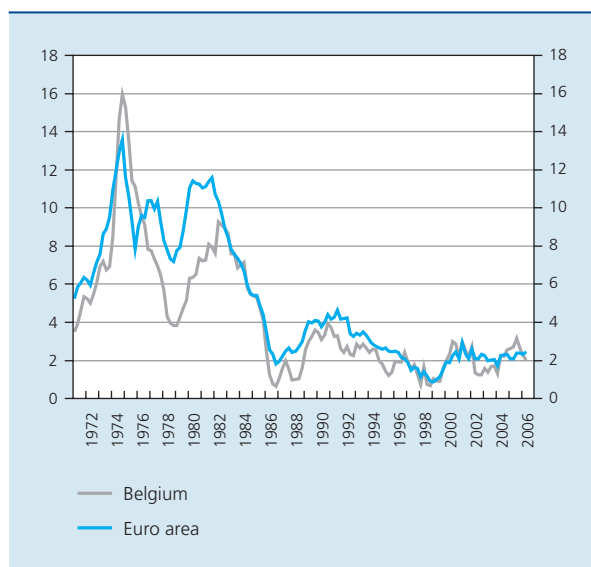# Inflation persistence in Belgium

M. Collin [1]

Introduction

This article examines inflation dynamics in Belgium and, in particular, the degree of inflation persistence. In general, inflation persistence refers to how quickly, following a shock, inflation reverts to its equilibrium value, which is determined by the inflation target set by the monetary authorities. In addition, this study aims to ascertain whether there have been any significant changes in inflation dynamics over the past thirty years. Thus, the article presents the Belgian results obtained via the *Eurosystem Inflation Persistence Network* (IPN). This temporary network, comprising researchers from the national central banks (NCBs) of the Eurosystem, the European Central Bank (ECB) and the academic world, has conducted and published numerous studies. A general summary of its work is given in a recent publication by the Bank [2].

The article is arranged as follows. The first section defines the concepts and the analytical framework. The second section explains the results of the study devoted to Belgium, and also compares the findings for Belgium with those for the euro area. The third section puts forward various factors which may lie behind the structural changes in inflation dynamics in Belgium over the past thirty years. Finally, the last section presents the conclusions.

1. Concepts, definitions and choice of methodology

The definition of inflation persistence used by the IPN refers to the *tendency of inflation to converge slowly towards its long-run value following a shock,* that value being determined by the implicit or explicit inflation target set by the monetary authorities. Traditionally, inflation persistence has been analysed using a univariate equation – known in the econometric jargon as an "autoregressive" model – which describes inflation in terms of its own past values. More specifically:

$$\pi_t = c + \alpha_1 \pi_{t-1} + \alpha_2 \pi_{t-2} + \ldots + \alpha_p \pi_{t-p} + \varepsilon_t \qquad (1)$$

CHART 1   INFLATION IN BELGIUM AND IN THE EURO AREA

(Percentage changes compared to the corresponding quarter of the previous year)

— Belgium
— Euro area

Sources: ECB; FPS Economy, SMEs, Self-employed and Energy; NBB.

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[1] The author would like to thank L. Aucremanne for his contribution to this article.
[2] Dhyne E. (2005), "Inflation persistence and price-setting in the euro area: results of the Eurosystem Inflation Persistence Network", Economic Review of the National Bank of Belgium, 4th quarter.

The inflation observed in time t, π_t[1], is thus regressed over a constant, c, and over its past values, π_{t-i}. The number of lags, p, determines the order of the autoregressive process[2]. In addition, the inflation observed in time t is affected by random shocks, ε_t, which are assumed to be zero on average, to have a constant variance and to be unconnected with past shock values.

For simplicity, equation (1) may be written:

$$\pi_t = c + \rho\pi_{t-1} + \sum_{i=1}^{p-1} \beta_i \Delta\pi_{t-i} + \varepsilon_t \qquad (2)$$

The degree of inflation persistence is estimated by ρ, which corresponds to the sum of all coefficients associated with past inflation values[3]. In general, the parameter ρ can take values ranging from 0 to 1. If the estimated coefficient ρ is close to 1, inflation is said to be persistent, which implies that – following a shock, ε_t – inflation will be very slow to revert to its equilibrium value which, on the basis of equation (2), corresponds to c/(1- ρ). In the extreme case where the coefficient ρ is equal to 1, the equilibrium value of inflation is not defined, and in this case inflation presents a unit root. For the purpose of this analysis, it is essential to test whether the unit root hypothesis can be rejected, or in other words to determine whether inflation reverts to its equilibrium value. On the other hand, if the coefficient ρ takes a value close to 0, the impact of ε_t on inflation tends to be temporary and inflation reverts relatively quickly to its long-run value.

The article also examines the changes in inflation dynamics over time. For this purpose, equation (2) is estimated over a series of moving 48-quarter (12-year) periods. Thus, the first estimate covers the period from the second quarter of 1978 to the first quarter of 1990, while the last estimate refers to the period from the first quarter of 1993 to the last quarter of 2004. That choice is dictated by theoretical considerations, as well as by the dynamic aspect of this analysis. Various studies[4] have in fact shown that failure to allow for a possible break in the level of inflation may lead to a significant overestimate of inflation persistence. In view of the inflation pattern in Belgium over the past three decades, and more particularly in the mid-1980s, it is highly likely that an estimation conducted over the period as a whole, from the second quarter of 1978 to the last quarter of 2004 – without taking account of any breaks in the long-run inflation level – will also cause persistence to be overestimated. Furthermore, the definition of persistence, as already mentioned, refers to inflation converging towards its long-run value, which is defined by the implicit or explicit inflation target set by the monetary authorities. In practice, however, this can cause problems since that target was not known in the past, and it has most likely changed over time.

The national consumer price index (CPI) is used as the reference index for this study. However, from the point of view of monetary policy, it would have been more appropriate to use the HICP, but that index is not available over a long period. Nonetheless, if a recent period is considered for which both index figures are available, the analysis produces broadly similar results regardless of the consumer price index used (see section 2). The time series used for this study are defined on a quarterly basis and were adjusted to take account of seasonal variations. These data cover the estimation period extending from the second quarter of 1978 to the last quarter of 2004. More detailed information on the data and statistical instruments used may be found in the working paper on which this article is based (Aucremanne and Collin, 2006).

This empirical exercise is carried out both for overall inflation and for six major categories traditionally used in inflation analysis: unprocessed food, energy, the underlying inflation trend[5], processed food, non-energy industrial goods, and services. The analysis is also based on 60 subindices of the national CPI. As suggested by Bilke (2005) and by Cecchetti and Debelle (2006), the use of sectoral data makes it easier to determine the factors which can lead to structural changes in inflation dynamics.

Thus, if macroeconomic factors of domestic origin, such as wage-setting or economic policy – more particularly, monetary policy – are responsible for any structural changes in the mean level of inflation or inflation persistence, a relatively uniform and synchronised change in the statistical characteristics of inflation would be found in all components of the CPI. Conversely, if external or exogenous factors are the cause of those changes, the prices of internationally traded goods, particularly energy and non-energy industrial goods, would be affected first.

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(1) $\pi_t = \ln(p_t) - \ln(p_{t-1})$

(2) In the econometric estimation, the number of lags p was determined by the Akaike information criterion (Akaike, 1973).

(3) Since the estimates of equation (2) obtained by the ordinary least squares (OLS) method are biased, equation (2) is estimated using a procedure developed by Hansen (1999).

(4) Cf inter alia Perron (1990) or Altissimo *et al.* (2006)

(5) The underlying inflation trend is measured by the national CPI excluding unprocessed food and energy.

CHART 2   INFLATION : COMPONENTS OF THE CPI

(Percentage changes compared to the corresponding month of the previous year)
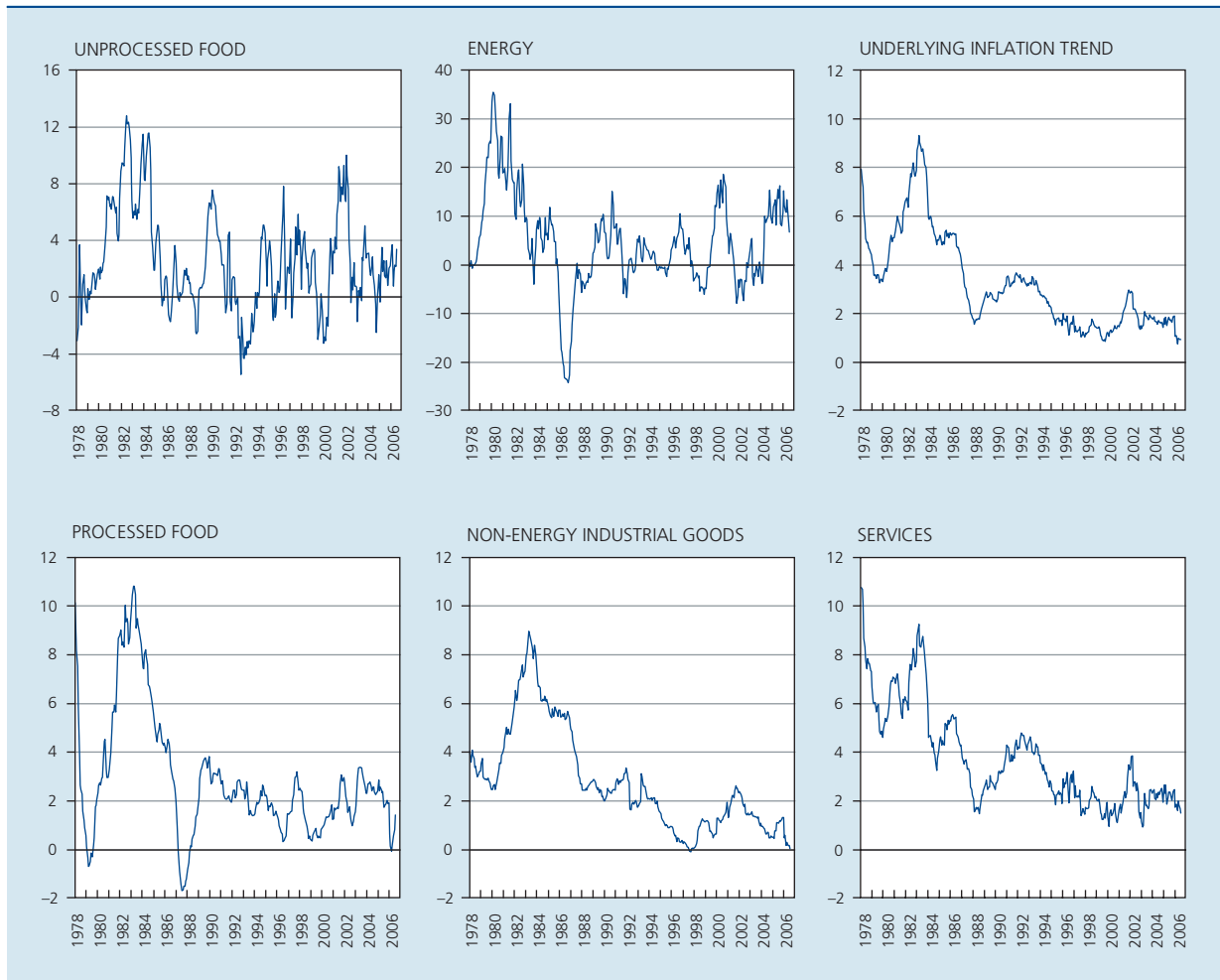
Sources : SPF Economy, SMEs, Self-employed and Energy ; NBB.

2. Analysis results

2.1 The mean level of inflation

The results obtained from the dynamic analysis indicate that the inflation level has changed considerably in the past thirty years. Overall inflation declined sharply between the estimation period running from the second quarter of 1979 to the first quarter of 1991 and the period running from the first quarter of 1983 to the fourth quarter of 1994. Between these two moving windows, the absolute mean level of aggregate inflation fell from 4.5 to 2.2 p.c., after which it stabilised at just under 2 p.c. A virtually identical picture emerges for the main components of the national CPI, with the notable exception of services and the underlying inflation trend, where services account for an average of 45 p.c. The decline

in the mean level of inflation in services begins slightly later and is also more gradual than for the other CPI components. In the IPN studies which also comprise such an analysis, similar results were recorded for the service sector in France (Bilke, 2005).

At sectoral level, the results obtained are largely comparable. The information is summed up in a chart, called a box plot, which provides information on the central tendency, the symmetry and the dispersion of the data. That chart thus summarises the overall distribution of the mean level of inflation observed in the 60 sub-sectors. More specifically, for each estimation window, the chart shows the median, the 1st and 3rd quartile, and the minimum and maximum of the mean inflation rate for the 60 product categories considered. The central part of the distribution, namely the mean inflation for the product categories between the 1st and 3rd quartiles,

shows a sharp downward trend in the various sectors, starting approximately with the window extending over the period from the second quarter of 1979 to the first quarter of 1991. This decline continues until about the period from the first quarter of 1983 to the fourth quarter of 1994. This downward shift in the central part of the distribution thus reflects a relatively uniform and synchronised change in the mean level of inflation for the majority of the product categories examined. For both services and the underlying inflation trend, the deceleration once again is clearly much more gradual.

Overall, these findings reveal that mean inflation in Belgium declined sharply in the mid-1980s. Except for services, that trend is also largely similar and synchronised in the various sectors, which therefore implies that this downward movement is due primarily to a common factor. In view of the date when that break becomes apparent – in that regard it seems crucial to consider post-1983 data – monetary policy would appear to be a key factor in this development (see section 3).

CHART 3 MOVING AVERAGE OF INFLATION : SECTORAL DATA[1]

(Annual percentage changes compared to the preceding quarter)
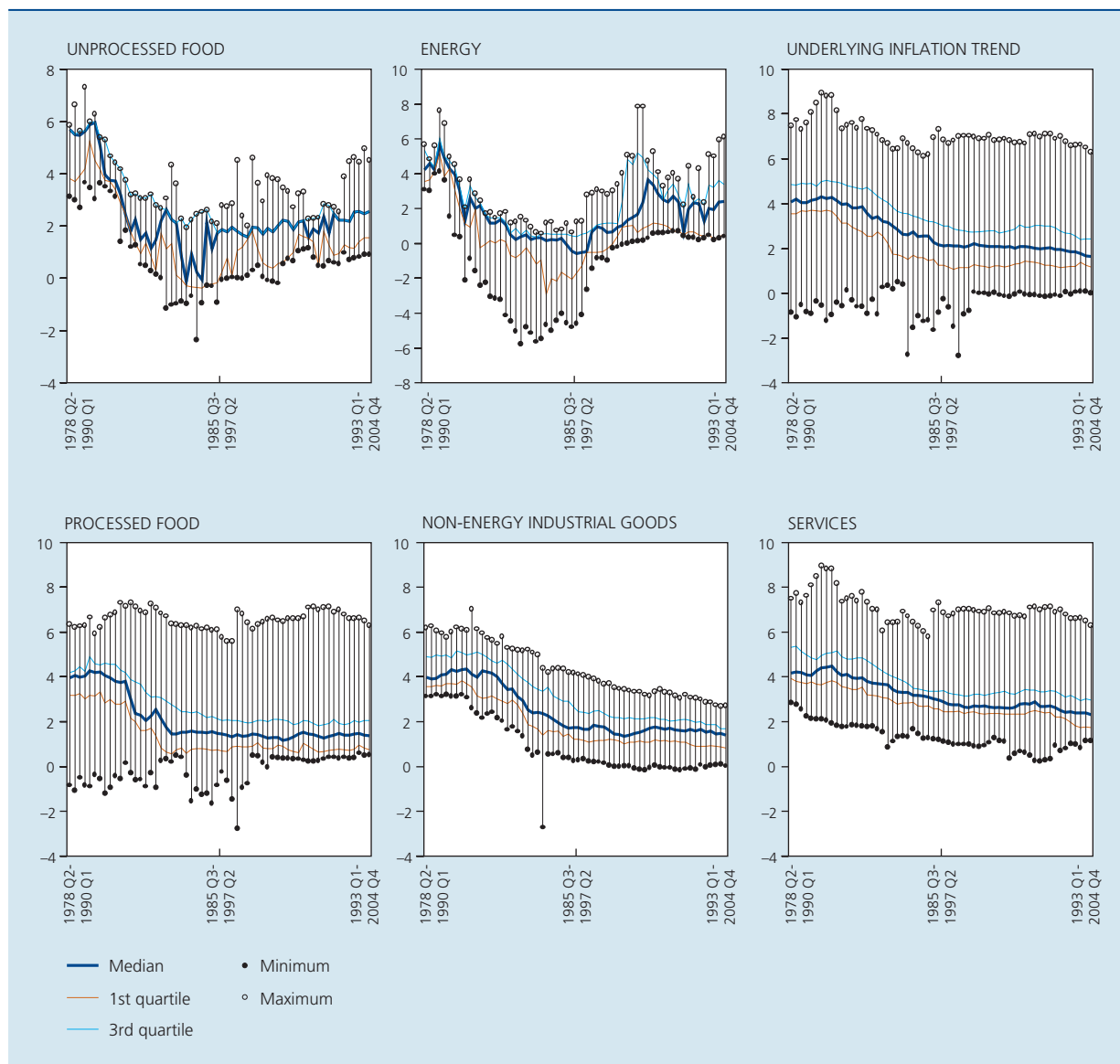
Source : Aucremanne and Collin (2006).
(1) Moving averages corresponding to the estimated autoregressive models.

2.2 Inflation persistence

The analysis reveals that, under the current monetary policy system, inflation persistence is relatively moderate in Belgium. The degree of persistence of overall inflation, estimated over the last window from the first quarter of 1993 to the last quarter of 2004, amounts to 0.51, though the confidence interval is relatively large, ranging from 0.11 to 0.92. Nonetheless, the unit root hypothesis is rejected at a significance level of 5 p.c. It should also be noted that the degree of inflation persistence measured by the HICP over the most recent period is equal to 0.42, and thus largely corresponds to the inflation persistence measured by the national CPI. Conversely, the degree of aggregate inflation persistence was much higher in the past. Estimates show that the persistence of overall inflation averaged 0.97 over the first five moving windows, and that the unit root hypothesis could not be rejected.

These findings therefore support the analyses published by the Bank in its annual reports. Thus, the 1976 report states that "One of the weaknesses of the Belgian economy is its vulnerability to inflationary chain reactions".... "inflation is sustained by deeply-rooted lines of behaviour" [1]. This finding therefore points to high inflation persistence, in sharp contrast to the Bank's recent analyses which state that, in the past few years, the pattern of inflation has been generally influenced by unfavourable supply factors, and more particularly by the large increases in the prices of petroleum products and unprocessed food, which are assumed to have a temporary impact only [2].

A broadly similar profile is apparent in the case of non-energy industrial goods and processed food, where the degree of persistence declined from 1 to 0.78 and from 0.87 to 0.24 respectively between the first and last moving windows. For their part, unprocessed food and energy [3] already displayed a relatively moderate degree of persistence at the start of the period considered, so that the decline here is more modest than for overall inflation. The main exception is once again the service sector, where persistence remained high (hovering around 0.80) up to the estimation period extending from the second quarter of 1989 to the first quarter of 2001. The degree of inflation persistence in services subsequently diminished somewhat to 0.69 during the period from the first quarter of 1993 to the last quarter of 2004. At the end of the period, the unit root hypothesis can be rejected. The degree of persistence in the underlying inflation trend is

broadly comparable to that observed in services. Thus, having remained at a very high level for a long time, it declined slightly during the last moving window to 0.79 for the latest estimation period; moreover, the unit root hypothesis can be rejected.

However, one should note that it is difficult to state with certainty whether the degree of inflation persistence in Belgium has actually declined over the past three decades. The method of studying this issue via a succession of moving windows is imperfect in that it does not permit total neutralisation of the influence of a break in the mean inflation level. If the break occurs within a window, the degree of persistence will be subject to an upward bias during that particular period. In view of the instability in the mean inflation level recorded at the beginning of the estimation period, it is therefore likely that persistence over those periods is overestimated. There is therefore a possibility that the decline in persistence simply reflects the fact that this overestimate has gradually diminished in parallel with the transition towards a more stable mean inflation level.

The analysis based on sectoral data confirms the results obtained for the higher aggregation level. While the unit root hypothesis can only be rejected for one-third of the 60 subindices during the first moving window, covering the period from the second quarter of 1978 to the first quarter of 1990, that percentage rises systematically as the estimation takes account of more recent periods. Thus, the percentage of products for which the unit root hypothesis can be rejected practically doubled during the estimation period extending from the first quarter of 1988 to the fourth quarter of 1999, and almost tripled for the latest moving window (first quarter of 1993 to the fourth quarter of 2004). A similar development is apparent for the various components of the national CPI. In that connection, it must be said that the percentage of products for which the unit root hypothesis can be rejected continues to rise systematically between the moving window which covers the period from the first quarter of 1988 to the fourth quarter of 1999 and the latest moving window, though the mean level of inflation remained relatively stable during those periods. These results therefore seem to suggest that inflation persistence has indeed declined in Belgium, and that this observed decline is due not only to a certain shortcoming in the method of estimation during earlier periods, when the mean level of inflation was far less stable.

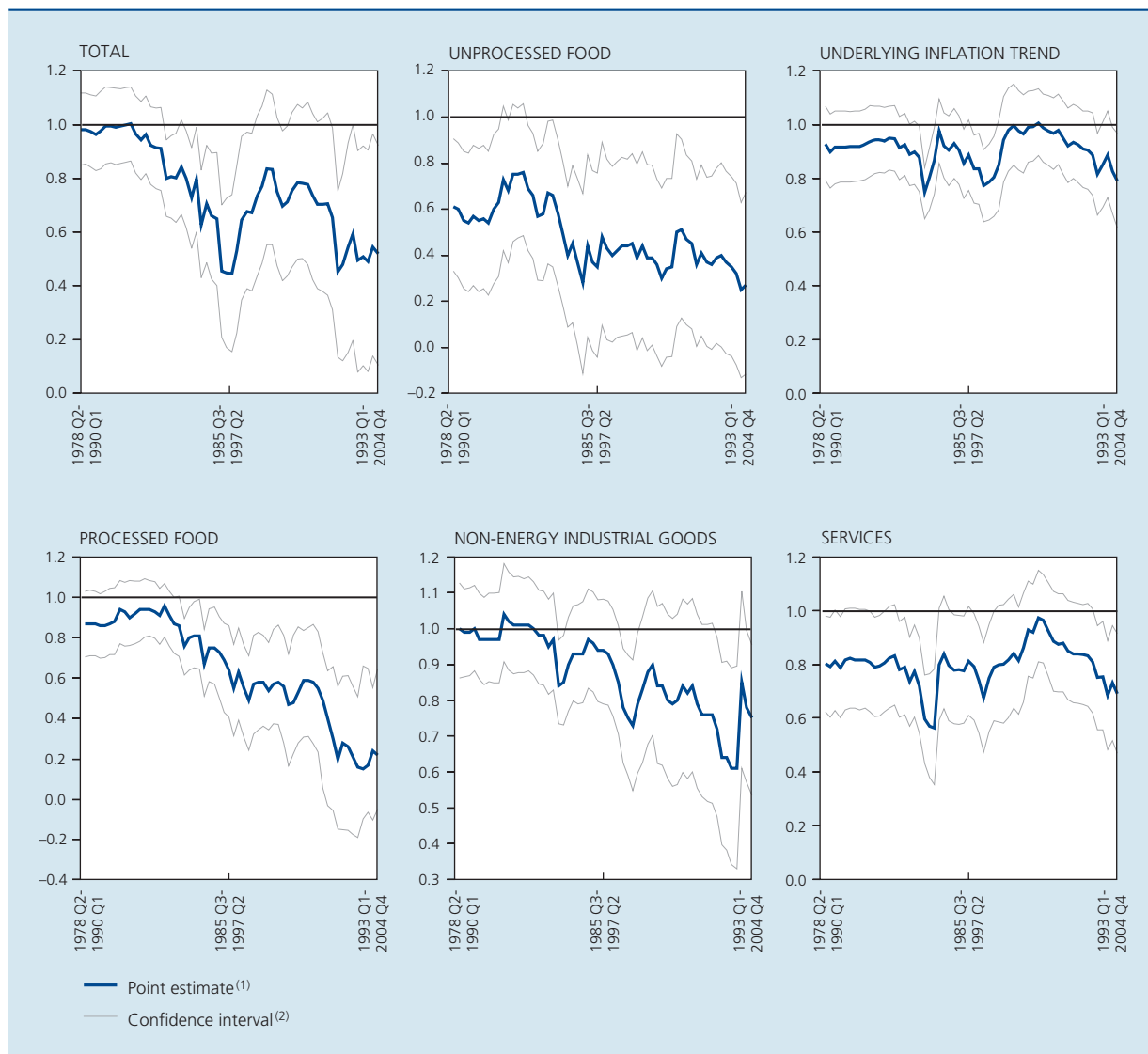Although the analysis reveals that the degree of persistence in Belgium is currently relatively moderate, those results mask some disparity between the various components of the CPI. In the service sector and non-energy

(1) National Bank of Belgium (1976), Annual Report, p. XXIV.
(2) National Bank of Belgium, (2004), Annual Report, p. 88.
(3) The chart does not show the results for these products.

CHART 4   INFLATION PERSISTENCE

(Sum of the autoregressive coefficients)

TOTAL

UNPROCESSED FOOD

UNDERLYING INFLATION TREND

PROCESSED FOOD

NON-ENERGY INDUSTRIAL GOODS

SERVICES

Point estimate[1]

Confidence interval[2]

Source : Aucremanne and Collin (2006).

(1) Persistence is measured as the sum of the coefficients of an autoregressive model; it is obtained using the methodology developed by Hansen (1999).

(2) The confidence intervals are calculated for a significance level of 5 p.c., which means that they cover 95 p.c. of the observations. They are obtained using the methodology developed by Hansen (1999).

industrial goods, inflation persistence is generally much higher than for the other CPI components, namely food and energy. Furthermore, in accordance with the literature (cf Granger, 1980), the results indicate an aggregation effect, which means that the persistence for the aggregates is higher than the average for the component series. Furthermore, it is apparent that the CPI components with a higher weighting also show a higher degree of persistence.

The IPN has obtained similar results for the euro area as a whole. If the changes in the mean inflation level are taken into account, all the studies for the euro area indicate that inflation persistence is relatively modest. Depending on the study, the degree of persistence in overall inflation in the euro area ranges between 0.3 and 0.6, and in all cases the unit root hypothesis can be rejected. These results are therefore similar to those obtained for Belgium (0.5). It is also interesting to note that the results based on the consumer price index correspond very closely to those based on the GDP deflator. Just as in Belgium, the degree

TABLE 1 REJECTION OF THE UNIT ROOT HYPOTHESIS

(Percentage of products for which the unit root hypothesis can be rejected)

	1978 Q2 – 1990 Q1	1983 Q1 – 1994 Q4	1988 Q1 – 1999 Q4	1993 Q1 – 2004 Q4
Overall inflation	**33.9**	**46.4**	**64.3**	**89.3**
Energy	40.0	40.0	60.0	100.0
Unprocessed food	50.0	50.0	83.3	100.0
Underlying inflation trend	**31.1**	**46.7**	**62.2**	**86.7**
Processed food	22.2	33.3	55.6	88.9
Non-energy industrial goods	0.0	41.8	55.6	77.8
Services	57.6	57.6	72.2	94.4

Source : Aucremanne and Collin (2006).

of persistence in the underlying inflation trend in the euro area is higher than that for overall inflation.

The various analytical studies conducted by the IPN also point to considerable heterogeneity between the various components of the CPI for the euro area. Thus, in the case of non-energy industrial goods, the degree of persistence is considerably higher than that for energy and processed or unprocessed food.

3. Factors which could account for the structural changes in inflation dynamics

The results presented in section 2 show that there have been significant changes in inflation dynamics in Belgium over the past thirty years. The analysis began by revealing a substantial decline in the mean level of inflation during the mid-1980s. Various factors indicate that this was due to a fundamental change in the monetary policy system. First, the study found that the decline in the mean level of inflation was fairly uniform and synchronised for the main CPI components, and as regards the 60 product categories analysed. Second, the time when the break becomes apparent – namely the mid-1980s – largely

TABLE 2 DEGREE OF INFLATION PERSISTENCE [(1)]

	Euro area			Belgium		
	Consumer price index	Underlying inflation trend	GDP deflator	Consumer price index	Underlying inflation trend	GDP deflator
Dossche and Everaert (2005) [(2)]			0.4			
Lünnemann and Mathä (2004) [(3)] . . .	0.4			−0.3		
Gadzinski and Orlandi (2004) [(4)]	0.6	0.8	0.6	0.3	0.9	0.3
Robalo Marques (2004) [(5)]	0.3					
Aucremanne and Collin (2006) [(6)] . . .				0.5	0.8	0.6

(1) Persistence is measured as the sum of the coefficients of an autoregressive model of order p. The estimates in bold indicate that one can reject the assumption that the sum of the coefficients is equal to 1 (unit root hypothesis). The estimates take account of any break in mean inflation.
(2) Estimates during the period from the 2nd quarter of 1971 to the 4th quarter of 2003, assuming that the inflation target varies over time.
(3) Estimates based on the movement in the HICP during the period from the 2nd quarter of 1995 to the 4th quarter of 2000.
(4) Estimates during the period from the 2nd quarter of 1970 to the 3rd quarter of 2003, assuming a break in the mean level of inflation in 1993 for the euro area in the case of the three price indicators, and – for Belgium – a break in 1994 for the GDP deflator.
(5) Estimates during the period from the 1st quarter of 1986 to the 4th quarter of 2002.
(6) Estimates during the period from the 1st quarter of 1993 to the 4th quarter of 2004.

TABLE 3 INFLATION PERSISTENCE PER CPI COMPONENT[1]

	Euro area	Belgium
Unprocessed food	0.55	0.27
Energy	0.44	0.43
Processed food	0.61	0.22
Non-energy industrial goods	0.68	0.75
Services	0.53	0.69

Sources : Aucremanne and Collin (2006), Altissimo *et al.* (2006).
(1) Persistence is measured as the sum of the coefficients of an autoregressive model of order p.

corresponds to the changes in the monetary policy regime. As a result of the sharp deterioration in Belgium's economic situation, and more specifically in Belgian competitiveness, during the 1970s and early 1980s, the government decided to devalue the Belgian franc by 8.5 p.c. in 1982. That date marks the start of a monetary policy regime aimed more at price stability via maintenance of the parity between the Belgian franc and the German mark, and thus heralded the end of a period when monetary policy was fairly accommodating – witness the protracted period of negative real interest rates in the mid-1970s. Subsequently, the credibility of monetary policy gradually improved in the second half of the 1980s; that was reflected, in particular, in the substantial reduction in the positive interest rate differential between Belgium and Germany, and in June 1990 the monetary authorities officially announced the anchoring of the Belgian franc to the German mark. That change in the conduct of monetary policy, and especially the explicit aim of maintaining the exchange rate, made it possible to achieve a sustained reduction of inflation.

Numerous IPN studies have also shown that the pronounced changes in inflation dynamics, more precisely the movements in the mean level of inflation, in the industrialised countries were made possible by a drastic change in the conduct of monetary policy. Thus, in their analysis Corvoisier and Mojon (2005) show that the three waves of breaks in the mean level of inflation in the industrialised countries, occurring respectively in the early 1970s, mid-1980s and early 1990s, are also connected with breaks in the mean of the nominal variables, in contrast to the real variables for which no such changes were observed.

Thus, monetary policy helped to bring down the mean level of inflation and keep it stable, thereby limiting the estimated persistence by elimination of the bias which

may have affected the first estimation periods. However, some results have shown that there may have been a more fundamental reduction in persistence. In Belgium, that could be due to changes in the system of wage-setting. In that respect, two specific measures most likely played a role.

First, the introduction, in 1994, of the health index as the reference index for linking incomes to inflation greatly reduced the automatic occurrence of second-round effects resulting from a change in the price of petroleum products or indirect taxes, as the health index excludes from the national CPI certain energy products such as motor fuel (petrol and diesel), and tobacco and alcoholic beverages on which excise duties are levied.

Next, the changes made to the wage-setting system in 1996 by the law on the promotion of employment and the preventive safeguarding of competitiveness also helped to diminish somewhat the risk of second-round effects, and to make wage-setting more prospective. In the negotiations on the scope available for real wage increases, the social partners must in fact take account of the expected inflation picture over the ensuing two years. In view of the automatic wage indexation, however, the ex post nominal wage increase may deviate from the increase originally planned if actual inflation differs from the expected level. In recent years, however, an increasing number of sectors have in practice opted for all-in agreements, which are intended to determine a negotiated real growth figure which may be reduced if the originally expected index increase is exceeded. With such a system, it is possible to cushion the surprise effect resulting from inflation in excess of the level expected at the time of the negotiations, albeit only partly if the forecasting error is large. Conversely, if actual inflation is below the expected level, the all-in agreements imply that the originally expected increase in nominal wages is indeed granted; the ex post increase in real wages then exceeds the rise agreed during the negotiations. This means that, in practice, wage negotiations increasingly concern nominal wages.

It is important to note that these changes were most likely an endogenous response to the changes in the monetary policy system[1]. After all, the 1996 law expressly refers to EMU. The social partners and economic agents have gradually adopted the position that, in a fixed exchange rate system, it is essential to control domestic costs in order to avoid any loss of competitiveness. That set of measures proved necessary to maintain the parity of the

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(1) Bernanke (2004) recently drew attention to this aspect, pointing out that changes in the economic structure may in turn be caused by changes in the conduct of monetary policy.

Belgian franc against the German mark, and subsequently for the Belgian economy's entry into EMU.
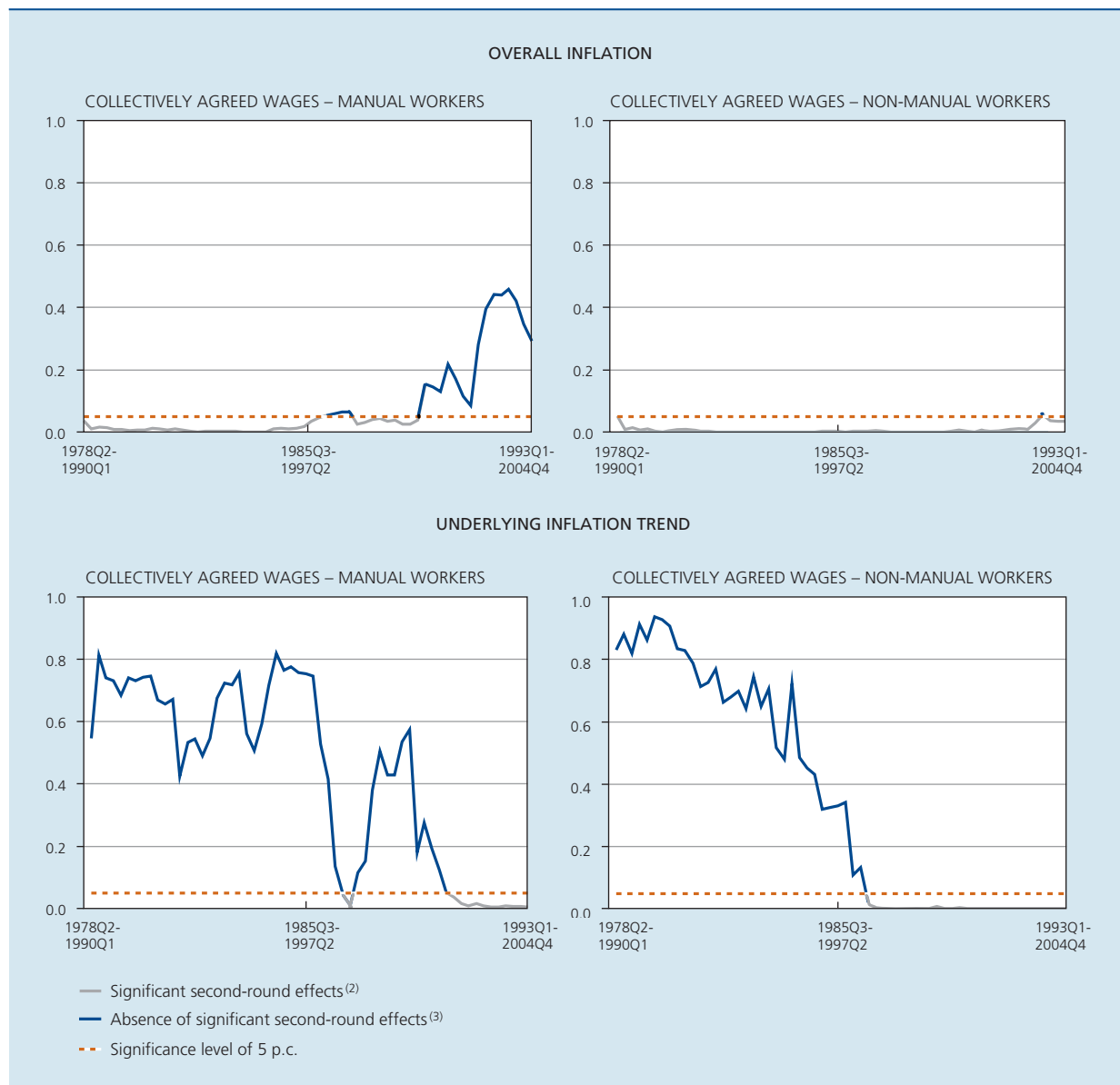
The significant changes in wage dynamics over the past thirty years can be illustrated using the results of Granger causality tests, which examine the extent to which past inflation values (or past values of the underlying inflation trend) help to determine the current growth of nominal wages. In order to investigate whether the causal relations have changed over the years, this empirical method was also applied to a series of 12-year moving windows.

Past inflation values used to play a substantial role in determining the growth of nominal wages, but if the 1970s and 1980s are eliminated from the estimation period, the causal relation is greatly diminished. Although

CHART 5   CAUSAL RELATION BETWEEN OVERALL INFLATION (OR THE UNDERLYING INFLATION TREND) AND COLLECTIVELY AGREED WAGES

(Probability of the absence of second-round effects [1])

OVERALL INFLATION

COLLECTIVELY AGREED WAGES – MANUAL WORKERS

COLLECTIVELY AGREED WAGES – NON-MANUAL WORKERS

UNDERLYING INFLATION TREND

COLLECTIVELY AGREED WAGES – MANUAL WORKERS

COLLECTIVELY AGREED WAGES – NON-MANUAL WORKERS

— Significant second-round effects [2]

— Absence of significant second-round effects [3]

- - - Significance level of 5 p.c.

Sources : FPS Employment, Labour and Social Dialogue ; FPS Economy, SMEs, Self-employed and Energy ; NBB.
(1) Calculated on the basis of the Granger causality test which determines the causal relation between two variables in a bivariate system. In the case considered here, only the probability of the causal relation between inflation (or the underlying inflation trend) and the movement in wages is represented.
(2) The existence of significant second-round effects results from the rejection of the null hypothesis on the basis of which inflation (or the underlying inflation trend) does not cause the movement in wages. The null hypothesis is rejected if the probability is less than 5 p.c.
(3) The absence of significant second-round effects results from the non-rejection of the null hypothesis on the basis of which inflation (or the underlying inflation trend) does not cause the movement in wages. The null hypothesis is not rejected if the probability is greater than 5 p.c..

the conclusions are very clear in the case of manual workers, that is less true for non-manual workers. The second-round effects are always significant, although at the end of the period they appear to be smaller than in the past.

Examination of the causal relation between the growth of nominal wages and the underlying inflation trend yields different results. Thus, that link becomes significant as soon as the period from the mid-1990s is taken into account, whereas the earlier values for underlying inflation did not previously exert any significant effect on wage growth. Such results appear to be mainly consistent with the introduction of the health index as the reference index for linking wages to inflation. They also suggest that the practice of all-in agreements, which resulted from the application of the 1996 law, is partial or too recent to be shown by the estimation method used. Furthermore, those results also appear to offer a partial explanation for the relatively higher degree of persistence still exhibited by the underlying inflation trend.

In all, the changes made to wage-setting, originating to a large extent from the change towards a monetary policy regime aimed at price stability, have had a major impact on the dynamics of both wages and inflation, and on their mutual interaction. These changes in wage-setting lie behind the decline in the persistence of overall inflation during the most recent estimation periods, as a result of the elimination of second-round effects. The nature of those changes also explains why the decline in persistence is less marked in the case of the underlying inflation trend. In line with the current indexation procedures, it was found that developments in the underlying inflation trend still have an impact on the movement in labour costs at the end of the period, which is of course a source of persistence.

Conclusion

The past three decades have brought considerable changes in inflation dynamics in Belgium. This article shows, in particular, that the mean level of inflation fell sharply in the mid-1980s. A relatively uniform and synchronised pattern is apparent in the national CPI components as a whole, except for services, where the decline in inflation was much more gradual. These results indicate that the change in the monetary policy regime, which took place in 1982, directing the focus onto exchange rate stability, was a major factor in that structural break in the mean level of inflation.

Furthermore, the results showed that the degree of inflation persistence is relatively modest under the current monetary policy system, implying that, after a shock, inflation tends to revert fairly quickly to its equilibrium value. The persistence of aggregate inflation in Belgium also appears to have declined somewhat in comparison with the situation in the 1970s and 1980s, perhaps as a result of the changes made to the wage-setting system.

The results presented in this study tally closely with those obtained by the various IPN studies for the euro area. The degree of persistence in overall inflation and in the underlying inflation trend in Belgium are comparable to the findings for the euro area. As regards the main CPI categories, the sectoral variations are also very similar. These results corroborate the Bank's earlier analyses, which indicated that there is no persistent inflation differential between Belgium and the euro area. In general, that therefore indicates that the Eurosystem monetary policy is appropriate to the economic situation in Belgium, and that the risk of asymmetry in the transmission of monetary policy stimuli is relatively small.

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