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# Economic Monetary Union Enlargement

The fall of the Berlin Wall is considered to be one of the most important historical transitions of the last century. In Eastern Europe, transition was specific; the implementation of the market was accompanied and enforced by EU enlargement, which was responsible to a large extent for its success.<sup>1</sup> Moreover, as compared to previous EU enlargements, the enlargement towards Central and Eastern European countries (CEECs) was achieved extremely rapidly, within 15 years, in 2004 (2007 for Romania and Bulgaria). Given that EU Membership implies the adoption of the *Acquis Communautaire*, including the adoption of the euro, EMU enlargement is the next step of European integration.

The specificity of this EMU enlargement is the existing contradiction between the legalistic and institutional approach, namely the Maastricht criteria, and the necessity of catching up for the New Member States (NMS) to the GDP level of Western Europe. This contradiction has different labels, including the Balassa Samuelson effect, real versus nominal catching up, and Maastricht versus Optimal Currency Area criteria. It can be summarized in the following way: the sooner NMS have converged, the sooner EMU enlargement will be optimal; however, a rapid convergence also means a higher inflation rate, which does not fit the price criteria. Similarly, fixing the currencies or adopting a currency board is also associated with more inflationary pressures, which means that meeting the exchange rate criteria or giving up the independence of the monetary policy hurt the institutional requirement on inflation.

Nevertheless, it is desirable to enter EMU, not only according to the Optimal Currency Area (OCA) criteria, for reasons that are beyond the OCA criteria, including wider access to financing growth, deeper trade integration, and lower vulnerability to external shocks. The true question is therefore not “is it optimal”, but “when is it optimal?” and “what should be the feuille de route?”. Many economists advocate the approval of a special treatment for the NMS in order to avoid delaying the schedule of the EMU enlargement too much. Besides, there is a strong argument, which lies in the endogeneity of the optimality of a currency union. If business symmetry increases *ex post*, once the currency union is launched, then the latter can be created sooner than when the criteria applied *ex ante* imply. We consider the Irish example<sup>2</sup>, and ask whether business cycles are more symmetric during the functioning of the sterling monetary union by using and analysing the implications of its exogenous breakup in 1979.

## 1 Formal Status of the New Member States in the Legalistic Approach

The treaty sets out five convergence criteria that each EU country must meet to adopt the euro: the rate of inflation and long term interest rates should not exceed by more than 1.5 percentage points (2 percentage points) the average rates of inflation (average long term interest rates) of the three best-performing Member States; fiscal conservatism in terms of deficit and debt (deficit must not exceed 3% of GDP, debt must not exceed 60% of GDP); and finally exchange rates must have

<sup>1</sup> See Roland and Verdier (2003).

<sup>2</sup> The Irish example was emphasised by Tom and Walsh (2002), who looked at the robustness of the link between memberships in a Currency Union and the result of a trade  $x$  times over the average.

Table 1

### Overview Economic Indicators of Convergence, Excluding the Exchange Rate Criterion

	Year	HICP Inflation <sup>1</sup>	Long-term interest rate <sup>2</sup>	General government surplus (+) or deficit (-) <sup>3</sup>	General government gross debt <sup>4</sup>
Czech Republic	2004	2.6	4.8	-2.9	30.7
	2005	1.6	3.5	-3.6	30.4
	2006	2.2	3.8	-3.5	30.9
Estonia	2004	3	..	2.3	5.2
	2005	4.1	..	2.3	4.5
	2006	4.3	..	2.5	4
Cyprus	2004	1.9	5.8	-4.1	70.3
	2005	2	5.2	-2.3	69.2
	2006	2.3	4.1	-1.9	64.8
Latvia	2004	6.2	4.9	-0.9	14.5
	2005	6.9	3.9	0.1	12.1
	2006	6.7	3.9	-1	11.1
Hungary	2004	6.8	8.2	-6.5	59.4
	2005	3.5	6.6	-7.8	61.7
	2006	3.5	7.1	-10	67.6
Malta	2004	2.7	4.7	-5	74.9
	2005	2.5	4.6	-3.2	74.2
	2006	3.1	4.3	-2.9	69.6
Poland	2004	3.6	6.9	-3.9	41.8
	2005	2.2	5.2	-2.5	42
	2006	1.2	5.2	-2.2	42.4
Slovakia	2004	7.5	5	-3	41.6
	2005	2.8	3.5	-3.1	34.5
	2006	4.3	4.3	-3.4	33
Sweden	2004	1	4.4	1.8	50.5
	2005	0.8	3.4	3	50.4
	2006	1.5	3.7	2.8	46.7
Reference value		2.8	6.2	-3	60

Source: ECB Convergence Report December 2006, [www.ecb.int/pub/convergence/html/index.en.html](http://www.ecb.int/pub/convergence/html/index.en.html), [www.ecb.int/pub/convergence/html/index.en.html](http://www.ecb.int/pub/convergence/html/index.en.html).

<sup>1</sup> Annual average percentage change. 2006 data refer to the period from November 2005 to October 2006.

<sup>2</sup> In percentages, annual average. 2006 data refer to the period from November 2005 to October 2006.

<sup>3</sup> As a percentage of GDP. European Commission Projections for 2006.

<sup>4</sup> Reference value refers to the period from November 2005 to October 2006 for HICP inflation and long-term interest rates and to the year 2005 for general government deficit and debt.

remained within the authorized margin of fluctuation for the previous two years without devaluating the currency of any other Member State.

Those Maastricht criteria must be fulfilled by the NMS, although they do not fit their needs. They were conceived indeed to avoid demand-led inflation, not structural inflation or productivity-led inflation. However, in 2006, the GDP at market prices of the twelve NMS accounted for less than 5% of the EU-27, and it has been growing

very quickly over the last decade. Growth is expected to continue in the following years, which will induce inflation and real appreciation above the required institutional level.

This high inflation is due to the Balassa Samuelson effect: the increase in productivity in the tradable sector translates into higher wages in both the tradable and non-tradable sectors, while the ratio of productivity in the tradable sector on productivity in the non-tradable sector must be equal to the inverse

of the ratio of tradable on non-tradable prices (equation 2).

$$Y^i = A^i (K^i) (L^i)^{1-\gamma^i}$$

with  $0 < \gamma_i < 1$  and  $i=T$ , (1)

$$NT (1-\gamma_i) \frac{Y^i}{L^i} = \frac{W^i}{P^i}$$

$$W^T = W^{NT} = W \Rightarrow c \frac{Q^T}{Q^{NT}} = \frac{P^{NT}}{P^T} \quad (2)$$

If the exchange rate is fixed and tradable prices are exogenous, then inflation in the non-tradable sector not driven by productivity gain translates into higher than average inflation rates. If the exchange rate floats, then it can partially accommodate the increase in inflation due to productivity gains. One consequence of the Balassa Samuleson effect in NMS is therefore that inflation rates are higher in fixer countries as compared to floaters, and more importantly the rate is higher than in core EU/EMU countries. This is reflected in table 1.

Eggert (2007), Kovacs (2003), Mihajlek and Klau (2003) and many others provide estimates on the size of the Balassa Samuelson effect for NMS, which is in the range of 1% to 3% per annum. Changing the requirement of an inflation rate not being more than 1.5 percentage points over the average inflation of the three best performers by the requirement of an inflation rate not higher than 1.5 percentage points above the average inflation rate for the euro area would allow for the accommodation of this 1% to 3% Balassa Samuelson effect.

Contrary to what happened to the UK and Denmark, there will be no opt-out clauses. However, NMS are free to specify the dates for ERM II (that is EMU). In practice, Slovenia adopted the euro in January 2007, Cyprus and Malta in January 2008, and

Table 2

### Adoption of the Euro

Country	EU	ERM II	Euro official date
Slovenia	2004	2004	2007
Cyprus	2004	2005	2008
Malta	2004	2005	2008
Slovakia	2004	2005	2009
Bulgaria	2007	n.a.	n.a.
Czech Republic	2004	2008*	2001*
Estonia	2004	2004	2010**
Hungary	2004	2011*	2014*
Latvia	2004	2005	2008**
Lithuania	2004	2004	2010***
Poland	2007	2009*	2012*
Romania	2007	n.a.	n.a.

Source: EMU Convergence Report (2006).

\* Official date not yet set; dates provided are forecasts by Ficht Ratings (August 2006).

\*\* Under Revision.

\*\*\* In October 2006, the Lithuanian government decided that "Lithuania will aim to join the euro area as soon as possible. The more favourable period for Lithuania to join the euro area starts from 2010".

Slovakia is well on track. Lithuania was rejected on the grounds that its inflation rate was beyond the limits fixed by the Maastricht criteria. But as reported in table 2, Lithuanian inflation was quite low, and this rejection of the bid to join the EMU based on an inflation rate that was "not sustainable" is disputed.

## 2 Economic Arguments for and against Joining EMU

Alongside the institutional criteria, the Optimal Currency Area set up five criteria to be fulfilled for a set of countries to constitute an optimal currency area. If shocks are not symmetric, a common monetary and exchange rate policy will not be too costly if other adjustments are available, e.g., price and wage flexibility. Other considerations also have to be taken into account to properly evaluate the trade-off between entering a monetary union and keeping the autonomy of the fiscal/monetary/exchange rate policy, such as the degree

of trade and financial integration. If potential Member States are highly involved in mutual trade, then the benefit from sharing the same currency increases and might compensate for the loss of independent policies.

In the case of New Member States, the symmetry of business cycles is relatively high, wages and prices are as flexible as other EMU countries, and trade and financial integration increased dramatically over the last decade, to the extent that in 2007, EU partner countries absorbed more than the two tiers of NMS external import and export.

*Symmetry of business cycles:* The most comprehensive work on this topic has been done by Fidrmuc and Korhonen

(2006), who suggest that the criterion of business cycle symmetry could not be used to disqualify NMS for their participation to the EMU. Thirty-five publications about business cycle symmetry amongst NMS and old EU countries have been issued, the most recent being that of Afonso and Furceri (2008).

*Price and wage flexibility:* Fidrmuc (2004) used regional data to assess the mobility of workers across regions of NMS as a response to asymmetric shocks. Mobility is quite low, which allows a relative pessimistic assessment of the way labour markets could compensate for the loss of monetary policy. But this finding must be nuanced by the fact that current EMU members'

Table 3

### MINEFI Indicators

	Rigidity of the formal labour market (private and public)	Guarantee of employment for graduates in the public sector	Practice of guaranteed employment in the private sector (of the "lifelong employment" type)	Indexation of wages on inflation
	from 1 (rigid) to 4 (flexible)	from 1 = guaranteed employment to 4 = no guarantee of employment	from 1 = widely practised to 4 = not practised at all	from 1 = indexation to 4 = no indexation
Germany	3.7	4	3	4
Spain	3.0	4	3	2
France	3.3	4	3	3
United Kingdom	4	4	4	4
Greece	3.3	4	4	2
Ireland	4.0	4	4	4
Italy	3.7	4	3	4
Portugal	2.9	3	4	2
Sweden	1.6	2	2	1
Bulgaria	3.6	4.0	4	3
<i>Average for old EU Members</i>	3.3	3.7	3.3	2.9
Czech Republic	3.6	4	4	3
Estonia	2.9	4	4	1
Hungary	4.0	4	4	4
Lituania	2.9	4	4	1
Norway	2.6	3	4	1
Poland	3.3	4	3	3
Romania	3.3	3	4	3
<i>Average for potential EMU members</i>	3.3	3.8	3.9	2.4

Source: Profils Institutionnels-Database: [www.cepii.fr/ProfilsInstitutionnelsDatabase.htm](http://www.cepii.fr/ProfilsInstitutionnelsDatabase.htm), author's calculations.

labour markets do not perform much better.

Other arguments:

*Trade and financial integration:* Beyond the reduction of exchange rate volatility, adoption of the euro is expected to lower transaction costs and increase trade and FDI. This provides an additional and substantial benefit from the adoption of the euro. The controversial aspect of this question is not if the increase will take place but by how much will trade increase as a result of the adoption of the euro. As summarized by Rose and Stanley (2005), a currency union might increase overall trade by a factor of between 30% and 90%. For the NMS, Brouwer, Paap and Viaene (2008) compute that the increase could range from 18.5% for Poland to 30% for Hungary.

*Financial soundness:* EMU reduces the probability of sudden reversals of capital inflow. It reduces the cost of foreign capital as the exchange rate risk premium disappears. Maurel (2004) assesses the potential for more financial integration from participation in EMU.

EMU provides protection against currency crises, but the rapid expansion of domestic credit has to be managed, and can provoke a banking crisis.

EMU accession will bring higher inflation, not only in the short run (one-time increase in inflation), but also in the long run (real appreciation must be achieved through higher inflation). EMU accession will also imply lower real interest rates, which may result in capital misallocation, especially in countries with a weak financial system.

Those financial systems are dominated by foreigners and the transmission mechanisms of ECB monetary policy differs from their old member counterparts because financial markets

in NMS are young and relatively shallow.

*The quality of monetary policies:* The cost of giving up monetary policy is proportional to the ability to respond to shocks and to pursue good fiscal and structural policies. A ranking of NMS by the quality of their policies is calculated by Fabrizio and Mody (2006). It combines measures of the quality of the budget formation and execution process. Generally fiscal institutions are weaker but considerable progress has been achieved over the last ten years.

Relatively strict criteria can be important for addressing the relatively weak capacity of the political process in some NMS to deal with fiscal difficulties. One facet of this capacity lies in the temptation to resort to monetary and fiscal policies, during the years that precede elections. Unlike Fabrizio and Mody (2006), Maurel (2006) shows that although young, the new East European democracies do not run higher deficits as compared to EMU countries when allowing incumbent presidents or governments to get re-elected. The difference comes from the fact that Fabrizio and Mody (2006) focus on NMS, while Maurel (2006) draw lessons from the comparison between old and new potential members.

### 3 OCA Endogeneity

By taking the OCA *à la lettre*, one may postpone the accession to the EMU for most of the NMS. Would that be optimal? One argument, which is radically critical of Mundel's theory, is that those criteria are endogenous, which means that they are more likely to be fulfilled *ex post*, after the completion of the currency union, than *ex ante*. The causality running from being a member of a currency union to the level of trade integration and the symmetry of cycles is as convincing as the causality running the

other way. It implies that the very fact of entering a currency area validates the process by optimizing the criteria endogeneously. Following that vein, Maurel and Flandreau (2005) analyse the Austro-Hungarian precedent of a monetary union between Austria and Hungary. They argue that asymmetric supply shocks were compensated by the synchronisation of demand shocks channelled through both fiscal policy and discipline. Babetski, Boone and Maurel (2004) compare NMS to the most recent accession countries, Portugal and Spain, and show that while supply shocks are asymmetric, because of the transition process, the increasing symmetry of demand shocks reflects monetary policies mimicking the European Central Bank. Necessary adjustments seem to have been made through productivity gains translating into endogenous inflation differentials. Finally, Maurel (2004) interprets the higher than average trade within a monetary union as a reflection that markets are imperfect and reluctant to finance current imbalances. Hence, the explanation for the positive association between being a member of a currency union and trading more is that current imbalances are less of an impediment to further trade integration once the monetary union is achieved.

The same can be applied to labour market performances (unemployment and rigidities) and both exchange rate volatility and monetary regimes. Belke and Setzer (2004) regress exchange rate volatility (alone and multiplied by labour market institution variables) on unemployment level, by arguing that the creation of jobs is delayed when the macroeconomic environment is not sound enough. Hence, the positive association between higher exchange rate volatility and unemployment is in favour of fixing the currency as a way of

implementing a sound macroeconomic environment.

Turning back to the symmetry of business cycles within a monetary union, one interesting case is that of Ireland exiting, in 1979, from the currency union it constituted with the UK back in 1929. Simultaneously, Ireland was committed to participate in the ERM while Britain declared it would not. This case is interesting for several reasons. First, instead on running panel equations where currency unions are very heterogeneous and do not resemble the EMU case, the British currency union is a European one. Second, the two parts of the United Kingdom (Ireland and Great Britain) were quite different in terms of economic development, Great Britain being economically more advanced than Ireland, they were specialised in different sectors, but the union was functioning for several decades. Finally, the currency union was certainly not unilateral (although this can be disputed) in the sense of a (former) colonial state having a currency union with its colonies. Ireland was a free state in 1922, as a result of the civil war provoked by the ratification of the Anglo Irish Treaty, and five years before the introduction of the Irish pound at a 1:1 no-margins peg with sterling until 1979.

Ireland's integration in the EU, ERM, and finally EMU could be used as a benchmark for assessing the EMU enlargement, its costs and benefits. As many of the NMS today, Ireland was lagging behind the EU Member States and it caught up the European GDP per capita level within a quite short period of time. Ireland's strategy of reforms combined with the participation to the European institutions has many similarities with the strategies followed in certain NMS. Therefore we could focus on the benefit from adopting the

euro in this country, which is the most suitable benchmark.

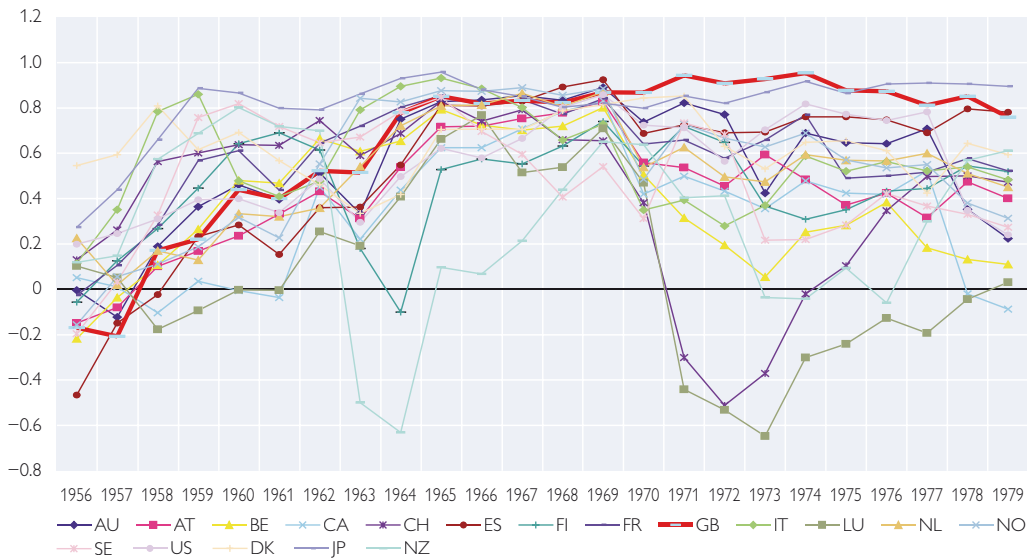
We adopt another strategy, which is similar to that proposed by Thom and Walsh (2002), and which consists of drawing lessons from the breakup of the currency union in 1979. Thom and Walsh focused on Ireland's trade with

its main trade partners, and tested whether it was higher in the currency union before 1979. Here we will test whether business cycles between Ireland and Great Britain are higher than outside the monetary union, and whether exiting the monetary union in 1979 caused a decline in the symmetry

Chart 1a

### Symmetry of Business Cycles from 1956 to 1979

Correlation of business cycles

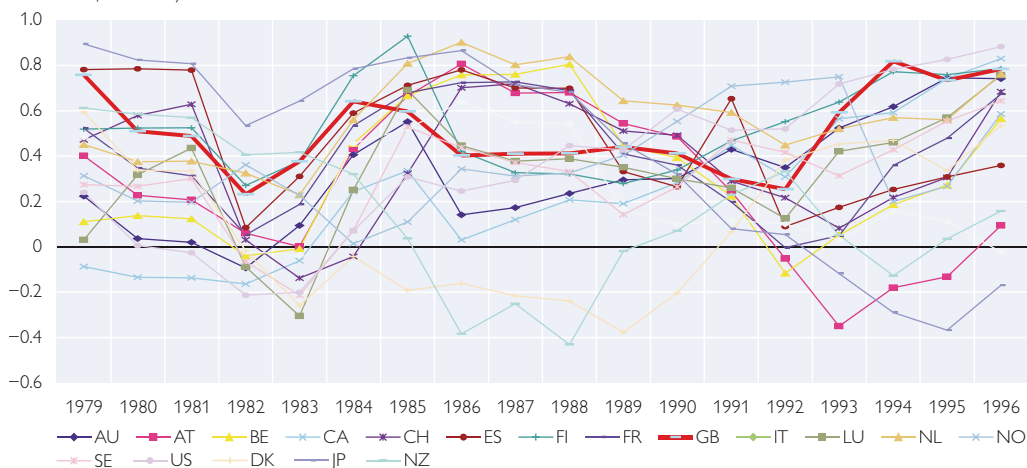


Source: Author's calculations.

Chart 1b

### Symmetry of Business Cycles from 1979 to 1996

Correlation of business cycles



Source: Author's calculations.



of the business cycles. This historical analysis has many advantages: first the time span over which the data are available is much larger; we have twenty years (from 1950 to 1979) of the functioning currency union, and 13 years after the breakup (from 1980 to 1992). Second, and more importantly, we focus on exiting a currency union instead of entering it. This strategy allows us to avoid the endogeneity problem coming from the fact that, while symmetry increases the desirability of a currency union, membership in a currency union increases business cycle synchronisation. As a result, we cannot infer from the statistical link between symmetry



and currency union membership that the former is a condition for the latter. The reasons for breaking the sterling link were well motivated, but not based upon the OCA criteria. They included the political perceived benefits (EU subsidies), economic motives, like trade diversification towards the continental EU, and currency anchoring to a zone of monetary stability.

However, many economists believed that the breakup was not economically motivated, and as a result on

three occasions provoked the devaluation of the Irish Pound (1983, 1986, 1993). Similar to Thom and Walsh (2002, page 1113), we believe that “we are justified in treating the end of the sterling link as exogenous with respect to trade patterns” and with respect to business cycles symmetry. This assumption is based upon chart 1, where it can be seen than the correlation of Irish and British business cycles is among the highest over the period from 1950 to 1979. Hence the currency union was not broken because of the lack of synchronisation between economic cycles.

The graphs suggest that many other explanatory variables stand behind the patterns of correlation of the business cycles. According to Frankel and Rose (1998), we assume that business cycles can be represented according to the following decomposition:

$$\Delta y = \sum \alpha_i s_i + d \quad (1)$$

$$\Delta y^* = \sum \alpha_i^* s_i + d^* \quad (1b)$$

where an asterix denotes a foreign value. Business cycles are the sum of sector shocks weighted by the respective share of each sector  $i$  in both domestic and foreign economy (these shares may differ, but not the shocks themselves), and of demand shocks, like the increase or decrease in public expenditures (fiscal policy), inflationary measures not driven by productivity gains or devaluation aimed at improving short run competitiveness. In the case of nominal inertia, these demand shocks might have a long lasting effect.

From equations 1 and 1b, one can derive the following formula:

$$\text{corr}(\Delta y, \Delta y^*) = \sum \alpha_i \alpha_i^* \sigma(s_i) + \text{corr}(d, d^*) \quad (2)$$

This expression shows that the correlation of business cycles depends on: countries specialisation, the co-variation  $corr(d, d^*)$  of country-specific demand shocks, and  $\sigma(s_i)$ , which refers to the variance of sector shocks. If trade is specialised, meaning that a countries productions are concentrated in different sectors or whatever,  $\alpha_i$  and  $\alpha_i^*$  are very different, and any increase in trade is likely to amplify asymmetry. On the contrary, if trade is intra-industry, countries produce and trade the same commodities and trade integration may be expected to be positively correlated with the correlation of business cycles.

In practice we estimate the equation proposed by Flandreau and Maurel (2005) or Maurel (2004):

$$\begin{aligned} corr(ij,t) = & a_2 + b_2 \text{inte}(ij,t) + \\ & + c_2 \text{monetary coordination}(ij,t) + \quad (3) \\ & + c_3 \text{trend } v(ij) + w(ij,t) \end{aligned}$$

If trade is specialized,  $b_2$  should be negative. Trade integration, by facilitating specialization in supply, will lead to greater asymmetry. We expect that the UK experience will conform to Krugman's view.

For the issues that regard the relationship between monetary integration and business cycles  $c_2$ , the empirical analysis in Engle and Rose (2002) suggested it is positive. We can think of two main channels. First, the transmission of monetary shocks across regions will tend to be more important in a closely knit banking and financial sys-

tem (see Angeloni, Kashyap and Mojon 2003). Second, higher capital markets integration leads agents to diversify their portfolio so that consumer demand tends to exhibit greater co-movements across regions: when a given region is hit by an adverse productivity shock, local demand does not necessarily follow, since risks are spread all over the monetary union. As a result, monetary integration is likely to increase the correlation of business cycles, rather than decrease it.

The data used for estimating the gravity equation<sup>3</sup> come from Thom and Walsh (2002), and have the advantage of being expressed in constant Irish pounds and deflated by Irish import and export price indices. This avoids a sharp decline in the trade volume due to the appreciation of the dollar around the year of the currency union breakup. The sample contains 19 countries, which are the main trade partners of Ireland, over the period from 1950 to 1992.

We have several forms of monetary coordination: the currency union constituted by Ireland, Northern Ireland, Great Britain, and the European Economic Community<sup>4</sup> (EEC hereafter), which takes the value one when both partners belong to the EEC. Ireland entered the EEC in 1973.

The coefficients have the expected signs. More bilateral trade intensity amplifies the asymmetry of business cycles, as suggested by the Krugman's view, while membership in the sterling

<sup>3</sup> *Bilateral Trade: Statistical Abstract of Ireland and UK Statistical Abstract.*

*GDP: Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.1, Center for International Comparisons at the University of Pennsylvania (CICUP), October 2002.*

<sup>4</sup> *In 1964, the Central Banks of the Member States of the European Economic Community began to meet regularly to discuss the coordination of monetary policy at EEC level. In the early 1970s, when the Bretton Woods system was breaking down, they agreed to put limits on exchange rate fluctuations between participating European currencies as a first step towards closer integration (the so-called "Snake"). With the introduction of the European Monetary System in 1979, the coordination was significantly extended, until the Maastricht Treaty in 1992 and the establishment of the European Monetary Union.*

**Correlation of Irish Business Cycles from 1950 to 1992**

	Eq. (1a) Fixed effects	Eq. (1b) Random effects	Eq. (2a) Fixed effects	Eq. (2b) Random effects
Trade intensity	-0.044 (-1.28)	-0.032 (-1.35)	-0.065** (-2.01)	-0.045** (-2.00)
CU (sterling currency union)	0.116 (1.10)	1.177** (1.86)	0.169* (1.66)	0.208** (2.24)
EEC	-0.091** (-1.99)	-0.064 (-1.52)		
Trend	-0.001 (-1.06)	-0.0019 (-1.53)	-0.0024** (-1.91)	-0.0027** (-2.29)
Intercept	2.26 (0.75)	3.57 (1.32)	3.65 (1.24)	4.74** (1.82)
Number of observations	654		654	654
R2	0.0355	0.0340	0.0294	0.0392
Hausman test	5.41 0.248		1.69 0.6389	

Source: See footnote 3.

Note: Number of observations = 654. Dependent variable: Correlation of the first differences of the Irish GDP and Ireland's main trade partners over ten years.

\*\* \*: significant at 5%, 1%.

currency union was associated with more symmetry. We interpret this result as a strong argument in favor of the endogeneity of the OCA: the very fact of constituting a currency union creates endogenously the symmetry of the business cycles, regardless of the fact that the members are at different stages of development and despite their economic specialization. More trade integration allows countries to be more specialized, as argued by Krugman, but this negative effect on the cycles is more than compensated for by the economic coordination, which turns out to be higher within a monetary union.

The negative coefficient of EEC is puzzling. It can be interpreted as reflecting the difficulties encountered in keeping the Irish pound independent from the sterling, whose weakness forced Ireland to devalue on three occasions. The average symmetry of business cycles decreased over time, as reflected by the negative coefficient of trend.

#### 4 Conclusion

EMU enlargement is now on track. Some NMS have already adopted the euro, but the question for the majority of them is when this enlargement will be possible. Two obstacles have to be considered. The first obstacle is an institutional one. Fixing the currency creates inflation, which is not consistent with the inflation criteria. Keeping inflation low may impede the catching up and convergence processes. Those inconsistencies have to be handled by the European Commission and the European Central Bank, as suggested by several experts (Gros, 2004; Pisani Ferry et al., 2008; De Grauwe and Shnabel, 2005). In regards to inflation, one option could be to require that the rate of inflation must not exceed by more than 1.5 percentage points the average inflation rate for the euro area, as opposed to the average rate of inflation of the three Member States of the EU where inflation is the lowest.

The second obstacle is more on the side of the NMS themselves. Can they benefit from keeping the independence of their monetary policies for as long as possible? We assume that the question of optimality is not questionable. A more difficult issue to be addressed is: when. Our focus on the Irish case suggests that optimal conditions are created by the constitution of the currency union itself. In other words an early EMU enlargement should not be harmful.

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