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How anchored are inflation expectations in EMU countries?☆

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ABSTRACT

Anchored inflation expectations help stabilize inflation. Previous results indicate that monetary policy has been effective in breaking the link between actual and expected inflation at the euro area level. In this paper we examine whether this is also true at the national level. We define the 'disconnect' between inflation and inflation expectations and then proceed to examine the extent to which this disconnect exists for a number of euro area countries. Our findings suggest that for some countries, their own inflation experiences still affect national inflation expectations, and certainly more by comparison to how they affect the aggregate euro area level.

1. Introduction

Since the formation of European Monetary Union (EMU) and the advent of the euro, there has been a significant convergence in prices and inflation rates across all member states. Faber and Stokman (2009) argue that price convergence has been an ongoing process for the last 50 years in the euro area, and it is not therefore uniquely the result of monetary union (also Rogers, 2007). However, even if price convergence is not exclusively the result of monetary union, there is evidence that the latter has contributed to it. And it has done so, either through active policy in the EMU area (Demertzis et al., 2000; Allington et al., 2005; Beck et al., 2009), or through the achievement of greater homogenization in the underlying structures (for example Faber and Stokman, 2009, argue that this is the result of an increase in country openness). At the same time, we observe that euro area inflation, itself, has been both low as well as relatively stable. Similarly, euro area inflation expectations at the long horizon are anchored at a level just below the 2% upper bound and have not followed the cyclical movements in inflation. This has implied a good anchoring of expectations at the euro area level and, by implication, a monetary policy that is on the whole perceived to be credible by the public (Demertzis et al., 2009).

The question that we pose in this paper is to what extent we can say the same thing about national inflation expectations in the member countries. Are country inflation expectations similarly anchored, in the sense of being stable, at a constant and similar to the euro area level? And are they formed independently of the underlying national inflation process?[2] Our motivation stems from the fact that while euro area inflation is managed by the euro area policy interest rate, national inflation may also be affected by national variables, such as wages, domestic competitiveness conditions, etc. (see for example Druant et al., 2009 for the relevance of domestic institutional labour market conditions), as well as the common euro area policy interest rate.

Our results indeed suggest that national inflation expectations behave differently than euro area inflation expectations. On average, expectations of national inflation appear less well anchored than expectations of euro area average inflation. Our findings indicate that there isn't an equivalent disconnect between national inflation expectations and country level actual inflation, and that EMU has not necessarily made the relevance of country characteristics for national inflation expectations disappear. In the absence of a domestic policy interest rate, national inflation rates can therefore only be managed indirectly (through, say, wage policies) and are therefore more likely to affect the way expectations are formed. Expectations, in turn, are more likely to feed back into the rate of inflation and reinforce the relationship between them. So while there appears to be a disconnect between the two variables at the aggregate level, this is

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[2] Beyond that, there is a literature on the potential difficulties with a single monetary policy (see Huchet, 2003) or indeed the potential trade-off between nominal and real convergence (Hein and Truger, 2005).

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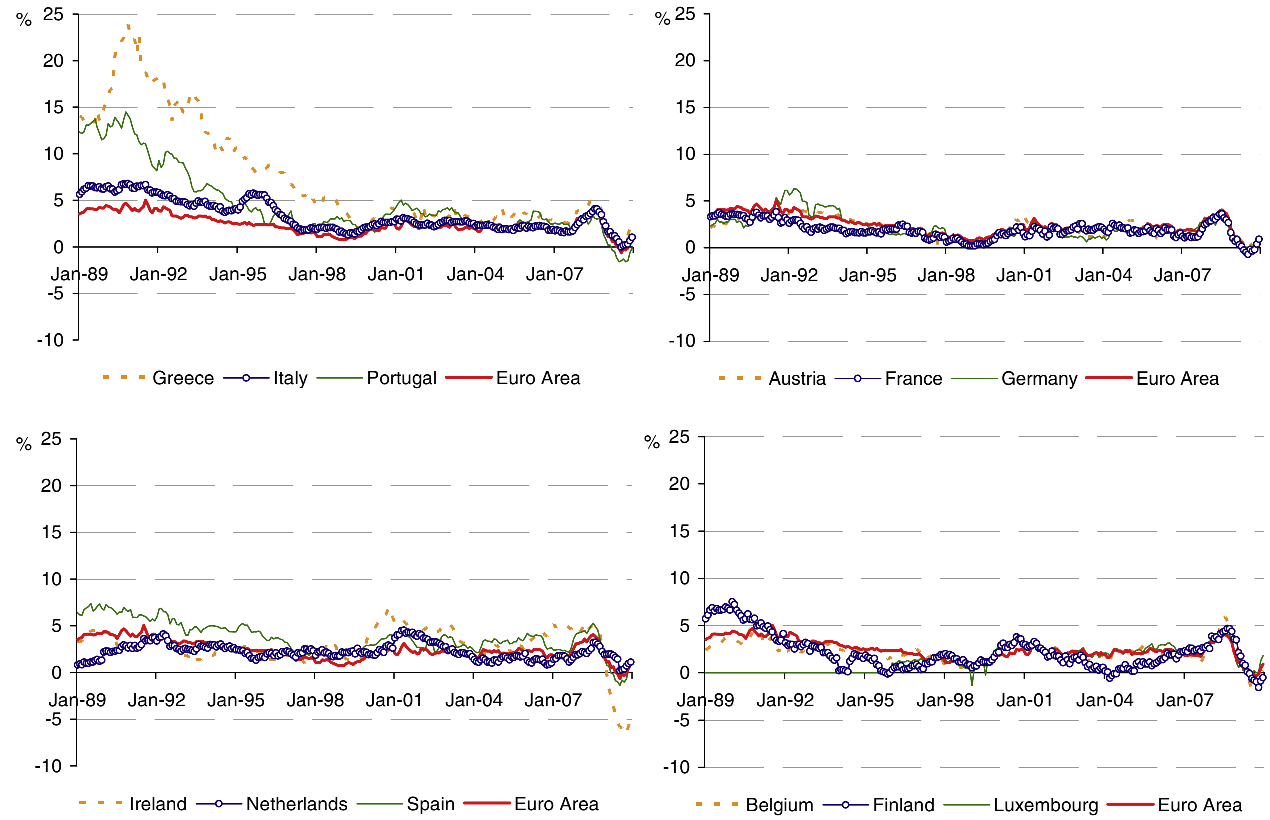

Fig. 1. Inflation in the EU-12 countries. Note: monthly data of the y-o-y % change of the Consumer Price Index. Euro area: Harmonized Index of Consumer Prices data since 1990 and the weighted average of the national Consumer Price Index series before 1990.

not necessarily the case at the national level. We argue that this may be potentially a source of instability for euro area inflation and needs therefore to be monitored.

Our paper is organized as follows. Section 2 presents a number of stylized facts about the euro area. We describe the actual and expected inflation in the euro area, as well as in a number of specific countries: France, Germany, Italy, the Netherlands and Spain. In Section 3 we describe in detail the methodology that would capture a credible 'disconnect' between the two variables. We present the results of our analysis in Section 4. Section 5 concludes.

2. Stylized facts

We start by describing a series of stylized facts on the relationship between inflation and long-term inflation expectations for a number of euro area countries. We plot the series, as well as look at a number of descriptive statistics of the series individually and the relationship between inflation and long-run inflation expectations. We do this for five EMU countries: Germany, Spain, France, Italy and the Netherlands. These five countries account for 85% and 83% in 1999 and 2009 respectively, of the euro area 16 Gross Domestic Product (GDP).[3]

2.1. Inflation in EMU

Within the euro area inflation differs from country to country. Fig. 1 presents the level of inflation in the EU-12 countries in the past twenty years. Although inflation levels have converged in the last two decades, inflation differentials between countries do remain.

Table 1 summarizes then a number of descriptive statistics for inflation pre- and during EMU, for a number of countries as well as the euro area. We observe that both the levels as well as the standard deviation of inflation have declined since the start of EMU in almost all countries (except Belgium and the Netherlands which have seen an increase in the standard deviation and Ireland and Luxembourg, which have seen an increase in both). The definition of price stability that the European Central Bank (ECB) uses is an inflation rate of 'close to, but below 2%', the level at which it aims to stabilize average inflation. Only a handful of countries have managed to conform to this level (Austria, Finland, France and Germany), with the majority being above it. This has implied that average inflation in the euro area lies just above the definition of price stability. Nevertheless, as we will see in the next section, this has not affected the long-term expectations for the euro

Table 1
Inflation in EMU countries.

	(1) Pre-EMU		(2) EMU	
	Mean	St. Dev.	Mean	St. Dev.
Austria	2.6	1.0	1.9	0.9
Belgium	2.3	0.9	2.1	1.2
Finland	2.7	2.2	1.7	1.3
France	2.2	0.9	1.6	0.8
Germany	2.8	1.5	1.5	0.8
Greece	12.2	5.4	3.1	0.9
Ireland	2.6	0.9	3.0	2.8
Italy	4.6	1.6	2.2	0.7
Luxembourg	1.2	0.3	2.2	1.0
Netherlands	2.3	0.7	2.1	1.0
Portugal	7.0	4.0	2.6	1.3
Spain	4.7	1.7	2.9	1.3
Euro area	2.9	1.1	2.0	0.8

Note: Monthly year-on-year Consumer Price Index inflation data. Euro area: Harmonized Index of Consumer Prices data since 1990 and the weighted average of the national Consumer Price Index series before 1990. The pre-EMU period ranges from 1989:1–1998:12 (except for Luxembourg: 1996:1–1998:12) and the EMU period ranges from 1999:1–2009:12.

[3] Individually these countries account for 31.2%, 9%, 21.2%, 17.5% and 6% in 1999 and 26.8%, 11.7%, 21.2%, 16.9% and 6.4% in 2009 of the euro area 16 GDP (source: Eurostat).