

BOLETÍN INFLACIÓN Y ANÁLISIS MACROECONÓMICO

INSTITUTO
FLORES
DE LEMUS

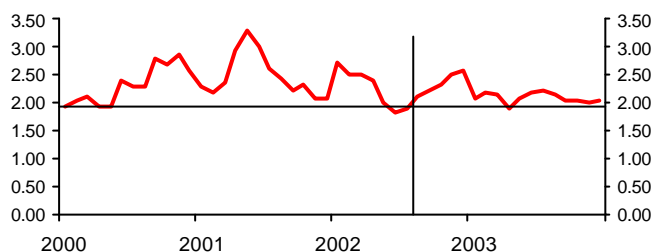


Instituto Flores de Lemus de Estudios Avanzados en Economía N° 96 septiembre 2002

TITULAR

"La inflación en la economía Europea se situará sobre el 2.6% en diciembre de 2002."

TASAS ANUALES DE INFLACIÓN TOTAL EN LA UME



Fuente: Eurostat & IFL / Fecha: 20 septiembre 2002

Contenidos

I. PRINCIPALES CONCLUSIONES Y RESULTADOS

- I.1 Unión Monetaria y Europea..... p.1
- I.2 Cuadro Macroeconómico de la Economía Europea..... p.3
- I.3 Estados Unidos p.5
- I.4 España p.7
- I.5 Cuadro Macroeconómico de la Economía Española..... p.9
- I.6 Comunidad de Madrid..... p.11
- I.7 Resumen comparativo de predicciones ... p.13
- I.8 Previsiones de Inflación de otras instituciones p.16

II. ANÁLISIS DE INFLACIÓN, POLÍTICA MONETARIA Y COYUNTURA ECONÓMICA

- II.1 Unión Monetaria y Europea..... p.16
- II.2 Estados Unidos p.22
- II.3 España p.26
- II.4 Comunidad de Madrid..... p.31

III. TEMA A DEBATE

- Core Inflation: Alternatives Measures And Their Utility* Different alternatives for core inflation p.35

CUADROS Y GRÁFICOS..... p.36

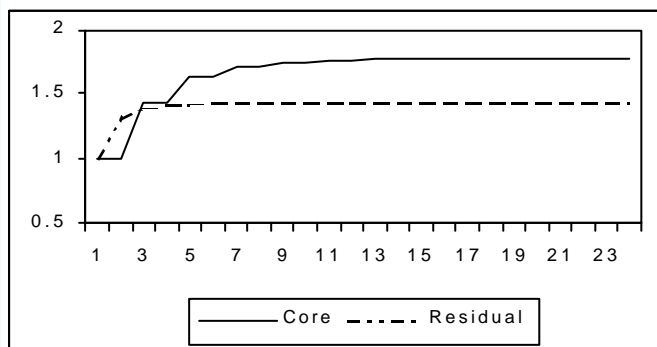
N° 96

Depósito Legal: M22 938 - 1995

TEMA A DEBATE

"Las innovaciones en la inflación subyacente son más persistentes que las innovaciones en otros precios".

Funcion de respuesta a una innovacion en los indices de precios correspondientes a la inflacion subyacente y residual.



Fuente: I. Flores de Lemus / Fecha: 27 de septiembre de 2002.

Core Inflation: Alternatives Measures And Their Utility.* **Different alternatives for core inflation**

By Antoni Espasa & Rebeca Albacete.

The starting problem with core inflation is that there is not a clear idea about its definition. In a vague way it has been argued that core inflation is related to a definition of underlying monetary inflation which would be more interesting for central banks. The changes in individual prices could be seen as having two components, a common one given by core inflation and an idiosyncratic one. Then averaging these individual price changes a core inflation measure can be obtained. The problem is how to define the weights. The theory of the cost of living index provide a solution consisting in using the relative importance of each item, that is the budget share weight multiplied by the ratio in (t-1) of the level of corresponding individual price and the level of the price index.

The results from this weighted average is the standard inflation measure which following Vega and Wynne (2001) it can be called headline inflation. But in order to obtain a core inflation value the weights should be derived by considering that all individual prices do not contain the same signal for monetary inflation. Several reasons can be put forward in this respect. One is that prices like energy and food prices can suffer more frequent supply shocks and it can be argued, but without unanimous consensus, that such effects on prices do not contribute to monetary inflation. Another reason is that not all prices are equally well sampled by the national statistical offices, because specific sampling difficulties. This provides the rationale for core measures based on excluding certain categories of prices from the total inflation rate. In this approach the weights are well the relative importance or zero. Considering that the exclusion is at least in part related with the quality of the signal in each individual price, there have been other proposals consisting in calculating a core measure weighting individual prices inversely proportional to their volatility. This has the problem that volatility could change too much over time and consequently the weights.

Another alternatives appeared in the literature are the median of the individual price changes or trimmed-means. But they seem less related to the quality of signal in each price.

Finally there are measures derived from econometric models, usually structural VAR ones. The problem here is that it is by no means clear the vector of variables which should be used in the analysis and there is not universal consensus in how to structuralize the VAR. But the biggest shortcome of these proposals is that the results are updated each time that a new observation is published.

Another question is if we have quantitative criteria to evaluate the different core measures which enable us to choose one. So far the proposed criteria are not convincing because if we decompose the headline inflation in core inflation and the rest and call residual inflation to the latter, we do not know if the index of prices corresponding to the core and the index corresponding to the residual component should be cointegrated. If they are not, we do not expect that core inflation forecast well headline inflation. In the euro-zone "ex. food and energy" consumer price index is not cointegrated with the residual index.

A proposed core inflation measure and its limited utility.

From all the above arguments it can be said that the "ex. food and energy" core measure has different advantages: is related to the idea that the signal about underlying monetary inflation is not the same in each price, is very simple to obtain, is only subjected to the same updates

* In writing the first part of this box the works by Wynne(1999)and Vega and Wynne (2001) have been very useful.

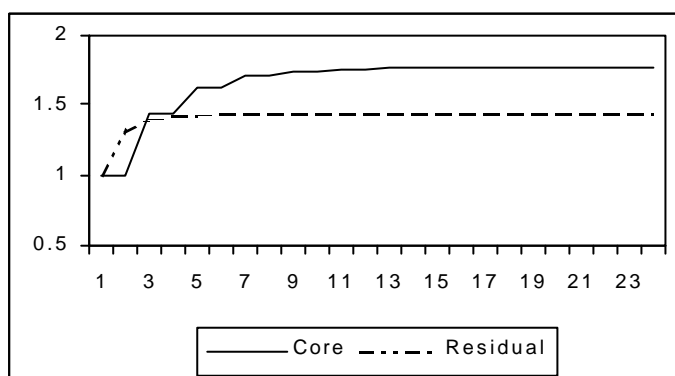


of headline inflation and can easily be understood and used by many economic agents.

The prices which should be removed are the ones with poor monetary inflation signal in them. Since monetary policy is relatively stable, prices with relatively high fluctuations can be seen as having poor signal. At the same time the innovation persistence of these prices should be lower than the persistence of other prices. Espasa et al (1987) propose to remove non-processed food and energy prices for Spain and later, Bulletin, EU and US Inflation and Macroeconomic Analysis, propose the same measures for the euro-zone, see also Espasa et al (2002). In fact “ex components” core measures can be obtained removing not only the mentioned components but some other erratic ones as prices of tobacco and tour packages. This is done for Spain in the above mentioned publication. The problem of removing more components than the more usual ones is that the resulting core measure is not published by the Eurostat or national statistical offices and users must construct it from disaggregated data.

Core inflation can be seen as related with underlying monetary inflation but is not necessary a proper measure for it nor it is either a very good indicator to forecast headline inflation. The usefulness of this proposed core measure is that the prices indexes included in it have a higher persistence than prices included in the residual inflation. This can be seen in the attached figure, obtained using the models from the work by Espasa et al (2002). Then central banks are less worried by the fact that a high headline inflation was due to residual inflation than to core inflation. And viceversa, favourable headline inflation is less reliable for central banks when is based, as is the case now the euro-zone, on residual inflation than on core inflation.

Figure I.3 Response function to an innovation in the price indexes corresponding to core and residual inflation



In sum, core inflation measures can not replace accurate trace forecasts for headline inflation, but helps to present the results and to explain that innovations from more fluctuating prices are less persistent.

References:

Espasa, A, M. Manzano, M.U. Matea and V. Catesus , (1987), “La inflación subyacente en la economía española: estimación y metodología”, Boletín Económico del Banco de España, March.

Espasa, A., Senra, E. and Albacete, R. (2001), “Forecasting Inflation in the European Monetary Union: A Disaggregated Approach By Countries and By Sectors”, *European Journal of Finance*, volume 8, issue 4.

Wynne, M.A., (1999), “ Core inflation a review of some conceptual issues”, working paper nº5, European Central Bank

Vega, J.L and M.A. Wynne, (2001) “ An evaluation of some measure of core inflation for the euro-area”, working paper nº 53, European Central Bank.

