

## BULLETIN EU & US INFLATION AND MACROECONOMIC ANALYSIS



Instituto Flores de Lemus de Estudios Avanzados en Economía N. 88 January 2002

MAIN POINTS

" THE SERVICES SECTOR WILL KEEP THE INFLATION IN THE EUROZONE BELOW THE INFLATION IN UNITED STATES AS OF THE SECOND SEMESTER OF 2002".



Source : Eurostat, BLS & IFL / Date: Jan. 24. 2002.

# MONTHLY DEBATE

### "CONVERGENCIA EN LA OCDE"

**By:** Fernando Garcia - Belenguer and Manuel S. Santos

"A lot of research has been devoted to the study of economic growth yet many basic issues remain ...... (See page.55)





Universidad Carlos III de Madrid

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#### I. MAIN POINTS AND NEW RESULTS

#### I.1. MONETARY AND EUROPEAN UNIONS

- □ The January monthly inflation rate in the MU is forecasted at 0.2%, and therefore, the corresponding yearon-year rate will increase to 2.4% for next January (graph R1).
- □ The monthly rate registered in December was 0.18%, above our prediction of 0.13%; core inflation registered 0.28% instead of the 0.19% foreseen. These discrepancies do not derive from forecast errors but come from aggregation errors in adding up the different components that compose global and core inflation (tables R1 and A2 in the appendix).

OBSERVED VALUES AND FORECASTS IN THE MONTHLY RATE OF GROWTH IN THE COMPONENTS OF THE HICP IN THE MU						
Consumer Price Index (HICP)	Observed growth Dic. 2001	Forecast	Confidence interval at 80%			
Global Inflation(100%)	0.18	0.13	± 0.09			
Core inflation (82,54%)	0.28	0.19	± 0.08			
Residual Inflation (17.46%)	-0.09	-0.17	± 0.39			

(\*) Al 80% de significación

Source : EUROSTAT & IFL / Date: January 22, 2002.



The expectations for the average annual rate of core inflation in the MU are 2.3% in 2002 and 2.2% in 2003. In the US the mean annual rate for core inflation is predicted to reach 2.7% in 2002 and 2.8% in 2003 (graph R1).

Source : Eurostat & IFL / Date: Jan. 24, 2002.

- □ The differential between **core inflation** in goods and services has decreased in December to 0.6 percentage points but it is expected to increase to 0.8% next March as a consequence of the decrease of annual inflation in goods and the increase of annual inflation in services. The average annual rates of prices of non-energy processed goods for 2002 and 2003 are forecasted at 1.9% and 1.8%, respectively, with respect to the 1.8% registered in 2001. In the services market the expectations for the average annual rates are 2.7% in 2002 and 2003, in contrast with the 2.5% observed in 2001.
- □ The forecasted average annual rate in **global inflation** for 2002 is 1.8% in 2002 and 2.1% in 2003, compared with the 2.6% registered in 2001 (see table R2).
- The probably of meeting the objective in the average annual rate in 2002 is above 50%, and could be reached beginning in March 2002. Therefore, the fulfilment of the inflation objective depends on the downward evolution of energy prices and nonprocessed food prices which will oscillate from 6.4% in January to 1.2% in June (see graph R2).



Source : Eurostat & IFL / Date: Jan. 24. 2002.

By countries, the expectation for monthly inflation for next January is a positive rate for Germany, Italy and Spain, and negative one for France. In the case of Germany we are taking into account the tax increment on tobacco and insurances.





The inflation differential of the Monetary Union with the United States has systematically been a percentage point in favour of the MU, as can be observed in the accompanying graph. Currently, the annual rate of growth in December in the USA was 1.6 %, below the corresponding rate of 2.1 % in the MU, (graph R3). It is expected that this differential inflation will remain favourable for the US until July 2002 but after that, inflation in the MU will again be lower than in the US.

Source : Eurostat, BLS & IFL / Date: Jan. 24. 2002.

- This differential is favourable for the MU in services, and for the US in goods. The different behaviour of commodity prices are noticeable, for while the expectations for the average annual rate in the US stay at 0.1 % in 2002 and 0.6% in 2003, in the MU they are 1.8% in 2002 and 2003.
- As far as the Euro-zone is concerned the economy continued its downtrend in the last two months of 2001.However, some encouragement can be drawn from the economic confidence data and the improvement in the German industrial sector orders.

Table R2 FORECASTS FOR THE MEAN ANNUAL RATES IN THE HICP OF THE MU					
Harmonised Indices of Consumer Prices (HICP)	2000*	2001*	2002	2003	
GLOBAL HICP IN THE MU (100%)	2.3	2.6	1.8	2.1	
CORE INFLATION (82,54%)	1.3	2.1	2.3	2.2	
Non energy processed goods HICP (44,41%)	0.8	1.8	1.9	1.8	
Services HICP (38,13%)	1.7	2.5	2.7	2.7	
RESIDUAL INFLATION (17,46%)	7.6	4.8	-0.6	1.5	
Non Processed Food HICP(7,98%)	1.7	7.2	2.6	1.6	
Energy HICP (9,48%)	13.3	2.7	-3.4	1.4	
GERMANY HICP (30,91%)	2.1	2.4	1.1	1.2	
FRANCE HICP (20,55%)	1.8	1.8	1.3	1.3	
ITALY HICP (18,70%)	2.6	2.7	2.0	2.0	
SPAIN HICP (10,44%)	3.5	3.7	3.0	3.2	
<ul> <li>Observed Values</li> <li>(1) Monthly and annual rates can be found in tables A4A, A4B,</li> </ul>	A4C, A4D, A5A	and A5B in the ap	pendix.		

Although the Euro-zone has not suffered the current slowdown as much as the American economy, its near term outlook is less optimistic.

Source: EUROSTAT & IFL/Date: February 1, 2002.



#### I.2. UNITED STATES

□ US monthly inflation rate in January is forecasted at 0.4%, with the corresponding year-on-year rate of 1.3%, descending three tenths of percentage point to its value in December (1.6%). Monthly core inflation rate is forecasted at 0.4%, and year-on-year rate at 2.7%.

Table R3						
OBSERVED VALUES AND FORECASTS MONTHLY GROWTH RATES OF US CPI BY COMPONENTS						
Index	Growth December 2001	Forecast	Confidence Intervals (*)			
Global Inflation (100%)	-0.39	-0.11	±0.17			
Core Inflation (73.6%)	-0.16	-0.05	±0.12			
Residual Inflation (26.4%)	-1.18	-0.34	±0.56			

□ The **US Consumer Prices Index** in December showed a negative monthly growth of 0.39%, as opposed to the – 0.11 forecasted (Table R3). The corresponding year-on-year rate dropped from 1.9% in November to 1.6% in December.

(\*) At 80% confidence level.

Source : BLS & IFL / Date: January 16, 2002



- □ Core inflation registered a monthly negative growth of 0.16% as opposed to the negative 0.05% forecasted. This is explained by the important downward innovations registered in non-energy and non-food good prices, with a monthly variation of -0.89% as opposed to the -0.46% foreseen. This innovation affected both durable and non-durable goods, which experimented a monthly growth of 0.08% and -1.67%, as opposed to the 0.29% and the 1.09% forecasted, respectively. However, new vehicles evolved as expected, and tobacco changed by a small percentage. Non-energy services prices evolved as expected, although yield of shelter prices is still on the rise.
- □ On the **residual inflation** side, which registered a monthly growth of -1.18% instead of the -0.34 forecasted, due to the considerable decreases in energy prices, especially motor fuel prices, with a monthly rate of -8.04% as opposed to the -3.94% forecasted. Food also behaved well with a monthly rate of 0.06% as opposed to the 0.30% forecasted.



□ The perspectives indicate that crude oil price will remain at between \$20 to \$25 per barrel, during 2002. For 2003 stability is forecasted in values around \$25 per barrel. With these hypothesis, the average annual rates foreseen for energy prices for 2002 and 2003 are -10.3% and 3.8% respectively.



□ Throughout these last months, the inflation differential between non-energy services and commodities and excluding food energy commodities, increased more than 4 points. The December value confirms this tendency, forecasting this differential for the coming years to decrease because of the deceleration in services and the slight acceleration in commodities excluding food energy and commodities (See graph R5).



- □ Global inflation in January will situate itself at 1.3%, with important oscillations during 2002, with an average annual rate of 1.7%, and almost coinciding with the forecasted average for the Euro Zone. For 2003, previsions are very different, as they indicate an average annual growth of inflation of 2.9%, which is superior to the 2.1% forecasted for the Eurozone. (See graph R6).
- Although most relevant economic variables continued to decline in December, there is evidence suggesting that the recent monetary and fiscal stimulus has been successful in providing an offset in the United States. Both retail sales and industrial production performed downwards in December though a steady imprevement through the quarter is perceived. Indeed, the US economy could be bottoming soon.

Table R4 US AVERAGE ANNUAL RATES OF GROWTH (*)					
Consumer Prices Index	1999	2000	2001	Fore 2002	casts 2003
Global CPI(100%)	2.2	3.4	2.8	1.7	2.9
Core inflation (CI – 73,6%)	2.1	2.4	2.7	2.7	2.8
Non-energy goods (ex. food.) (C – 27,3%)	0.7	0.5	0.3	0.1	0.6
Non-energy Services (S – 46,3%)	2.7	3.3	3.7	3.8	3.7
Residual inflation (RI- 26,4%)	2.6	6.8	3.3	-1.7	3.0
Energy (E- 10,4%)	3.6	16.9	3.8	-10.1	3.8
Food (F – 16%)	2.1	2.3	3.1	2.4	2.7

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

Source : BLS & INSTITUTO FLORES DE LEMUS / Date: January 16, 2002



#### I.3. SPAIN

- January is expected to have a positive value of 0.1%. The year-on-year rate of 2.7 % observed in December, will increase to 3.5% in January (graph R7).
- The forecast monthly rate for January is broken down in the following way (table R5):
  - 0.6%, is the prediction shown in table A7B of monthly rates of growth, which incorporates the increases in taxes, with an effect of three tenths of percentage point, but does not include either the euro rounding effect nor the sales effect:
  - plus 0.3% that constitutes the potential Euro rounding effect, which is calculated as the average of the resulting effect taking into account mean prices, 0.2%, and the effect considering individual prices, 0.4% (See Working paper nº 0202 Servicio de Estudios del Banco de España).
  - minus 0.8%, as a consequence of the effect derived from the incorporation of sales prices in the calculation of the CPI. This estimation comes in the analysis of the different European CPI with similar schema of sales prices in the last four years .

Table R5 DECOMPOSITION OF THE PREDICTED MONTHLY RATE FOR JANUARY 2002				
Forecast without effects	0.3%			
Tax increases effect	. 0.3%			
Euro Rounding effect	0.3%			
Sales effect	-0.8%			
Total Prediction	0.1%			

Source : IFL / Date: January 23, 2002.

Table R6 DECOMPOSITION OF THE P ANNUAL RATE FOR JANU	REDICTED ARY 2002
Forecast without euro rounding effect	3.3%
Euro Rounding effect	0.3%
Total Prediction	3.5%

□ Nevertheless, the effect due to the sales prices Source : IFL / Date: January 23, 2002. incorporation will not be noticed in the year-on-year rates because the INE (Statistics National Institute) has elaborated two samples, one including sales prices and the other not. Thus, the annual rates that the INE will soon publish are calculated incorporating sales prices in 2001 and in 2002. Then, the forecasts of the year-on-year rates proposed in table A7A in the appendix constitute good estimations of the annual rates that will be published by the INE, while taking into account that they do not incorporate the Euro rounding effect.

- It is not known if this last effect will be permanent or if is incorporating increases in prices that will be produced during the year. If we consider an estimation of this effect, the year-on- year rate will be 3.5% in January 2002.
- □ The monthly rate registered in December, a positive value of 0.4%, coincided practically with our prediction and showed a null innovation in trend inflation, and a slight upward surprise in residual inflation derived from prices of tourism (table R7).

Table R7 OBSERVED VALUES AND FORECASTS IN THE MONTHLY RATE OF GROWTH IN THE COMPONENTS OF THE CPI IN SPAIN						
Consumer Price Index (CPI)	Observed growth Dic 2001	Forecast	Confidence interval at 80%			
Global Inflation(100%)	0.36	0.30	± 0.15			
Trend inflation (78,03%)	0.23	0.20	± 0.13			
Residual Inflation (21,97%)	0.83	0.67	± 0.22			

(\*) Al 80% de significación

Source : INE & IFL / Date: January 11, 2002.

**Trend inflation** stayed at 3.5% in December. Nevertheless, most components in trend inflation in services showed annual rates closer or greater than 4% and trend inflation in food stayed at 5.1%. During 2000 and 2001 there was an important increase in prices of goods, and therefore, its year-on-year rate moved from 1.4% in January 2000 to 3.2% in the last quarter of 2001. There is a tendency to consolidate around 3% in 2002, and to decrease to 2.6% in 2003. Nevertheless, prices of services, as a result of discounting the new seasonality structure corresponding to the months of June to December, due to methodological changes and not to real facts, remained stable at around 4.0%, and a mean value of 3.9% is expected in 2002, to increase to 4.0% in 2003.



For next January, trend inflation is expected to increase to 3.6%. For 2002, a drop to 3.4%, is foreseen, as a consequence of the improved behaviour of rates of growth in prices of services, excluding tourist packages. Again, for 2003, a decrease to 3.2% is expected, due to the improved behaviour of rates of growth of prices in non-energy processed goods, excluding fats, oils and tobacco (table R8).

Table R8				
FORECASTS FOR THE MEAN ANNUAL RATES OF GROWTH IN THE CPI IN SPAIN				
Consumer Prices Index (CPI)	2000*	2001	2002	2003
GLOBAL INFLATION (100%)	3.4	3.6	3.0	3.3
TREND INFLATION (78.03%)	2.5	3.5	3.4	3.2
Non energy processed goods, excluding tobacco, oils and fats CPI (45,01%)	1.9	3.0	3.0	2.6
Services excluding tourism CPI (33,02%)	3.5	4.1	3.9	4.0
RESIDUAL INFLATION (21.97%)	6.5	3.8	1.8	3.5
Non processed food CPI (8,93%)	4.2	8.7	3.6	4.2
Energy CPI (8,87%)	13.3	-1.0	-3.2	3.0
<ul> <li>Observed Values</li> <li>Monthly and annual rates can be found in tables A7A and A7B</li> </ul>	in the apper	ndix.		

Source: INE e IFL / Date: January 23, 2002.

Graph R7 YEAR ON YEAR RATES OF GROWTH OF





□ The favourable evolution of **residual inflation** will contribute to the expected reduction of global inflation in 2002 with an estimated average annual rate of 3.0% in contrast with the 3.6% registered in 2001. Therefore, the year will begin with figures of 3.5%, to decrease in June to 2.5% and to increase again at the end of 2002 to 3.3%, the value in which global inflation will be stabilized in 2003 (graph R8).

□ Although core inflation in the MU increased to 2.5% in December and the expectations for the average annual rate for core inflation are 2.3% in 2002 and 2.2% in 2003, in contrast with the 1.3% observed in 2000, there remains a consolidated inflation differential between Spain and the MU of greater than one percentage point.

Graph R8



Source: INE and IFL / Date: January 23, 2002.



# I. 4 COMPARATIVE SUMMARY OF THE INFLATION FORECASTS IN THE DIFFERENT AREAS.

Table 1 EVOLUTION AND INFLATION FORECASTS IN SPAIN, THE MU AND USA (1999-2003)					
				2000	2002
GLOBAL INFLATION	1999	2000	2001	2002	2003
Spain.	2.3	3.4	3.6	3.0	3.3
Euro-zone.	1.1	2.3	2.6	1.8	2.1
	22	3.4	2.8	1.7	2.9
ALTERNATIVE MEASURES OF CORE INFLATION					
(A) Services and Non-energy processed					
goods.					
Spain (82.2%).	2.4	2.5	3.5	3.6	3.2
Euro-zone (82.538%).	1.1	1.2	2.1	2.3	2.2
(B) Services and Non-energy processed					
goods excluding tobacco, fats and					
tourist packages.	2.1	2.5	3.5	3.4	3.2
Spain (78.03%).					
(C) Services and Non-onergy industrial					
goods excluding food					
Spain (66.41%).	2.5	2.9	3.5	3.5	3.5
Euro-zone (70.229%).	1.1	1.3	2.0	2.3	2.3
USA (73.4%).	2.1	2.4	2.7	2.8	2.8
DIFFERENT COMPONENTS OF CORE INFLATION MEASURES					
(1.a) Services.					
Spain (34.04%).	3.4	3.8	4.2	4.2	4.2
Euro-zone (38.127%).	1.5	1.7	2.5	2.7	2.7
USA (46.3%).	2.7	3.3	3.7	3.8	3.7
(1.b) Services excluding tourist packages.		0.5			
Spain (55.02%).	3.3	3.5	4.1	3.9	4.0
(2.a) Non-energy processed goods.					
Spain (48.16%).	1.7	1.7	2.9	3.1	2.4
Euro-zone (44.411%).	0.7	0.8	1.8	2.0	1.8
(2.b) Non-energy processed goods excluding					
fats and tobacco. Spain (45.01%)	13	1 0	3.0	3.0	26
(2 c) Non-energy industrial goods excluding	1.5	1.5	5.0	5.0	2.0
food.					
Spain (32.37%).	1.5	2.1	2.6	2.6	2.5
Euro-zone (32.102%).	0.7	0.7	1.4	1.8	1.8
USA (27.1%).	0.7	0.5	0.3	0.1	0.6
INFLATION IN EXCLUDING COMPONENTS OF CORE INFLATION MEASURES					
(3.1) Non-processed food					
Spain (8.93%)	12	4 2	87	36	4.2
Euro-zone (7.981%).	0.0	1.7	7.2	2.6	1.6
(3.2) Food.	4.5				
Spain (24.72%).	1.8	2.2	5.5	3.9	2.9
EUIO-ZOHE (20.29%).	0.0 2.1	1.3	4.0 3.1	2.4	1.8
	۲.۱	2.5	5.1	2.4	2.1
(3.3) Energy.					
Spain (8.87%).	3.2	13.3	-1.0	-3.3	3.0
Euro-zone (9.481%).	2.4	13.3	2.8	-3.4	1.4
USA (10.4%)	36	16 9	38	-10.3	38

Source: EUROSTAT & BLS & INE & IFL / Date: January 24, 2002.

#### **I.5. MACROECONOMIC TABLE OF SPANISH ECONOMY**

		Annual Rates			
		Forecasts BIMA <sup>(*)</sup>		Governmet Forecasts	
	2000	2001	2002	2001	
Private Final Consumption Expenditure	4.0	2.6	2.4	2.4	
Public Final Consumption Expenditure	4.0	2.8	3.0	2.0	
Gross Fixed Capital Formation	5.7	3.4	2.9	4.1	
Equipment	4.8	1.2	2.7	4.0	
Building	6.2	5.2	3.4	4.2	
Other products	6.0	1.9	1.7		
Inventary change (1)	-0.1	0.0	0.0	0.0	
Domestic Demand	4.2	2.9	2.6	2.8	
Exports of Goods and Services	9.6	5.1	3.4	7.1	
Imports of Goods and Services	9.8	5.6	5.5	6.4	
Net Exports (1)	-0.2	-0.3	-1.2	0.1	
GDP	4.1	2.7	1.9	2.9	
GDP, current prices	7.7	6.5	5.1	5.9	
Prices and Costs					
CPI, annual average	3.4	3.6	3.0		
CPI, dec./dec.	4.0	2.7	3.3		
Average earning per worker	3.4	3.6	3.2		
Unit labour cost	3.5	2.9	3.0		
Labour Market (Data poll labor force)					
Labor Force (% variation)	2.0	0.9	0.8		
Employment:					
Data adjusted from changes in the employment survey					
Annual average variation in %	4.2	1.9	0.9	1.8 (3)	
Annual average variation in thousands	560.3	275.0	142.0	277.3 (3)	
Unemployment rate	14.1	13.2	13.0	11.5	
Basic balances					
Foreing sector					
Current Account (billions Pts.)	-20.86	-22.84	-23.50	-	
Net lending or borrowing (% GDP) (2)	-2.6	-2.3	-2.4	-2.0	
AA.PP. (Total) / Public Administration					
Net lending or borrowing (% GDP) (2)					
	-0.3	-0.1	-0.2	0.0	
Other Economic Indicators					
Industrial Production Index	4.0	-0.7	1.0	-	
<ol> <li>Contribution to GDP growth in percentage points.</li> <li>In national account terms.</li> <li>CNTR (National Quaterly Account) estimated positions equivalent to full tilt</li> </ol>	ime.				

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Source: INE & I. FLORES DE LEMUS Date: January 23, 2002.

(\*) Bulletin EU & US Inflation and Macroeconomic Analysis. (\*\*) July 2001.

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#### II. ANALYSIS OF INFLATION, MONETARY POLICY AND INTERNATIONAL ANALYSIS

#### **II.1 Monetary and European Unions**

In December 2001, inflation in the Monetary Union registered a monthly rate of 0.2% with a year-on-year rate of 2.1%.

**In December 2001, inflation in the Monetary Union** registered a monthly rate of 0.2% with a year-on-year rate of 2.1%, the same registered in November.

Table 1 summarises the discrepancies between observed and forecasted values for the different basic aggregations in the Euro- Zone.

OBSERVED AND FORECAST VALUES ON CONSUMER PRICE FIGURES IN THE MU							
Consumer Price Index (HICP)	Current growth December 01	Forecast	Confidence intervals (*)				
(1) Processed Food - AE (12.309%)	0.09	0.17	± 0.14				
(2) Commodities - MAN (32.102%)	0.09	0.09	± 0.10				
Non-Energy Manufactured Goods - BENE <b>[1+2]</b> (44.411%)	0.09	0.11	± 0.09				
(3) Services - SERV (38.127%)	0.27	0.28	± 0.14				
Core Inflation: Non-Energy Manufactured Goods and Services, (excluding fats, oils, tobacco and tourist packages) - IPSEBENE [1+2+3] (82.538%)	0.28	0.19	± 0.08				
Non-Processed Food - ANE (7.981%)	0.98	0.31	± 0.46				
(5) Energy Goods - ENE (9.481%)	-1.12	-0.60	± 0.60				
Residual Inflation: Fats, Oils, Tobacco, Tourist Packages, Non-Processed Food and Energy - R [4+5] (17.462%)	-0.09	-0.17	± 0.39				
General CPI - IPC [1+2+3+4+5] (100%)	0.18	0.13	± 0.09				

(\*) At 80% confidence level

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: January 22, 2002.

As shown in table 1, the monthly rate registered in December was 0.18%, above our prediction, 0.13%; core inflation registered 0.28% instead of the 0.19% foreseen. These discrepancies do not derive from forecast errors but come as aggregation errors from adding up the different components that compose global and core inflation.

It is important to note the existence of rounding problems in the aggregation of different sectors of HICP in the MU and in the comparison of the obtained aggregate figure with the published data by Eurostat for determined markets and for the global HICP. For this reason, in the forecast errors tables in the appendix (tables A2 and A3) the errors in the aggregation are pointed out.

Core inflation registered a null innovation.

The breakdown of the harmonised consumer price index into basic market groups shows that the prices of processed food (the AE index) increased less than was predicted (0.1% instead of 0.2% forecasted). The prices of the remaining processed goods excluding energy prices (the MAN index) increased as was forecasted (0.1%). With this, core inflation in goods calculated on the basis of the aggregation of the previous indexes, (the BENE index) registered a monthly rate of 0.1%, as was foreseen. The service prices (the SERV index) also increased as was forecasted (0.3%), so that finally core inflation registered a null innovation.



In Residual inflation (non-processed food and energy), the upward innovation in prices of nonprocessed food was compensated with a downward surprise in energy prices.

Table 2 summarises the differences between observed and forecasted values for the main countries. The information relative to all the countries can be found in table A2 in appendix.

Table 2								
OBSERVED V	ALUES AN	ID FOREC	ASTS ON CONSUMER F		S IN EU COUNTRIES <sup>(*)</sup>			
Country Weight Current growth Forecast Confidence Intervals (%)								
	UM	UE15	December 01					
Spain HICP	10.44%		0.35	0.34	± 0.15			
Germany HICP	30.91%		0.09	0.03	± 0.29			
France HICP	20.55%		0.09	-0.07	± 0.20			
Italy HICP	18.70%		0.09	0.13	± 0.23			
MU HICP	100.00%	79.06%	0.18	0.07	± 0.12			
EU-15 HICP		100.00%	0.27	0.06	± 0.11			
<sup>(*)</sup> More detailed information c <sup>(**)</sup> At 80% confidence level.	an be found in ta	able A2 in Apper	ıdix.					

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: January 22, 2002.

*Germany and France registered an upward innovation, and Italy and Spain a null surprise.* Of the countries that make up the Monetary Union, Italy and Spain registered a null surprise; Austria, Belgium, Luxembourg and Portugal registered a downward innovation and the remaining countries registered an upward surprise.

Table 3 shows annual observed HICP rates for energy and those corresponding to the remainder of goods and services – denominated HICP-E.

Table 3										
				ANNUAL	GROWTH	HICP				
		HICF	excluding	Energy				HICP energ	у	
		Observed	ł	Fore	casts		Observed		Forecasts	
	Dic 01	Average 2000	Average 2001	Average 2002	Average 2003	Dic 01	Average 2000	Average 2001	Average 2002	Average 2003
Germany	1.9	0.7	1.9	1.7	1.1	-2.5	14.4	6.4	-3.9	1.4
Spain	4.0	2.6	4.1	3.6	3.3	-10.0	13.3	-1.0	-3.2	3.0
France	2.3	0.8	2.1	1.8	1.3	-7.0	12.1	-1.5	-3.8	1.4
Italy	2.8	1.9	2.7	2.4	2.1	-4.9	11.6	1.6	-3.1	0.7
Monetary Union	2.9	1.3	2.6	2.4	2.2	-4.5	13.3	2.7	-3.4	1.4

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: February 1, 2002.



Annual energy rates are registering negative values, including Germany. Annual energy rates are registering negative values, as shown in table 4; in December they registered a relevant and homogeneous decrease again, as a consequence of the recent evolution of international price of crude. This contrasts, however, with the different behaviour of the other non-energy prices (HICP-E). Germany registered below-unit annual rates in HICP-E from the last quarter of 1998 to January 2001, reaching in December an annual rate of 1.9%, less than was observed last November, 2.0%. Forecasts for the annual average rates will be below this value, reaching a figure of 1.7% in 2002 and 1.1% in 2003. France registered an annual rate of 2.3%, greater than was observed last November, 2.2% and the forecasts for the annual average rate are 1.8% in 2002 and 1.3% in 2003. On the other hand, observed values in Italy were 2.8% and forecasts are for 2.4% in 2002 and 2.1% in 2003. In the case of Spain, the annual rate was 4.0% and a mean annual rate of 3.6% is expected in 2002, and 3.3% in 2003.

In the MU prices of energy registered a downward innovation, but in Germany and France this surprise was upwards.

In energy prices, there has been a downward innovation in prices of fuels in the MU, and upwards surprises in France and Germany with prices of gas and electricity registering an upward surprise in the MU and France, but in Germany this innovation was downwards.

Table 4												
	ANNUAL GROWTH IN ENERGY HICP											
			Fuels				Ele	ctricity and	gas			
		Observed	d	Fore	casts		Observed		Fore	Forecasts		
	Dic. 01	Average 2000	Average 2001	Average 2002	Average 2003	Dic. 01	Average 2000	Average 2001	Average 2002	Average 2003		
Germany	-11.2	24.4	-0.4	-8.1	2.9	6.0	5.8	13.2	-0.1	0.0		
Spain	-13.3	18.1	-2.1	-5.1	3.5	0.5	0.2	2.0	1.9	1.7		
France	-13.7	20.8	-5.7	-7.6	2.3	2.6	1.0	4.7	1.3	0.1		
Monetary Union	-12.0	20.9	-2.4	-7.1	2.6	4.1	5.3	8.9	0.4	0.1		

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: February 1, 2002.

As shown in table 4, the differential in gas and electricity prices is greater than in fuel prices as a consequence of the strong dependency of gas and electricity prices on domestic regulations. prices.

The inflation forecast for January 2002 in the Monetary Union is 0.2 %. Therefore, the year-on-year rate will stay at 2.4%. The expectations for the average annual rate are around 1.8 - 2.0% for 2002, and about 2.1-2.0% for 2003, depending on the analysis employed; by sectors or by countries, respectively.

In forecasting inflation in the Euro-zone, two different procedures are used: a breakdown analysis by countries making up the MU; and a breakdown of large markets or sectors in the Euro-zone.

By countries, the expectation for monthly inflation for next January is a positive rate for Germany, Italy and Spain, and negative for France. In the case of Germany we are taking into account the tax increment on tobacco and insurances.

There have been revisions in figures corresponding to the global HICP in Austria.

Table 5 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 5						
AVERAGE A	NNUAL RA	TE OF GRO	OWTH IN M	ONETARY	UNION	
	1998	1999	2000	2001	2002	2003
17.462% Residual Inflation	-0.4	1.2	7.6	4.8	-0.6	1.5
7.981% Non-Processed Food	2.0	0.0	1.7	7.2	2.6	1.6
9.481% Energy	-2.6	2.2	13.3	2.7	-3.4	1.4
82.538% Core Inflation	1.4	1.1	1.3	2.1	2.3	2.2
12.309% Processed Food	1.4	0.9	1.1	2.9	2.4	2.0
32.102% Non-Energy Commodities	0.9	0.6	0.7	1.4	1.8	1.8
38.127% Non-Energy Services	2.0	1.6	1.7	2.5	2.7	2.7
100% HICP Inflation	1.1	1.1	2.3	2.6	1.8	2.1

Source: EUROSTAT & INSTITUTO FLORES DE LEMUS / Date: January 24, 2002.

The year-on-year rate for next January, 2.4%, will be composed of a rate of 2.9% in nonenergy prices and of -2.1% in energy prices. The expectations of the average annual rate will be achieved through increments in core inflation in 2002 to 2.3% and 2003 to 2.2%, and decreases in residual inflation, due to the decrease in prices of non-processed food and the favourable evolution of energy prices as a consequence of the maintenance of the international crude oil price at about an average value of U.S \$24 in 2002.

In 2002 and 2003, the expected drop in residual inflation, as a consequence of the decrease in prices of non-processed food and energy will provoke the downward contribution of residual inflation, but the magnitude of the decrease of global inflation is uncertain. Therefore, the fulfilment of the inflation objective in 2002 and in 2003 is based exclusively on the evolution of residual inflation.

The forecasts by sectors of the average rate for 2002 is 1.8%, and by countries is 2.0%, so the probability of achieving the inflation objective is very high. The discrepancy, as was commented on in other occasions, comes from the fact that by countries the breakdown is less than by sectors. Thus the evolution by countries is upwards, so the forecasts by sectors are preferable.

Table 6 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 6								
	ANNUAL AV	ERAGE RATE	S OF GROWTH	l				
		Observed		Fore	casts			
	1999 2000 2001 2002 2003							
Spain HICP – 10.44%	2.2	3.5	3.7	3.0	3.2			
Germany HICP – 30.91%	0.6	2.1	2.4	1.1	1.2			
France HICP – 20.55%	0.6	1.8	1.8	1.3	1.3			
Italy HICP – 18.70%	1.6	2.6	2.7	2.0	2.0			
MU HICP – 100%	1.1	2.3	2.6	2.0	2.0			

Source: Eurostat & I. Flores de Lemus / Date: February 1, 2002.



Graph 1



Source: EUROSTAT & I. FLORES DE LEMUS / January 24, 2002.

New 2001 data continue to be negative though some optimism can be drawn from the confidence side. According to recent Eurostat data, the Eurozone economy continued its downtrend in the last two months of 2001. Industrial production figures showed a fall of 0.8 per cent in November compared to October. The broadly based monthly reduction set the year over year rate at - 4.3%.

Table 7

	06-ene	07-ene	08-ene	09-ene	10-ene	11-ene
Industria						
Total industry	0.9%	-1.7%	1.3%	-0.6%	-1.4%	-0.8%
Bienes intermedios						
Intermediate goods	0.6%	-0.9%	0.4%	-0.9%	-1.3%	-1.1%
Energía						
Energy	0.0%	0.1%	-0.2%	0.1%	-0.8%	0.1%
Bienes de capital						
Capital goods	0.7%	-1.7%	1.9%	-1.2%	-0.6%	-1.0%
No duraderos						
Non durable goods	0.4%	-0.3%	0.4%	0.1%	-1.1%	-1.1%
Duraderos						
Durable goods	-0.1%	-3.0%	3.2%	-3.2%	-3.0%	-0.6%

Fuente/Source: Eurostat

However, some encouragement can be drawn from the economic confidence data



#### Table 8

Indicadores de co	onfianza /	Confiden	ce indexe	S		
	07-ene	08-ene	09-ene	10-ene	11-ene	12-ene
Clima económico						
Economic sentiment	100.7	100.1	100.1	99.1	98.6	98.8
Confianza industrial						
Industrial confidence	-9	-10	-11	-16	-18	-17
Confianza del cosumidor						
Consumer confidence	-6	-8	-9	-10	-12	-10

Fuente / Source: EUROSTAT

German

have improved.

The economic forecast also strengthen thanks to the increase by 0,7 in German real manufacturing orders manufacturing orders following a 0.4% and 4.1% drops in November and October respectively. The December improvement has allowed an increase in the year over year rate to -8,7% from -9.1% in November.

> On the contrary, according to the German Federal statistics office, gross domestic product grew by only 0.6 per cent in 2001, its poorest performance since 1993.

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
2.2%	-1.1%	2.3%	1.7%	0.8%	1.4%	2.0%	1.8%	3.0%	0.6%



Table 9	
	2001
Consumo privado final. Final private consumption.	1.4%
Consumo público final. Government final consumption	1.3%
Formación bruta de capital. Gross fixed capital formation	-4.1%
FBC en maquinaria y equipo. GFCF in machinery and equipment	-3.4%
Exportación. Exports	5.1%
Importación. Imports	2.0%



REAL YEAR OVER YEAR CHANGE AT CONSTANT PRICES



The year 2001 has been the worst since 1993.

Positive contributions to growth where scarce both in the domestic and foreign sector. Net exports in real terms contributed just over 1 percentage point to economic growth in 2001, whereas total domestic uses of the gross domestic product decreased 0.5%.

Table 10	
	2001
Consumo privado final. Final private consumption.	0.8%
Consumo público final. Government final consumption	0.3%
Formación bruta de capital. Gross fixed capital formation	-0.9%
FBC en maquinaria y equipo. GFCF in machinery and equipment	-0.3%
Variación de inventarios. Changes in inventories	-0.6%
Exportación neta. Net exports	1.1%

Graph 4

#### CONTRIBUTIONS TO GROWTH OF THE REAL GDP



Fuente. Source : www.destadis.de



#### **II.2 United States**

In December strong downward innovation in commodities less food and non-energy commodities. The United States Consumer Prices Index in December behaved better than expected, registering a negative monthly rate of 0.4%, as opposed to -0.1% forecasted. This is due to a strong downward innovation in commodities less food and energy commodities prices, and to a greater decrease than expected in motor fuels prices. The corresponding year-on-year rate descended from 1.9% in November to 1.6% in December.

Following our traditional CPI analysis by components, we will evaluate this data by its relevance to core and residual inflation.

In table 11 we can see the breakdown scheme following in our US CPI analysis.

Table 11	Table 11 USA CPI DESAGGREGATION								
<b>CPI</b> (1+2+3+4) (100%)	1) Energy CPI ( <b>E</b> – 10,4%)	RESIDUAL INFLATION (1+2) ( <b>RI</b> – 26,4 %)	<b>CPI</b> (1+2+3+4) (100%)						
	2) Food CPI ( <b>F</b> – 16%)								
	3) Non-energy Services CPI ( <b>S</b> – 46,3%)	CORE INFLATION (3+4) ( <b>CI</b> – 73,6 %)							
	4) Non-energy goods (exc. food) CPI (C - 27,3%)								

Source: BLS & INSTITUTE FLORES DE LEMUS

Table 12 allows for an evaluation of discrepancies between observed and forecasted values for the different components. Core inflation and residual inflation have behaved better than expected. Core inflation just improves due to commodities less food and energy commodities prices, since service prices have behaved as expected. Residual inflation improves in relation to forecasts in food, and mostly because of energy (specially motor fuel prices).



		Monthly G	Confidence	
CONSUMER PRICES INDEX (CPI)	observed value	observed (a)	forecasts (b)	Intervals at 80% level (+ -)
Non-food and non-energy goods CPI (C-27,3%)	144.7	-0.89	-0.46	0.21
-Durable Goods CPI (14,3%)	124.3	0.08	0.29	
-Non-durable Goods CPI (13%)	157.4	-1.67	-1.09	
Non-energy services CPI (S-46.3%)	212.6	0.14	0.12	0.15
Core Inflation (CI-73,6%)	187.8	-0.16	-0.05	0.12
Food CPI (F-16,0%)	174.7	0.06	0.30	0.38
Energy CPI (E-10,4%)	111.4	-3.97	-1.76	1.28
- Fuel Oil CPI (0,7%)	112.7	-4.73	-0.96	
- Gas & Electricity CPI (4,9%)	133.5	-0.89	-0.19	
-Motor fuel CPI (4,8%)	96.1	-8.04	-3.94	
Residual Inflation (RI-26,4%)	149.4	-1.18	-0.34	0.56
All items (100 %)	176.7	-0.39	-0.11	0.17

#### **OBSERVED VALUES AND FORECAST ON CONSUMER PRICE FIGURES IN US**

Source: BLS & INSTITUTE FLORES DE LEMUS Data: January 16, 2002

Core inflation decreases slightly from 2.8% to 2.7%. After the increase in two tenths of percentage in core inflation year-on-year rate registered in November, in December decreases slightly from 2.8% to 2.7%. This deceleration is due to commodities less food and non-energy commodities, since services maintain its annual rate at 4.0%. There has to be pointed out the strong downward innovations in durable and nondurable goods prices, with an increase of 0.08% and of -1.67%, as opposed to the forecasted 0.29% and -1.09% respectively (See graph 2). However, new vehicles prices grow as expected. 2001 has ended with a year-on-year rate of commodities less food and non-energy commodities of -0.28%, durable goods at -1.3% and non-durable goods at 0.6%.

Strong downward innovations in durable and non-durable goods prices

Table 12

The different goods' subgroups show different behaviours inside of a general deceleration, for example, the new vehicles register a year-on-year rate in December of -0.1% and the apparel's one of -3.2%. However, tobacco prices stand out, increasing 8.9% in its annual rate.

For January is forecasted a commodities less food and non-energy commodities prices decrease of 0.14%, which would make the annual rate increase slightly. The year-on-year durable goods rate will decrease less that one tenth of percentage point, whereas the nondurable goods one will increase two tenths of percentage point. The good December's datum in the commodities less food and non-energy commodities sector, allows to expect year-onyear rates for 2002 and 2003 of 0.1% and 0.6% respectively, lower than the ones foreseen in the previous month.



Non-energy services prices showed a monthly increase of 0.14% in December, which is almost as foreseen (0.12%). The year-on-year rate stays at 4.0% from the previous month. However, a positive development of medical care service prices has been registered, and has been compensated by a bad behaviour of the rent of shelter prices, whose year-on-year rate increases two tenths in percentage point.

During the last three years, service prices, in all its components, have registered an acceleration in prices rise. However, annual rates are higher in medical care service (4.8%) than in transportation services (3.2%).

In January, non-energy service prices are forecasted to increase 0.56%, descending annual rate one tenth of percentage point down to 3.9%. The services prices inflation expectations haven't been modified by the December datum, forecasting a year-on-year rate of 3.8% in 2002 and 3.7% in 2003.

Graph 3 shows both the observed annual rates and those forecasted in core inflation in goods and services. The inflation differential between these two sectors of more than three percentage points is forecasted to start narrowing slightly, but not dropping below 3 p.p.

Graph 5



Source : BLS & INSTITUTE FLORES DE LEMUS / Date: January 16, 2002.



Source : BLS & INSTITUTE FLORES DE LEMUS / Date: January 16, 2002.



Residual component prices (food and energy) showed a negative monthly rate of 1.2% in December, as opposed to the 0.3% forecasted. The energy prices have decreased 4.0% in December, greater drop than the expected 1.8%.

Food prices increased 0.1%, instead of the forecasted 0.3%. Vegetable and fruit prices have had a specially positive behaviour in December.

At midterm, the perspectives indicate that crude oil price will remain at between 20 to 25 \$ per barrel, during 2002. For 2003 is forecasted stability in values around 25 \$ per barrel. With these hypothesis, the average annual rates foreseen for energy prices for 2002 and 2003 are -10.3% and 3.8% respectively.

Regarding food prices, they are expected to increase 0.6% in January, with some slight downward revisions in 2002 expectations, form 2.7% to 2.4%. No changes are forecasted for 2003.

Table 13 shows the average annual growth rates forecasts for 2002 and 2003 for the different components of the US economy (monthly and annual rates can be found in tables A6A and A6B in the appendix).

			. ,	
CONSUMER PRICES INDEX (CPI)	2000	2001	2002 (forecasts)	2003 (forecasts)
Non-food and non-energy goods CPI (C-27,3%)	0.5	0.3	0.1	0.6
-Durable Goods CPI (14,3%)	-0.5	-0.6	-0.9	-0.5
-Non-durable Goods CPI (13%)	1.4	1.1	1.0	1.6
Non-energy services CPI (S-46,3%)	3.3	3.7	3.8	3.7
Core Inflation (CI-73,6%)	2.4	2.7	2.7	2.8
Food CPI (F-16,0%)	2.3	3.1	2.4	2.7
Energy CPI (E-10,4%)	16.9	3.8	-10.3	3.8
Residual Inflation (RI-26,4%)	6.8	3.3	-1.8	3.0
All items (100 %)	3.4	2.8	1.7	2.9

US AVERAGE ANNUAL RATES OF GROWTH (\*)

Table 13

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

Source: BLS & INSTITUTE FLORES DE LEMUS Data: January 16, 2002



#### CORE AND RESIDUAL INFLATION IN THE U.S.



Source: I. Flores de Lemus & BLS / Date: January 16, 2002

As a result of the above, the overall CPI inflation is expected to be 0.4% in January, with a year-on-year rate of 1.3%. Although there will be important oscillations during 2002, it is likely that US global inflation will stay around 1.7%, in this year, owing to residual inflation, and to a monthly US inflation near approximation with the forecasted average for Euro Zone. For 2003, previsions are quite different, as they point to an average annual growth of inflation of 2.9%, which is superior to on-year rate of 1.3%, the 2,1% foreseen for Eurozone.

> The foreseen rise in January in the core inflation monthly rate is of 0.4%, which wouldn't change the annual variation of 2.7% of December. The improvement of US core inflation expectations shown last month leads to a decrease in one tenth of percentage point in the annual rate forecasted for 2002, down to 2.7%. For 2003, the forecasts stay at 2.8%.

> Regarding residual inflation in January, it's forecasted a rise of 0.6%, with a 0.6% increment in food and a 0.7% in energy, due to motor fuel prices. The residual inflation average annual rate could settle at -1.7% in 2002 and at 3.0% in 2003.

Economic data continues to be on the negative side but improving.

The forecasted

rate for January is -0.4%, with a year-

descending two tenths of percentage point respect to its

value in December.

Although most relevant economic variables continued to decline in December, there is evidence suggesting that the recent monetary and fiscal stimulus has been successful in providing an offset.

Optimism about consumer spending was provided by an upward revision to retail sales in November from 3.7% to a 3% drop and by an improvement in December retail sales that decreased by a moderate 0.1% in the month.

	Sept	Oct	Nov	Dec
Sales	-2.2%	6.4%	-3%	-0.1%





Fuente: US Department of Commerce

US industrial production declined by just 0,1% in December thanks to the offset provided by motor vehicles which surged 4.1% in December after a 5.4% rise in November and by high-tech which rose 0.3% in the month. Unfortunately, this was not

Enough to prevent industrial production from falling 7.2% annualized in the fourth quarter.

	Sept	Oct	Nov	Dec
industrial Production	-0.8%	-0.7%	-0.4%	-0.1%



Fuente: BEA



The labor market keeps dropping employment though at a lower pace. Behind this sizable decline is the reduction of business inventories that dropped 1.0% in November following an even larger 1.6% cut in October. However, some encouragement can be drawn from the fact that this pace will first ease and then reverse sometime this year helping the economy to return to positive growth.

As far as the labor market is concerned, payroll employment continued to decline in December, though by much less than in the previous months, sending the unemployment rate up to 5.8% from a downwardly revised 5.6% in November.

Such weakness in employment was concentrated in the goods-producing sector where it fell 133,000 while employment in the service-producing sector was essentially flat in the month rising 9,000 in December compared to 202,000 drop in November.

	Sept	Oct	Nov	Dec
Payroll Employment	-165,000	-448,000	-371,000	-124,000



In all, the American economy seems to be close to a turning point and therefore the federal reserve is expected to remain on the sidelines at the January 29/30 FOMC meeting.



#### II.3 Spain

The CPI for December 2001 showed a positive monthly rate with a year-on-year rate of 2.7%.

The upward innovations in residual inflation arose from prices of tourist packages. The CPI for December 2001 showed a positive monthly rate of 0.4%, with a year-on-year rate of 2.7%.

Trend inflation, calculated on the basis of the IPSEBENE-XT index, registered a year-on-year rate of 3.5% in December, overcoming again that corresponding to global inflation, 2.7%. Since December 2000, residual inflation has been -0.1%.

Innovation in trend inflation has been null. The downward surprise in the goods market came in prices of commodities, and was compensated with an upward innovation in the services market. Regarding residual inflation, it registered a slight upward surprise, arising from prices of tourist packages.

In order to analyse this in greater detail, it is necessary to refer to tables 14 and 15. Table 14 shows the breakdown used in this Bulletin to study inflation behaviour (there is a more detailed version in table A1 at the end of the document) and table 15 summarises prediction errors made for different components.

Ta	Table14 SPANISH CPI DISAGGREGATION (*)						
1.	Processed Foods CPI (excluding Fats and Tobacco)	AE-X (12.64%)	Trend Inflation (1+2+3)				
2.	Non Energy Commodities CPI	MAN (32.37%)	IPSEBENE-XT (78.03%)				
3.	Non Energy Services CPI (excluding Tourism)	SERV-T (33.02%)	L	СРІ			
4.	Fats, Tobacco and Tourism	XT (4.17%)	Residual Inflation	(100%)			
5.	Non Processed Foods CPI	ANE (8.93%)	(4+5+6) R				
6.	Energy CPI	ENE (8.87%)	(21.97%)				
<sup>(*)</sup> [	(*) More detailed information can be found in table A1 in Appendix.						

Source: INE & INSTITUTO FLORES DE LEMUS



#### Table 15

#### OBSERVED VALUES AND FORECASTS ON CONSUMER PRICE FIGURES IN SPAIN (\*)

Consumer Price Index (CPI)	Current growth December 01	Forecast	Confidence Intervals <sup>(*)</sup>
(1) AE-X (12.64%)	0.34	0.27	± 0.18%
(2) MAN (32.37%)	0.12	0.21	± 0.16%
BENE-X [1+2] (45.01%)	0.17	0.22	± 0.14%
(3) SERV-T (33.02%)	0.29	0.17	± 0.17%
IPSEBENE-X-T [1+2+3] (78.03%)	0.23	0.20	± 0.13%
(4) X+T (4.17%)	2.81	1.58	
(5) ANE (8.93%)	1.66	2.00	± 1.09%
(6) ENE (8.87%)	-1.40	-1.35	
R [4+5+6] (21.97%)	0.83	0.67	± 0.22%
IPC [1+2+3+4+5+6] (100%)	0.36	0.30	± 0.15%
(*) At 80% confidence level.			

Source: INE & INSTITUTO FLORES DE LEMUS Date: January 11, 2002.

The year-on-year rates of growth in December in footwear, apparel and durable goods, excepting automobiles, are 5.3%, 2.7% and 2.6%, respectively. **Trend inflation in goods** (measured by the BENE-X index) was 0.2%, coinciding practically with our prediction, as a consequence of the slight upward innovation in prices of processed food excluding fats, oils and tobacco, was compensated with a downward surprise in nonenergy commodities. Prices of non-energy commodities registered growth of 0.1% in December, with a year-on-year rate of 2.5%, the same registered in November. This contrasts with these prices in the Euro-zone, with a year-on-year rate of growth of 1.6% in December. In the evolution of the non-energy commodities market, the following are notable: the year-on-year rates of growth in footwear, apparel and durable goods, excepting automobiles, are 5.3%, 2.7% and 2.6%, respectively. As was announced in our previous Bulletins, the corresponding seasonality revision in October of apparel could be used to incorporate a more permanent increase in those prices. This is one of the worst features of Spanish inflation, because 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. Consequently, the predictions for mean rates in commodity prices are 2.6% for 2002, and 2.5% in 2003, with respect to the 2.6% registered in 2001.

Trend inflation in food is foreseen to decrease in 2002 and 2003.

The mean growth expectations for trend inflation in goods for 2002 and 2003 will stay at 3.0% and 2.6% respectively.

The mean growth expectations of **trend inflation in food** for 2002 and 2003 are 4.0% and 2.9%, respectively, with respect to the 4.1% observed in 2002.

The downward innovations in prices of non-energy commodities reduce **trend inflation** expectations **for goods** (measured by the BENE-X index) in 2002 in 3.0% to decrease in 2003 to 2.6%. In 2001 the annual average rate was 3%

Table 16 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 16							
	SPANISH AVER	AGE RATES (	OF GROWTH				
	1002 1000 2001					Forecasts	
	1550	1555	2000	2001	2002	2003	
Residual Inflation	0.6	3.0	6.5	3.8	1.8	3.5	
Fats	-11.1	14.9	-7.6	-7.3	4.2	-3.9	
Tobacco	7.9	4.3	2.5	4.9	4.2	1.0	
Tourism	15.4	7.2	12.3	7.1	12.0	8.8	
Non Processed Foods	2.1	1.2	4.2	8.7	3.6	4.2	
Energy	-3.8	3.2	13.3	-1.0	-3.2	3.0	
Trend Inflation	2.2	2.1	2.5	3.5	3.4	3.2	
BENE-X	1.4	1.3	1.9	3.0	3.0	2.6	
SERV-T	3.3	3.3	3.5	4.1	3.9	4.0	
CPI Inflation	1.8	2.3	3.4	3.6	3.0	3.3	
<sup>(*)</sup> More detailed information can be for	ound in tables A6A	and A6B in Ap	pendix.	•	•		

Source: INE & Institute Flores de Lemus / Date: January 23, 2002.

Trend inflation in services registered an upward innovation, thus the year-on-year rate increases to 3.9% in December. With regards to the **services sector, excluding those components known as tourist packages** (the SERV-T index), monthly inflation, 0.3%, came out higher than predicted at 0.2%, as a consequence of the same direction in innovation registered mainly in prices of hotels due to a change of seasonality in this index, which now incorporates prices of apartments. (See graph.) The evolution of prices of services is especially worrisome in transport, postal services, restaurants, catering, housing, medicine, education and culture which show monthly rates of growth near or greater than 4%. Nevertheless, the inflation differential between the market of non-energy processed goods, excluding fats and tobacco, and the services market, excluding tourism, increased in December to 0.7 percentage points. This differential is quite similar to that of the MU (0.6%); the year-on-year rate of growth of services was of 4.2%, while that corresponding to the Euro-zone was 2.8%. The year-on-year trend inflation in services (SERV-T) increased by 3.9% in December 2001, with respect to the 3.8% of last November. Therefore, mean growth expectations have been adjusted upwards to 3.9% for 2002 and 4.0% for 2003, with respect to the 4.1% registered in 2001.

The mean annual rate of trend inflation will stay at 3.4% in 2002 and at 3.2% in 2003.

With the aforementioned innovations in the goods and the services market, trend inflation, calculated on the IPSEBENE-XT index, registered an annual rate of 3.5%, the same as registered last November. It is predicted that **trend inflation** will decrease to 3.4% in 2002 and to 3.2% in 2003, compared to 3.5% observed in 2001.



Source: : IFL & INE /Date: January 11, 2002



#### Graph 12



#### AVERAGE RATES OF GROWTH OF CPI INFLATION IN GOODS AND IN SERVICES

Source : INE & INSTITUTO FLORES DE LEMUS / Date: January 23, 2002.

Residual inflation registered an upward innovation in prices of tourism.

Those prices which serve as a basis for calculating residual inflation have registered a null innovation in prices of energy and tobacco; an upward innovation in prices of tourist packages; and finally a downward surprise in prices of non-processed food and prices of fats and oils. In the non-processed food groups (the ANE index) there were downward innovations in prices of all components, excluding meat, vegetables and potatoes. Prices of tourist packages increased by 8.9% in December with respect to November. Finally, energy prices decreased by 1.4% with respect to November.

With all of this, residual inflation registered a year-on-year growth rate of -0.1% in December. A significant decrease throughout the last months of 2001 is foreseen, as with the rest of the MU.

As a consequence of the recent decreases in prices of crude, the expectations of average growth in consumer energy prices are of -3.2% and 3.0% for 2002 and 2003, respectively. Average annual variation rates for oils and fats are expected to increase by 4.2% in 2002 and to decrease by 3.9% in 2003. As far as average growth of non-processed foods, expectations are 3.6% for 2002 and 4.2% for 2003. Lastly, tourist package prices will reach average values of 12.0% in 2002 and 8.8% in 2003. Therefore, **the estimated average growth of residual inflation** is 1.8% in 2002 and 3.5% in 2003.

The monthly inflation prediction for January 2002 is 0.6%, including the tax increment but neither the Euro rounding effect nor sales effect; the annual rate will increase to 3.3% without the Euro rounding effect.

As a result, the inflation prediction for January 2002 is for a positive growth of 0.6%, taking into account the tax increases, which suppose 3 tenths of a percentage point, but neither the Euro rounding effect nor the sales effect; which will increase annual growth to 3.3%. Trend inflation will increase 0.6% and residual inflation will be 0.7%. The average inflation rate within the overall CPI is placed at 3.0% in 2002 and 3.3% for 2003. The average rate of trend inflation will be 3.4% in 2002 and 3.2% in 2003.

The forecast monthly rate for January is broken down in the following way (table 17):

- 0.6%, is the prediction shown in table A7B of monthly rates of growth, which incorporates the increases in taxes, with an effect of three tenths of percentage point, but does not include either the Euro rounding effect or the sales effect;
- plus 0.3% that constitutes the potential Euro rounding effect, which is calculated as the average of the resulting effect taking into account mean prices, 0.2%, and the effect considering individual prices, 0.4% (See Working paper n° 0202 Servicio de Estudios del Banco de España).



- minus 0.8%, as a consequence of the effect derived from the incorporation of sales prices in the calculation of the CPI. This estimation comes in the analysis of the different European CPI with similar schema of sales prices in the last four years .

Table 17 DECOMPOSITION OF THE PREDICTED MONTHLY RATE FOR JANUARY 2002				
Forecast without effects	0.3%			
Tax increases effect	0.3%			
Euro Rounding effect	0.3%			
Sales effect	-0.8%			
Total Prediction	0.1%			

Source : IFL / Date: January 23, 2002.

Nevertheless, the effect due to the sales prices incorporation will not be noticed in the year-onyear rates because the INE (Statistics National Institute) has elaborated two samples, one including sales prices and the other not. Thus, the annual rates that the INE will soon publish are calculated incorporating sales prices in 2001 and in 2002. Then, the forecasts of the yearon-year rates proposed in table A7A in the appendix constitute good estimations of the annual rates that will be published by the INE, while taking into account the fact that they do not incorporate the Euro rounding effect.

It is not known if this last effect will be permanent or if it is incorporating increases in prices that will be produced during the year. If we consider an estimation of this effect, the year-on-year rate will be 3.5% in January 2002.

Table 18 DECOMPOSITION OF THE P ANNUAL RATE FOR JANU	REDICTED ARY 2002
Forecast without euro rounding effect	3.3%
Euro Rounding effect	0.3%
Total Prediction	3.5%

Source : IFL / Date: January 23, 2002.



Graph 13



#### AVERAGE RATES OF GROWTH OF TOTAL INFLATION, CORE AND RESIDUAL INFLATION

Source : INE & INSTITUTO FLORES DE LEMUS / Date: January 23, 2001.

The decrease in residual inflation foreseen for 2002 will not be sufficient to offset rates of 3.4% in trend inflation at the end of 2002. This fact makes it unlikely that the Spanish economy will reach the inflation objective established by the European Central Bank of inflation no greater than 2%, in 2002.

**Trend inflation** stayed at 3.5% in December. Nevertheless, most components in trend inflation in services showed annual rates closer or greater than 4% and trend inflation in food stayed at 5.1%. During 2000 and 2001 there was an important increase in prices of goods, and therefore, its year-on-year rate moved from 1.4% in January 2000 to 3.2% in the last quarter of 2001. There is a tendency to consolidate around 3% in 2002, and to decrease to 2.6% in 2003. Nevertheless, prices of services, as a result of discounting the new seasonality structure corresponding to the months of June to December, due to methodological changes and not to real facts, remained stable at around 4.0%, and a mean value of 3.9% is expected in 2002, to increase to 4.0% in 2003.

For next January, trend inflation is expected to increase to 3.6%. For 2002 a drop to 3.4% is foreseen, as a consequence of the improved behaviour of rates of growth in prices of services, excluding tourist packages. Again, for 2003, a decrease to 3.2% is expected, due to the improved behaviour of rates of growth of prices in non-energy processed goods, excluding fats, oils and tobacco (table R8).

In January 2001, the INE introduced important methodological changes in the elaboration of CPI, for example the incorporation of prices of apartments in the index of prices of hotels. This new component has a different seasonal behaviour, so the seasonality of the new index "hotels and apartments" has changed and covers November as well. We have analysed this variation and it supposes an increment of 5, 14 and 17 percentage points in the seasonal coefficients corresponding to June, July and August, but this increase in seasonality was compensated for in September, October, November and December.

The INE (National Statistics Institute) in January 2002 is going to introduce a base change and



therefore a new consumption basket, as well as realizing a total system change with the objective of harmonising the European lows and to obtain a more dynamic CPI.

Table 19 shows the average annual rates for 2000, 2001 and 2002 of the different sectors in the MU and Spain, where the relevant differential in non-energy industrial goods and services can be observed.

Table 19						
HARMON	ZED ICP ANNUAL GR	OWTH BY SECTOR	RS IN THE MU A	ND SPAIN 2000-2	2001-2002	
		2000	2001	2002	2003	
AE	MU	1.1	2.9	2.4	2.0	
AE-X	SPAIN	1.4	4.1	4.0	2.9	
MAN	MU	0.7	1.4	1.8	1.8	
	SPAIN	2.1	2.6	2.6	2.5	
BENE	MU	0.8	1.8	1.9	1.8	
BENE-X	SPAIN	1.9	3.0	3.0	2.6	
SERV	MU	1.7	2.5	2.7	2.7	
SERV-T	SPAIN	3.5	4.1	3.9	4.0	
IPSEBENE	MU	1.3	2.1	2.3	2.2	
IPSEBENE-XT	SPAIN	2.5	3.5	3.4	3.2	
	MU	1.7	7.2	2.6	1.6	
ANE	SPAIN	4.2	8.7	3.6	4.2	
	MU	13.3	2.7	-3.4	1.4	
	SPAIN	13.3	-1.0	-3.2	3.0	
DESIDITAT	MU	7.6	4.8	-0.6	1.5	
RESIDUAL	SPAIN	6.5	3.8	1.8	3.5	
HICP	MU	2.3	2.6	1.8	2.1	
CPI	SPAIN	3.4	3.6	3.0	3.3	

Source: INE, EUROSTAT & Instituto Flores de Lemus / Date: January 24, 2002.

The following table shows the contribution of each component of global CPI to the annual global inflation registered in December 2001, 2.7%. Also if we readjust the relative importance in order to add up to 100 it is possible to calculate the contribution of each component to the excess of 7 tenths of a percentage point that the annual global inflation registered in December with respect to the government forecast of 2.0%.

CONTRIBUTION TO THE ANNUAL GLOBAL INFLATION REGISTERED IN DECEMBER 2001						
	Weights of each component in the CPI (%)	Relative importance of the inflation in 2001 (%)	Contribution to the annual inflation in December 2001	Contribution to the excess of the annual rate of December 2001 with respect to 2%		
<ol> <li>Processed food excluding fats and tobacco.</li> <li>Non-energy industrial goods (commodities).</li> <li>Services excluding packages tourist.</li> <li>Fats and tobacco.</li> <li>Tourist packages.</li> <li>Non-processed food.</li> <li>Energy.</li> </ol>	12.64	11.47	0.59	0.36		
	32.37	30.37	0.77	0.17		
	33.02	35.44	1.39	0.69		
	3.15	3.94	0.24	0.16		
	1.02	1.62	0.15	0.11		
	8.93	8.68	0.53	0.36		
	8.87	9.48	-0.95	-1.14		
GLOBAL INFLATION	100.00	99.97	2.70	0.70		
TREND INFLATION [(1)+(2)+(3)]	78.03	76.80	2.72	1.19		
RESIDUAL INFLATION [(4)+(5)+(6)+(7)]	21.97	23.17	-0.03	-0.50		
CORE INFLATION [(1)+(2)+(3)+(4)+(5)]	82.20	82.05	3.11	1.47		
Non-energy processed goods [(1)+(2)+(4)]	48.16	45.53	1.58	0.67		
Services [(3)+(5)]	34.04	36.93	1.53	0.80		

Source: INE & IFL / Date: January 23, 2002.

