

# Economic interests and public support for the euro

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**ABSTRACT** Although economic theories have been advanced to explain public support for the common currency, we know very little about how public support for the euro has been affected by its economic impact. We hypothesize that concern about rising prices following the introduction of the euro may have dampened enthusiasm for the project. We use Eurobarometer data from 2000–2007 to examine how rising prices and other economic factors have shaped support for the euro. We find that while inflation has had a negative impact on support for the euro, this is offset by the positive effect of diffuse support for the European Union. This support, along with the impact of a strong currency, has led most (approximately two-thirds) of Europeans to be generally positive about the euro.

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**KEY WORDS** Common currency; euro; European integration; inflation; public opinion.

## 25 INTRODUCTION

With the European monetary union (EMU) celebrating its tenth anniversary in 2009, the euro has now settled into the minds and markets of more than half of the 27 European Union (EU) member states. After a somewhat rocky start in terms of its value, the common currency, which was first introduced into circulation in 12 member states in 2002, has strongly rebounded to be considered a viable alternative global reserve currency and competitor to the US dollar. Despite continued British reservations about its own membership, the eurozone has expanded eastward to include Slovenia in 2007 and Slovakia in 2009, and southward in 2008 to include Malta and Cyprus. Additional central and eastern European member states look to join in the near future (Estonia, the Czech Republic, and Hungary) or within the next five years.

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Despite this rapid embracing of the euro, the mood within the EU has not been quite as robust. The rejection of the referendums on the European Constitution in France and in the Netherlands in 2005 highlighted divisions over the future of Europe. Further efforts to address the perceived democratic deficit in the EU through the Reform Treaty were complicated by the Irish rejection of the Lisbon Treaty in 2008. In addition, a cloudy or mixed economic outlook for the eurozone economy suggests difficult times ahead for the EU project.

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This paper examines how the economic impact of the common currency has influenced support for the euro. Despite a surface level 'strength' to the euro project, we hypothesize that concerns about a loss in purchasing power may have weakened support for the euro. We focus on the extent to which these economic concerns as opposed to other explanations structure support for the common currency.

### CHANGING ECONOMIC CONDITIONS AND EURO SUPPORT

The frequent use of referendums on European integration underscores the importance of public opinion to the success of the European project. A review of the literature reveals a range of theories that might help to understand the relationship between public opinion and European common currency. Explanations for public support for European integration can be grouped, generally, into utilitarian and identity theories. The utilitarian perspective relies on self-interested explanations of political attitudes and suggests that citizens are more likely to support integration if it results in a net benefit to the national economy or their own pocketbook (Eichenberg and Dalton 1993; Gabel 1998; Gabel and Palmer 1995; Anderson and Reichert 1995). Given its economic implications, it is reasonable to expect opinions about the euro to be shaped by economic self-interest and that, consequently, those who have the capacity and resources to benefit from monetary union will be more supportive (Karp and Bowler 2006). Even prior to adoption, previous studies found considerable empirical support for these claims in shaping attitudes about the common currency (Gabel and Hix 2005; Kaltenthaler and Anderson 2001; Banducci *et al.* 2003).

One of the more obvious economic consequences associated with the introduction of the new currency is its impact on purchasing power. Prior to the introduction of the common currency, high inflation was associated with higher levels of support for the euro (Banducci *et al.* 2003), suggesting that citizens expected the European Central Bank (ECB) to bring about stability and lower inflation. If these expectations are not met then support for the euro should decrease.

Although the adoption of the euro promised to bring stability in the long term, fears that price rises would accompany the introduction of the euro were widespread. A 2001 Eurobarometer revealed that two-thirds of European citizens feared cheating on prices once the euro came into circulation.<sup>1</sup> According to Eurostat (2003), these fears appear to have been unwarranted. The official rate of inflation within the eurozone remained at 2.3 per cent in 2002, the same as in 2001. Nevertheless, it did acknowledge in its report that price rises were evident in the service sector, such as restaurants and cafés, hairdressers, and recreational and sporting services. Consumers may have been more sensitive to these increases as they are likely to place greater weight on price changes of frequently purchased goods than on less frequently purchased goods (Angeloni *et al.* 2006: 369; Dziuda and Mastrobuoni 2007).

The introduction of the euro also coincided with a strengthening US dollar which may have affected support. The exchange rate, in particular, is not only an indicator of purchasing power but also has important symbolic value. While economists may suggest that a weak currency may have certain advantages, a strong currency can be seen by citizens as a symbol of economic strength (Hobolt and Leblond 2009). When the euro first traded on world currency markets in 1999, its initial value was set at close to 1.20 dollars per euro. The new currency soon depreciated in value against other major currencies. In the first 16 months, the value of the euro plunged more than 20 per cent against the US dollar. The euro continued to depreciate, dropping to a low of 0.84 euros against the US dollar in 2002. At the time, economists feared that the euro's decline would raise the price of imports, reduce the standard of living and contribute to inflationary pressure. By 2003, the trend had reversed and the euro steadily gained in value, reaching its launch value by mid-year. By the end of 2007, the euro had reached a peak of 1.50 euros against the dollar.

Another economic indicator that may play a role in shaping attitudes about the common currency is a country's budget deficit. Prior to the adoption of the common currency, convergence criteria required countries to reduce their debt which produced a 'squeeze effect' for countries with loose fiscal policy (Gärtner 1997). An analysis of public support for the euro prior to its adoption, using individual level data, found that support for the euro was lower where debt decreased (Banducci *et al.* 2003: 698). The lack of support associated with a reduction in debt can be interpreted as a negative reaction to austerity measures or squeeze produced by tighter fiscal policy. These austerity measures still exist as a result of the Stability Pact of 1995 and the ongoing surveillance of government macroeconomic policy by the European Commission and the ECB. While some eurozone members have slipped in terms of adhering strictly to the guidelines, such as the 3 per cent target for annual deficits, eurozone members have largely continued to maintain the stability focus required by the Pact. Moreover, the ECB has upheld a tough policy line demanding that eurozone members maintain fiscal austerity. The ECB's decision not to follow the lead of other central banks to lower interest rates until October 2008, despite a spreading fear of economic downturn across Europe (triggered in large part by economic slowdown in the United States), is a reflection of its tough stand on inflation and its concern about how government spending might negatively impact the Bank's targets.

Finally, previous studies have also suggested that other indicators of economic stability, such as low unemployment, are a key byproduct of economic union and the monetary policy of the ECB. Citizens are expected to prefer stability in employment brought about through monetary union. Past research has demonstrated that higher unemployment leads to increased support for a common currency although the effect is not consistent across model specifications (Kaltenthaler and Anderson 2001).

While these economic concerns may shape public support, they may nonetheless feature less prominently than other factors. Some have suggested

that feelings of national identity and pride (Gabel and Hix 2005; Risse 2003) or feelings of political community (Jupille and Leblang 2007) exert a more powerful influence. Indeed, the creation of territorial currencies was viewed by policy-makers as a way to strengthen national identities (Helleiner  
 140 2003). Those familiar with the story of Germany's decision to join EMU (see, for example, Loedel 1999; Risse 2003) know that the German public's attachment to the Deutschmark weighed heavily on the political decision to join EMU. In a survey in Austria prior to the euro's adoption, Meier and Kirchler (1998) found that extreme attitudes about the euro were  
 145 linked to individuals' preoccupation with national identity. The adoption of the common currency has meant a fundamental shift in the role of the nation state, and we expect that those with strong national identities will be less supportive while those with a strong European identity will be more supportive.

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### THE PUBLIC'S REACTION TO THE CHANGEOVER

A qualitative study conducted shortly after the introduction of the new currency in May 2002 gauged citizens' reactions to the new currency, based on in-depth  
 155 interviews with at-risk groups (the elderly and socio-economically disadvantaged) and a control group of 'average citizens' (European Commission 2002). Based on spontaneous reactions to the euro, citizens' attitudes reflect positive experiences, both expected and unexpected, as well as some expressions of uncertainty about the effect of the euro on prices. Positive expressions encompassed both instrumental benefits as well as symbolic benefits. Interviewees  
 160 pointed to the unexpected ease of the transition to the new currency, the increased ease in travel as well as the contribution of the common currency to economic stability. Other respondents' comments that 'I feel closer to other countries', and 'In sharing the same single currency I feel more connected with the rest of Europe', illustrate the ability of the currency to bring Europeans  
 165 together and build a sense of shared identity (European Commission 2002: 8). There was, however, some nostalgia among the elderly participants for the old currencies such as the French franc or the Greek drachma ('the oldest currency in the world').

170 Negative reactions to the currency centred on the feeling that prices had risen considerably with the introduction of the euro. The sentiment that purchasing power had been reduced was expressed across all categories of individuals and in all countries, being particularly true in the Netherlands and Germany (European Commission 2002: 20). Generally, people expressed the feelings that  
 175 their money was not 'lasting as long', 'buying as much' or 'going as far' as before. The source of the increase in prices was identified as rounding up and businesses taking advantage of the change in currency to raise prices. One Dutch respondent said, 'There's no doubt that prices have gone up ... people have taken advantage of it', with another adding, 'Prices have been  
 180 rounded up just about everywhere' (European Commission 2002: 21).

Clearly, as is noted in the qualitative research conducted directly after the introduction of the euro currency, European citizens are concerned about price increases. These concerns were echoed in a Flash Eurobarometer conducted in May 2002. While a majority of respondents found the benefits of cheaper and easier travel and easier price comparison noteworthy, many citizens were still convinced that the introduction of the euro would still increase prices (especially in the removal of small denominations from their own national currencies). More pointedly, respondents widely believe that the euro has had a negative effect on prices. Over 80 per cent of all citizens believe that the euro has added to the increases in prices.

The sensitivity of the public to the price mechanism could also be the result of a majority of citizens still calculating prices based as much on old national currencies or a mix of national currencies and the euro. For example, 69 per cent of respondents still calculate prices on national currencies compared to 29 per cent when making exceptional purchases (buying a car or house). Even small purchases are still calculated either in national currencies or a mix of the euro and national currencies by 44 per cent of the population. Finally, a majority (59 per cent) of respondents suggest that they are either buying less out of fear of spending too much or buying more because they have difficulty realizing how much they have spent. In short, citizens' measures of how the euro is affecting their price calculations and the cost of goods are still high. An even more recent study of public opinion completed by the European Commission finds an almost even match between citizens' concerns with unemployment and inflation (27 per cent to 26 per cent respectively).<sup>2</sup> More strikingly, citizens' concerns with inflation have risen 8 per cent since early 2007. Furthermore, in Slovenia, which introduced the euro in 2007, 63 per cent of respondents noted inflationary concerns. This represents an increase of 45 per cent compared to the previous year. Clearly, citizen perceptions of the euro's inflationary impact appear to be quite strong.

The public's perception of price increases does not necessarily reflect the view coming from the ECB. The ECB uses a quantitative definition of price stability. The first measure is a reference value for the growth rate of a broad monetary aggregate (namely, M3: the stock of notes and coins in circulation, the value of bank current accounts, and deposit or interest-bearing accounts). The ECB's own measures of the growth of M3 since 2002 indicate some concern about uncertainty and volatility, sometimes rising outside the ranges desired by the ECB. However, in general, this more technical definition and the management of it have not generally caused the ECB to shift interest rates (Howarth and Loedel 2005). More important is the second measure, the Harmonized Index of Consumer Prices (HICP). The HICP for the euro area is based on national HICPs, which follow the same methodology in all euro area countries (European Central Bank 2008). The HICP covers monetary expenditures on final consumption by households in the euro area. An examination of this measure of 'inflation' indicates that the eurozone HICP ranged, on an annual rate of change, between 1.5 and 2.75 during the period 2002–2007.

There was a more recent surge to over 3 per cent in the last months of 2007 and early 2008, but nothing to indicate any dramatic ‘surge’ in prices, either after the introduction of the euro in 2002 or over the next five years. Moreover, interest rates have remained within a fairly narrow range throughout the time frame since the euro’s introduction in 2002.<sup>3</sup>

### UNDERSTANDING CHANGES IN SUPPORT FOR THE EURO

To examine public support for the euro, we rely on data from the Eurobarometer, which is conducted on behalf of the European Commission and regularly surveys citizens in each of the member states about their opinions on European matters. We aggregate for each member state year responses to a question about whether an individual was for or against a ‘European monetary union with one single currency, the euro’.<sup>4</sup> Figure 1 displays the proportion of respondents in each member state who said they were in favour of a single currency from 2000–2007. The 15 EU member states are grouped by region and whether they are enthusiastic or sceptical about EU membership.

Although monetary policy has been relatively stable, support for the euro has varied considerably since its introduction. Clearly, outside the eurozone mass opinion is more negative than within the eurozone. The euro note’s introduction in 2002 appears to have lifted support somewhat outside the eurozone but the overall level of support has remained relatively stable since 2002. The largest increase in support is evident in those countries within the eurozone that could be characterized as ‘eurosceptic’. In both Austria and Finland, where a majority on average do not support European membership across the time period, there was an approximate 20 per cent increase in support for the

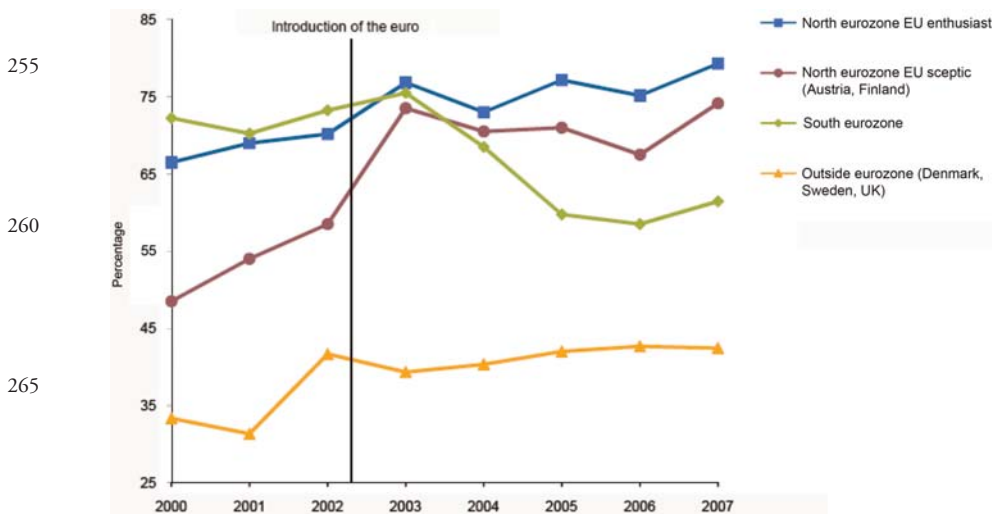


Figure 1 Changes in support for the euro (2000–2007)



euro between 2000 and 2003. The apparent euphoria surrounding the introduction of the euro continued through 2007. The overall level of support in Finland and Austria now approximates to that of the more enthusiastic EU members in the north. Unexpected, however, is the loss of support in the southern member states (Greece, Spain, Portugal and Italy). Support for the euro has declined sharply in these states, from an average of three-quarters to two-thirds support. It should be noted that despite the sharper decline, support remains well above 50 per cent. In comparison, support in the northern member states continues to rise.

The trends in Figure 1 indicate that support for the euro has shifted substantially over time. These changes have occurred primarily within the euro zone and appear to be independent of support for EU membership. While support increased in the eurosceptic countries, support decreased substantially in the south which was initially more enthusiastic about the euro than anywhere else in the EU. To determine whether these changes can be attributed to economic influences, we undertake a multivariate analysis using pooled public opinion and economic data from the 15 member states. We chose to start the time series data in a year prior to the introduction of bank notes to capture any shifts in opinion that accompanied the changeover.<sup>5</sup> Several indicators are used to assess the impact of economic factors on euro support. We use the inflation level as an indication of price stability, as measured by the annual rate of change in the HICP. The effective range is limited given the convergence criteria. Nevertheless, inflation does vary across space and time between 0.8 and 5.1. The change in the exchange rate against the US dollar is used to measure changes in the value of the euro. As the euro increases in value against the US dollar, support should increase. To capture the impact on fiscal policy, the level of deficit (or surplus as a percentage of gross domestic product (GDP) is used to represent any 'squeeze' in government spending which is the result of meeting convergence criteria (see Banducci *et al.* 2003). We include the rate of unemployment as another indicator of economic stability.<sup>6</sup>

In the model, we also use the lagged level of euro support and control for the level of general EU support measured by the proportion of respondents who say that EU membership is a good thing. We also control for GDP.<sup>7</sup> These controls provide a fairly robust test for the effects of economic conditions on aggregate support for the euro.

Given that the data are pooled time-series cross-sections (TSCS), statistical issues arise which make estimation using ordinary least squares (OLS) problematic (Stimson 1985; Beck and Katz 1995). A common technique to deal with the problem is to adjust for autocorrelation by using panel corrected standard errors (PCSE) (see Beck and Katz 1995). However, this fix only addresses the problem of autocorrelation (if it exists) within the TSCS and does not take into account heterogeneity either in intercepts or slopes across the panel units or given full consideration to modelling dynamics (see Wilson and Butler 2007 on these points). Following specification tests for autocorrelation and unit-time effects (a fixed effects model), we find no significant autocorrelation but

significant unit-time effects. Therefore, we use a fixed effects model to estimate how economic factors influence euro support.<sup>8</sup> We estimate a model using data across all original 15 member states and then compare this to a model using only countries inside the eurozone. Table 1 shows the results from a fixed effects pooled cross-sectional model.

Our initial test of the model shows that the most important economic indicators are the change in the exchange rate and the level of inflation. Our indicator of the squeeze effect – the deficit – does not have a significant impact on euro support nor does unemployment either inside the eurozone or across all member states. This result is inconsistent with earlier findings prior to the introduction of the currency (see Gärtner 1997, for example). However, it does reflect some of the findings from individual-level analysis where objective economic indicators were found to have little impact (see Gabel and Whitten 1997, for example).

Although the qualitative studies after the introduction of the euro suggest that citizens may have blamed the euro for high prices, the coefficient for inflation,

Table 1 Economic conditions and support for the euro (2001–2007)

	<i>15 original member states</i>	<i>Inside eurozone</i>
Lagged euro support	0.44** (0.08)	0.56** (0.09)
Inflation	-1.64 <sup>a</sup> (0.97)	-0.78 (1.03)
Deficit/Surplus (as % GDP)	0.05 (0.45)	-0.70 (0.55)
Unemployment	0.31 (0.72)	0.76 (0.77)
Exchange rate change	0.27** (0.09)	0.35** (0.10)
GDP	-0.02 (0.20)	0.02 (0.21)
EU membership a good thing	0.51** (0.11)	0.51** (0.13)
Euro in circulation	-4.13 <sup>a</sup> (2.35)	-4.91* (2.40)
Constant	11.43 (9.59)	-1.73 (11.99)
N	105	84
$R^2$	0.74	0.58
Within	0.50	0.58
Between	0.80	0.65

Notes: Exchange rate is the change in the euro exchange against the US dollar.

Standard errors are in parenthesis.

\*\*  $p < 0.01$ ; \*  $p < 0.05$ , <sup>a</sup>  $p < 0.10$ .



while in the expected direction, is not statistically significant in the fixed effects model within the eurozone. Across all 15 member states, higher inflation appears to have a negative impact on levels of euro support. A 1 per cent increase in inflation is predicted to lower euro support by over 1.5 per cent, whereas we  
365 see no significant effect of inflation inside the eurozone.<sup>9</sup> This lack of evidence for the objective indicator of inflation effects on euro support does not square with the evidence from the focus groups or surveys in the post-introduction period.

While inflation does not appear to have affected support within the eurozone,  
370 the change in the exchange rate of the euro does appear to have a strong impact. The results suggest that a stronger euro (relative to the US dollar) boosts support which is consistent with other research showing that citizens are more reluctant to give up their national currency when it is strong (Banducci *et al.* 2003). Given the increase in the value of the euro over time, we were concerned that the  
375 exchange rate, as it varies only across time and not countries, might be acting as a proxy for time. However, including a trend variable in the model along with the exchange rate does not alter the results. Furthermore, the trend variable, when included on its own in the model, is not significant. Therefore, we are confident that we are picking up effects of the exchange rate.

380 Finally, general levels of EU support are tied to more specific support for EU monetary policy in the form of the euro. A 1 per cent increase in general EU support increases euro support by a half of a percentage point. By controlling for general support, we have provided a more robust test of the effect of various economic indicators on the euro. The results indicate that the strength of the  
385 euro against the US dollar has affected public support more so than inflation, independent of general feelings about the EU. It should be noted that our aggregate model does not explicitly compare cultural explanations for euro support except in suggesting that general support is linked to specific support. In our individual level analysis that follows, we investigate more thoroughly the role  
390 of identity in structuring support for the euro.

## A MODEL OF EURO SUPPORT

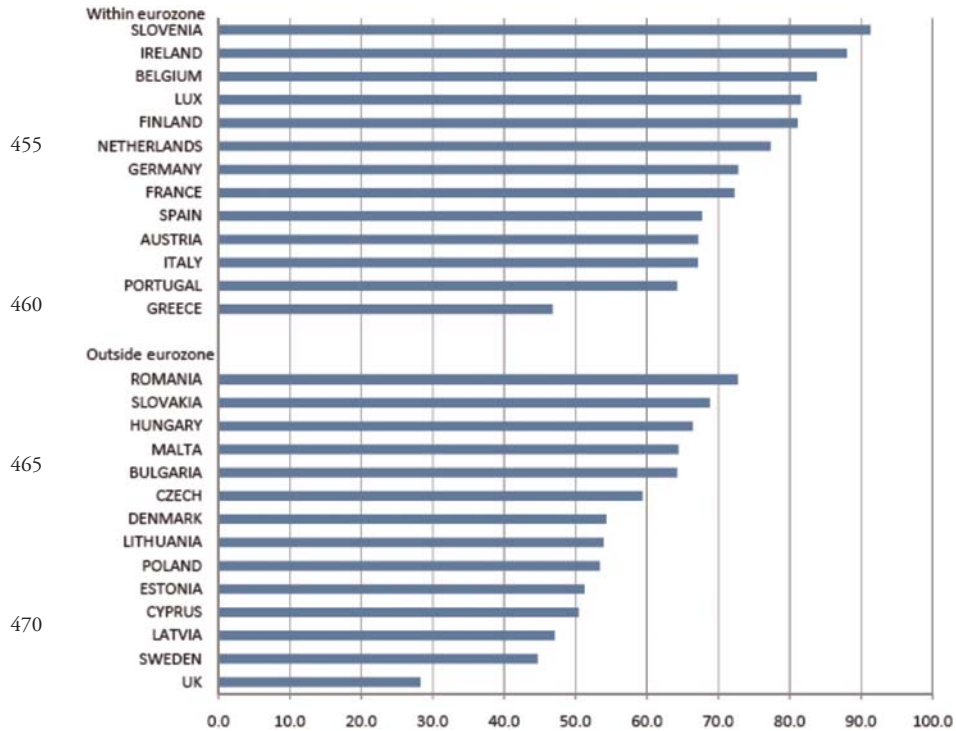
While the results presented so far suggest that some economic factors influence  
395 overall support, it is not clear how economic perceptions structure support. Nor is it clear how these factors weigh against other factors that are believed to play an important role in shaping individual opinions. In models of economic voting, perceptions of economic conditions weigh more heavily in decision-making than do the actual economic indicators (see, for example,  
400 Lewis-Beck 1988). Gabel and Whitten (1997), when investigating why Eichenberg and Dalton (1993) found little evidence of economic indicators influencing support for European integration, posit that perceptions of economic conditions rather than objective indicators may be more relevant. For example, the actual inflation rate may not have an impact because citizens  
405 perceive inflation to be much higher than it actually is. Likewise, even if we

find little evidence that objective economic indicators matter in explaining euro support, we nonetheless may expect perceptions of the economy to influence variations in support for the euro. Namely, a belief that prices (or inflation) are high will decrease support for the euro. Furthermore, in the post-introduction phase, evaluations of national economic performance should increase support. However, we expect that these economic indicators will be tempered by general EU support and feelings of European and national identity. Overall, we expect that general EU support and a stronger European identity will boost euro support while strong national identity should decrease support. We also expect that outside the eurozone, where citizens do not have the day-to-day experience with the euro and may not link it to inflation, opinion will be structured more by attitudes about the EU, general support and identity. To the extent that domestic economic conditions matter, the stronger the economy, the less likely that citizens will agree that the euro is necessary.

To examine these questions, we rely on data from Eurobarometer 67.2, conducted in April–May 2007. The expansion of the EU to 27 member states as of 2007 provides a more diverse set of countries that includes ten new members that are former communist countries. An analysis based on data from 2007 also provides a sufficient amount of time since the changeover to gauge how the euro has settled into the minds of Europeans. Note that, at the time of the survey, the euro traded at a record high against the US dollar (1.35). We use the same question that was reported in the aggregate analysis. Therefore, the descriptive statistics show the proportion of respondents who say they are ‘for’ the euro.

As Figure 2 shows, there is considerable variation among EU member states, both within and across the eurozone.<sup>10</sup> Support is lowest in the UK, with fewer than 30 per cent in support of the euro, and strongest in Slovenia, the newest member, with over nine in ten supporting the euro. As reflected earlier in Figure 1, support is generally lower outside the eurozone. Within the eurozone, support is lowest in the southern member states. Overall, with the exception of Greece, over 50 per cent of respondents within the eurozone support the euro.

The 2007 survey includes several items that provide for a test of the euro’s economic impact. These include an item asking respondents to identify the current inflation rate. Reflecting a substantial degree of ambivalence, just over half the sample (51 per cent) were not able to provide an estimate. Within the eurozone, 22 per cent estimated the inflation rate to be between 2 and 5 per cent while 12 per cent estimated it to be above 5 per cent. Outside the eurozone, citizens were more likely to estimate a higher rate; 25 per cent estimated a rate above 5 per cent. Because we are interested in how perceptions of prices influence support for the euro, we are not concerned about the fact that many respondents could not estimate the rate or provide a correct estimate. Of all economic concepts, citizens do seem to have the greatest understanding of and knowledge about inflation (Walstad 1997). Another economic item asks



475 *Figure 2* Support for the euro across the EU (2007)  
 Source: Eurobarometer 67.2 (Spring 2007).

respondents to assess the current situation of the national economy ranging  
 from very good (+2) to very bad (-2). Those without an opinion are placed  
 480 in the middle of the scale (0). Again, we expect that those who perceive inflation  
 to be high or the national economy to be bad will be less supportive of the euro.  
 However, outside the eurozone, inflation and a poor economic performance of  
 the national government will lead to greater support for the euro.

To assess the impact of identity, an item measuring the strength of attach-  
 485 ment to country and to the EU is used where those responding that they are  
 'very attached' are coded as a '1', while others are coded as '0'. One variable  
 then indicates attachment to the EU and the other to the individual's  
 country. As outlined earlier, identity has played an increasingly important  
 490 role in the analysis of public support for the EU. However, given the symbolic  
 importance of currencies, we would expect that national identity would be  
 linked to less support for the euro while European identity leads to greater  
 support for the euro.

To control for general support for the EU, we rely as above on the item that  
 495 measures whether citizens believe their country's membership is a 'good thing'  
 or a 'bad thing', which ranges from +1 to -1. Ambivalent responses are

placed in the middle of the scale and coded as '0'. The inclusion of general support for the EU raises the issue of the relationship between general support of institutions and that of specific policies. Most models of general EU support suggest that utilitarian concerns and identity play key roles in structuring attitudes about European integration. Yet, it is also conceivable that support for specific policies, such as the common currency, may influence levels of more general support. While our main interest is in modelling support for a common currency, we must also take into account the possibility of a reciprocal relationship. This endogeneity is consistent with models that suggest that governmental policy performance underlies political support (Evans and Whitefield 1995; Mischler and Rose 2001). Therefore, we tested a structural model allowing the causal arrows to run both ways between euro support and general support for EU membership. While the results indicate support for a reciprocal relationship, the estimates for our main variables of interest do not change significantly. Therefore, we treat support for EU membership as an exogenous variable.<sup>11</sup>

Education is measured by the age at which a citizen stopped full-time education. Those with a high level of education are classified as ending their education in their 20s, while those with a medium level of education are those ending their education between 16–19 years of age. The comparison group is students and those ending their education before the age of 16. We also include dummy variables for citizens who are out of the labour force and are either unemployed or full-time students. Age and gender are included in the model as controls. As with the aggregate analysis, the dependent variable is based on those who are 'for' 'a European Monetary Union with one single currency, the euro'. Those who are against or those who are ambivalent are placed in the residual category. Given that we have different expectations about the effects of these variables on euro support where the euro has been introduced, we estimate two separate models for countries within and outside the eurozone. The results are presented in Table 2.

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## RESULTS

There is clear evidence that economic evaluations structure support for the euro within the eurozone. Those with positive assessments of the national economy are far more likely to support the euro than those who are pessimistic. Concerns about high inflation rates also appear to dampen support for the euro. Those who believe that inflation exceeds 5 per cent or those who are unsure about the rate are less likely to support the euro than those who believe that the inflation rate is less than 2 per cent. These results provide evidence that concern about rising prices dampens support for the euro. However, the effects of inflation do not appear to be as substantial as one might expect; the change in probability in support for the euro between those who perceive inflation as high compared to those who perceive it as low is just 6 per cent. We expected a positive effect of inflation outside the eurozone, but high inflation has a negative impact. Generally, outside the eurozone, the economic

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Table 2 Explaining support for the euro

	Eurozone			Outside eurozone		
	Coef.	Robust S.E.	Min-Max	Coef.	Robust S.E.	Min-Max
545 National economic performance	0.35**	(0.09)	0.25	0.06	(0.07)	0.06
Perceived inflation rate 5%+	-0.36**	(0.13)	0.07	-0.35*	(0.15)	0.09
550 Perceived inflation rate 2-5%	-0.15	(0.11)	0.03	-0.19	(0.13)	0.05
Perceived inflation unknown	-0.39**	(0.11)	0.07	-0.52**	(0.13)	0.13
Unemployed	-0.15**	(0.06)	0.02	-0.08	(0.06)	0.02
National identity	0.03	(0.12)	0.01	-0.26**	(0.07)	0.06
EU identity	0.74**	(0.14)	0.11	0.85**	(0.10)	0.20
EU membership a good thing	0.94**	(0.06)	0.38	0.94**	(0.05)	0.44
555 Female	-0.25**	(0.06)	0.04	-0.35**	(0.06)	0.09
Age (in 10s)	-0.05	(0.34)	0.01	-0.48*	(0.21)	0.10
Student	0.92**	(0.12)	0.13	0.29*	(0.14)	0.07
Medium education	0.57**	(0.09)	0.09	0.24	(0.09)	0.06
High education	0.90**	(0.12)	0.14	0.42**	(0.11)	0.10
560 New entrant	1.34**	(0.13)	0.16	0.78**	(0.22)	0.19
Constant	-0.51**	(0.17)		0.09	(0.21)	
Number of countries	13			14		
n	13,140			13,273		
Cragg-Uhler(Nagelkerke) $R^2$	0.29			0.22		

565 Notes: Robust standard errors are clustered by country; Min-Max refers to the maximum change in probability (i.e. first difference). \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Source: Eurobarometer 67.2 (Spring 2007).

570 effects on the euro are not at all clear. National economic performance has no influence on euro support but inflation does. Additionally, those who are unemployed are less supportive of the euro. These differences strongly suggest that citizens within the eurozone are linking economic performance to the euro while other factors may be at play outside the eurozone.

575 Outside the eurozone, there is little evidence that economic factors influence support. Evaluations of economic performance have no influence, while perceived inflation has a negative rather than a positive effect. In comparison, identity appears to play a greater role in euro support. Outside the eurozone, both national and EU identity are significant and in the expected direction.

580 While national identity reduces support, attachments to the EU exert a more powerful influence on support for the euro. EU identity is also a factor within the eurozone while national identity appears to have no influence. Clearly, experience with the currency produces a different structure to euro support. Economic evaluations are important inside the eurozone while identity

585 plays a more important role outside the eurozone.

Finally, attitudes about EU membership exert a powerful influence. A citizen who believes his or her their country's membership is a good thing has a probability of supporting the euro that is 29 per cent greater than a citizen who believes that his or her country's membership is a bad thing. While we note that the performance of the euro may lead to more generalized support for the EU, controlling for general support should provide a robust test of how economic perceptions and identity influence euro support. We also note that previous findings, prior to the introduction of the euro, are consistent with the view that general attitudes about European integration structure specific support for the euro. The remaining variables are largely consistent across both models. Education has a positive, though somewhat weaker, influence outside the eurozone.

## CONCLUSIONS: EUROPEAN INTEGRATION AND THE EUROPEAN CENTRAL BANK

Previous studies have found considerable empirical support for the impact of economic factors and identity on euro support. These studies relied on data that were either collected prior to the euro's introduction, when the currency remained an abstract concept, or outside of the euro zone, where the currency has not been adopted. In this paper we examined support for the common currency after the introduction of notes and coins in 2002. Whereas we find considerable evidence that euro support is responsive to economic conditions – both national inflation rates and the overall strength of the currency – we also find that identity and general EU support can boost support for the euro. Therefore, when the currency is strong and general EU support is high, there will be considerable support for the common currency.

Of the primary economic indicators, inflation was expected to have a strong negative impact on support for the euro. The official inflation rate, however, appears to be only weakly related to support across both time and space. Nevertheless, the results from the individual analysis suggest that citizens may have perceptions of inflation that do not necessarily coincide with the actual indicators. This may result from the tendency of citizens to be more sensitive to price changes of certain goods which may have increased in price. The results suggest that these perceptions do in fact influence support for the common currency. The magnitude of these effects, however, is not as great as more general assessments of economic performance, which appear to have a substantial impact on support.

Closely related, the prestige of the euro among the public will depend on how effectively the ECB can deal with various crises – from external shocks due to US dollar instability, internal shocks within certain regions, and the ongoing political question of high unemployment in some parts of the eurozone. Monetary policy decisions affect member states differently due to different national economic cycles (despite some convergence) and differently structured economies. Given the lack of financial transfer payments to

compensate those parts of the eurozone suffering from asymmetrical shocks, limited labour mobility and the strong constraints placed on the use of national fiscal instruments, the ECB's response to these shocks will be of considerable importance.

635 The long-term record may suggest that the ECB has done an effective job in moulding a broad level of public support for EMU which, in turn, has bolstered support for the European project. Thus the future of EMU rests on a solid institutional foundation. In general, citizens of the EU provide the political foundation or legitimacy for European integration. The evidence seems to suggest  
640 that the ECB has overcome, at least on one level, this legitimacy question. As demonstrated by Erdal (2005), European citizens do not seem to differentiate the common currency from the EU. Those citizens who express their support for the euro thus provide the basis of support for the larger EU project. Thus, support for the euro project, managed effectively by the ECB, will  
645 support the larger public's attitudes toward the further integration of the EU. Indeed, nearly 70 per cent of EU citizens indicated strong support for an important role of the ECB in the life of the EU (Eurobarometer 2004, No. 61). It would seem then that the ECB and the euro are powerful foundations for the future of EU integration.

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## NOTES

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1 The flash Eurobarometer 98/2 asked, 'I am going to read you four statements concerning the replacement of the [NATIONAL CURRENCIES] by the euro in daily life. Could you tell me if you agree or disagree [with the following] 'You're afraid of abuses and cheating on prices.' Q1

2 Eurobarometer 68, *Public Opinion in the European Union*, September–November  
675 2007.



- 3 For example, the main refinancing rate has ranged from a low of 2 per cent to 4.25 per cent.
- 4 This question does not focus on EU competencies such as which level of government, EU or national, should handle monetary policy but instead gauges direct evaluations of the monetary union and primes respondents to focus directly on the currency.
- 5 Changes in question wording precluded any comparisons prior to 2000.
- 6 We estimated models using three different transformations of inflation and debt: actual level of debt, change in debt and deviation from the average debt across the eurozone average. All transformations yielded similar results. However, using the deviation from the eurozone average proved to be the most robust indicator across the different estimates of the model. The change in the exchange is invariant across units.
- 7 We also tested the 'gap' in GDP, the difference between potential outputs and actual outputs (potential GDP – actual GDP). However, this economic indicator was not significant in any of the models tested so we have opted not to report its effects in Table 1.
- 8 We compared results from models estimated using fixed effects, panel corrected standard errors, autoregressive (ARIMA) and random effects. Comparison across the models suggests that a fixed effects model is appropriate. A Hausman test comparing the fixed and random effects models indicated that the null hypothesis of equivalent coefficients across the models could not be rejected suggesting significant correlation between the unobserved random effects on the independent variables. Therefore, the random effects model, which has the same coefficient estimates as the PCSE models, is rejected in favour of the fixed effects model.
- 9 We examined the correlation between inflation and euro support in the three countries outside the eurozone: Denmark, Sweden and the UK. We expected high inflation in these countries to be accompanied by support for the euro following the expectation that those outside the eurozone would see some benefit (reducing inflation) in transferring monetary authority to the ECB. We found that in the UK there was indeed a strong positive correlation between inflation and euro support ( $r = 0.79$ ). As inflation increased, the proportion of citizens willing to give up sovereignty over the national currency also increased. However, the correlation was strong and negative in both Denmark ( $r = -0.48$ ) and Sweden ( $r = -0.68$ ). While outside the eurozone, the economies of these countries are closely linked with those in the eurozone such that the UK, of all the original 15 member states, may be considered the only country outside the eurozone. Perhaps citizens in Denmark and Sweden, feeling the inflationary pressures but receiving very little of the benefits of the currency, are feeling frustrated by the euro and the negative economic consequences take precedence in their evaluations.
- 10 Note that Malta and Cyprus joined the eurozone in 2008, seven months after the data were collected.
- 11 Another approach would be to use an instrumental variables approach. However, it is difficult to determine a priori which variables could serve as appropriate instruments to predict support for EU membership that would not be correlated with support for the euro.

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## REFERENCES

- Anderson, C and Reichert, M.S (1995) 'Economic benefits and support for membership in the EU: a cross-national analysis', *Journal of Public Policy* 15(3): 231–49.
- Angeloni, I., Aucremanne, L. and Ciccarelli, M. (2006) 'The euro and prices: did EMU affect price setting and inflation persistence?', *Economic Policy* 21(46): 353–87.

720

- Banducci, S.A., Karp, J.A. and Loedel, P.H. (2003) 'The euro, economic interests, and multi-level governance: examining support for the common currency', *European Journal of Political Research* 42(5): 685–703.
- Beck, N. and Katz, J.N. (1995) 'What to do (and not to do) with time series cross-section data', *American Political Science Review* 89: 634–47.
- 725 Dziuda, W. and Mastrobuoni, G. (2007) 'The euro changeover and its effects on price transparency and inflation'. Unpublished manuscript, Kellogg School of Management, Northwestern University.
- Eichenberg, R.C. and Dalton, R.J. (1993) 'Europeans and the European Community: the dynamics of public support for European integration', *International Organization* 47: 507–34.
- 730 Erdal, K. (2005) 'EU citizens and European Central Bank support: an individual level analysis'. Unpublished dissertation, University of Bergen
- European Central Bank (2008) Statistical Data Warehouse, <http://www.ecb.int/stats/prices/hicp/html>
- European Commission (2002) 'Qualitative study on EU citizens and the euro in the months following its introduction', Directorate General for Health and Consumer
- 735 Protection.
- Eurostat (2003) 'Euro-zone annual inflation down to 1.9%. Euro-indicators', Rapid STAT 69.
- Evans, G. and Whitefield, S. (1995) 'The politics and economics of democratic commitment: support for democracy in transition societies', *British Journal of Political Science* 25(4): 485–514.
- 740 Gabel, M. (1998) *Interest and Integration: Market Liberalization, Public Opinion and European Union*, Ann Arbor, MI: University of Michigan Press.
- Gabel, M. and Hix, S. (2005) 'Understanding public support for British membership of the single currency', *Political Studies* 53(1): 65–81.
- Gabel, M. and Palmer, H.D. (1995) 'Understanding variation in public support for European integration', *European Journal of Political Research* 27(1): 3–19.
- 745 Gabel, M. and Whitten, G. (1997) 'Economic conditions, economic perceptions, and public support for European integration', *Political Behavior* 19(1): 81–96.
- Gärtner, M. (1997) 'Who wants the euro – and why? Economic explanations of public attitudes towards a single European currency', *Public Choice* 93(3–4): 487–510.
- Helleiner, E. (2003) *The Making of National Money: Territorial Currencies in Historical Perspective*, Ithaca, NY: Cornell University Press.
- 750 Hobolt, S.B. and Leblond, P. (2009) 'Is my crown better than your euro? Exchange rates and public opinion on the European single currency', *European Union Politics*, forthcoming.
- Howarth, D. and Loedel, P. (2005) *The New European Leviathan? The European Central Bank*, Basingstoke: Macmillan.
- Jupille, J. and Leblang, D. (2007) 'Voting for change: calculation, community and euro referendums', *International Organization* 61(4): 763–82.
- 755 Kaltenthaler, K. and Anderson, C. (2001) 'Europeans and their money: explaining public support for the common currency', *European Journal of Political Research* 40(2): 139–70.
- Karp, J.A. and Bowler, B. (2006) 'Broadening and deepening or broadening versus deepening: the question of enlargement and Europe's hesitant Europeans', *European Journal of Political Research* 45(3): 369–90.
- 760 Lewis-Beck, M., S. (1988) *Economics and Elections: The Major Western Democracies*, Ann Arbor, MI: University of Michigan Press.
- Loedel, P. (1999) *Deutsche Mark Politics: Germany in the European and International Monetary System*, Boulder, CO: Lynne Rienner.

Meier, K. and Kirchler, E. (1998) 'Social representations of the euro in Austria', *Journal of Economic Psychology* 19(6): 755–74.

Mischler, W. and Rose, R. (2001) 'What are the origins of political trust? Testing institutional and cultural theories in post-communist societies', *Comparative Political Studies* 34(1): 30–62.

770 Risse, T. (2003) 'The euro between national and European identity', *Journal of European Public Policy* 10(4): 487–505.

Stimson, J.A. (1985) 'Regression in time and space: a statistical essay', *American Journal of Political Science* 29(4): 914–47.

Walstad, W.B. (1997) 'The effect of economic knowledge on public opinion on economic issues', *Research in Economic Education* 28(3): 195–205.

775 Wilson, S.E. and Butler, D.M. (2007) 'A lot more to do: the sensitivity of time-series cross-section analyses to simple alternative specifications', *Political Analysis* 15(2): 101–23.

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