

Comments on Price Setting and Inflation persistence: did EMU matter ?

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Aim of the paper

- Impact of European monetary integration on inflation persistence.
- Based on micro data on sectoral inflation rates from 6 Euro area countries between 1994 and 2003
- Estimate univariate autoregressive representations with dummy variables that are introduced to capture structural changes.

$$\pi_t = (\alpha_0 + \gamma_0^1 D_{1,t} + \gamma_0^2 D_{2,t}) + (\alpha_1 + \gamma_1^1 D_{1,t} + \gamma_1^2 D_{2,t})\pi_{t-1} + \dots + (\alpha_p + \gamma_p^1 D_{1,t} + \gamma_p^2 D_{2,t})\pi_{t-p} + \varepsilon_t$$

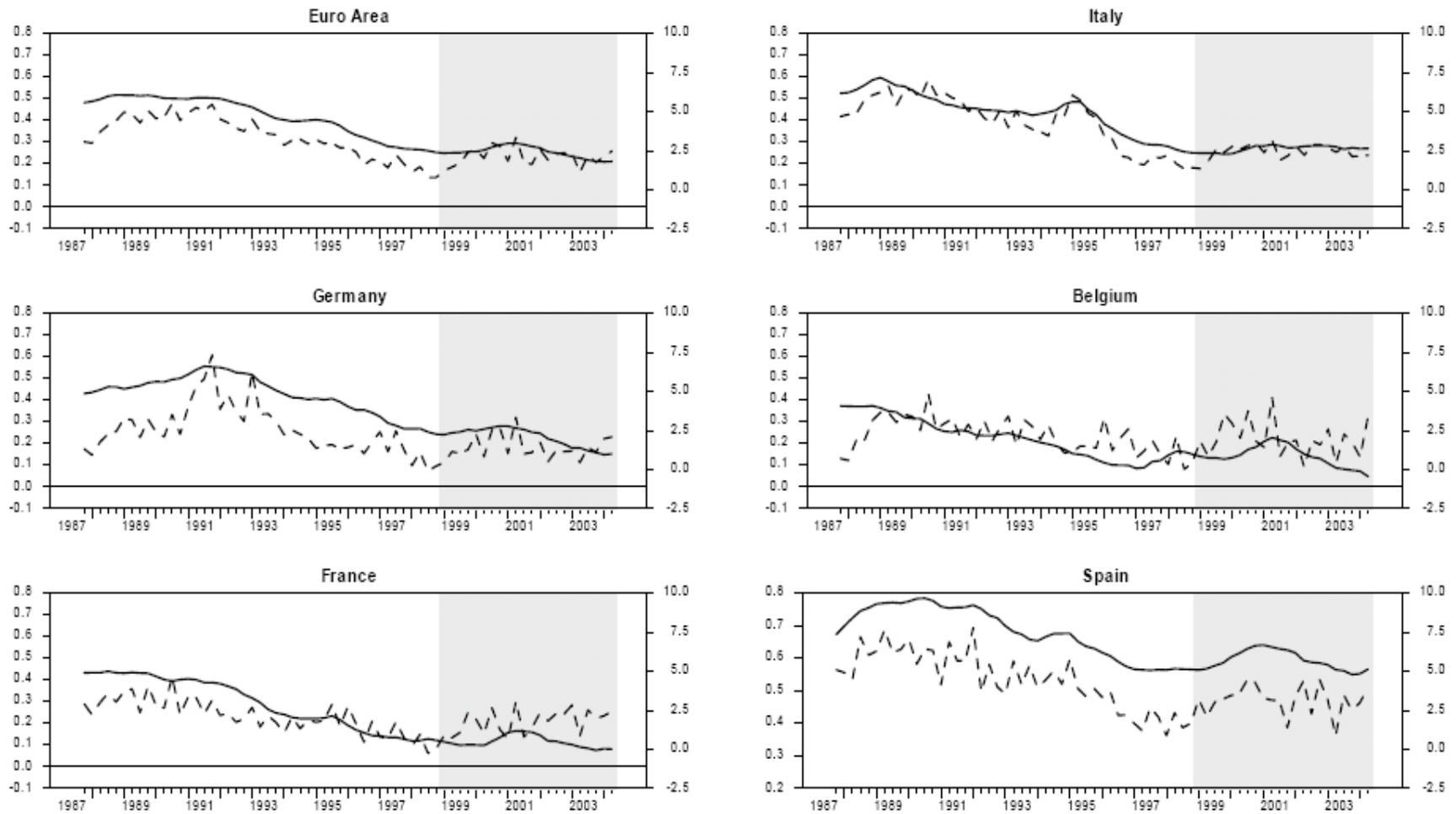
π_t difference in (log) prices at date t

$D_{it}, i = 1, 2$: dummy variable for period 1996Q1 to 1998Q2,
and 1998Q3 to 2003.

Conclusion

- no significant change in inflation persistence in 1996 and 1998
- therefore EMU did not matter directly on price setting and inflation persistence.

Figure 11 - Current inflation and inflation persistence in EMU countries



Why inflation persistence?

Low inflation rates, to what extent inflation persistence *per se* of disaggregated price indexes is a measure of efficiency of
Monetary policy
Markets

Disaggregated data may be useful to understand price mechanism

- cross correlations of prices changes
- industries
- countries

Where does inflation persistence come from?

The authors distinguish three sources of frictions in the inflation process:

1. “intrinsic” inflation persistence: due to informal indexation schemes
2. “expectations driven”: wrong information about monetary policy
3. “extrinsic” inflation persistence: changes in marginal costs

Sticky-price models (Calvo, 1983, Taylor, 1999),

changes in inflation persistence may be the consequence of shocks on

- money supply, monetary transmission mechanisms
- technology (marginal costs)
- preferences (market power, discount rate, demand)

Inflation persistence is influenced by many factors

What may be the impact of the EMU on inflation persistence?

EMU may change inflation persistence through many channels:

- Money supply
- Market integration: lower market power
- Interest rate

Therefore two related questions arise:

- How can we identify the impact of the EMU on prices in the euro area?
- Through which channel did the EMU influence prices ?

Empirical approach

Data:

Monthly data are deseasonalised, then use of quarterly data. May overestimate the persistence in price changes.

No test for the stationarity of inflation rates

Method

1. What events are considered as important (1996Q1 and 1998Q3)?

1996 Q1: In December 1995 the European Council confirmed that Stage Three of EMU would start on 1 January 1999.

1998 Q3:

- 2 May 1998 11 Member States had fulfilled the conditions necessary for the participation in the third stage of EMU
- 1 June 1998, creation of the ECB

What about, for instance:

- the Growth Pact in June 1997?
- 1999Q1: introduction of the euro?

2. Dummy variable for regime shifts.

If the events at dates 1996Q1 and 1998Q3 are anticipated, these events may have an impact before these dates.

3. Results do not look very robust

- Table 10a, estimation with one dummy (1996Q1) finds regime shift
- Table 10b, estimation with 2 dummies (1996Q1, 1998Q3), no regime shift in 1996Q1

More robustness check

- Changes in dates of dummies
- Simple estimation methods

4. Results for the US different from those obtained by Bils and Klenow (2004)

- Aggregate inflation: serial correlation = 0.2 (standard error = 0.13)
with an AR(1) process