The inflation in the euro area tend to 1.9% in 2005, but the median stay at 2.3%, and the differences in inflation through euro area countries for 2004 and 2005 will reduce with respect to 2001-2003.

Box diagram of euro area countries dispersion on inflation

- Italy
- France
- Germany
- Belgique
- Netherlands ▲ Portugal
- Luxembourg
- Spain
- ▬ MU-11/12
- Finland
- Ireland
- Greece
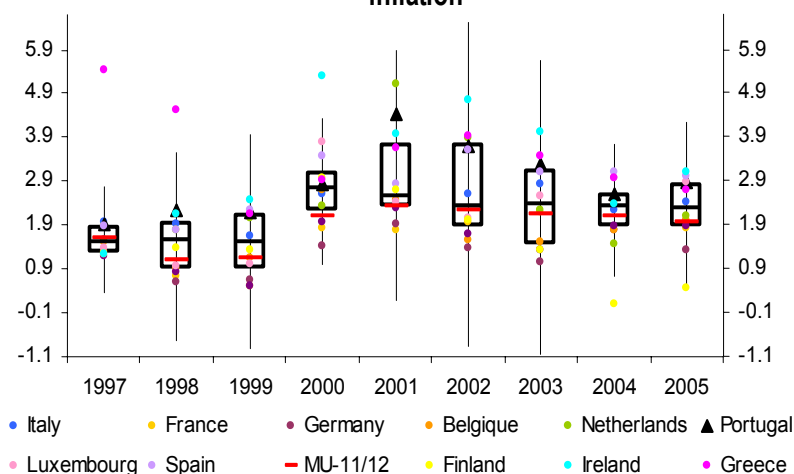
Date: September 16, 2004   Source: IFL & EUROSTAT

The perspectives for GDP growth in the euro area in 2004 rise from the last forecast due to enhanced net exports, although capital investments continue to be largely responsible for economic recovery.

ANNUAL AVERAGE GROWTH RATES :				
	2002	2003	**2004**	**2005**
GDP	0.9	0.5	2.0	2.2
FINAL CONSUMPTION	1.3	1.2	1.4	2.0
CAPITAL INVESTMENT	-2.7	-0.6	1.8	3.2
CONTRIBUTIONS TO THE GDP ANNUAL AVERAGE GROWTH RATES:				
	2002	2003	**2004**	**2005**
DOMESTIC DEMAND	0.3	1.2	1.5	2.2
NET EXPORTS	0.6	-0.7	0.5	0.0
GROSS VALUE ADDED FROM SERVICES	1.3	1.0	2.1	2.4

Source: Eurostat & IFL   Date: September 21st, 2004

Monthly Debate
The Capitalism to Come.
HOMO POSTECONOMICUS
by Juan Urrutia. See Page. 30

CONTENTS

Nº120

@

www.uc3m.es/boletin

CAJA MADRID

CONSEJERÍA DE ECONOMÍA E INNOVACIÓN TECNOLÓGICA
Comunidad de Madrid

Supporting Entities

FUNDACIÓN
UNIVERSIDAD CARLOS III

BBVA

TERMINOLOGY USED:

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

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

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

I. MAIN POINTS AND NEW RESULTS

I.1. ECONOMIC AND MONETARY UNION

❑ For this month, we are forecasting a positive monthly inflation rate of 0.2%, with a reduction in the annual inflation in the euro zone from last month's figure to 2.1%. Core inflation will reach an annual rate of 2.1% in September, due to stable growth in this component. Within core inflation, there is an increase in the average inflation rate for non energy industrial goods in 2004, due to fewer falls in these prices in August respect the forecast because of sales less deep. The energy price growth forecasts have reduced in September, and the effect of this on the year-on-year rate of total EMU inflation is a decrease in the rates total inflation even with the increase of core inflation expected thought the non-energy industrial goods.

Graph I.1.1

YEAR-ON-YEAR RATE OF EMU INFLATION AND CONTRIBUTIONS OF MAIN COMPONENTS
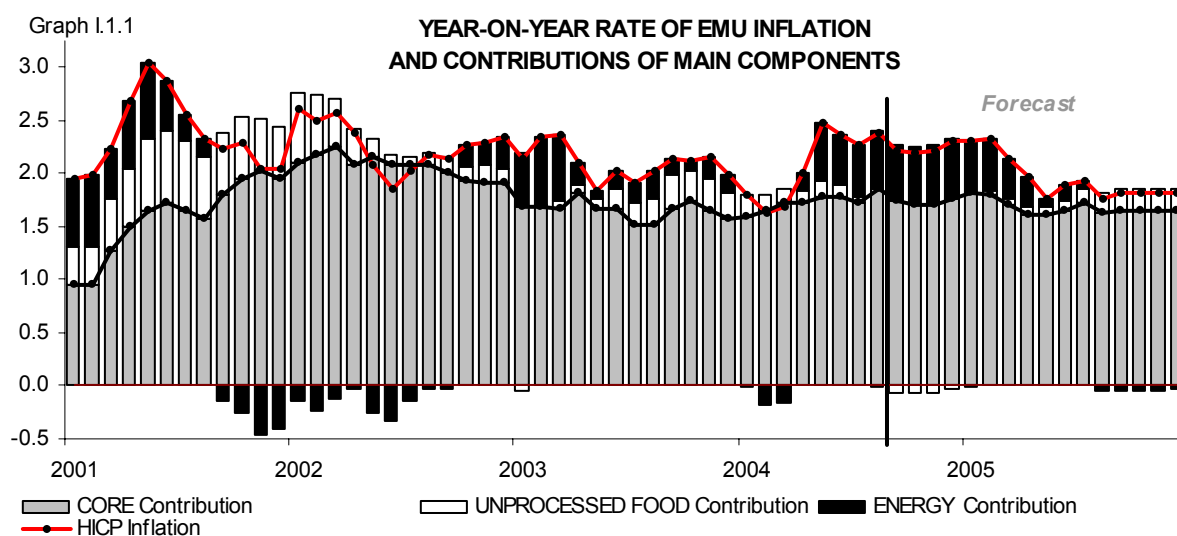
Source: EUROSTAT, IFL & UC3M   Date: September 16, 2004

❑ Inflation in the euro zone in August has performed as expected, with an increase of 0.17% in the monthly rate and the annual rate remaining at 2.3%. The principal innovations in the monthly rate arose in core inflation, with a slightly worse performance t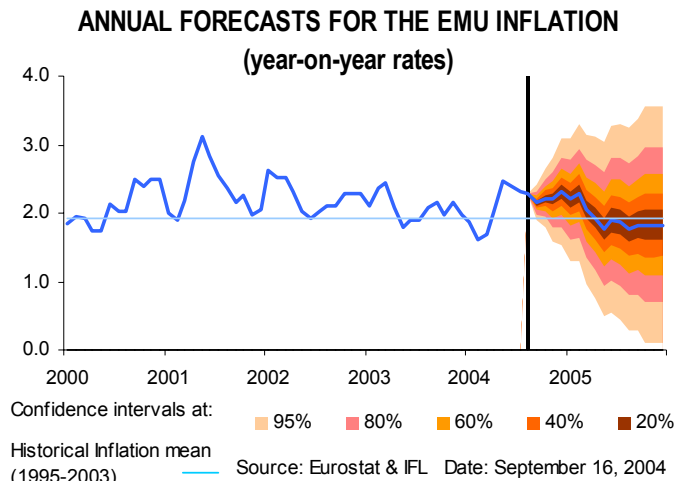han was predicted, with 0.26% instead of the forecast 0.12%, and unprocessed food, with a negative growth value of 1.34% instead of the forecast 0.71%. In August, the core inflation rate was 2.2%, whereas processed foods and energy registered a negative value of 0.25% and a positive value of 6.44%, respectively. (tables 2.1.1 of section II.1 and A2 in the appendix).

❑ The expected performance of inflation in the euro zone in 2004 is characterised by the stability of annual core inflation, with rates of around 2.1% for the remaining months of the year, and the marked volatility of annual inflation in energy. Thus, the total annual inflation rate has been on the increase from the 1.6% registered in February to the 2.5% observed in May, but annual rates are expected to stabilise at around 2.3% starting in July. This difference between the evolution of total and core inflation is caused by the performance of energy prices, which started to grow in March and are not expected to decrease until March, 2005, so their effect on the annual rate of total inflation will continue until the first quarter of 2005 (see graph I.1.1 on the contributions of components to European inflation). The last few energy price growth forecasts have increased slightly; we are expecting rates of around 7% for the end of the year. For 2005, future crude oil markets are not indicating further price increases and the year-on-year total inflation rate will systematically decrease from 2.3% at the beginning of the year to 1.8% in the last quarter, with an annual average of 1.9%. Core inflation will be relatively stable around 2.0%. The effects of the oil price hike on inflation in the Euro area seem to be rather moderate during 2005.

❑ For 2004, we forecast a mean total inflation rate of 2.1%, with which the probability of the mean annual inflation rate exceeding 2% is over 60% – as we can see from fan chart 1.1 2 of the forecasting intervals for 2004. On the other hand, the risk of deflation in the EMU disappeared several months ago.

□ Core inflation in the Euro area has been below that of the US – using an homogeneous measure for both areas-for several years before 2002, but in 2002 and 2003 euro area core was nine and seven tenths of a percentage point higher than US core, respectively. This is an indication that monetary policy possibilities in the two countries have been different in this period.The annual inflation rate last year and in the first months of this year in the two economies appears to converge at values of around 2%, but due to the rapid rise in crude oil prices, which influenced energy prices in both economies starting in March, this situation has changed. Since March, the two inflation rates have again diverged because of the greater sensitivity of U.S. inflation to crude oil market fluctuations. We thus expect the differential between the two economies for June and July to be around one percentage point in favour of the EMU, and this situation should remain unaltered until the first quarter of 2005 (see page 16).

Graph I.1.2

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

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

Historical Inflation mean
(1995-2003)   Source: Eurostat & IFL   Date: September 16, 2004

□ Independently from the above, the inflation differential in services continues to be in favour of the EMU, in non-energy industrial goods in favour of the U.S. Whereas expectations for the mean annual rates of service prices, excluding owner's equivalent rents in the U.S., are 3.4% in 2004 and 3.5% in 2005, compared to the 3.2% observed in 2003, in the EMU they are 2.6% in 2004 and 2005, compared to the 2.6% also observed in 2003. In non-energy industrial goods, the corresponding rates for the U.S. have a negative value of 0.9% in 2004 and a positive value of 0.5% in 2005, and 0.8% in 2004 and in 2005 in the EMU (Graphs I.1.3).

Graph I.1.3

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

Source: BLS, EUROSTAT, IFL & UC3M
Date: September 16 / 2004
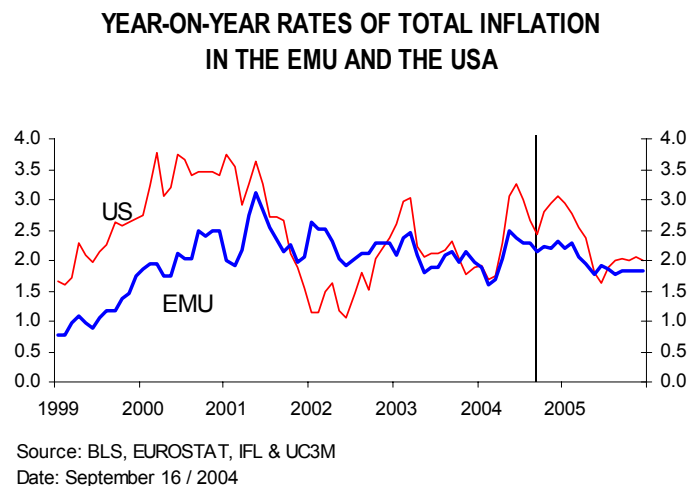
Table I.1.1 FORECASTS FOR THE MEAN ANNUAL RATES IN THE HICP OF THE EMU						
Harmonised Indices of Consumer Prices (HICP)	2000*	2001*	2002*	2003*	Forecasts	
					2004	2005
TOTAL INFLATION (100%)	2.1	2.3	2.3	2.1	**2.1**	**1.9**
CORE INFLATION (84,17%)	1.0	1.9	2.5	2.0	**2.1**	**2.0**
Non energy processed goods HICP (42,85%)	0.6	1.5	1.9	1.5	**1.6**	**1.3**
Services HICP (41,33%)	1.5	2.5	3.1	2.6	**2.6**	**2.6**
RESIDUAL INFLATION (15,82%)	7.5	4.4	1.1	2.6	**2.5**	**1.6**
Non Processed Food HICP (7,69%)	1.7	7.0	3.1	2.2	**0.7**	**1.5**
Energy HICP (8,13%)	13.0	2.3	-0.6	3.0	**4.1**	**1.6**
* Observed Values (revised) (1) Monthly and annual rates can be found in tables A5A and A5B in the appendix.						

Source: Eurostat & UC3M/ Date: September 16, 2004

I.2 MACROECONOMIC TABLE OF EURO-ZONE

	Annual Averages Growths				
	2001	2002	2003	Forecasts BIMA (*)	
				2004	2005
GDP p m	**1.6**	**0.9**	**0.5**	**2.0**	**2.2**
Demand					
Final Consumption	2.1	1.3	1.2	1.4	2.0
Capital Investment	-0.3	-2.7	-0.6	1.8	3.2
Contribution Domestic Demand	0.9	0.3	1.2	1.5	2.2
Exports of Goods and Services	3.4	1.7	0.1	7.0	6.5
Imports of Goods and Services	1.7	0.3	2.1	6.1	7.0
Contribution Foreign Demand	0.7	0.6	-0.7	0.5	0.0
Supply					
Gross Value Added Total (market prices)	1.6	0.9	0.5	2.0	2.2
Net Taxes	-2.9	-0.6	-0.6	0.7	-1.0
Gross Value Added Total (basic prices)	1.9	0.9	0.5	2.1	2.4
Gross Value Added Agriculture	-1.2	1.0	-3.6	1.7	2.1
Gross Value Added Industry	0.3	0.2	0.0	2.5	2.8
Gross Value Added Construction	-0.4	-0.6	-0.6	0.5	0.3
Gross Value Added Services	2.7	1.3	1.0	2.1	2.4
Private	3.2	0.9	0.9	2.3	2.7
Public	1.7	2.2	1.0	1.7	1.8
Prices					
CPI harmonized, annual average	2.3	2.3	2.1	2.1	1.9
CPI harmonized, dec./dec.	2.1	2.3	2.0	2.3	1.8
Employment					
Unemployment rate	8.0	8.4	8.9	8.9	9.0
Others Economic Indicators					
Production Index of Industry (excluding construction)	0.4	-0.5	0.3	2.3	2.4

Source: EUROSTAT & UC3M
Date: September 21, 2004

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

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

I.3. UNITED STATES

❑ The general index forecast for **September** is an 0.11% increase, with the annual rate falling from 2.65% to 2.43%. This reduction in the annual rate is explained by the energy index, due to the heavy increases registered last September. For core inflation, we forecast an 0.17% increase, with its annual rate growing from 1.71% to 1.82% (chapter II shows the details).

Table I.3.1
OBSERVED VALUES AND FORECAST ON CONSUMER PRICE FIGURES IN US
-August 2004-

CONSUMER PRICES INDEX (CPI)	Monthly Growth (T^1_1)		Confidence Intervals at 80% level (+ -)
	observed (a)	forecasts (b)	
Residual Inflation	-0.23	-0.03	0.43
Core Inflation	0.10	0.28	0.15
Total inflation	0.05	0.21	0.12

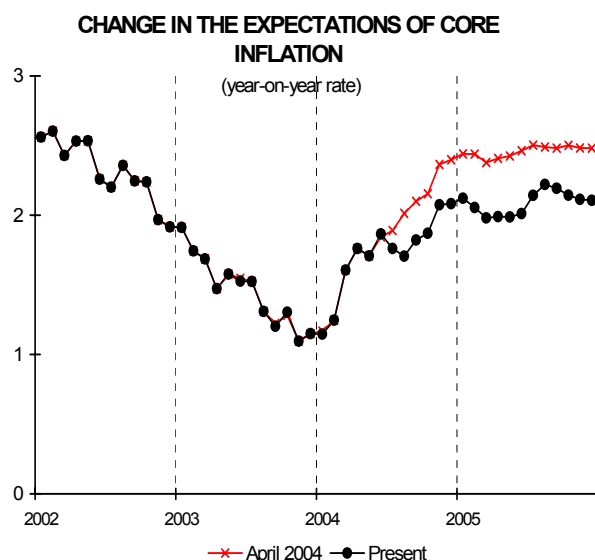Source: BLS & Universidad Carlos III Madrid
Data: September 16, 2004

❑ In August, the U.S. CPI rose by 0.05% from the previous month's figure, instead of the forecast 0.21% increase, with the annual rate decreasing by three tenths from 2.99% to 2.65%. Many items performed better than expected, particularly durable goods (new cars), food, lodging away from home, and airline prices (see Table I.3.1) (chapter II shows the details).

❑ The rate of core inflation rose by 0.10% instead of increasing as forecast by 0.28%, with the annual rate going from 1.76% to 1.71%. The fall registered in non-energy manufactured goods was 0.07% instead of the 0.28% increase forecast, and the annual rate fell from a negative value of 1.22% to 1.15% (negative value). On the other hand, service prices rose by 0.17%, less than expected (0.28%), with the annual rate falling from 2.99% to 2.89%. Core inflation, not including owner's equivalent rent of primary residence and tobacco, and therefore comparable with the underlying rate in Europe excluding food, increased by 0.03%, instead of the 0.32% forecast, with the annual rate going from 1.47% to 1.38%.

❑ By components, non-durable goods prices, excluding the index for tobacco, increased by 0.10%, instead of the 0.33% expected, with the annual rate going from 0.17% to 0.00%. Durable goods prices decreased by 0.35% as opposed to the 0.19% increase forecast, with the annual rate going from –2.81% to -2.57%. With regards to durable goods, the annual rate of the new car index went from the previous month's –0.59% to –1.39%.

❑ The index for services excluding owner's equivalent rent of primary residence shows an increase of 0.11%, as opposed to the 0.35% forecast, with the annual rate going from 3.36% to 3.17%. The index for owner's equivalent rent of primary residence increased by 0.27%, instead of the 0.17% forecast, with the annual rate going from 2.50% to 2.54%.

❑ For **2004** and **2005,** we forecast mean total annual inflation rates of 2.6% and 2.2%, respectively, which means, in relation to last month's report, a reduction of one tenth for 2004. However, the forecast for the core rate has improved with the July and August figures, which have reduced the mean annual rate for 2005 from 2.5% to 2.1% (see **Table I.3.2** and **Graph I.3.1**).

❑ After the first few months of the year in which core inflation forecasts were constantly corrected upwards, the July and August figures have led to significant reductions. This is partly due to the recent performance of import prices, particularly for durable goods (see **Graph I.3.1**).

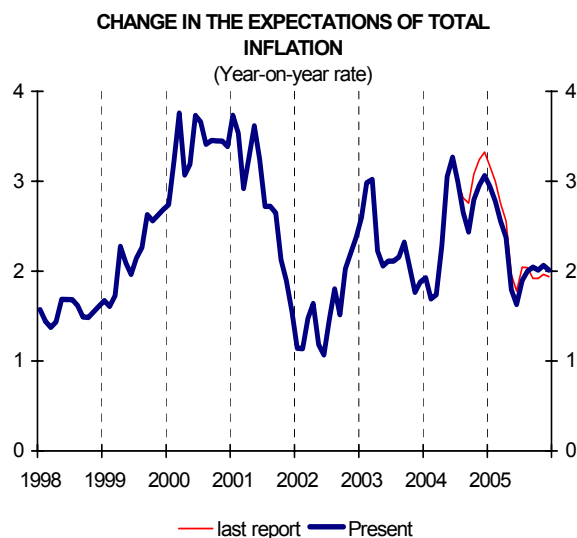1 The official information provided is with one decimal aggregation error

Graph I.3.1

CHANGE IN THE EXPECTATIONS OF CORE INFLATION

(year-on-year rate)

—x— April 2004 —●— Present

Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

Graph I.3.2

CHANGE IN THE EXPECTATIONS OF TOTAL INFLATION

(Year-on-year rate)

—— last report —— Present

Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

Table I.3.2

AVERAGE ANNUAL RATE OF GROWTH IN US

CONSUMER PRICES INDEX (CPI)	2000	2001	2002	2003	2004 (forecasts)	2005 (forecasts)
Food (1)	2.3	3.1	1.8	2.1	**3.4**	**2.6**
Energy (2)	16.9	3.8	-5.9	12.2	**10.0**	**2.2**
Residual Inflation (3=2+1)	**6.8**	**3.3**	**-0.8**	**5.3**	**5.7**	**2.4**
Non-food and non-energy goods (4)	0.5	0.3	-1.1	-2.0	**-1.1**	**-0.4**
Less tobacco	-0.1	-0.2	-1.5	-2.1	**-1.2**	**-0.5**
-Durable goods	-0.5	-0.6	-2.6	-3.2	**-2.6**	**-0.9**
-Nondurable goods	1.4	1.1	0.4	-0.7	**0.3**	**0.0**
Non-energy services (5)	3.3	3.7	3.8	2.9	**2.9**	**3.1**
-Services less owner's equivalent rent of primary residence (5-a)	3.5	3.6	3.6	3.2	**3.3**	**3.2**
-Owner's equivalent rent of primary residence (a)	3.0	3.8	4.1	2.4	**2.3**	**2.8**
Core Inflation (6=4+5)	**2.4**	**2.7**	**2.3**	**1.5**	**1.7**	**2.1**
Core inflation less owner's equivalent rent of primary residence (6-a)	2.2	2.3	1.7	1.1	1.5	1.8
Core inflatión less owner's equivalent rent of primary residence and tobacco	2.1	2.1	1.5	1.1	1.5	1.8
Total inflation (7=6+3)	**3.4**	**2.8**	**1.6**	**2.3**	**2.6**	**2.2**
All items less owner's equivalent rent of primary residence (7-a)	3.5	2.6	1.0	2.2	2.7	2.0

Source: BLS & Universidad Carlos III Madrid

Data: September 16, 2004

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

I.4. SPAIN

❑ The total monthly inflation rate forecast for September is 0.3%, with the annual rate expected to remain at the 3.3% observed in August (graphs I.4.2 and I.4.3).

❑ The monthly rate of total inflation in August was 0.44%, worse than our 0.39% forecast. Core inflation (processed food, industrial goods and services) registered an upwards innovation, whereas residual inflation (non-processed food and energy) registered a downward innovation (table I.4.1).

❑ The annual rate of core inflation was 2.9% in August 2004, compared with the 2.8% observed the previous month. In August, the monthly rate for processed food performed as forecast (0.22%),

Table I.4.1 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 August 2004	Forecast	*Confidence interval at 80%*
Total Inflation(100%)	0.44	0.39	± 0.15
Core inflation (82.28%)	0.32	0.22	± 0.13
Residual inflation (17.72%)	1.10	1.27	± 0.22

(*) At 80% confidence level.
Source : INE & UC3M / Date: September 10, 2004

whereas non-energy industrial goods (MAN) and services (SER) presented upwards innovations. In MAN, this was due to the worse than expected performance of apparel and footwear, where the effect of the sales was less than forecast, with a fall of 0.1% in the monthly rate compared to the negative value of 0.3% expected. On the other hand, in the monthly inflation rate in services, tourist packages performed worse than forecast, increasing by 8.32% instead of 7.64%. Most service components, such as transport, household goods, restaurants and housing, continue to have annual rates of over 4%, whereas university expenses have an annual rate of over 5% (5.05).

❑ In August 2004, the annual rate of inflation in non-energy industrial goods in Spain and the EMU registered upwards innovations, to 0.09% in the EMU and falling 0.08% in Spain. With the new forecasts, we expect that at the end of 2004 the annual rate in Spain will be around 1.0%, above the 0.8% of the EMU. As for the mean annual rate of non-energy industrial goods in Spain and the EMU, we expect them both to be around 0.8% for 2004. In the U.S., the mean annual inflation rate in non-energy goods not including food will register a negative value of 1.1% for 2004, compared with the 2.0% decrease observed in 2003.

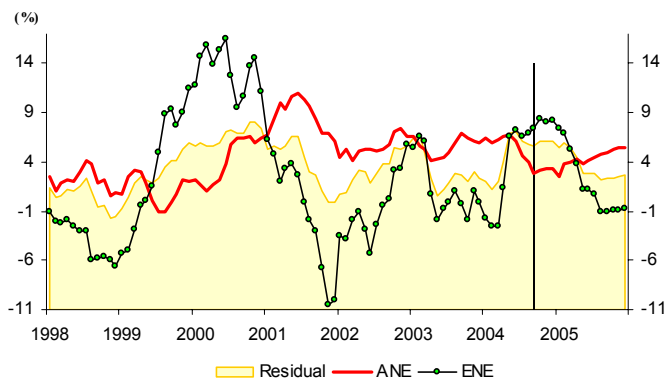| Table I.4.2 FORECASTS FOR THE MEAN ANNUAL RATES OF GROWTH IN THE CPI IN SPAIN			Forecasts	
Consumer Prices Index (CPI)	2002	2003	2004	2005
TOTAL INFLATION (100%)	3.1	3.0	**3.0**	**2.8**
CORE INFLATIÓN (82,28%)	3.7	2.9	**2.7**	**2.8**
TREND INFLACIÓN (77,21%)	3.4	2.9	**2.6**	**2.7**
Non energy industrial goods (30,05%)	2.5	2.0	**0.8**	**1.1**
Services CPI (35,05%)	4.6	3.7	**3.8**	**4.1**
Processed food CPI (17,17%)	4.3	3.0	**3.6**	**3.1**
RESIDUAL INFLATION (17,72%)	2.6	3.6	**4.7**	**3.0**
Non processed food CPI (8,60%)	5.8	6.0	**5.0**	**4.4**
Energy CPI (9,12%)	-0.2	1.4	**4.5**	**1.7**

Monthly and annual rates can be found in tables A7A and A7B in the appendix
Source: INE. IFL & .UC3M / Date: September 16, 2004

Graph I.4.1

ANNUAL RATES OF RESIDUAL INFLATION AND ITS COMPONENTS IN SPAIN

Source: INE, IFL & UC3M / Date: September 16, 2004

□ For this month, the annual rate of core inflation is forecast at 2.9%, the same value observed in August, with an expected annual rate of 4.3% in processed food, 0.9% in non-energy industrial good prices, and 3.8% in services. The mean annual rate of core inflation in 2004 will be around 2.7%, beneath the 2.9% registered in 2003. We should emphasise the poor performance of inflation in processed food, with a mean rate expected in 2004 of 3.6%, compared with 3.0% in 2003. Processed food prices have been especially affected by tobacco prices, with a forecast mean annual rate of 5.6% compared to the 3.8% observed in 2003, and higher prices of fats and oils, with a forecast mean annual rate of 15.1% in 2004 compared to the 3.5% observed in 2003 (tables I.4.2 and I.4.3).

□ In the EMU, the annual rate of core inflation in August 2004 was 2.2%. Forecasts for the mean annual rate are 2.1% in 2004 and 2.0% in 2005, compared with the 2.7% and 2.8% forecast in Spain for the same years. Therefore, the differential between Spain and the euro zone for 2004 is expected to be more than half a percentage point.

□ As for the evolution of residual inflation components, the mean annual rate of non-processed food prices is expected to fall from values of around 6.0% in the first half of 2003 to values around 3.0% at the end of 2004. A mean annual rate of 5.0% is expected for 2004, and 4.4% for 2005. Energy, however, tends to increase more than the previous month, and the annual rate expected for September 2004 is 7.3%. The mean annual rate forecast for 2004 is 4.5%, over the 1.4% observed in 2003.

□ The contributions of core and non-processed food inflation to annual inflation in Spain is expected to remain stable until 2005. The fall in the contribution of energy

Graph I.4.2

CONTRIBUTIONS TO TOTAL INFLATION IN SPAIN (YEAR-ON-YEAR RATES)
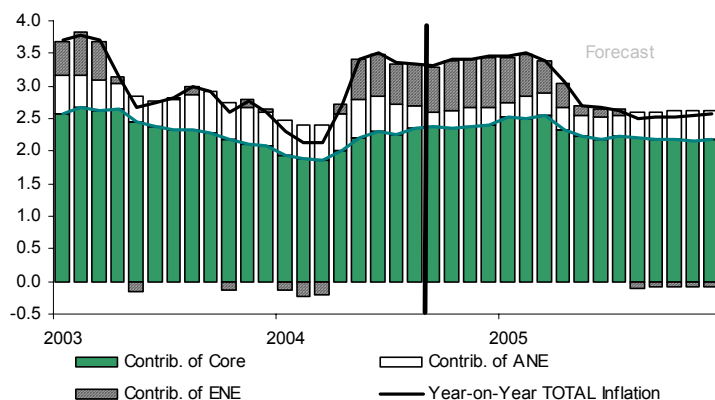
Source: INE & UC3M   Date: September 16, 2004

for the second half of 2005 will make total annual inflation return to levels close to those observed in 2003 (see graph I.4.2).

□ It is highly likely that the total annual inflation rate in Spain for the remaining months of 2004 and the first few months of 2005 will remain stable above 3.0%, as observed in graph I.4.3. The mean annual total inflation rate in Spain was 3.0% in 2003, and will be 3.0% in 2004 and 2.8% in 2005 (table I.4.2).

Graph I.4.3

ANNUAL FORECASTS FOR TOTAL INFLATION IN SPAIN
(year-on-year rates)
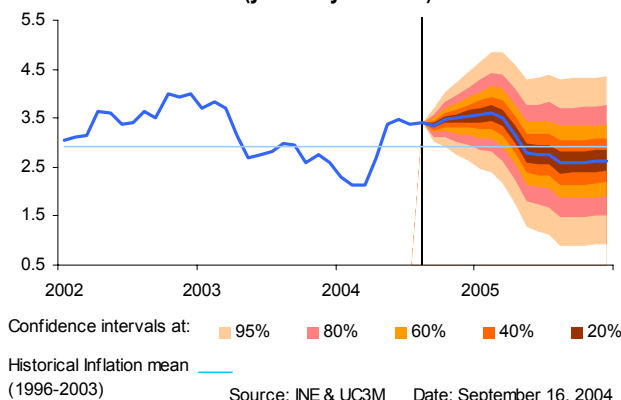
Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1996-2003)

Source: INE & UC3M   Date: September 16, 2004

I.5. MACROECONOMIC TABLE OF SPANISH ECONOMY

MACROECONOMIC TABLE AND INDICATORS (*)					
	Annual Rates				
	2002	2003	Forecasts BIMA(*)		Budget
			2004	2005	2004
Private Final Consumption Expenditure	2.9	2.9	3.2	3.3	3.1
Public Final Consumption Expenditure	4.1	3.9	4.4	4.1	2.9
Gross Fixed Capital Formation	1.7	3.2	3.6	3.8	3.8
Equipment	-5.4	1.0	3.5	5.8	(3)
Building	5.2	4.3	3.9	2.2	3.0
Other products	3.0	3.0	3.0	4.3	(3)
Inventory change (1)	0.0	0.1	-0.1	0.0	0.0
Domestic Demand	2.8	3.2	3.4	3.4	3.3
Exports of Goods and Services	1.2	2.6	5.0	6.5	6.3
Imports of Goods and Services	3.1	4.8	7.5	7.7	7.0
Net Exports (1)	-0.6	-0.8	-1.0	-0.7	-0.4
GDP	**2.2**	**2.5**	**2.5**	**2.9**	**3.0**
GDP, current prices	6.8	6.7	6.3	6.5	5.9
Prices and Costs					
CPI, annual average	3.1	3.0	3.0	2.8	
CPI, dec./dec.	4.0	2.6	3.5	2.6	
Average earning per worker	4.3	4.2	3.8	3.9	
Unit labour cost	3.3	3.5	3.1	3.3	
Labour Market (Data poll labour force)					
Labour Force (% variation)	3.0	2.6	2.0	1.7	
Employment (EPA)					
Annual average variation in %	2.0	2.7	2.2	2.3	
Annual average variation in thousands	312.5	437.0	367.0	392.5	
Unemployment rate	11.4	11.3	11.1	10.8	11.0
Basic balances					
Foreign sector					
Current Account (m. ε.)	-18.842	-24.634	-35.270	-28.937	
Net lending or borrowing (% GDP) (2)	-2.7	-3.3	-4.5	-3.4	-2.6
AA.PP. (Total) / Public Administration					
Net lending or borrowing (% GDP) (2)	-0.1	0.0	-0.8	-1.2	
Other Economic Indicators					
Industrial Production Index	0.1	1.6	2.5	2.7	

(1)   Contributions to GDP growth
(2)   In term of national accounts
(3)   Equipment goods and other goods: Forecast PGE, 5.0; Forecast BIAM, 3.6.

Source: INE & UC3M
Date: September 21, 2004.

(*) 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	2003	Forecasts	
							2004	2005
TOTAL INFLATION								
Euro-zone (100%).	1.1	1.1	2.1	2.3	2.3	2.1	**2.1**	**1.9**
USA (81.5%). [1]	1.1	2.1	3.5	2.6	1.0	2.2	**2.7**	**2.0**
A HOMOGENEOUS MEASURE OF CORE INFLATION [2]								
Services and Non-energy industrial goods excluding food and tobacco.								
Euro-zone (72.34%).	1.4	1.1	1.0	1.8	2.4	1.8	**1.8**	**1.9**
USA (55.6%). [1]	1.8	1.4	2.1	2.1	1.5	1.1	**1.5**	**1.8**
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Services.								
Euro-zone (41.33%).	1.9	1.5	1.5	2.5	3.1	2.6	**2.6**	**2.6**
USA (27.4%). [1]	2.9	2.7	3.5	3.6	3.6	3.2	**3.3**	**3.2**
(2) Non-energy industrial goods excluding food and tobacco.								
Euro-zone (31.01%).	0.9	0.7	0.4	0.9	1.5	0.8	**0.8**	**0.8**
USA (29.0%).	-0.1	-0.5	-0.1	-0.2	-1.5	-2.1	**-1.2**	**-0.5**
INFLATION IN EXCLUDED COMPONENTS FROM THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Food.								
Euro-zone (19.53%).	1.6	0.6	1.4	4.5	3.1	2.8	**2.4**	**2.1**
USA (14.9%).	2.2	2.1	2.3	3.1	1.8	2.1	**3.4**	**2.6**
(2) Energy.								
Euro-zone (8.13%).	-2.6	2.4	13.0	2.3	-0.6	3.0	**4.1**	**1.6**
USA (9.90%).	-7.7	3.6	16.9	3.8	-5.9	12.2	**10.0**	**2.2**

[1] less owner´s equivalent rent of primary residence.

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

Source: EUROSTAT, BLS, IFL & UC3M.
Date: September 16 / 2004

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

YEAR-ON-YEAR RATES OF TOTAL INFLATION IN THE EMU AND TOTAL INFATION 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
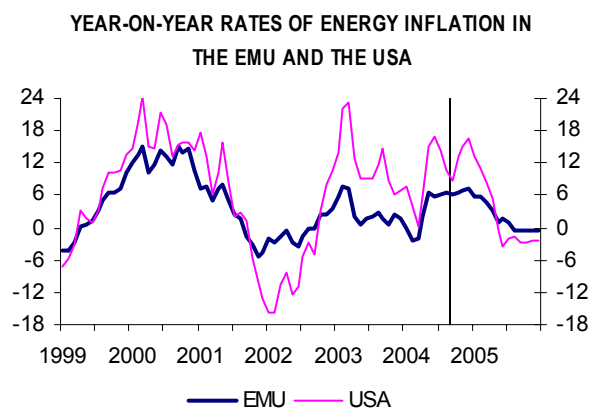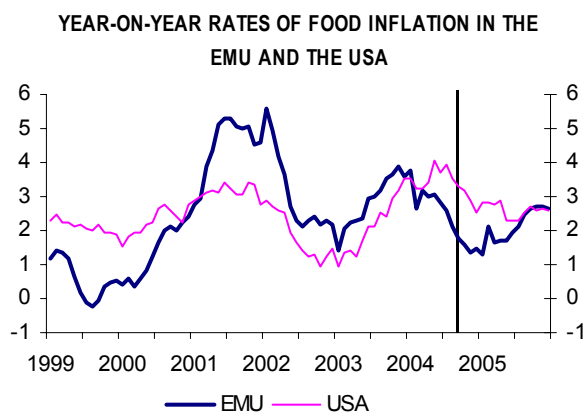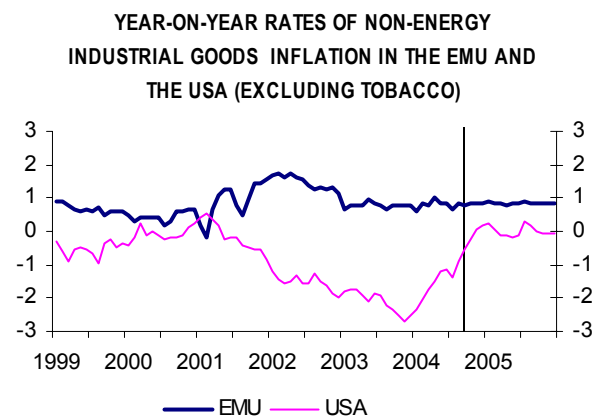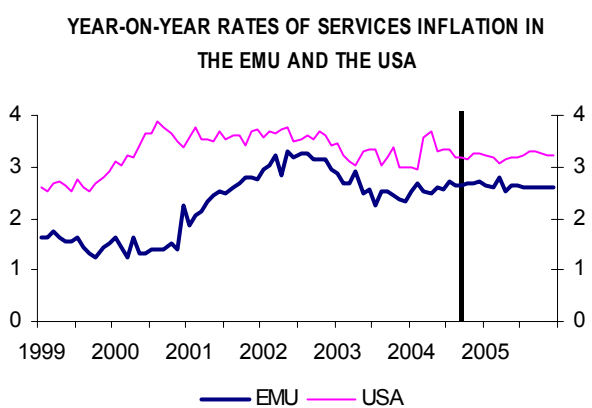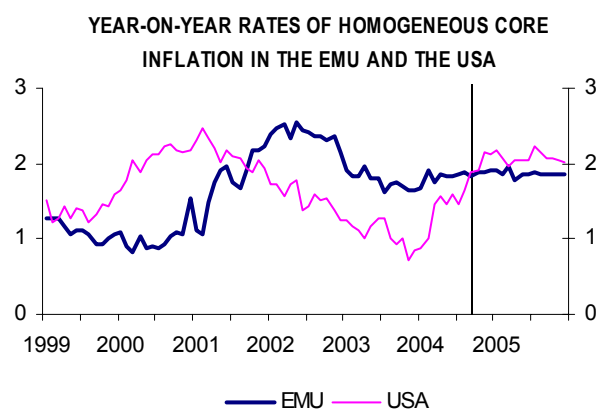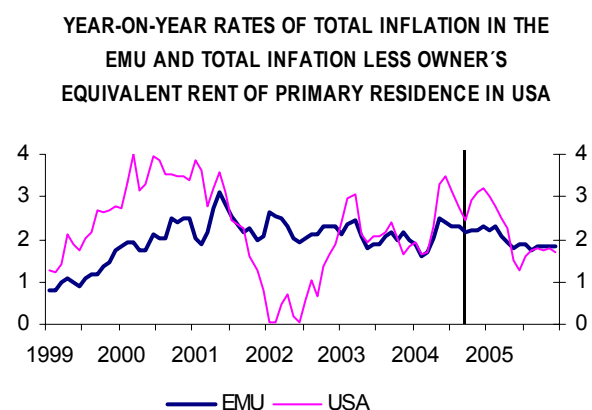
Source: EUROSTAT, BEA, IFL & UC3M
Date: September 16, 2004

INFLATION FORECASTS AND EVOLUTION IN THE EMU AND SPAIN (1998-2005)							Forecasts	
	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL INFLATION								
Spain (100%).	1.8	2.3	3.4	3.6	3.1	3.0	**3.0**	**2.8**
Euro-zone (100%).	1.1	1.1	2.1	2.3	2.3	2.1	**2.1**	**1.9**
CORE INFLATION								
Services and Non-energy processed goods.								
Spain (81.40%).	2.2	2.2	2.5	3.4	3.7	2.9	**2.7**	**2.8**
Euro-zone (84.18%).	1.4	1.1	1.0	1.9	2.5	2.0	**2.1**	**2.0**
DIFFERENT COMPONENTS OF CORE INFLATION								
(1) Services.								
Spain (34.87%).	3.6	3.4	3.7	4.2	4.6	3.7	**3.8**	**4.1**
Euro-zone (41.33%)	1.9	1.5	1.5	2.5	3.1	2.6	**2.6**	**2.6**
(2) Non-energy processed goods.								
Spain (46.53%).	1.4	1.7	1.7	2.9	3.1	2.4	**2.2**	**2.0**
Euro-zone (43.26%).	1.1	0.7	0.6	1.5	1.9	1.5	**1.6**	**1.3**
INFLATION IN EXCLUDED COMPONENTS FROM CORE INFLATION								
1) Non-processed food.								
Spain (9.40%).	2.1	1.2	4.2	8.7	5.6	5.6	**4.9**	**4.4**
Euro-zone (7.69%).	2.0	0.0	1.7	7.0	3.1	2.2	**0.7**	**1.5**
(2) Energy.								
Spain (9.14%).	-3.8	3.2	13.3	-1.0	-0.2	1.4	**4.5**	**1.7**
Euro-zone (8.13%).	-2.6	2.4	13.0	2.3	-0.6	3.0	**4.1**	**1.6**

Source: EUROSTAT, BLS, IFL & UC3M.
Date September 16 / 2004.

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

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

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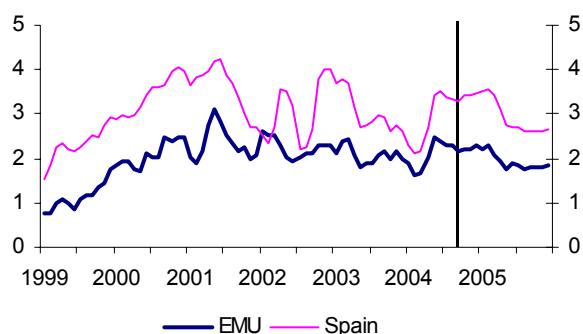
YEAR-ON-YEAR RATES OF SERVICES AND NON-ENERGY PROCESSED GOOS IN THE EMU AND SPAIN

EMU — Spain

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

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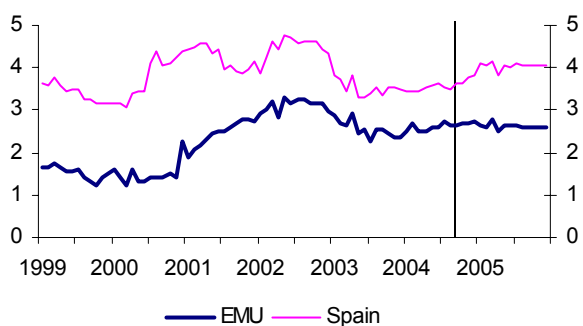
YEAR-ON-YEAR RATES OF NON-ENERGY PROCESSED GOODS INFLATION IN THE EMU AND SPAIN
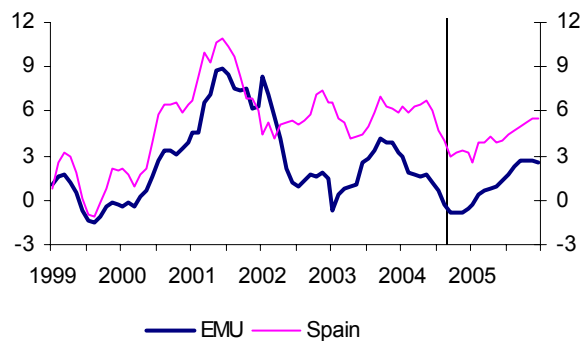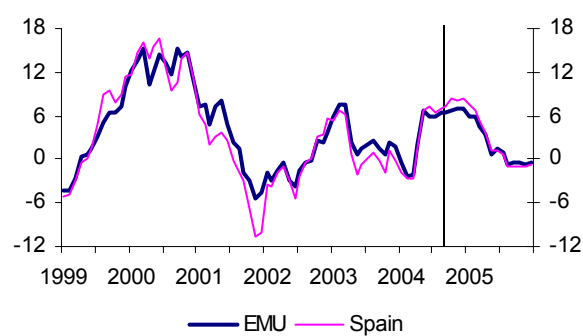

EMU — Spain
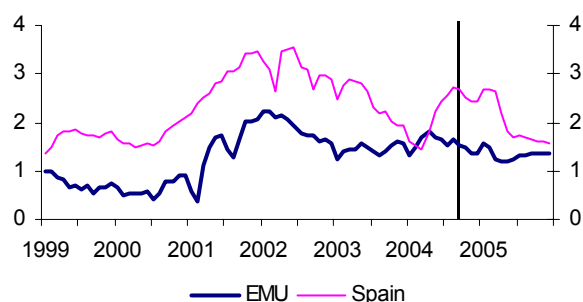
YEAR-ON-YEAR RATES OF NON-PROCESSED FOOD IN THE EMU AND SPAIN

EMU — Spain

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

EMU — Spain

Source: EUROSTAT, BEA, IFL & UC3M
Date: September 16, 2004

I.7 INFLATION FORECASTS OF DIFFERENT INSTITUTIONS

	INFLATION FORECASTS OF DIFFERENT INSTITUTIONS[1]									
	BIAM[2]		CONSENSUS FORECASTS[3]		IMF[4]		ECB[5]		OCDE[6]	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
UME	2.1	1.9	2.1	1.8	1.7	1.6	2.1	1.9	1.7	1.4
U.S.A.	2.6	2.2	2.7	2.4	2.3	2.2	-	-	2.3	2.0
ESPAÑA	3.0	2.8	3.0	2.8	2.7	2.7	-	-	2.3	2.6

1   The forecasts are based on CPI in USA and Spain and on HICP in the EMU.
2   Bulletin EU & US Inflation and Macroeconomic Analysis , September 2004
3   September 13, 2004.
4   IMF. World Economic Outlook. April 2004.
5   ECB. Monthly Bulletin. Survey of Professional Forecasters. August 2004
6   OECD Economic Outlook 75. June 2004. For Spain, the forecasts are based on HICP.

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.

Our expectations about total inflation in the EMU are slightly lower than the previous bulletin: 2.1% in 2004 and 1.9% in 2005. In Spain, these expectations are 3.0% for 2004 and 2.8% in 2005, similar to the previous bulletin. The Consensus Forecast expectations are higher than august in the case of Spain and the same for USA and UME. Energy prices are expected to increase due to the evolution of crude prices. The expected average inflation rate for 2004 in energy prices is 4.5% in Spain and 4.1% in the EMU.

II. ANALYSIS OF INFLATION, MONETARY POLICY AND INTERNATIONAL ANALYSIS

II.1 Economic and Monetary Union

In August 2004, inflation in the euro area registered a monthly rate of 0,17% with a year-on-year rate of 2.29%.

Inflation in the euro zone in August has performed as expected, with an increase of 0.17% in the monthly rate and the annual rate remaining at 2.3%. The principal innovations in the monthly rate arose in core inflation, with a slightly worse performance than was predicted, with 0.26% instead of the forecast 0.12%, and unprocessed food, with a negative growth value of 1.34% instead of the forecast 0.71%. In August, the core inflation rate was 2.2%, whereas processed foods and energy registered a negative value of 0.25% and a positive value of 6.44%, respectively (Tables 1 and A2 in the appendix).

Table 1 summarises the discrepancies between observed and forecast 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 II.1.1

OBSERVED AND FORECAST VALUES ON CONSUMER PRICE FIGURES IN THE EMU

Consumer Price Index (HICP)	Current growth August 04	Forecast	Confidence intervals (a)
(1) Processed food - AE (9.463%)[(b)]	0.00	**0.21**	± 0.09
(2) Tobacco (2.373%)	0.00	**0.10**	± 0.13
(3) Commodities - MAN (31.009%)	0.09	**-0.08**	± 0.10
Non-Energy Manufactured Goods - BENE **[1+2+3]** (42.845%)	0.07	**0.00**	± 0.09
(4) Services - SERV (41.334%)	0.25	**0.24**	± 0.14
Core Inflation:			
Non-Energy Manufactured Goods and Services, (excluding fats, oils, tobacco and tourist packages**)** - **IPSEBENE [1+2+3+4] (84.178%)**	0.26	**0.12**	± 0.08
(5) Non-Processed Food - ANE (7.689%)	-1.34	**-0.71**	± 0.46
(6) Energy Goods - ENE (8.133%)	1.49	**1.46**	± 0.60
Residual Inflation:			
Fats, Oils, Tobacco, Tourist Packages, Non-Processed Food and Energy **-** R **[5+6] (15.822%)**	0.00	**0.43**	± 0.39
Total Inflation: **HICP [1+2+3+4+5+6] (100%)**	0.17	**0.17**	± 0.09

(a)   At 80% confidence level
(b)   Excluding tobacco prices
 Source: EUROSTAT, IFL & UC3M/ Date: September 16, 2004

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, aggregation errors are marked in the forecast errors tables in the appendix (table A2).

The total inflation innovation was a null innovation.

The breakdown of the harmonised consumer price index into basic market groups shows that the prices of processed food, excluding tobacco (the AE index), registered a null monthly growth instead of the 0.21% growth predicted. The prices of tobacco registered a null rate, lower than the 0.10% forecast. The prices of the remaining processed goods excluding energy prices (the MAN index) registered a rate of 0.09%, instead of the negative rate of -0.08% forecast. With this, core inflation registered a monthly growth of 0.26%, slightly higher than 0.12% expected. Finally, in Residual inflation (non-processed food and energy), there was a

downward innovation, 0.0% instead of 0.43% (see table A5A and A5B)..

The forecast for the year-on-year rate of inflation in September 2004 is 2.1%.

Total European expected inflation will decrease to 2.1% in September. The expected monthly inflation rate is a positive value of 0.2%. The expectations for the average annual rate are 2.1% in 2004 and 1.9% in 2005, compared to the 2.1% registered in 2003.

Table 2 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 II.1.2 AVERAGE ANNUAL RATE OF GROWTH IN MONETARY UNION							
	Observed					Forecasts	
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Residual Inflation 15.822%	1.2	7.5	4.4	1.1	2.6	**2.5**	**1.6**
Non-Processed Food 7.689%	0.0	1.7	7.0	3.1	2.2	**0.7**	**1.5**
Energy 8.133%	2.4	13.0	2.3	-0.6	3.0	**4.1**	**1.6**
Core Inflation 84.178%	1.1	1.0	1.9	2.5	2.0	**2.1**	**2.0**
Processed Food[a] 9.463%	0.5	0.6	2.7	2.4	2.1	**1.4**	**1.7**
Tobacco 2.373%	3.1	3.4	3.8	5.9	8.4	**11.9**	**6.4**
Non-Energy Commodities 31.009%	0.7	0.4	0.9	1.5	0.8	**0.8**	**0.8**
Non-Energy Services 41.334%	1.5	1.5	2.5	3.1	2.6	**2.6**	**2.6**
Total Inflation 100%	1.1	2.1	2.3	2.3	2.1	**2.1**	**1.9**

(a) Excluding tobacco prices
Source: EUROSTAT, IFL & UC3M/ Date: September 16, 2004

The average annual rate in 2003, 2.1%, is achieved through decreases in core inflation in 2003 to 2.0% in relation to the 2.5% observed in 2002, 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, and increases in residual inflation, due to prices of energy compared with the values registered in 2002. The expected evolution of core inflation will be similar to last year; energy is the component that is increasing the performance of total inflation during 2004 from March, and this trend is not expected to change until March 2005.

By country, the expectations for month-on-month inflation for next July is a negative rate of 0.2% for Germany and positive rates of 0.3% in Spain, 0.5% in Italy and 0.2% in France.

Table 3 summarises average annual growth rates for the main countries. Monthly and annual forecasts for all countries can be found in tables A4A, A4B, A4C and A4D in the appendix.

Table II.1.3

	Observed					Forecasts	
ANNUAL AVERAGE RATES OF GROWTH							
	1999	2000	2001	2002	2003	2004	2005
Spain HICP (11.11%) *	2.2	3.5	2.8	3.6	3.1	**3.1**	**3.0**
Germany HICP (29.26%)	0.6	1.4	1.9	1.3	1.0	**1.8**	**1.4**
France HICP (20.70%)	0.5	1.8	1.8	1.9	2.2	**2.4**	**1.7**
Italy HICP (19.26%)	1.7	2.6	2.3	2.6	2.8	**2.3**	**2.6**
EMU HICP (100%)	1.1	2.1	2.3	2.3	2.1	**2.1**	**1.9**
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, IFL & UC3M/ Date: September 16 / 2004

Inflation forecasts for the euro area reveal significant differences between countries, leading to a range of actual real interest rates through member countries, which for the one year horizon go from negative values in Luxembourg (-0.91%), Ireland, Spain (-0.62%), Portugal and Italy (-0.19%) to positive values in Finland (1.80%), Germany (0.98%), France (0.71%), Austria, Netherlands and Belgium (0.14%). This range is narrower than in past years and, in fact, except in Finland all member countries are experiencing near zero or negative real interest rates, which should favour business investment. (see table II.1.3).

Table II.1.4	INFLATION EXPECTATIONS		ACTUAL REAL INTEREST RATES	
	Three Months	**One Year**	**Three Months**	**One Year**
Luxembourg	3.31	3.29	-1.19	-0.91
Ireland	3.12	3.14	-1.01	-0.77
Spain	3.07	3.00	-0.95	-0.62
Portugal	2.71	2.74	-0.59	-0.36
Italy	2.54	2.57	-0.42	-0.19
Greece	2.35	2.33	-0.23	0.05
Belgium	2.24	2.24	-0.12	0.14
Netherlands	1.97	2.01	0.15	0.36
Austria	1.93	1.91	0.19	0.46
France	1.73	1.67	0.38	0.71
Germany	1.48	1.39	0.63	0.98
Finland	0.54	0.58	1.58	1.80

Source: ECB, Eurostat & EFN

Date: September 17, 2004

The dispersion of the rates in the euro area was greater for the years in the centre of the chart (2001-2003)

The chart on the top of the cover page shows the dispersion of the average annual inflation rates in euro zone countries for the 1997-2005 period, thus including the forecasts for 2004 and 2005. The chart is a box diagram, the base of which is the first quartile and the ceiling the third, so its height is the interquartile range and the inner horizontal line is the median. The box also has two vertical lines measuring 1.5 times the interquartile range above and below it. This figure relates the inflation rates in the different euro zone countries with certain of their distribution values for each year. In fact, if the rate was above or below the vertical line stemming from the box, we would be referring to an atypical datum for that distribution; if the rate falls inside the box we would be in the part with more distribution observations and if the rate coincides with the horizontal line inside the box, it would have the same number of observations on either side. We can see how the dispersion of the rates in the euro zone was greater for the years in the centre of the chart (2001-2003) and smaller for 2001 and after 2003. We can also see that the only countries with atypical rates would be Greece with a very

high rate until 2000, Ireland with a high rate in 2000 and Finland, with an abnormally low rate since 2004. The inflation rate for the entire euro zone constructed as the weighted mean of the individual rates is beneath the median throughout the period, showing that countries with greater weight in the mean have lower inflation rates in the euro area (Germany and France, for example).

Table II.1.5 shows annual observed HICP rates for energy and those corresponding to the remainder of goods and services – denominated HICP excluding energy.

Table II.1.5	ANNUAL GROWTH HICP											
	HICP excluding Energy						**HICP energy**					
	Observed				**Forecasts**		**Observed**				**Forecasts**	
	Aug. 2004	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005	Aug. 2004	Media 2001	Media 2002	Media 2003	Media 2004	Media 2005
Germany	1.6	1.5	1.4	0.8	**1.5**	**1.2**	5.8	5.7	0.3	4.0	**4.0**	**2.8**
Spain	3.2	4.0	3.4	3.2	**3.0**	**3.0**	6.5	-1.0	-0.2	1.3	**4.4**	**1.7**
France	2.4	2.1	2.3	2.2	**2.2**	**1.7**	5.7	-1.5	-1.5	2.3	**3.9**	**1.4**
Italy	2.2	2.4	3.0	2.8	**2.3**	**2.5**	3.4	1.6	-2.6	3.2	**2.1**	**4.0**
Monetary Union	2.0	2.3	2.6	2.0	**2.0**	**1.9**	6.0	2.3	-0.6	3.0	**4.1**	**1.6**

Source: EUROSTAT, IFL & UC3M/ Date: September 16 , 2004

Year-on-year rates of energy prices in August, 2004 registered values higher than 2% in these four countries, as shown in table 5. For non-energy prices, Germany registered in August a year-on-year rate of 1.6%; forecasts for the annual average rates will be around 1.5% in 2004 and 1.2% in 2005. France registered for the HICP excluding energy a year-on-year rate of 2.4% in August and the forecasts for the annual average rate are 2.2% in 2004 and 1.7% in 2005. The observed value for the annual rate in Italy was 2.2% and forecasts are 2.3% in 2004 and 2.5% in 2005. In the case of Spain, the annual rate was 3.2% in August and a average annual rate of 3.0% is expected in 2004 and 3.0% in 2005. Therefore, in the HICP excluding energy, German inflation will perform better than French, which will in turn perform better than Spanish and Italian inflation.

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

Graph II.1.1 **Non Energy Processed Commodities (BENE) and Sevices (SERV)**
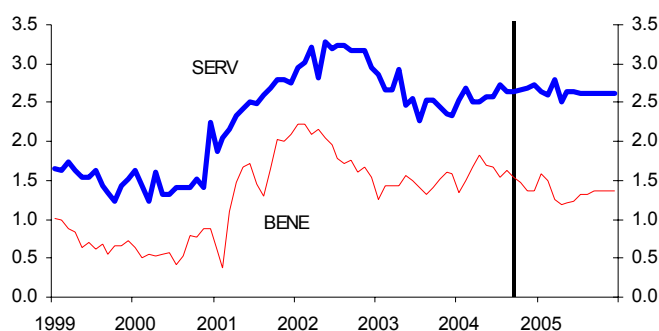
CORE, Residual and total inflation
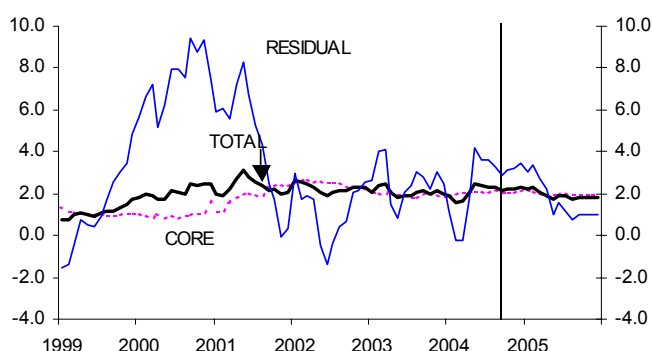
Source: EUROSTAT, IFL & UC3M/ Date: September 16, 2004

II.2. Industrial Production in the EMU and USA.

The Industrial Production Index published for July 2004 has been a slight downwards innovations. The analysis of the components shows an upwards innovations in Durable component goods as opposed to the rest of components that behaved downwards. This information is shown in table II.2.1.

Table II.2.1 FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO JULY		
	Forecast for July	**Observed in July[(*)]**
Capital	4.44	4.15
Durable	-0.80	1.58
Intermediate	3.66	2.86
Non Durable	-0.06	-1.03
Energy	1.70	1.14
Total	**2.65**	**2.36**

Working day adjusted data.
Source: Eurostat and UC3M.

New forecasts show a similar growth expectation for year 2004 and a little better for 2005. The forecasts for year 2004 has been revised from 2.32% to 2.28% and those for 2005 from 2.05% to 2.40%. The expectations of growth for the different sectors are shown in table II.2.2.

Table II.2.2 ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EMU[(***)]								
	1998	1999	2000	2001	2002	2003	2004	2005
Capital	6.7	2.4	8.2	1.6	-1.6	-0.1	**3.6**	**3.8**
Durable	4.2	1.3	6.1	-2.1	-5.6	-4.3	**2.5**	**1.9**
Intermediate	3.7	1.9	6.2	-0.6	0.2	0.4	**2.2**	**2.9**
Non Durable	2.1	1.2	0.9	0.8	0.6	0.1	**0.6**	**1.1**
Energy	1.6	0.8	1.9	1.3	1.1	2.9	**2.0**	**0.6**
Total EMU	3.8	1.8	5.2	0.4	-0.5	0.3	**2.3**	**2.4**

[(***)]Bold figures are forecasts. Working day adjusted data.
Source: Eurostat and UC3M.
Date: September, 21st 2004

In US, the last published data corresponds to August and has behaved as expected (5.14 instead of 5.06%), and the same has happened in equipment and material goods. On the contrary Durable and Non Durable consumer goods have registered un upwards and a downward innovation respectively. This information is shown in table II.2.3.

Table II.2.3 FORECASTS AND OBSERVED DATA IN THE ANNUAL RATE OF GROWTH OF THE DIFFERENT EMU IPI COMPONENTS CORRESPONDING TO AUGUST		
	Forecast for August	**Observed in August**
Durable Consumer Goods	3.13	4.01
Non Durable Consumer Goods	2.53	1.62
Equipment and Supplies	5.46	5.31
Materials	5.45	5.47
TOTAL US	**5.14**	**5.06**

Source: Federal Reserve and UC3M

Table II.2.4 shows the updated forecasts. The average rate of growth for IP in 2004 has been upwards revised from 5.04% to 4.63% and in 2005 from 4.67% to 4.06%.

Table II.2.4 **ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN US[1]**	1998	1999	2000	2001	2002	**2003**	**2004**	**2005**
Durable Consumer goods	7.2	6.9	3.9	-5.8	4.7	2.3	**4.4**	**3.9**
Non Durable Consumer Goods	2.3	-0.1	1.7	0.4	-0.6	-1.7	**1.8**	**0.9**
Equipment and Supplies	8.1	4.8	5.9	-4.1	-0.6	0.4	**5.0**	**4.3**
Materials	5.2	5.7	5.3	-4.5	0.4	0.5	**5.1**	**4.6**
TOTAL US	5.6	4.3	4.7	-3.5	-0.6	0.2	**4.6**	**4.1**

(1) Bold figures are forecasts.
Source: Federal Reserve and IFL.
Date: September 21st, 2004

II.3 United States

*In **August**, the U.S. CPI rose by 0.05% from the previous month's figure, instead of the forecast 0.21% increase, with the annual rate decreasing by three tenths from 2.99% to 2.65%.*

In **August**, the U.S. CPI rose by 0.05% from the previous month's figure, instead of the forecast 0.21% increase (see **Table II.3.1**), with the annual rate decreasing by three tenths from 2.99% to 2.65%. Many items performed better than expected, particularly durable goods (new cars), food, lodging away from home, and airline prices (see **Graphs II.3.2** and **II.3.3**).

Table II.3.1

OBSERVED VALUES AND FORECAST ON CPI IN US
August 2004

CONSUMER PRICES INDEX (CPI)	Relative importance Dec. 2003	Annual Growth (T^1_{12}) observed	Monthly Growth (T^1_1) observed (a)	forecasts (b)	Confidence Intervals at 80% level (+ -)
Food (1)	14.4	3.55	0.00	0.32	0.39
Energy (2)	7.1	10.46	-0.64	-0.64	1.15
Residual Inflation (3=2+1)	21.5	6.02	-0.23	-0.03	0.43
Non-food and non-energy goods (4)	22.3	-1.15	-0.07	0.28	0.28
Less tobacco	21.4	-1.27	-0.08	0.26	0.21
-Durable goods	11.3	-2.57	-0.35	0.19	0.29
-Nondurable goods	11.0	0.14	0.11	0.37	0.42
-Non-durable goods less tabacco	10.2	0.00	0.10	0.33	0.30
Non-energy services (5)	56.3	2.89	0.17	0.28	0.16
-Services less owner's equivalent rent of primary residence (5-a)	32.9	3.17	0.11	0.35	0.23
-Owner's equivalent rent of primary residence (a)	23.4	2.54	0.27	0.17	0.13
Core Inflation (6=4+5)	78.5	1.71	0.10	0.28	0.15
Core inflation less owner's equivalent rent of primary residence (6-a)	55.2	1.38	0.03	0.32	0.19
Core inflatión less owner's equivalent rent of primary residence and tobacco	54.3	1.37	0.03	0.32	0.16
Total inflation (7=6+3)	100.0	2.65	0.05	0.21	0.12
All items less owner's equivalent rent of primary residence (7-a)	76.6	2.71	-0.01	0.22	0.15

Source: BLS & Universidad Carlos III Madrid
Data: September 16, 2004

Many items performed better than expected, particularly durable goods (new cars), food, lodging away from home, and airline prices.

The rate of core inflation rose by 0.10% instead of increasing as forecast by 0.28%, with the annual rate going from 1.76% to 1.71%. The fall registered in non-energy manufactured goods was 0.07% instead of the 0.28% increase forecast, and the annual rate fell from a negative value of 1.22% to 1.15% (negative value). On the other hand, service prices rose by 0.17%, less than expected (0.28%), with the annual rate falling from 2.99% to 2.89%. Core inflation, not including owner's equivalent rent of primary residence and tobacco, and therefore comparable with the underlying rate in Europe excluding food, increased by 0.03%, instead of the 0.32% forecast, with the annual rate going from 1.47% to 1.38%.
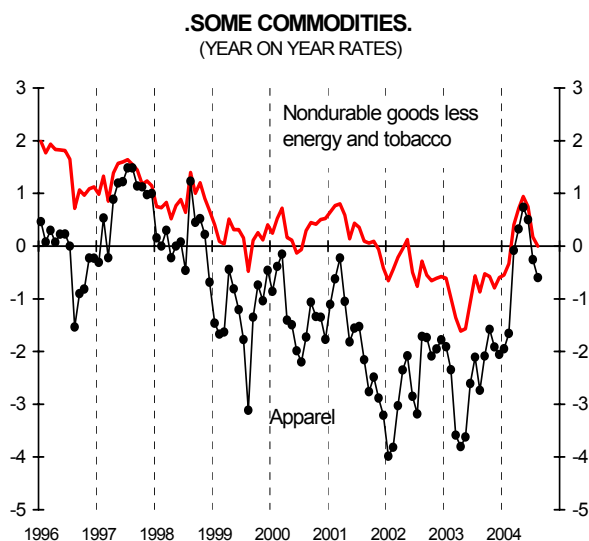
By components, the index for commodities less food and energy without tobacco decreased by 0.08% instead of the 0.26% increase expected, with the annual rate going from a negative value of 1.36% to another negative value of 1.27%. Non-durable goods prices, excluding the index for tobacco, increased by 0.10%, instead of the 0.33% expected, with the annual rate going from 0.17% to 0.00%. Regarding non-durable goods, the annual rate of the apparel index went from -0.26% to -0.60% (see Graph II.3.1). And the index for tobacco increased by 0.23% as opposed to forecast of 0.80%, with the annual rate going from 2.43% to 2.08%. Durable goods prices decreased by 0.35% as opposed to the 0.19% increase forecast, with the annual rate going from –2.81% to -2.57%. With regards to durable goods, the annual rate of the new car index went from the previous month's –0.59% to –1.39% (see Graph II.3.2).

The index for services excluding owner's equivalent rent of primary residence shows an increase of 0.11%, as opposed to the 0.35% forecast, with the annual rate going from 3.36% to 3.17%. The index for owner's equivalent rent of primary residence increased by 0.27%, instead of the 0.17% forecast, with the annual rate going from 2.50% to 2.54% (see Graph II.3.4).

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 three tenths to 4.4 points, from the previous month's figure.

Residual inflation decreased by 0.23%, more than expected: -0.03%, with the annual rate going from 7.50% to 6.02%. By components, food prices have increased by remained unaltered, less than expected: 0.32%, with the annual rate going from 3.95% to 3.55%. The index for energy decreased by 0.64%, exactly as forecast, with the annual rate going from 14.17% al 10.46%.

Graph II.3.1

.SOME COMMODITIES.
(YEAR ON YEAR RATES)

Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

Graph II.3.2

.SOME COMMODITIES.
(YEAR ON YEAR RATES)
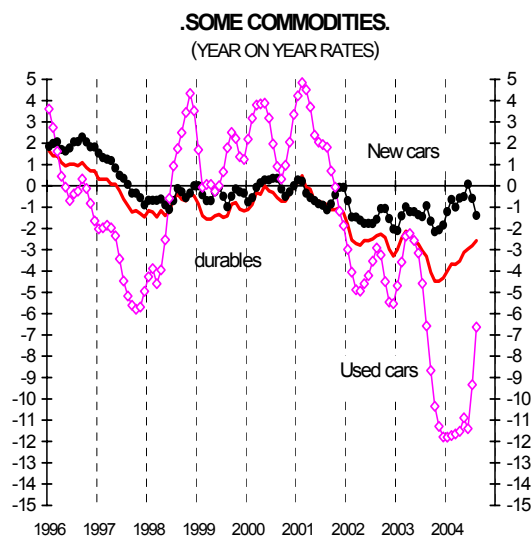
Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

The general index forecast for **September** is an 0.11% increase, with the annual rate falling from 2.65% to 2.43%. This reduction in the annual rate is explained by the energy index, due to the heavy increases registered last September. For core inflation, we forecast an 0.17% increase, with its annual rate growing from 1.71% to 1.82%.

By components, the expected increase in the index for services is 0.01%, 0.27% for the index for owner's equivalent rent of primary residence and -0.17% for the rest. The annual rate of the index for owner's equivalent rent of primary residence will remain at 2.54%. The year-on-year rate for the index for all other services, on the whole, will remain at 3.17%.

Taking commodities less food and energy into consideration, the expected increase is 0.58%, with the annual rate going from −1.15% to -0.93%. Excluding the index for tobacco, the predicted increase is 0.62%, which would leave the year-on-year rate at −1.06%, as opposed to last month's −1.27%. Durable goods prices are expected to decrease 0.15%, leaving the annual rate at −1.88%. Non-durable goods prices are forecast to increase 1.33%, reducing the annual rate from 0.14% to 0.07%. Within the index of non-durable goods, tobacco prices are predicted to decrease by 0.35%, which would leave the year-on-year rate at 2.39%.

The expected decrease in residual inflation is 0.08%, which would leave the year-on-year rate at 4.80%, as opposed to last month's 6.02%. With regards to residual inflation, the expected decrease for the food index is -0.06%, with the annual rate going from 3.55% al 3.32%. Energy prices are expected to decrease by 0.12%, which would leave the year-on-year rate at 7.27%, as opposed to last month's 10.46%.

For **2004** and **2005,** we forecast mean total annual inflation rates of 2.6% and 2.2%, respectively, which means, in relation to last month's report, a reduction of one tenth for 2004 (see **Graph II.3.6**). However, the forecast for the core rate has improved with the July and August figures, which have reduced the mean annual rate for 2005 from 2.5% to 2.1% (see **Graph II.3.5**).

Graph II.3.3
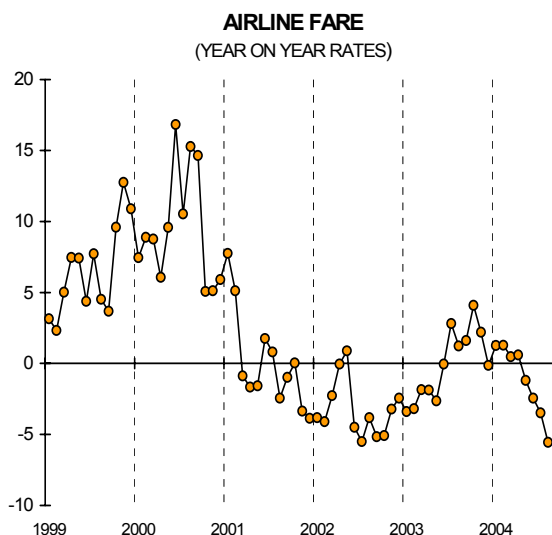
Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

Graph II.3.4
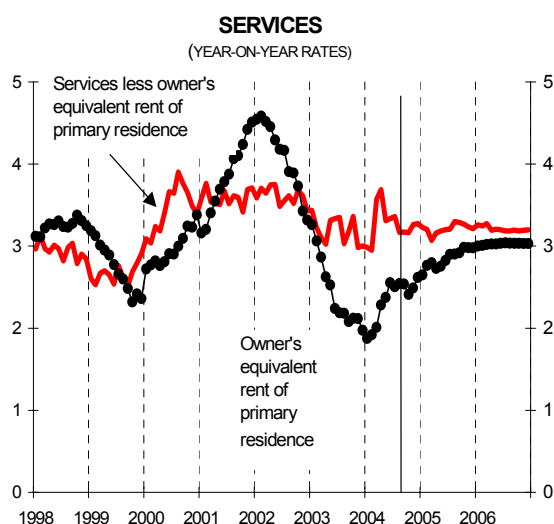
Source: Universidad C.III Madrid & BLS / Date: September 16, 2004

After the first few months of the year in which core inflation forecasts were constantly corrected upwards, the July and August figures have led to significant reductions. This is partly due to the recent performance of import prices, particularly for durable goods.

Graph II.3.5

(year-on-year rate)

Graph II.3.6

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

— last report — Present

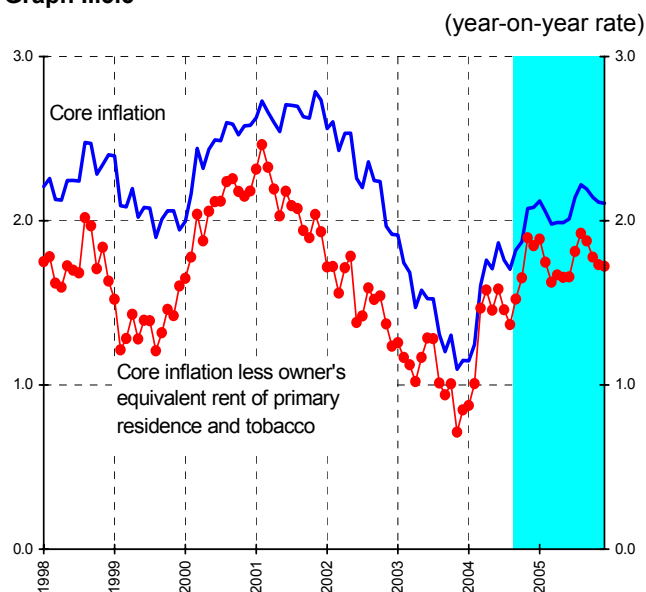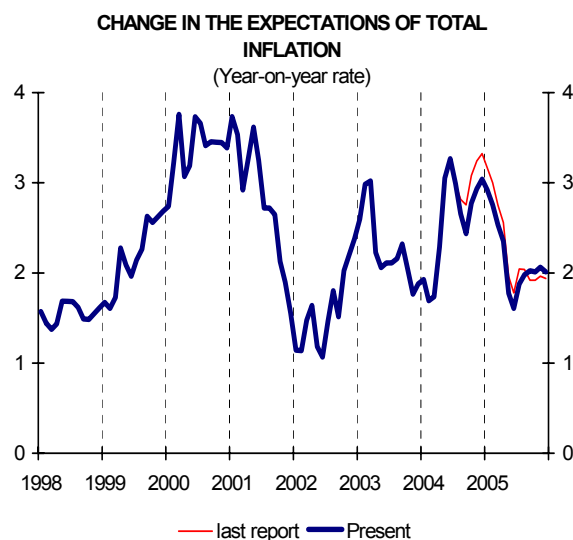Table II.3.2 shows the average annual growth rate forecasts for 2004 and 2005 for the different components of the US Consumer Price Index (monthly and annual rates can be found in Tables A6A and A6B in the Appendix).

Table II.3.2

AVERAGE ANNUAL RATE OF GROWTH IN US (*)

CONSUMER PRICES INDEX (CPI)	2000	2001	2002	2003	2004 (forecasts)	2005 (forecasts)
Food (1)	2.3	3.1	1.8	2.1	**3.4**	**2.6**
Energy (2)	16.9	3.8	-5.9	12.2	**9.9**	**2.0**
Residual Inflation (3=2+1)	**6.8**	**3.3**	**-0.8**	**5.3**	**5.7**	**2.4**
Non-food and non-energy goods (4)	0.5	0.3	-1.1	-2.0	**-1.1**	**-0.4**
Less tobacco	-0.1	-0.2	-1.5	-2.1	**-1.2**	**-0.5**
-Durable goods	-0.5	-0.6	-2.6	-3.2	**-2.6**	**-0.9**
-Nondurable goods	1.4	1.1	0.4	-0.7	**0.3**	**0.0**
Non-energy services (5)	3.3	3.7	3.8	2.9	**2.9**	**3.1**
-Services less owner's equivalent rent of primary residence (5-a)	3.5	3.6	3.6	3.2	**3.3**	**3.2**
-Owner's equivalent rent of primary residence (a)	3.0	3.8	4.1	2.4	**2.3**	**2.8**
Core Inflation (6=4+5)	**2.4**	**2.7**	**2.3**	**1.5**	**1.7**	**2.1**
Core inflation less owner's equivalent rent of primary residence (6-a)	2.2	2.3	1.7	1.1	**1.5**	**1.8**
Core inflatión less owner's equivalent rent of primary residence and tobacco	2.1	2.1	1.5	1.1	**1.5**	**1.8**
Total inflation (7=6+3)	**3.4**	**2.8**	**1.6**	**2.3**	**2.6**	**2.2**
All items less owner's equivalent rent of primary residence (7-a)	3.5	2.6	1.0	2.2	**2.7**	**1.9**

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

II.4 Spain

The consumer price index in August 2004 in the Spanish economy showed a monthly rate of 0.44%, higher than our predicted 0.39%. The annual rate fell to 3.3%, compared to the 3.4% observed in July.

Core inflation, calculated on the basis of the IPSEBENE index, registered an annual rate of 2.87% in August. **Residual inflation** (ANE and ENE) was 5.50%.

The observed monthly rate of core inflation (0.32%) was higher than our forecast 0.22%. In its components, there was an increase in services, especially non-energy industrial goods. In residual inflation, there was a decrease due to the lower inflation rate observed in non-processed food.

To analyse this in greater detail, please refer to tables II.4.1 and II.4.2. Table II.4.1 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 II.4.2 summarises prediction errors made for different components.

Table II.4.1 SPANISH CPI DISAGGREGATION [*]				
1. Processed Foods CPI	AE (17.17%)	*Trend Inflation* (1+2+3) IPSEBENE (82.28%)		*CPI* (100%)
2. Non Energy Commodities CPI	MAN (30.05%)			
3. Non Energy Services CPI (excluding Tourism)	SERV (35.05%)			
4. Non Processed Foods CPI	ANE (8.60%)			
5. Energy CPI	ENE (9.12%)			
[*] More detailed information can be found in table A1 in Appendix.				

Source: IFL & UC3M

Table II.4.2 OBSERVED VALUES AND FORECASTS ON CONSUMER PRICE FIGURES IN SPAIN			
Consumer Price Index (CPI)	**Current growth August 04**	**Forecast**	**Confidence Intervals [*]**
(1) AE (17,17%)	0.22	0.22	± 0.18%
(2) MAN (30,05%)	-0.08	-0.28	± 0.16%
(3) SER (35,05%)	0.64	0.56	± 0.17%
IPSEBENE [1+2+3] (82,28%)	0.32	0.22	
IPSEBENE-X-T (77,21%)	0.17	0.08	± 0.13%
(5) ANE (8,60%)	0.32	1.05	± 1.09%
(6) ENE (9,12%)	1.80	1.46	
R [5+6] (17,72%)	1.10	1.27	± 0.22%
IPC (100%)	0.44	0.39	± 0.15%
[*] At 80% confidence level.			

Source: INE, IFL & UC3M Date: September 10, 2004

Inflation in **processed food,** AE, registered a monthly rate of 0.22%, as forecast. For the second consecutive month, this rate is at an annual minimum after reaching highs of 0.5% in February and April, 2004. The annual rate remained at the 4.2% observed in July, 2004. For the remaining months of the year, we expect annual rates to stabilise at around 4.0%, with expectations for mean growth at 3.6% in 2004 and 3.1% in 2005, greater than the mean rate

of 3.0% observed in 2003

*The offers picked
up by the INE
lead to a more
erratic evolution
of core inflation
in food.*

Prices of **non-energy industrial goods,** MAN, registered a negative monthly rate of 0.08%, higher than our prediction of a negative value of 0.28%. The annual rate registered in August was 1.0%, higher than the 0.8% registered in July The main upwards innovation in MAN components in Spain was observed in footwear, which performed worse than expected with a fall of 0.98% in its monthly rate compared to the expected fall of 1.79%. Annual rates for apparel and footwear were 2.0% and 2.3% respectively. These goods are the most related to foreign trade and unless Spanish production of these goods is of a higher quality than in other European countries, the Spanish economy will suffer a loss of competitiveness in relation to Europe, which will translate to lower economic growth. The average annual rate in non-energy industrial goods is 0.8% in 2004 and increases to 1.1% in 2005 compared with the 2.0% observed in 2003.

*The differential
between annual
inflation for industrial
goods in Spain and
the EMU for the end
of 2004 is forecast at
more than one
percentage point
0.5%.*

In the euro zone, the annual MAN rate in August 2004 was 0.9%, higher than the 0.7% observed in July. Therefore, for this month, the annual inflation rate in non-energy industrial goods between Spain and the EMU maintains the difference of one percentage point observed in July. For the end of the year, we expect the annual inflation rate in manufactured goods in Spain to be three tenths higher than in the EMU.

Table II.4.3 shows a summary of the mean annual forecasts for the different components of core and residual inflation.

Table II.4.3 SPANISH AVERAGE RATES OF GROWTH							Forecasts	
	1998	1999	2000	2001	2002	2003	2004	2005
Residual Inflation	**0.4**	**2.8**	**6.7**	**3.7**	**2.6**	**3.6**	**4.7**	**3.0**
Fats	-11.1	15.0	-7.6	-7.3	15.2	3.5	**15.1**	**8.2**
Tobacco	7.9	4.3	2.5	4.9	7.4	3.8	**5.6**	**2.4**
Tourism	15.4	7.2	12.3	7.1	8.7	3.1	**1.6**	**6.1**
Non Processed Foods	2.1	1.2	4.2	8.7	5.8	6.0	**5.0**	**4.4**
Energy	-3.8	3.2	13.3	-1.0	-0.2	1.4	**4.5**	**1.7**
Core Inflation	**2.2**	**2.2**	**2.5**	**3.4**	**3.7**	**2.9**	**2.7**	**2.8**
BENE-X	1.6	1.5	1.9	3.1	2.6	2.3	**1.8**	**1.8**
Processed Food excluding fats and tobacco	1.4	0.8	1.4	4.1	3.1	2.8	**2.7**	**2.9**
Non-energy industrial goods	1.5	1.5	2.1	2.6	2.5	2.0	**0.8**	**1.1**
SERV-T	3.3	3.3	3.5	4.1	4.3	3.5	**3.7**	**4.0**
CPI Inflation	**1.8**	**2.3**	**3.4**	**3.6**	**3.1**	**3.0**	**3.0**	**2.8**

[*] More detailed information can be found in tables A6A and A6B in Appendix.

Source: INE, IFL & UC3M / Date: September 16/ 2004

Graph II.4.1

AVERAGE RATES OF GROWTH OF CPI INFLATION IN GOODS (BENE) AND IN SERVICES (SER) IN SPAIN
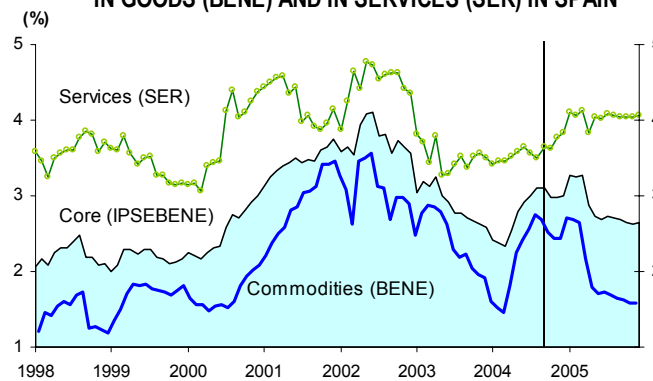
Source: INE, IFL & UC3M / Date: September 16 / 2004

The worrisome evolution of service prices leads to a greater inflation differential between industrial goods and services, 2.7 points in August 2004.

With regards to the **services** sector (SER)**,** it registered a monthly rate of inflation of 0.64% in August, higher than our forecast, 0.56%. Even so, the evolution of service prices is especially worrisome in most of the components, transport, restaurants, medicine, housing, teaching and household services, which show annual rates of around 4% or more, whereas the annual rate for universities is 5.05%. The inflation differential between the annual rates of non-energy industrial goods market and the services market, was 2.7 percentage points in August, greater than the 1.7 points observed this month for the EMU. Service prices in August registered an annual rate of 3.7%, which compares badly with the 2.6% observed in the euro zone. We expect the differential in Spain between the annual SER and MAN rates to remain above two percentage points in the remaining months of 2004 and the whole of 2005. Mean growth in service prices is forecast at 3.8% in 2004 and 4.1% in 2005, compared to the 3.7% observed in 2003.

*The mean annual rate of core inflation will be 2.7% in 2004 and 2.8% in 2005.*

With the aforementioned innovations in the goods and the services market, **core inflation** in August, calculated from the IPSEBENE index, was 2.9%. It is predicted that the average rate of growth of core inflation will be 2.7% in 2004, rising to 2.8% in 2005, compared to the 2.9% observed in 2003.

The evolution of total inflation in Spain will be marked in 2004 by the evolution of energy prices.

The prices which serve as a basis for calculating **residual inflation** (RES), have registered a downward innovation in non-processed food and an increase in energy, which performed worse than expected with a monthly rate of 1.8% instead of the 1.46% forecast.

The crude oil market has improved in the last month, so the forecast for annual rates for the final months of the year has fallen from our September 10 forecast. However, the forecast mean growth of energy prices remains at 4.5% for 2004, falling to 1.7% in 2005. As for the forecast for the mean annual rate of non-processed food, it is 5.0% in 2004 and 4.4% in 2005, after the 6.0% observed in 2003.

Graph II.4.2

ANNUAL RATES OF TOTAL AND CORE INFLATION IN SPAIN
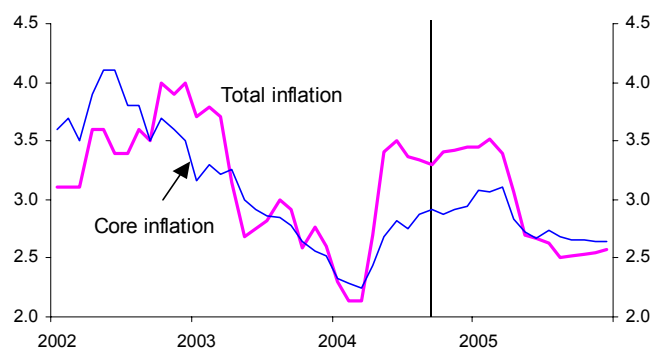
Source: INE, IFL & UC3M / Date: September 16, 2004

As a result, the forecast for **total inflation** for July 2004 is a monthly increase of 0.3% and annual growth of 3.3%, as observed in August. Monthly underlying inflation will be 0.2%, and core inflation will be 0.4%. The mean inflation rate within the overall CPI is forecast at 3.0% in 2004 and 2.8% in 2005, after the 3.0% observed in 2003. The mean rate of core inflation will be 2.7% in 2004 and 2.8% in 2005, after the 2.9% observed in 2003.

We forecast an acceleration in general inflation, reaching rates of over 3% for the rest of 2004. This is basically due to the heavy increase in energy prices, the annual rate of which is expected to reach its highest value in October, 8.4%, improving the forecast provided in the last bulletin. The expected mean price of Brent in euros for 2004 falls from the 30.82 € in August to this month's 30.37 € per barrel.

Table II.4.4 shows the average annual rates between 2000 and 2005 of the different sectors in the EMU and Spain, where the important differentials in industrial goods and services mentioned earlier can be observed.

Table II.4.4 HARMONIZED CPI ANNUAL GROWTH BY SECTORS IN THE EMU AND SPAIN		2000	2001	2002	2003	Forecasts	
						2004	2005
AE[(a)]	EMU	1.1	2.9	3.0	3.3	3.5	2.6
	SPAIN	0.9	3.4	4.3	3.0	3.6	3.1
MAN	EMU	0.4	0.9	1.5	0.8	0.8	0.8
	SPAIN	2.1	2.6	2.5	2.0	0.8	1.1
BENE	EMU	0.6	1.5	1.9	1.5	1.6	1.3
	SPAIN	1.7	2.9	3.1	2.4	2.2	2.0
SERV	EMU	1.5	2.5	3.1	2.6	2.6	2.6
	SPAIN	3.7	4.2	4.6	3.7	3.8	4.1
IPSEBENE	EMU	1.0	1.9	2.5	2.0	2.1	2.0
	SPAIN	2.5	3.4	3.7	2.9	2.7	2.8
ANE	EMU	1.7	7.0	3.1	2.2	0.7	1.5
	SPAIN	4.2	8.7	5.8	6.0	5.0	4.4
ENE	EMU	13.0	2.3	-0.6	3.0	4.1	1.6
	SPAIN	13.3	-1.0	-0.2	1.4	4.5	1.7
RESIDUAL	EMU	7.5	4.4	1.1	2.6	2.5	1.6
	SPAIN	2.5	3.5	2.6	3.6	4.7	3.0
HICP	EMU	2.1	2.3	2.3	2.1	2.1	1.9
CPI	SPAIN	3.4	3.6	3.1	3.0	3.0	2.8

(a) Including tobacco prices
Source: INE, EUROSTAT, IFL & UC3M / Date: September 16, 2004

THE CAPITALISM TO COME:

Juan Urrutia Elejalde
Professor of Economics

August 2004

PART III: FIRM, MARKET, STATE

II.0. Introduction

INTRODUCTION

Half way along the road we have taken to obtain an idea of the capitalism to come, this is a good time to take a look at our journey so far, and to get an idea of what we should expect in the second half. As you will remember, our objective is to study and analyse the impact that the knowledge society, the new information and communication technologies (ICTs) and globalisation are going to have on the basic institutions of capitalism. These institutions are clearly business, the market and the State, and this third part will concentrate on these three factors, leaving for the fourth and final part the macroeconomic implications that the changes we detect in them may have. But to approach this second half of our journey, we have had to prepare the analytical tools we are going to need.

In the first three chapters of the first part, we considered in some detail the impact on individual agents of the ICTs, tools that will make it impossible to distinguish an individual agent's function as a consumer, producer or intermediary. Without going in to a complete summary, remember that we expect homo post-economicus to be psychologically denser, rationally more complex and socially less individualistic.

Indeed, if we start by considering the individual agent as a consumer we realise that, although as such he will continue to be sovereign and make rational decisions, his individuality will dissolve as he belongs to groups and his rationality will not only be instrumental but also expressive, critical or communicative, making him much more sophisticated and affecting the way in which products are sold or what we could call consumption technology, or the way in which physical assets become identity-defining characteristics. What is possibly most interesting, however, is the panorama we are

starting to see in which individual agents can also operate as producers, both because ICTs enable us to produce and consume at the same time and because education and knowledge have become crucial inputs increasing the power of individual agents in detriment of the power of unions or even firms, playing down their role as they increase the importance of the self-employed. The image of production changes from the modern notion of a tree to the post-modern of a climbing plant or creeper, so that we thirdly see individuals or users as intermediaries helping to form and dismantle small personal networks which become firms generating a numerous population with a fast turnover. The information required to make the most of productive opportunities is available to practically everyone and clever users will become small investment bankers capable of acting as brokers, creating markets and even becoming producers themselves, as long as they are also capable of acquiring and keeping a product that is going to be scarce in the future: trust.

In the second part, we have continued to gather intellectual tools, no longer limited to individual agents but considering their social relationships. We have seen how private ownership of production means is crucial for incentives to work properly, with their absence bringing about the failure of all attempts at socialism, even market socialism, in spite of the fact that, due to the extension of ownership by means of patents or copyright, patronage or an examination of the consequences of growing returns, emphasis has turned towards access. This is new and interesting but ownership continues to be of crucial importance. We have also seen how many of the virtues generally associated to capitalism have to be reconsidered in relation not only to incentive problems but also to information problems and the lack of transaction costs associated to mutual trust. All this inevitably leads us to consider capitalism as a resource-allocating mechanism which is never fully designed and which shows a high degree of creativity in generating institutions attempting to respond to the difficulties and challenges arising from the many combinations of problems associated to information, transaction costs, incentives and mutual trust. In the previous chapter, we have prepared ourselves for this third part by examining different aspects of institutional creativity, particularly the scope with which institutions and the consequences of changes in this scope. In this respect, we saw how globalisation, with its problems of alienation and an enormous growth in the field of consumption, reacts with the proliferation of communities identified by a certain lifestyle often based on consumer or other behavioural habits. This not only has an impact on the sales strategy of private firms but also a significant impact on the provision of public goods in political communities containing different identity-based groups.

In the previous chapter that I have just briefly summarised, there are numerous references to the three basic institutions of capitalism we are going to consider here, with ownership having been examined as the fourth fundamental aspect. Although these results will be carefully discussed in each chapter, we can confirm that, due to the inexorable influence of the new technologies, the growing importance of knowledge, and globalisation, there will be a series of changes in these three institutions. First of all, the enormous volatility of the shareholders of trading firms –and also companies that do not trade on the stock exchange, through brokered operations– together with the establishment of quasi-individual businesses with new legal forms, will have an impact on demands for transparency and on good corporate governance standards or recommendations, including corporate social responsibility, replacing Stakeholder value as the only criterion for managerial success with a stakeholder society which will largely solve the problem of the provision of public goods in heterogeneous communities. We will see a panorama with a handful of large multinational corporations and a galaxy of small flexible and constantly changing businesses: the market will take over from the firm as an alternative way of allocating resources. Secondly, this institution, the market, will end up more like the creative destruction process of the Austrian tradition than the neoclassic concept in which the set of goods, and firms, is exogenous. This rather static concept –although there may be dynamic interpretations– favours the use of the idea of rational expectations and leads to a kind of social engineering. This, however, does not fit in with the Austrian tradition in which rational expectations are not contemplated and which trusts in a certain spontaneous order. The power of the ICTs will lead us to a situation in which uncertainty is radical and in which we can expect, in view of the possibilities

generated by globalisation and the enormous statistical knowledge available, to see sophisticated mutual assurance schemes which, paradoxically, will end up spontaneously implanting what engineering has not achieved, the "liberating security" that will replace the "stimulating insecurity" with which "Austrians" fustigate "neoclassics". Thirdly, the State. The capitalism to come will retain few of the roles traditionally reserved for the State. Its scope will diminish. The liberal idea of the minimum State, which should concentrate on macroeconomic management, security, education, healthcare and little more, will be by-passed in several directions. On the one hand, much of the management will be delegated to independent regulatory agencies with no political responsibility. On the other, the public sector will not attract much talent and, as a result of both these phenomena, it will have less capacity to reach firm commitments (a capacity that has always been questioned), so the minimum State will even further reduce its range of functions, running the risk of becoming nominally restricted to policies to support competition. These policies, however, will also lose legitimacy as different versions are reinforced of the idea of contestable markets promoted precisely by the ICTs. They will also question the size of the State in a territorial sense, and even the very idea of territoriality, fostering the proliferation of new networked political entities.

This provocative suggestion – which I will analyse in more detail later – ends this introduction to the third part of THE CAPITALISM TO COME, remembering that this anorexic State will possibly have to help spontaneity to manage macroeconomic scenarios, promote economic development and combat poverty or inequality and, in general, respond to some important issues with which the anti-globalisation is concerned. But these issues will have to wait for part four and the epilogue of this attempt to use current trends to discover the future.

CHAPTER III.1. THE FIRM

III.1.0. Introduction

III.1.1. The firm as a productive unit

III.1.1.A. The contour of the firm.
III.1.1.B. Incentive alignment.

III.1.2. Firm governance

III.1.2.A. Transparency
III.1.2.B. Value of the firm and the "Stakeholder Society"
III.1.2.C. Closing remarks

Summary

SUMMARY

With this chapter we have reached the centre of the CAPITALISM TO COME. In the first two parts we profiled different analytical tools which, at the same time, helped us to explore the crucial, but debated, role of private ownership in the presence of globalisation, the growing importance of knowledge as a production factor and the emergence of the new information and communication technologies. We have now arrived at our equator. Starting with the firm, in this chapter, I will examine, in the following chapters, the market and the State, the three basic institutions of capitalism. I will attempt to discover how the recent phenomena I have just mentioned influence the changes predicted in each of these institutions.

The firm is both a productive unit and an asset in which to materialise savings from family economies, and both aspects have been examined in this chapter III.1. We started by focusing our attention on the first aspect in order to answer questions relating to the contour and size of the firm, and the distribution of its population, by size. An intuitive argument used earlier has led us to understand how the contour of the firm becomes diffuse as the distinction between its inner and outer self becomes uncertain: the customers, in a newspaper or university, can collaborate in the production of those firms. On the other hand, we have identified a crucial tension. The consideration of transaction costs on the market, associated to the absence of mutual trust, makes plausible the observation that the market is winning the race against the firm. But, if we consider that, in the New Economy or Digital Economy, there are evident increasing returns associated to the network effect (reinforced by the ICTs) or the digital nature of knowledge-intensive products, we detect the opposite trend; in other words, the tendency to form large productive units. As a result of these two contrary trends, we can expect a highly polarised population of firms. Next to a small and quite stable group of large multinational corporations sailing with the winds of globalisation, we will find a very large group of small national or regional firms with a high turnover rate; but overall this group is a safeguard against abuse of power by the large corporations.

Although the contour of each of the firms is becoming diffuse, it is clear that they continue to be single units held together by authority, monetary incentives and rules of conduct that we can describe as cultural and which make up the firm's identity above and beyond its precise organisational format. This identity is not unchanging, however, and it varies with the use of ICTs, and these changes are faster the less it costs to vary the rules of conduct. This is small firms have a greater turnover.

In any event, although the market is growing at the cost of the firm, it is difficult to imagine the existence of a real correlate to what is called complete market structure. Consequently we are forced to question the objective of the firm, regardless of the

aspects related to its "cultural" concept. Indeed, when the market structure is incomplete, the objective of a firm may not be to maximise its stock market value, a notion which, in these conditions, may not be the same as the maximisation of profits. In this respect, we have remembered how to define a target function aligning the incentives of the different objectives, which would not be easy to optimise in practice although the widespread use of ICTs opens one possibility by providing knowledge of the subjective valuations included in that target function. This more or less technical problem has led us directly to what is called corporate governance and which, in turn, can be divided into two. On the one hand, the problems associated to transparency, which are less obvious than they may appear and, on the other, the problem associated to the difference between shareholder value as the ultimate business management criterion and the possibility of that management criterion helping to implant what is called the stakeholder society.

With regards to the problem of transparency, so important since the corporate scandals of the turn of the century, it is clear that the ICTs can and should help to provide more information about a firm's financial status, but accounting has it limits and creativity, capable of generating such wealth, will not hesitate in view of demands and recommendations one step behind practice, especially when there are some cases or situations, not surprising for those familiar with Information Economics, in which more transparency may not be advisable.

The chapter should have made it quite clear that, in relation to the choice between shareholder value and stakeholder society, the tendency appears to be in favour of the latter, as shown by insistence on Corporate Social responsibility, particularly when the firm sub-contracts out, as occurs in a globalised world, to third world firms. Maximisation of company value, leaving this technical problem aside, could be a subsidiary optimum in social terms of the context of popular capitalism; but the stakeholder society is an abstract notion occupying centre stage in the economist's imagination because it solves many inefficacy problems. The most original conclusion of this chapter is that the beneficial effects of taking stakeholders into account may be obtained by dual corporate governance in which a surveillance committee attempts to balance all the interests involved; but above all with the development of new markets on which stakeholders' rights can be contracted. And this will be possible when the ICTs develop and enable the creation of new markets.

III.1.0 INTRODUCTION

I can find no better introduction to the subject of this chapter and the main issued to be considered than the following text by Simoni. Referring to the ubiquity of organisations, he says: "A mythical visitor from Mars, not having been apprised of the centrality of markets and contracts, might find the new institutional economics rather astonishing. Suppose that it… approaches the Earth from space, equipped with a telescope that reveals social structures. The firms reveal themselves, say, as solid green areas with faint interior contours marking out divisions and departments. Market transactions show as red lines connecting firms, forming a network in the spaces between them. Within firms (and perhaps even between them) the approaching visitor also sees pale blue lines, the lines of authority connecting bosses with various levels of workers. As our visitor looked more carefully at the scene beneath, it might see one of the green masses divide, as a firm divested itself of one of its divisions. Or it might see one green object gobble up another…."
"No matter whether our visitor approached the United States or the Soviet Union, urban China or the European Community, the greater part of the space below it would be within the green areas, for almost all of the inhabitants would be employees, hence inside the firm boundaries. Organisations would be the dominant feature of the landscape. A message sent back home, describing the scene, would speak of "large green areas interconnected by red lines". It would not likely speak of "a network of red lines connecting green spots."

In view of this, Simon questions whether the observed structured should not cease to be called a market economy and take on the name of organizational economy. And he adds something that I believe is important and may guide us in our research: "The

choice of name may matter a great deal. The name can affect the order in which we describe its (the structure's) institutions, and the order of description can affect the theory. In particular, it may strongly affect our choice of the variables that are important enough to be included in a first-order theory of the phenomena."

According to the impression of the visitor from outer space, it seems clear that the order we follow should be as indicated in the Introduction to this third part of THE CAPITALISM TO COME, and so it will, because we will start y considering the green areas, in other words the firm. And we can also advance the principal questions. Simplifying Simon slightlyii, I believe that there are two pertinent questions. The first refers to understanding how, to what degree and under what conditions or principles is the production of an economic system organised, either in a firm or through market transactions. It is the problem of the contour, or scope, of the firm, and it should tell us why some productive activities take place inside the organisation and why others are outsourced. The second pertinent question refers to how the different components in the internal organisation of what we call firm are aligned to achieve, or at least aim at achieving, a common objective, and to how to discover what this objective may be. However, I would like to aim a little higher to position these two pertinent questions in what we would call the firm as a productive unit, the subject of the first section in this chapter, and to add a further question related to capitalism proper: the firm as an asset in which to materialise savings. This is the subject of the second section in which we will be considering current issues such as corporate social responsibility or good business governance and its supposedly associated transparency. Both these aspects can influence the trading performance of a firm which does not only depend on its capacity to produce well.

The analytical tools that we have gathered in the previous two parts will make it easier to understand and describe what Simon calls organisational economy. We have alternative views of production, we are aware that the business population is not static and that its distribution by size may vary, we know about the incentive and information revolution – which may affect our answers to these pertinent questions – and about the transaction costs associated to (a lack of) mutual trust, and we are familiar with the problem of the emergence of rules of thumb and how they depend on the environment concerned. We are equipped, then, to tackle our primary objective, which is to put forward an informed opinion on the future of the firm in the capitalism arising from globalisation, from knowledge as a fundamental input and from the massive presence of the new technologies. We will see how the productive unit changes its appearance and internal organisation following a significant change in authority, loyalty, identity and other similar concepts and how popular capitalism will gradually adapt to new rules of thumb and calmly withstanding what are merely hasty reactions to recent events – corporate social responsibility and the interest in suggesting, and even legislating, codes of good governance – which will end up leading to more profound and less extemporaneous changes.

Although this chapter does not intent to review different theories on the firm, but take a look at its possible forms and rules of thumb in the future, it is convenient to have an overall idea of the different theories available, since they will all be used in our prospective study. At the cost of precision, we could divide these theories into two major classes: the neoclassic theories and neo-institutions. The former do not aim at a detailed analysis of the insides of the organisation; they prefer to see it as a black box in which inputs go in and outputs go out in a technologically precise manner. If there is technological progress it is because the black box has been changed; but we do not know how the change has come about, or by who it has been made, and the technological description is summarised in a few concepts in the form of decreasing, constant or increasing returns. Since this notion of firm only aims at being part of the formulation of a "market economy", its description as an organisation is practically nonexistent. We do not know how creates it and why, and neither do we have clear ideas about the characteristics of its population, how its number and size is determined and the reasons for its turnover.

If we are to begin to answer some of these questions, we have to change our

point of view and consider the firm as such an organisation. We can do this from a tradition that we could continue to call neoclassic, but renovated, moving on to the neo-institutionalist tradition. The renovated neoclassic response to the question of what the firm is focuses on contract theory, with the firm being no more than the bundle of contracts regulating the obligations of each of its components and specifying the structure of its ownership, identifying where authority lies when contingencies not foreseen in the necessarily incomplete contracts ariseiii. Neither does this contractual notion of the firm respond to all the questions arising with reference to the firm as an organisation.

To come closer to the answers we are seeking, we have to move to neo-institutionalist tradition, attempting to understand the information and incentive characteristics leading to these special organisations, the internal behaviour of which may vary over time and which eventually closeiv. The presentation of fraternity provided in the last chapter of the previous part gives an good idea of this neo-institutional perspective of the firm. This form would be at the heart of what Simon would call the organisational economy, and it would appeal to the "Coasian" notion of transaction costs and, forgive me for my lack of precision, would include many of the Austrian notions which, like the Schumpeterian notion of entrepreneur, would place the emphasis on information and incentives.

I make no attempt to define or compare these notions. I intend what parts of them I can to achieve my prospective objective.

III.1.1. THE FIRM AS A PRODUCTIVE UNIT

In the famous economic circle of any introductory text, firms use hand labour provided by family economies, buy other inputs manufactured by other firms on the market and produce outputs that they in turn sell on the corresponding markets. Firms are, then, productive units: nothing is produced outside them. We saw earlier that ICTs enable a certain unification of productive and consumption activity, but this is not our concern here; we are interested in observing trends in the productive activity of firms. In the first section, I will attempt to imagine what will be the scope of the productive firm, its delimitation, size, etc., and in the second that incentive alignment is very difficult in such a unit. Both these things together suggest that an enormous effervescence in the business sector will characterise the capitalism of the immediate future.

II.1.1.1.A. The contour of the firm

On what does the relative size of the organisational economy and the market economy depend? Expressed in the terms of Simon's metaphor that we included in the introduction to this chapter, we are asking about the relative size of the green and red areas. Simon said that, in terms of employment, the green areas were much larger, and that was why he referred to organisational economy. But this relative size can be different if we look not at employment but at, for example, added value, and the relative size may not be constant. Both questions can be answered at the same time according to the ideas contained in Coase's famous article about the firmv. Simplifying his description a little, we could say that the relative size between the firm and the market, together with its evolution, simply depends on transaction costs, defined as the actual resources required to establish all the institutions required to mitigate the lack of trust and enable market trading. The conclusion of this section will be that the three new aspects of the capitalism to come will interact in such a way that the contour of what a firm is will become diffuse, the relative size of the market will increase and the distribution of the size of firms will be a handful of relatively stable large multinational corporations and a myriad of short-lived small firms.

Although it may seem extraordinary, the idea of production is not homogeneous in economic thinking. A little genealogy will help us to define what we wish to say when we refer to firms as productive units. The classical concept of productive activity (without restricting it to the unit called the firm) could now be described as a multisectorial model. It is an input/output matrix specifying what each productive activity requires from others,

products and labour, to manufacture a unit of whatever it produces. It is a fixed coefficient model (and consequently establishes constant scale returns) which can be complemented with the inclusion of joint production – when each activity manufactures more than one product – and alternative technologies – when each product can be manufactured by several different activities-. It is not only interesting that this model sustains a work-value theory, which it does, but that there is little room for technological substitution and that scale returns are constant. If we establish fixed relative prices of products other than labour, we can reduce the model to one with a single product (which can be understood both as output and as the capital input combined with the labour input to produce it), which works according to a technology that admits technological process, the scale returns of which may be increasing, constant or decreasing. If we now wish to introduce production into a general equilibrium model, the previous model is disaggregated, production factors are substitutable, joint production is admitted and scale returns must be falling (or constant) to permit standard existence tests.

I will concentrate on this last way of understanding the firm as a productive unit and now attempt to suggest how the contour of the firm becomes diffuse. This idea was indeed implicit in what in chapter I.2 I referred to as the postmodern concept of production. Briefly returning to what I then said, I will first consider the traditional way of imagining production, using the diagram I am including below, and remembering that it can be interpreted as a river basin in the form of a tree lying on its side.
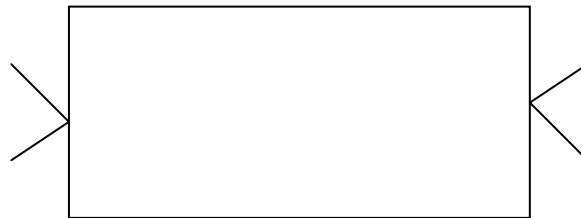
The inputs enter the closed box at one end of the assembly line and the output leaves the box at the other end after being assembled by workers who always perform the same job in the same place. This would represent the production of products such as planes, pipes or cars, and it clearly distinguishes between the producer (the owner of the box) and the consumer/worker. But the image is very different when we consider the productive activity of a university or a newspaper.
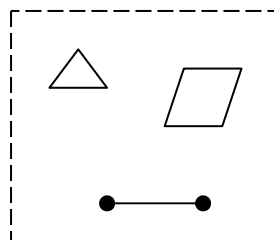
Workers do not always do the same job, but they make up different groups performing specific tasks. The box is not hermetically sealed but has room for varied external collaborations by means of often informal contracts between the firm and,

possibly, consumers themselves. In a university, students do not realise that they also teach their colleagues, and the readers of a newspaper are increasingly external writers.

A comparison of the two diagrams is sufficient to accept that the contour of the firm becomes diffuse in the production of goods such as newspapers or university graduated by publishers or universities. Since production in the knowledge society, in terms of added value, is increasingly more like a newspaper than an assembly line, we can conclude that the contour of the firm is becoming diffuse.

A comparison of the two diagrams also suggests that the market is growing at the cost of the organisation. In a newspaper or a university many activities can be outsourced, and they in fact are, and what previously occurred inside the closed box now occurs on the market. This observed situation arises because the transaction costs required to support mutual trust have decreased and this is because the information and communication technologies weave a large number of overlapping networks, each of them based on an identity-oriented community sustaining mutual trust, producing multi-membership making mutual trust widespread.

However, with regards to this effect derived from lower transaction costs, we also find what is possible the opposite effect – increasing size of firms – which is derived from the increasing returns which, in view of falling mean costs, generate a tendency to monopolise the market, creating an even larger firm. It is evident that globalisation permits a greater deployment of increasing returns; but what is interesting is possibly to understand, according to many ideas described in the two first parts of this book, that increasing returns become brutal as soon as we refer to the Digital Economy as a specific version of the new economy. The network effect typical of the New Economy, which in itself generates increasing returns on the demand side (the more users there are of a certain product – telephone – the better for me), is nothing compared to the increasing returns generated in the production of digital goodsvi. Producing software or music requires a heavy initial investment; but once a prototype has been produced, exact copies are essentially free.

On the one hand, we can see that there is a tendency to enlarge the market at the cost of firms; but on the other, there is also a tendency for firms to grow. It is not difficult to imagine a future in which the second tendency leads to the development of giant multinational corporations producing digital or digitisable products, which will experience limited turnover, whereas the first will lead to a large number of small satellite firms around each large corporation. This population of small companies will experience a very high turnover and, as we will explain in the next chapter, it will be essential to maintain a competitive performance in the large firms.

III.1.1.B Incentive alignment

In the previous section, I have identified transaction costs with a view to understanding the relative size of the business sector and the market, as the cost of acquiring mutual trust for market operations. But since the transaction cost is a relative cost, we could also consider the internal cost of maintaining the organisation that we call the form in one piece and united. Although we have seen what occurs with the contour and size of companies, we still have to understand what keeps a firm united and how this unit, initially composed of people with different interests, works. I will end this section by referring to the separation between ownership and control typical of popular capitalism and its consequences, including the problem of good governance. But I will first consider less formal issues such as business culture, strategy and control, attempting to explain that, in the capitalism to come, business culture is a transient value and that traditional strategy and control become impossible.

Let us leave on one side the problem of the separation between ownership and control to start with, and question how a set of individuals comprise a productive technology and reach a consensus to proceed efficiently in spite of their different

interests. Even if we assume that none of them are very fond of working, some of them will prefer a good salary to high profits and others will prefer the opposite. The problem is how to solve the many conflicts of this kind arising in all organisations. Simon, in the article from which I have quoted profusely in the introduction, mentions, in a neoinstitutional tone, four mechanisms used for this purpose: authority, compensations, identification and coordination. With regards to authority we only have to remember the argument we used when we insinuated the eventual convenience of privatising science in chapter II.1, to understand that it is an efficient institutional characteristic. In fact, since the bundle of contracts comprising the firm is always incomplete, it is good to decide who is the boss in situations not contemplated in these contracts. If authority is given to the investor, we will have greater investment and a similar advantage is derived from giving authority to whoever invests the most when there is more than one investor. As for economic compensation as an institutional mechanism, it is evident that such a mechanism cannot be absent from an organisation; but it should likewise be evident that it is not enough, and could also be an additional source of conflict, because it is no easy task to attribute the product of his/her individual efforts to each member of the productive team. A good business operation therefore demands what we could call a culture, something which, in Simon's terms, would provide identification and coordination. At this point we can make use of the tools we have prepared to provide a rapid explanation and diagnosis. Culture is understood as the set of rules of thumb configuring evolutionary equilibrium according to the explanation provided in the previous chapter. As you will remember, these equilibrium patterns arise precisely from the response to external patterns in a dynamic game of coordination: coordination is part of a business culture and it could be considered as the "language" of the organisation concerned. These rules of thumb identify this specific organisation as different from others, so its members can be identified with the culture they represent. These notions belong to a rationality that is not instrumental, which in the first chapter we identified as expressive or communicate rationality. In as much as we identify rationality only as expressive, and identity as one's own culture, we can affirm that a certain amount of irrationality is required to keep a company united and that the identify of which the firm is so proud is, as we saw earlier, something variable which changes all the faster as the ICTs increasingly help to reduce the costs of betraying an organisation's rules of thumb. In view of all this, it is not difficult to conclude that, as we saw before, we have no other option that to see a future in which small firms are continuously created and closed, simply because the rules of thumb aligning the different incentives of different agents are highly volatile[vii].

Let us now consider such a firm and ask how the new technologies will influence its strategy and management. As I have said elsewhere[viii], the typical strategies in sectors with increasing returns, such as taking up a position or establishing a standard (in other words, competing for the market, and not on the market), are not possible in a world in which the network effect is in place and/or the products are digital. In these sectors, all positions are unbeatable and all standards are reversible, precisely because of the possibility of establishing enormous networks and reproducing digital products. The example of the battle between Microsoft and Linux is paradigmatic in this respect. On the other hand, it also seems evident that in a digital world, ensuring customer loyalty is a vain hope however focused management it. Although these are serious problems, there is another, more profound, and more clearly related to incentive alignment. Indeed, in the world of the future it is more than likely that the objective of a firm will not necessarily be to maximise its profits or value. To end this section, I will briefly present two cases in which it appears that either profits are not maximised or this is not the correct criterion.

In rapidly evolving sectors, maximisation of profits would appear to involve the secrecy of innovations in order to obtain complete control over their monopoly. However, in free software movements, for instance, we observe cooperation which is apparently incompatible with this. Elsewhere[ix], I have attempted to explain that this is typical of the pioneer system: as long as there is room for colonisation, we collaborate so that we can all make the most of future opportunities. When colonisation is over, we will cease to cooperate and start to compete for whatever is available[x].

Let us now consider another case in some detail, particularly relevant for popular

capitalism, in which it is not clear what the firm's objective should be. We therefore have to consider that, in spite of the proliferation of markets in the future, we do not have a complete market structure. We will see that, in these conditions, the firm's target function is not obvious nor its immediate optimisation. Secondly, if we momentarily return our attention to the impressionist picture painted by Simon in his introductory quotes, we will notice that we have progressed in our knowledge about the foreseeable future of its green areas and gentle blue contours. In the next chapter, we will attempt to understand the red lines connecting green areas together and connecting the latter and individual agents, although, considering our approach to this chapter, we have not been able to consider the firm as an institution in which resources are allocated without simultaneously mentioning the market as an institution competing for this task. In this last point of this chapter, however, we will pay attention to an aspect of resource allocation that is not contemplated in Simon's impressionist approach. The individual agents from the first part, this new mixture of consumers, producers and intermediaries, do not consume all their income on the product markets suggested by the red lines, but part is saved, and this part will be materialised either in durable consumer goods (which move along the red lines) or in financial assets, the most elementary of which represent shares in or loans to companies which are traded on specialist markets with universal access: one firm may own another and an individual agent may hold shares in both. The widespread use of financial markets, fostered by the appearance of other derived assets which mitigate the risks taken and by the emergence of specialist intermediaries, has led to what is called popular capitalism which, briefly, means that the ownership of the production means that define capitalism has become more widespread. This popular capitalism has implications of interest for predicting the future[xi]. The most immediately is clearly the need to reconsider the effects of the separation between ownership and control, because with atomised capital there is no relevant owner and power effectively lies with executive management. This gives rise to the problem of determining what should be the true objective of the firm, forcing us to distinguish between stock market value and profits. We are so used to taking as given that the objective of the firm is to maximise profits, that we find it shocking to question this, not for reasons of corporate social responsibility or other socio-political issues, but simply because profit is not the obviously appropriate criterion for a corporation trading on the stock market, and it is not clear either than maximising profits is the same as maximising the value of the firm. Indeed, there is no criterion on which all shareholders will unanimously agree.

For a correct understanding of these subtleties, I will start by describing an economy which is different from an economy without standard production in general equilibrium in that the market structure is incomplete in a specific sense explaining the role of financial assets. I will now introduce production in order to be able to interpret financial assets as shares issued by firms. And in this context I will finally explore the problem of the target function of the firm, an institution considered here in its strictly neoclassic sense, regardless of internal organisational problems or the difficulty of aligning incentives to which we have referred earlier, but which includes the crucial factor of the existence of discrepancies between the shareholders. It is precisely the emergence of possible discrepancies that will lead us to the problem of good governance that we will be considering in the next section of this chapter.

Following a previous paper[xii], I will start by describing a toy economy that will serve as an example. Assume an economy in which there is only one consumer good (that we will call wheat), to consumers indexed by i, i=1,2, two dates indexed by t, t=0,1 (today and tomorrow) and two states of nature (sunshine and rain) which may prevail tomorrow, indexed by s = s=1,2. We can rename these goods as (1) wheat today, (2) wheat tomorrow if the sun shines, and (3) wheat tomorrow if it rains. Since wheat is "perfectly" divisible, we can say that the consumption space is given by the entire positive orthant of the three-dimensional Euclidean space, R_+^3 [xiii]. In this space, we can define the initial allocation vector and the consumption vector of an individual agent i:

$$W^i = (W_1^i, W_2^i, W_3^i) \equiv \left[W^{i0}, (W^{is}), s = 1, 2 \right]$$

$$X^i = (X_1^i, X_2^i, X_3^i) \equiv \left[X^{i0}, (X^{is}), s = 1, 2 \right]$$

Let us now examine the preferences of the individual agents who are here only acting as consumers. We assume that these preferences can be represented by an additive utility function as follows: $U^i(X^i) = X^{i0} + U^i(X^{is})$. Since we also assume compliance with the axioms of von Newman and Morgenstern, this utility function has the property of ordering consumption alternatives according to their expected value; in other words, I can define:

$$U^i = \left(X^{i0}, X^{is} \right) = \sum_{s=1}^{2} \Pi^{is} U^i \left(X^i \right) = X^{i0} + \sum_{s=1}^{2} U^i \left(X^{is} \right)$$

where Π^{is} is the probability that individual i attributes to the eventuality of the state of nature (rain or sunshine) occurring tomorrow.

We will now attempt to introduce two concomitant ideas, that the market structure is incomplete and that, to mitigate the effects of this, there are financial assets that we cannot yet identify with shares or obligations. Assume that today, t = 0, there are no contingent markets for the goods we have called either good 2 or good 3; in other words, that there are only spot markets. Since wheat cannot be stored, this means that there is no way in which to transfer purchasing power over time or between states of nature on contingent wheat markets. Imagine, however, that there are two financial assets, indexed by f = 1,2, which can be traded today and generate dividends tomorrow according to the following matrix:

$$A = \left[a_s^f \right] = \begin{bmatrix} a_1^1 & a_2^1 \\ a_1^2 & a_2^2 \end{bmatrix}$$

where a_s^f is the dividend, in the form of wheat, that the holder of one unit of financial asset f will receive tomorrow in state s. Each individual i can use his today's income to buy a portfolio of assets, $Z^i = \left[Z^{if} \right] = \left[Z^{i1}, Z^{i2} \right]$ where Z^{if} is the quantity of asset f purchased $\left(z^{if} > 0 \right)$ or sold $\left(z^{if} < 0 \right)$ by individual i. This individual thus has a contingent income that he will receive tomorrow in state s, $R^{is} = \sum_{f=1}^{2} z^{if} a_s^f$,

and that he can add to his initial allocation W^{is}. As we can see, the presence of financial assets enables the transfer of purchasing power over time (from today to tomorrow, lending today, and from tomorrow to today, borrowing today) and between states of nature, thus covering the risk of rain (or sunshine). What is interesting about this construction is that we notice that the lack of contingent markets will only be fully mitigated when there are as many independent financial assets as states of nature. In our example, this is the case if the range of matrix A is complete; in order words r(A) = 2. If the dividends from one of the assets are no more than a linear combination of those of the other asset (for example if double is always paid), we find that r(A) = 1 < 2 and that, consequently, the absence of markets has only been partly mitigated.

It is very easy to describe how this toy economy works. Today, individual agents, based on their preferences, initial allocations, price expectations, pes , s = 1 , 2 , decide on their wheat consumption today and their portfolio of assets, generating a price of wheat today, p0, and a price vector for assets q = (q1 , q2) Tomorrow, after observing s, consumers, based on their preferences, initial allocations W^{is} and additional income R^{is}, decide on their wheat consumption generating prices which must be those expected, according to the simplest version of the hypothesis of rational expectations. This suggests a notion of natural equilibrium in which expectations are fulfilled, existing wheat and financial asset markets are emptied and each individual maximises his utility

function subject to the budgetary constraints derived from the possibilities of transferring purchasing powerxiv. It is now time to introduce production into our example, so that the financial assets will have a real correlate and we consider the problem of what should be the maximising criterion of a firm when the market structure is incomplete and when, consequently, we find a financial system and stock market allocating a value to each firm. This is the turn into the road that will lead us to consider shareholders and problems of business governance.

Consider two firms indexed by j = 1,2. The technology of the firm j is given by its production function $f^i\left(y^{i0}, y^{is}\right) = 0$ where $y^{i0}(<0)$ is the negative of the quantity of wheat used as input at t = 0 and $y^{is}(>0)$ is the quantity of wheat produced and sold at t = 1 when the state of nature is s. These firms are owned by individual agents. Assume that the firm's stock capital is represented by a share with a stock market value of V^j. At t = 0, we use θ_0^{ij} to represent the share of agent i in the capital of firm j. We have now introduced production into the toy economy we are describing. To keep the example simple, we will simplify the preferences of the individual agents assuming that they do not appreciate wheat at t = 0 and that $\Pi^{is} = \Pi^s$ for all i. The utility function of von Newman and Morgensten thus becomes

$$U^i = \sum_{s=1}^{2} \Pi^s \, U^i\left(X^{is}\right)$$

Let us now consider how this economy works with a view to the notion of equilibrium to be used. At t = 0, each firm decided how much input, y^{j0}, to buy and issues B^j shares to finance it. Since wheat is numeral, we can say that each share promises to pay tomorrow (1 + r) units of wheat, r > 0, whatever the state of nature. If we assume that there is no bankruptcy, the shares of one company or the other are perfect substitutes and, in equilibrium, we should have:

$$\sum_{j=1}^{2} B^j = -\sum_{j=1}^{2} y^{j0} = \sum_{i=1}^{2} W^{i0} = \sum_{i=1}^{2} b^i$$

, where b^i is the quantity of shares (all the same) bought by i. This individual agent i goes at t = 0 to the stock exchange where he positions himself by acquiring the portfolio θ^{ij}, j = 1,2, a portfolio that will tomorrow provide him with dividends that he today expects to be:

$$\sum_{j=1}^{2} \theta^{ij} \left[p^{es} \, y^{is} - (1+r) B^j \right]$$

where the expression between square brackets is the net profit of firm j at t = 1. Thus, V^j is generated as the value of a share reflecting the expected profits. Therefore today, t = 0, each individual agent, based on his beliefs, $\Pi^{is} = \Pi^s$, his initial allocations, W^{is}, and his price expectations, p^{s0}, decides on his consumption plan X^{is} and his portfolio $\left(b^i, \theta^{ij}\right)$ and each producer decides on his production plan (y^{j0}, y^{is}) according to the same price expectations and his production function f^j. Tomorrow, t = 1, once s is known, the firms put their production plans into practice and the consumers, once they have collected the dividends and the company loan has been returned, put their consumption plan into practice establishing prices ps which, due to

rational expectations, must be the same as p^{es}. Equilibrium is now more difficult to define. I will begin by explaining the consumer's part, emphasising that his specific behaviour depends on the behaviour of the firms, so in a second more complicated stage, I will attempt to show how we can imagine a target function for a firm which fits into the nature of the economy we are describing and involves both decisions and obligations.

Beginning with the behaviour of consumer i, it is easy to accept that, based on the hypothesis of rational expectations, the problem of this consumer i consists of choosing a consumption vector Xis and a portfolio $\left(b^i, \theta^{ij}\right)$ from his initial allocations (W^i, θ_0^{ij}) so that they are the solution for the following problem:

(1) $\qquad \max \sum_{s=1}^{2} \Pi^s U^i (X^{is})$

s.a.

(2) $\qquad \sum_{j=1}^{2} \theta^{ij} v^j + b^i = w^{i0} = \sum_{j=1}^{2} \theta^{if} v^j$

(3) $\qquad p^s X^{is} = b^i (1+r) + \sum_{j=1}^{2} \theta^{ij} \left[p^s y^{js} + (1+r) y^{j0} \right] + p^s W^{is}, s = 1,2$

This problem can be solved for each production plan, but we have to know how each firm j decided on its production plan. The difficulty lies in the fact that, since the firms belong to the individual agents who consumer and have initial allocations of wheat, and since the market structure is not necessarily complete because there may be more states of nature than independent assets, maximisation of net profits is not necessarily the same as the maximisation of the firm's stock market value, and neither does this criterion have to be unanimously accepted by all the shareholders. Consider, for example, that maximisation of profits could require the massive production of low-price wheat if the sun shines and that there is a minority shareholders with an enormous allocation of wheat in that state of nature. This shareholder may be interested in adopting a production plan with little wheat when the sun shines because, in this case, the higher price generated may provide him with more income. If this shareholder sells his share, we see that maximising profit is not the same thing as maximising stock market value. We would therefore have to obtain a target function which is unanimously admitted by the shareholders. In the next chapter, we will describe the analytical process required to derive this target function, but what is important here is to emphasise that such a target function exists and is as follows for firm j:

(•) $\sum_{i=A^j} \theta_0^{ij} \left[q^{is} \left[p^s y^{is} + (1+r) y^{j0} \right] \right]$

Where qis is the subjective evaluation made by agent i of a unit of wheat tomorrow if s occurs in terms of wheat today and where Aj is the set of shareholders in firm j. This expression represents, therefore, a weighted mean for the participation of the personalised evaluation that each shareholder makes today of future net profits.

This completes our discussion of the difficulties associated to incentive alignment in the firm. We will now go on to consider the problems it causes for good corporate governance.

III.1.2. CORPORATE GOVERNANCE

A similar way of interpreting the result we have described in the previous section is to say that the administrators of a corporation should represent the different shareholders in proportion to the number of shares they hold. This arises from two problems which are either difficult or impossible to solve: the physical impossibility of obtaining each shareholder's vote and the impossibility, not so much physical as incentive-related, of giving specific weight to each of these votes according to their subjective evaluation of the proposed technological change. But we do not only have to think of ways in which to distribute the power of administration between different types of shareholder; we also have to elucidate the best method to ensure that the owners-shareholders do not fall into the hands of the executives with effective control and business management in general, and question the sense in which business administrators are responsible before society as a whole, not only their shareholders. This last section will attempt to discuss these issues. Business governance has concerned economists since, seventy years ago[xv], they detected the problems arising from the separation between a firm's ownership and its control which, in major corporations, is in the hand of executives who thus have the opportunity and temptation to work in a thousand different ways. It is a typical agency relationship problem between a principal (the shareholder) and an agent (the executive) the relevant characteristics and specific activities of whom are often unknown to the principal and difficult to discover. How can the executive's incentives be aligned with those of the investor? This is a problem which leads us to a concept of the firm that is different from the neoclassic idea we returned to in the previous section, more related with the likewise aforementioned approach conceiving the firm as a bundle of problematic and fragile contracts which can be destroyed at any time.

One of these times occurred at the change of the century, not because of the new millennium but because it coincided with the end of the period of "irrational exuberance"[xvi] that was incubated precisely from expectations that many classified as unfounded related to the New Economy. Indeed, a long list of North American firms, largely related to this New Economy, and including Enron, Xerox, Tycho, Worldcom and a few others, fell into a wide range of accounting temptations (fraud, minor repair work, questionable expenses related to stock options, etc.) which led to the immediate dismissal of the people responsible, widespread suspicion concerning board ethics, complete scepticism in relation to the technical capabilities of analysts, an accusation of conniving auditors and the ultimate confirmation of the danger of conflicts of interest in investment banks. And all this took place in the birthplace of capitalism, the United States of America, where the subsequent stock market crash spread world-wide and from which disaster the economy has not yet recovered because of different circumstances.

In the next two sections, we will respectively and critically study the demand for transparency that followed these scandals and the relativisation of the value of the firm as a criterion of reference.

III.1.2.A Transparency

One of the main problems associated to the corporate crisis at the turn of the century is the questionable ethics of Boards of Directors that fail to comply with what would appear to be their minimum responsibility to the shareholders they represent; in other words, with their obligation to accurately inform them of the different aspects of the firm's operations. The demand for transparency has increased, to a large extent because it appears that with ICTs there is no real difficulty to disseminate the appropriate information, and this demand is evidently not limited to the business community. We are bound to consider transparency, then, with the greatest of care, from its more general aspects to an examination of those aspects which could question its pertinence.

I will begin in general terms, attempting to relativise the importance of transparency without being too specific. Indeed, when we refer to a transparent individual, we are referring to someone simple, without second intentions, in which his inner self (his not very complex psychological structure) is not distinguished from his outer self (his easy to predict actions). We would not like to be considered transparent

because we would feel useless; but curiously, when we refer to a human group (a nation or firm, for instance), transparency in decision-making or any other relevant issue for the group, is not a synonym of simplicity but something useful. On the contrary, it appears that lately, unlike the case of an individual for whom his internal structure forms part of his privacy, however simple it may be, in the case of human groups we would prefer there to be no separation between what is private and what is public, between what is internal and what is external. I hope that an examination of this semantic significance of "transparency" will provide us with interesting perspectives with which to understand popular capitalism.

To begin with, the emphasis on transparency in collective fields forms part of the postmodern sensitivity to which we have referred earlier[xvii]. In modernity, the interrelated activities of individuals in society is contained by the State (like a super-ego) as an external shell preventing disorder, and the individual psychological structure is, in turn, ordered by its super-ego (like the State) which mitigates the collision between contradictory pulses and can also be seen as an outer shell preventing chaos. In post-modernity, however, neither the State nor the super-ego are acceptable controllers of life; where there were shells we want to develop bone structures to contain overspill and at the same time avoid external authoritarianism. Inside ourselves, we reach compromises between our contradictory wishes and establish simple rules of conduct, and externally, we establish institutions which condition our choices and activities and they are admitted by us all as long as other more useful ones do not arise. This replacement of the shell by the skeleton is merely a metaphor indicating that we have overcome the separation between the inner and outer self, perfectly understandable when there is a shell separating the two areas, but hardly acceptable when life in all its complexity starts to leave the shell and generates a skeleton-forming process, a process establishing rules of conduct and institutions capable of keeping some kind of order in social life without the need for a higher authority[xviii].

I have attempted to anchor the demand for transparency in the post-modern cultural setting to better understand some of the manifestations of this demand which are of more interest to relate transparency to popular capitalism. Let us consider three very important fields in which transparency has been totally absent, some of which we will come back to later. In the world of politics, the real relations between the three levels of power are not known in detail. In the world of economic policy, some believe that the legal autonomy of a central bank merely disguises the usual dependences, so it would be convenient to publish the minutes of each meeting with the individual opinions of the members of the Governing Board. In the business community, practically no-one believes that annual reports and general shareholders' meetings actually explain how decisions are made or which shareholders really have the control, so priority is being given to the transparency of more detailed information provided by some firms by means of investment bank analysts. The impulse behind these three manifestations of the demand for transparency is obviously worthy of praise, but some questions do arise. Is transparency possible? Is it really useful? It is useful for everyone?

Even remaining on this level of abstraction and lack of detail, we can start to answer these questions if we carefully examine some institutional arrangements very close to transparency, enabling the application of a minimally sophisticated economic analysis. Let us firstly consider the two sides or what has been referred to as unbundling. In its political sense, it refers to unbundling political party programmes and making decisions on specific issues to avoid having to vote for a whole bunch of issues, some of which I approve and others of which I do not. It is as if I am forced to buy a bundle of products without having the opportunity to buy each product in the bundle separately. Indeed, the economic aspect of unbundling considers this problem and recommends that each product should be sold separately, not only because of freedom of choice but also because it might be more efficient (better for everyone). Why do I have to buy shares in a motorway instead of separate shares in a building firm, a maintenance company, a toll management enterprise, a financing firm and a company managing recreational areas? It is true that I should be able to organise the risk associated to my portfolio, but it is also true that, one the one hand, unbundling knows no limits (the building firm, for instance, is

really a team of people, a set of heavy machinery and an office of influences and, in turn, the latter is ....) and that, on the other, it may be desirable to have ready-made risk packages, as shown by the success of investment funds. Similarly, it is perfectly conceivable that political party programmes may exhibit this particular characteristic of correctly balancing the risks we would be running if we separately approved issues that could later turn out to be contradicting each other.

In the second place, let us consider the assemblyism typical of political movements aiming at being something more than bureaucratic parties, and which appear to be essential for up-and-coming politicians. Here again, we have to question the correct initial impulse and subject it to limits. What economic analysis tells us here is that assemblyism is one of the decision-making mechanisms which are easy to manipulate by potential dictators: caudillismo and populism go hand in hand too often for us to question the virtues of assemblyism. I would dare to insinuate that this strange impulse typical of some assemblies which end up making emperors out of generals, and gods out of emperors, is what is behind the elevation of central banks to the category of pillars of wisdom. We eventually realise that the members of their governing boards may have personal, regional or national interests and we intend to make them transparent by forcing them to publish their minutes. But once again, economic analysis leads us to careful consideration, because if the members of the governing board knew that their opinions were going to be published, they may not be completely frank and end up generating a general opinion backing an inappropriate monetary policy.

Transparency, unbundling and assemblyism share an initial impulse which appears to be the origin of a double and simultaneous renovation process affecting both capitalism and democracy. For capitalism to preserve the enormous creativity of the market, we have to proceed, with all due caution, to unbundled goods, improving the information provided by firms and profiling the technical skills of regulators. This is the only way in which popular capitalism will flourish, fostering renewed growth by permitting the massive channelling of popular savings to more promising projects than merely financing the public deficit. For this capitalism to remain pure, there must be issues, besides ideological and purely party-related subjects, about which citizens are able to decide without intermediaries, taking care not to place legislators above all suspicion. But all this has to be put into practice little by little, in order and studying each case. Prudence is clearly required because we have already seen in the first two chapters of the second part that the incentive and information revolutions provide major surprises. ICTs can certainly help a great deal in the informational aspect of transparency, but there are still constraints and paradoxes which we will now examine before leaving this first aspect of corporate governance.

The constraints on accounting are a good illustration of the inevitable constraints on transparency[xix]. Accounting is like map-making; neither one nor the other are capable of simultaneously representing all the details in which we might be interested. The case of map-making is obvious. According to the type of projection used to represent a sphere in two dimensions, some of the sphere's characteristics will be lost. We can either choose to represent distances properly or disguise them in order to faithfully represent the relative sizes of countries. I imagine that finally we see the projections and maps preferred by the most powerful countries so that, for instance, we are used to seeing maps on which the United States are much larger than Brazil. The case of accounting is similar. In many cases we can choose how we enter certain operations on the books, and what we finally do will depend on what we are going to do with the information. I'm afraid that the use of all the available alternatives, all of them possibly legal, will depend on who is in control. If executive management has its way, stock options will not appear as expenses. If shareholders have their way, they will.

But leaving map-making on one side for a moment, and focusing on accounting, let us now consider the possible impact of accounting practices on real activity by examining how goodwill is handled. In Europe, and certainly in Spain, it is accounted for as an asset, at acquisition price, and depreciated gradually, although it can be fully depreciated all at once. In the U.S. it does not depreciate, and each year it is accounted for according to the market price of the asset in question, with the increase or decrease in

this market price classified as gain or loss. There was a time when Spanish companies could have used the US GAAP, but at other times they would have preferred the European convention. According to the latter, for instance, Telefónica earned a profit in 2001; according to U.S. standards it incurred a loss. The saviours of capitalism who appear en masse to straighten things out when things are not going well for them, do not appear to realise that it is impossible to obtain objective accounts, and they aim not only to establish universal standards but also to pass bills penalising those who do not comply with such objectivity.

Let us consider a disturbing example related to how goodwill is handled according to generally accepted accounting standards in the U.S. In this case, the accounts of firm A must reflect the stock market value of its share in firm B, so that the stock market value of the latter will influence the stock value of the former. Assume they each hold shares in the other. It is easy to see how they could both collapse in a recessive, non-convergent movement: A is worth less because its share in B has fallen in value for some reason, but this decrease in the value of A reinforces the initial fall in the value of B which, in turn, reduces the value of A. this has nothing to do with the objective value of either firm and that is why, because it is possibly no more than the effect induced by an accounting practice, investors would at some moment in time detect a bargain and put an end to the recession process. In fact, in a capitalist market system corporations are worth their stock market value and no accounting system is capable of reflecting that. If a CEO discovers an attractive way of "repairing" the accounts, compatible with auditing criteria and transparent for analysis (which has to be assumed), the value of the corporation may increase and non-one will be able to say that it is not its real value. What difference is there between marketing and touching up the accounts? To seek objectivity in either case is as useless as seeking the absolute. It is possible (and desirable) to establish standards by means of auto-regulation, but new accounting tricks or new marketing ideas will always arise. To penalise creativity in either field is like putting a door on a field. It is curious, therefore, to find that the self-appointed saviours of the system want, as more than a few political leaders appear to show, is capitalism with clear rules and no tricks. Those of us who believe in the market, however, know that capitalism is the best system available because we are creative and like tricks. If we weren't and we let ourselves be carried away by avarice, practically any economic system would be just as efficient as capitalism, and many of them much fairer. The problem facing those who really believe in capitalism and aim to help to implant such a system is how tackle the incentives to be deceived to become wealthy without, at the same time, sealing the well of creativity. The genuine problems facing us, once again, have to do with the open nature of the capitalist system, a system that is incompatible with the desire to decide and organising everything for once and for all.

Nothing better illustrates the open nature of capitalism that the paradoxes arising in relation to transparency, which by this time should not surprise usxx. Let us begin with the monetary policy of a central bank. We know that the dynamic inconsistency of a discretionary monetary policy in the hands of a government which really wants to inflate the economy to reduce unemployment, creates an inflationary bias which can only be reduced by placing monetary policy in the hands of an independent central bank for which anti-inflationary policy is the predominant strategy. However, since the public is not sure of the central bank's preferences, it has to earn its decidedly anti-inflationist reputation because the stronger that reputation, the less inflationary bias; but this reputation may be influenced by transparency, as Petra Geraats has recently shown. If the central bank publishes its forecast conditioned in the observable economic policy variable, that is the interest rate, this sign becomes more precise in relation to the preferences of the central bank, which can thus enhance its reputation and reduce inflationary bias. If the central bank only publishes forecasts, without conditioning them to interest rate values, this variable would be a less accurate sign and both the bank's reputation and its ability to reduce inflationary bias would suffer. Therefore, we can conclude that although transparency (identified here as the publication of the central bank's forecasts) is a good thing, care is required because, if the inflation rate and output forecasts do not explain the interest rate values pursued, this variable loses its ability to influence the bank's reputation and, consequently, its ability to reduce inflationary bias. The moral of this story is that if a central bank is going to be transparent, it will really have

to be unambiguous when communicating its nature, preferences and intentions.

Let us know consider the agency relationship which Andrea Pratt has carefully examined in relation to transparency in a paper rich in implications but which here can only be examined with a view to insisting that transparency is a delicate issue and that it cannot be said, although it would appear to be common sense, that the more transparency the better. In an agency relationship, the principal can know both what action the agent has taken and what is the result of such action. What is interesting is that the principal would prefer only to know about the result, ignoring the action taken to obtain it. Intuitively, the reason is that if he is also aware of the action, and the agent knows this, the agent will behave in a conformist manner in order not to be penalised for going against the flow. This will lead him to refrain from processing some signals and, finally, the principal will know who the agent is, preventing the existence of an optimum contract and therefore reducing the efforts actually made by the agent.

Finally, let us now examine a surprising result due to M. A. de Frutos and C. Manzano in their work on transparency on a stock market that can be either centralised (transparent) or fragmented (opaque). In the first case, which would be a variable income market like the Madrid stock market, price offers are public, so that intermediaries are aware of the prices offered by their competitors. In the second case, which could be represented by the American treasury bond market, agreements are often bilateral, so intermediaries do not know whether they are in line with their competitors or not. It is easy to imagine that, from the investor's perspective, fragmentation (no transparency) has more advantages. The reason is that market-makers are interested in not erring in their calculation of the transactions they expect to make, because this reduces their operating costs. This interest is easily satisfied when the market is centralised, and therefore transparent, because it is then easier to improve conditions only marginally when more operations are required to balance the books. On the other hand, if they need more orders and the market is fragmented, and therefore less transparent, the market-maker's interest can only be satisfied offering aggressively better conditions to the investor.

These three are examples of the many paradoxes arising when we open Pandora's box of informational problems. At times, more information can be harmful, something that should not surprise us because we have known for some time that adding a market to an incomplete market structure is not necessarily a Pareto improvement even though the new market increases the information available. If the new market does not complete the market structure, enabling the transfer of purchasing power from one date to another, and from one contingency to another, the additional information may make some of the contracts, which were possible and convenient without that information, impossible.

This last reminder, together with the three examples provided, persuades, or should persuade, us that the issue of information, and therefore the issue of transparency, is a delicate question which does not admit final solutions easily put into practice. Unawareness of these problems is what explains the enthusiasm shown for the adoption of codes of conduct by firms, the diligent establishment of recommendations for the good governance of trading companies by ad hoc committees, or the few legislative changes made. In any case, the idea was to solve the problem of deceit, distorted information or secrecy in relation to shareholders by administrators in agreement with executives who thus distorted the market and prevented it from working properly. But, instead of humbly recognising the limits of accounting or the reasonable doubts concerning some of its practices, instead of teaching the relative merits of information, it was paradoxically decided to sing the praises of transparency with the only aim of manipulating a relatively uninformed public opinion.

III.1.2. B. Value of t he firm and the Stakeholder Society

Good corporate governance is not limited to transparency or accounting. The problem of the inevitable separation between ownership and control and its recent manifestation in the corporate crisis which start with the Enron scandal, has given rise not only to the design of international accounting standards required for transnational firms but also to specific codes of conduct applicable to Boards of Directors and their

members, ensuring that the interests of management are not given priority over shareholders and that controlling shareholders are not given priority of minority stock holders[xxi]. These codes are centred, however, on creating shareholder value, and they do not contemplate the interest of what are known as stakeholders, or people who, like the shareholders, are concerned for the company's progress, either as employees, suppliers, customers or local inhabitants. However, not much can be said about good corporate governance until we know whether those who have a legitimate interest in the product created, besides the managers in control, are only the financial investor who own shares or also the other people concerned for these activities, who comprise the "stakeholder society". Until about fifteen years ago, the corporate concept in Europe was similar to the idea of a stakeholder society; but since then (and in spite of the demoralisation of America in relation to its corporate sector in the late eighties), the American concept of corporation has been applied, according to which its only goal is to create shareholder value, something that we now associate to popular capitalism. However, in the Presidential Address to the meeting of the Econometric Society de 1998, Jean Tirol made a considerable effort to refocus the problem and, in a way, open up a line of research which, involving the ideas of incentive economy and control, would make a frontal attack on the problem of putting into practice the social optimum represented by the stakeholder society.

This call to order by Jean Tirol is naturally welcomed by an economist whose first aim is always to identify the first best and only then, after admitting the constraints, informational or otherwise, affecting the problem, attempts to identify and apply the second best. To characterise optimum distribution, an economist would attempt to identify the maximisation conditions of a certain function such as, for instance, the sum of the welfare (or utility) functions of all the stakeholders[xxii]. Besides the investors who have bought shares, we have the suppliers, who may have made specific investments to serve the orders placed by the firm, the clients who purchase a product which is part of their consumption package or which is essential for their own production, the employees who will have invested in specific human assets for the company, and others such as local shopkeepers, the surrounding boroughs or the areas suffering from atmospheric pollution. Many of the effects that these stakeholders generate or suffer in relation to the firm have nothing to do with the market. Not only does the firm not pay for the pollution it generates (typical externality), but the local shopkeepers or councils neither pay nor charge for the possible effects, negative or positive, which are generated (except for the price paid or the tax revenue received) in their relations with the firm that operates in their environment (such as discounts for large orders, or investments in computers, for instance) and the suppliers, clients or employees who, although they get paid according to their contracts, neither pay nor charge anything for the possible implicit guarantee of an order, their supply, or their jobs. All these are examples of externalities that have to be internalised to obtain the social optimum. The existing contracts would therefore have to be much more complex and new ones would have to be invented. And to sustain all this, the Board of Directors would need to have members defending the interests of each type of stakeholder.

Tirol attempts to understand why this first best solution is not easily put into practice. There is not room here to summarise all he said, but we can provide an idea of the theoretical effort which, in terms of incentive economics and control, Tirol makes in his work. It is very difficult to design explicit incentives for managers to help to internalise the externalities detected between the firm and its stakeholders, because there is no precise measure of the aggregate welfare of the latter to be maximised by the former[xxiii]. It could be expected that, in spite of this, managers may indeed work as we wish them to if we provide them with incentives according to a discernible and practical criterion, such as share value; but this is a vain expectation because we know that, if this was the case, they would ignore the other stakeholders. If we consider implicit incentives, such as progress horizons and the corresponding career design that can be expected in the firm, we would find ourselves with a similar problem because if, for instance, the manager wishes to satisfy investors, he may endanger his own promotion. And if we now consider control, it is easy to admit that it cannot be exercised well when it is divided between different types of stakeholder. In these circumstances, it is easy to guess that maximisation of shareholder value is second best. By explicitly monitoring the conduct of

managers by means of implicit surveillance by a bank or rating agency, it is possible to establish the incentives that are appropriate for sustaining the shareholder value criterion. It would be sufficient for corporate governance to be delegated in a Board of Directors in which the independent members are in charge of defending the interests of small shareholders from the executive (or internal) shareholders in a rough but worthy approximation. However, it would be naïve to conclude that the impulse underlying the stakeholder society has been buried under a merely technical argument based on incentive and control ideas for the implantation of a second best. On the one hand, the theoretical efforts of economists will presumably continue along the lines defined by the desire to design incentive mechanisms enabling the first best to be put into practice. On the other, a recent appearance on the political-business scenario is what used to be called the firm's social responsibility, often linked to the social doctrine of the Church, and which is now known by similar names such as, for example, social action or corporate ethics and, recently, Corporate Social Responsibility (CSR). There are starting to be funds that only invest in firms with socially responsible corporate activities, rankings are established for this purpose, large corporations look after their Foundations and it is thought that social action has an impact on reputation, management and, finally, on share value.

None of this is surprising and an economists immediately understands all these initiatives as alternatives for internalising some of the externalities to which I referred in the first part of this paper and which, merely be existing, justify our reference to the stakeholder society as the set of people and groups who have a legitimate interest in how the firm progresses, above and beyond contractual relations. But economic thinking can go a little deeper into this issue by recognising the fact that corporate governance is only a small part of the governance of society, understood in a broad and not merely political sense. It is this social governance that has to internalise externalities and it can, for instance, promote enlargement of the range of possible contracts: long-term for suppliers or clients, compensatory for investments in specific human assets or including education for employee's children, etc. Whether this should be the responsibility of the firm or other institutions is an interesting question but it does not lie within this paper's scope. What is important, however, is that we are now supporting pressure to achieve first best that we cannot ignore, and that ideas are needed to administer this pressure. Earlier, when I referred to transparency, I suggested that, although unbundling is initially a good thing, because consumers are not obliged to buy bundles of goods some of which they dislike (Sunday newspapers with their supplements spring to mind, or diversified firms), great care is needed because if we move too fast, some of the goods in the bundle may suffer too much and too suddenly, with destabilising effects for everyone. Likewise, we can see that, although today we only have a market for the relation between the shareholder and the firm (stock market), tomorrow we may have markets for the relation between the firm and some stakeholders; but care is also required here because if we give priority to pollution, for instance, we may be ignoring other aspects related to the firm's results.

III.1.2. C. Final remarks

In my opinion, recommendations concerning good governance are not all on the right track, because they have not understood the environment of the New Economy, which rewards excess, and because they do not pay intelligent attention to the stakeholder society.

In the first place, I believe that if Corporate America suffered a crisis, it was not because auditors and analysts failed, or because the individual morals of the CEOs concerned had become significantly degraded. None of these agents was prepared for the technological revolution of the end of the last century, a revolution characterised by increasing returns on a scale unknown before then both with regards to their magnitude and to their nature, associated to the non-rival nature of many of the digital products and the network effects of some of the most dynamic sectors. As I mentioned earlier, competition here is not competition on the market (through price) but competition for the market, to take up a position and stay there by establishing a standard. In a situation of this kind, the possibilities of earnings are so brutal that it is difficult to throw the first stone against the people responsible for the enormous debts incurred by firms, or even against

those who permitted the highly questionably steps taken later to prevent the effects of those debts, lethal in the case of delayed promises, from appearing in the official accounts.

In view of this diagnosis, the first thing to do is affirm that the opportunities are still there, and that the next time we attempt to make the most of them, we should know who makes the decisions and who is to blame if something goes wrong. This means that the reform of investment banks, the regulation of auditing firms and the establishment of universal accounting standards are of secondary importance. I believe that what is most important in dynamic sectors is corporate governance; the set of rules establishing who makes decisions and who responds for failure and before whom. The independence of board members, executive salaries or general transparency is not that important. What is important is that boards operate according to a strict incentive system and in the right direction.

Let's begin with this last remark. Since the scope of the problem of the stakeholder society includes more than technical aspects, and includes not only corporate governance but the overall administration of things, we could possibly learn something from studying how different firms put it into practice using one or another of the different channels available. In this respect, for instance, we should not conclude that, because American firms are centred on shareholder value and German firms are aiming at stakeholder satisfaction, America is further from the first best than Germany. It is more than likely that in America there are instruments or institutions which enable them to come closer than in Germany to the internalisation of the externalities necessarily generated by firms. We could therefore agree with Tirol when he concludes that "one of the reasons why shareholder value is less controversial in Anglo-Saxon countries than in continental Europe is that the externalities generated by shareholder control over employees are less in the former", due, for example, to greater employee mobility in America, I might add.

Since ICTs, the importance of knowledge and globalisation will equal the importance of mobility (and diminish that of the State, as we will see in the last chapter of this third part), the implementation of the first best typical of the stakeholder society, will increasingly depend on corporate governance, and this justifies my claim that what is important is that the board operates based on a strict incentive system. Not only can firms not be saved with public money, but, when management errors occur, the CEO should leave the firm, possibly with the executives working under his/her orders. If this is done quickly, there is no time to fiddle the accounts; but who is responsible for dismissing the CEO? Possibly the independent board members, should such a figure exist, but there are so many conditions that I believe that it doesn't. In the long term there may arise associations of minority shareholders – easier to organise with the ICTs – directly monitoring progress and proposing their own board members, which could implement the target function we introduced earlier, and we could be sure that the Board would dismiss the CEO. But in the meantime, I believe that this decision should be made by the chairman of a Surveillance Committee, more typical of Franco-German capitalism, the ultimate goal of which is to conciliate stakeholders' interests. I am sure that whoever represents the shareholders is more willing to attempt to pretend that there is "no news on the western front" that whoever represents the employees, suppliers, clients or local authorities who have long-term interests in the firm and are unable to negotiate those genuine interests on a market.

The conclusion of this section, then, is not a very fashionable one. All the features of the capitalism to come are working for, on the one hand, boards of directors representing the desires of different types of shareholders: they will be elected by the shareholders themselves. On the other, those same features are bringing us close to a stakeholder society the externalities of which have been internalised by corporations by means of a Surveillance Council. We have to conclude, then, that in spite of the inaudible influx of American ways, the capitalism of the future will have firms with dual administration: a management board and a surveillance committee establishing the target function to be maximised taking stakeholders into account. It would appear that what in the early 90's made American capitalism tremble, the way Japan and Germany were

operating, will prevail, although it is perfectly possible that it will prevail precisely in America, given how easily it adapts and that some of its differential signs of identity are going to cease to be relevant.

NOTES

[i] See Simon (1991) pp 27-28.

[ii] The simplification consists of the fact that Simon does not only refer to firms when referring to organisations as alternatives to the market.

[iii] This theory of the firm would be associated to the name of Hart and some of the articles in his book, already mentioned on other chapters. See Hart (1995)

[iv] The ideas of Coase (1937) are at the origin of this neoinstitutional approach.

[v] We are referring to the same article as in the previous footnote.

[vi] For Quah (2003), a digital good has the following characteristics: (i) non-rivalry (my use of the good does not prevent yours); (ii) Expandibility (the quantity can be enlarged at random at no cost); (iii) indivisibility (the quantity is measured according to natural numbers: 1,2,3,….); (iv) speciality (goods not subject to transport costs) and (v) recombinance, making these goods accumulative and emerging.

[vii] This type of reasoning fits in well with that employed by Carrillo and Gromb, according to which the more the individuals in the work team invest in accessing what I am here calling a certain business culture, the more probable it is that that culture will be maintained, based on a simple argument related to opportunity costs in the organisation. Similarly, the culture is easy to break if little is invested in it. As we know, this type of reasoning always leads to multiple equilibria, with some very stable and other very weak cultures. See Carrillo and Gromb (1999). On the other hand, although this is a footnote, I would like to mention that a new way of competing, besides with prices, would precisely be through business cultures.

[viii] See Urrutia (2001)

[ix] See 1.2.2 in Urrutia (2003)

[x] In this respect, see Saint-Paul (2003)

[xi] Naturally, the spread of financial markets is not necessary for issues of interest in the business environment to arise, such as one example out of a thousand, the choice of financing the company with debt or capital. We know from the Modigliani-Miller theorem that, without fiscal or other types of imperfection, the two forms of financing are equivalent, but in any case this chapter does not aim to explore other business issues in general. The reason is that what we pursue is to explore the consequences of globalisation, knowledge and ICTS, and they would not appear to influence this specific issue or others that will not be mentioned here.

[xii] From here on, I am nearly literally transcribing a paper I wrote in 1998 which, in any case, is based, as its bibliography shows, on Grosman and Hart (1999).

[xiii] These formalisms are not strictly necessary; but they simplify my explanation. The allergic reader can merely skip over the following pages as far as the formula identified with $(\bullet)$.

[xiv] The maximisation of utility should be subject to the three independent budgetary constraints. However, when $r(A) = 2$, the three collapse into one, because the financial system enables purchasing power to be transferred in any direction.

[xv] See Berle and Means (1993)

[xvi] This expression is due to the Governor of the Federal Reserve, Alan Greenspan, and it was used as the title of a premonitory book by Shiller announcing, in the year when the New York Stock Exchange reached an all-time high, that the index was unsustainable and the result of a bubble. When it burst, it was given the name of the "dot com bubble".

[xvii] See the introduction to Chapter I.2.

[xviii] Show business, so clearly detected by Guy Debord some years ago, transparencies in female apparel which more than reveal curves reveals the bones of anorexic models, and the success of Big Brother, negating the home as the last refuge of privacy, are only three post-modern examples of the problems associated to the inner and outer self, to what is public and what is private

[xix] See Urrutia (2004 a). The text is a slight adaptation of that article.

[xx] What follows is part of an article published in Expansión. See Urrutia (2004 b)

[xxi] Over 100 of these codes have appeared in over 30 countries. In Spain, the Olivencia Code was drafted before the great scandals arose together with, more recently, the Aldama Code. Dozens of papers have been written on the subject.

[xxii] See Tirol (2001).

[xxiii] This problem would be formally similar to finding a target function for the firm operating on incomplete markets, a problem we have considered in the previous section, the complete development of which has been reserved for the next chapter.

REFERENCES

Berle, A.A. and G.C. Means (1933): <u>The Modern Corporation and Private Property</u>, McMillan, N.Y. (1999).

Carrillo, J.D. and Grom, D.:" On the strength of corporate cultures", <u>European Economics Review</u>

Coase (1937): "The Nature of the firm", <u>Economica</u> .

Frutos, M.A. and C. Manzano. (2002): Risk Aversion, Transparency and Market Performance,   <u>Journal of Finance</u>.

Geraats, Petra (2000): Why Adopt Transparency? The Publication Of Central Bank Forecasts, CEPR, D.P. nº 2582

Grosman, S. and O. Hart (1979): "A Theory of Competitive Equilibrium on Stock Market Economies". <u>Econometrica,</u> 47

Hart, O. (1995): <u>Firms</u>, <u>Contracts and Financial Structures</u>, Oxford U.P.

Quah, D. (2003): "Digital Goods and the New Economy", CEPR D.P. nº 3846

Pratt, Andrea (2003): The Wrong Kind of Transparency, CEPR, D.P: nº 3859

Saint-Paul, G. (2003): "Information Sharing and accumulative innovation in business networks", CEPR. D.P. nº 41116

Shiller (2000): <u>Irrational Exuberance,</u> Princeton U.P.

Simon, H. A. (1991): "Organizations and Markets", <u>The Journal of Economic</u> <u>Perspectives</u>, Vol. 5. Nº 2

Tirol, J. (2001): "Corporate Government". <u>Econometrica</u>

Urrutia, J. (1988): "Mercados y Contratos Financieros y el funcionamiento de la economía" <u>Boletín de Estudios Económicos</u>.

Urrutia, J. (2001): Redes de personas, Internet y la lógica de la abundancia. Un paseo por la Nueva Economía", <u>Ekonomiaz.</u>

Urrutia, J. (2003) <u>Economía en Porciones</u>: Prentice-Hall, Madrid

Urrutia, J. (2004) "Los límites de la contabilidad". Expansión 3.VIII

Urrutia J. (2004 b) ¿Transparencia? Ventajas de la opacidad. Expansión 9-IX-04.

TABLES & PLOTS

TABLES:

- A1A: Spanish CPI desaggregation.
- A1B: EMU HICP desaggregation.
- A1C: USA HICP desaggregation
- A2: Europe forecast errors for euro-zone and Monetary Union countries.
- A3: HICP Europe forecast errors by sectors in Monetary Union.
- A4A: Harmonized Consumer Price Index (HICP) Annual Growth Rates for 2003,2004, and 2005 for EMU. countries.
- A4B: Harmonized Consumer Price Index (HICP) Annual Growth Rates for 2003,2004, and 2005 for EMU countries.
- A4C: Harmonized Consumer Price Index (HICP) Monthly Growth Rates for 2003,2004, and 2005 for EMU countries.
- A4D: Harmonized Consumer Price Index (HICP) Monthly Growth Rates for 2003,2004, and 2005 for EMU countries.
- A5A: Harmonized Consumer Price Index (HICP) Annual Growth Rates by sectors for 2003,2004, and 2005 for EMU.
- A5B: Harmonized Consumer Price Index (HICP) Monthly Growth Rates for 2003,2004, and 2005 for EMU.
- A6A: US CPI Annual Growth Rates for 2003,2004, and 2005.
- A6B: US CPI Monthly Growth Rates for 2003,2004, and 2005.
- A7A: Spanish CPI Annual Growth rates for 2003,2004, and 2005.
- A7B: Spanish CPI Monthly Growth rates for 2003,2004, and 2005.

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

- A2B: Annual Forecast For The USA Inflation

- A2C: Annual Forecast For The Spanish Inflation

- A3A: Year-on-year rate of EMU inflation and contributions of main components

METHODOLOGY: ANALYSIS OF SPANISH INFLATION BY SECTORS

BASIC COMPONENTS AGGREGATES	BASIC COMPONENTES	BASIC COMPONENTS AGGREGATES

BENE
46.527%
1 + 2 + 4

AE
16.376%
1 + 4

IPSEBENE
81.401%
1 + 2 +3 +4 + 5

(1) AE-X
13.331%
processed food excluding fats and tobacco CPI.

(2) MAN
30.150%
non-energy industrial goods CPI

(3) SERV-T
33.725%
services excluding packages tourist CPI

(4) X
3.046%
fats and tobacco CPI

(5) T
1.149%
tourist packages CPI

(6) ANE
9.398%
non-processed food CPI

(7) ENE
9.142%
energy CPI

BENE-X
44.481%
1 + 2

IPSEBENE-X-T
77.206%
1 + 2 + 3

R
22.735%
4 + 5 + 6 + 7

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

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

GLOBAL INFLATION
IT IS CALCULATED ON THE IPC INDEX

IPC = 0.13331 **AE-X** + 0.3150 **MAN** + 0.3715 **SERV- T** + 0.03046 **X** + 0.01149 **T** + 0.09398 **ANE** + 0.09142 **ENE**   **(weights 03)**

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

Methodology: *Analysis of EMU inflation by SECTORS*

BASIC COMPONENTS AGGREGATES	*BASIC COMPONENTS*
IPSEBENE *84.178%* **1 + 2 +3 + 4** **BENE** *42.845%* **1 + 2 + 3** **RESIDUAL INFLATION** *15.822%* **5 + 6** *CORE INFLATION*(IT IS CALCULATED ON THE IPSEBENE INDEX)	**(1) AE** [a] *9.463%* HICP Processed Food **(2) TOBACCO** *2.373%* HICP Tobacco **(3) MAN** *31.009%* HICP Non Energy Industrial Goods **(4) SERV** *41.334%* HICP Services **(5) ANE** *7.689%* HICP Non processed Food **(6) ENE** *8.133%* HICP Energy

IPCA = 0.09463 **AE** + 0.02373 **TOBACCO** + 0.31009 **MAN** + 0.41334 **SERV** + 0.07689 **ANE** + 0.08133 **ENE**

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

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

Methodology: *Analysis of USA inflation by SECTORS*

BASIC COMPONENTS AGGREGATES		*BASICS COMPONENTS*
CORE CPI *78.54%* **1 + 2 +3+4+5**	**SERVICES LESS ENERGY** *56.28%* 1+2	**(1) OWNERS' EQUIVALENT RENT OF PRIMARY RESIDENCE** *23.38%* **(2) SERVICES LESS OWNER' EQUIVALENT RENT OF PRIMARY RESIDENCE** *32.90%*
	COMMODITIES LESS FOOD AND ENERGY 22.25% 3+4+5	**(3) TOBACCO** *0.81%* **(4) NON DURABLES LESS TOBACCO** *10.17%* **(5) DURABLES** *11.28%*
RESIDUAL CPI *21.46%* **6 +7 +8 +9**		**(6) FOOD** *14.38%*
	ENERGY *7.08%* **7 + 8+9**	**(7) GAS** *1.17%* **(8) ELECTRICITY** *2.43%* **(9) MOTOR FUEL AND FUEL OIL** *3.48%*
HIPC =0.5628(SERV. – ENERGY) + 0.2225(COMM. - FOOD AND ENERGY) + 0.1438FOOD + 0.0708ENERGY		

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

Table A2

FORECAST ERRORS IN THE MONTHLY INFLATION RATE FOR AUGUST IN THE EUROPEAN UNION

	Weights 2004 MU	Weights 2004 EU	Observed Monthly Rate	Forecast	Observed Annual Rate	Confidence Intervals at 80%
Spain	111,07		0,48	0,48	3,32	± 0,15
Germany	292,58		0,18	-0,18	2,11	± 0,29
Austria	31,43		0,36	0,27	2,18	± 0,37
Belgium	33,18		1,68	1,52	2,04	∓ 0,32
Finland	15,65		0,27	0,14	0,27	± 0,37
France	206,97		0,18	0,10	2,53	∓ 0,20
Greece	26,55		-0,30	-0,01	2,83	± 0,78
Netherlands	52,90		0,16	0,25	1,16	± 0,33
Ireland	12,86		0,62	0,58	2,52	± 0,30
Italy	192,65		-0,17	-0,29	2,40	± 0,23
Luxembourg	2,73		1,10	0,57	3,65	± 0,32
Portugal	21,43		-0,40	-0,28	2,45	± 0,66
Denmark		11,78	-0,34	0,07	0,87	± 0,27
United Kingdom		181,92	0,27	0,33	1,27	± 0,33
Sweden		18,65	0,00	0,02	1,25	± 0,50
(1) aggregation error -0.03%						
(2)aggregation error -0.08%						

Source: EUROSTAT, IFL & UC3M

Date: September 16, 2004

Table A3

FORECAST ERRORS IN THE MONTHLY INFLATION RATE FOR AUGUST 2004 BY SECTORS IN THE EMU

	Weights 2004	Observed Monthly Growth	Forecast	Annual Growth Observed	Confidence interval at 80%
HICP Processed Food	118,36	0,00	0,19	3,65	± 0.14
HICP Processed Food excluding tobacco	94,63	0,00	0,21	1,22	± 0.09
HICP Tobacco	23,73	0,00	0,10	13,51	± 0.13
HICP Non Energy Industrial Goods	310,09	0,09	-0,08	0,86	± 0.10
HICP Non Energy Processed Goods	428,45	0,07	0,00	1,63	± 0.09
HICP Services	413,34	0,25	0,24	2,64	± 0.14
CORE INFLATION (1)	841,78	0,26	0,12	2,23	± 0.08
HICP Unprocessed Food	76,89	-1,34	-0,71	-0,25	± 0.46
HICP Energy (2)	81,33	1,49	1,46	6,44	± 0.60
RESIDUAL INFLATION (3)	158,22	0,00	0,43	3,26	± 0.39
GLOBAL INFLATION (4)	1000,00	0,17	0,17	2,29	± 0.09

(1) aggregation error 0.02%
(2) aggregation error -0.03%
(3) aggregation error 0.04%
(4) aggregation error -0.09%

Source: EUROSTAT , IFL & UC3M

Date: September 16, 2004

Table A4A

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

	EMU12		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avr 03/02(b)	Avr 04/03(b)	Avr 05/04(b)
Spain HICP	11,11%	2003	3,8	4,2	4,1	3,1	2,8	2,6	2,5	2,5	2,4	2,6	2,8	2,7	3,1		
		2004	2,3	2,2	2,2	2,7	3,4	3,5	3,3	3,3	**3,4**	**3,5**	**3,5**	**3,5**		3,1	
		2005	**3,7**	**3,7**	**3,5**	**3,2**	**2,8**	**2,8**	**2,7**	**2,6**	**2,6**	**2,7**	**2,7**	**2,7**			3,0
Germany HICP	29,26%	2003	0,9	1,2	1,2	1,0	0,6	0,9	0,8	1,6	1,1	1,1	1,3	1,1	1,0		
		2004	1,2	0,8	1,1	1,7	2,1	1,9	2,0	2,1	**2,1**	**2,2**	**2,2**	**2,3**		1,8	
		2005	**1,8**	**1,9**	**1,7**	**1,5**	**1,3**	**1,4**	**1,4**	**1,1**	**1,2**	**1,1**	**1,1**	**1,1**			1,4
Austria HICP	3,14%	2003	1,7	1,8	1,8	1,3	0,9	1,0	1,0	1,7	1,4	1,1	1,3	1,3	1,3		
		2004	1,2	1,5	1,5	1,5	2,1	2,3	2,1	2,2	**2,0**	**2,1**	**2,0**	**2,0**		1,9	
		2005	**2,1**	**2,0**	**2,0**	**2,0**	**1,9**	**1,8**	**1,9**	**1,9**	**1,9**	**1,9**	**1,9**	**1,9**			1,9
Belgium HICP	3,32%	2003	1,2	1,6	1,7	1,4	0,9	1,5	1,4	1,6	1,7	1,4	1,8	1,7	1,5		
		2004	1,4	1,2	1,0	1,7	2,4	2,0	2,1	2,0	**2,2**	**2,2**	**2,1**	**2,1**		1,9	
		2005	**2,5**	**2,4**	**2,5**	**2,2**	**2,1**	**2,3**	**2,3**	**2,1**	**2,1**	**2,2**	**2,1**	**2,1**			2,2
Finland HICP	1,57%	2003	1,4	2,1	1,9	1,3	1,1	1,2	1,0	1,6	1,2	0,9	1,2	1,2	1,3		
		2004	0,8	0,4	-0,4	-0,4	-0,1	-0,1	0,2	0,3	**0,1**	**0,2**	**0,2**	**0,3**		0,1	
		2005	**0,4**	**0,3**	**0,5**	**0,5**	**0,5**	**0,6**	**0,8**	**0,7**	**0,6**	**0,6**	**0,7**	**0,7**			0,6
France HICP	20,70%	2003	1,9	2,5	2,6	1,9	1,8	1,9	1,9	2,9	2,3	2,3	2,5	2,4	2,2		
		2004	2,2	1,9	1,9	2,4	2,8	2,7	2,6	2,5	**2,3**	**2,3**	**2,3**	**2,3**		2,4	
		2005	**2,0**	**1,9**	**1,8**	**1,8**	**1,6**	**1,6**	**1,6**	**1,6**	**1,5**	**1,5**	**1,5**	**1,5**			1,7
Netherlands HICP	5,29%	2003	2,7	2,9	2,8	2,2	2,3	2,1	2,1	1,9	2,0	1,9	2,0	1,6	2,2		
		2004	1,5	1,3	1,2	1,5	1,7	1,5	1,2	1,2	**1,2**	**1,4**	**1,5**	**1,7**		1,4	
		2005	**1,7**	**1,8**	**1,9**	**1,9**	**1,8**	**2,0**	**2,1**	**2,2**	**2,2**	**2,2**	**2,2**	**2,2**			2,0
Ireland HICP	1,29%	2003	4,7	5,1	4,9	4,6	3,9	3,8	3,9	4,5	3,8	3,3	3,3	2,9	4,0		
		2004	2,3	2,2	1,8	1,7	2,1	2,5	2,5	2,5	**2,6**	**2,8**	**2,8**	**2,9**		2,4	
		2005	**3,1**	**3,1**	**3,2**	**3,3**	**3,3**	**3,1**	**3,1**	**3,1**	**3,1**	**3,1**	**3,1**	**3,1**			3,1
Italy HICP	19,26%	2003	2,9	2,6	2,9	3,0	2,9	2,9	2,9	4,1	3,0	2,8	2,8	2,5	2,8		
		2004	2,2	2,4	2,3	2,3	2,3	2,4	2,2	2,4	**2,1**	**2,2**	**2,3**	**2,4**		2,3	
		2005	**2,9**	**2,6**	**2,4**	**2,4**	**2,5**	**2,5**	**2,6**	**2,5**	**2,6**	**2,6**	**2,6**	**2,7**			2,6
Luxembourg HICP	0,27%	2003	3,3	3,2	3,7	3,0	2,3	2,0	1,9	3,2	2,7	1,8	2,0	2,4	2,5		
		2004	2,3	2,4	2,0	2,7	3,4	3,8	3,8	3,6	**3,3**	**3,6**	**3,5**	**3,5**		3,2	
		2005	**3,9**	**3,0**	**3,2**	**3,1**	**3,0**	**2,9**	**4,0**	**3,3**	**3,1**	**3,4**	**3,3**	**3,3**			3,3
Portugal HICP	2,14%	2003	4,0	4,1	3,8	3,7	3,7	3,4	2,9	3,5	3,2	2,8	2,3	2,3	3,3		
		2004	2,2	2,1	2,2	2,4	2,4	3,7	2,9	2,4	**2,3**	**2,3**	**2,6**	**2,7**		2,5	
		2005	**2,7**	**2,8**	**2,8**	**2,7**	**2,6**	**2,0**	**2,6**	**2,9**	**2,9**	**2,9**	**2,9**	**2,9**			2,7
Greece HICP	2,65%	2003	3,3	4,2	3,9	3,3	3,5	3,6	3,5	6,7	3,3	3,2	3,5	3,1	3,5		
		2004	3,1	2,6	2,9	3,1	3,1	3,0	3,1	2,8	**2,5**	**2,5**	**2,5**	**2,4**		2,8	
		2005	**2,5**	**2,6**	**2,3**	**2,3**	**2,2**	**2,2**	**2,4**	**2,5**	**2,3**	**2,3**	**2,2**	**2,2**			2,3

* 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, IFL & UC3M

Date: September 16, 2004

Table A4B

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

	EU15		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avr 03/02(b)	Avr 04/03(b)	Avr 05/04(b)
Denmark HICP	**1,18%**	2003	2,6	2,9	2,8	2,5	2,1	2,0	1,8	2,0	1,7	1,1	1,4	1,2	2,0		
		2004	1,0	0,7	0,0	0,5	1,1	0,9	1,1	0,9	**0,6**	**0,9**	**0,7**	**0,8**		0,8	
		2005	**0,9**	**1,0**	**1,4**	**1,2**	**1,1**	**1,4**	**1,3**	**1,6**	**1,7**	**1,7**	**1,7**	**1,8**			1,4
UK HICP	**18,19%**	2003	1,4	1,6	1,6	1,5	1,2	1,1	1,3	2,1	1,4	1,4	1,3	1,3	1,4		
		2004	1,4	1,3	0,9	1,2	1,5	1,6	1,4	1,3	**1,3**	**1,2**	**1,3**	**1,2**		1,3	
		2005	**1,2**	**1,2**	**1,4**	**1,3**	**1,2**	**1,3**	**1,3**	**1,3**	**1,3**	**1,3**	**1,3**	**1,3**			1,3
Sweden HICP	**1,87%**	2003	2,6	3,3	2,9	2,3	2,0	2,0	2,4	3,0	2,3	2,0	2,0	1,8	2,3		
		2004	1,3	0,2	0,4	1,1	1,5	1,2	1,2	1,3	**1,1**	**1,1**	**1,3**	**1,3**		1,1	
		2005	**1,4**	**1,7**	**1,5**	**1,3**	**1,2**	**1,5**	**1,5**	**1,6**	**1,5**	**1,5**	**1,5**	**1,5**			1,5

* 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, IFL & UC3M

Date: September 16, 2004

Table A4C

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

	EMU12		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03 / D02	D04 / D03	D05 / D04
Spain HICP	11,11%	2003	-0,4	0,2	0,8	0,8	-0,1	0,1	-0,6	1,9	-1,1	0,7	0,3	0,2	2,7		
		2004	-0,8	0,1	0,7	1,4	0,6	0,2	-0,7	0,5	**0,3**	**0,8**	**0,3**	**0,2**		3,5	
		2005	**-0,7**	**0,1**	**0,6**	**1,0**	**0,2**	**0,1**	**-0,8**	**0,4**	**0,3**	**0,8**	**0,4**	**0,3**			2,7
Germany HICP	29,26%	2003	-0,1	0,6	0,2	-0,3	-0,3	0,2	0,3	0,6	-0,6	-0,1	-0,2	0,9	1,1		
		2004	0,0	0,2	0,5	0,3	0,2	0,0	0,4	0,2	**-0,2**	**0,0**	**-0,1**	**1,0**		2,3	
		2005	**-0,4**	**0,2**	**0,2**	**0,1**	**0,0**	**0,2**	**0,3**	**0,0**	**-0,1**	**-0,1**	**-0,1**	**1,0**			1,1
Austria HICP	3,14%	2003	0,2	0,2	0,3	-0,1	-0,2	0,0	-0,1	1,0	-0,5	0,0	0,2	0,3	1,3		
		2004	0,1	0,5	0,4	-0,1	0,4	0,2	-0,3	0,4	**0,1**	**0,0**	**0,2**	**0,3**		2,0	
		2005	**0,1**	**0,4**	**0,3**	**-0,1**	**0,3**	**0,1**	**-0,2**	**0,3**	**0,2**	**0,0**	**0,2**	**0,3**			1,9
Belgium HICP	3,32%	2003	-1,0	2,1	0,3	-0,2	-0,4	0,4	-1,2	1,7	0,2	-0,4	0,2	0,0	1,7		
		2004	-1,3	1,9	0,1	0,5	0,3	-0,1	-1,0	1,7	**0,3**	**-0,4**	**0,2**	**0,0**		2,1	
		2005	**-1,0**	**1,8**	**0,1**	**0,3**	**0,2**	**0,1**	**-1,0**	**1,5**	**0,3**	**-0,3**	**0,1**	**0,0**			2,1
Finland HICP	1,57%	2003	0,2	0,9	0,4	-0,1	-0,1	-0,1	-0,5	0,6	0,1	-0,1	-0,1	0,1	1,2		
		2004	-0,3	0,4	-0,4	0,0	0,2	-0,1	-0,3	0,3	**0,3**	**0,0**	**0,0**	**0,1**		0,3	
		2005	**-0,1**	**0,3**	**-0,2**	**0,0**	**0,1**	**0,0**	**-0,1**	**0,2**	**0,2**	**0,0**	**0,0**	**0,1**			0,7
France HICP	20,70%	2003	0,3	0,7	0,5	-0,2	-0,1	0,2	-0,1	1,1	-0,4	0,2	0,1	0,1	2,4		
		2004	0,1	0,4	0,4	0,3	0,4	0,1	-0,2	0,2	**0,2**	**0,2**	**0,1**	**0,2**		2,3	
		2005	**-0,2**	**0,4**	**0,3**	**0,2**	**0,2**	**0,1**	**-0,2**	**0,1**	**0,2**	**0,2**	**0,0**	**0,2**			1,5
Netherlands HICP	5,29%	2003	0,6	0,8	0,9	0,1	-0,1	-0,5	-0,1	-0,1	1,2	-0,2	-0,4	-0,6	1,6		
		2004	0,5	0,6	0,8	0,3	0,2	-0,7	-0,3	0,2	**0,9**	**0,0**	**-0,3**	**-0,4**		1,7	
		2005	**0,5**	**0,6**	**0,9**	**0,4**	**0,1**	**-0,5**	**-0,2**	**0,2**	**0,9**	**0,0**	**-0,3**	**-0,4**			2,2
Ireland HICP	1,29%	2003	0,0	1,0	0,7	0,5	-0,2	0,1	-0,4	1,2	-0,4	0,0	0,0	0,4	2,9		
		2004	-0,6	0,9	0,4	0,3	0,2	0,5	-0,4	0,6	**0,2**	**0,2**	**0,0**	**0,5**		2,9	
		2005	**-0,4**	**0,9**	**0,5**	**0,4**	**0,2**	**0,4**	**-0,4**	**0,6**	**0,2**	**0,2**	**0,0**	**0,5**			3,1
Italy HICP	19,27%	2003	-0,3	-0,4	1,2	0,8	0,2	0,1	-0,1	1,0	-0,6	0,3	0,3	0,0	2,5		
		2004	-0,6	-0,2	1,1	0,8	0,2	0,2	-0,2	-0,2	**0,5**	**0,5**	**0,3**	**0,1**		2,4	
		2005	**-0,1**	**-0,5**	**0,9**	**0,7**	**0,3**	**0,1**	**-0,2**	**-0,2**	**0,5**	**0,5**	**0,3**	**0,1**			2,7
Luxembourg HICP	0,27%	2003	-0,3	1,1	0,5	-0,2	-0,2	0,0	-0,8	2,1	-0,2	-0,4	0,4	0,2	2,4		
		2004	-0,3	1,3	0,1	0,5	0,5	0,4	-0,8	1,1	**0,4**	**-0,1**	**0,3**	**0,2**		3,5	
		2005	**0,0**	**0,3**	**0,3**	**0,4**	**0,4**	**0,4**	**0,2**	**0,4**	**0,2**	**0,2**	**0,2**	**0,2**			3,3
Portugal HICP	2,14%	2003	0,1	0,0	0,1	0,8	0,7	0,0	-0,2	0,7	-0,4	0,2	0,1	0,1	2,3		
		2004	0,0	-0,2	0,2	1,0	0,8	1,2	-0,9	-0,4	**0,1**	**0,2**	**0,4**	**0,1**		2,7	
		2005	**0,1**	**-0,1**	**0,3**	**0,9**	**0,7**	**0,6**	**-0,3**	**-0,1**	**0,1**	**0,3**	**0,4**	**0,1**			2,9
Greece HICP	2,67%	2003	-0,8	-0,2	2,5	0,2	0,5	-0,2	-2,1	3,2	-1,1	0,4	0,4	0,4	3,1		
		2004	-0,8	-0,7	2,9	0,4	0,4	-0,2	-1,9	-0,3	**1,8**	**0,3**	**0,3**	**0,3**		2,4	
		2005	**-0,8**	**-0,6**	**2,6**	**0,3**	**0,4**	**-0,2**	**-1,7**	**-0,3**	**1,6**	**0,3**	**0,3**	**0,3**			2,2

(1) Figures in bold type are forecasted values.
(2) Annual average rate of growth.

Source: EUROSTAT, IFL & UC3M
Date: September 16, 2004

Table A4D

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

	EU15		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03 / D02	D04 / D03	D05 / D04
Denmark HICP	**1,18%**	2003	0,2	0,7	0,8	0,0	-0,3	0,0	-0,6	0,4	0,3	-0,3	0,2	-0,2	1,2		
		2004	-0,1	0,4	0,1	0,5	0,3	-0,3	-0,3	-0,3	**0,5**	**0,1**	**0,0**	**-0,1**		0,8	
		2005	**0,0**	**0,5**	**0,5**	**0,3**	**0,3**	**0,0**	**-0,4**	**-0,1**	**0,6**	**0,1**	**0,0**	**-0,1**			1,8
UK HICP	**18,19%**	2003	-0,6	0,4	0,4	0,3	0,0	-0,1	-0,1	1,1	-0,5	0,2	-0,1	0,4	1,3		
		2004	-0,5	0,3	0,0	0,5	0,4	-0,1	-0,3	0,3	**0,3**	**0,1**	**0,0**	**0,3**		1,2	
		2005	**-0,6**	**0,3**	**0,2**	**0,4**	**0,3**	**0,0**	**-0,3**	**0,3**	**0,3**	**0,1**	**0,0**	**0,3**			1,3
Sweden HICP	**1,87%**	2003	0,3	1,0	0,6	-0,4	-0,1	-0,2	-0,2	0,7	0,0	0,1	-0,3	0,2	1,8		
		2004	-0,3	-0,1	0,9	0,3	0,4	-0,5	-0,2	0,0	**0,6**	**0,1**	**-0,1**	**0,2**		1,3	
		2005	**-0,1**	**0,2**	**0,6**	**0,1**	**0,2**	**-0,3**	**-0,1**	**0,0**	**0,5**	**0,1**	**-0,1**	**0,2**			1,5

(1) Figures in bold type are forecasted values.
(2) Annual average rate of growth.

Table A5A																	

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

			I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avr 03/02(b)	Avr 04/03(b)	Avr 05/04(b)
AE	9,46%	2003	1,9	2,1	2,2	2,1	2,1	2,2	2,0	2,0	2,0	2,2	2,1	1,9	2,1		
		2004	1,9	1,9	1,7	1,7	1,5	1,4	1,4	1,2	1,1	1,0	1,1	1,2		1,4	
		2005	1,2	1,2	1,3	1,4	1,5	1,6	1,7	1,9	2,0	2,0	2,0	2,0			1,7
TOBACCO	2,37%	2003	6,7	7,7	7,5	7,9	7,9	7,6	7,7	7,5	7,8	9,3	11,7	11,7	8,4		
		2004	9,0	8,3	13,9	13,1	13,8	13,8	13,7	13,5	13,3	11,9	9,5	9,2		11,9	
		2005	11,9	11,6	6,1	5,7	5,2	5,1	5,2	5,3	5,3	5,3	5,3	5,3			6,4
MAN	31,01%	2003	0,7	0,8	0,8	0,8	0,9	0,9	0,8	0,7	0,8	0,8	0,8	0,8	0,8		
		2004	0,6	0,9	0,8	1,0	0,8	0,8	0,7	0,9	0,8	0,8	0,8	0,8		0,8	
		2005	0,9	0,8	0,9	0,8	0,8	0,8	0,9	0,8	0,9	0,8	0,8	0,8			0,8
BENE	42,85%	2003	1,3	1,4	1,4	1,4	1,6	1,5	1,4	1,3	1,4	1,5	1,6	1,6	1,5		
		2004	1,3	1,5	1,7	1,8	1,7	1,7	1,5	1,6	1,5	1,5	1,4	1,4		1,6	
		2005	1,6	1,5	1,2	1,2	1,2	1,2	1,3	1,3	1,4	1,4	1,4	1,4			1,3
SER	41,33%	2003	2,9	2,7	2,7	2,9	2,5	2,6	2,3	2,5	2,5	2,5	2,4	2,3	2,6		
		2004	2,5	2,7	2,5	2,5	2,6	2,6	2,7	2,6	2,6	2,7	2,7	2,7		2,6	
		2005	2,6	2,6	2,8	2,5	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6			2,6
IPSEBENE	84,18%	2003	2,0	2,0	2,0	2,2	2,0	2,0	1,8	1,8	2,0	2,1	2,0	1,9	2,0		
		2004	1,9	2,0	2,1	2,1	2,1	2,1	2,1	2,2	2,1	2,0	2,0	2,1		2,1	
		2005	2,2	2,2	2,0	1,9	1,9	2,0	2,1	2,0	2,0	2,0	2,0	2,0			2,0
ANE	7,69%	2003	-0,7	0,3	0,8	0,9	1,1	2,6	2,8	3,3	4,2	3,8	3,8	3,2	2,2		
		2004	2,9	1,9	1,7	1,6	1,8	1,3	0,7	-0,3	-0,9	-0,9	-0,9	-0,5		0,7	
		2005	-0,2	0,4	0,6	0,8	0,9	1,3	1,7	2,2	2,6	2,7	2,7	2,6			1,5
ENE	8,13%	2003	5,9	7,6	7,5	2,2	0,6	1,6	2,0	2,7	1,6	0,8	2,3	1,8	3,0		
		2004	-0,3	-2,3	-2,0	2,0	6,7	5,9	6,0	6,4	6,3	6,7	7,0	7,1		4,1	
		2005	5,9	6,0	4,5	3,4	0,8	1,5	0,9	-0,7	-0,5	-0,5	-0,6	-0,5			1,6
HICP	100,00%	2003	2,1	2,4	2,4	2,1	1,8	1,9	1,9	2,1	2,2	2,0	2,2	2,0	2,1		
		2004	1,9	1,6	1,7	2,0	2,5	2,4	2,3	2,3	2,1	2,2	2,2	2,3		2,1	
		2005	2,2	2,3	2,1	1,9	1,8	1,9	1,9	1,8	1,8	1,8	1,8	1,8			1,9

Source: EUROSTAT, IFL & UC3M
Date: September 16, 2004

Table A5B

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

			I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03 / D02	D04 / D03	D05 / D04
AE	9,46%	2003	0,2	0,3	0,2	0,2	0,1	0,2	0,1	0,2	0,1	0,2	0,1	0,0	1,9		
		2004	0,2	0,2	0,0	0,1	0,0	0,1	0,1	0,0	**0,0**	**0,1**	**0,1**	**0,1**		1,2	
		2005	**0,2**	**0,2**	**0,1**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,1**	**0,1**	**0,2**	**0,1**			2,0
TOBACCO	2,37%	2003	4,2	1,0	0,1	1,2	0,1	0,1	0,1	0,1	0,3	1,4	2,3	0,3	11,7		
		2004	1,7	0,3	5,3	0,4	0,6	0,1	0,0	0,0	**0,1**	**0,1**	**0,1**	**0,1**		9,2	
		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**			5,3
MAN	31,01%	2003	-1,4	0,0	1,1	0,6	0,3	-0,2	-1,4	-0,1	1,1	0,6	0,3	-0,1	0,8		
		2004	-1,6	0,3	1,0	0,8	0,1	-0,2	-1,6	0,1	**1,1**	**0,6**	**0,3**	**-0,1**		0,8	
		2005	**-1,5**	**0,2**	**1,1**	**0,8**	**0,1**	**-0,2**	**-1,5**	**0,0**	**1,1**	**0,6**	**0,3**	**-0,1**			0,8
BENE	42,85%	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		
		2004	-1,0	0,3	1,1	0,7	0,1	-0,1	-1,1	0,1	**0,8**	**0,5**	**0,2**	**0,0**		1,4	
		2005	**-0,8**	**0,2**	**0,8**	**0,6**	**0,1**	**-0,1**	**-1,0**	**0,1**	**0,8**	**0,5**	**0,2**	**0,0**			1,4
SER	41,33%	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	2,3		
		2004	0,0	0,5	0,0	0,3	0,1	0,3	0,8	0,2	**-0,3**	**-0,1**	**-0,1**	**0,9**		2,7	
		2005	**-0,1**	**0,5**	**0,2**	**0,1**	**0,2**	**0,3**	**0,7**	**0,2**	**-0,3**	**-0,1**	**-0,1**	**0,9**			2,6
IPSEBENE	84,18%	2003	-0,5	0,3	0,5	0,4	0,1	0,1	-0,2	0,1	0,4	0,3	0,1	0,4	1,9		
		2004	-0,5	0,4	0,6	0,4	0,2	0,1	-0,3	0,3	**0,2**	**0,2**	**0,1**	**0,4**		2,1	
		2005	**-0,4**	**0,3**	**0,5**	**0,3**	**0,2**	**0,1**	**-0,2**	**0,2**	**0,2**	**0,2**	**0,1**	**0,4**			2,0
ANE	7,69%	2003	1,4	0,3	0,5	0,4	0,3	0,6	-0,6	-0,4	1,2	-0,3	-0,2	0,0	3,2		
		2004	1,1	-0,7	0,3	0,3	0,4	0,1	-1,2	-1,3	**0,5**	**-0,3**	**-0,2**	**0,4**		-0,5	
		2005	**1,4**	**0,0**	**0,6**	**0,5**	**0,5**	**0,5**	**-0,8**	**-0,8**	**0,9**	**-0,3**	**-0,1**	**0,2**			2,6
ENE	8,13%	2003	3,1	1,9	1,0	-2,9	-2,1	0,0	0,5	1,1	-0,1	-0,3	-0,2	-0,2	1,8		
		2004	1,0	-0,1	1,3	1,1	2,5	-0,8	0,6	1,5	**-0,2**	**0,0**	**0,1**	**-0,1**		7,1	
		2005	**-0,1**	**-0,1**	**-0,1**	**-0,1**	**-0,1**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**			-0,5
HICP	100,00%	2003	-0,1	0,4	0,6	0,1	-0,1	0,1	-0,1	0,2	0,4	0,1	0,1	0,3	2,0		
		2004	-0,2	0,2	0,7	0,4	0,3	0,0	-0,2	0,2	**0,2**	**0,2**	**0,1**	**0,4**		2,3	
		2005	**-0,3**	**0,3**	**0,5**	**0,3**	**0,2**	**0,1**	**-0,2**	**0,1**	**0,3**	**0,2**	**0,1**	**0,4**			1,8

Source: EUROSTAT, IFL & UC3M
Date: September 16, 2004

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	Avr 03/02(b)	Avr 04/03(b)	Avr 05/04(b)
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	-2,5	-2,0		
	2004	-2,3	-2,0	-1,6	-1,4	-1,1	-1,0	-1,2	-1,1	**-0,9**	**-0,5**	**-0,2**	**-0,1**		-1,1	
	2005	**-0,1**	**-0,4**	**-0,6**	**-0,6**	**-0,7**	**-0,6**	**-0,3**	**-0,2**	**-0,3**	**-0,5**	**-0,5**	**-0,5**			**-0,4**
Non energy services (2)	2003	3,4	3,2	3,0	2,9	3,0	2,9	2,9	2,7	2,7	2,9	2,6	2,6	2,9		
	2004	2,5	2,5	2,9	3,1	2,9	3,0	3,0	2,9	**2,9**	**2,8**	**2,9**	**3,0**		2,9	
	2005	**3,0**	**3,0**	**3,0**	**3,0**	**3,0**	**3,0**	**3,1**	**3,1**	**3,1**	**3,2**	**3,1**	**3,1**			**3,1**
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	1,1	1,5		
	2004	1,1	1,2	1,6	1,8	1,7	1,9	1,8	1,7	**1,8**	**1,9**	**2,1**	**2,1**		1,7	
	2005	**2,1**	**2,1**	**2,0**	**2,0**	**2,0**	**2,0**	**2,1**	**2,2**	**2,2**	**2,1**	**2,1**	**2,1**			**2,1**
Core inflation less owner's equivalent rent of primary residence	2003	1,4	1,2	1,2	1,0	1,2	1,2	1,3	1,0	0,9	1,0	0,7	0,8	1,1		
	2004	0,9	1,0	1,5	1,6	1,5	1,6	1,5	1,4	**1,5**	**1,7**	**1,9**	**1,9**		1,5	
	2005	**1,9**	**1,8**	**1,6**	**1,7**	**1,7**	**1,7**	**1,8**	**1,9**	**1,9**	**1,8**	**1,7**	**1,7**			**1,8**
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	3,6	2,1		
	2004	3,5	3,3	3,2	3,4	4,1	3,7	4,0	3,5	**3,3**	**3,2**	**2,9**	**2,5**		3,4	
	2005	**2,8**	**2,8**	**2,8**	**2,9**	**2,3**	**2,3**	**2,3**	**2,5**	**2,7**	**2,6**	**2,6**	**2,6**			**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	6,9	12,2		
	2004	7,8	3,8	0,4	5,6	15,0	17,0	14,2	10,5	**7,3**	**11,4**	**12,8**	**14,8**		10,0	
	2005	**11,9**	**10,0**	**7,9**	**5,3**	**-0,6**	**-3,2**	**-1,5**	**-1,0**	**-0,6**	**-0,3**	**0,5**	**0,0**			**2,2**
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	1,7	1,7	2,3	3,1	3,3	3,0	2,7	**2,4**	**2,8**	**3,0**	**3,1**		2,6	
	2005	**2,9**	**2,8**	**2,6**	**2,4**	**1,8**	**1,6**	**1,9**	**2,0**	**2,0**	**2,0**	**2,1**	**2,0**			**2,2**
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	1,9	2,2		
	2004	1,9	1,6	1,7	2,3	3,3	3,5	3,2	2,7	**2,4**	**2,9**	**3,1**	**3,2**		2,7	
	2005	**3,0**	**2,8**	**2,5**	**2,3**	**1,5**	**1,3**	**1,6**	**1,7**	**1,8**	**1,7**	**1,8**	**1,7**			**2,0**

(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.

Source: BLS & Universidad Carlos III Madrid
Data: September 16, 2004

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

		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03 / D02	D04 / D03	D05 / D04
Non energy commodities less food (1)	2003	-0,6	0,3	0,4	-0,1	-0,6	-0,6	-0,6	-0,1	0,4	0,1	-0,4	-0,6	-2,5		
	2004	-0,4	0,6	0,7	0,1	-0,2	-0,6	-0,9	-0,1	**0,6**	**0,6**	**-0,1**	**-0,6**		**-0,1**	
	2005	**-0,4**	**0,3**	**0,5**	**0,1**	**-0,3**	**-0,5**	**-0,5**	**0,0**	**0,5**	**0,4**	**-0,1**	**-0,6**			**-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	2,6		
	2004	0,5	0,4	0,6	0,2	0,1	0,3	0,3	0,2	**0,0**	**0,3**	**0,0**	**0,0**		**3,0**	
	2005	**0,5**	**0,4**	**0,6**	**0,2**	**0,1**	**0,3**	**0,4**	**0,2**	**0,0**	**0,4**	**0,0**	**0,0**			**3,1**
Core inflation (3=1+2)	2003	0,2	0,4	0,3	0,1	0,1	-0,1	0,1	0,2	0,1	0,4	-0,2	-0,2	1,1		
	2004	0,2	0,5	0,6	0,2	0,0	0,1	0,0	0,1	**0,2**	**0,4**	**0,0**	**-0,1**		**2,1**	
	2005	**0,2**	**0,4**	**0,5**	**0,2**	**0,0**	**0,1**	**0,1**	**0,2**	**0,1**	**0,4**	**0,0**	**-0,2**			**2,1**
Core inflation less owner's equivalent rent of primary residence	2003	0,2	0,5	0,3	0,1	0,0	-0,1	0,1	0,1	0,0	0,4	-0,4	-0,3	0,8		
	2004	0,2	0,6	0,8	0,2	-0,1	0,0	-0,1	0,0	**0,1**	**0,5**	**-0,1**	**-0,3**		**1,9**	
	2005	**0,3**	**0,5**	**0,7**	**0,2**	**-0,1**	**0,0**	**0,1**	**0,1**	**0,1**	**0,4**	**-0,2**	**-0,3**			**1,7**
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	0,7	3,6		
	2004	0,1	0,2	0,2	0,1	0,9	0,1	0,3	0,0	**-0,1**	**0,4**	**0,1**	**0,3**		**2,5**	
	2005	**0,4**	**0,1**	**0,1**	**0,1**	**0,3**	**0,1**	**0,3**	**0,2**	**0,2**	**0,3**	**0,1**	**0,3**			**2,6**
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	6,9		
	2004	4,2	2,3	1,8	2,0	5,6	3,6	-2,1	-0,6	**-0,1**	**-1,7**	**-1,6**	**0,8**		**14,8**	
	2005	**1,6**	**0,6**	**-0,2**	**-0,5**	**-0,3**	**1,0**	**-0,4**	**-0,1**	**0,3**	**-1,4**	**-0,7**	**0,3**			**0,0**
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		
	2004	0,5	0,5	0,6	0,3	0,6	0,3	-0,2	0,1	**0,1**	**0,2**	**-0,1**	**0,0**		**3,1**	
	2005	**0,4**	**0,4**	**0,4**	**0,1**	**0,0**	**0,2**	**0,1**	**0,2**	**0,2**	**0,2**	**-0,1**	**-0,1**			**2,0**
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	1,9		
	2004	0,6	0,7	0,8	0,3	0,7	0,4	-0,3	0,0	**0,1**	**0,3**	**-0,2**	**-0,1**		**3,2**	
	2005	**0,4**	**0,4**	**0,5**	**0,1**	**0,0**	**0,1**	**0,1**	**0,1**	**0,1**	**0,2**	**-0,2**	**-0,2**			**1,7**

(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 & Universidad Carlos III Madrid
Data: September 16, 2004

Table A7A

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

			I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Avr 03/02(b)	Avr 04/03(b)	Avr 05/04(b)
(1) AE	17,17%	2003	3,7	4,2	4,1	3,1	2,8	2,6	2,5	2,5	2,4	2,6	2,8	2,7	3,0		
		2004	2,5	2,4	2,4	2,9	3,7	4,0	4,2	4,2	**4,3**	**4,1**	**4,1**	**4,1**		3,6	
		2005	**4,1**	**4,0**	**4,1**	**3,7**	**2,9**	**2,7**	**2,7**	**2,6**	**2,6**	**2,5**	**2,5**	**2,5**			3,1
(2) MAN	30,05%	2003	2,0	2,2	2,3	2,6	2,6	2,5	2,2	2,0	2,1	1,5	1,2	1,2	2,0		
		2004	0,7	0,5	0,5	0,7	0,9	1,0	0,8	1,0	**0,9**	**1,1**	**1,1**	**1,1**		0,8	
		2005	**1,3**	**1,3**	**1,3**	**1,1**	**1,1**	**1,0**	**1,2**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**			1,1
(3) SER	35,05%	2003	4,0	3,9	3,6	4,0	3,5	3,5	3,6	3,7	3,5	3,7	3,7	3,6	3,7		
		2004	3,6	3,6	3,6	3,7	3,8	3,8	3,7	3,7	**3,8**	**3,8**	**3,9**	**4,0**		3,8	
		2005	**4,1**	**4,1**	**4,2**	**3,9**	**4,0**	**4,0**	**4,1**	**4,1**	**4,0**	**4,0**	**4,1**	**4,1**			4,1
IPSEBENE (4)=(1)+(2)+(3)	82,28%	2003	3,2	3,3	3,2	3,3	3,0	2,9	2,9	2,8	2,8	2,6	2,6	2,5	2,9		
		2004	2,3	2,3	2,2	2,4	2,7	2,8	2,8	2,9	**2,9**	**2,9**	**2,9**	**2,9**		2,7	
		2005	**3,1**	**3,1**	**3,1**	**2,8**	**2,7**	**2,7**	**2,7**	**2,7**	**2,7**	**2,6**	**2,6**	**2,6**			2,8
IPSEBENE-XT	77,21%	2003	2,9	3,0	3,0	3,2	3,1	3,0	2,8	2,8	2,7	2,6	2,6	2,6	2,9		
		2004	2,4	2,4	2,3	2,5	2,6	2,6	2,6	2,7	**2,7**	**2,6**	**2,6**	**2,6**		2,6	
		2005	**2,9**	**2,9**	**2,9**	**2,6**	**2,6**	**2,6**	**2,8**	**2,7**	**2,7**	**2,7**	**2,7**	**2,7**			2,7
(5) ANE	8,60%	2003	7,2	5,9	5,6	4,5	4,6	4,8	5,5	6,5	7,7	7,0	6,7	6,4	6,0		
		2004	6,5	6,1	6,5	6,8	7,0	6,2	5,5	3,8	**2,6**	**3,0**	**3,2**	**3,2**		5,0	
		2005	**2,6**	**4,1**	**4,1**	**4,3**	**3,9**	**4,2**	**3,8**	**4,7**	**5,0**	**5,2**	**5,5**	**5,4**			4,4
(6) ENE	9,12%	2003	5,5	6,7	6,1	0,8	-1,9	-0,6	0,0	1,1	-0,2	-1,8	1,1	-0,1	1,4		
		2004	-1,7	-2,5	-2,5	1,4	6,6	7,2	6,6	7,0	**7,3**	**8,4**	**8,1**	**8,3**		4,5	
		2005	**7,4**	**6,9**	**5,2**	**3,8**	**1,3**	**1,2**	**0,8**	**-1,0**	**-1,0**	**-1,0**	**-0,9**	**-0,8**			1,7
IPC	100%	2003	3,7	3,8	3,7	3,1	2,7	2,7	2,8	3,0	2,9	2,6	2,8	2,6	3,0		
		2004	2,3	2,1	2,1	2,7	3,4	3,5	3,4	3,3	**3,3**	**3,4**	**3,4**	**3,5**		3,0	
		2005	**3,5**	**3,5**	**3,4**	**3,1**	**2,7**	**2,7**	**2,6**	**2,5**	**2,5**	**2,5**	**2,6**	**2,6**			2,8

* 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: INE, IFL & UC3M
Date: September 16, 2004

Table A7B

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

			I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	D03 / D02	D04 / D03	D05 / D04
(1) AE	17,17%	2003	0,5	0,6	0,3	0,1	0,1	0,1	0,1	0,2	0,1	0,3	0,2	0,1	2,7		
		2004	0,4	0,5	0,3	0,5	1,0	0,4	0,2	0,2	**0,1**	**0,1**	**0,2**	**0,1**		4,1	
		2005	**0,4**	**0,4**	**0,3**	**0,2**	**0,1**	**0,2**	**0,2**	**0,2**	**0,1**	**0,1**	**0,1**	**0,1**			2,5
(2) MAN	30,05%	2003	-3,1	0,0	1,0	2,7	0,5	-0,2	-3,5	-0,3	1,0	2,3	1,1	-0,1	1,2		
		2004	-3,6	-0,2	0,9	3,0	0,6	-0,1	-3,7	-0,1	**1,0**	**2,4**	**1,1**	**-0,1**		1,1	
		2005	**-3,4**	**-0,1**	**1,0**	**2,8**	**0,6**	**-0,1**	**-3,6**	**-0,1**	**1,0**	**2,4**	**1,1**	**-0,1**			1,1
(3) SER	35,05%	2003	0,6	0,4	0,5	0,7	-0,2	0,4	0,7	0,7	-0,5	0,2	-0,2	0,4	3,6		
		2004	0,6	0,4	0,5	0,7	-0,1	0,4	0,6	0,6	**-0,3**	**0,1**	**-0,1**	**0,4**		4,0	
		2005	**0,7**	**0,4**	**0,6**	**0,4**	**0,0**	**0,4**	**0,6**	**0,6**	**-0,4**	**0,2**	**-0,1**	**0,5**			4,1
IPSEBENE (4)=(1)+(2)+(3)	82,28%	2003	-0,8	0,3	0,6	1,3	0,1	0,1	-1,0	0,2	0,2	1,0	0,4	0,1	2,5		
		2004	-1,0	0,2	0,6	1,5	0,4	0,2	-1,1	0,3	**0,2**	**1,0**	**0,4**	**0,2**		2,9	
		2005	**-0,8**	**0,2**	**0,6**	**1,2**	**0,3**	**0,2**	**-1,0**	**0,3**	**0,2**	**0,9**	**0,4**	**0,2**			2,6
IPSEBENE-XT	77,21%	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	2,6		
		2004	-1,1	0,2	0,6	1,5	0,3	0,1	-1,3	0,2	**0,4**	**1,1**	**0,5**	**0,1**		2,6	
		2005	**-0,8**	**0,2**	**0,6**	**1,2**	**0,3**	**0,1**	**-1,1**	**0,1**	**0,4**	**1,0**	**0,5**	**0,1**			2,7
(5) ANE	8,60%	2003	0,4	-1,5	0,5	0,0	0,6	0,3	1,5	1,9	2,2	-0,4	0,0	0,9	6,4		
		2004	0,6	-1,9	0,8	0,3	0,8	-0,5	0,8	0,3	**0,9**	**0,0**	**0,2**	**0,8**		3,2	
		2005	**0,1**	**-0,5**	**0,8**	**0,5**	**0,3**	**-0,2**	**0,4**	**1,2**	**1,2**	**0,2**	**0,4**	**0,8**			5,4
(6) ENE	9,12%	2003	2,2	1,3	1,4	-2,6	-2,5	-0,6	0,9	1,4	-0,4	-1,1	0,3	-0,3	-0,1		
		2004	0,6	0,4	1,5	1,3	2,5	0,0	0,3	1,8	**-0,1**	**-0,1**	**0,0**	**-0,1**		8,3	
		2005	**-0,2**	**-0,1**	**-0,1**	**-0,1**	**-0,1**	**0,0**	**-0,1**	**-0,1**	**-0,1**	**0,0**	**0,0**	**0,0**			-0,8
IPC	100,00%	2003	-0,4	0,2	0,7	0,8	-0,1	0,1	-0,6	0,5	0,3	0,7	0,3	0,2	2,6		
		2004	-0,7	0,0	0,7	1,4	0,6	0,2	-0,8	0,4	**0,3**	**0,8**	**0,3**	**0,2**		3,5	
		2005	**-0,7**	**0,1**	**0,6**	**1,0**	**0,2**	**0,1**	**-0,8**	**0,3**	**0,3**	**0,8**	**0,4**	**0,2**			2,6

** 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: INE, IFL & UC3M
Date: September 16, 2004

Graph A1A

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

Observed Values ——— Forecast - - - -
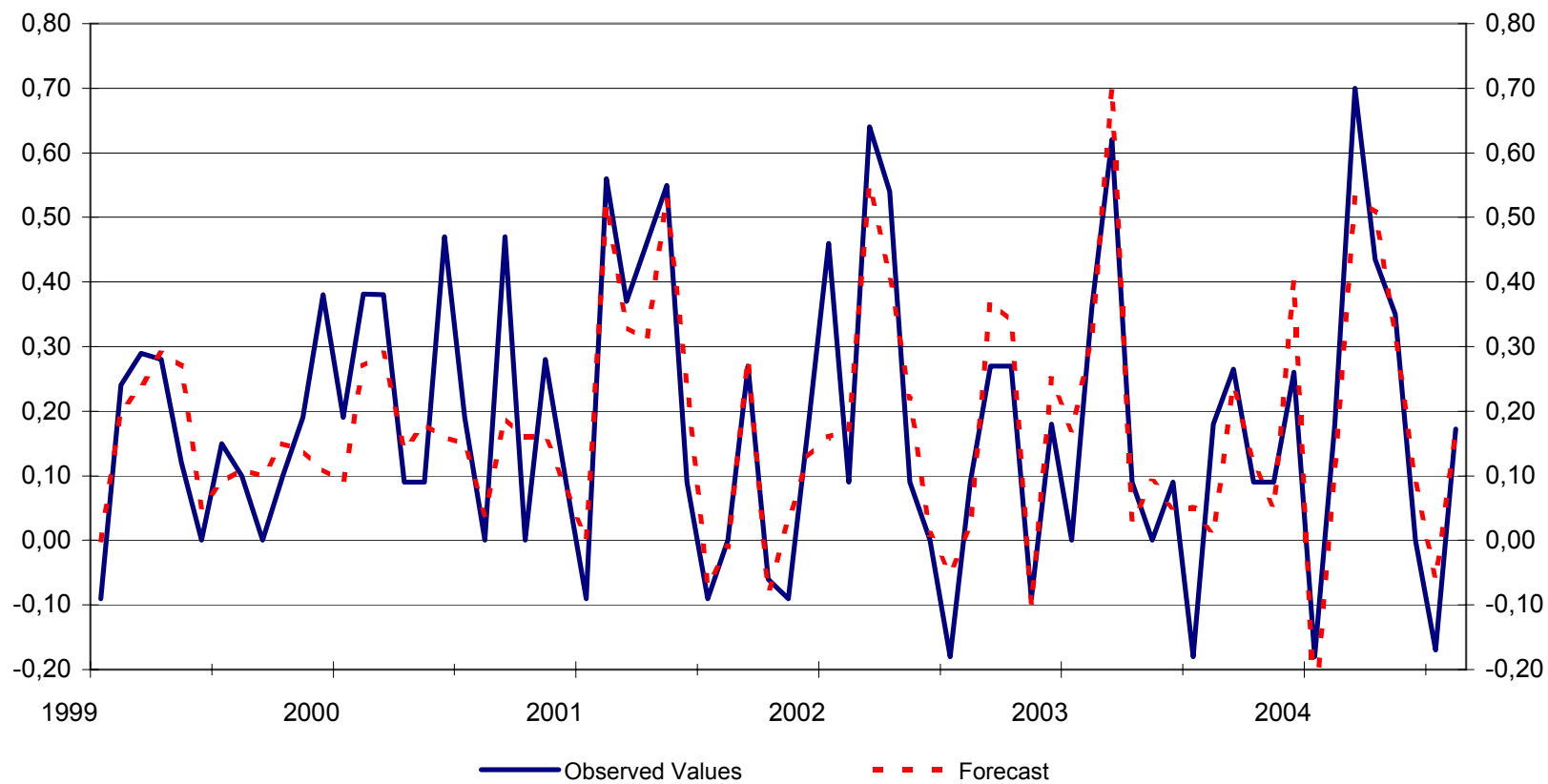
Source: EUROSTAT, IFL & UC3M   Date: September 16, 2004

Graph A1B

CPI MONTHLY GROWTH RATES IN USA
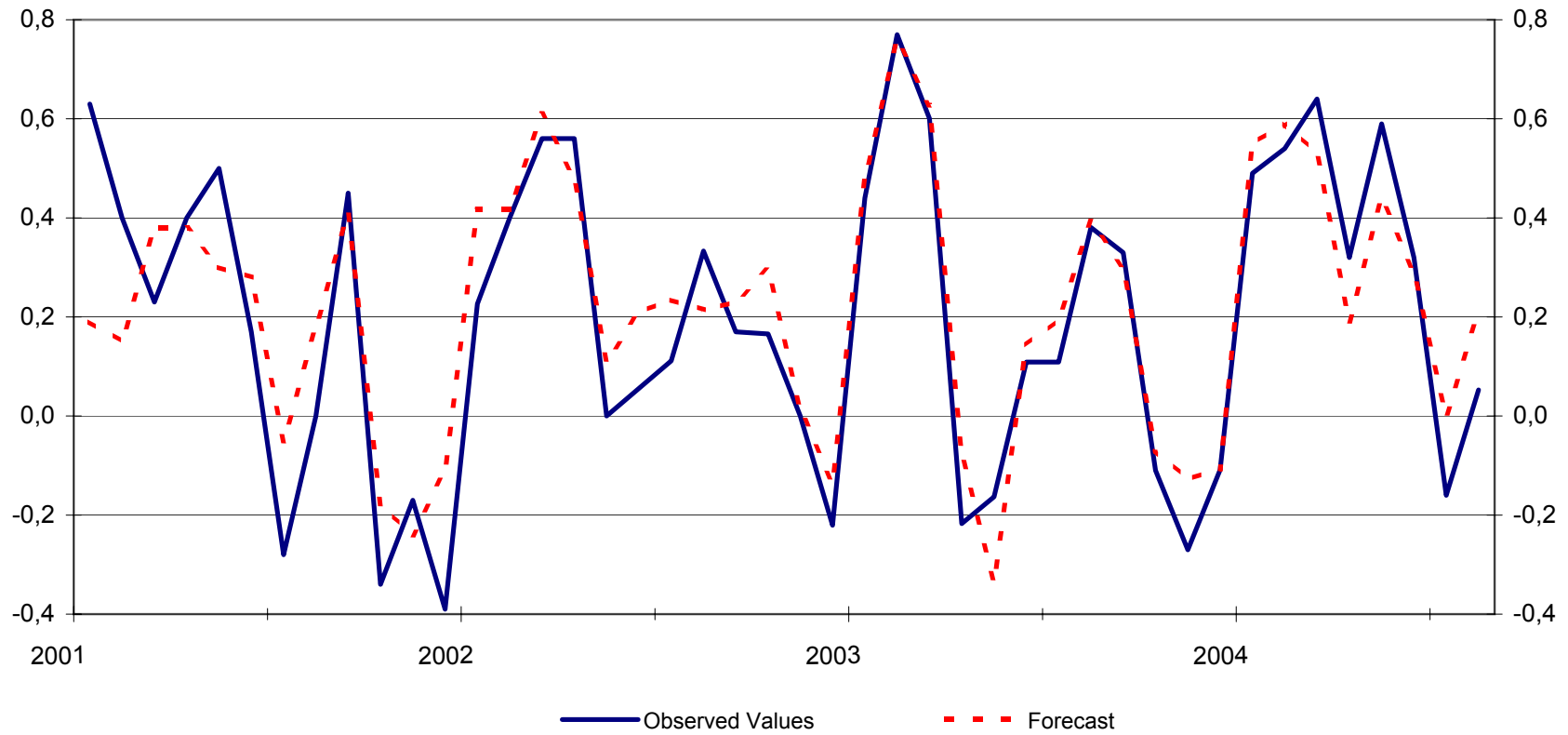
Source: BLS, IFL & UC3M   Date: September 16, 2004

Graph A1C

CPI MONTH-ON-MONTH RATES OF GROWTH IN SPAIN

Observed Values   Forecast
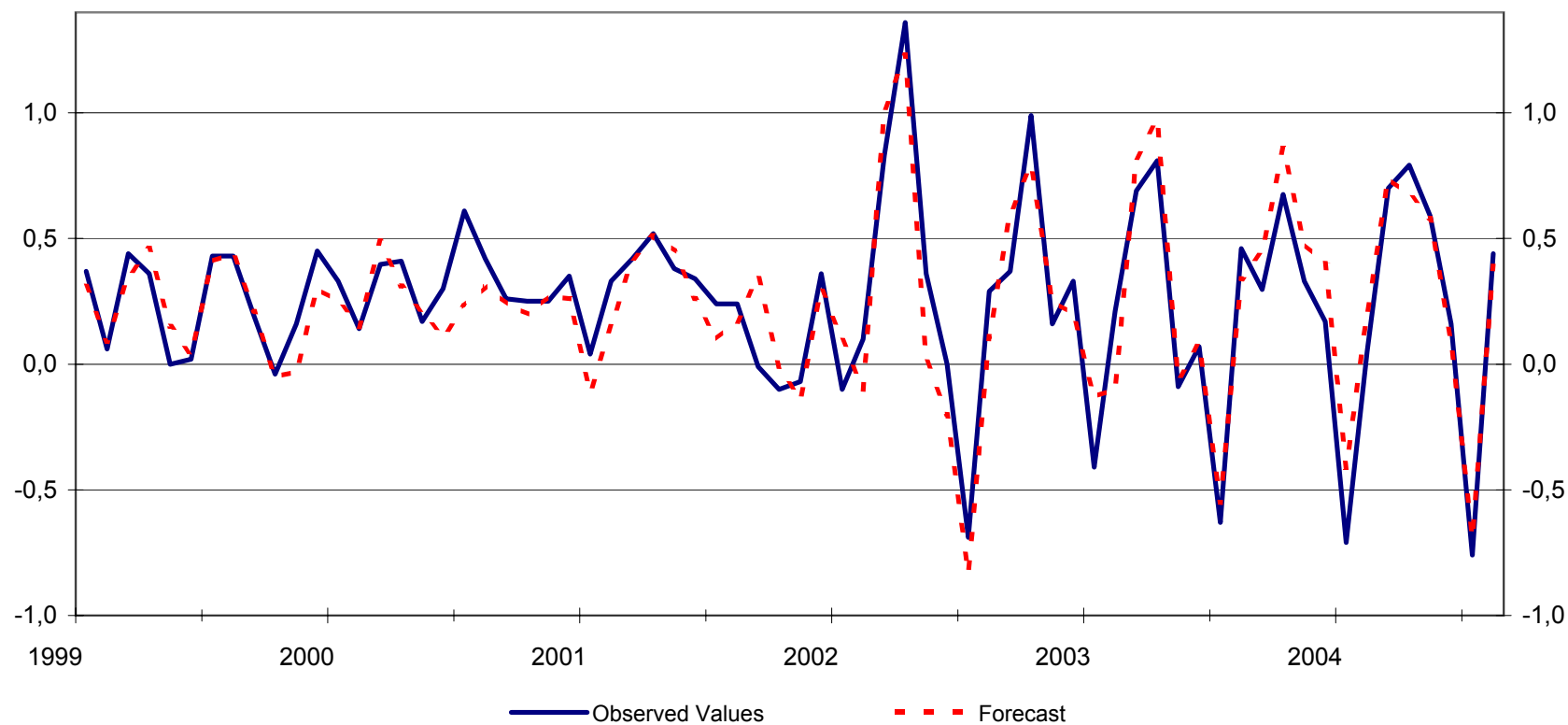
Source: INE, IFL & UC3M   Date: September 10, 2004

Graph A2A

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

Observed Value — Historical Inflation mean
May-04 (Last Obs) — Feb-04 (Last Obs.)
August-04 (Last Obs.)
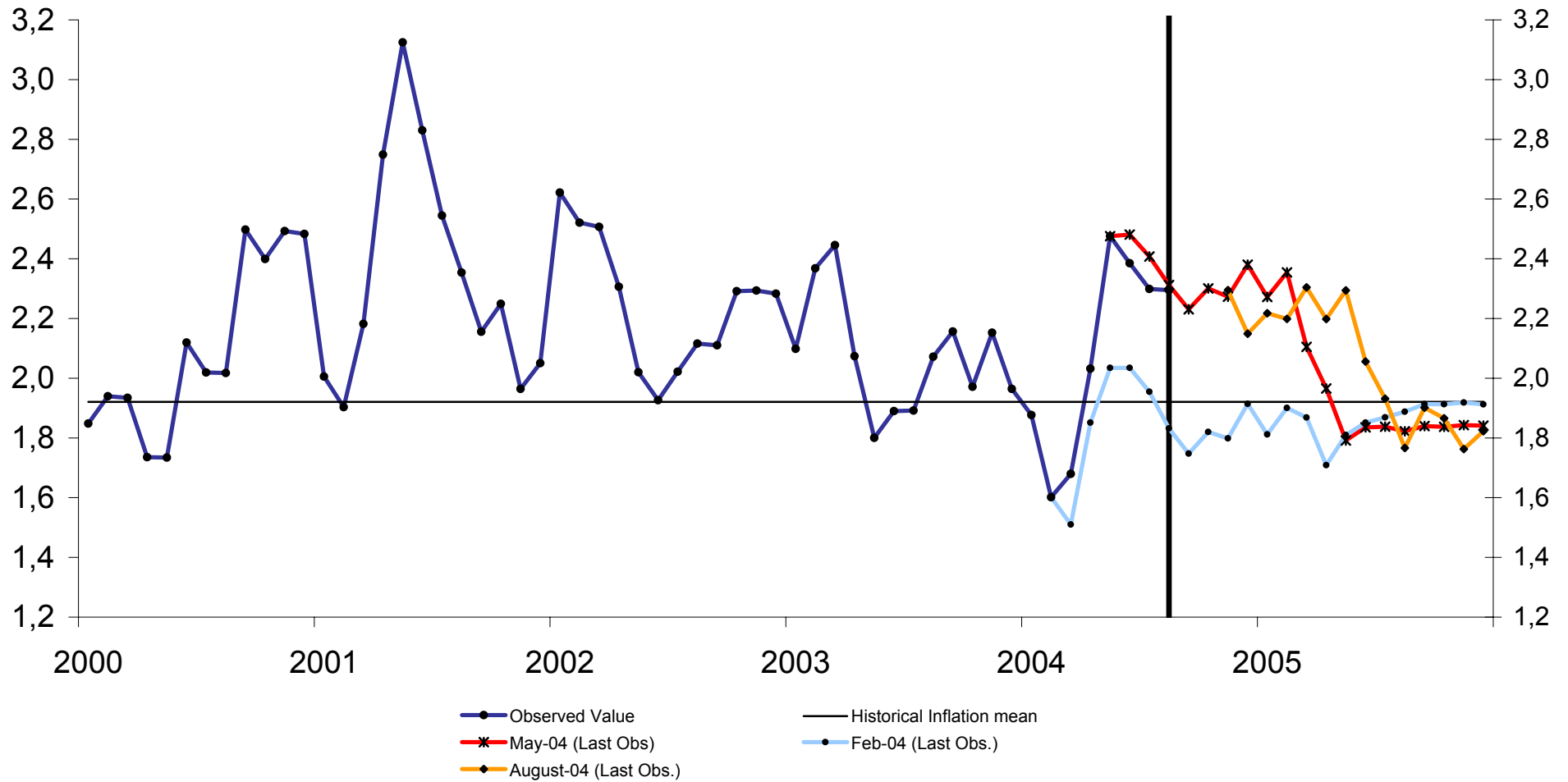
Source: Eurostat & EFN   Date: September 16, 2004

Graph A2B

ANNUAL FORECASTS FOR US INFLATION

CPI ——◆—— dic-01 ——◆—— Mar-03 ——●—— forecast
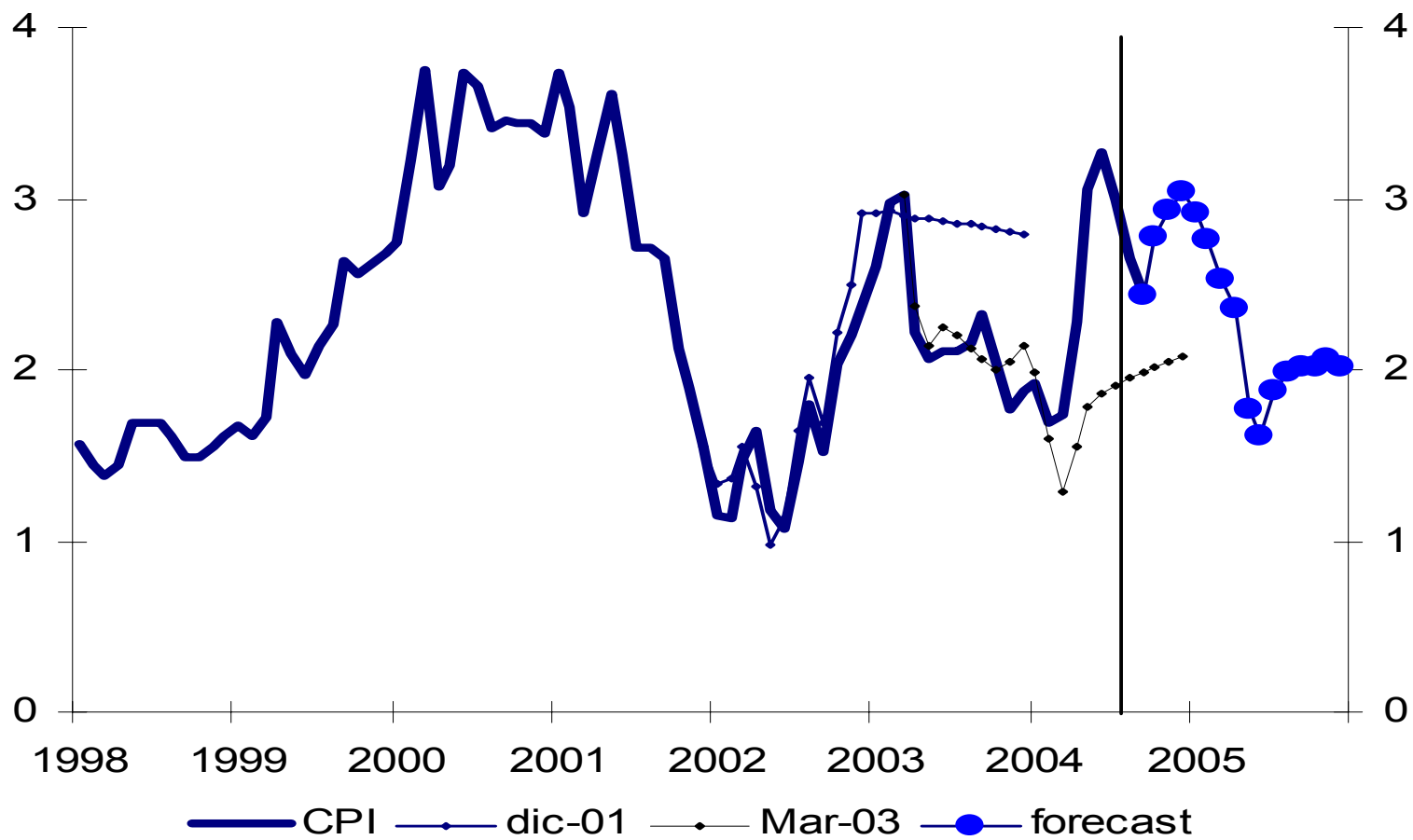
Graph A2C

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

●— Obs. Values	✳— Forecast (Last Obs Dec-03)
— Historical Inflation mean (1996-2003)	●— Forecast (Last Obs Aug-04)
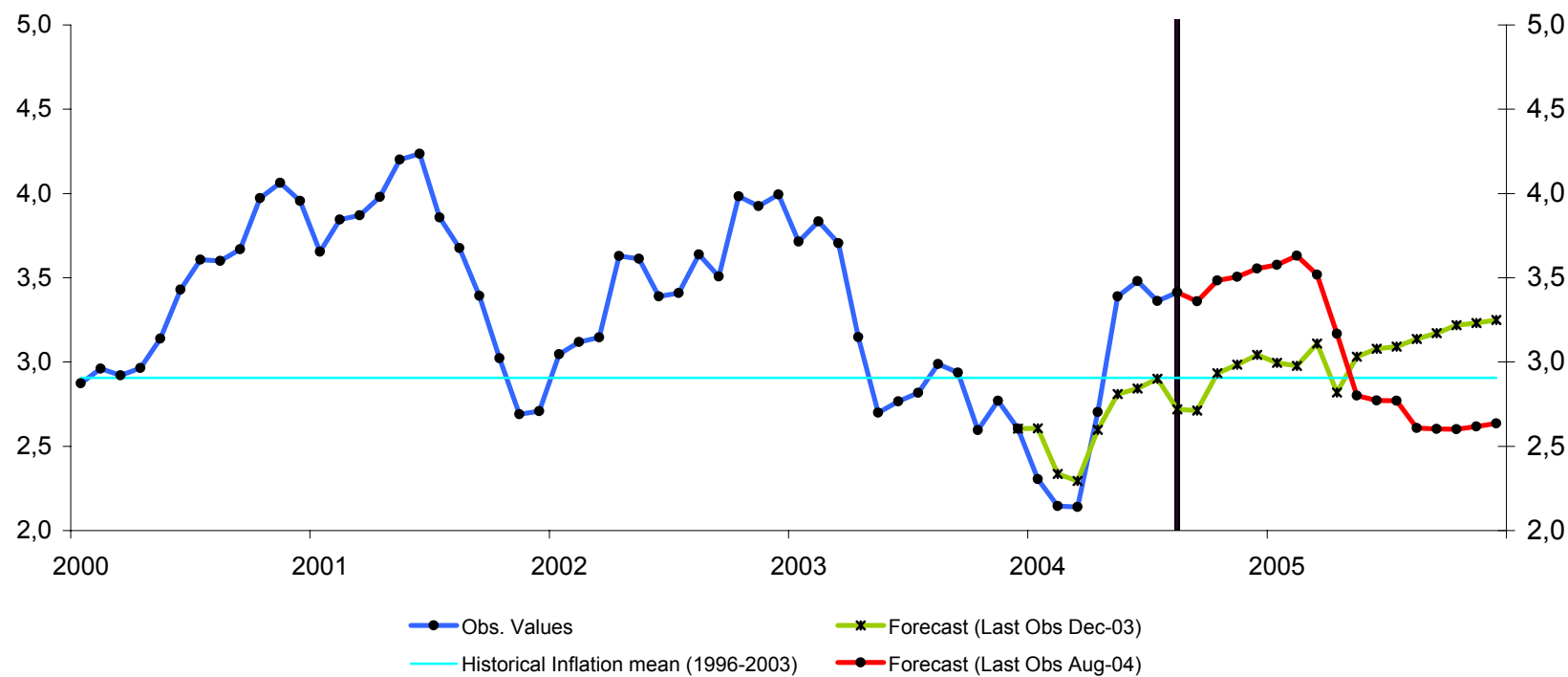
Source: INE, IFL & UC3M   Date: September 16, 2004

Graph A3A

YEAR-ON-YEAR RATE OF EMU INFLATION
AND CONTRIBUTIONS OF MAIN COMPONENTS

Forecast

Legend:
- CORE Contribution
- UNPROCESSED FOOD Contribution
- ENERGY Contribution
- HICP Inflation
- CORE Contribution
- Contribution of a 2% CORE inflation rate
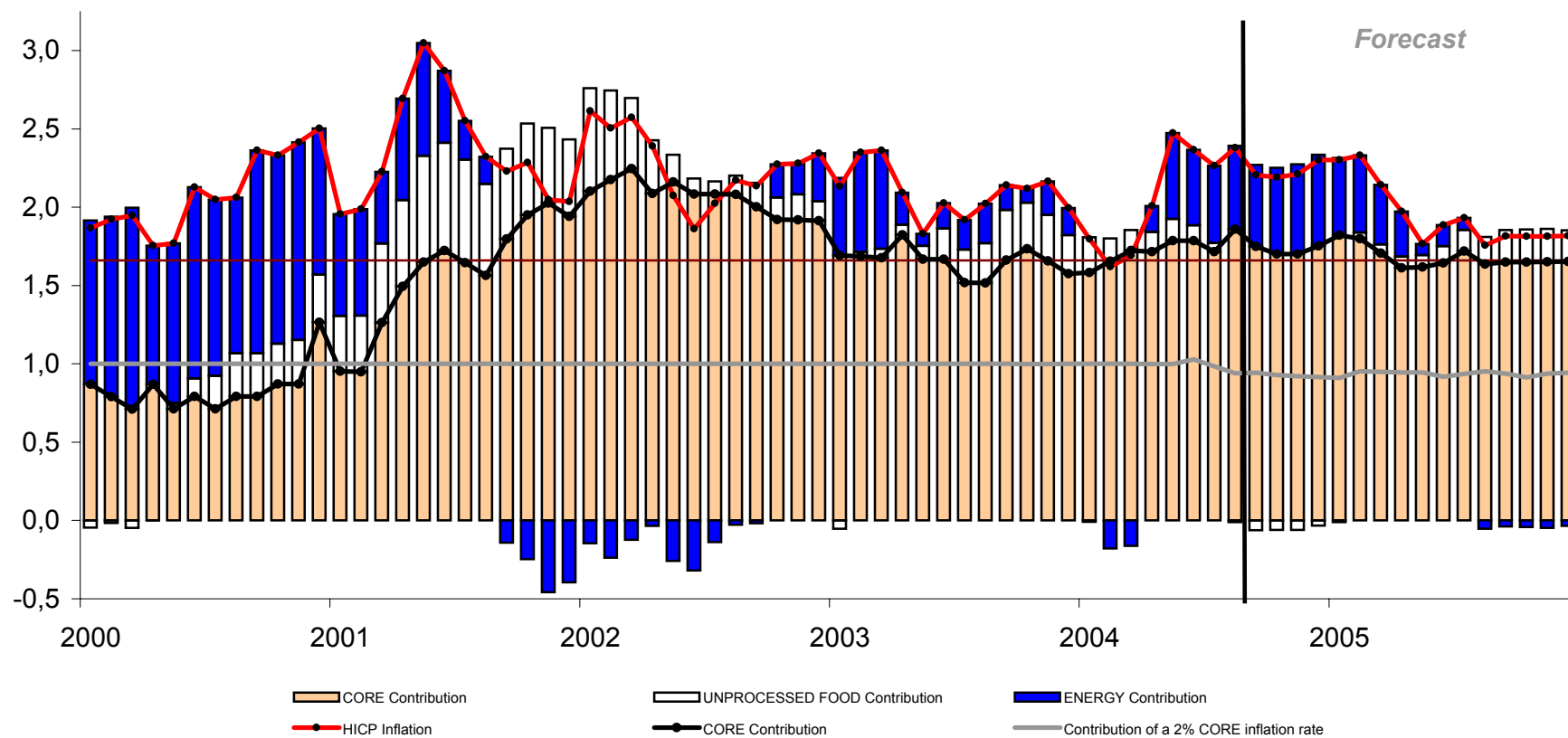
Source: EUROSTAT, IFL & UC3M   Date: September 16, 2004

MONTHLY DEBATES IN PREVIOUS BULLETINS

- Juan Urrutia "The Capitalism to come". Fraternity: Scope, Diversity and Cultural Relativism (nº 118)

- Juan Urrutia "The Capitalism to come". Transaction costs and information problems (nº 117)

- Juan Urrutia "The Capitalism to come" Ownership, information and scope (nº116)

- Juan Urrutia "The Capitalism to come" Users as intermediaries (nº115)

- Juan Urrutia "The Capitalism to come" Users as producers (nº114)

- Juan Urrutia "The Capitalism to come" Homo Posteconomicus (nº113)

- Juan Urrutia "The Capitalism to come". (nº112)

- Juan de Dios Tena Horrillo Sectoral Output and Price Reactions to Monetary Shocks in the UK. Do Financial Factors Really Matter (nº 110)

- Enrique M.Quilis, Análisis factorial dinámico: una panorámica (nº 109)

- 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, p. 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)

SUBSCRIPTION FORM - 2004 YEAR

First and Last Name: ....
Address: .... Postal Code: ....
Telephone: .... Telefax .... E-Mail: ....
VAT Number: .... Date: ....

EU & US Inflation and Macroeconomic Analysis Bulletin (*Monthly edition*) .... €325 o
Delivered 14 days after the European Harmonised Prices Index publication

Inflation Forecast Update Service (*3 updates*) .... €1150 o
12 hours after the Spanish CPI publication
48 hours after the European Harmonised Prices Index publication
48 hours after the United States CPI publication

Jointly Subscription .... €1275 o
Subscription to the EU & US Inflation and Macroeconomic Analysis Bulletin
+ Inflation Forecast Update Service.

PAYMENT METHODS
(Including VAT and shipping fees)

Bank Transfer... o
To: Fundación Universidad Carlos III C.C.C.: 2096-0630-18-2839372704

Credit Card .... VISA o .... AMERICAN EXPRESS o.............. MASTERCARD o
Credit card number .... Expiry date ....
Signature...

Please send me *FREE OF CHARGE*

A copy of the EU & US Inflation and Macroeconomic Analysis Bulletin...o
An Inflation Forecast Update of the current Bulletin edition ....o

WWThank you for giving us details of a colleague who may be interested in our products and services WW
....
....
....

Authorised signature:

Bulletin EU & US Inflation and Macroeconomic Analysis
INSTITUTO FLORES DE LEMUS
Universidad Carlos III de Madrid

INTERNATIONAL INFLATION FORECASTS

| | SEPTEMBER 2004 | | AVERAGE ANNUAL RATES | | | | |
	Monthly Rate	Annual Rate	2001*	2002*	2003*	2004	2005
ECONOMIC MONETARY UNION							
Total Inflation	0.2	2.1	2.3	2.3	2.1	2.1	1.9
Core Inflation	0.2	2.1	1.9	2.5	2.0	2.1	2.0
Goods	1.1	0.8	0.9	1.5	0.8	0.8	0.8
Services	-0.3	2.6	2.5	3.1	2.6	2.6	2.6
GDP			1.6	0.9	0.5	2.0	2.2
Private Final Consumption Expenditure			2.1	1.3	1.2	1.4	2.0
Gross Fixed Capital Formation			-0.3	-2.7	-0.6	1.8	3.2
Exports of Goods and Services			3.4	1.7	0.1	7.0	6.5
Imports of Goods and Services			1.7	0.3	2.1	6.1	7.0
Gross Value Added Total			1.6	0.9	0.5	2.0	2.2
Gross Value Added Agriculture			-1.2	1.0	-3.6	1.7	2.1
Gross Value Added Industry			0.3	0.2	0.0	2.5	2.8
Gross Value Added Construction			-0.4	-0.6	-0.6	0.5	0.3
Gross Value Added Services			2.7	1.3	1.0	2.1	2.4
OTHER ECONOMIC INDICATOR							
Industrial Production Index (excluding construction)			0.4	-0.5	0.3	2.3	2.4
UNITED STATES							
Total Inflation	0.1	2.4	2.8	1.6	2.3	2.6	2.2
Core Inflation	0.2	1.8	2.7	2.3	1.5	1.7	2.1
Goods	0.6	-0.9	0.3	-1.1	-2.0	-1.1	-0.4
Services	0.0	2.9	3.7	3.8	2.9	2.9	3.1

*Observed values.

SPANISH ECONOMY FORECASTS

| | SEPTEMBER 2004 | | AVERAGE ANNUAL RATES | | | | |
	Monthly Rate	Annual Rate	2001*	2002*	2003*	2004	2005
Total Inflation	0.3	3.3	3.6	3.1	3.0	3.0	2.8
Trend Inflation	0.2	2.9	3.4	3.7	2.9	2.7	2.8
Goods	1.0	0.9	3.1	2.5	2.0	0.8	1.1
Services	-0.3	3.8	7.1	4.6	3.7	3.8	4.1

*Observed values.

For information about subscriptions see
SUBSCRIPTION FORM
inside this issue
www.uc3m.es/boletin