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# The disinflation process in Spain. A look at the role of wages (1)

## 1. The disinflation process and the role of factors other than wage behaviour

This article briefly describes the Spanish disinflation process since the mid eighties, with special attention to the role of wage behaviour in this process. Its potential role in the more difficult task of maintaining and even improving the Spanish economy's stability record is also assessed.

Chart 1 (upper panel) shows the path followed by Spanish inflation since the second half of the eighties and illustrates clearly the magnitude of the disinflation process in Spain. Following figures of around 6.5 % for the late eighties, the inflation rate started to decline at a slow pace in the early nineties and this process intensified in the late nineties. As a result, the average inflation rate for the 1996-2000 period (2) was 2.5 %, a figure substantially lower than the average rate in the late eighties (6.5 %).

To properly frame the role played by wage behaviour, it is important to understand the role that can be attributed to factors other than wages in this disinflation process. In this respect, the second panel in Chart 1 shows the behaviour of real GDP growth in Spain over the same period. Significantly, whereas cyclical considerations may account for a sizeable portion of the reduction of the inflation rate during the early nineties, the quickening of the disinflation process in the second half of the decade coincided with a period of a high average growth of close to 3.5 %. Thus, it seems clear that the position of the economy in the business cycle cannot offer a sufficient explanation for the recent pattern of the inflation rate.

Certainly, the rapid decline in the inflation rate in the second half of the nineties cannot be properly understood without a reference to a series of important changes in the design and stance of both fiscal and monetary policy in Spain. The situation of the Spanish economy in the early nineties clearly demanded some changes in this respect, which became particularly pressing after the signing of the European Union Treaty in 1992, when the macroeconomic stability requirements to become a member of the future Union were made explicit. In fact, as from 1992, fulfilling the convergence criteria set in the Maastricht Treaty on time became one of the main guiding principles of Spanish economic policy.

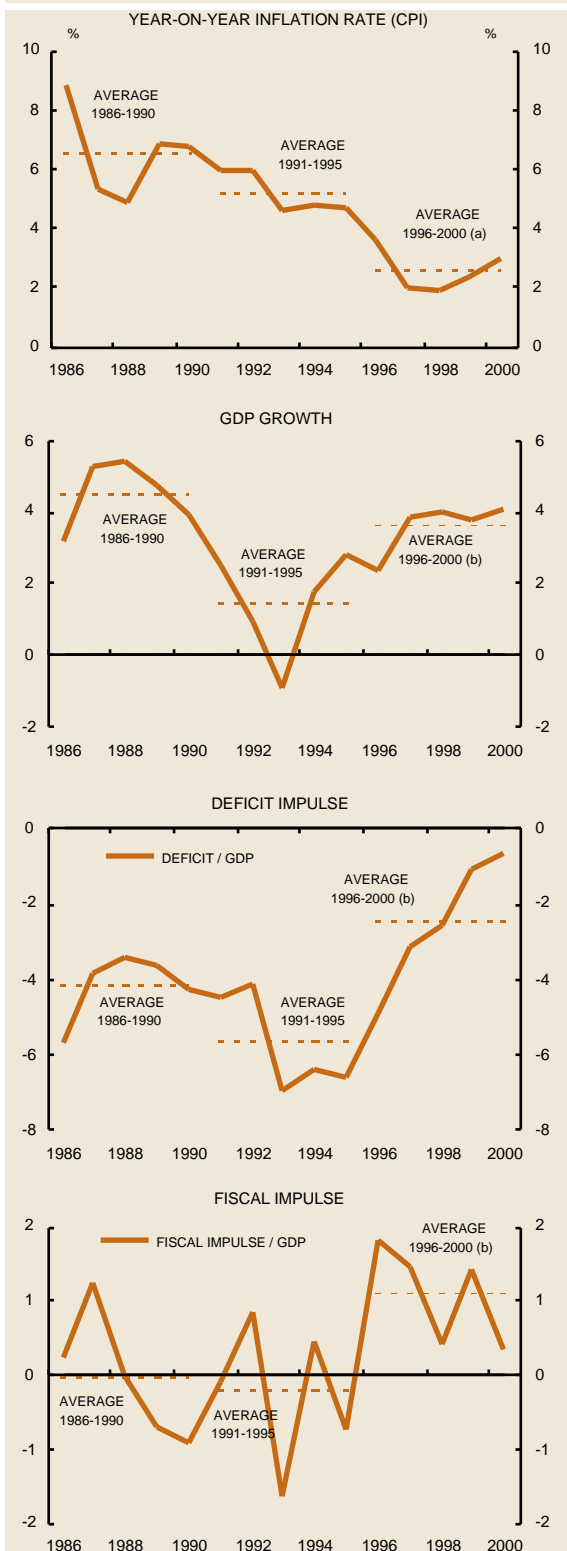
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(1) This article summarises the intervention prepared by Juan Ayuso and Pilar L'Hotellerie, from the Research Department, for the BIS Spring Central Bank Economists' meeting held on 2<sup>nd</sup> and 3<sup>rd</sup> March 2000.

(2) Up to 2000 Q1.

CHART 1

An overview of the disinflation process

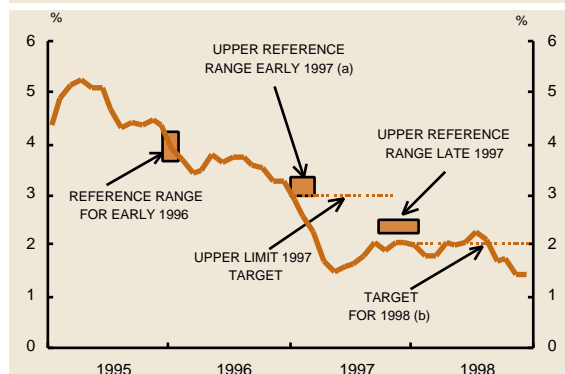


Sources: Instituto Nacional de Estadística and Banco de España.

(a) March 2000.  
(b) Forecast.

CHART 2

Year-on-year inflation: Targets



Source: Banco de España.

(a) The CPI growth rate was, in the opening months of 1997, to be close to 3%.

(b) The twelve-month inflation rate was, at end-1997, to be close to 2.5% and around 2% during 1998.

Regarding fiscal policy, the third panel in Chart 1 summarises the important change in its stance in the late nineties. The rising trend that the Spanish public deficit had been following was clearly broken in 1996. The average public deficit in the 1996-2000 period has been around 2.5 %, whereas the figures for the 1986-1990 and 1991-1995 periods were about 4.2 % and 5.8 %, respectively. Although cyclical considerations have played a role in this respect, the break in the trend is also apparent in the so-called fiscal impulse indicator, where cyclical considerations have been filtered out (see Chart 1, bottom panel). This new, less loose fiscal policy stance was implemented, moreover, mainly through mechanisms to curb public expenditure and to enhance its control and management.

Changes in monetary policy making started in 1994, when a new law conferred full independence on the Banco de España to conduct a monetary policy geared primarily towards price stability. One of the first decisions made by the Governing Council elected under the new law was to change the strategy of the Spanish monetary policy. Thus, from 1995 until Spain's incorporation into EMU, the Banco de España pursued a new monetary policy strategy of direct inflation targeting, which replaced the previous strategy based on (broad money) intermediate targets.

The new monetary policy stance was implemented as a gradual policy of disinflation from the relatively high levels prevailing at the beginning of the second half of the nineties to the levels that at that time were thought to be consis-

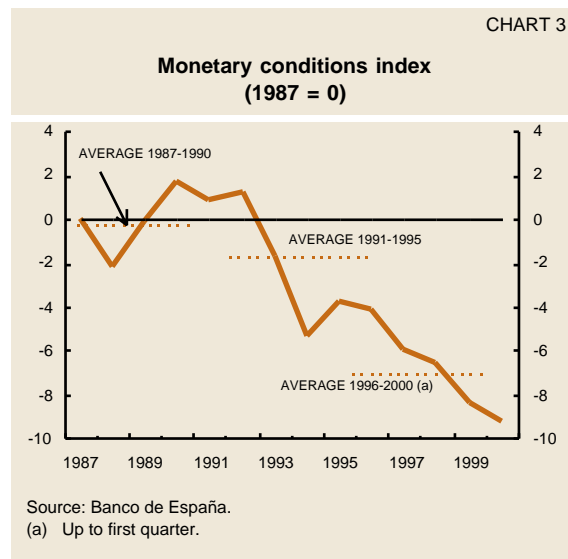
tent with the Maastricht criteria. Chart 2 shows how this gradualism was actually implemented as well as the relative ease with which the different targets were met. As a matter of fact, the main part of the targeted disinflation process was completed almost one year in advance, as the inflation figures for the last three quarters in 1997 were broadly compatible with the target set for 1998, i.e. keeping the inflation rate around 2 %.

To understand the nature, the final aims and the success of these economic policy changes, it is important to recall that Spain had traditionally been a so-called high-inflation country. Inflation had been strongly entrenched in the behaviour of economic agents and in the institutional mechanisms underpinning the workings of the economy. In this framework, it was clearly understood that the success of any programme aimed at reducing the inflation rate would hinge crucially on its ability to break with previous beliefs and behaviour or, to put it another way, on its ability to be credible.

In this regard, the growing general consensus in Spanish society on the need promptly to fulfil the Maastricht criteria, the new economic policy framework and its promising early results laid the foundations for a virtuous circle. Within this virtuous circle, additional headway in the disinflation process improves the credibility of the new policy framework and targets, hence making further advances easier. This is in clear contrast to the vicious circle that seemed to have been at play before the changes. In that vicious circle a low degree of credibility of the economic policy targets increased the real costs of fulfilling those targets and therefore increased the probability of not fulfilling them. This further undermined economic policy credibility.

Chart 3 provides additional information to illustrate – and perhaps to allow for a preliminary evaluation of the relevance of – this virtuous circle. As can be seen, the acceleration of the disinflation process in Spain took place against a background of looser –rather than tighter– monetary conditions. Regarding the patterns of short– and long-term real interest rates and of the real effective exchange rate (the components of the monetary conditions index depicted in the chart), the comparison of the average figures for the 1991-1995 and the 1996-2000 periods shows that real interest rates have decreased by around 4 percentage points from levels close to 6 % and the real effective exchange rate has depreciated by almost 8 %.

To conclude this brief overview of the role that factors other than wages have played in



the recent Spanish disinflation process, the reduction of the inflation rate has also benefited from structural reforms in the product markets. Moreover, transitory developments (such as the pattern followed by commodity and oil prices in the mid-nineties) helped curb inflation at crucial junctures.

## 2. The role of wage behaviour

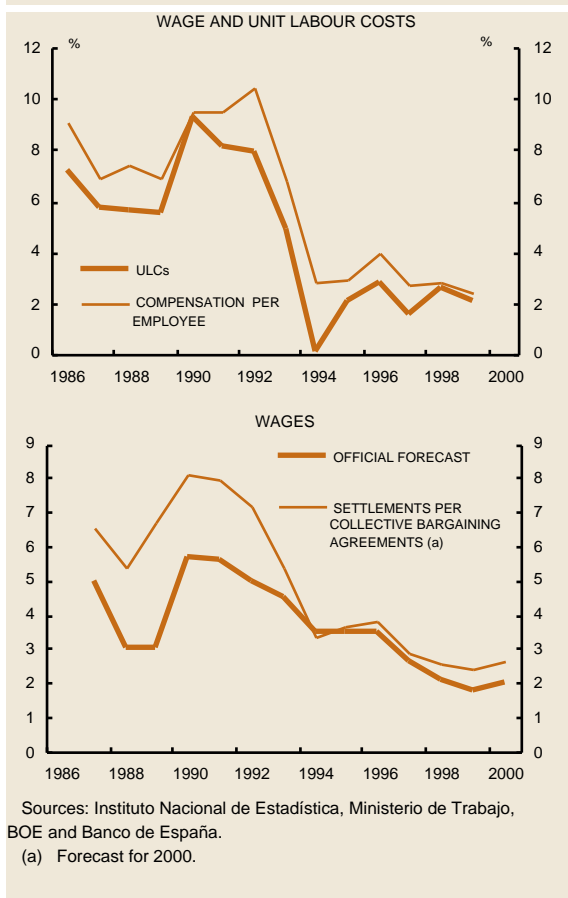
All the information provided so far helps to properly frame the analysis of both the actual role played by the behaviour of wages in lowering the inflation rate in Spain and its prospective role in the task of maintaining price stability in the new framework of EMU. These are the objectives of this section.

The upper panel in Chart 4 shows the pattern of compensation per employee and unit labour costs in Spain since the late eighties. The growing moderation of wage increases is clearly apparent in this chart, showing its important contribution to the observed process of reduction of the Spanish inflation rate. Although the crisis during the mid-nineties may account for some – or much – of this wage moderation, it is striking that moderation has been sustained and even heightened throughout the late nineties, against a backdrop of high growth.

It is worth noting, however, that wages can contribute to shaping a context of macroeconomic stability in two ways. At a “macroeconomic” level, moderate aggregate wage behaviour can make disinflation easier if wage claims are based on inflation expectations that closely match monetary policy targets. Yet there is also a “microeconomic” aspect. For wage behaviour to contribute favourably to a disinflation process, while simultaneously con-

CHART 4

## Labour market conditions



tributing to a high level of employment, wage claims have to be flexible enough to adjust themselves to different sectoral or firm patterns of productivity. While being “macroeconomically” adequate, inappropriate “microeconomic” wage behaviour can bring about changes in relative prices that may reduce competitiveness in some sectors of the economy and might eventually impinge adversely on the aggregate rate of inflation.

A more in-depth analysis of the wage moderation process in Spain with a view to distinguishing these two aspects reveals, first, that aggregate wage behaviour has played an important and positive role. The bottom panel in Chart 4 shows how the gap between wage settlements at the beginning of each year and the official inflation target was sharply reduced in the mid-1990s and that the ex-ante real wage increase was almost brought to zero. This pattern could reflect either a reduction in the equilibrium real wage and/or a lower nominal component of the agreed wage due to increased credibility of the inflation target. Initially, lower wages probably reflected a reduction in the de-

sired real wage, as a result of the recession in 1992/1993 and the related increase in unemployment. However, in the following years, as the economy recovered, wage claims continued to be close to inflation targets as a consequence of the higher credibility of the former, so that expected inflation was equal to targeted inflation. Additionally, the existence of inflation-adjustment clauses in collective agreements (3) has helped moderate initial wage claims. This chart therefore offers another example of how important the virtuous circle referred to earlier has been in explaining the prolonged low inflation figures in Spain. A more credible set of inflation targets has contributed to moderating wage claims and lower wage claims have reduced the pressure on inflation, thus increasing the probability of meeting the targets and, therefore, their credibility.

Nevertheless, the picture emerging from the analysis of wage flexibility at sector and firm level is not so positive. Although the wage bargaining system in Spain has, in principle, an intermediate level of centralisation, there are in fact two important trade unions, which behave in a highly co-ordinated way. This has been beneficial for the disinflation process as long as trade unions have perceived the credibility of inflation targets, which has allowed a reduction in their inflation expectations to be incorporated into the bargaining process, as described in the previous paragraph. But, on the other hand, strong co-ordination among trade unions has resulted in high homogeneity of wage increases across sectors and firms, leaving little room for manoeuvre for sectoral adjustments.

At the beginning of the 1980s the particular characteristics of the wage bargaining system in Spain combined with the very high level of redundancy payments determined a very rigid structure of wages and employment. This rigidity has been addressed in several waves of labour market reform in Spain (1984, 1992, 1994, and 1997), which in general have been aimed at increased flexibility of employment rather than increased flexibility of wages.

Thus, in 1984, the use of temporary labour contracts was given a most significant boost. The percentage of workers with temporary labour contracts increased rapidly through the late 1980s to reach a level of around 33-34%. In the second half of the 1990s, in the wake of the 1992-1993 recession and following new legislative changes in 1994, the duration of

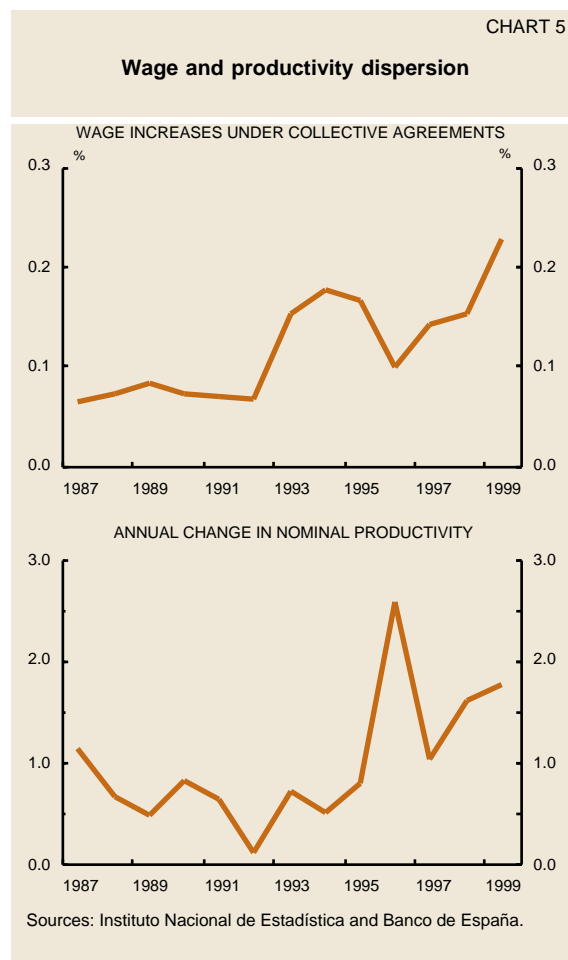
(3) Inflation-adjustment clauses guarantee that deviations of the final outcome for inflation from the expected rate of inflation, used as a reference in collective agreements, are recovered, at least in part, in terms of higher wages.

temporary contracts started to decrease dramatically, giving way to a rapid increase in the ratio of the number of contracts to wage-earners. On the whole, there has been a significant increase in the flexibility of employment conditions since the mid-1980s. Yet increased flexibility only relates to one-third of all employees, those with temporary contracts.

On the contrary, no such significant headway has been made towards wage flexibility. Wage flexibility requires both wage levels to adapt to productivity and other firm- and sector-related characteristics, and, ultimately, wage increases to be related to productivity developments at this decentralised level. In general, a sufficient degree of wage dispersion is needed, both in terms of levels and in terms of rates of change. According to the available information on individual wage distribution (which unfortunately corresponds to 1995), although temporary workers have, in general, lower wages than permanent employees, the aggregate wage distribution in Spain is characterised by excessively high wages at the lower end of the distribution. This is due to high minimum wages for permanent workers, which are explained, in turn, both by the high replacement ratio (unemployment benefits as a proportion of wages) and by the existence of high entry wages. Those entry wages are negotiated in collective bargaining, which set high floors for minimum wages. As a result, average wages are also relatively high.

Against this background, some gradual changes have been introduced by the labour market reforms of 1994 and 1997. The measures taken have been geared to making permanent employment somewhat more attractive for employers. In particular, in 1997 a new type of permanent contract, with lower redundancy payments and reductions in social security contributions, was created. This contract has been aimed at specific groups of workers (the young, women, the long-term unemployed and – up to 1999 – temporary workers). All in all, these measures have entailed a reduction in the cost of labour for employers additional to that derived from wage moderation itself. The effect of such changes has been a noticeable increase in the weight of permanent contracts up to 1999 (from 4 % of new contracts in 1996, to 9 % of new contracts in 1999). Some measures have also been taken to increase the adaptability of wages to firm-level and sectoral circumstances by introducing opt-out clauses (1994) and by favouring collective bargaining on a multi-tier basis (1997).

Although the dispersion of negotiated wage increases (calculated with sectoral data) has



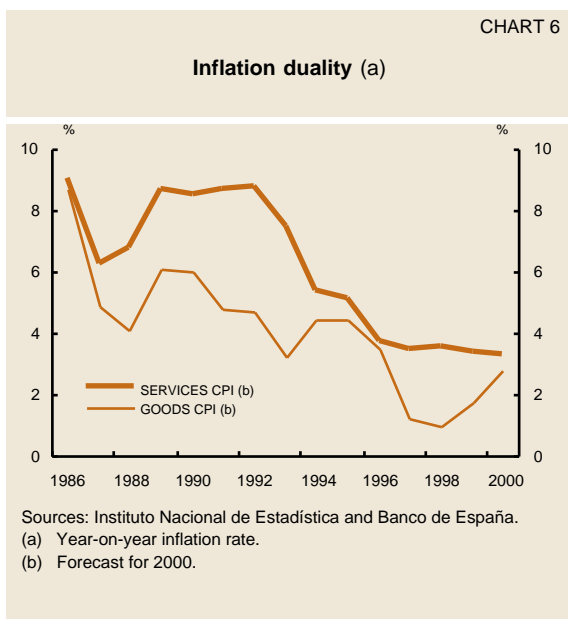
tended to increase, the above-mentioned characteristics of the wage distribution have probably changed little. Chart 5 shows that variability in nominal productivity is much higher than variability in negotiated wages, even if the improvements in the more recent period are taken into account. In any case, updated micro data are needed to confirm the extent of these changes.

Another indirect way of checking to what extent the labour market works efficiently is provided by changes in structural unemployment. A proxy for the level of the structural unemployment rate, long-term unemployment as a proportion of total unemployment, shows that the level of structural unemployment remains high in Spain, indicating a less than flexible performance of the labour market. Nevertheless, in recent years structural unemployment has tended to decrease.

### 3. The duality of inflation

Having analysed the aggregate contribution to disinflation that wages have had in the past, we now turn to assess how the process of reduction of inflation has affected tradable and

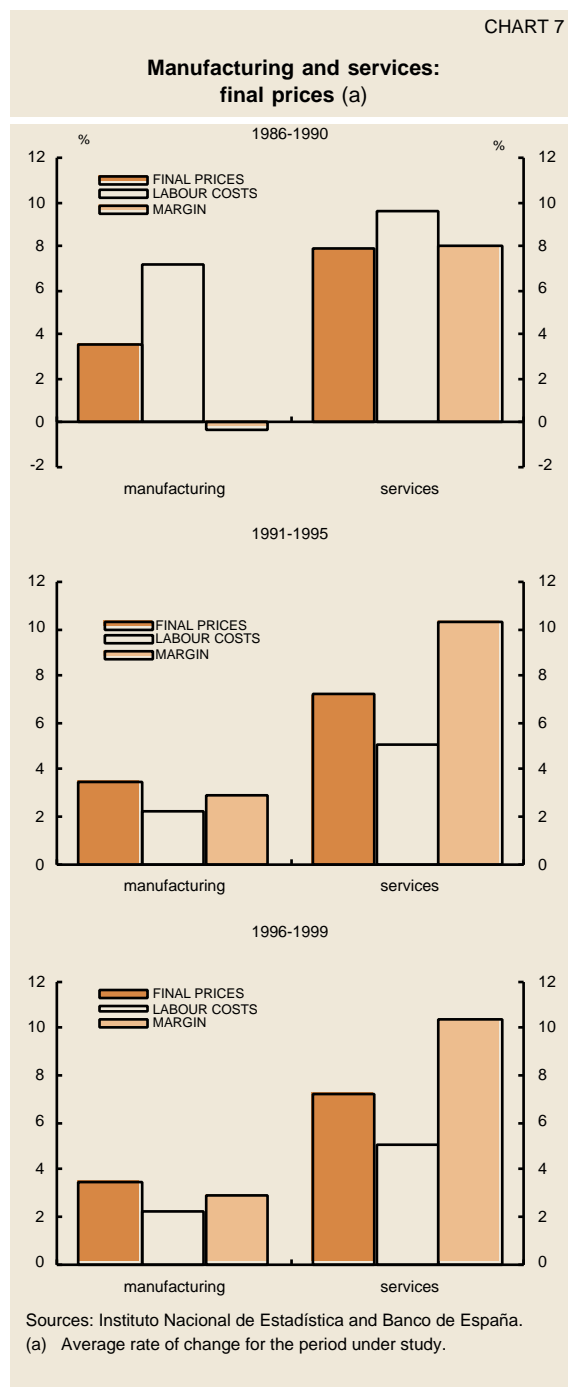




non-tradable products. For the sake of simplification, we will take services as being equivalent to the sheltered (non-tradable) sector and manufactures as equivalent to the non-sheltered (tradable) sector. As can be seen in Chart 6, two-speed inflation has been a characteristic of the Spanish inflation process since the 1980s.

In Chart 7 we provide some information on the price formation process in services and manufactures for an insight into the causes of this dual inflation. Looking at the contribution of unit labour costs (ULCs) to inflation, it can be seen that, up to 1995, ULCs increased more in services, in part due to higher productivity growth in manufactures. It appears that higher inflation in services can be explained to some extent by this type of factor (the usual arguments in the Balassa-Samuelson model of dual inflation). But some qualifications are in order. First, higher increases in productivity in manufactures have been associated with reductions in employment (in the 91-95 period). Second, high rates of inflation in services have been accompanied by a widening of margins, irrespective of the cyclical situation of the economy. Third, in the most recent period (1996-1999), ULCs have increased more in manufactures than in services, whereas prices have increased more in services. As a result, margins have contracted in manufactures and widened in services.

These developments are indicative of the lack of (sufficient) competitiveness in services markets. As a result, price adjustments to changes in the nominal conditions of the economy tend to be delayed in these activities. Operating margins in services branches have



widened in general, although there have been some exceptions, such as communications, where market reforms have been implemented, aimed at putting an end to former monopoly situations by gradually opening up the market to new operators.

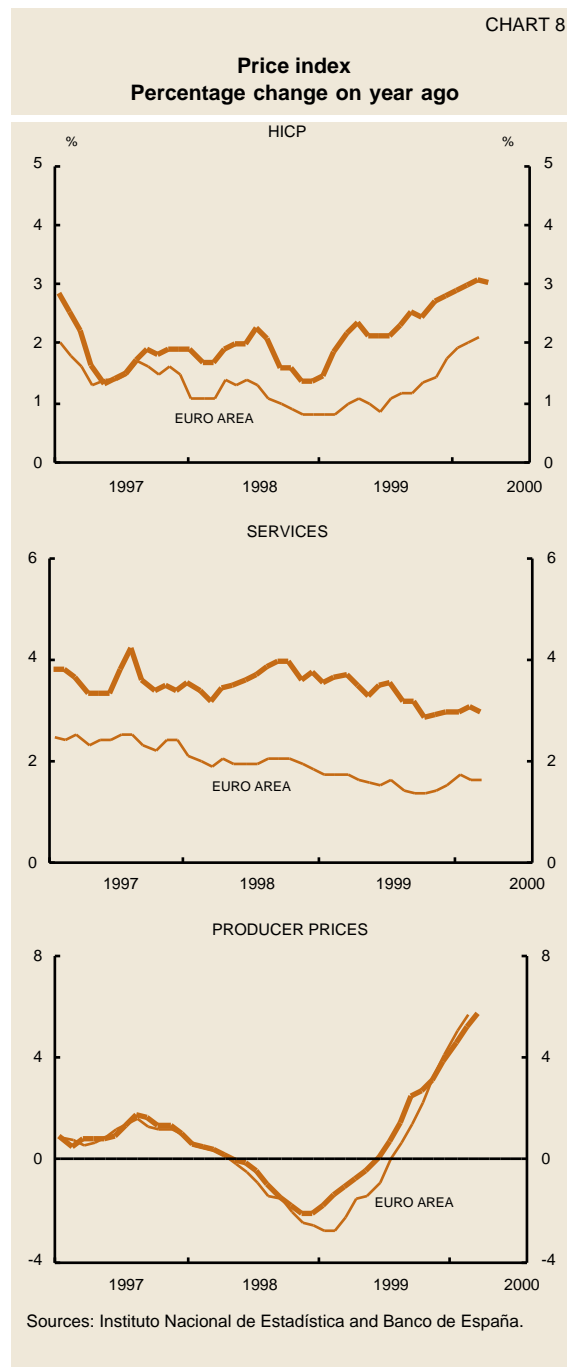
In the comparison with the euro zone, services prices in Spain have maintained a significant inflation differential over the last three years, although a gradual but firm trend towards the reduction of this gap can be seen in the latest data, as can be seen in Chart 8. This is in contrast to producer prices for industrial prod-

ucts, the increases in which have generally been tied to international price developments. Nevertheless, there has been an unusual widening of the differential of these price increases between Spain and the euro area since the beginning of 1999 (see Chart 8). This widening has been partly related to some special factors (i.e. increases in olive oil prices) and possibly to a stronger impact of oil price increases in the case of Spain. But it may also be the result of insufficient adjustment to cost increases through the contraction of margins in tradable sectors showing up as an inflation differential, with both factors pointing to a loss of competitiveness in the non-sheltered sectors of the economy. This loss of competitiveness would be particularly worrying in the context of EMU as it could start a process of adjustment of employment and activity in the non-sheltered sectors, jeopardising the catching-up process of the Spanish economy.

#### 4. Inflation in 1999 and the outlook for 2000

Sharp increases in oil prices during 1999 have heavily affected consumer prices in Spain, as in other countries. Given the greater weight of energy (fuel, in particular) as an input in the production process in services (transport), as opposed to manufactures, the rise in energy prices is further and damagingly fuelling inflation in sectors that already exhibit very high price increases and that are slow to adjust to lower inflation rates. Additionally, these developments have to be placed in the more general context of the strong cyclical recovery of the Spanish economy, accompanied by a somewhat accommodating policy mix. As a result, as can be seen in Chart 8, headline HICP accelerated in 1999, initially widening the inflation differential with the euro area. The year 2000 has started with a reduction in the inflation differential vis-à-vis the euro area. In principle, over the course of the year a downward path in the Spanish inflation rate can be expected, as the same factors that have contributed to widening the differential with the euro area in 1999 may be expected to act in the opposite direction in 2000.

In assessing the inflation outlook for 2000, and taking into account the relatively loose monetary and financial conditions still prevailing in Spain, the main risk to inflation regarding wages is that wage negotiations incorporate the recent acceleration in prices. Looking at wage dynamics in 1999 and the prospects for 2000, the fact that inflation in 1999 was finally higher than the official target taken as a reference in wage bargaining (2.9 % year-on-year at end-



1999, against 1.8 %) activated inflation-adjustment clauses, affecting 60 % of bargaining contracts. The average wage increase finally resulting from collective bargaining was higher than that negotiated in the first place (2.8 % against 2.4 %). This means that due to the indexation mechanism implicit in the clauses, the increase in oil prices has already been incorporated to some extent into wage increases.

For the year 2000, the information available supports the hypothesis that the official inflation target (2 % by the end of the year) is being taken as the initial reference for collective bargain-

ing. If inflation behaves as expected, the virtuous circle of wage increases helping keep inflation low will be restored. But the risks here are twofold. The most immediate risk would be that negotiated wage increases take as a reference the present inflation rate (2.9 % as of April 2000). But there is no definite evidence of that being the case. The second risk would be that even with wage increases initially set in terms of the 2 % inflation target (at around 2.5 %), inflation ends up far above the expected figure at the end of 2000. That would once more activate the indexation mechanism implicit in inflation-adjustment clauses, jeopardising the process of wage moderation and endangering the virtuous circle of nominal stability.

## 5. Final considerations

The Spanish economy has been on a cyclical upturn for more than five years already, and the prospects for 2000 are for this expansion to continue. This period of growth has provided for a significant step forward in the process of real convergence (catching up) with the more advanced countries of the EMU. Notably, the process has run in combination with clear headway towards nominal stability and a decreasing path for inflation. To continue this process in the fu-

ture, it is necessary to act both to maintain macroeconomic stability and to push ahead with structural reforms.

Maintaining nominal stability requires an adequate policy mix to preserve credibility effects. The European framework combining the single monetary policy and the commitment towards fiscal consolidation included in the SGP provides an adequate setting for this. In any case, given that monetary conditions, which are set by the Eurosystem taking into account the euro area situation as a whole, are relatively loose for the case of Spain, an appropriate offsetting fiscal policy stance is especially needed.

Although this article has claimed that inflation has been drastically reduced in Spain with an important contribution by wage behaviour, there is still room for further reforms both in the labour market (to improve its efficiency) and in the more sheltered sectors (to reduce dual inflation). Such structural improvements are particularly important as continuing structural rigidities both in the labour markets and in the more sheltered sectors may ultimately result in excessive wage increases in the non-sheltered sectors, badly impairing their competitiveness and jeopardising the real convergence process of the Spanish economy.