

# Implications of EMU enlargement for European monetary policy: A political economy view

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**Abstract** In this paper we investigate the implications of EMU enlargement from a political economy perspective. We argue that a high degree of convergence of the candidate countries prior to EMU accession is an important requisite. Otherwise, as a result of a sharp increase in economic dispersion, public support for European monetary policy is likely to decrease, and external pressure on the European Central Bank will mount.

**Keywords** : EU Enlargement, Economic Convergence, Political Economy

**JEL codes**: E58, E50, D78

## 1. Introduction

From the perspective of economic theory, the choice whether to participate in a currency union or not is straightforward: according to the literature on optimal currency areas, a currency union entails economic costs and benefits, and if the benefits exceed the costs, then the country should join the union. In the real world, this decision is more complex. First, measurement of the costs and benefits is far from being straightforward. Second, besides economic considerations political issues play a role.

For EU enlargement monetary policy may not be the thorniest issue, but for EMU enlargement the impact of the accession countries on the single monetary policy is very important. In investigating this issue we take the position of a central bank. Monetary policy is typically not concerned about regional inflation rates, but about the long-run increases in the average price level.<sup>1</sup> But in a currency union the complication could arise that regions are in fact nation states. Supra-national monetary policy could therefore, in the short run, not be optimal for a monetary union member state. If e.g. certain countries experience temporary deflation because the Single European Monetary policy cannot respond to their

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<sup>1</sup> Different regional inflation rates are adjustments of relative prices, which are normally not of a concern to central banks.

specific economic situation, the public support for the European Central Bank (ECB) might decline. This illustrates the importance of regional convergence in a currency union.

The EU is currently negotiating with a number of candidate countries that want to join the EU. In principle, each new EU member is also a potential candidate for EMU. This means that at some point they may become part of the Eurosystem, the system of national central banks plus the ECB. Upon entry in EMU, current accession countries will formally participate in determining the monetary policy stance in the euro area. In this article we go beyond the economic implications and focus on the consequences of EMU enlargement for European monetary policy from a political economy perspective. Economic analysis is troubled by the fact that time series for the accession countries are very short and exhibit structural breaks. Therefore, conventional econometric analysis is hardly possible, and we have to find other ways to analyse the accession countries. Moreover, since the economic future is highly uncertain we took the most recent data as a starting point and consider what would happen if the accession countries joined 'today'.<sup>2</sup> We argue that a strong increase in economic diversity might pose a problem for European monetary policy, so economic convergence is an important prerequisite for joining EMU. Otherwise, quick EMU enlargement might result in an increase in external pressure on the ECB and possibly even be detrimental to public support for the single monetary policy in Europe.

This article is organised as follows. In the next section we set out our framework, describing the main determinants of monetary policy. Then we examine the economic situation (section 3) and non-economic factors for the euro area (section 4). In section 5 we extend our analysis to the enlarged euro area. The final section summarises our main conclusions.

## 2. Why political factors matter

The public choice literature on monetary policy emphasises the possibility that non-economic factors might influence the monetary policy stance. Monetary policy is directed towards achieving a goal, e.g. price stability. The pursuit of this goal entails analysing a set of information with respect to the state of the economy. However, this is not to say that the relevant economic information is entirely determined by economic factors. On the contrary, given that the main policy instrument of monetary policy is a (short-term) interest rate, which then is intended to influence market interest rates (and ultimately expenditure), expectations of economic agents play an important role. These expectations are in part determined by non-economic factors. For instance it has been claimed that elections (Nordhaus, 1975), the political colour of governments (Hibbs, 1977) or the political preference of central bankers (Vaubel, 1997)<sup>3</sup> might have a significant impact on the conduct of monetary policy.

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<sup>2</sup> This could be called a 'worst-case scenario', as we might expect that economic divergence between the current EMU members and the accession countries will be smaller by the time they enter EMU.

<sup>3</sup> However, Berger and Woitek (1997) fail to find an impact of German central bankers' party preferences.

So monetary policy decisions are influenced by two main factors: The economic situation, which calls for an “optimal” monetary policy stance (e.g. an optimal level of key interest rates as the Taylor rule), and a number of non-economic factors, such as external pressure on a central bank. The extent to which monetary policy decisions become effective, i.e. affect long-term and other market interest rates, then also depends on these non-economic factors. Clearly, economic and non-economic factors are often related: for instance high inflation might call for tight monetary policy. If high inflation and high unemployment occur simultaneously, non-economic factors might enter into the central bank’s considerations, as external pressure on the central bank to lower interest rates might increase.

We define external pressure as a situation in which government(s) or interest groups demand changes in monetary policy.<sup>4</sup> A related concept is that of public support, which we define as behaviour where some parts of the population support monetary authorities, irrespective of the current policy stance.<sup>5</sup> Any group of the population can offer public support. One reason for such behaviour could be trust in the central bank. If a central bank enjoys a high degree of confidence or support from the population, it has a better position in public discussion about monetary policy. That is, the higher public support the less likely is external pressure. This means that the likelihood to deviate from the ‘optimal’ monetary policy (as determined by the economic situation) becomes smaller.

Based on these ideas, EMU enlargement should be analysed in economic and political terms. Note that we do not consider EU accession (which will probably have a huge impact on the accession countries), but EMU enlargement, that is we assume that the accession countries have become part of the EU, but want to adopt the euro. What are the additional factors playing a role? In what follows we examine the economic situation and non-economic factors first for the current EMU, then for the EMU plus candidate countries. Since the time span is short, and the data for the accession countries exhibit structural breaks (making forecasting difficult), we investigate the possible consequences of the candidate countries joining ‘today’, that is we take the current level of economic dispersion as a starting point.

### 3. The economic situation

The euro area is made up of 12 economies, who have gone through a process of economic convergence. Still, they are not perfectly integrated. This diversity reflects a number of underlying structural factors, such as different economic structures, differences in preferences, different development in

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<sup>4</sup> Statutory central bank independence may limit the scope for external pressure, but is not sufficient to fully exclude pressure from outside, as e.g. informal links between the government and the central bank might exist. To what extent external pressure is successful can only be determined empirically. See Forder (1996).

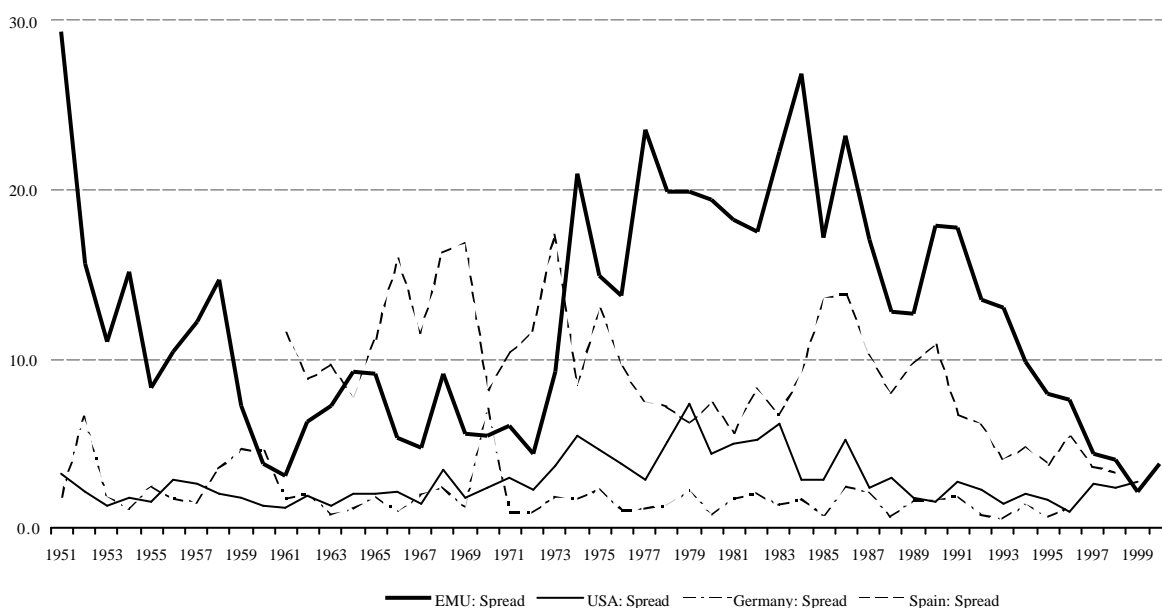
<sup>5</sup> In practice, when reading through newspapers, it occurs quite often that certain interest groups ‘unconditionally’ support their central bank by opposing any form of political or other external pressure. Instead, they state that the ‘central bankers do not need external “advice”, they know how to do their work’. See also Maier (2002).

productivity across the euro area or differences in monetary transmission. Since European monetary policy is a single monetary policy for all EMU members, it is not an economic instrument to fight regional or national developments. Still, as we show economic divergence might have implications for external pressure or public support.<sup>6</sup>

### 3.1. The current euro area

Currently, the euro area is comprised of twelve member states. Essentially, any country can be viewed as a monetary union between several different regions and can therefore be used as a benchmark to check whether European inflation dispersion is currently relatively high or low, compared to other monetary unions. In other words, countries for which regional inflation data are available can give insight in the actual performance of the European Monetary Union. We selected data from three monetary unions (Germany, Spain, US) to compare the performance of the EMU.<sup>7</sup> Figure 2 shows two measures of inflation dispersion: the left part displays the absolute spread of the inflation rate, the right part the unweighted standard deviation for all monetary unions.

**Figure 1: Inflation rate dispersion (measured by the absolute spread) across monetary unions**



The fall of the absolute spread of the EMU countries is remarkable: between 1985 and 2001 inflation dispersion in the EMU has fallen from a level above 25 percentage points to a level below 5 percentage points. This corresponds to the inflation differentials observed in the three other monetary unions. Figure 2 shows the unweighted standard deviations for the different monetary unions. The sharp in-

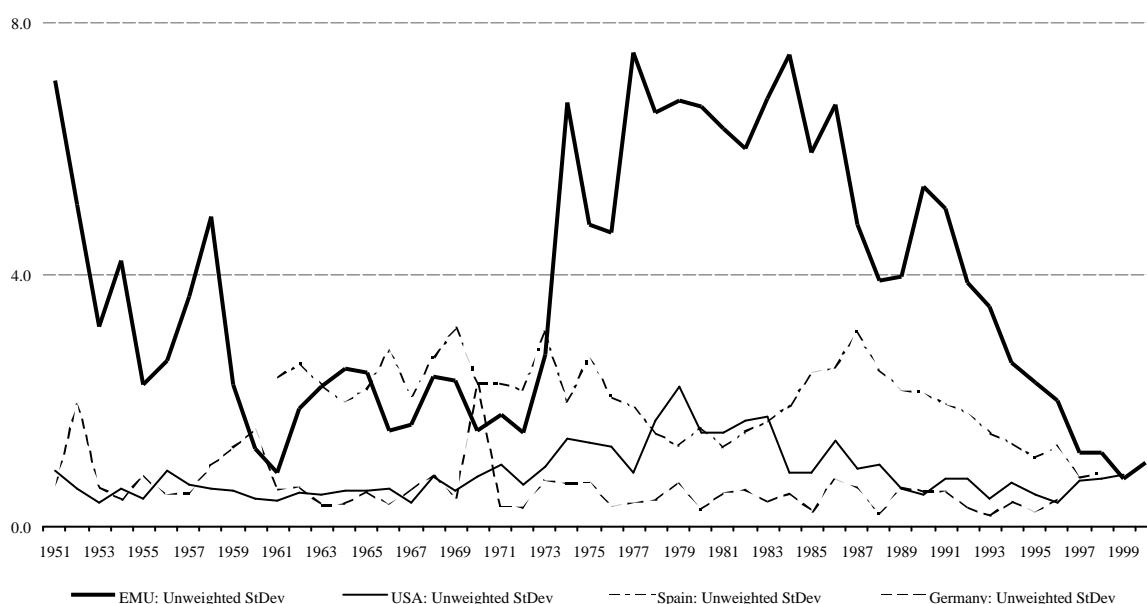
<sup>6</sup> When examining economic dispersion we focus on inflation, the ultimate goal of European monetary policy.

<sup>7</sup> Our data set consists of inflation data of twelve FED districts, nine German Bundesländer, fifty Spanish provinces and twelve EMU countries since 1960 (see appendix).

crease in the standard deviation for the EMU since the end of the Bretton Woods system is clearly visible, but the fall since the early 1990s is equally strong. The example of Spain shows that a relatively high aggregate inflation rate need not lead to high regional inflation dispersion, thereby illustrating the disciplining effect of having a single monetary policy.

To summarise, both dispersion indicators show that current inflation differentials in the euro area do not seem particularly pronounced and are not higher than in other monetary unions.

**Figure 2: Inflation rate dispersion (measured by the unweighted standard deviation) across monetary unions**



### 3.2. The enlarged euro area

Most economic evidence indicates that this situation will change, once the candidate countries join the euro area. Table 1 reviews some recent empirical studies for the EU accession countries. In figure 3 we plot the unweighted coefficient of variation<sup>8</sup> for current euro area (EU 12) and the EU 21, that is the EU 12 plus candidate countries, on the left axis.<sup>9</sup>

<sup>8</sup> The coefficient of variation is computed by dividing the standard deviation by the mean. It is used to compare dispersion of countries with high inflation rates, as takes into account the mechanical increase in standard deviation, caused by an increase in the mean. The weights used are based on GDP figures. Qualitatively, we get similar results for the Figures 1 and 2 if we use the coefficient of variation.

<sup>9</sup> The candidate countries comprise Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. We decided to leave out Bulgaria and Romania: both countries had inflation rates above 100%, which we regard as temporary distortions.

**Table 1: The economic situation of the accession countries**

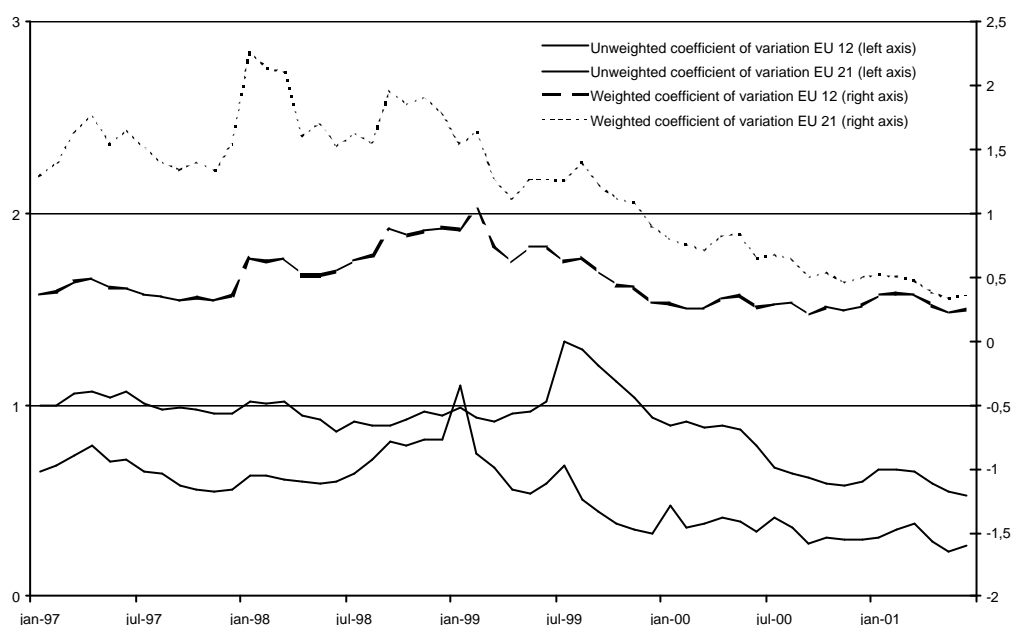
Study	Methodology and main findings
European Bank for Reconstruction and Development (2000)	Analysis of institution building and capital markets with the use of convergence indicators. Convergence is more advanced for goods markets than for capital markets, institutional and capital market convergence towards the standards set by the EMU members has yet to be achieved.
Fidrmuc and Korhonen (2002)	VAR models to test the correlation of supply and demand shocks between the candidate countries and the euro area. They conclude that the correlation of supply shocks greatly varies across countries, and turning to demand shocks, only Hungary displays a high correlation with the euro area.
Frenkel et al. (1999)	Structural VARS to examine the differences in demand and supply shocks and the response to them between EMU and (a) EU countries that have not yet joined EMU, (b) EFTA countries and (c) accession countries. Their results suggest that EMU enlargement towards the accession countries would entail “significantly higher costs” than EMU enlargement towards countries of the other two groups.
Eichengreen and Ghironi (2002)	Estimation of a growth model for the average annual rate of growth per capita income, forecasting the period 1999-2006. Main result: unless the accession countries improve their institutional framework, economic divergence between EMU incumbents and candidates continues. If institutions are upgraded to EU levels the accession countries can grow faster than the present euro area.
Schweickert (2001)	Cost/Benefit analysis; Slovenia and Hungary yield the highest net benefits, the net benefits are lowest for Romania, Latvia, Lithuania and Bulgaria.
Wagner (2002)	Theoretical model; quick EMU entry might result in high costs for some accession countries due to real divergence (or slow real convergence).

We see that (a) both coefficients are higher for the EU 21 than for the EU 12 and (b) that the impact on the unweighted standard deviation is much larger. The latter is no surprise, given the low economic weight of the candidate countries. Data for the second quarter of 2001 indicate that compared to the EU 12 the unweighted and weighted coefficient of variation increase by more than 112% and 43%, respectively (see Table 2). This increase is quite substantial and inflation dispersion would be far higher than in any other monetary union in our sample. This implies that the possibility that monetary policy is – at least temporarily – not suitable for a country is greatly increased.

To summarise, if EMU enlargement would take place today, it would increase inflation dispersion to an extent not observed in other currency unions in our sample. Evidence from other currency unions

(e.g. Engel and Rogers, 1996) show that inflation differentials can be very persistent. Therefore, we can conclude that on *economic* grounds convergence prior to accession is warranted. This is hardly new, of course, but in what follows, we show that also on *political* grounds convergence is important.

**Figure 3: Measures of inflation dispersion for the EU 12 and EU 21**



**Table 2: Coefficient of variation for EU 12 and EU 21**

	Unweighted coefficient of variation			Weighted coefficient of variation		
	EU 12	EU21	Difference	EU 12	EU21	Difference
1999	0,57	1,06	85%	0,64	1,25	95%
2000	0,36	0,75	108%	0,28	0,66	136%
2001Q1	0,34	0,66	92%	0,37	0,50	36%
2001Q2	0,26	0,56	112%	0,25	0,36	43%

#### 4. Non-economic factors in the current euro area

There is not single best way to analyse non-economic or political factors. Typically, regression analysis is used to examine the impact of political variables or political pressure. Since the sample period is very short, econometric estimation is hardly possible. Therefore, in what follows we have chosen to use different approaches, each providing different, but as we show mutually consistent information.

#### 4.1. Newspaper evidence: Measuring external pressure and public support

Quantifying non-economic factors and measuring external pressure and public support is not straightforward. The methodology of Havrilesky (1993) seems the most promising available. He constructed an indicator for political pressure on the US Federal Reserve, based on the number of newspaper reports in which politicians argue in favour of a more or a less restrictive monetary policy. The idea is as follows: if conflicts between (pressure) groups and the central bank occur or if external pressure is applied, this will be covered by the press. More severe struggles result in more articles. Therefore, to construct the indicator, the number of articles in leading newspapers, in which government officials or interest groups demanded a change in monetary policy, are counted. Reports calling for monetary ease are counted as -1 and reports in favour of more restrictive monetary policy are counted as +1. The external pressure index is then constructed as a balance statistic.<sup>10</sup> Although Havrilesky only analysed political pressure from the government, this methodology can also be applied for interest groups or to analyse public support.

We constructed a similar indicator to measure external pressure and public support for the ECB, using the following six newspapers: the *'Frankfurter Allgemeine Zeitung'*, the *'Handelsblatt'*, *'Het Financieele Dagblad'*, the *'NRC Handelsblad'*, the *'Financial Times'* and the *'Wall Street Journal'* (a detailed description of the data can be found in the appendix).<sup>11</sup> A number of checks were done, which showed that by and large all news was consistently reported in all newspapers.<sup>12</sup> As (interest) groups we have included the national governments, banks,<sup>13</sup> the industry, trade unions and other sources, which comprise both statements from the international organisations such as the IMF and pressure from governments outside the euro area (mainly the US). The index runs from 1/1999 to 2/2002

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<sup>10</sup> Havrilesky (1993) reports findings for the US. In regressions for the Federal Funds rate this indicator is highly significant, Froyen et al. (1997) have shown that if economic control variables are included in the model for the interest rate the conflict indicator remains significant.

<sup>11</sup> Our selection of newspapers is based on the idea that we want to have independent and politically neutral newspapers that cover economic affairs extensively. Furthermore, the circulation should be as broad as possible, as the broader the circulation, the higher the effect on public opinion and (presumably) also on European monetary policy.

<sup>12</sup> Clearly, it would be desirable to include more newspapers, but this data was not available to us. Still, our checks indicate that since most news was relatively equally featured in all newspapers, the additional information from other newspapers would be relatively limited. This holds all the more since Hayo (1998) has shown that German and Dutch inflation aversion were quite similar, but during the period considered German and Dutch inflation rates were not.

<sup>13</sup> Posen (1993) first mentioned the importance of financial sector interests for monetary policy.



(weekly data).<sup>14</sup> In what follows we examine external pressure on the European Central Bank from the sources mentioned above. In a second step, we investigate the impact of EMU enlargement.

#### **4.2. External pressure and public support: The European Central Bank in the current euro area**

In Figure 4 we plot the most aggregated pressure and support indicator, namely pressure and support from all interest groups in all countries. As with other conflict indicators it is clearly observable that pressure and support are only high during certain periods (see also Maier, 2002). We see two spikes in terms of public pressure: In the second quarter 2001 and in the fourth quarter of 2001. Plotting the sources of pressure and support, we see that in particular political pressure has increased during these periods (see Figure 5). Interest groups such as trade unions or the industry hardly play a role.

Is this a special feature of a supra-national central bank? If this is the case, then it might well be the case that because of its supra-national status it might be less prone to external influence from interest groups. To examine this issue further, we compare this evidence to the only other detailed, sectoral pressure and support indicator available: newspaper indicators for the Bundesbank. Maier et al. (2002) and Maier and Knaap (2002) present data sets for external pressure and public support for Germany, based on the same methodology.<sup>15</sup> The two sets of indices for the ECB and the Bundesbank are compared in Table 3, where for each interest group we report the sum of the pressure and support over the entire period and (in parentheses) the percentage of articles stemming from each pressure group.<sup>16</sup>

Direct comparison between the two indices is not useful, as both central banks differ considerable, but still a number of interesting conclusions can be drawn. We observe that the percentage of articles from interest groups (banks, industry and trade unions) is much lower for the European Central Bank than previously for the Bundesbank. This holds for both external pressure and public support and indicates that national central banks might face different types of pressure than the supra-national ECB. In what follows we analyse these findings according to the source of the pressure or support and consider possible changes in the ECB's external position after EMU enlargement.

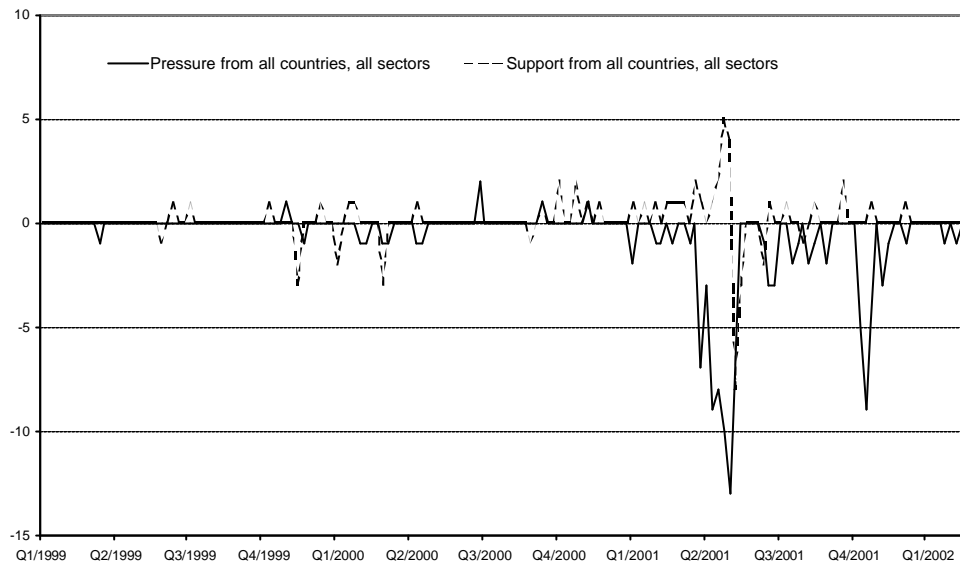
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<sup>14</sup> One might object that this sample period is 'special' in the sense that it coincides with the introduction of the euro, the pan-European payment system etc., which might have biased the sample towards finding convergence of the current EMU members. However, the ECB only started to operate in 1999 and we have aimed at including the latest data, so there is little we can do about this issue.

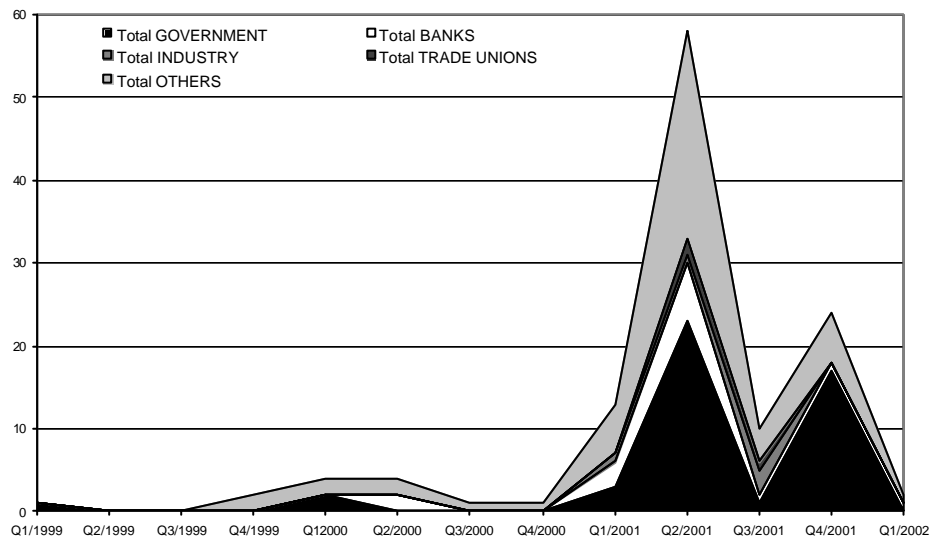
<sup>15</sup> The sample period for the German indices runs from 1/1960 to 12/1998. See Maier and Bezoen (2002) for a detailed analysis.

<sup>16</sup> Note that the first column of each category, where the total sum is given, does not display all articles. This is because a number of articles 'cancel out', i.e. in one period articles are classified as +1 and -1, resulting in score 0 for that period. Therefore, in the last row we have also reported the total number of observations.

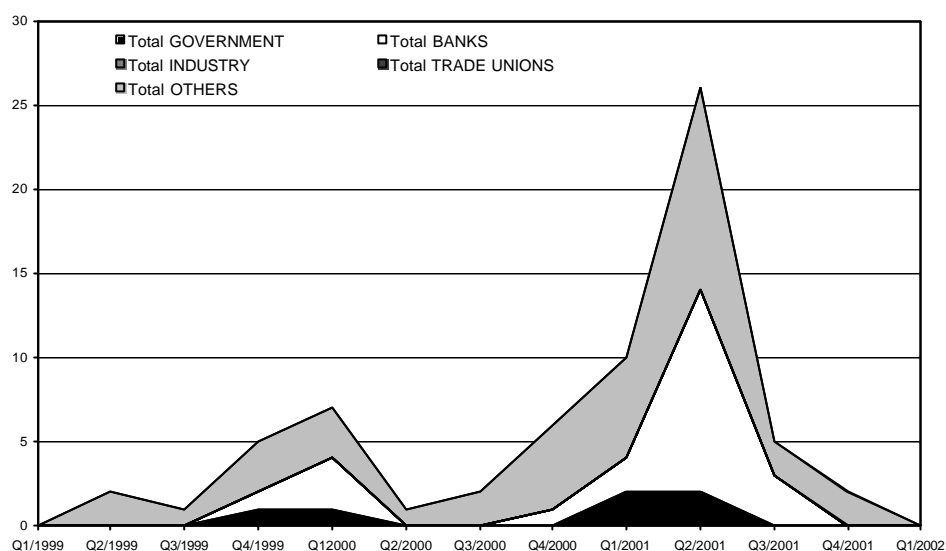
**Figure 4: External pressure and public support: The European Central Bank**



**Figure 5: Sources of external pressure: The European Central Bank**



**Figure 6: Sources of public support: The European Central Bank**



**Table 3: External pressure and public support**

	Pressure on the ECB		Pressure on the Bundesbank		Support for the ECB		Support for the Bundesbank	
Sample period	01/1999-02/2002		01/1960-12/1998		01/1999-02/2002		01/1960-12/1998	
Total no. of articles	118		527		67		314	
Sum of total pressure/support	-108		-339		19		314	
Government	-47	(39.8%)	-42	(16,1%)	4	(9,1%)	88	(28.0%)
Banks	-11	(12.7%)	-58	(26,6%)	-6	(32.8%)	111	(35.4%)
Industry	-3	(4.2%)	-29	(10,4%)	0	(0%)	59	(18.8%)
Trade Unions	-3	(2.5%)	-69	(13,1%)	0	(0%)	9	(2.9%)
Other sources	-44	(42.4%)	-72	(20,8%)	21	(59.2%)	14	(4.5%)

### a) Political Pressure

At first glance, pressure from national governments on the ECB seem to be very important, as their share is almost 40% of the entire pressure indicator (this is considerable higher than for the Bundesbank). However, to a large extent this merely reflects the absence of pressure from other organised groups. At the same time, this absence also increases the relative importance of pressure and support from other international institutions, such as the IMF (as reflected in the row ‘Other sources’).

How likely is it that political pressure will have influenced European monetary policy? The “traditional” source of political pressure as found in the literature on political business cycles, namely nervous politicians facing an election, has lost most of its threat.

- The ECB has a very high degree of statutory independence (see de Haan, 1997). Previously, the major reason to assume that any national central bank might have feared losing its independence during conflicts with the government was the possibility to change its legal status (usually by simple parliamentary majority). At the European level, any change in the ECB's statute requires unanimous consent of all member countries. This consent will not easily be reached.
- Elections in the EMU member countries do not occur at the same date, typically not even in the same year.<sup>17</sup> Should – due to upcoming elections – the incumbent government in one member country demands lower interest rates, it is highly unlikely that the other EMU members will tolerate that monetary policy is targeted to help winning the elections in this member country.

The fact that political pressure has been applied on the European Central Bank is not new, for instance similar attempts have been made in the US and in Germany. The main question is to what extent this political pressure will influence the ECB's monetary policy decisions. In the end, this is an empirical question. Unfortunately, the sample period is too short for meaningful conclusions. Still, given the high degree of statutory independence it is unlikely that short-lived political interests (such as upcoming elections in a member state) have a significant impact on European monetary policy. Even concerted political pressure is only credible if the political will exists to change the ECB's independent status, which requires changes to the Treaty of Maastricht. In our view it is highly unlikely that such a situation will occur in the foreseeable future.

### **b) Interest groups**

Detailed analysis of the findings for the other interest groups for the ECB is difficult, given the short sample period. Still, the lack of pressure and support from industry and trade unions in the European case is quite apparent, in particular in comparison to the findings for the Bundesbank. How can such behaviour be explained?

Compared with a national interest group in a country with an autonomous monetary policy, the situation in the European Union for pressure groups is more complex. On the one hand, national governments will remain an important factor to extract rents (by asking for government regulations or subsidies), on the other hand, the European level becomes more important, as more decisions are taken by the EU Commission. This has implications for pressure groups: these groups realise that monetary policy is no longer in the hands of a national central bank, but has shifted to the European level. Here monetary policy decisions are based on the euro area aggregate. This clearly limits the scope for national interest groups to influence European monetary policy. In our view this is the main reason why interest groups' attempts to influence monetary policy have decreased sharply: they have simply real-

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<sup>17</sup> Vaubel (1999) opposes this point, hinting at the possibility of a certain “clustering” of national elections between May 2002 and June 2004. Note also that elections to the European Parliament are an exception.

ised that pressure from organised groups has become less effective, in particular since most interest groups are not well-organised at the European level (in contrast to governments).

It is also interesting to note that the main findings of Maier et al. (2002) are that of all organised groups, only the financial sector had a significant impact on the Bundesbank. The attempts to influence monetary policy from all other groups, including the government, were not successful. Due to the short sample period it is not yet possible to say whether a similar impact of the banking sector on European monetary policy exists.

### c) Individual countries

Next, we investigate the impact of individual countries. Here, however, we have to be very cautious to draw conclusions, as our newspaper coverage is far from being complete: we have only covered newspapers from Germany, the Netherlands and two major financial newspapers based outside the euro area (*Financial Times* and *Wall Street Journal*). Therefore our results are certainly biased towards finding evidence for Germany and the Netherlands. In Table 4 we have aggregated over all national sources of external pressure and public support. Indeed, it turns out that we have a lot of observations for Germany and the Netherlands, whereas for a number of countries we do not have any evidence at all (those countries were therefore not included in Table 4). This would clearly change if newspapers from these countries were included. Still, Table 4 is very interesting: the main finding is that of a remarkable degree of homogeneity in the direction of external pressure among the countries. Even in a country such as the Netherlands external pressure was –on average– more biased towards lowering interest rates, despite the relatively high inflation rates during the period reviewed. Clearly, it has not been the case that several countries have called for tighter monetary policy, whereas others wanted to lower interest rates.

**Table 4: Pressure and support per country**

	BE	DE	NL	FR	IT	AT	FI	ROW	Unknown
Sum of Pressure	-8	-31	-4	-7	-3	-5	0	-28	-22
Sum of Support	-1	14	0	2	1	1	-1	2	1

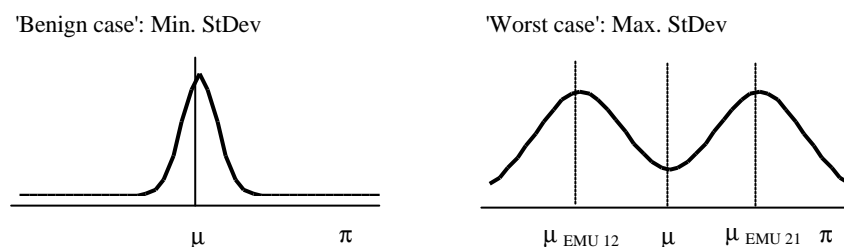
This point can be related to the degree of homogeneity within the euro area. Economic diversity in a currency union implies that if members could determine an autonomous, national monetary policy, based on the economic fundamentals of their country, some members might prefer (slightly) higher or lower interest rates. This means that for these countries the single monetary policy is not fully *appropriate*, since they might wish to implement a different policy stance.

Additional research (not reported) shows that it is not the case that one country has always had the lowest or the highest inflation rate. Instead, member countries share a common trend in inflation rates, and there exist fluctuations around this trend due to, e.g., asymmetric shocks and differences in busi-

ness cycles. This implies that during certain periods some member states might prefer a somewhat tighter or looser monetary policy. So the overall benefit of EMU (and the decision to adopt the euro) is not determined by these deviations from the common trend, as each country sometimes gets an extra cyclical boost during certain periods by ‘too loose’ monetary policy, and sometimes monetary policy is too tight. Over the medium term, however, those periods are ‘averaged out’.

Still, once these countries have entered EMU, we argue that the degree of economic dispersion is related to the demand of individual countries to change the policy stance. The more diverse the economies are, the less appropriate is the monetary policy stance for some members, and the more likely – relatively speaking – is external pressure to change interest rates.

**Figure 7: Benign and worst case for European monetary policy**



This issue can be further examined by analysing the distribution of the member states of the EMU around the euro area inflation rate. In order to compare the actual distribution, we hypothesise two extreme scenarios (see also Figure 7):

- Only two outliers determine the observed inflation spread and all other member states are located at the average HICP inflation. This is a “benign case” for monetary policy, since it is appropriate for a large majority of the European countries.
- If the observed inflation spread is caused by two *groups* of countries, while no individual country is at the union average, monetary policy faces a worst case scenario: for the group of countries above aggregate inflation, monetary policy will be too loose, and for the group of countries below aggregate inflation, monetary policy will be too tight.

In order to assess the distribution of the euro area inflation, we use the coefficient of variation, computed as the standard deviation divided by the mean. Then we construct a corridor, based on the two extreme scenarios, that functions as reference for the actual distribution.<sup>18</sup>

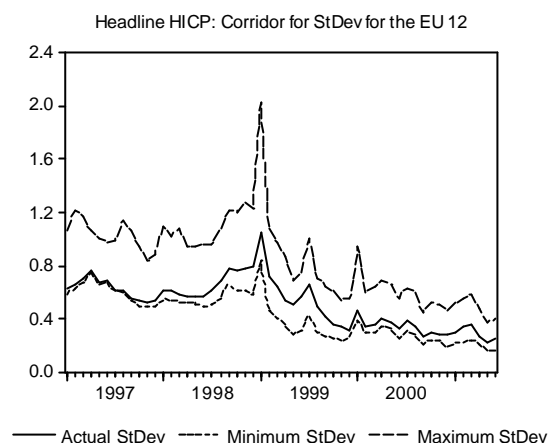
In Figure 8 we present the corridor for inflation rates of the twelve EMU member states since 1997. We observe that in most cases the actual standard deviation is quite close to the theoretical minimum

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<sup>18</sup> See Maier and Hendrikx (2002) for a formal representation of the corridor as indicator for the distribution of countries around the mean.

value, implying that the member states are positioned closely around the average HICP inflation. This means that the situation in the euro area is currently characterised by few outliers, not by groups of countries.

**Figure 8: Distribution of the EU 12 countries around euro area inflation**



## 5. External pressure and public support in an enlarged EMU

From a public choice perspective the impact of EMU enlargement clearly goes beyond purely economic areas. The discretion of national policymakers is sharply reduced, as responsibility for some policy fields (e.g. monetary policy) is shifted to the European level. Therefore, the balance between policymakers and national interest groups in the accession countries changes significantly: national policymakers have less to “offer” to interest groups, as in important policy fields their hands are tied.<sup>19</sup>

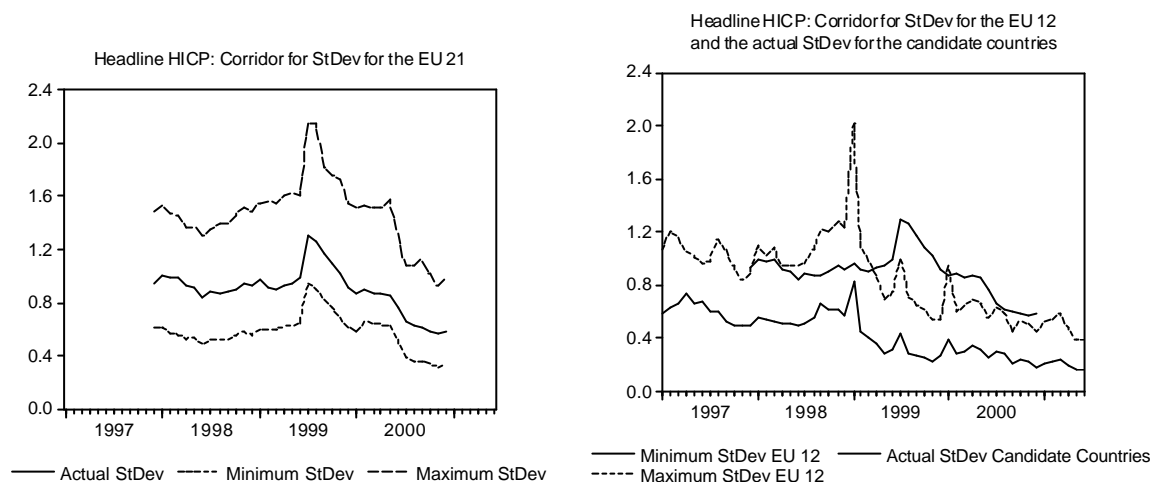
Our previous finding was that interest groups have largely ceased their attempts to influence European monetary policy. There is no reason to assume that this might change in an enlarged EMU. Also the degree of homogeneity across the individual euro area members was relatively high, both economically and in their desired policy stance, which is hardly surprising, given that one major economic finding (section 3) was that inflation dispersion in the euro area is not higher than in other monetary unions. This might be different, if EMU enlargement occurs very quickly: we have seen that if the candidate countries joined ‘today’, without further macroeconomic convergence, inflation dispersion would increase by 50-100% (depending on the dispersion measure). This may have strong implications for our conclusions about external pressure and public support on the ECB. The distribution of the countries around the mean is of particular interest, first to assess whether the homogeneity of countries in their desired policy stance will prevail, but second also to investigate public support.

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<sup>19</sup> Bofinger (1998) concludes that EMU enlargement entails massive shifts in political power in the accession countries, from which traditionally weak interest groups (consumers, exporters) might benefit, whereas traditionally stronger interest groups (such as import-competing firms) might lose.

To assess the distribution of the EU 21 around the inflation rate in the enlarged euro area we use the corridor, as presented in the last section. Previously, we concluded that the spread in the EU 12 was determined by few outliers. The picture changes quite dramatically when the accession countries are included in our analysis.

**Figure 9: Distribution of the EU 21 around the enlarged euro area inflation rate**



The left part of Figure 9 shows the corridor for the “EU 21”, that is the EU 12 plus the candidate countries.<sup>20</sup> Compared to Figure 8 the spread increases quite sharply, and the actual scaled standard observation moves on average somewhat closer to the maximum.<sup>21</sup> How big the changes are becomes clearer if the corridor for the EU 12 (Figure 8) and the measure of dispersion for the candidate countries are plotted in one graph. We see in the right part of Figure 9 that the *actual* scaled standard deviation of the EU 21 in many cases is even higher than the potential *worst case* scaled standard deviation for the EU 12. This means that the worst possible situation for the current euro area in terms of inflation dispersion is even better than the actual situation for the EU 21. Additional analysis showed a relatively clear distinction between two groups of countries: one has relatively low inflation rates, the other features relatively high inflation (the range is from 1% to 5% and from 8% to 12%, respectively).<sup>22</sup> Given the huge differences in price levels, it is rather unlikely that inflation rates in the candidate countries will converge to same low levels as in the current EMU members.

This implies that a monetary policy stance, orientated at the enlarged euro area aggregate, might not be appropriate for the accession countries. Put differently: if the national central banks in the candidate

<sup>20</sup> Again we decided to leave out Bulgaria and Romania.

<sup>21</sup> This methodology does not allow testing the statistical significance of this upward movement.

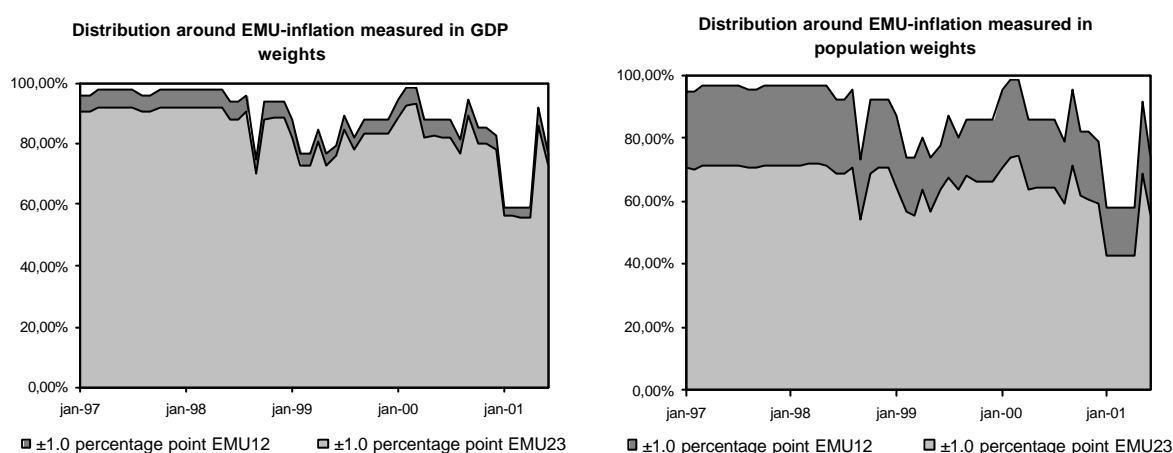
<sup>22</sup> However, not all EU 21 countries belong to the high inflation group. Going back to the raw data we observe that inflation rates in Cyprus, Czech Republic, Lithuania and Latvia are all below 5%. Of the *candidate countries* they account for less than 20%.



countries placed the same weight on inflation as European monetary policy, they would have set different levels of interest rates.

Note that we are using the *unweighted* scaled standard deviation to compute this corridor. The impact on the weighted standard deviation is certainly less apparent, since these countries would enter the euro area with low (initial) weights. This corridor cannot be computed for weighted standard deviations and therefore one might argue that excessive weight is placed on outliers. Still, for the peoples' sentiments in the accession countries the unweighted standard deviation is the best representation, as high national inflation in, say, Poland or Slovakia hurts people in these countries – and it is no really a relief for Polish people to know that your own bad situation only account for a low percentage of euro area inflation.

**Figure 10: Economic and political weight of the accession countries**



Economically the impact of the accession countries on the euro area is rather limited. Politically, it is not: the economic weight of all candidate countries, relative to the current euro area, is only about 5%. This sharply contrasts with a political weight of about 30% of the enlarged EMU population. This means that while economically, the impact of the candidate countries on the formulation of the policy stance is comparatively limited, the number of people potentially suffering from too high or too low interest rates might be significant.

In what follows, we visualise the difference between the economic and political weights of the accession countries. Our proxy for the economic weight is GDP, political weight is proxied by population.<sup>23</sup> We use the following simple illustration: we identify the countries and their corresponding weights – in economic and political terms – that are positioned within a  $\pm 1$  percentage point band around the

<sup>23</sup> The population figures are taken from the International Financial Statistics of the IMF.

euro area inflation rate (monthly data).<sup>24</sup> Figure 10 shows the economic and political mass represented by the countries falling within this band, both for the current EMU (dark grey) and for the enlarged EMU 23 (light grey).

We see that the difference between the EU12 (dark grey area) and the EU23 (light grey area) in terms of economic weight is relatively small (left part of Figure 10), as the economic power of the accession countries is small compared to the EU12. However, in terms of political weight measured by population size, the picture changes considerably (Figure 10 right part). While on average about 80% of EU23 GDP lies within a band of HICP inflation  $\pm 1$  percentage point, the percentage of EU23 population covered is sharply lower (the minimum is below 45%!). This implies that more than half of the EU23 population would have inflation rates that deviate more than 1% from the enlarged euro area inflation rate.

## 6. Conclusion

Entering a monetary union entails costs and benefits. In this paper we have examined some of the costs of quick EMU enlargement for both the accession countries and the current EMU members. Monetary policy typically focuses on average data for the monetary area and cannot take into account regional inflation rates. This is nothing new, of course, but in a monetary union the complication can arise that regions are in fact nation states. Then, if monetary policy is structurally too tight or too expansive, because some countries strongly deviate from the union average, public acceptance of this single monetary policy might suffer. This could be harmful for the reputation of the common central bank, in particular if public pressure on the central bank results. Therefore, when considering EU enlargement economic and political factors need to be considered.

The final decisions on EU and EMU enlargement will be political ones, not exclusively based on economic needs. But obviously an adoption of the euro in the accession countries will have important economic and political implications. In this paper we have argued that economic consequences for the current euro area will be rather limited, due to the small weight of the accession countries. However, the long run consequences from a political economy perspective might be costly for the ECB, if initial economic convergence is low. As econometric analysis was not possible, we have used different approaches to highlight the political consequences of the sharp increase in economic dispersion. This is not to say that quick EU or EMU enlargement might not be desirable on economic grounds – after all, quick accession might bring also about additional benefits.<sup>25</sup> But in our view it is important to realise

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<sup>24</sup> We computed a hypothetical  $\mathbf{p}^{HICP}$  for the EU23 based on actual GDP weights and inflation rates of the EU23 to simulate the enlarged monetary union. For the EU12 we use HICP data.

<sup>25</sup> In that respect it is important to distinguish between the benefits of entering EU and EMU – we suspect that the benefits of entering the former could outweigh the benefits of quick adoption of the single currency.

the consequences for the external position of the ECB, if due to a high degree of economic dispersion the single monetary policy is not fully suitable for the EMU accession countries.

Therefore, entry to the currency union should be based on economic convergence, simply because the performance of Europe as a whole depends on the appropriateness of European monetary policy for all member countries. Political pressure on European monetary policy could increase and public support could decrease, if economic diversity exceeds a certain level. So despite the fact that quick accession to the European Union may be politically desirable, accession to the European *Monetary* Union should be based on economic fundamentals.

## Appendix: Data sources

### **Newspaper index**

The data sets were built by screening all articles related to the ECB for the period Jan 1999-Feb 2002 (weekly data). For each article the main actors, the main statements and the date of appearance was noted. It is important to stress that in the index we have only included articles calling for lower or higher interest rates, i.e. articles with direct ‘policy implications’. Articles expressing a general frustration about monetary policy strategy (i.e. the ECB’s two pillar-approach) without direct implications for interest rate decisions, or articles related to the start-up of the ECB, are not included in the index. In addition, discontent with the euro exchange rate was not included, since this discomfort did not translate into a preference for higher or lower interest rates. Therefore, the index mirrors external demands to change interest rates, but not the ‘general opinion’ about monetary policy or the ECB.

Articles demanding a more restrictive monetary policy were counted as +1 (positive pressure), each article calling for monetary ease was counted as –1 (negative pressure). The news indicator for each category consists of the simple, unweighted sum of pluses and minuses. This closely follows Havrilesky's methodological approach. If an approval statement contains also a demand for further policy measures (“we are glad interest rates were lowered, but this was only a first step and further policy measures are necessary”), then such a statement was classified as pressure. For the “support index” we counted all articles expressing approval of current monetary policy as +1 (positive support) and disapproval as –1 (negative support). The articles were classified according to the sectors government, banks, industry, trade unions and others. Additionally, the articles were grouped per country.

A number of cross-checks were done, which showed that by and large all news was consistently reported in all newspapers, i.e. also across all countries. Although we would have liked to include more newspaper, this data was not available to us, but the checks indicates that the added-value of having more newspapers is likely to be limited. The total number of articles exceed more than 100 and 60 for the ECB pressure and support indices, respectively.

## Other data

The regional inflation data for the German Länder is taken from De Haan et al. (2002). Spanish regional inflation was provided by Alberola and Marques (2000), regional inflation data for the US Fed Districts was taken from Wynne and Koo (2000). The data sets for external pressure and public support of the Bundesbank were taken from Maier et al (2002) and Maier and Knaap (2002).

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