Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Average rates(b)		
														03/02	04/03	05/04
(1) AE (9.432%) ^(c)	2003	1.9	2.1	2.2	2.1	2.1	2.2	2.0	2.0	2.0	2.2	2.1	2.0	2.1		
	2004	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.2	2.3	2.3		2.2	
	2005	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4			2.4
(2) TOBACCO (2.282%)	2003	6.7	7.7	7.5	7.9	7.9	7.6	7.7	7.5	7.8	9.2	11.6	11.3	8.4		
	2004	11.3	10.3	10.3	9.1	9.1	9.1	9.1	9.1	8.9	7.6	5.3	5.3		8.7	
	2005	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3			5.3
(3) MAN (31.550%)	2003	0.7	0.8	0.8	0.8	0.9	0.9	0.8	0.7	0.8	0.8	0.7	0.7	0.8		
	2004	0.9	0.8	0.8	0.8	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9		0.8	
	2005	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9			0.9
BENE [(1)+(2)+(3)] (43.264%)	2003	1.3	1.4	1.4	1.4	1.6	1.5	1.4	1.3	1.4	1.5	1.5	1.6	1.4		
	2004	1.7	1.6	1.6	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.4	1.4		1.5	
	2005	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4			1.4
(4) SERV (40.909%)	2003	2.9	2.7	2.7	2.9	2.5	2.6	2.3	2.5	2.5	2.5	2.4	2.4	2.6		
	2004	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.5	2.5		2.4	
	2005	2.5	2.5	2.6	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5			2.5
IPSEBENE [(1)+(2)+(3)+(4)] (84.173%)	2003	2.0	2.0	2.0	2.2	2.0	2.0	1.8	1.8	2.0	2.0	1.9	1.9	2.0		
	2004	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	1.9		1.9	
	2005	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9			1.9
(5) ANE (7.577%)	2003	-0.7	0.3	0.8	0.9	1.1	2.6	2.8	3.3	4.2	3.9	4.0	4.2	2.3		
	2004	3.9	3.3	3.0	2.9	2.6	1.9	1.7	1.4	0.9	1.0	0.9	0.8		2.0	
	2005	0.8	1.1	1.2	1.2	1.3	1.6	1.7	1.8	2.0	2.0	2.0	2.1			1.6
(6) ENE (8.249%)	2003	5.9	7.6	7.5	2.2	0.6	1.6	2.0	2.7	1.6	0.8	2.2	1.5	3.0		
	2004	-1.7	-3.6	-4.8	-2.1	-0.2	-0.3	-1.0	-2.1	-2.0	-1.7	-1.4	-0.9		-1.8	
	2005	-0.3	-0.2	-0.2	-0.1	0.1	0.3	0.5	0.6	0.6	0.6	0.6	0.6			0.3
HICP (100%)	2003	2.1	2.4	2.4	2.1	1.8	1.9	1.9	2.1	2.2	2.0	2.2	2.1	2.1		
	2004	1.9	1.6	1.4	1.7	1.9	1.9	1.8	1.6	1.5	1.6	1.6	1.6		1.7	
	2005	1.7	1.7	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8			1.8

* T1,12 growth rate lags fundamental changes in prices 6 months with respect to monthly growth rates. It is necessary to evaluate forecasts to analyze current situation.

** Weights on Global HICP are shown in brackets

(a) Figures in bold type are forecasts

(b) Annual average rate of growth

(c) 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 & INSTITUTO FLORES DE LEMUS

Date: December 18, 2003

Table A5B

HARMONIZED CPI (HICP) MONTHLY GROWTH RATES BY SECTORS IN THE EMU 2003-2004-2005 (a)

	Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Annual Rates (b)		
														D03/D02	D04/D03	D05/D04
(1) AE (9.432%) ^(c)	2003	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	2.0	2.3	2.4
	2004	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1			
	2005	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1			
(2) TOBACCO (2.282%)	2003	4.2	1.0	0.1	1.2	0.1	0.1	0.1	0.1	0.3	1.3	2.3	0.1	11.3	5.3	5.3
	2004	4.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
	2005	4.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
(3) MAN (31.550%)	2003	-1.4	0.0	1.1	0.6	0.3	-0.2	-1.4	-0.1	1.1	0.6	0.2	0.0	0.7	0.9	0.9
	2004	-1.3	-0.1	1.2	0.6	0.2	-0.1	-1.3	0.0	1.1	0.6	0.2	0.0			
	2005	-1.3	-0.1	1.2	0.6	0.2	-0.1	-1.3	0.0	1.1	0.6	0.2	0.0			
BENE [(1)+(2)+(3)] (43.264%)	2003	-0.8	0.1	0.9	0.5	0.3	-0.1	-1.0	0.0	0.9	0.5	0.3	0.0	1.6	1.4	1.4
	2004	-0.7	0.0	0.9	0.5	0.2	-0.1	-0.9	0.0	0.8	0.5	0.2	0.0			
	2005	-0.7	0.0	0.9	0.5	0.2	-0.1	-0.9	0.0	0.8	0.5	0.2	0.0			
(4) SERV (40.909%)	2003	-0.2	0.3	0.2	0.3	0.0	0.3	0.6	0.3	-0.3	-0.1	-0.1	0.9	2.4	2.5	2.5
	2004	-0.2	0.4	0.1	0.4	0.0	0.3	0.7	0.2	-0.3	-0.1	-0.1	0.9			
	2005	-0.2	0.4	0.3	0.1	0.2	0.3	0.7	0.2	-0.3	-0.1	-0.1	0.9			
IPSEBENE [(1)+(2)+(3)+(4)] (84.173%)	2003	-0.5	0.3	0.5	0.4	0.1	0.1	-0.2	0.1	0.4	0.2	0.1	0.4	1.9	1.9	1.9
	2004	-0.4	0.2	0.5	0.4	0.1	0.1	-0.1	0.1	0.3	0.2	0.1	0.5			
	2005	-0.4	0.2	0.6	0.3	0.2	0.1	-0.1	0.1	0.3	0.2	0.1	0.5			
(5) ANE (7.577%)	2003	1.4	0.3	0.5	0.4	0.3	0.6	-0.6	-0.4	1.2	-0.3	-0.1	0.8	4.2	0.8	2.1
	2004	1.1	-0.2	0.2	0.3	0.0	-0.2	-0.8	-0.7	0.7	-0.2	-0.2	0.7			
	2005	1.2	0.0	0.3	0.3	0.1	0.2	-0.7	-0.6	0.9	-0.2	-0.1	0.7			
(6) ENE (8.249%)	2003	3.1	1.9	1.0	-2.9	-2.1	0.0	0.5	1.1	-0.1	-0.3	-0.2	-0.5	1.5	-0.9	0.6
	2004	0.0	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0			
	2005	0.5	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0			
HICP (100%)	2003	-0.1	0.4	0.6	0.1	-0.1	0.1	-0.1	0.2	0.4	0.1	0.1	0.4	2.1	1.6	1.8
	2004	-0.3	0.1	0.4	0.4	0.1	0.1	-0.2	0.1	0.3	0.2	0.0	0.4			
	2005	-0.2	0.2	0.5	0.3	0.2	0.1	-0.2	0.1	0.3	0.2	0.1	0.4			

** Weights on Global HICP are shown in brackets

(a) Figures in bold type are forecasts

(b) December over December rate of growth

(c) 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 & INSTITUTO FLORES DE LEMUS

Table A6A

US ANNUAL RATES OF GROWTH ON CPI AND ITS COMPONENTS⁽¹⁾

		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avrg 03/ 02 (2)	Avrg 04/ 03 (3)	Avrg 05/ 04 (4)
Non energy commodities less food (1)	2003	-1.4	-1.5	-1.4	-1.8	-1.9	-1.8	-1.8	-2.2	-2.4	-2.4	-2.6	-2.3	-1.9		
	2004	-2.0	-1.7	-1.7	-1.4	-1.2	-1.1	-1.1	-0.9	-0.9	-0.7	-0.4	-0.5		-1.1	
	2005	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5			-0.6
Non energy services (2)	2003	3.4	3.2	3.0	2.9	3.0	2.9	2.9	2.7	2.8	2.9	2.6	2.7	2.9		
	2004	2.7	2.8	2.9	3.0	2.8	2.9	2.9	2.9	2.9	2.8	2.9	2.9		2.9	
	2005	2.8	2.9	2.9	3.0	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0			2.9
Core inflation (3=1+2)	2003	1.9	1.7	1.7	1.5	1.6	1.5	1.5	1.3	1.2	1.3	1.1	1.2	1.5		
	2004	1.3	1.5	1.6	1.7	1.6	1.7	1.7	1.8	1.8	1.8	2.0	2.0		1.7	
	2005	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0			2.0
Core inflation less owner's equivalent rent of primary residence	2003	1.4	1.2	1.2	1.0	1.2	1.3	1.3	1.0	0.9	1.0	0.7	0.9	1.1		
	2004	1.1	1.2	1.3	1.4	1.3	1.3	1.4	1.5	1.5	1.6	1.8	1.8		1.4	
	2005	1.7	1.7	1.7	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8			1.7
Food (4)	2003	1.0	1.4	1.4	1.2	1.7	2.1	2.1	2.5	2.4	2.9	3.2	3.2	2.1		
	2004	3.8	3.4	3.3	3.6	3.5	3.2	3.4	3.2	3.2	3.0	2.8	2.8		3.3	
	2005	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.5	2.5			2.6
Energy (5)	2003	14.1	22.0	23.4	13.0	9.0	9.3	9.1	11.8	14.7	8.8	6.2	6.8	12.2		
	2004	4.0	-0.2	-4.5	-1.8	0.9	0.6	0.1	-2.9	-5.8	-2.4	-0.7	0.2		-1.1	
	2005	-0.5	-2.5	-3.2	-3.0	-2.4	-2.1	-1.9	-1.8	-1.6	-1.5	-1.4	-1.5			-2.0
All items (6=3+4+5)	2003	2.6	3.0	3.0	2.2	2.1	2.1	2.1	2.2	2.3	2.0	1.8	1.9	2.3		
	2004	1.9	1.6	1.4	1.7	1.8	1.9	1.8	1.6	1.4	1.7	1.9	2.0		1.7	
	2005	1.8	1.7	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8			1.8
All items less owner's equivalent rent of primary residence	2003	2.4	3.0	3.1	2.1	1.9	2.1	2.1	2.2	2.4	2.0	1.7	1.8	2.2		
	2004	1.8	1.5	1.1	1.5	1.7	1.7	1.7	1.4	1.1	1.5	1.8	1.8		1.5	
	2005	1.7	1.5	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6			1.6

(1) Figures in bold type are forecasted values.

(2) Mean level of 2003 over 2002 growth rate.

(3) Mean level of 2004 over 2003 growth rate.

(4) Mean level of 2005 over 2004 growth rate.

Table A68

US MONTHLY RATES OF GROWTH ON CPI AND ITS COMPONENTS ⁽¹⁾

		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	02(XII)/ 01(XII) (*)	03(XII)/ 02(XII) (*)	04(XII)/ 03(XII) (*)
Non energy commodities less food (1)	2003	-0.6	0.3	0.4	-0.1	-0.6	-0.7	-0.6	-0.1	0.4	0.1	-0.4	-0.5	-2.3	-0.5	-0.5
	2004	-0.3	0.6	0.4	0.2	-0.4	-0.6	-0.6	0.0	0.3	0.4	-0.1	-0.5			
	2005	-0.3	0.6	0.3	0.2	-0.4	-0.6	-0.5	0.0	0.4	0.4	-0.1	-0.5			
Non energy services (2)	2003	0.5	0.4	0.2	0.0	0.3	0.2	0.4	0.3	0.0	0.4	-0.1	0.0	2.7	2.9	3.0
	2004	0.6	0.5	0.4	0.1	0.1	0.3	0.4	0.3	0.0	0.3	0.1	0.0			
	2005	0.5	0.5	0.3	0.2	0.1	0.3	0.4	0.3	0.0	0.3	0.1	0.0			
Core inflation (3=1+2)	2003	0.2	0.4	0.3	0.1	0.1	-0.1	0.1	0.2	0.1	0.3	-0.2	-0.1	1.2	2.0	2.0
	2004	0.4	0.5	0.4	0.1	0.0	0.0	0.1	0.2	0.1	0.3	0.0	-0.1			
	2005	0.3	0.5	0.3	0.2	-0.1	0.0	0.1	0.2	0.1	0.3	0.0	-0.1			
Core inflation less owner's equivalent rent of primary residence	2003	0.2	0.5	0.3	0.1	0.0	-0.1	0.0	0.1	0.0	0.3	-0.3	-0.2	0.9	1.8	1.8
	2004	0.4	0.6	0.5	0.1	-0.1	0.0	0.1	0.2	0.0	0.3	-0.1	-0.3			
	2005	0.3	0.7	0.4	0.2	-0.1	0.0	0.1	0.2	0.0	0.3	-0.1	-0.3			
Food (4)	2003	0.1	0.5	0.2	-0.1	0.2	0.4	0.1	0.4	0.2	0.6	0.4	0.4	3.2	2.8	2.5
	2004	0.6	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.4	0.2	0.3			
	2005	0.5	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.3			
Energy (5)	2003	3.4	6.2	5.3	-3.2	-3.0	1.9	0.3	2.7	2.8	-5.3	-2.8	-1.0	6.8	0.2	-1.5
	2004	0.7	1.8	0.8	-0.4	-0.3	1.5	-0.2	-0.4	-0.2	-1.9	-1.1	-0.2			
	2005	0.0	-0.1	0.1	-0.2	0.3	1.8	0.0	-0.3	0.0	-1.8	-1.0	-0.2			
All items (6=3+4+5)	2003	0.4	0.8	0.6	-0.2	-0.2	0.1	0.1	0.4	0.3	-0.1	-0.3	-0.1	1.9	2.0	1.8
	2004	0.4	0.5	0.4	0.1	0.0	0.2	0.1	0.2	0.1	0.1	0.0	-0.1			
	2005	0.3	0.4	0.3	0.2	0.0	0.2	0.1	0.2	0.1	0.2	0.0	-0.1			
All items less owner's equivalent rent of primary residence	2003	0.5	1.0	0.7	-0.3	-0.2	0.1	0.1	0.4	0.3	-0.2	-0.4	-0.2	1.8	1.8	1.6
	2004	0.5	0.6	0.4	0.1	-0.1	0.2	0.1	0.2	0.0	0.1	-0.1	-0.1			
	2005	0.3	0.5	0.3	0.2	-0.1	0.2	0.1	0.2	0.1	0.1	-0.1	-0.2			

(1) Figures in bold type are forecasted values.

(2) December 2003 over December 2002 growth rate.

(3) December 2004 over December 2003 growth rate.

(4) December 2005 over December 2004 growth rate.

Source: BLS & INSTITUTO FLORES DE LEMUS

Data: December 16, 2003

Table A7A

"CONSUMER PRICE INDEX, ANNUAL GROWTH RATES IN SPAIN 2003-2004-2005 (a)

(**) Concept	Rate	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avr 03/02(b)	Avr 04/03(c)	Avr 05/04(d)
(1) AE-X (13,03%)	2003	3.1	3.5	3.4	3.3	3.0	2.8	2.6	2.6	2.4	2.5	2.6	2.7	2.9		
	2004	3.0	2.8	2.9	3.0	3.1	3.3	3.4	3.4	3.4	3.2	3.2	3.1		3.1	
	2005	3.2	3.1	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.0	2.9	2.9			3.0
(2) MAN (31,31%)	2003	1.9	2.1	2.2	2.8	2.8	2.7	2.2	2.0	2.1	1.8	1.5	1.6	2.1		
	2004	2.0	1.8	1.6	1.2	1.2	1.2	1.8	2.0	1.9	2.3	2.5	2.5		1.8	
	2005	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8			2.7
BENE - X [(1)+(2)] = (44,34%)	2003	2.2	2.4	2.6	2.9	2.9	2.7	2.3	2.2	2.2	1.9	1.8	1.9	2.3		
	2004	2.3	2.1	2.0	1.8	1.8	1.8	2.3	2.4	2.4	2.6	2.7	2.7		2.2	
	2005	2.8	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8			2.8
(3) SERV-T (33,15%)	2003	3.8	3.6	3.6	3.5	3.4	3.4	3.4	3.5	3.3	3.5	3.7	3.6	3.5		
	2004	3.8	3.8	3.7	3.7	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7		3.7	
	2005	3.6	3.6	3.6	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7			3.6
IPSEBENE-XT [(1)+(2)+(3)] = (77,49%)	2003	2.9	3.0	3.0	3.2	3.1	3.0	2.8	2.7	2.7	2.6	2.6	2.7	2.9		
	2004	3.0	2.8	2.7	2.6	2.6	2.7	2.9	3.0	2.9	3.1	3.2	3.1		2.9	
	2005	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2			3.2
(4) XT (4,20%)	2003	5.9	7.1	4.7	4.7	1.0	1.4	2.4	3.3	2.9	3.7	2.8	1.8	3.4		
	2004	4.4	3.4	5.6	7.1	8.2	7.7	7.3	5.8	8.0	6.9	5.4	5.4		6.3	
	2005	3.5	3.4	6.4	0.6	3.6	3.7	3.8	3.9	3.8	3.8	3.6	3.7			3.7
(5) ANE (9,05%)	2003	6.6	5.5	5.2	4.2	4.3	4.4	5.0	5.9	7.0	6.4	6.2	8.2	5.7		
	2004	9.6	8.3	9.1	9.6	7.6	6.7	6.9	7.3	6.3	6.3	6.5	5.7		7.5	
	2005	5.4	5.6	5.5	5.7	5.9	6.0	5.8	5.8	6.0	6.2	6.3	6.3			5.9
(6) ENE (9,26%)	2003	5.4	6.6	6.1	0.8	-2.0	-0.7	0.0	1.0	-0.2	-1.8	1.1	0.0	1.3		
	2004	-1.8	-3.1	-4.4	-1.9	0.5	1.3	0.2	-1.3	-1.0	0.0	-0.3	-0.2		-1.0	
	2005	-0.7	-0.7	-0.7	-0.7	-0.6	-0.7	-0.6	-0.5	-0.3	-0.2	-0.1	0.0			-0.5
R [(4)+(5)+(6)] = (22,51%)	2003	6.4	6.7	5.5	2.9	1.1	1.8	2.5	3.4	3.3	2.6	3.6	3.8	3.6		
	2004	4.2	2.8	3.0	4.6	5.0	4.8	4.4	3.7	3.9	4.0	3.7	3.4		4.0	
	2005	2.8	2.8	3.4	2.3	3.0	3.1	3.1	3.1	3.3	3.4	3.4	3.5			3.1
IPC (100%)	2003	3.7	3.8	3.7	3.1	2.7	2.8	2.8	3.0	2.9	2.6	2.8	2.8	3.1		
	2004	3.1	2.6	2.6	2.9	3.1	3.1	3.1	3.0	3.0	3.2	3.3	3.2		3.0	
	2005	3.1	3.1	3.2	2.9	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3			3.1

* T1,12 growth rate lags fundamental changes in prices 6 months with respect to monthly growth rates. It is necessary to evaluate forecast in order to analyze current situation.

** Weights on General CPI are shown in brackets.

(a) Figures in bold type are forecasted values

(b) 2003 over 2002 mean growth

(c) 2004 over 2003 mean growth

(d) 2005 over 2004 mean growth

Source:

Table A7B

CONSUMER PRICE INDEX, MONTHLY GROWTH RATES IN SPAIN 2003-2004-2005 (a)

(*) Concept	Rate	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03/ D02(b)	D04/ D03(c)	D05/ D04(d)
(1) AE-X (13,03%)	2003	0.6	0.4	0.3	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.3	2.7		
	2004	1.0	0.3	0.4	0.3	0.2	0.2	0.1	0.3	0.0	0.0	0.2	0.2		3.1	
	2005	1.0	0.1	0.3	0.3	0.2	0.2	0.1	0.3	0.0	-0.1	0.1	0.2			2.9
(2) MAN (31,31%)	2003	-3.2	-0.1	1.1	2.9	0.5	-0.2	-3.7	-0.3	1.1	2.5	1.2	0.0	1.6		
	2004	-2.9	-0.3	0.9	2.5	0.5	-0.1	-3.1	-0.2	1.0	2.9	1.4	0.0		2.5	
	2005	-2.7	-0.3	0.9	2.5	0.5	-0.1	-3.1	-0.1	1.0	3.0	1.4	0.0			2.8
BENE - X [(1) + (2)] = (44,34%)	2003	-2.1	0.1	0.9	2.1	0.4	-0.1	-2.6	-0.2	0.8	1.8	0.9	0.1	1.9		
	2004	-1.8	-0.1	0.8	1.9	0.4	0.0	-2.2	0.0	0.7	2.0	1.0	0.0		2.7	
	2005	-1.6	-0.2	0.7	1.9	0.4	0.0	-2.2	0.0	0.7	2.0	1.0	0.0			2.8
(3) SERV-T (33,15%)	2003	0.9	0.4	0.5	0.4	0.1	0.3	0.4	0.3	-0.1	0.3	0.0	0.2	3.6		
	2004	1.0	0.3	0.4	0.4	0.2	0.2	0.4	0.3	-0.1	0.3	0.1	0.2		3.7	
	2005	0.9	0.3	0.4	0.3	0.2	0.3	0.4	0.3	-0.1	0.3	0.1	0.2			3.7
IPSEBENE-XT [(1) + (2) + (3)] = (77,49%)	2003	-0.9	0.2	0.7	1.3	0.3	0.1	-1.3	0.1	0.4	1.1	0.5	0.1	2.7		
	2004	-0.5	0.1	0.6	1.2	0.3	0.1	-1.0	0.1	0.4	1.3	0.6	0.1		3.1	
	2005	-0.5	0.0	0.6	1.2	0.3	0.1	-1.0	0.1	0.4	1.3	0.6	0.1			3.2
(4) XT (4,20%)	2003	-2.1	1.0	0.3	2.4	-2.4	1.2	2.4	2.7	-2.8	-0.2	-1.4	0.9	1.8		
	2004	0.4	0.0	2.5	3.9	-1.4	0.7	2.1	1.2	-0.8	-1.2	-2.9	0.9		5.4	
	2005	-1.4	-0.1	5.4	-1.7	1.5	0.8	2.2	1.2	-0.8	-1.2	-3.0	1.0			3.7
(5) ANE (9,05%)	2003	0.3	-1.3	0.4	0.0	0.5	0.3	1.3	1.7	2.0	-0.3	0.1	3.0	8.2		
	2004	1.7	-2.6	1.1	0.4	-1.3	-0.6	1.5	2.0	1.0	-0.3	0.3	2.2		5.7	
	2005	1.4	-2.4	1.1	0.5	-1.0	-0.5	1.3	2.0	1.3	-0.1	0.3	2.2			6.3
(6) ENE (9,26%)	2003	2.2	1.4	1.4	-2.7	-2.5	-0.6	0.9	1.4	-0.4	-1.1	0.3	-0.2	0.0		
	2004	0.4	0.0	0.0	-0.1	-0.1	0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1		-0.2	
	2005	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.0			0.0
R [(4) + (5) + (6)] = (22,51%)	2003	0.6	0.2	0.8	-0.6	-1.3	0.1	1.4	1.8	0.1	-0.6	-0.1	1.4	3.8		
	2004	1.0	-1.1	1.0	0.9	-0.9	-0.1	1.0	1.1	0.3	-0.4	-0.5	1.1		3.4	
	2005	0.3	-1.1	1.5	-0.1	-0.1	0.0	1.0	1.2	0.4	-0.3	-0.4	1.2			3.5
IPC (100%)	2003	-0.4	0.2	0.7	0.8	-0.1	0.1	-0.6	0.5	0.3	0.7	0.3	0.4	2.8		
	2004	-0.2	-0.2	0.7	1.1	0.0	0.1	-0.6	0.3	0.3	0.9	0.4	0.3		3.2	
	2005	-0.3	-0.2	0.8	0.9	0.2	0.1	-0.6	0.4	0.4	0.9	0.4	0.4			3.3

** Weights on General CPI are shown in brackets.

(a) Figures in bold type are forecasted values

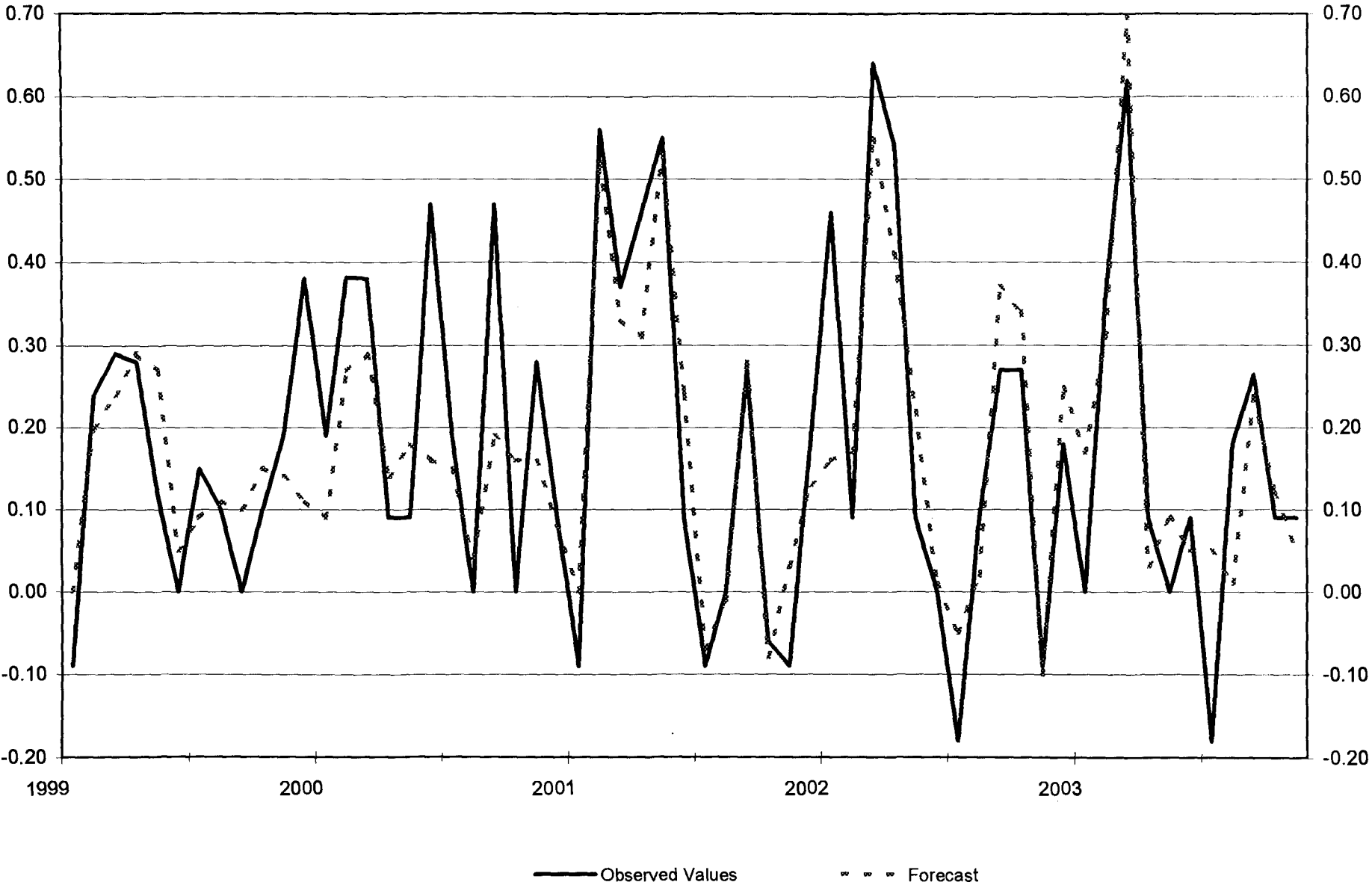
(b) December 2003 over December 2002.

(c) December 2004 over December 2003.

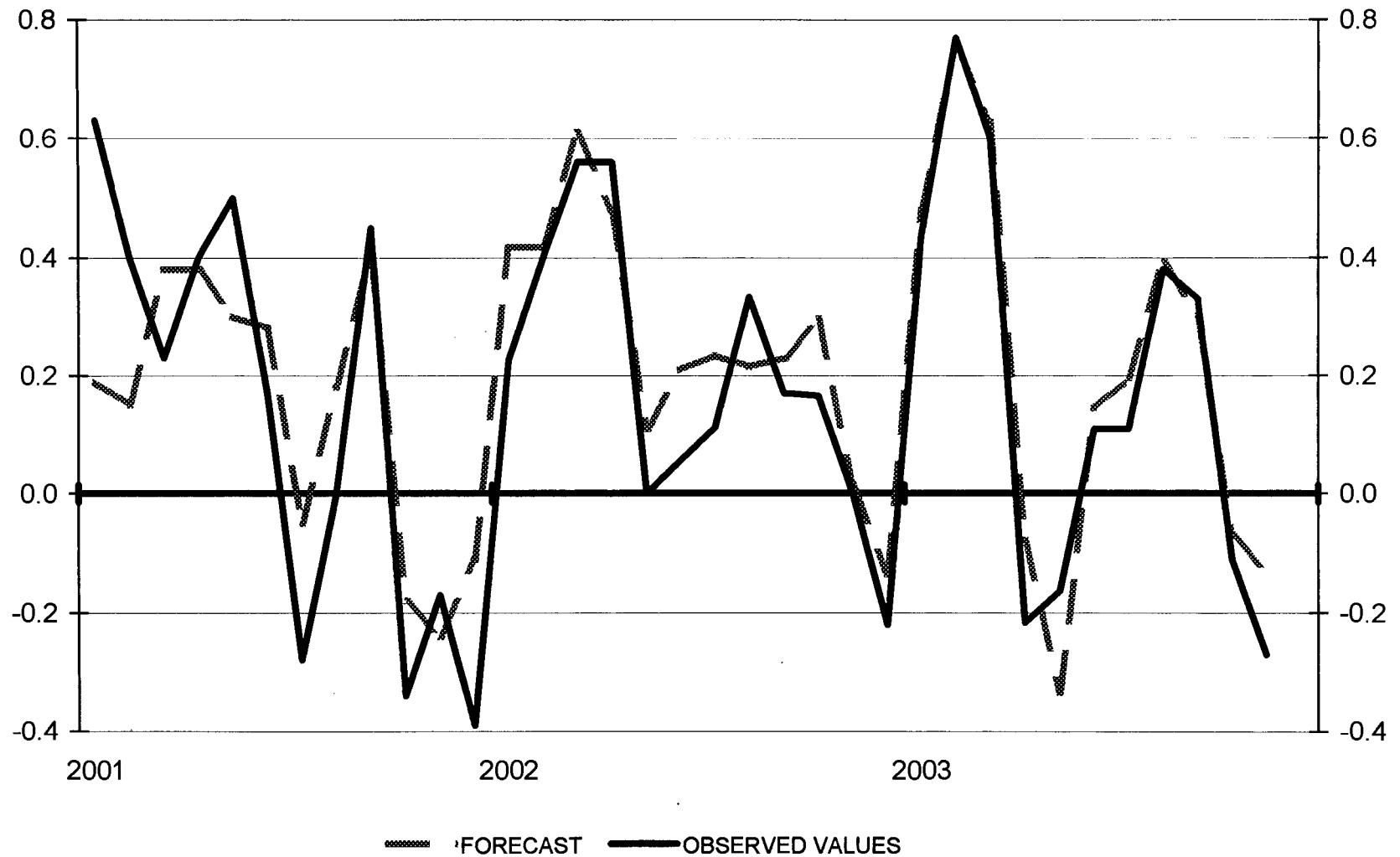
(d) December 2005 over December 2004.

Source:

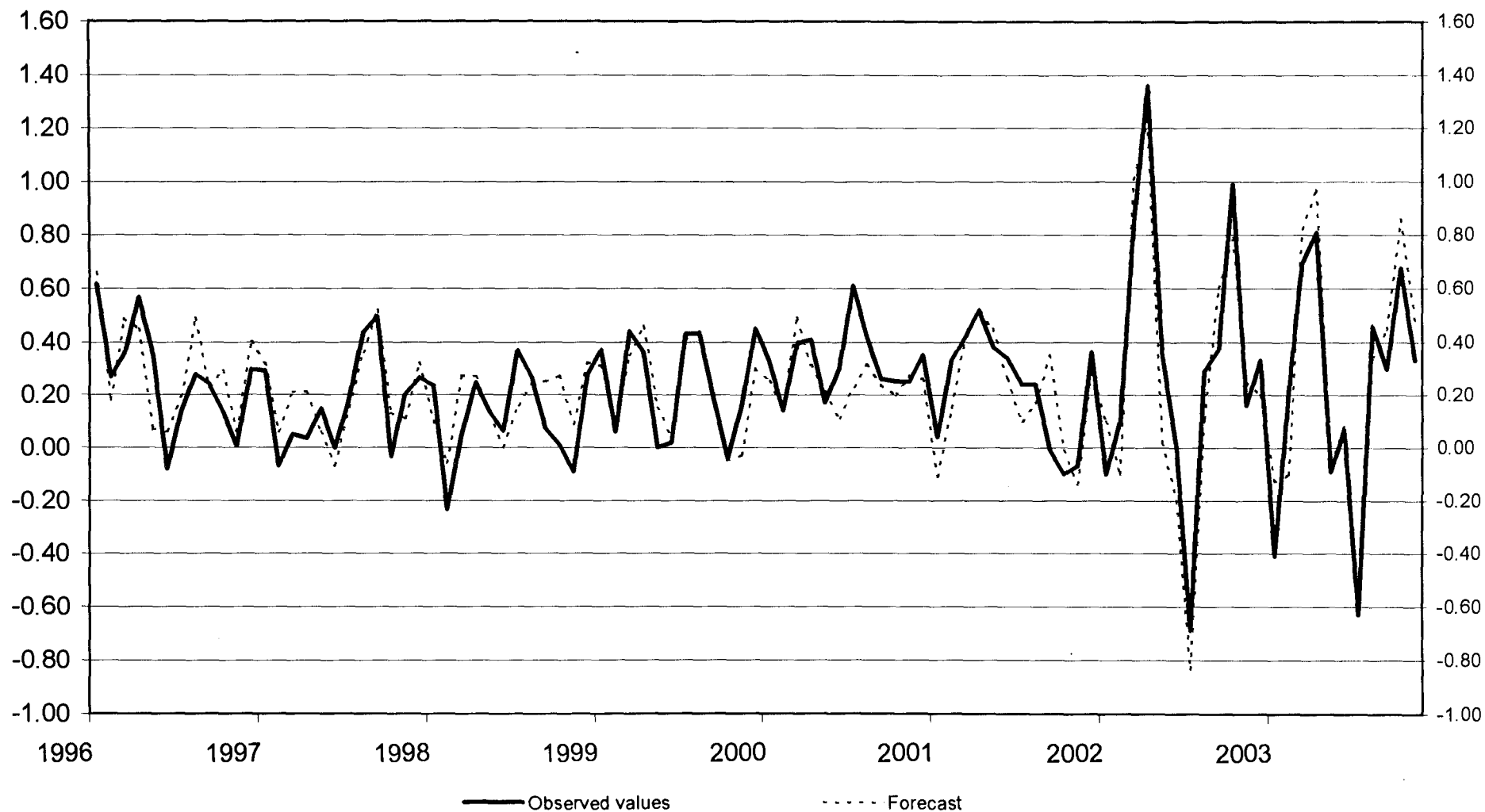
HCPI MONTH-ON-MONTH RATES OF GROWTH IN THE EMU



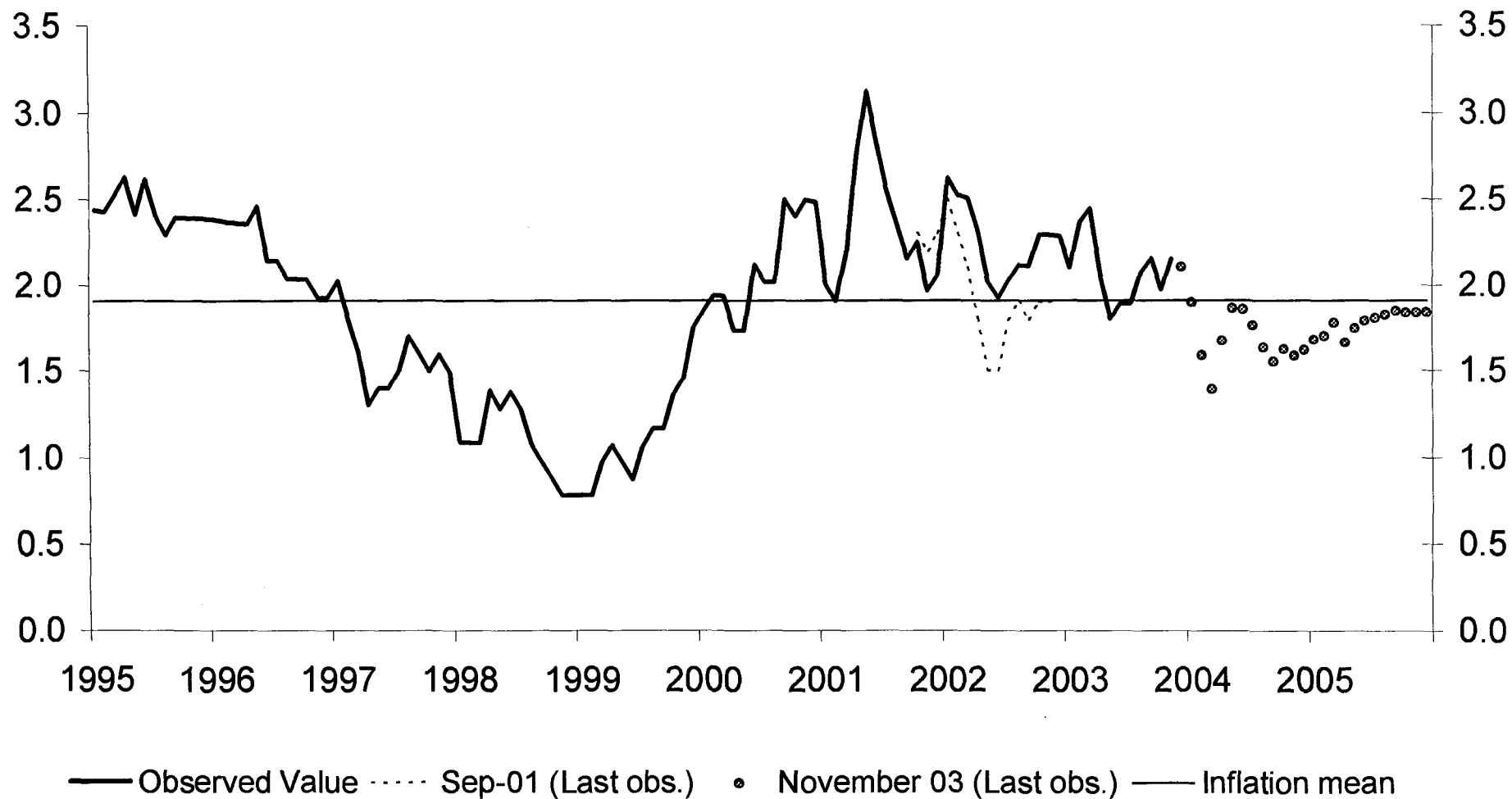
CPI MONTHLY GROWTH RATES IN USA



CPI MONTH-ON-MONTH RATES OF GROWTH IN SPAIN

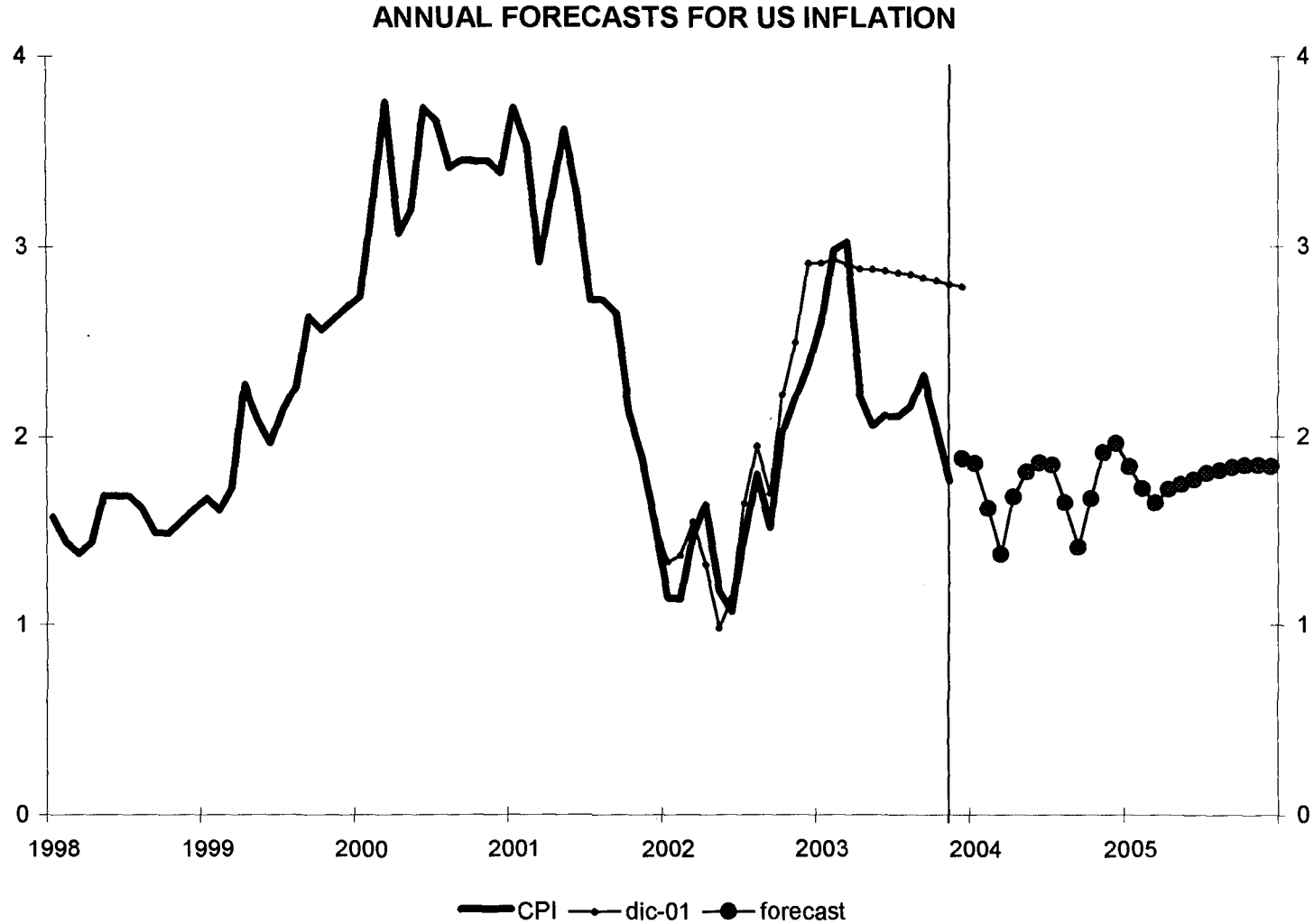


ANNUAL FORECASTS FOR THE EMU INFLATION (year-on-year rates)



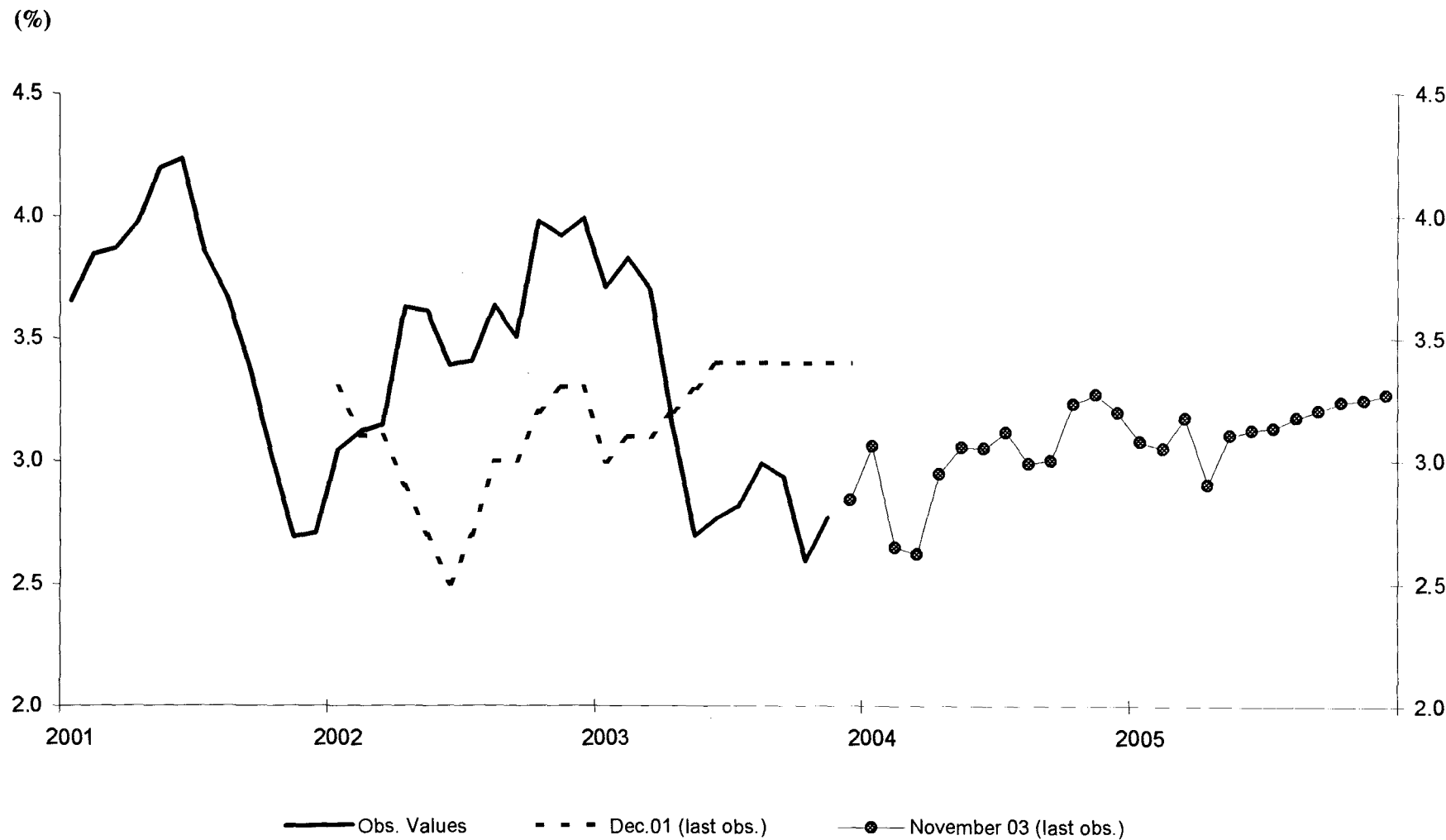
Source: Eurostat & EFN
Date: December 18, 2003

Graph A2B



Source: I.Flores de Lemus
Date: 16/12/2003

ANNUAL FORECASTS FOR SPANISH INFLATION



Source: INE & IFL
Date: December 15, 2003

MONTHLY DEBATES IN PREVIOUS BULLETINS

- Enrique M. Quilis, Análisis factorial dinámico: una panorámica (nº 108, Pág.)
- Banerjee Anindya, . Leading indicators for euro-area inflation and GDP growth: some considerations (nº102, pág. 48)
- Espasa A., Albacete R., "Innovations in core inflation are more persistent than innovations in other prices". (nº 96, p. 35)
- Mario Izquierdo (Banco de España), Omar Licandro (Instituto Universitario Europeo y FEDEA) y Alberto Maydeu (Universitat de Barcelona) "Mejoras De Calidad E Índices De Precios Del Automóvil En España".
- Mayo Burgos, Ivan, "Building a more dynamic Europe November 27th , 2001", (nº 89)
- Fernando Garcia-Belenguer Universidad Carlos III and Manuel S. Santos Arizona State University "Convergence in the OECD" (nº 88)
- Oxley, Les , "Earthquakes and volcanoes: the international conference on modelling and forecasting financial volatility, Perth, 7-9th September 2001" (nº 87)
- Espasa, A., Poncela, P. and Senra, E., " A disaggregated analysis of us consumer price indexes" (Bulletin nº 86)
- Pérez Pereira, María , " II Jornadas Sobre Derecho Del Comercio Electrónico. Una Crónica" (Bulletin nº 85).
- Nieto, María J., "Reflections on the regulatory approach to e finance"(Bulletin nº 84)
- Veredas, David, "Estacionalidad Intra diaria de datos financieros de alta frecuencia" nº 81, pp54-60)
- Quilis, Enrique M., "Algunas consideraciones sobre los indicadores cíclicos" (nº 79, pp. 73-80)
- Jimeno, Juan F., "Empleo y salarios públicos: una aproximación a partir de la teoría de los incentivos" (nº 78, pp. 57-64)
- Herce, José A., "¿Existe una solución demográfica al problema de las pensiones?" (nº 77, pp. 71-83)
- González Veiga, I., "El cambio de sistema del Índice de Precios de Consumo", (nº 76, pp. 60-76)
- Astolfi, R. D. Ladiray y G.L. Mazzi, "Business cycle statistics for the Euro-zone: Situation and prospective", (nº 75, pp. 58-86)

● ● ● BULLETIN OF E.U. AND U.S INFLATION AND MACROECONOMIC ANALYSIS



Macroeconomic Forecast and Analysis Laboratory N° 111 December 2003

ANALYSIS OF INFLATION IN THE ECONOMIC AND MONETARY UNION

The inflation forecast for December 2003 in the Economic and Monetary Union is 0.4%; the year-on-year rate will stay at 2.1%, respect to the 2.2% registered last November. Mean annual rate expectations are 2.1% for 2003, 1.7% for 2004 and 1.8% for 2005.

- Total inflation in November registered a slight upward innovation of 0.04 percentage points. The year-on-year rate was 2.2% compared to the 2.0% observed last October.
- Core inflation in goods in the EMU is expected to remain at the 1.4% in 2003-2005. Services inflation will stay at 2.6% in 2003, 2.4% in 2004 and 2.5% in 2005. Consequently, the forecast average annual rate of core inflation will decrease from the 2.5% observed in 2002 to 2.0% in 2003, to remain stable at 1.9% in 2004-2005.
- ◆ Based on these results, expected average total inflation rates are 2.1% in 2003, 1.7% in 2004 and 1.8% in 2005. Consequently, the fulfilment of the inflation objective in 2004 and 2005 relies considerably on the evolution of prices of unprocessed food and energy.
- ◆ The monetary factors pushing up inflation are compensated by the behaviour of unit labour costs, the negative output gap and the appreciation of the euro. Consequently, for several months ahead there is no need for deviating from the current expansionary stance of monetary policy.

AVERAGE ANNUAL RATES OF GROWTH							
					FORECASTS		
	1999	2000	2001	2002	2003	2004	2005
CORE INFLATION	1.1	1.0	1.9	2.5	2.0	1.9	1.9
CORE INFLATION IN GOODS	0.8	0.6	1.5	1.9	1.4	1.5	1.4
CORE INFLATION IN SERVICES	1.5	1.5	2.5	3.1	2.6	2.4	2.5
TOTAL INFLATION	1.1	2.1	2.3	2.3	2.1	1.7	1.8

Source: Eurostat & IFL
Date: December 18, 2003

For further information see Main Points in Bulletin n. 111



OF E.U. AND U.S INFLATION AND MACROECONOMIC ANALYSIS



Macroeconomic Forecast and Analysis Laboratory N° 111 December, 2003

ANALYSIS OF US INFLATION

The general index forecast for **December** is a 0.11% decrease, increasing the annual rate by one tenth from 1.77% to 1.88%. We expect a 0.11% fall in core inflation, with the annual rate rising from 1.09% to 1.19%.

In **November**, the U.S. CPI fell by 0.27% from the previous month's figure, around a tenth more than expected: -0.13%, with the annual rate going from 2.04% to 1.77%. There were considerable forecasting errors in some items. In fact, there have been significant downwards innovations in non-durable industrial goods not including energy (due to apparel and footwear, among others), in transport services (due to public transport), in recreational services and others (due to lodging expenses). Overall, performance was better than expected in nearly all the items included in the index, except for gas and meat prices. As for the **core inflation** figures observed in November, it fell 0.19% from last month, compared with a forecast increase of 0.04%, **which has given rise to the lowest rate in the last 40 years: 1.09%**. The decrease in non-energy manufactured products was 0.36% compared to a forecast -0.11%, with the annual rate falling from -2.43% to -2.58% (this negative rate is heavily conditioned by the collapse of used car prices). On the other hand, service prices fell 0.09% compared with the forecast 0.10% increase, with the annual rate falling from 2.87% to 2.64%.

For **2003, 2004** and **2005**, we forecast mean total annual inflation rates of 2.3%, 1.7% and 1.8%, respectively, maintaining our last month's forecast. The excellent inflation figure published for November is compensated in our forecast by worse crude oil price expectations, the heavy depreciation in the real effective exchange rate and the greater economic growth expected.

AVERAGE ANNUAL RATE OF GROWTH IN US

CONSUMER PRICES INDEX (CPI)	2000	2001	2002	2003 (forecasts)	2004 (forecasts)	2005 (forecasts)
Food (1)	2.3	3.1	1.8	2.1	3.3	2.6
Energy (2)	16.9	3.8	-5.9	12.2	-1.1	-2.0
Residual Inflation (3=2+1)	6.8	3.3	-0.9	5.3	1.8	1.1
Non-food and non-energy goods (4)	0.5	0.3	-1.1	-1.9	-1.1	-0.6
Less tobacco	-0.1	-0.2	-1.5	-2.1	-1.1	-0.5
-Durable goods	-0.5	-0.6	-2.6	-3.2	-2.2	-0.9
-Nondurable goods	1.4	1.1	0.5	-0.7	-0.1	-0.3
Non-energy services (5)	3.3	3.7	3.8	2.9	2.9	2.9
-Services less owner's equivalent rent of primary residence (5-a)	3.5	3.6	3.6	3.2	3.2	3.2
-Owner's equivalent rent of primary residence (a)	3.0	3.8	4.1	2.4	2.3	2.5
Core Inflation (6=4+5)	2.4	2.7	2.3	1.5	1.7	2.0
Core inflation less owner's equivalent rent of primary residence (6-a)	2.2	2.3	1.7	1.1	1.4	1.7
Core inflation less owner's equivalent rent of primary residence and tobacco	2.1	2.1	1.6	1.1	1.5	1.8
All items (7=6+3)	3.4	2.8	1.6	2.3	1.7	1.8
All items less owner's equivalent rent of primary residence (7-a)	3.5	2.6	0.9	2.2	1.5	1.6

For further information see Main Points in Bulletin n. 111



● ● ● BULLETIN OF E.U. AND U.S INFLATION AND MACROECONOMIC ANALYSIS



Macroeconomic Forecast and Analysis Laboratory Nº 111 December, 2003

ANALYSIS OF SPANISH INFLATION

The forecast for inflation in December 2003 in Spain is a month-on-month rate of 0.4%. The year-on-year rate will stay at 2.8% registered last November. The expectations for the mean annual rate are 3.1% for 2003, 3.0% for 2004 and 3.1% for 2005.

- In November 2003, Spanish inflation registered a month-on-month rate of 0.3%, below our predicted 0.5%. The year-on-year increased by 2.8% respect to the 2.6% registered last October.
- This figure is characterised by: (a) the year-on-year rate in processed food prices increased to 2.6%; (b) the current evolution of non-energy industrial goods prices implies a considerable increase in relative terms with respect to Europe, with expected average rates of growth of 2.1% in 2003, 1.8% in 2004 and 2.7% in 2005, respect to the 0.8% in 2003 and 2004 and 0.9% in 2005 expected in the EMU; (c) many components of services show year-on-year rates of growth near to or greater than 4%. Trend inflation in Spain stayed at 2.6%, but is higher than the core inflation of the Economic Monetary Union, which was 1.9%.
- ◆ Due to the expectations for 2003 in non-energy processed goods prices with an average annual rate of 2.3% and services with a mean annual rate around 3.5%, the expectations for the mean annual rate for core inflation decrease to 2.9% in 2003, compared to the 3.4% observed in 2002.
- ◆ The expectations for the average annual rate of inflation in prices for energy and unprocessed food have increased to 3.6% in 2003, due largely to the expected evolution of energy prices.

SPANISH INFLATION AVERAGE ANNUAL RATES OF GROWTH								
	1998	1999	2000	2001	2002	Forecasts		
						2003	2004	2005
RESIDUAL INFLATION (Fats, Tobacco, Tourist Packages, Non Processed Food and Energy)	0.4	2.8	6.7	3.7	3.2	3.6	4.0	3.1
CORE INFLATION	2.3	2.1	2.5	3.5	3.4	2.9	2.9	3.2
Core inflation in goods	1.6	1.3	1.9	3.1	2.6	2.3	2.2	2.8
Core inflation in services	3.3	3.3	3.5	4.1	4.3	3.5	3.7	3.6
TOTAL INFLATION	1.8	2.3	3.4	3.6	3.5	3.1	3.0	3.1

Source: INE & IFL
Date: December 15, 2003

For further information see Main Points in Bulletin n. 111



Bulletin EU & US Inflation and Macroeconomic Analysis

INSTITUTO FLORES DE LEMUS
Universidad Carlos III de Madrid

INTERNATIONAL INFLATION FORECASTS

	DECEMBER 2003		AVERAGE ANNUAL RATES				
	Monthly Rate	Annual Rate	2001*	2002*	2003	2004	2005
ECONOMIC MONETARY UNION							
Total Inflation	0.4	2.1	2.3	2.3	2.1	1.7	1.8
Core Inflation	0.4	1.9	1.9	2.5	2.0	1.9	1.9
Goods	0.0	1.6	1.5	1.9	1.4	1.5	1.4
Services	0.9	2.4	2.5	3.1	2.6	2.4	2.5
GDP							
Private Final Consumption Expenditure			1.6	0.9	0.5	1.8	2.1
Gross Fixed Capital Formation			2.0	0.8	1.3	1.4	1.7
Exports of Goods and Services			-0.1	-2.9	-2.0	-0.4	2.3
Imports of Goods and Services			3.3	1.7	1.0	7.7	4.8
Gross Value Added Total			1.8	0.1	1.4	6.0	4.2
Gross Value Added Agriculture			1.6	0.9	0.5	1.8	2.1
Gross Value Added Industry			-1.4	-0.8	-2.6	0.2	0.9
Gross Value Added Construction			0.6	1.0	0.6	2.3	3.5
Gross Value Added Services			-0.6	-0.9	-1.2	-0.3	0.0
Gross Value Added Services			2.5	1.5	0.9	2.2	2.1
OTHER ECONOMIC INDICATOR							
Industrial Production Index (excluding construction)			0.5	-0.5	0.4	1.7	1.9
UNITED STATES							
Total Inflation	-0.1	1.9	2.8	1.6	2.3	1.7	1.8
Core Inflation	-0.1	1.2	2.7	2.3	1.5	1.7	2.0
Goods	-0.5	-2.3	0.3	-1.1	-1.9	-1.1	-0.6
Services	0.0	2.7	3.7	3.8	2.9	2.9	2.9

*Observed values.

SPANISH ECONOMY FORECASTS

	DECEMBER 2003		AVERAGE ANNUAL RATES				
	Monthly Rate	Annual Rate	2001*	2002*	2003	2004	2005
Total Inflation	0.4	2.8	3.6	3.5	3.1	3.0	3.1
Trend Inflation	0.1	2.7	3.5	3.4	2.9	2.9	3.2
Goods	0.1	1.9	3.1	2.6	2.3	2.2	2.8
Services	0.2	3.6	4.1	4.3	3.5	3.7	3.6

*Observed values.

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