Observatorio de Coyuntura Económica Internacional

Monographic March 2006:

Prices 2006

INDEX

Authors: Vicente J. Pallardó, Nicolás Jannone, Silviano Esteve, Antonio Cutanda, Francisco Requena, Rosa Puertas, Mª Luisa Martí y Héctor Ruiz

Observatorio de Coyuntura Económica Internacional
Instituto de Economía Internacional
Universitat de València
Campus dels Tarongers
3er piso, edificio Departamental Oriental

1.- The United Estates

Prices in the US economy: energy and housing, the only slightly negative aspects perceived

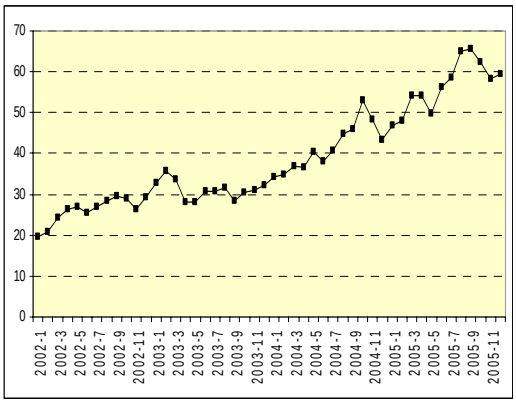
a) Favourable Historical Trend

Price stability has become one of the most significant accomplishments over the last decade in the US economy – following the difficult times experienced in the 1970s and 80s (see the inflation trend since 1960 in Figure 1 at the end of this report). Even when the economic climate was not favourable (as has been the case over the past four years), nothing appears to threaten price stability, with the necessary intervention of the Federal Reserve, in the medium or the long term. Surveys carried out on all types of economic agents reveal that this confidence is widespread[1].

Certain structural factors have favoured this positive situation which remains intact even when real interest rates are particularly low. Let's take a closer look at these ideas.

The average inflation rate in the United States (Consumer Price Index) over the last 45 years stands at 4.3%. In contrast, the average for the last decade stands at 2.5% (core inflation figures were similar at 4.2% and 2.2% respectively). Furthermore, inflation has been held in check at the same time as real interest rates have dropped from 1.86% (average for the last 45 years) to 1.34% (average over the last decade), which creates a more expansive scenario that, initially speaking, is more prone to inflationary tensions. In fact, such low real interest rates were only recorded in the 1970s (before Paul Volcker's term of office and his fight against inflation) and the cost in terms of price hikes was extraordinarily high.

Figure 2: Oil Prices (dollars/barrel of WTI)

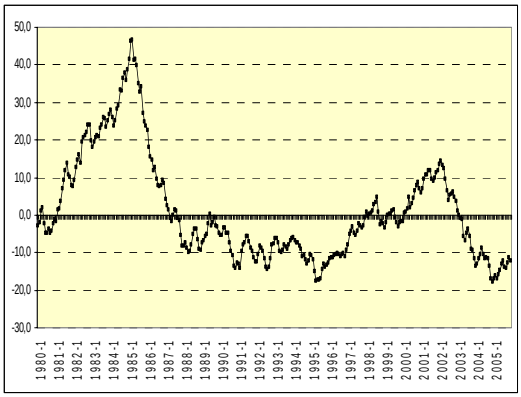


Source: own elaboration with data from FRED II

This situation of considerably accommodating monetary conditions has since 2002 been joined by soaring energy prices (Figure 2), robust economic growth and based on an excessive boom in domestic demand and the fact that the US dollar has clearly depreciated with respect to its historical trend (Figure 3). All these factors should have put price stability in serious danger.

[1] We must highlight the fact that this is not only the case in the United States, but in developed nations as a whole.

Figure 3: Effective US Dollar Exchange Rate Compared to Main Currencies (deviations with Respect to 1980-2005 average)



Source: own elaboration with data from FRED II

However, and in spite of the significant increase in headline inflation (yet to be observed in core inflation, at least for the moment), these negative aspects related to the current economic environment are being offset by structural elements that move to keep prices in check. In particular, the following three stand out:

- Globalisation: the rise in international competition is increasingly affecting both companies, which are forced to severely limit their profit margins, and also workers, subjected to the risk of their company going offshore if growth in productivity does not tally with the increase in wages. As the competition phenomenon of emerging nations is felt by primary and traditional industry sectors and moves on towards more advanced industrial sectors and services, the downward pressure on inflation and wages will become more pronounced.
- New technologies: the spectacular progress linked to Information and Communication Technologies (together with other vanguard sectors), as well as the improvements in business management and organisation, have resulted in exceptional gains in productivity in the United States (and other developed nations, although not all) over the last decade. Many experts believe that part of this improvement is a trend, which would raise future growth in productivity by around an annual 1% with respect to previous decades. The favourable impact on costs has unquestionably curbed inflation.

Central Bank Credibility: the remarkable work on behalf of top monetary officials in developed countries to control inflation has led to the widespread belief that any threat in this sense would undoubtedly be deactivated by the Central Bank. This belief guarantees moderate progress in terms of agents' income and contributes to the satisfaction of expectations.

In light of the predominance of these three economic processes, the possibility of inflation getting out of hand seems frankly remote in all developed countries and even more so in the United States.

b) Current Threat of Energy Prices

Table 2 summarises the pattern of a wide range of price categories (consumer, producer and export/import prices) over the last five years and last year.

The difference between the substantial rise in energy prices and the control of practically all the rest of the categories can be appreciated almost immediately.

As far as the CPI is concerned, apart from the perennial inflationary impact of those goods and services related to health in the United States, the transport sector clearly records the worst results, particularly in 2005.

Table 2: Recent Price Patterns by Category

CHANGE IN PRICE (%)	2000-05 Average	2005
CONSUMER PRICES		
HEADLINE	**2.7**	**3.4**
CORE	**2.2**	**2.1**
Food/Beverages	2.5	2.5
Household	3.0	3.3
Textiles and Clothing	-1.6	-0.7
Transport	**3.2**	**6.6**
Health	4.3	4.2
Recreation	1.2	0.7
Education/Communications	2.0	1.9
Misc. Goods & Services	3.3	2.9
Gas for Domestic Use	**15.4**	**29.5**
Heating Oil	**16.8**	**27.0**
Petrol	**10.0**	**15.8**
PRODUCER PRICES		
Final Goods	2.9	5.6
Final Goods exc. Energy & Food	1.1	1.7
Equipment	0.9	1.3
Intermediate Goods	4.2	8.5
Intermediate Goods exc. Energy & Food	2.7	4.5
Raw Industrial Materials	4.5	**9.6**
EXPORT/IMPORT PRICES		
Oil Imports	20.1	**42.5**
Rest of Imports	0.75	2.5
Exports	1.4	2.7

Source: own elaboration with data from BLS

As you look down the table to the sub-items linked to energy (gas for domestic use, petrol), the average annual double digit growth rate over the last five years became more accentuated last year.

In contrast, the price of the rest of the categories has moderated (with a special mention for the continuous deflation in textile products), which results in core inflation remaining in keeping with price stability. There is no clear sign of the upturn in energy prices spreading to the rest of prices in the economy.

A similar situation can be observed in producer prices: the increasingly strong rise in the price of raw industrial materials (not only energy) has seen both intermediate goods and final goods record substantial inflation.

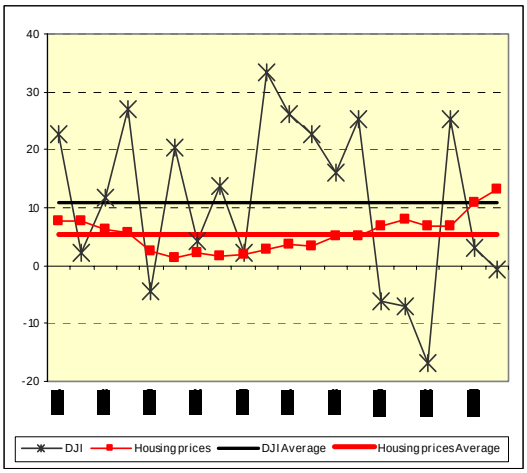
However, second round effects have apparently not been felt in this sector either, despite the 4.5% growth observed in intermediate goods except energy and food. The average inflation rate of around 1% for both equipment and final goods (except for the most volatile categories) since 2000 remained practically unchanged in 2005.

Finally, while the price of oil imports has soared since 2002 (including a rise of more than 40% in 2005), inflation linked to exports and imports as a whole remains below 3%, although it did witness an increase last year with respect to the previously stagnant five-year period.

c) Real Estate Bubble or Only "Froth Markets"?

We cannot finish our review of the main prices in the US economy without making a reference to the price of assets. Some authors believe that while the structural factors described above prevent low interest rates from resulting in an increase in the price of goods and services, the accommodating monetary conditions and high liquidity can lead to dangerous speculative bubbles in asset markets, particularly where real estate is concerned.

Figure 4: Housing Prices and Stock Market Listings – Dow Jones Industrial (annual growth rates; %)



Source: own elaboration with data from DJI and the Office of Federal Housing Enterprise Oversight

Figure 4 displays the pattern of housing prices and the DJI Index over the last 20 years.

As far as the **real estate market** is concerned, the average annual increase in prices over the last two decades stands at 5.5%, but this figure was well and truly eclipsed in 2004 and 2005, giving rise to the fear of a bubble, although such fear is probably excessive.

Firstly, because real estate inflation was below the level of headline inflation between 1990 and 1997, leaving undeniable room for a recovery, which occurred slowly over the following six years. Secondly, even if we include the double-figure rises over the past two years, the average increase in the price of housing since 1996 (7%) is still far from the level observed in other Anglo-Saxon countries (the UK, Ireland and Australia) or in Spain, where housing prices rose by more than 10% in all cases. The 7% rise is even similar to that observed in France, where no mention has been made of a bubble at all.

Thirdly, figures are only alarming in certain regions (generally speaking on both coasts and in Florida), while other States display moderate data. The idea of overheated markets introduced by the Fed is probably closer to the truth than that of a real estate bubble.

Finally, what should be considered a worrying rise in recent years appears to be steadily moderating. Housing sales and construction data and the time it takes to sell a house reveal that the housing market is cooling down. Prices should mirror this situation in the near future, particularly following the shift in monetary policy towards tougher conditions that began in June 2004.

Unless there are surprises, the most likely scenario is that of a slowdown in prices, thus silencing the alarm over a potential bubble, but also preventing the market from imploding.

As far as the **stock market** is concerned, after the "technology bubble" Bursa and the marked decreases in listings between 2000 and 2002, which to a great extent recovered in 2003, growth over the last two years has been practically flat. Despite the increase in corporate profits and dividend payments, improved investment options (in housing and other financial assets apart from shares), continuous accounting and management scandals, the poor performance of the dollar from the viewpoint of the foreign investor and an unmistakable fear of further episodes such as ".com", have resulted in the US stock market stagnating, in contrast with the remarkable growth in other markets, both developed and emerging.

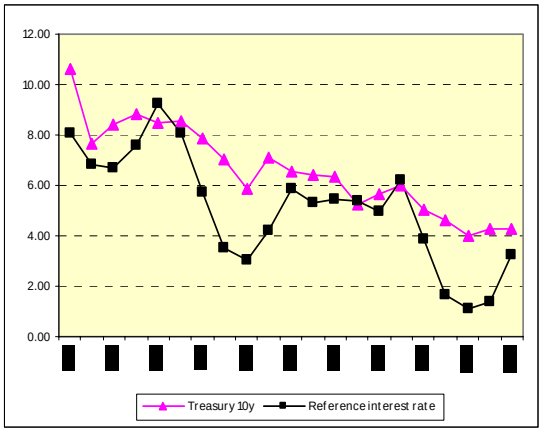
Finally, this situation has also been attributed, albeit to a lesser degree than in the case of housing, to excessively low medium and long term interest rates, pushing the prices up too high in the bond market (and in **fixed income markets** in general).

Figure 5 shows the pattern of 10-year Treasury bond rates in relation to the Fed Funds rate. On the one hand, it is true that no response on behalf of the public debt market has been witnessed in relation to the short term interest rate rise (the famous "conundrum" described in our January 2006 report). However, it is also true that the decreases in the Fed Funds Rate between 2001 and 2003 were only partially mirrored by long term rates whose downward trend is in keeping with the overall pattern of interest rates in recent years.

On the other hand, private issues have seen their spreads narrow substantially in recent years (see, for example, Figure 6), with respect to the already expensive public bonds. However, spreads were unusually high at the beginning of the decade. Now that they are more in line with the average for the past 20 years, spreads have stabilised and are even beginning to rally.

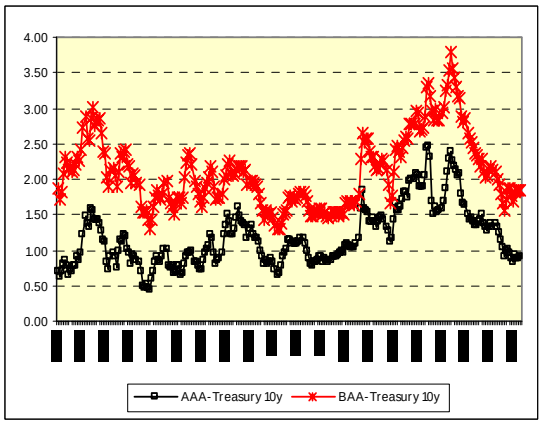
In short, although still cautious due to the developments in the housing market and long term interest rates in recent years, there do not appear to be any reasons to fear that the presumed bubbles in US asset markets will burst, at least for the moment.

Figure 5: Fed Funds Rate and 10-Year Treasury Bond Rate



Source: own elaboration with data from FRED II

Figure 6: Gap between Corporate and 10-Year Treasury Bonds



Source: own elaboration with data from FRED II

Vicente J. Pallardó
Valencia, March 28 2006

Table 1: Federal Reserve Chairmen and Economic Growth during their Terms of Office

Chairman	Citizen Participation Rate	Unemployment Rate	Employment (1,000s/year)	Employment (%)	Headline Inflation	10-year Treasury Bond rate
William McChesney Martin	59.3 (0.9)	4.6 (-0.7)	1283.4	2.3	2.3 (2.5)	4.1 (n.d.)
Arthur Burns + G. William Miller	61.8 (3.2)	6.4 (1.8)	2208.8	2.7	7.2 (3.2)	7.5 (1.8)
Paul Volcker	64.5 (1.9)	7.7 (0.9)	1620.6	1.7	5.8 (-3.5)	11.1 (0.5)
Alan Greenspan	***66.5 (0.7)***	***5.5 (-1.7)***	***1707.9***	***1.4***	***3.1 (-0.2)***	***6.2 (-4.7)***
Average (except Greenspan)	**61.9 (2.0)**	**6.2 (0.7)**	**1704.3**	**2.2**	**5.1 (0.7)**	**7.6 (1.2)**

Source: own elaboration with data from official institutions

Notes:

The annual adjustment (as appointments are not made at the beginning of the year, we have approximated their terms of office) has been carried out as follows:

W. McChesney Martin: 1951-1970

A. Burns: 1970-78 + G. William Millar: 1978-1979 (results are grouped in view of Millar's short term of office, which lasted only a few months and during which time few changes occurred with respect to the previous period)

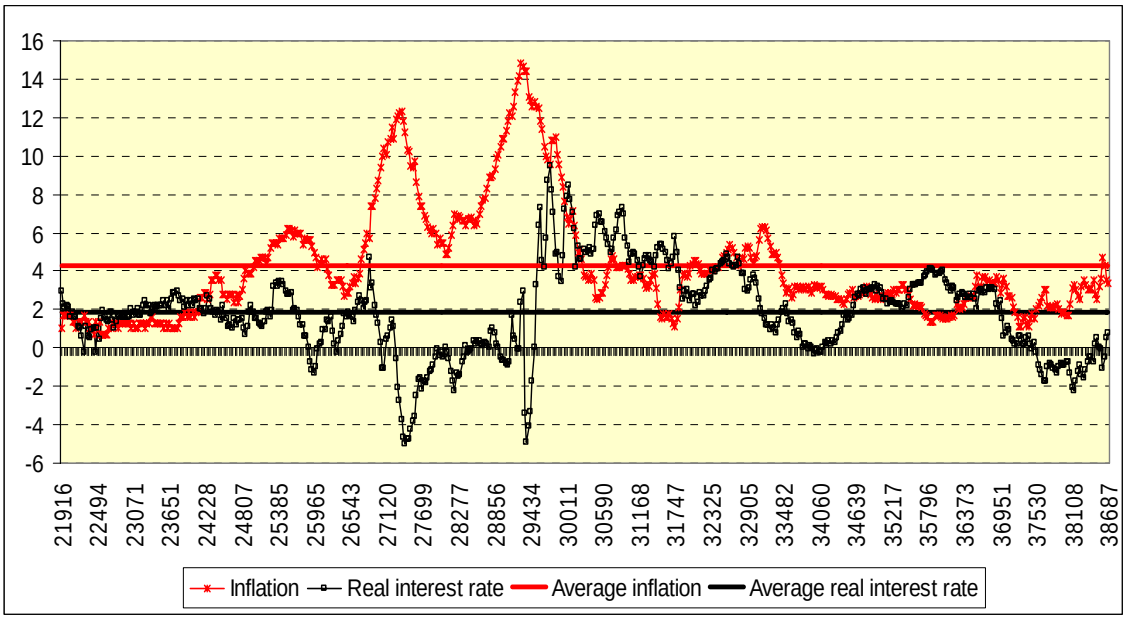
P. Volcker: 1980-1987

A. Greenspan: 1988-2005

The main figures are averages for each variable over the period under analysis. In brackets, the deviation of the variable from the average over the three previous years prior to office and the average of the three last years of their respective terms.

Employment (1,000s/year) refers to nonfarm payroll jobs created on average per year during each term. Employment (%) is the percentage those new jobs represent in relation to the total number of jobs in the economy each year.

Figure 1: CPI Inflation Rate and Real Interest Rates (Fed Funds Rate – Headline Inflation) since 1960 (%)



Source: own elaboration with data from FRED II

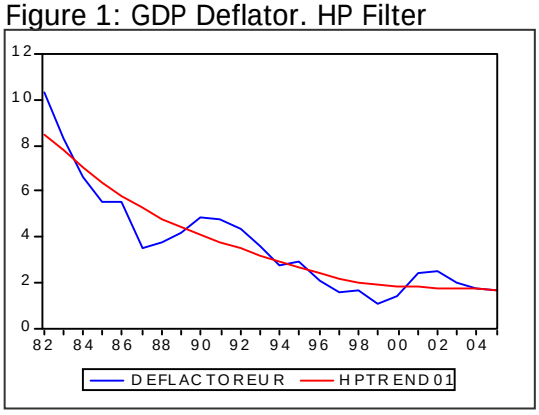
2.- Eurozone

General Slowdown in Prices

It easy to see the continuous slowdown in inflation by simply observing the pattern of the Euro-zone GDP deflator between 1980 and 2005. If we took other countries into account, we would still draw the same conclusion.

The deflator or inflation only dropped below 3% from 1996 onwards. The GDP deflator ranged from 10.3% to 2.8% between 1982 and 1995, averaging 5.05%. Apart from the slowdown in the deflator over this period, less volatility is also observed.

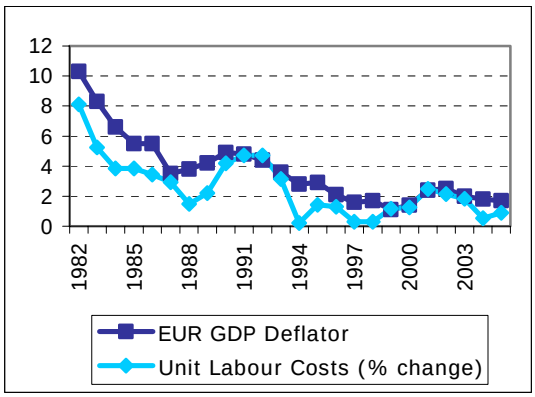
Figure 1: GDP Deflator. HP Filter



Source: OECD

As regards inflation in the Euro-zone, the average over the period dating from 1996 to 2006 stands at 1.91%, although a slight increase has been observed since 2000, since which time the inflation rate has stabilized in the vicinity of 2.25%, as can be appreciated by applying an HP filter to the series.

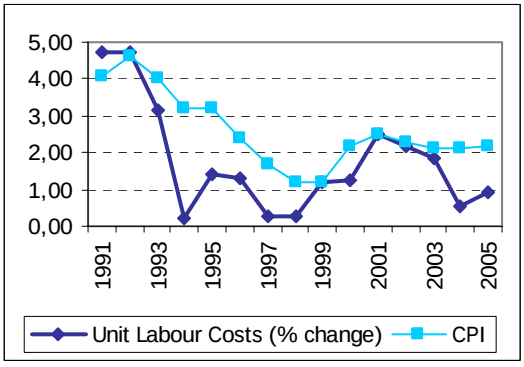
Figure 2: GDP Deflator and Unit Labour Costs



Source: Eurostat

The variables that explain the inflation trend in the Euro-zone are the changes in the price of raw materials and energy, the increase in labour costs and unemployment. All of these factors affect inflation positively, except for unemployment. Out of these variables, the one that most affects inflation is the increase in unit labour costs. In fact, a 1% increase in this variable pushes up inflation by 0.72%.[2]

Figure 3: Inflation and Unit Labour Costs



Source: Eurostat and OECD

The two variables that affect unit labour costs are employee wages and

[2] CDC-IXIS Flash 2005-167 de 12-5-05. "What accounted for the disinflation in the 1980s and 1990s? Many factors played but, apparently, monetary policy did not" by P. Artus.

apparent productivity of the labour factor. Both variables have a practically identical impact on unit labour costs, although to be more precise, the productivity ratio of 1.15 is slightly higher than the work wages coefficient of 0.94.

The slowdown in worker wages is perhaps the factor of the two that has most influenced the trend of unit labour costs and, consequently, inflation. This has resulted in weal real wage growth that averaged 0.4% over the period dating from 1995 to 2005, both due to intense international competition on behalf of emerging countries – measured by the increase in the share of imports from these countries with regard to GDP – as well as the decrease in the import price deflator – and due to the labour market situation.

Figure 4: Worker Wages, Labour Productivity and Unit Labour Costs

Source: Eurostat

Inflation as a Global Phenomenon

If we analyse the situation in the Euro-zone, the USA, the UK and Japan, on average inflation is similar and that individually they display a positive correlation to the average for the four economic regions of between 0.86 and 0.95. This might suggest that the inflation phenomenon is more global than national.

If we estimate inflation in the Euro-zone econometrically according to global inflation and other variables such as the annual growth in unit labour costs and the annual percentage change in the effective exchange rate, a get a good estimation. Moreover, in light of the value of the coefficients, global inflation (0.58) has more of an effect than domestic increase in unit labour costs in the Euro-zone (0.30). Consequently, we can conclude that inflation in the Euro-zone depends more on global inflation than on its own domestic factors.

Global inflation is positively affected by global economic growth and the increase in oil and raw material prices and negatively affected by the degree of openness to international trade.[3]

Table 1: Correlations between Country and Global Inflation

1970-2004	INFLATION 4 AREAS
EURO-ZONE	0.95
USA	0.94
JAPAN	0.86
UK	0.90

Source: CDC-IXIS

Marked Heterogeneity in Prices among EMU Countries

There is no doubt that inflation rates in EMU countries absolutely converged between 1980 and 1999. On applying the multivariate unit root test to the inflation rates in EMU countries, we can see how they absolutely converged between 1980 and 1997.[4]

[3] CDC-Ixis Flash 2005-147 22-04-05 "Inflation: A worldwide phenomenon or a regional phenomenon? Or: Having several central banks is useless" by P. Artus.

[4] ECB WP 574 January 2006. "Inflation convergence and divergence within the EMU" by F. Busetti and others.

Table 2: Average Inflation by EMU Country

	Average Inflation 2001-05
BELGIUM	2.0
GERMANY	1.6
GREECE	3.5
SPAIN	3.2
FRANCE	2.0
IRELAND	3.4
ITALY	2.4
LUXEMBOURG	2.8
NETHERLANDS	2.8
AUSTRIA	1.9
PORTUGAL	3.2
FINLAND	1.4
EURO-ZONE	2.2

Source: ECB

However, once the Monetary Union was up and running, differences have increased. The average inflation gap in absolute terms almost doubled between 1999 and 2003. Statistically speaking, three groups can be identified: countries with low inflation (Germany, France, Belgium, Austria and Finland), countries with high inflation (Spain, Greece, Portugal and Ireland) and the countries with moderate inflation (Italy, Netherlands and Luxembourg). Inflation movements appear to be uniform within each group of countries.

Likewise, when euro notes and coins were put into circulation in 2002 substituting national currencies, there was an extra inflationary impact that stemmed from this change that was considerable lower than the effect perceived by the general public and fairly asymmetrical in the heart of the EMU. The countries whose exchange rates with the euro were more complicated did not trust quick estimation rules to convert and, consequently, inflation was less affected. In contrast, the countries with a more simple type of conversion and the widespread use of these quick calculation rules suffered a greater impact on inflation, thus confirming the theory of consumers' limited ability to process information. Generally speaking, the products that were most affected were cheap goods and in the retail distribution sector.[5]

Inflation gaps between among countries, apart from being caused by different cyclical situations and other factors with a short term influence such as indirect tax rises, administered prices or heterogeneous responses to common shocks due to differing levels of competition and rigidities in the economy, are also due, in the long term, to the difference between the productivity of economic sectors subject to competition and those that are protected, accompanied by the contagious wage effect. That is, between the productivity of the industrial sector in question and the reference services sector protected from competition. While in 2004 labour productivity in the manufacturing sector was 3.2%, in construction and services it was 1%.

The inflation gap trend could stem from an improvement in the productivity of the industrial sector or through a decrease in the productivity of the services sector.

An increase in the inflation gap caused by a rebound in productivity in the industrial sector - Balassa Samuelson effect – constitutes an increase in real wages in industry, which also spread to the services sector where productivity has not risen, thus raising overall

[5] ECB WP 588 February 2006 "Rational inattention, inflation developments and perceptions alter euro cash changeover" by M. Ehtmann.

inflation. This could also be due to the increase in industrial wages boosting the demand for services and pushing up prices.

However, an increase in the inflation gap due to the services sector being less productive is caused by increases in the price of services due to a spillover effect from wage increases in industry or due to a decrease in the supply of services.

As the increases in real wages in the industrial sector are minimal due to the competition from emerging nations, the presences of a Balassa-Samuelson effect is discarded.[6]

Therefore, the countries that share the same monetary policy but have a higher inflation rate are in the first place faced with a problem of competitiveness in the industrial sector (which is subject to competition) that must be solved by linking wages to productivity and in the second place with a problem in monetary policy as excessively low real interest rates have been generated, which has a significant impact on the real estate sector and government investment. When this situation is accompanied by a favourable economic environment, it is called “passive seigniorage”.

Consumer and Producer Prices and their Components

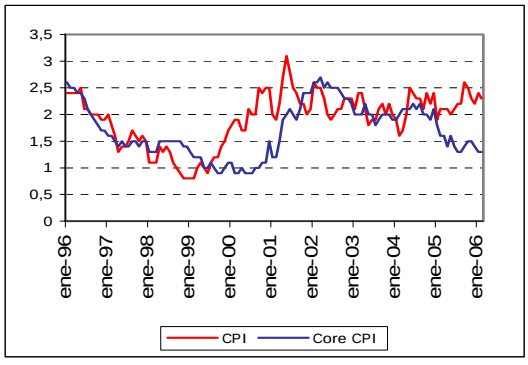
Both overall and core inflation have tended to follow the same pattern over time, although some gaps have been observed that later disappeared. In most of these cases, core inflation dropped below the level of overall inflation.

While the annual inflation rate has averaged 1.91% over the period dating from 1996-2006, core inflation averaged 1.7%. In recent years, while overall inflation has remained more or less stable at 2.25%, core inflation has dropped steadily. El dato para 2005 fue el 1.5% y el valor interanual para el mes de enero el 1.3%.

A new gap has opened up between overall and core inflation over the last year that is getting wider. This situation is the centre of debate over whether or not the difference will be reduced later and whether or not the end of the gap will be due to an increase in core inflation or a decrease in overall inflation.

The two previous gaps, recorded between 1999 and 2002, were influenced by other factors that cannot be compared to the current situation. Furthermore, apart from the effect of the oil shock that occurred, this coincided with a depreciation of the euro with respect to the dollar, which further aggravated the effect on businesses. In addition, this period saw the emergence of the famous animal epidemics which pushed up food prices in general. Likewise, domestic demand recorded high growth rates in 1999 and 2000.

Figure 5: Overall and Core Inflation



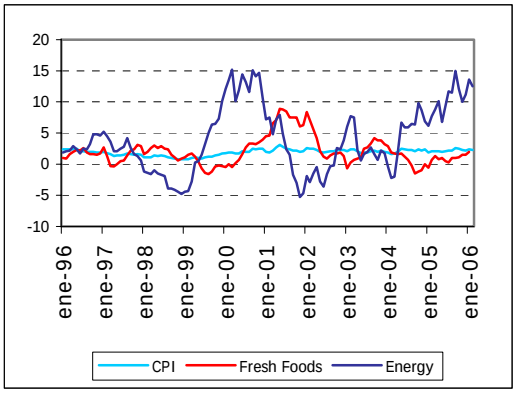
Source: ECB

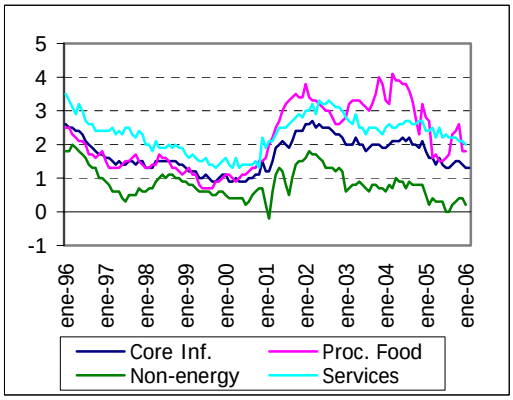
[6] CDC-Ixis 305-2005 7-09-05 “What accounts for inflation differentials in the Euro-zone?

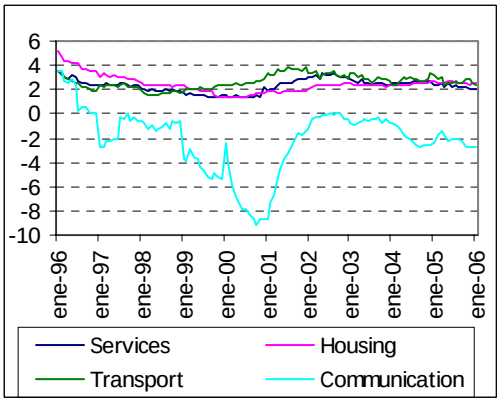
In view of all this and considering that domestic demand is currently weaker and the presence of strong competition from emerging nations, workers' wages should only increase moderately, thus allowing core inflation to continue rising slowly. Therefore, the gap will more than likely be closed by reduction in overall inflation.

The most volatile expenditure groups in the overall inflation rate were energy and unprocessed foods, which on average also outpaced the overall inflation rate.

Figures 6, 7 & 8: Inflation Components







Source: ECB

Energy and unprocessed foods grew on average between 1996-2006 by 3.88% and 2.06% respectively, compared to the 1.91% increase in overall inflation. Over the last year, due to the rise in oil prices, energy prices rose by 10.1% and the annual inflation rate of this component stood at 13.6% in January. Moreover, considering the monthly variations, the components that most clear affect inflation are energy and unprocessed foods, with a correlation of 0.75 and 0.43 respectively. The energy component is also seen to have a negative correlation with the rest of components, both in monthly and annual terms.

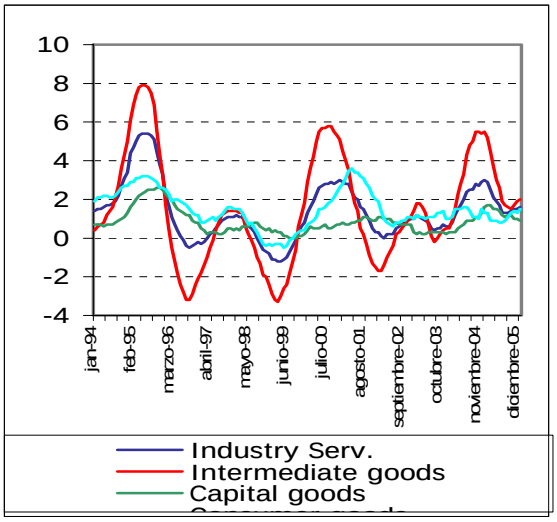
The inflation rate of non-energy industrial goods, which has on average remained below the overall inflation rate, has experienced a marked and progressive slowdown since 2002. While in 2002, the growth rate stood at 1.5%, in 2005 it was 0.3% and in January 2006 it was 0.2%. The reason for this slowdown in inflation is the strong competition in the market of these goods, in line with the surplus of supply from emerging countries.

The services component has remained on average above the overall inflation rate (2.32% compared to 1.91%); while inflation in the services sector is

decelerating progressively, the process is not as drastic as in the sector of non-energy industrial goods, as it combines competitive sectors and others with regulated prices. Transport and supplies, with administered prices and rentals that are automatically pegged to a price index, display a certain degree of resistance to fall and other sub-items such as communications that is faced by strong competition has registered continuous decreases in price since 1997, as can be appreciated in the graph. This sector has also been affected by the outsourcing of services to other countries such as India, where labour is much cheaper and well qualified.

On the other hand, producer prices rose markedly in 2005 (4.1%), particularly due to the influence of energy prices which rose by 13.4%. If the effect of construction and energy products were eliminated, the evolution of producer prices would have averaged a moderate growth rate of 1.4% over the period 1994-2006. If goods are broken down into final and intermediate goods, we can see that inflation in intermediate goods has well and truly outpaced the moderate rate of inflation in final goods since 2004. The reason behind this situation is the increasing demand for these products and raw materials from China.

Figure 9: Producer Prices



Source: ECB

Is Euro-zone Inflation Persistent?

The concept of persistent inflation can be defined several ways:

a) The tendency of inflation converging little by little towards a long term value, for example, towards the ECB target rate

b) When current inflation depends on past inflation and the sumo f lag coefficients equals one (unit root)

c) When inflation depends on past rates and the coefficient of the lag variable of the negative output gap is low.

This means that inflation is persistent when it registers little variation during changes in the economic cycle and from the perspective of monetary policy, this fact means the central bank's prediction involves ascertaining the number of periods in which a certain shock is absorbed.

IPN research finds no evidence that the inflation rate in the Euro-zone is more persistent than in the United States and shows that having a very low negative

output gap ratio (0.13) defines Euro-zone inflation as persistent.[7]

If the services component is eliminated from inflation, persistence is reduced.[8]

A low inflation scenario such as that in the Euro-zone generates more persistence due to the downward rigidity of nominal wages and a greater sacrifice of monetary policy.

Persistence is caused, on the one hand, by structural rigidities: labour market, lack of integration and competition of domestic services markets or weak cyclical sensitivity in the consumer prices of non-energy industrial products; or on the other hand, by corporate price fixing behaviour such as how quickly prices are revised and changed and whether or not this occurs symmetrically or the presence of implicit medium term price contracts.

Inflation Outlook

In general, as can be appreciated, inflation is tending to remain stable or decrease in the short to medium term, because unit labour costs will tend to drop over time as a result of improvements in productivity stemming from technical progress and wage moderation due to the threat of offshore outsourcing and the low wages in other parts of the world.

However, in the long term inflation could re-emerge as a result of the progressive ageing of the population which leads to an increase in the non-working consumer population – 2020 – and full employment in emerging countries which would raise unit labour costs giving the inflation curve a **U shape**.[9]

Valencia, 31 March 2006
Nicolás Jannone

[7] OECD WP 435/2005 20-7-05 "Sources of inflation persistence inflation in the Euro Area" by B. Cournède and others

[8] ECB WP 466/April 2005 "Regulated and Services prices and inflation persistence by T. Marthä.

[9] CDC-IXIS Flash 18-2006 January 2006. "Global Inflation's U-shaped curve."

3.- Spain

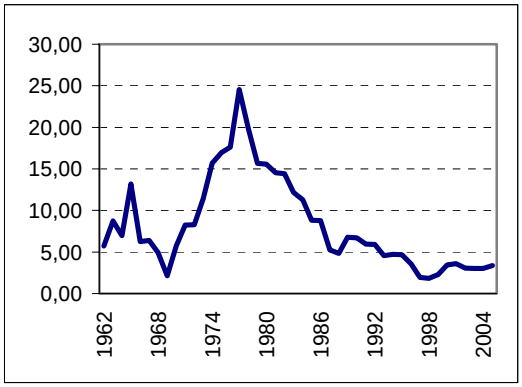
Monograph on Inflation in Spain

The indicator that is commonly used to measure the general level of prices in an economy (inflation) is the **percentage change of the Consumer Price Index**. This part of the report begins by reviewing the performance of this indicator since the early 1960s up to the present day and later focuses on analysing certain groups of items over recent years.

Inflation in Spain: 1962-2005

Strong economic growth in the 1960s, which stimulated domestic demand, together with the situation of virtually full employment and an increase in wage demands and minimal external openness led prices to increase significantly (Figure 1). This increase tailed off slightly towards the end of the decade as a result of the incipient trade deregulation process and the subsequently cheaper imports.

Figure 1: Average Annual Inflation Rate in Spain 1962-2005 (%)

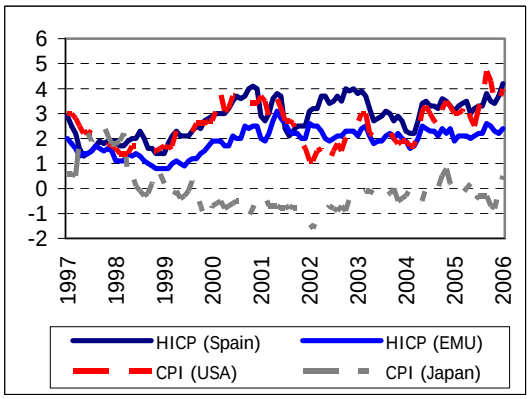


Source: own elaboration and OCEI

From the beginning of the 1970s until halfway through the 1980s, prices rose significantly, recording double figure annual inflation rates throughout the best part of the period. Increasing wage demands and, above all the oil shocks, in light of Spain's high energy dependence were behind this prolonged period of inflation.

From halfway through the 1980s, inflation began to slow down and continued doing so until the end of the 1990s when the trend was bucked. The process of greater and increasing external openness following Spain's accession to the European Community, increasing (albeit still insufficient) economic deregulation, more rigorous monetary policy and certain "culture of stability" explain this evolution. Notwithstanding, the wide and persistent inflation gap between Spain and other European countries has remained unchanged (Figure 2). The continuous deterioration of price-competitiveness in Spain is linked to demand, cost and structural factors. Firstly, tax policy has been excessively expansive for a period of strong economic growth. Moreover, the remarkable debility of some Euro-zone economies has led the ECB to employ a clearly expansive monetary policyk for Spain, with negative real interest rates.

Figure 2: International Comparison: Annual Inflation Rates (%)



Source: own elaboration and *Banco de España*

Secondly, the fact that growth in nominal wages has outpaced growth in

productivity together with the wage indexing clauses has put pressure on costs, which has spread to prices in non marketable goods (compared to marketable goods sectors – mainly manufacturing, where greater international competition has avoided this spillover effect). Despite the growing deregulation of the economy, there are still sectors with minimal competition, which results in high prices (and high corporate profits).

Finally, the high degree of dependence on petroleum and the fact that it is not used (very) efficiently has sparked inflationary tensions in recent months on the back of the increase in oil prices.

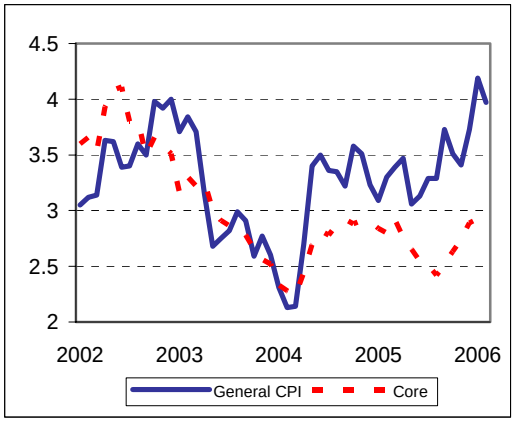
Recent Developments in Inflation and its Components

Inflation gains momentum

Inflation, measured by the annual percentage change in the CPI has been quite irregular in recent years (Figure 3). However, an upward trend has been observed since the beginning of 2004 that is mainly due to the most volatile components of the CPI, such as energy (with an average increase in price in 2005 of 9.6%) and, albeit to a lesser extent, unprocessed foods (Figure 4). Fuels are responsible for the behaviour of energy prices. This increase affects inflation **directly**, on pushing up the price the final consumer pays for fuels, and also **indirectly** through an increase in the production costs of all the sectors that use these production factors as inputs, as is the case of transport.

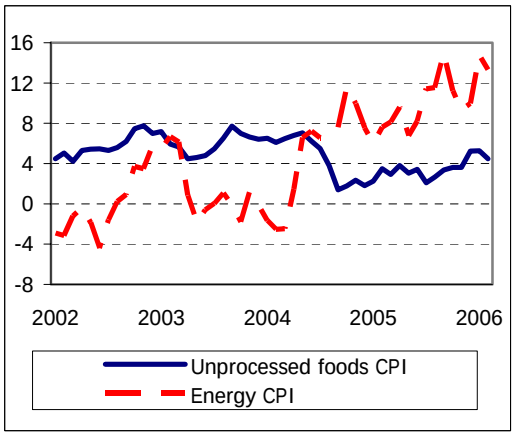
The most inflationary groups of **products** in recent years have been: *hotels, cafés and restaurants; alcoholic beverages and tobacco; education; housing; and transport.* The last two groups were particularly inflationary in 2004 and 2005. The groups that have recorded the lowest increases in prices were: *medicine; clothing and footwear* (in 2004 and 2005). Finally, *communications* prices dropped over the period dating from 2002 to 2005, while in *recreation and culture* prices fell in 2005.

Figure 3: Annual Inflation and Core Inflation Rates (%)



Source: own elaboration and *Banco de España*

Figure 4: CPI Components: Annual Inflation Rates (%)



Source: own elaboration and *Banco de España*

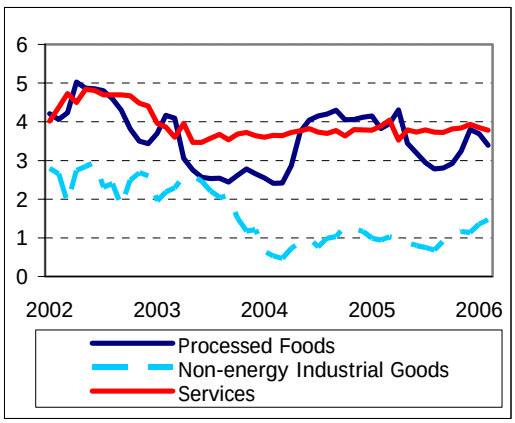
Core Inflation Remains High

While it is true that unprocessed foods and oil have pushed up inflation, there are other components that have also played a part in the high inflation rate. In this sense, **core inflation**, which is obtained by excluding energy and unprocessed foods from the general CPI, has rebounded to the same level observed at the end of 2004, following a slight slowdown halfway through 2005.

Core inflation is mainly determined by the developments in the price of **services**, which have remained relatively stable around 4%, and **manufactures** (processed foods and non-energy industrial goods, Figure 5). Inflation in processed foods has abated somewhat, while the price of non-energy industrial goods has risen by around 1%, due mainly to being exposed to the international competition of marketable goods, as indicated out above.

Accordingly, Spanish inflation is not only due to developments in the two most volatile groups of products, energy and unprocessed foods.

Figure 5: CPI Components Less Energy and Unprocessed Foods (Annual Percentage Change)



Source: own elaboration and *Banco de España*

Figure 5 highlights the marked differences that exist among the different sectors of the Spanish economy. In the least deregulated sectors (services, food), inflation is higher businesses are more able to pass on increases in costs to final prices, which subsequently props up or even increases corporate profits. On the other hand, the manufacturing sector is faced with the rigorous discipline imposed by foreign competition, which prevents the increase in energy prices or nominal wages from being passed on to prices, thus exercising downward pressure on corporate profit margins. This situation results in what is known as **dual inflation** in the Spanish economy.

The situation described above is also observed when examining the **origin of the inflation gap with the EMU** which averages, on an annual basis, more than one percentage point (1.1 in 2005) and which reached 1.8 percentage points in January and February this year. The gap is larger in services than in goods and, among the latter, the gap is much larger in the case of unprocessed foods. As was to be expected, the gap between the price of industrial goods in Spain and in the EMU is much lower, due to these goods being more exposed to industry competition, although it is significant that the gap in the case of non-energy industrial goods reached 0.7 percentage points in 2005 (annual average), which evidences the growing deterioration in Spain's price-competitiveness.

At this point, it is important to recall that EMU countries are also faced with the negative effects of energy price developments. In addition, Spain shares the same currency and

monetary policy as these countries, which means the inflation gap is not due to the behaviour of the exchange rate and/or different monetary policies. Consequently, inflation in Spain appears to be mainly related to **structural factors**, such as the lack of competition in important sectors of the economy and more particularly in the services sector. In this sense, it is seemingly necessary to take the deregulation of these industries further, in terms of production, distribution and marketing.

However, other factors also contribute to the increase in inflation. On the one hand, the fact that wage increases have outpaced growth in productivity (particularly in the case of workers with wage review clauses), which puts pressure on costs that are later only passed on to prices in those sectors that are subject to less competition. Moreover, corporate profit margins in many of these sectors are growing, which in turn adds to the increase in prices.

In short, gains in productivity above those achieved by the countries around Spain are vital.

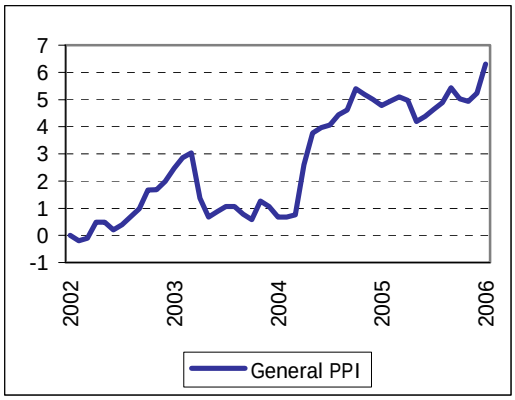
On the other hand, excessively expansive **tax policy** (including tax incentives for purchasing new houses) for period in which economic growth is booming, together with the excessively accommodating **monetary policy** for Spain's needs that has been implemented by the European Central Bank have boosted domestic demand (real interest rates have been negative for the past three years and in addition to this, the continuous rises in housing prices has generated a wealth effect that has also fuelled domestic demand) thus creating inflationary tensions.

In the next section of this article, other price indicators, such as the producer price index, the foreign trade price index and the price of real estate and property assets are briefly reviewed.

Producer Price Index

Figure 5 displays the upward trend in industrial prices in recent years, which accelerated in 2004 and 2005 by 3.4% and 4.9%.

Figure 5: Producer Price Index: Annual Growth Rate (%)



Source: own elaboration and *Banco de España*

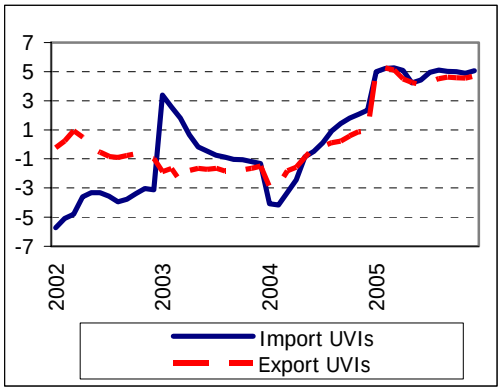
The increased growth in prices over the last two years is due mainly to the increase in the price of energy products, which clearly outpaced intermediate goods, consumer goods, and particularly equipment (from highest to lowest inflation rates). In January 2006, producer prices picked up further speed due to energy products being more expensive and, albeit to a lesser extent, the increase in the price of intermediate and consumer goods.

Unit Value Index

Unit Value Indexes **(UVI)** are foreign trade price indicators. Import UVIs rose by 5% throughout 2005 as a whole, double the increase in 2004 and bucking the negative growth trend observed in 2002 and 2003 when rates

of -3.12% and -1.3% respectively were recorded (Figure 9). The main reason behind this new pattern is the growth in energy prices, with a 26.2% increase in 2005. Obviously, this situation could result in inflationary tensions continuing or even increasing in Spain, in view of the fact that the country is highly dependent on energy inputs. On the other hand, export UVIs display a similar pattern to that observed in imports, albeit with lower growth rates.

Figure 6: Spanish Trade Unit Value Indexes Accumulated Annual Growth Rate (%)



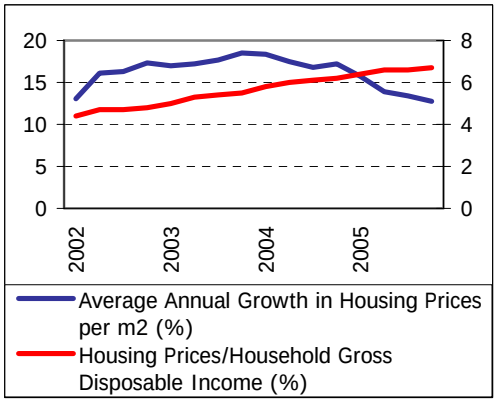
Source: *Banco de España*

Housing Prices

Figure 7 shows how housing prices slowed down in 2005, registering a remarkable (average) annual growth rate of 13.9%, albeit 3.5 percentage points less than the growth observed in 2004.

The upturn in housing prices in recent years has been boosted, among other factors, by low interest rates (which have even been negative in recent years), easy access to mortgage loans, which (on occasions) exceed the real value of the property, the purchase of houses on behalf of foreign residents, high immigration inflows and generous tax incentives for buying your first house.

Figure 7: Housing Prices and Degree of Loan Accessibility

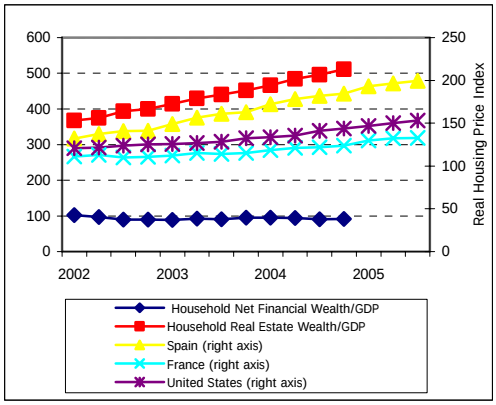


Source: own elaboration and *Banco de España*

One consequence of the price dynamism in this sector is that housing prices as a percentage of Household Gross Disposable Income continue to climb. For this reason, household borrowing is growing, thus reducing the rate of savings, which could hold back economic growth in the medium and long term. The foreseeable increase in interest rates could begin to generate the odd problem, particularly in view of the extraordinarily high proportion of mortgages with variable interest rates.

Housing inflation in Spain is considerably higher than that observed in other countries, as can be appreciated in Figure 8. Similarly, another consequence of the pattern in this sector is the increase in household real estate wealth as a percentage of GDP, which contrasts with households' net financial wealth.

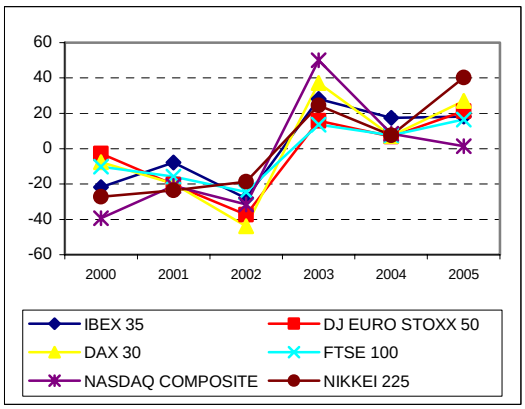
Figure 8: Household Financial and Real Estate Wealth and Price Comparison



Source: own elaboration and *Banco de España*

The variable income yield curve gives us an idea of the price of financial assets. Similar patterns have been observed in the main stock markets worldwide (except for the United States, where variable income has been stagnant since 2003), due to the increasingly globalised economy, with sustained growth in yields since 2002.

Figure 9: Variable Income Markets: Yields Accumulated during the Year (%)



Source: own elaboration and *Banco de España*

Silviano Esteve
Valencia, March 28 2006

4.- Germany

This month's monograph analyses prices in-depth. In the first place, the pattern observed in the general price index is analysed, from which we can conclude that Germany has warded off the risk of deflation that emerged particularly at the end of the 1990s. Nevertheless, prices have been remarkably sluggish since 1995, clearly reflecting the crisis in the German economy.

Table 1: General Price Index

	Index	Annual Growth Rate
1990	78.7	
1991	81.9	4.07
1992	86.1	5.13
1993	89.9	4.41
1994	92.3	2.67
1995	93.9	1.73
1996	95.3	1.49
1997	97.1	1.89
1998	98.0	0.93
1999	98.6	0.61
2000	100.0	1.42
2001	102.0	2.00
2002	103.4	1.37
2003	104.5	1.06

Source: OECD

By groups of prices, the most relevant are energy and food prices, due to the inflationary consequences their progress can provoke. Energy prices do not display any characteristic that is worth underlining in this sense. Germany is an energy importer, so the pattern of this variable depends on external factors. In any case, no unusual behaviour is observed in energy prices in so far as what was mentioned above. As far as food prices are concerned, more sluggishness has been witnessed since halfway through the 1990s and this could have contributed to the high risk of deflation that all experts highlighted over that period.

Table 2: Energy Price Index

	Index	Annual Growth Rate
1990	70.4	
1991	77.2	9.66
1992	80.7	4.53
1993	81.7	1.24
1994	84.5	3.43
1995	83.8	-0.83
1996	84.6	0.95
1997	87.0	2.84
1998	84.2	-3.22
1999	87.7	4.16
2000	100.0	14.03
2001	105.7	5.70
2002	106.0	0.28
2003	110.2	3.96

Source: OECD

Table 3: Food Price Index

	Index	Annual Growth Rate
1990	91.5	
1991	94.0	2.73
1992	95.9	2.02
1993	96.4	0.52
1994	98.0	1.66
1995	99.0	1.02
1996	99.6	0.61
1997	101.0	1.41
1998	102.0	0.99
1999	100.7	-1.27
2000	100.0	-0.70
2001	104.5	4.50
2002	105.3	0.77
2003	105.2	-0.09

Source: OECD

As regards the producer price index, on analysing the data we can conclude that inflation rates have been much lower than in the general price index. This leads us to believe that in Germany, as is the case in many other countries, distribution is a first order inflationary element.

Table 4: Producer Price Index

	Index	Annual Growth Rate
1990	90.5	
1991	92.5	1.62
1992	94.0	0.00
1993	94.0	0.74
1994	94.7	2.11
1995	96.7	0.10
1996	96.8	0.10
1997	97.4	0.62
1998	97.2	-0.21
1999	97.0	-0.21
2000	100.0	3.09
2001	101.3	1.30
2002	101.5	0.20
2003	102.1	0.59

Source: OECD

Core inflation has not been a problem in the German economy either, recording growth rates of below 2% and at times even below 1% since halfway through the 1990s.

Table 5: CPI Core Inflation

	Index	Annual Growth Rate
1990	77.90	
1991	80.80	3.72
1992	85.30	5.57
1993	89.90	5.39
1994	92.40	2.78
1995	94.30	2.06
1996	95.80	1.59
1997	97.60	1.88
1998	98.9	1.33
1999	99.4	0.51
2000	100.00	0.60
2001	101.30	1.30
2002	102.90	1.58
2003	103.80	0.87
2004	105.50	1.64

Source: OCEI

Import prices do not constitute a serious problem for the German economy either, as can be observed in the data. In fact, except for the odd occasion (such as 2000, due to the rebound in energy prices) they have been clearly deflationary in the German economy, with very low rates that have frequently been negative.

Table 6: Import Price Index

	Index	Annual Growth Rate
1990	92.5	
1991	93.2	0.77
1992	91.0	-2.44
1993	89.6	-1.54
1994	90.3	0.87
1995	90.6	0.23
1996	91.0	0.44
1997	94.2	3.53
1998	91.3	-3.09
1999	90.8	-0.53
2000	100.0	10.16
2001	100.6	0.60
2002	98.4	-2.18
2003	96.2	-2.24
2004	97.2	1.09

Source: OCEI

Industrial prices also show a clearly moderate pattern, as expected in view of the fact that German industry is mainly dedicated to exporting.

Table 7: Industrial Price Index

	Index	Annual Growth Rate
1990	92.4	
1991	94.98	2.41
1992	96.28	1.38
1993	96.28	-0.01
1994	96.82	0.56
1995	98.49	1.73
1996	97.28	-1.24
1997	98.43	1.19
1998	98.03	-0.41
1999	97.03	-1.03
2000	100.01	3.07
2001	102.97	2.96
2002	102.37	-0.58
2003	104.12	1.71
2004	105.83	1.65

Source: OCEI

The DAX index reveals that the German stock market was healthy up to 2000, when the general crisis undoubtedly affecting listings. Nevertheless, data for 2004 reflects a rebound on this front,

Antonio Cutanda
Valencia, March 28 2006

although we will have to wait and see if the trend is confirmed in the future.

Table 8: DAX Index

	Index	Annual Growth Rate
1990	1691.33	
1991	1585.29	-6.27
1992	1637.09	3.27
1993	1829.53	11.75
1994	2116.57	15.69
1995	2128.90	0.58
1996	2591.79	21.74
1997	3744.49	44.47
1998	5058.75	35.10
1999	5391.62	6.58
2000	7049.20	30.74
2001	5612.18	-20.39
2002	4111.16	-26.75
2003	3205.03	-22.04
2004	3984.07	24.31

Source: OCEI

As far as housing prices are concerned, the German economy shows no sign of the speculation bubble observed in other countries over the same period. In contrast, the German real estate sector appears to be in the midst of deflation, with prices being pushed down by the economic crisis.

Table 9: Housing Price Index

	Index	Annual Growth Rate
1990	101.48	
1991	102.08	0.59
1992	100.42	-1.63
1993	99.29	-1.13
1994	98.67	-0.62
1995	100.00	1.35
1996	97.62	-2.38
1997	93.94	-3.77
1998	91.21	-2.91
1999	91.61	0.44
2000	91.20	-0.45
2001	90.33	-0.95
2002	89.10	-1.36
2003	88.18	-1.03
2004	85.01	-3.59

Fuente: OCEI

5.- France

As regards the general price index, data shows how the annual inflation rate in France has remained below 2% in recent years. In this sense, data show signs of a certain degree of sluggishness, which must be a sign of the crisis in the French economy in recent years.

Table 1: General Price Index

	Index	Annual Growth Rate
1990	84.3	
1991	87.0	3.20
1992	89.1	2.41
1993	91.0	2.13
1994	92.5	1.65
1995	94.2	1.84
1996	96.0	1.91
1997	97.2	1.25
1998	97.8	0.62
1999	98.3	0.51
2000	100.0	1.73
2001	101.6	1.60
2002	103.6	1.97
2003	105.8	2.12

Source: OECD

The fact that energy prices have moderated, except for the rebound in prices in 2000, explains a great deal of the sluggishness described above, particularly since the end of the 1990s.

Table 2: Energy Price Index

	Index	Annual Growth Rate
1990	80.2	
1991	82.1	2.37
1992	81.2	-1.10
1993	82.8	1.97
1994	83.9	1.33
1995	85.5	1.91
1996	89.6	4.80
1997	91.4	2.01
1998	88.8	-2.84
1999	89.2	0.45
2000	100.0	12.11
2001	98.4	-1.60
2002	96.9	-1.52
2003	99.2	2.37

Source: OECD

The above pattern in energy prices is contrary to that observed in food prices, which have bucked the moderate trend they were characterised by in the 1990s.

Table 3: Food Price Index

	Index	Annual Growth Rate
1990	88.5	
1991	91.0	2.82
1992	91.4	0.44
1993	91.2	-0.22
1994	92.0	0.88
1995	93.1	1.20
1996	94.1	1.07
1997	95.8	1.81
1998	97.4	1.67
1999	97.8	0.41
2000	100.0	2.25
2001	105.5	5.50
2002	108.4	2.75
2003	110.9	2.31

Source: OECD

As is the case in Germany, moderate producer prices in France reveal that inflation is essentially a distribution problem.

Table 4: Producer Price Index

	Index	Annual Growth Rate
1990	102..2	
1991	101.0	-1.17
1992	99.9	-1.09
1993	97.6	-2.30
1994	98.9	1.33
1995	103.9	5.06
1996	101.1	-2.69
1997	100.5	-0.59
1998	99.6	-0.90
1999	98.0	-1.61
2000	100.0	2.04
2001	101.2	1.20
2002	101.0	-0.20
2003	101.3	0.30

Source: OECD

As regards core inflation, data shows that the French economy has not suffered from serious inflationary tensions, at least since 2000, which

clearly reflects the weak economic situation described above.

Table 5: Core Inflation

	Index	Annual Growth Rate
2000.03	102.00	
2000.04	102.37	0.36
2001.01	102.77	0.39
2001.02	103.20	0.42
2001.03	103.77	0.55
2001.04	104.37	0.58
2002.01	104.97	0.57
2002.02	105.43	0.44
2002.03	105.97	0.51
2002.04	106.37	0.38
2003.01	106.73	0.34
2003.02	107.13	0.37
2003.03	107.47	0.32
2003.04	108.07	0.56
2004.01	108.53	0.43
2004.02	108.93	0.37
2004.03	109.30	0.34
2004.04	109.50	0.18
2005.01	109.77	0.25
2005.02	110.10	0.30
2005.03	110.17	0.06
2005.04	110.53	0.33

Source: OCEI

Industry prices have also been moderate, which could be due to the fact that this sector has a greater export tradition.

Table 6: Industrial Price Index

	Index	Annual Growth Rate
1995	102.6	
1996	101.3	-1.32
1997	100.6	-0.71
1998	98.9	-1.68
1999	97.2	-1.68
2000	100.0	2.89
2001	100.9	0.88
2002	99.7	-1.23
2003	99.9	0.23
2004	101.5	1.66

Source: OCEI

As far as the French stock market is concerned, the listings on the SBF 250 were relatively healthy up to 2001, when the French stock market appeared to suffer the effects of the general crisis the country is experiencing.

Table 7: SBF 250 Index

	Index	Annual Growth Rate
1990	96.9	
1991	91.4	-5.68
1992	94.4	3.28
1993	105.0	11.23
1994	111.4	6.10
1995	100.0	-10.23
1996	113.9	13.90
1997	147.0	29.06
1998	192.2	30.75
1999	234.6	22.06
2000	321.7	37.13
2001	260.1	-19.15
2002	203.6	-21.72
2003	170.3	-16.36

Source: OCEI

Finally, as is the case in Germany, housing prices show no sign of a speculation bubble. Instead, negative growth rates have been common in a scenario that could be classified as “normal”, in view of the overall situation in the country.

Table 8: Housing Price Index

	Index	Annual Growth Rate
1990	107.7	
1991	105.7	-1.87
1992	104.8	-0.88
1993	103.9	-0.88
1994	99.5	-4.16
1995	98.6	-0.92
1996	99.5	0.93
1997	98.1	-1.45
1998	101.8	3.72
1999	106.0	4.13
2000	103.9	-1.93
2001	111.3	7.07
2002	109.7	-1.39
2003	114.5	4.34
2004	122.6	7.15

Source: OCEI

Antonio Cutanda
Valencia, March 28 2006

6.- United kingdom

Analysis of Consumer and Producer Prices

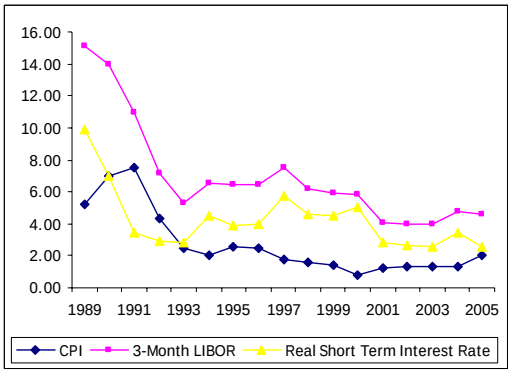
The RPI shows the developments in a basket of 650 goods and services, selected to capture price movements in a set of similar products. The price of each item is recorded in January and is monitored over 13 months in order to calculate the growth rates each month, using January as a basis. Finally, price indexes are built up by grouping these items into categories and scaled using 1987=100 to calculate the annual inflation rate. RPI items are revised on an annual basis. Apart from the RPI, other adjusted series are also published for specific uses; the most common are the RPIX (which excludes mortgage interest payments) and the PRI (which excludes mortgage interest payments and indirect taxes).

The price measurement is the CPI (previously known as the Harmonised and Index of Consumer Prices, HICP) which the government has used to determine its inflation target since 2000.

Consumer Prices: CPI and RPI

Figure 1 presents the historical trend of the annual inflation rate according to the CPI and the level of nominal and real interest rates between 1989 and 2005. The CPI has fluctuated around 2% since 1993 and coming close to 1% in 2000. Real short term interest rates, which ranged from 3% to 6% over the same period, were very low with regard to previous decades.

Figure 1: Annual Inflation Rate (CPI) 1989-2005



Source: ONS and Bank of England

Table 1: Annual Inflation Rate (CPI) by Group of Items 1989-2005

	Food and non-alcoholic beverages	Alcoholic beverages & tobacco	Clothing & footwear	Housing, water & energy	Furniture & household items	Health
1989	5.6	3.4	4.4	6.8	3.5	8.0
1990	8.1	7.3	3.7	9.5	4.6	8.6
1991	5.2	13.1	1.7	10.2	5.7	10
1992	2.1	8.7	-1.3	5.3	2.3	6.8
1993	1.2	6.3	-1.7	2.1	0.0	1.3
1994	1.3	4.2	-1.8	4.8	-0.8	1.4
1995	3.9	4.8	-2.1	3.7	1.9	0.9
1996	3.1	4.6	-3.2	3.2	1.9	2.1
1997	-0.1	4.0	-2.5	1.7	0.4	2.8
1998	1.0	5.4	-3.9	1.2	0.3	3.5
1999	0.3	6.4	-5.2	2.2	-0.4	2.0
2000	-0.5	4.7	-7.3	1.4	-1.7	2.9
2001	3.8	3.3	-7.5	2.3	-0.1	3.8
2002	0.8	1.8	-7.2	2.5	0.1	3.8
2003	1.2	1.9	-3.8	1.9	-0.6	3.4
2004	0.7	2.0	-4.8	3.7	-0.1	1.8
2005	1.5	2.2	-5.1	6.3	-0.3	2.9

	Transport	Comunications	Recreation & culture	Education	Restaurants & hotels	Misc. services
1989	5.5	1.4	3.6	7.0	6.1	6.8
1990	6.4	5.6	5.3	9.4	9.2	5.4
1991	7.2	8.5	6.2	12.7	11.3	6.6
1992	5.2	2.8	3.4	13.3	6.5	4.9
1993	2.9	0.6	1.6	10.1	5.0	3.6
1994	3.3	-4.5	1.5	8.2	3.7	2.0
1995	2.7	-2.9	1.7	5.0	4.2	1.5
1996	3.9	-2.0	1.9	4.2	3.5	1.8
1997	4.9	-2.8	1.1	5.1	3.6	2.8
1998	2.3	-1.5	0.5	5.7	3.9	3.9
1999	2.1	-2.9	0.4	5.7	3.5	3.0
2000	2.8	-3.9	0.6	5.8	3.3	1.3
2001	-0.1	-6.6	1.3	6.0	3.8	3.1
2002	0.6	0.8	1.7	5.7	3.4	2.6
2003	3.2	0.5	-0.6	7.5	3.1	2.1
2004	3.3	-0.7	-1.5	4.8	2.9	3.6
2005	4.1	-2.3	-1.2	4.9	3.3	4.3

Source: ONS

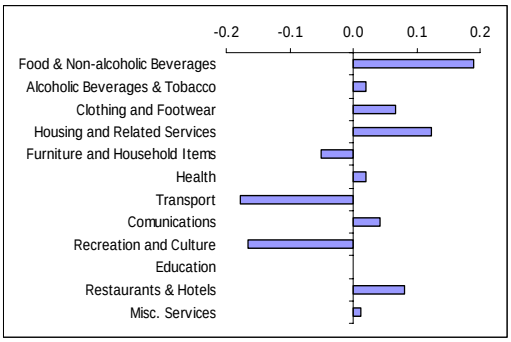
Table 1 shows the annual CPI inflation rate by groups of items. If we focus on 2005, the annual inflation rate was 2.05%, well above the 1.35% rate observed the previous year.

The group of items that exercised the most inflationary pressure on the CPI was food and non-alcoholic beverages. More specifically, the price of fruit, milk

and non-alcoholic beverages in general. The second most important price rises were observed in was housing and related services such as gas, electricity and water supply which rose first in January and again in April. The third group of items that has witnessed a marked upturn in prices is that of miscellaneous services, which includes rises in bank maintenance fees and commissions.

The group that exercised the most downward pressure on the CPI inflation rate was transport, particularly air fares. Recreation and culture prices also registered a decrease in 2005 that was to a great extent due to the drop in the price of books and package holidays.

Figure 2: Contribution to Inflation in 2005 by Group of Items

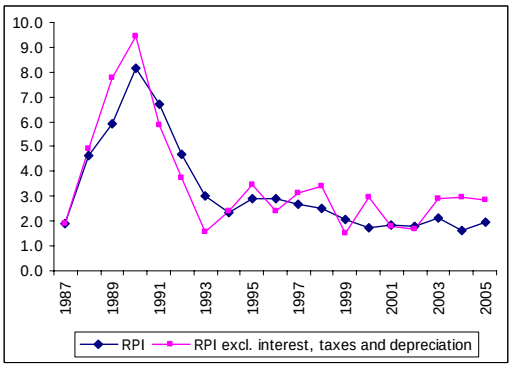


Source: ONS

The annual growth rate of the RPI fell from 3.5% in December 2004 to 2.2% in December 2005. There are two reasons for this decrease that the CPI computation does not take into account: the payment of mortgage interest and housing depreciation or the amount of money that owners must spend on maintaining their property. The Bank of England decreased the repo rate in 2004 resulting in lower interest payments in 2005. At the same time, the slowdown in the annual inflation rate in real estate from 14.7% in December 2004 to 3% one year later, took pressure off real estate depreciation.

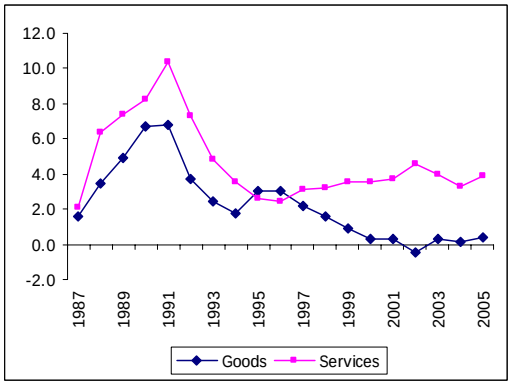
Figure 4 clear shows that the inflation phenomenon particularly affects services (products whose nature makes it more difficult to profit from cost decreases through technological progress o competition). Over the period from 1995-1999 the annual RPI goods inflation rate went almost flat. Meanwhile, the price of services has increased gradually over the last 10 years, with inflation rates ranging from 3.5% to 4%.

Figure 3: Retail Price Index (RPI): Annual Growth Rate



Source: ONS

Figure 4: Retail Price Index for Goods and Services. Annual Growth Rate



Source: ONS

The rest of items have affected the RPI in the same way as the CPI. However, motor vehicle expenditure has a greater

impact on the RPI, mainly because the upturn in second hand car sales.

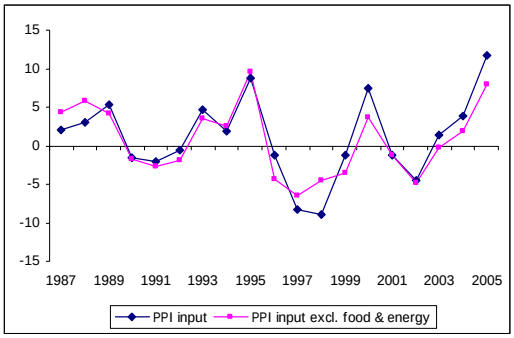
Producer Prices

The Producer Price Index enables us to observe the developments in the price of products bought and sold by British producers. Input prices include the materials and energy bought by companies while output prices are those at which the company sells their product.

In February the annual inflation rate of all manufactured commodities remained at 2.9%, while input prices fell from 15.8% to 15.0% in February. On eliminating the most volatile sectors, the annual inflation rate of output prices stood at 1.8% in February, whereas input price inflation stood at 10.7%.

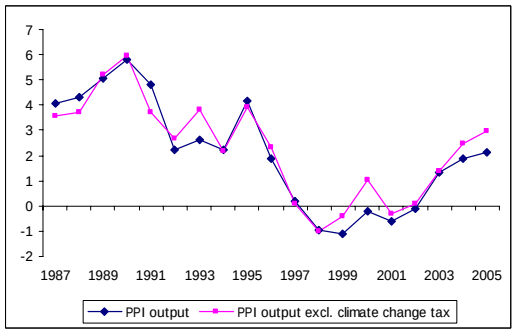
The behaviour of producer prices over the last two years has been mainly due to the petroleum sector as a result of the rise in the price of crude oil.

Figure 5: Producer Price Index (inputs) - Annual Growth Rate (Seasonally adjusted data)



Source: ONS

Figure 6: Producer Price Index (outputs) – Annual Growth Rate (seasonally adjusted data)



Source: ONS

Stock Market (FTSE) and Real Estate Prices

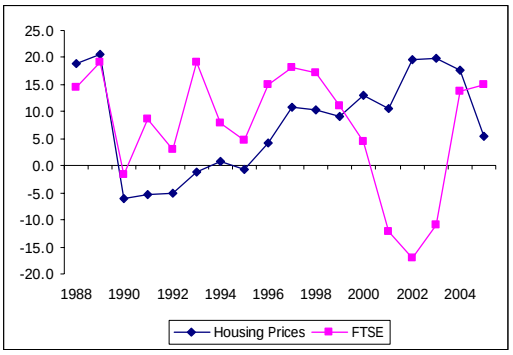
Housing prices have risen markedly over the last decade in the United Kingdom. According to statistics from the Office of the Deputy Prime-Minister (ODPM), prices rose by more than 12% a year between 1996 and 2004. In 2005, the price rise was a moderate 3.5%, but still outpaced overall inflation measured by the CPI or the RPI. There have been interesting developments in the real estate sector in the last decade. Firstly, the expansive phase of the cycle has been much longer than expected and also exceptionally large. Secondly, the boom did not coincide with a decisive period in the economic cycle. Thirdly, the housing price rise phenomenon has been observed in other OECD countries, including Spain and Australia where housing price rises have been larger than in the United Kingdom over the last decade.

The slowdown in housing prices in 2005 has been mainly achieved by the strategy adopted by the Bank of England. With British families deep in debt, the Bank of England raised interest rates between July 2003 and August 2004 by 125bp to 4.75%. Apart from tightening monetary policy, the

bank also warned about the danger of a potential decrease in the price of housing. British households were quick to understand the message and anticipated the possible decrease in prices by moderating their borrowing backed by real estate wealth collateral. As a result, mortgage equity withdrawal dropped to 33 billion pounds in 2005 compared to 61 billion pounds in September 2004. The repercussions could be immediately appreciated both in the decrease in retail sales as well as in private consumption.

Over the period dating from 1988-2005, housing prices have only outpaced share prices between 2000 and 2004. In 2005, the profitability of the variable income market was again greater than that offered by real estate investment.

Figure 7: Real Estate and Stock Market Prices (FTSE) – Annual Growth Rate



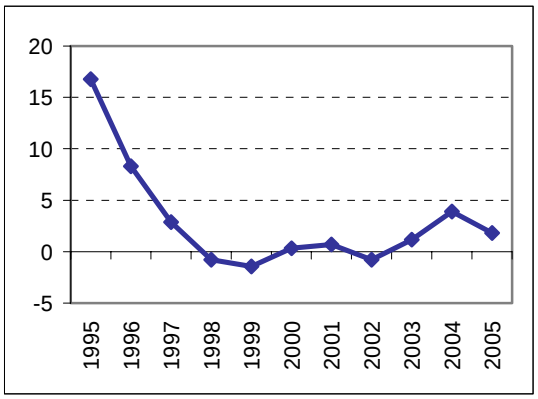
Source: Nationwide and Ecowin

Francisco Requena Silvente
Valencia, March 28 2006

7.- China

The evolution of prices in China has gone through different stages over the past 10 years (see Figure 1). China recorded deflation in 1998 and 1999 despite economic growth exceeding 7%. Negative rates of 0.8% and 1.4% were recorded in 1998 and 1999 respectively, compared to an annual inflation rate of 8.3% only two years earlier.

Figure 1: Consumer Price Index 1995-2005



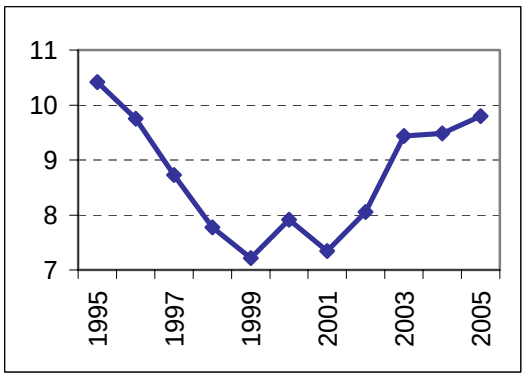
Source: National Bureau of Statistics, PRC

China was forced to tackle several disturbances during this period which sparked a shrinkage in aggregate demand (Figure 2) including[10]:

- The appreciation of the currency in real terms and the subsequent loss of competitiveness and slump in exports
- An increase in the risk premium for foreign investment
- An increase in real interest rates and, hence, a slump in investment
- An increase in the savings rate and a decrease in private consumption

On top of these macroeconomic factors, the corporate privatisation process failed, exports fell due to the Asian crisis in 1997 and investment flows waned.

Figure 2: Annual GDP Growth 1995-2005



Source: National Bureau of Statistics, PRC

Faced with this situation, the Chinese government opted for Keynes-type measures not only to curb the decrease in GDP, but mainly to curb deflation:

- Increase government investment (infrastructure, housing and improvements in State-run enterprises)
- Reactivate consumption by improving public sector wages and the general minimum wage

These expansive policies, implemented in 1998, were unable to prevent a further slump in GDP the following year or deflation from reaching 1.4%. As a result, monetary authorities were forced to cut interest rates by one point in June 1999.

This measure, together with the tax benefits applied in 1999 and 2000 pulled the Consumer Price Index (CPI) back up to 0.34% in 2000. Moreover, the measures boosted investment, consumption and exports and, hence, GDP rose at a rate of nearly 8%.

[10] See Bustelo, P. (2002): "Evolución Reciente y Perspectivas de la Economía China". *Información Comercial Española*, Vol. 797, pp. 43-53 (in Spanish)

However, following two years of positive results, albeit below 1% (0.34% in 2000 and 0.72% in 2001), in 2002 China once again suffered from deflation. The main cause for this deterioration in prices was excess capacity. Despite the fact that during the years of the investment boom and the subsequent increase in the price of raw materials the CPI once again rose into positive figures, the spectre of deflation remains.

Many economists have warned that some Chinese cities are creating a dangerous property bubble that could burst and seriously harm economic growth. The government must stabilise housing prices, as real estate is not only an economic problem, but also a social and political problem. Certain regions have witnessed rapid growth in real estate investment and upturns in prices since 2003[11], thus encouraging speculative purchases and pushing up the price of construction materials. The real estate boom is mainly due to the low mortgage interest rates and Peking and Shanghai are the cities that have been most affected. In 2003 real estate sales accounted for 25% of GDP in Peking and 20% in Shanghai.

More specifically, the real estate boom in Shanghai was caused by the strong demand for houses, offices and industrial sites on behalf of foreign enterprises, together with the massive influx of funds in the real estate market with the only aim of speculating. This situation has pushed up prices excessively (housing prices have doubled in three years). However, this situation is expected to stabilise over the next few years because construction has been so intense to satisfy the demand of the market that supply has overtaken demand.

In 2006, the establishment of regulations to curb real estate speculation remains a concern. The PNA, the highest legislative body in China, has demanded tougher measures to restrain frenetic trade and speculation in the real estate market. Namely, the Assembly proposed a rise in the minimum initial payment in order to obtain a mortgage of between 20% and 30% and between 40% and 50% in some parts of the country, as a pilot programme, while initial payments would have to rise by 70% in the case of real estate acquired for investment purposes.

A total of seven ministries and central departments, including the Central Bank and the Ministry of Construction, published joint regulations in May 2005, adopting a wide variety of measures aimed at cooling down the real estate market. These include levying a 5% tax on the owners who sell their houses inside the first two years of ownership.

The precarious stock market in China comprises the Shanghai stock market and that of Shenzhen. The enormous economic growth in China has never spilled over into the profitability of stock market listings, as both stock market indexes have remained bearish since they were created in 1990. The government is aware of this situation and great progress has been made in recent months towards bringing China in line with international standards.

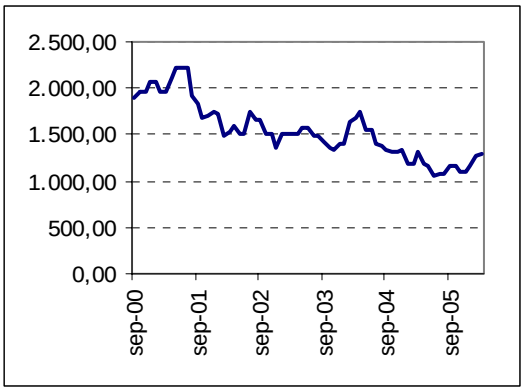
Some 1,300 companies were listed on the Shanghai and Shenzhen stock exchanges at the end of 2005, following the approval of the reform that allowed foreign investors to

[11] The average price of a house rose by 14.4% in China in 2004

purchase shares in the majority of the companies in the country without obstacles. Up to that point, foreign investors were only able to acquire a third of the shares of a company. Two thirds of the capital were to remain in the hands of the State under the title of non-negotiable or "A" shares.

The turnover of stock market operations in Shanghai amounted to 5 trillion yuan in 2005, 35% less than the previous year. The number of companies listed on this market totalled 834 with a total volume of 502,310 billion shares. Meanwhile, in the Shenzhen stock market, turnover in 2005 amounted to 1.24 trillion yuan, down by 21.53% on 2004. The number of companies listed on the stock exchange totalled 544.

Figure 3: Shanghai Stock Market Index



Source: Yahoo finance

At the end of March 2006, the Chinese Stock Exchange Commission made some amendments to regulations (that substitute those passed in 1997) governing company listings in order to protect shareholder rights, thus avoiding some majority shareholders from taking unfair advantage of their situation.

The most important reforms were:

- The General Meeting of Shareholders will be the highest authority (instead of the president)
- Shareholders will be represented by less than half the current number of board members
- Shareholders cannot vote on a transaction that they are involved in and only the general meeting can choose the company auditor
- Board members are not allowed to sell more than 25% of the shares they hold in one year.

Raw material imports take on sizeable proportions in China, accounting for 40% of total imports. The country imports almost 30% of the oil it consumes, and 45% of the minerals, iron and 10 other non ferrous metals. This situation pushed up the country's energy bill by 9.5% in 2005.

Likewise, the Asian giant imports parts and raw materials to be processed to create a final product that is later exported to the rest of the world. Consequently, inflationary tensions mainly emanate from this type of intermediate goods.

China is presently suffering significant price rises in iron minerals and metallurgy products, which is damaging both State and corporate interests markedly. In fact, iron mineral suppliers raised the price of minerals by 71.5% in 2005. As a result, the government intervened in the negotiations between metallurgy and mineral companies worldwide halfway through March 2006 in order to restrict import prices.

Since China became a member of the WTO in 2001, the country has witnessed a net increase in imports of agricultural products. The current rate of import tariffs imposed on such products is only 15.3%. Of all the agricultural products, the most important for the Chinese economy is cotton. Statistics made available by the Chinese Textile Association revealed that the surface area devoted to crops decreased by 10% in 2005, making China an increasingly large importer of cotton. Consequently, textile producers will raise their prices in view of the cotton deficit they are suffering. The Asian giant imports a quarter of the entire world's cotton imports (3 billion dollars in 2004).

Finally, oily is a basic raw material for the strong economic growth of the country. In 2005, 44% of the oil imported by China came from Arab countries. This is the reason China seeks to create free trade areas in order to obtain more competitive prices and better trade relations. The Chinese Minster of Commerce deemed the criticism that China's oil imports were pushing up the price of oil worldwide untrue, as the average price China paid per barrel imported in 2005 was $51.50, $2.80 less than the international average. China's import inclination in terms of crude oil is decreasing as a result of the country's continuous efforts to reduce its dependency on foreign oil.

Mª Luisa Martí Selva
Rosa Puertas Medina
Valencia, March 28 2006

8.- Mexico

Economy Linked to Inflation

Inflation is perhaps one of the economic phenomena that has one of the most intense and far reaching effects on the economy. No agreement has been reached over a complete explanation of its causes let alone how to fight it.

Some of the factors that can spark inflationary pressure include: the depreciation or devaluation of the national currency, increases in prices administered by the government (such as electricity or gas), real wage increases that outpace productivity growth, the climate (which has a marked effect on agricultural products), imported inflation (through price increases in raw materials that are imported), demand pressure, etc.

During the Mexican revolution in the early stages of the 20th century, money was produced by several sources, which led to hyperinflation and the complete loss of credibility of the currency.

Years later, in the Political Constitution of the United States of Mexico of 1917, the same constitution, with amendments, which still governs Mexico today, the establishment of a central bank is planned, which was called the Sole Issuing Bank. One of the roles the bank was empowered with was to be the only issuer of notes.

The law that created the Bank of Mexico was drawn up on August 25 1925, charging it with the sole rights of money issue, and the regulation of the money in circulation, the exchange rate and interest rates.

Until the beginning of the 1930s, once the Bank of Mexico was up and running, paper notes were generally accepted as a means of payment.

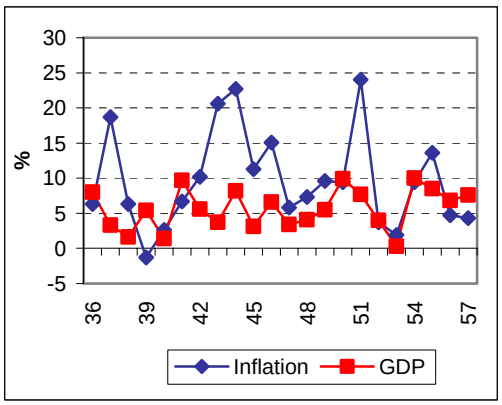
The monitoring of prices is closely related to the creation and progress of the central bank, that is, the Bank of Mexico. Prices began to be measured systematically towards the end of the 1920s. The price index elaborated by the Bank of Mexico dates back to these years and corresponded to Mexico City, where the producer prices of 36 articles were monitored.

The first results offered by the Producer Price Index of Mexico City were first published in the Annual Report of the Bank of Mexico in 1932.

The history of inflation in Mexico is characterised by short periods of time in which prices were low. Generally speaking, inflation has been present ever since the Central Bank began to measure it. However, the highest inflation rates were observed in the 1970s, but let's take it one step at a time.

The period dating from 1936 to 1957 was characterised by a high level of economic growth, with GDP averaging an annual growth rate of 5.6% and inflation averaging 9.67%.

Figure 1: Inflation and GDP 1936-1957



Source: own elaboration with data from INEGI

In the 1930s, Mexico began a stage of economic reconstruction following the revolution, stimulating growth in the agricultural sector through public-sector investment in infrastructure projects, particularly irrigation. Inflation soared in 1937 and 1938.

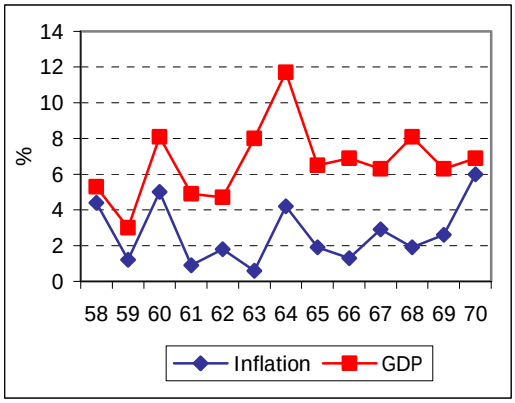
The 1930s were characterised by the impact of the great depression and the oil expropriation, which affected output, prices and the exchange rate.

Inflation continued to soar in the 1940s, recording an annual average of 11.2%. The causes for this inflationary process included the devaluation of the Mexican currency from an annual average of 4.85 pesos to the dollar to 5.74 pesos to the dollar. This process continued the following year to 8.0 pesos to the dollar.

The currency was further devaluated in 1950 to an annual average of 8.65. This was due to the rampant inflation recorded in previous years, in which the highest rates were observed in 1943 and 1944 with 20.6% and 22.7% respectively. The country also enjoyed a marked economic boom that also pushed up prices.

The process known as stabilising development took place in Mexico between 1954 and 1970 (although some authors date this period from 1958). During this period, the country registered annual inflation rates of less than 3% on average, the lowest in Mexico's history. Price stability dominated this 15-year period. Between 1958 and 1970, the annual inflation rate averaged 2.6% and economic growth 6.6%. However, the model of development created marked contradictions that years later were to result in an economic crisis. Perhaps the most striking contradiction was uneven distribution of income.

Figure 2: Inflation and GDP 1958-1970



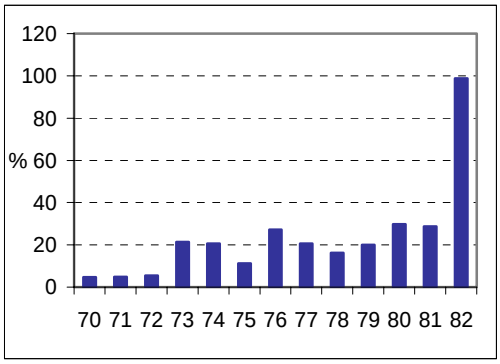
Source: own elaboration with data from INEGI

Following the devaluation in 1954 taking the exchange rate to 12.50 pesos to the dollar and which remained until 1976, budget deficits that could be financed were observed throughout the 1960s. However, this was not the case in the 1970s and 1980s.

At the beginning of the 1970s, the so-called shared development replaced the stabilising development and from that moment onwards the State is seen to intervene more in the economy. This resulted in a tax, monetary and financial boom. The marked increase in government spending generated large financial deficits and inflation together with a sizeable increase in foreign debt. This burden is still carried by Mexico today, in terms of the marked inequality in income distribution.

Over the period dating from 1970 to 1982 the annual inflation rate averaged 23.8%, while GDP grew at an average annual rate of 6.2%. In 1982 Mexico went into a crisis that began with a fall in oil prices in the second half of 1981. As a result of the crisis, Mexico was on the verge of going into default with respect to the country's foreign debt.

Figure 3: Inflation 1970-1982



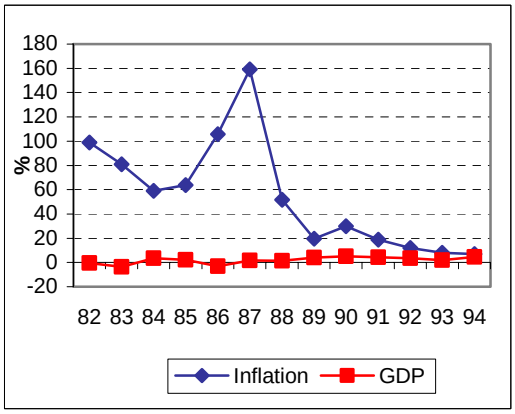
Source: own elaboration with data from INEGI

The average annual inflation rate between 1982 and 1987 was 94.5% and economic growth was nonexistent. It is worth highlighting that since the Bank of Mexico began to monitor prices, the highest inflation rate ever was recorded in 1987 at 159.2%.

Neoliberal policies were applied from 1982 onwards and in a scenario of marked growth in prices an era of economic pacts began in order to control inflation.

Over the period dating from 1982 to 1994, the annual inflation rate averaged 54.9%, while the economy only grew at an annual rate of 1.9%.

Figure 4: Inflation and GDP 1982-1994



Source: own elaboration with data from INEGI

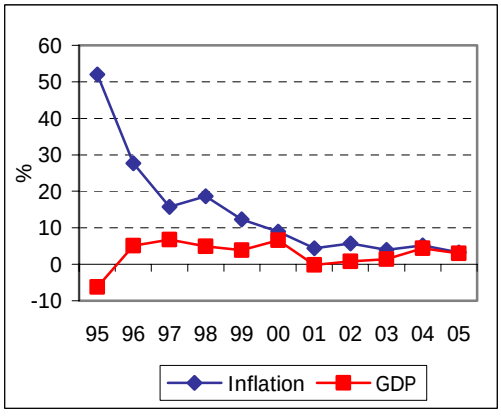
The annual inflation rate began to decrease, finally dropping into single figures in 1993 (8%). The independence of the Central Bank, awarded that year, laid down the foundations for lower inflation rates. The target inflation rate would later be set at 3%, one percentage point more/less.

However, another crisis that began in December 1994 forced the Bank of Mexico to postpone the objective of continuing to reduce inflation.

Once Mexico had recovered from its third most serious crisis in 1995 (the other two occurred at the time of the Mexican revolution and the great depression), when GDP growth dropped to -6.2% and inflation rose to 52%, prices began to drop once more, reaching 3.3% in 2005, the lowest inflation rate since national data has been monitored.

Over the period from 1995 to 2005, inflation grew at an average annual rate of 14.4%, while the economy grew by 2.8%.

Figure 5: Inflation and GDP 1995-2005



Source: own elaboration with data from INEGI

Recent Price Monitoring History

The Bank of Mexico began to measure prices on a monthly basis in 1969 by means of the National Index of Consumer Prices (NICP), using the

previous year as a base year and weightings according to the Income and Expenditure Survey in 1963.

Previously, as mentioned earlier in this report, the measurement of price movements was based on the Producer Price Index of Mexico City.

The first year this new methodology was used was in 1970, recording an inflation rate of 4.69%. The average inflation rate over the entire period that this measurement has been used (1970-2005) stands at 30.1%.

In 1978 the comparative base of this new method was modified, while the reference of the 1963 survey was maintained. In 1980, a further change was made, adopting the year in question as the base year and taking the National Household Income and Expenditure Survey (NHIES) of 1977 as the basis for the weightings.

The basis for the weightings was once again changed in 1994, basing weightings on the NHIES of 1989.

The most recent change in the methodology was made in 2002, taking the second half of June as a reference and basing weightings on the NHIES of 2000.

The NICP includes 315 general concepts which have a share of at least 0.02% of total expenditure measured by the NHIES. The survey is carried out in the 46 largest cities in Mexico.

Similarly, the National Index of Producer Prices (NIPP) is also taken into account. The main objective of this index is to provide information concerning price changes in a fixed basket of goods and services that represent national production. In other words, producer prices refer to the price set by the producer for the first purchase of the product.

The NIPP was first calculated in 1980 and initially covered the primary sector, manufacturing, construction and electricity generation.

In 1986, in light of the importance of oil in the national economy, the decision was made to publish the NIPP including and excluding petroleum. Ten years later, all the sectors of the economy were included, taking 1994 as the base year.

At present, the index uses December 2003 as a basis and comprises 600 concepts. The information comes from around 2,000 companies and institutions and is gathered nationally, compiling information from at least one city per federal state.

The classification used by the NIPP is as follows: final goods and services; intermediate goods and services and total output.

The weighting of the NIPP is based on Mexico's National Accounting System, economic censuses and national statistical year books.

Independence of the Bank of Mexico: a New Era

When the Bank of Mexico was declared independent in 1993, it was necessary for monetary policy to be oriented towards maintaining the exchange rate within certain parameters. On the price front, there was debate over the possibility that the task of measuring inflation should be charged to another organism, arguing that the bank could not be a "judge and a part"; however, legal complications resulted in the proposal being unsuccessful.

As regards the independence, the main objective of the bank was to achieve stability in prices, to limit government and to establish a governing council out of sync with political elections.

The Bank of Mexico announced for the first in 1994 that the target inflation rate should be similar to those of Mexico's main trading partners. At that time, the inflation rate in the United States was below 3%.

At the end of 1994 Mexico began to suffer the economic crisis that began with the famous "December mistake", when a marked current account deficit and a massive flight of capital among other factors, led to a devaluation of the peso which saw inflation hit 52% the following year. This led Mexico to adopt a floating exchange rate regime which has remained in place up to the present, allowing the Bank of Mexico greater monetary policy independence.

Recent monetary policy in Mexico has been characterised by a transition from being subject to the exchange rate regime to a policy that establishes short and long term inflation targets, also going through a period in which monetary aggregates were used as intermediate objectives.

Further progress was set in motion in 1996, when the Bank of Mexico included an annual inflation target in all its monetary programmes, which is jointly determined by the Federal Government. The idea was to ensure that financial and monetary policy went in the same direction. One immediate effect is that this target is used to set the minimum wage.

The independence of the central bank and the floating exchange rate allowed the Bank of Mexico to make clear progress in its fight to combat inflation, by adopting the framework entitled "Inflation Targets", linked to the monetary base, as an intermediate objective. This permitted inflation to be reduced to a medium level.

In 1999, the Bank of Mexico announced that it would begin to set medium term inflation targets, indicating that the objective was to attain a similar inflation rate to those in the countries that Mexico trades with, paying particular attention to the United States. As a result, the target was set at 3%.

Despite working with inflation targets since 1999, the formal announcement was not made until 2001. The main elements of this framework are: the independence of the Central Bank, understanding and assessing the causes of inflation, short and long term inflation targets (3% +/- 1%) and transparency and trading balance.

The Bank of Mexico introduced the concept of core inflation in its Monetary Programme in 1999, which enables the inflation trend to be monitored in the medium term. This indicator is first published the following year and was quite useful to strengthen the inflation target scheme. The methodology is applied to previous years and can be consulted from January 1983, together with the non-core inflation.

However, it was not until 2001 that the Bank of Mexico officially announced the adoption of an inflation target scheme which set an objective of 3%, within a band that ranged from 2% to 4%, that is, 3% plus o minus 1%.

Information Structures in Price Monitoring

The Bank of Mexico Publishes price movements on a two-weekly basis in

different formats. The National Index of Consumer Prices (NICP) is classified by:

- Expenditure item
- Sector of origin

Moreover, the NICP is made up of the following subgroups or indexes:

- 10 most variable products
- Core inflation, both in goods and services
- Fruit and vegetables
- Rest of farming and fisheries
- Administrated prices
- Oficially approved prices
- Education
- Cities included
- By region
- By population size
- By income bracket, among others.

As regards the National Index of Producer Prices (NIPP), the following categories are presented:

- Final Goods and Services Index
- Intermediate Goods and Raw Materials Index
- Total output (final plus intermeditate scores)
- Total output per industry
- General Domestic Index
- General Export Index
- General Production Index
- General Goods Index
- Residencial construction by city
- Building materials
- Public works provisions

Similarly, a foreign trade price index is elaborated, which includes imports and exports.

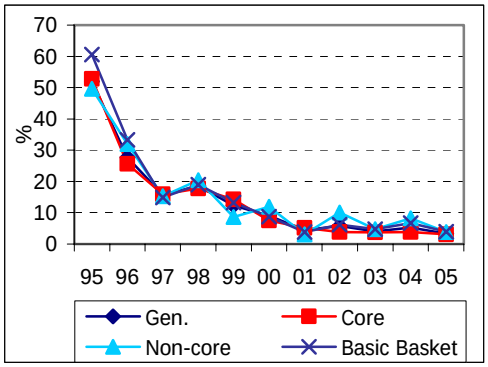
Price statistic

The data for some of the most important measures of price developments in the Mexican economy are presented below.

Global Inflation

This indicator summarises the rest and is the most used in economic analysis in Mexico, ahead of Core Inflation, Non-Core Inflation and the Basic Shopping Basket, although the latter has not been used much of late.

Figure 6: General, Core, Non-core and Basic Shopping Basket Inflation 1995-2005



Source: own elaboration with data from INEGI

While it is true that in the graph all four rates appear to go hand in hand, we will discuss this in more detail later in this report. One thing that does stand out is the downward trend in inflation since 1996 to around 4% in recent years.

As regards the recent developments in prices, it is worth highlighting that, according to data from the Bank of Mexico, the trend observed last year was the result of the 2004 supply shocks reverting and monetary policy moves.

Monetary policy in 2005 was aimed at preventing the supply shocks from affecting prices and reducing core inflation.

Consequently, inflation stood at 3.3%, the lowest ever recorded since prices have been monitored on a national scale and even below the level

observed over the same period in the United States (3.4%).

Core inflation dropped considerably from 3.8% to 3.1% in 2005. This was mainly due to a smaller contribution on behalf of housing in general, as the rally in mortgage loans has generated an excessive supply of this basic asset, as well as moderate rental prices.

However, the decrease in non-core inflation contributed a great deal to the lowest rate in the last 35 years, dropping from 8.2% in 2004 to 3.8% in 2005. This was due to the decrease in inflation in farming and fishery products and officially approved goods and services.

Core Inflation

The Bank of Mexico defines this variable as "the increase in the price of a subgroup of the NICP containing the least volatile expenditure categories." That is, this index is made up of a group of goods and services whose price patterns are more stable.

Core inflation can be consulted by type of commodity (processed foods, beverages and tobacco and other commodities) and by service. Non-core inflation is divided into farm produce (fruit and vegetables, meat and eggs), administered and officially approved prices and education.

Core inflation monitors around 70% of all goods and services, whereas the remaining 30% are monitored by non-core inflation.

The core inflation rate recorded in 2005 is the lowest since this indicator was first used and has ranged from 3% to 4% over the last five years. The graph also displays a downward trend since 1999.

Since October last year, inflation in services has tended to be higher in comparison to goods. This situation will have to be followed closely over forthcoming months.

The Bank of Mexico estimates core inflation to remain between 3.1% and 3.2% this year.

The multiple year inflation target will only be achieved if core inflation is anchored at 3% in the long term.

Goods Prices

The products monitored in this category represent 37% of the total. The effects of shifts in the exchange rate are mainly felt by these products, which boast the highest level of marketing.

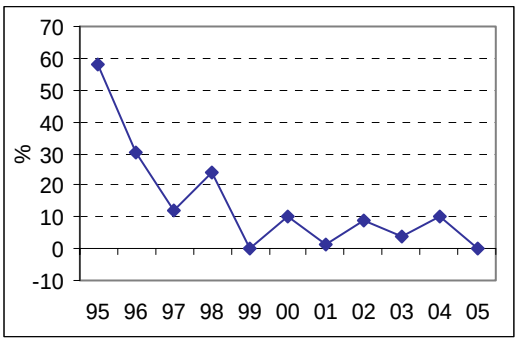
The marked devaluation at the end of 1994 also sparked a sharp upturn in prices the following year. While the overall inflation rate rose to 52% in 1995, goods inflation rose 10 points higher, to 62.3%.

On the flipside of the coin, the index has reflected the strength of the peso in recent years. For example, the peso appreciated by 4.7% in 2005 and goods inflation dropped to 2.8%, below the overall level of inflation.

Farming Prices

These prices are included in the non-core inflation index and are broken down into fruit and vegetables and meat and eggs. They represent 8.1% of total goods and services monitored. In 2005 these goods contributed a great deal to the decrease in overall inflation, as the 10.1% increase recorded in 2004 dropped to little more than 4% in 2005. These prices are mainly characterised by a high degree of volatility.

Figure 7: Farming Prices 1995-2005



Source: own elaboration with data from INEGI

The graph above shows just how volatile these prices are, particularly in 1997, when inflation stood at 11.8%, more than doubling one year later to 24.3%, or the latest figures which show an inflation rate of 10.1% in 2004 and -0.2% in 2005.

Fruit and Vegetable Prices

Farm produce is included in non-core inflation, representing 3.3% of the total. These prices, as is the case with most agricultural prices, are highly volatile, that is, they frequently increase and decrease irregularly due to uncontrollable factors such as the climate.

Table 1: Fruit and Vegetable Prices 2000-2005

Year	%
2000	2.2
2001	-6.0
2002	22.2
2003	-2.4
2004	6.4
2005	-1.9

Source: own elaboration with data from Banxico

The table above shows how prices have been highly volatile over the last five years. While prices rose by 6.4% in 2004, the following year they decreased.

The same volatility is observed in monthly data. The latest available figures indicate that while prices dropped by 1.9% in 2005, they have already risen by 5.4% over the first two months of this year.

These products will almost certainly be the most volatile in terms of price this year.

Administered and Officially Approved Prices

These prices are also included in non-core inflation, which represent 17.2% of the general index, are relatively predictable, as the government's economic policy is decisive in terms of price fixing.

Apart from the economic policy element, according to studies carried out by the central bank, international prices also exercise pressure on these prices as does the price of supplies used in the production of such goods and services, as would be the case with steel in electricity.

These prices fell in line with the target inflation rate, recording 7.5% in 2004 and 4.8% in 2005.

For example, in 2005 petrol prices were raised on a fixed monthly basis to 4%. Therefore, these prices are expected to once again remain in line with the inflation target in 2006, as electricity and L&P Gas will not rise by more than 4% and petrol will more than likely record a similar rise to that observed in 2005.

As a result, administered and officially approved prices will help to achieve the annual inflation target.

Basic Shopping Basket

Table 2: General Inflation and Basic Shopping Basket

Year	General	Basic Basket
1990	29.9	33.6
1991	18.8	22.3
1992	11.9	8.1
1993	8.0	7.5
1994	7.0	8.1
1995	52.0	60.6
1996	27.7	33.3
1997	15.7	14.9
1998	18.6	19.0
1999	12.3	13.2
2000	9.0	8.7
2001	4.4	3.8
2002	5.7	6.1
2003	4.0	4.7
2004	5.2	6.7
2005	3.3	3.9

Source: own elaboration with data from Banxico

This indicator has been available since 1982 and is used to measure inflation based on a basket of essential household consumption products. Consequently, the pattern of this index reflects the effect on the lowest income earning households.

In the data series that runs from 1990 to 2005, basic shopping basket inflation has only been lower than general inflation on five occasions (1992, 93, 97, 2000 and 2001).

The rest of the time, overall inflation was lower than the basic basket. The figures corresponding to 1995 and 1996, in the midst of economic crisis, are particularly striking as the gap between the two inflation rates is even wider.

By Income Brackets

This index is quite useful to ascertain how inflation affects income earners. Information has been available since 2003 and it measures the change in prices in four income brackets: up to one minimum wage, between one and three minimum wages, between three and six minimum wages and more than six minimum wages.

Table 6: Inflation by Income Bracket 2003-2005

Year	-1 MW	1-3 MW	3-6 MW	6+ MW
2003	4.2	4.2	4.0	3.9
2004	6.6	6.4	5.9	4.7
2005	3.3	3.1	3.2	3.4

Source: own elaboration with data from Banxico

Here we can appreciate how inflation has a greater impact on the lowest income earners, that is, those who receive up to one minimum wage.

Producer Prices

If producer prices rise, this trend spreads to consumer prices. In 2005, the producer prices of final goods and services rose by 2.5%, compared to the 8% rise the previous year. This means that producers were not under pressure in terms of costs in 2005 and this trend, should it continue, will help to control prices this year.

Experts' Outlook

The Bank of Mexico carries out an Expectations Survey on Experts in Private Sector Economics on a monthly basis. The survey gathers the opinion of 32 national and international groups of analysis and economic consultants in the private sector.

The issues addressed include inflation, interest rates, the exchange rate, economic activity, employment and wages, public-sector finances, policies that would stimulate greater corporate investment in Mexico and aspects that restrict economic growth.

The survey undertaken in February this year forecasts the general inflation rate to reach 3.6% and core inflation to reach 3.1% by the end of the year. For 2007, inflation is forecast to be 3.56% and in 2008 3.54%. The annual inflation rate is forecast to average 3.56% over the period from 2007 to 2010.

Benefits of a Low Inflation Rate

1. Investors are able to make decisions with a greater degree of certainty. Business planning is much easier, particularly in the long term, with stable prices than in a context of high or hyperinflation.

2. On reducing inflation, interest rates drop, which makes money cheaper, making credit more easily accessible. The decrease in inflation in Mexico in recent years has boosted consumer and mortgage loans markedly, but not corporate loans. However, it is worth remembering just how risky it is to increase consumer credit through credit cards, as the financial intermediation margin is very high, whereas the inflation rate is only slightly above 3%. The rates charged by banks are in most cases higher than 20% or 30%.

3. The population's purchasing power is reinforced, which favours the least privileged sector.

4. Financial vulnerability is reduced, as businesses for example, decide to ask for loans in the national currency instead of a foreign currency. In the case of Mexico, this preference became more noticeable from September 1998 onwards.

5. As inflation drops, public-sector finances improve due to the decrease in financial costs. A parallel trend can be observed in the two indicators since 1996.

6. Low inflation helps boost the development of financial markets. For example, the government bond yield curve in Mexico, for example, is flat in the long term (20 years) ranking from 5% to 9%.

As regards the aims of this year's monetary policy, the 2006 Monetary Programme of the Bank of Mexico includes the following four main aspects:

1. Multiple-year inflation target of 3%
2. Permanent and systematic analysis of inflation developments
3. Establishment of levels of monetary conditions and "corto"[12] as instruments
4. Inform the market to aid convergence of public expectations and the inflation target.

It is finally worth pointing out that a low inflation rate was achieved in 2005 and that the outlook for the next five years forecasts inflation to be in the vicinity of 5%. The challenge now will be to obtain high economic growth rates in a scenario of price stability in order to create jobs, as on the way to reducing inflation, growth in domestic demand has slumped in recent years causing a decrease in economic growth and job creation.

The current phase of price stability and low growth must be overcome and replaced by a phase of price stability and strong growth. Structural reform

[12] Monetary instrument used by the Bank of Mexico to reduce the amount of money in circulation and control inflation.

still remains to undertaken and there is still a long way to go in terms of suitable economic policy.

Héctor Ruiz Ramírez
Toluca, Mexico. March 28, 2006