

CAUSES AND CONSEQUENCES OF INFLATION DIFFERENTIALS ACROSS THE EUROZONE

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The problems associated with a “one size fits all” monetary policy within the EMU is particularly pronounced in the case of the Irish economy. After thoroughly analysing the reasons underlying inflation differentials across the EU and then considering the effects of these differences, Shane Conneely considers the structural changes accompanying enlargement. He discusses the tools which individual governments may use to manipulate their economies and concedes that the potential for stagnation must be addressed.

Introduction

In this essay I discuss the historical background which has led to the development of the European Economic and Monetary Union (EMU) Project. I discuss the economic principles on which the EMU is based and its underpinning logic. From there, I develop a reasoning of the consequences of EMU with regard to inflation and its divergence within the Eurozone. I then go on to discuss the nature of inflation differentials across the Eurozone, the patterns which can be observed and why monetary policy at Eurozone level will inevitably produce divergent inflationary effects. I subsequently discuss the costs which accrue to those Eurozone members whose cycle of inflation is not synchronized with the Euro level monetary policy. I pay particular attention to the German and Irish economies as they are the economies which exhibit the greatest disparity in rates of inflation, within the Eurozone, since the creation of the Euro.

I believe that Inflation Differentials across the Eurozone are an intrinsic feature of our Monetary Union. I believe this to be the case because market place promotes specialisation as the fundamental response to the pricing mechanism. This heterogeneity ensures that, despite the same macroeconomic conditions, different regional rates of growth will be observed. Consequently there will be observed deviations in economic indicators across the Eurozone.

Historical Roots of the EMU

The primary economic philosophy behind the Economic and Monetary Union has been Mundel and Fleming's development upon the simple Keynesian model. A basic result of Keynes' model is that an economy may settle into an equilibrium which is stable yet does not operate under full employment. Keynes' model predicts that the government may, however, through an expansionist monetary policy, induce a positive shock to excite the economy thereby energizing it sufficiently to move towards another equilibrium which promotes a higher level of employment.

The Rise and Fall of the Keynesian Model

Confidence in Keynesian economics grew in the years after World War II, The Marshall Plan proved the value to an economy of government expenditure (albeit in cases where there is underutilization of resources and labour). Meanwhile in the international system, intercontinental levels of stability were the consequence of the Bretton Woods Agreement (BWA) which maintained fixed exchange rates through the pegging of the European currencies to the dollar which was in turn pegged to gold.

In the late 1950s this system began to crumble as the growth of the world's supply of gold bullion could not keep pace with the West's economic growth. With the crises of the cold war, the market value of gold spiked. When the price of gold exceeded the \$35/ounce set by the BWA, arbitrage occurred. US reserves were bought at the fixed price and traded on the gold exchanges for the greater market price. This eventually precipitated the run on gold which forced the global system into a system of floating exchange rates.

Open Economies and the Mundel-Fleming Model

These failings of the BWA forced a re-evaluation of the Keynesian system and the Mundel-Fleming model developed as an explanation as to why these imperfections occurred. When a government seeks to engage in:

- fiscal policy
- in a world of free capital and
- fixed exchange rates

it finds itself skewered upon the horns of a trilemma: the ‘inconsistent trinity’ of monetary policy. Increased expenditure (in order to spur on an economy operating under capacity) raises the nominal amount of currency within the economy. To compensate for this, prices will rise, thus leading to a rise in interest rates. If however the home state’s currency operates under a fixed exchange rate with another nation’s currency the home government cannot alter its interest rates without precipitating an influx of investment from its partner country. This freedom of capital to move across borders will consequently raise money supply to greater levels thus spurring on inflation even further in the home country.

Meanwhile, not raising the home countries rates continues to fuel the rise in prices in that country. As the prices rise in the home country consumers will choose cheaper, imported goods thereby causing a capital outflow which continues until equilibrium is reached and the previous real values reassert themselves.

The “Inconsistent Trinity” and EMU

This mutually exclusive triumvirate of concepts, the professed “inconsistent trinity”, is at the heart of the fiscal difficulties which trouble the Eurozone. In choosing the path of Economic and Monetary Union we have foregone our right to an independent monetary policy. This has led us to the EMU, with free capital movement and a transnational currency. This does leave the member states with a dearth of economic management tools though. The costs associated with potentially uncontrollable inflation/deflation are substantial and must be weighed against the potential costs of turbulent currency exchange markets. Contrasting with this are the benefits which may accrue from the potential for growth through integration and investment in a common market and, of course, the peace dividends from a political solution to the Mittle-European penchant for invasion.

Causes of Inflation Differentials Across the Eurozone

Inflation differentials exist across the European Union for many reasons. There exists a strong correlation between changes in inflation in an economy and changes in the growth of the supply of money within said economy (Cagan 1956). Alas M1 money supply is no longer published by any of the Eurozone states other than Ireland. We can however observe the nominal

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rates of interest on deposit accounts which suggest that demand for money must be relatively low.

Table 1: Rates of interest on deposit accounts in the Euro Area

	1999	2000	2001	2002	2003	2004
Belgium	2.42	3.58	3.4	2.6	1.65	1.52
Germany	2.43	3.4	3.56	2.65	1.68	1.55
Greece	8.69	6.13	3.32	2.76	2.48	2.29
Spain	1.85	2.95	3.08	2.5	2.25	2.07
France	2.69	2.63	3	3	2.69	2.48
Ireland	0.1	0.1	0.1	0.1	0.04	0.03
Finland	1.22	1.63	1.94	1.49	1.34	1.23

Source: IMFStatistics.org

Inflation Persistence across the Eurozone

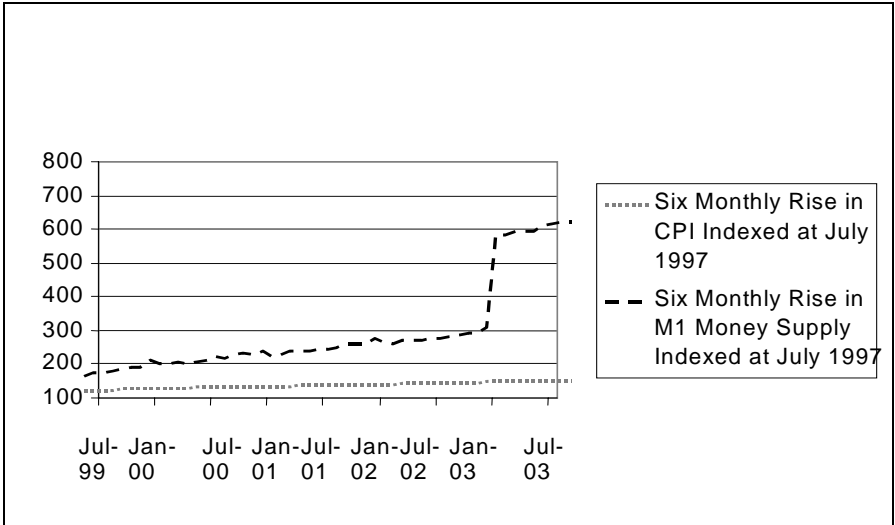
Much has been made of inflation persistence by the ECB (ECB-IPN 2004-2005), as it queries why certain countries exhibit rates of inflation which lie beyond the range of the ECB targets. We have to come to the understanding however, that so long as countries are behaving differently in economic terms, what is counter cyclical macroeconomic policy for one will exacerbate the situation of another. With Ireland accounting for only 1% of the Eurozone's economy, potential change in money supply is large and with a high degree of variance. Relatively large quantities of Euro can be shipped from the Continent and go unnoticed by the wider economy while a relatively small increase in the nominal demand for money by the Germany, France and Italy could force serious deflationary pressures upon Irish prices. This structural factor ensures that Ireland is likely to always have a wider range in variance than the Eurozone mean; this variance will exhibit itself in terms of inflationary and deflationary persistence.

Inflation and Money Supply in Ireland

Indeed since the transition to the Euro a high rate of growth in monetary supply is observable in Ireland (see figure1). The massive increase in the supply of money which occurs in December 2002 and January 2003 is quiet

remarkable and requires a further analysis as there is a marked increase in the supply of money without any commensurate rise in nominal prices.

Figure 1: Indexed Growth of M1 Money Supply and CPI in Ireland 1999-2003



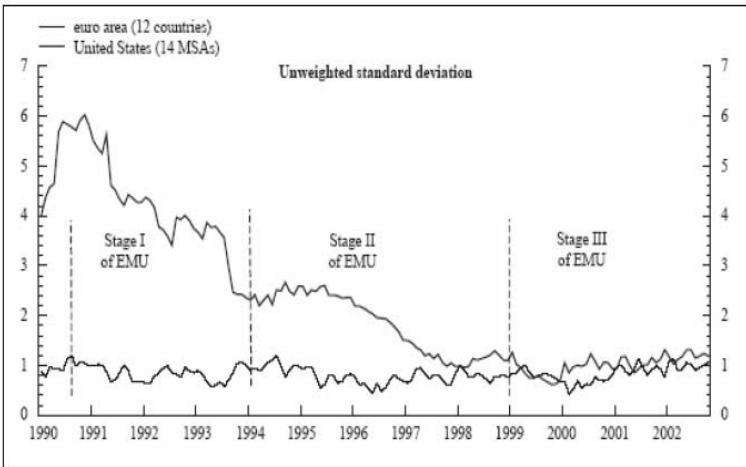
Source: CSO.ie

Variance in Inflation Rates in the Eurozone

There is no quick fix for the pattern of inflation divergence which exists within the Eurozone. The heterogeneity of the regions, combined with Germany's economy accounting for 40% of the Eurozone's GDP, ensures that the ECB's primary concern for monetary policy is to prevent a German slide into recession. The cost of this strategy will have to be borne by less vulnerable states.

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Figure 2: Inflation dispersion in the euro area and in the United States (14 MSAs)

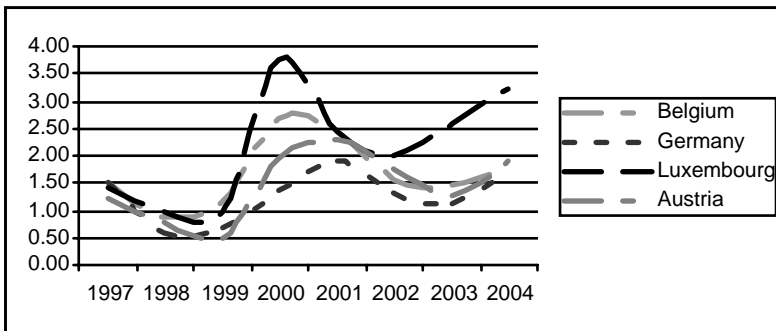


Source: Deutsche Bundesbank

While we can note that great strides have been made towards converging upon narrow band of inflation rates since the commencement of EMU, serious structural problems inhibit a closer re-alignment of the states.

Patterns Of Inflation In The Eurozone

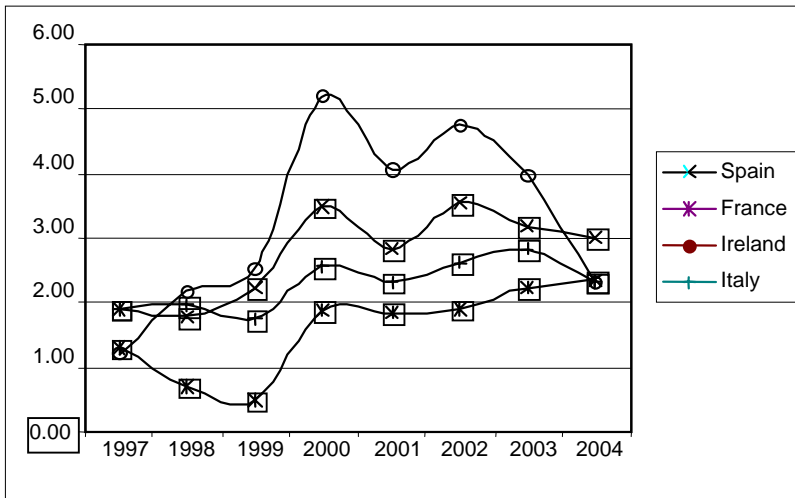
Figure 3: Inflation in the Germanic Zone



Source: EuroStat

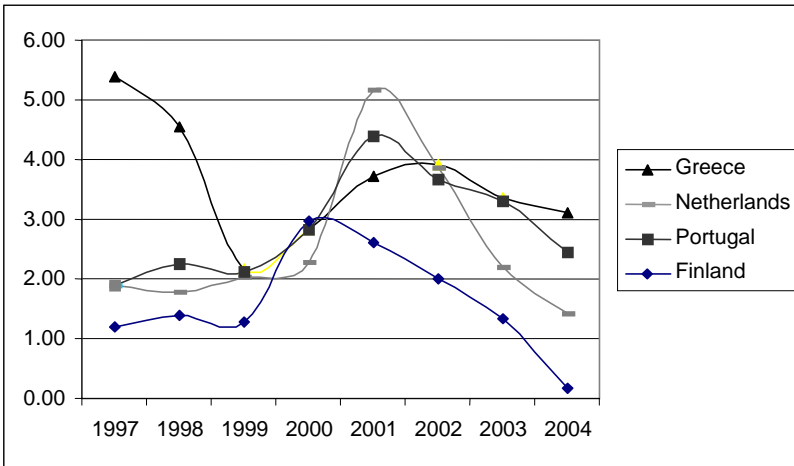
When we consider the patterns of inflation in the Eurozone we can find three distinct groups of countries. The first of which are the Germanic peoples of mid-western Europe. Economic policy for them, given the high status that price stability has in the canon of the European central bank, dictates that interest rates should rise in order to stem unwanted or dangerous inflationary pressures.

Figure 4: Inflation in the Coastal States



Source: EuroStat

Our second grouping of countries, the Coastal States, also shows a separate distinct pattern of inflation. All of these show a sudden drop in inflation in 2001 and see it rise again in 2002 only to converge on a point close to the 2% target rate.

Figure 5: Inflation in the Outlier States

Source: EuroStat

Finally we have the outliers who fit neither pattern. Greece's high initial inflation is an artefact of its interest rate before joining the EMU which was at almost 16%. Both Finland and The Netherlands have worryingly declining rates of inflation and could prove to become deflationary in the short term, so in their case the best option would be to lower interest rates yet again.

This implies that to take any action (including no action) could hurt the economies of a majority of the states in the Eurozone or at best act procyclically and push them outside the bounds of the inflation targets of the ECB. Across 2005 the Outlier countries have exhibited a small (0.5%) increase in inflation, excepting Portugal which remains at 2.5%, The Coastal states have diverged with Spain's inflation increasing by 0.7%, France's dropping to 1.8% and Ireland and Italy remaining stable, meanwhile for the Germanic Zone all states have seen an increase in Inflation (albeit marginal). Consequently we see in 2006 a forecasted increase in the Euro interest rate of up to 1% despite 2005 inflation being over target by 0.2 %.

Regional Inequalities as a Source of Divergent Rates of Inflation

Certainly the high taxation regimes in the Franco-German hinterland limit growth and the high replacement ratios of unemployment benefits combined with a tradition of long periods of study in third level and early retirement ages are factors which compound this effect. The reason that the continentals could afford to have such generous regimes was because their economies were powerful engines of growth. Where the continentals now need to put their efforts is not simply in reforming their labour laws but in learning how to reform their economies. Compounding this issue is the lack of initiative that Europeans exhibit. (Europe's entrepreneurial rates are half that of Americans and its capital market is only a third the size of the American market.)

The Germans in the 19th and 20th centuries excelled at capital intensive industrial production. Through the success of this model, they enacted the economic miracle and simultaneously financed the French fetish for farming through CAP; at our stage of economic, however, capital intensive industrial production is not where one finds the pools of profit.

If flexibility in the workforce is what is required, this should not be simply looked at as reduced workers rights which allow the employer the flexibility to hire and fire. Flexibility in the workforce requires also the individual's flexibility to take risks, take opportunities and to take control of their lives; qualities which are taken away from the individual when they must serve five year apprenticeships to spray paint cars on a factory floor (Volkswagen website). It is the million people added to Ireland's population since 1972 that created its growth and the wealth. All the Irish government had to do was stop hindering them.

Existing regional inequalities will be augmented by supply and demand shocks which can always give rise to new differences in inflation. The Eurozone member's labour markets are as yet poorly integrated. Due to the intransigence of the average citizen, she is unlikely and unwilling to relocate to another region in their state, never mind another state within the EU. "Hence, short-term inflation differentials can be interpreted as a natural reflection of the necessary adjustment mechanisms taking place" (Weber 2004). As there exist so many rigidities in the internal market it seems likely that all the volatility within this market will be funnelled into that one aspect of the market which is left outside the sphere of governmental control, the pricing mechanism.

The Causes of Heterogeneous Rates of Inflation

Each region is affected differently depending on how their economy is structured, their resources and industries and on their degree of specialisation. Similarly the effect of an exchange rate shock will be different among member countries depending on their share of imported goods in private consumption and their reliance on exports. As Weber (2004) has gone on to say, however, “monetary policy in the euro area is necessarily uniform; therefore it cannot exert a direct influence on inflation differentials” hence those member countries with above average inflation simply “have to carry the cost associated with it... Moreover, their export industry is expected to lose competitiveness,” such as is occurring in Italy.

Even Eurozone wide effects such as the dollars drop against the Euro can have different effects on the regions. Germany’s low rate of inflation means that, despite the dollar being in free fall, in real terms its products are only marginally more expensive in the US than 5 years ago whereas in internal trade with Germany, Italy finds itself 20% more expensive than before it joined the single currency. (http://www.economist.com/displaystory.cfm?story_id=3666544)

The Consequences of Heterogeneous Rates of Inflation

One of the most painful lessons to be learned from the divergent rates of inflation has come as a result of the divergent Real Effective Exchange Rates, themselves a consequence of divergent rates of inflation. Here we find that in the period between 2000 and 2002 Ireland’s Real Effective Exchange Rate increased by 8% as compared to Germany and Belgium for whom the REEP differential was only 2.1% and 1.1% respectively (IMF website). This process has accelerated with the devaluation of the dollar since 2002. In the last three years Ireland’s and Italy’s REEPs have increased by a further 18% as compared to a paltry 4% for Germany. This has resulted in the German economy becoming increasingly competitive, albeit through a slight of hand and with the cost being borne by the other members of the union. “Indeed, Germany is the only G7 economy to have increased its share of world exports in the past five years” (The Economist, 2005).

In the medium term this will give rise to growth within Germany, something which can only benefit the Eurozone as a whole, though growth manufactured by this mechanism will result in the necessary restructuring of the German economy being delayed well into the longer term.

Conclusion

Ideally the ECB would re-evaluate its inflationary targets and what it judges to be a healthy level of growth. While there are dangers to be recognized in over inflation, the dangers of stagnation and the inadvertent slippage into recession have also have to be recognised; Especially as there exists a tendency to overestimate the rate of inflation, an artefact of the CPI measure of inflation. The risks of stagnation are further enhanced if it is true that the causes of the Eurozone's economic weakness are purely structural in nature. If this is the case it will take a long time for reforms to be pushed through against so many vested interests and longer again before they have an effect.

The potential for the expansion of the Eurozone has also to be considered. If the transition states join us in our experiment, this will immediately dilute the share of Eurozone economy which Germany, France and Italy currently hold. Such a structural change can potentially ensure that the needs of growing states will also be taken into account when the ECB's Board of Governors make its decisions.

Regardless of this variations in regional economies cannot be dealt with adequately on a Euro-wide level. The direct logic of this is that regional difficulties require regional responses. With responsibility for monetary policy transferred to Europe it behooves the regions to maintain those few economic tools that remain. Taxation policy can be used as a short term policy instrument to stimulate economies that show signs of flagging meanwhile in periods of high inflation governments can issue pension bonds. If revenue from such bonds were invested in external markets they would have to dual effect of extracting money from the home market while simultaneously ameliorating some of the costs associated with the ageing population. Such a measure is equivalent to raising the interest rate to a level where saving becomes an option.

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