Greek ricochet? What drove Poles' attitudes to the euro in 2009−2010

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Abstract

We investigate the determinants of support for the euro adoption in Poland by means of logit models, using two unique survey datasets collected in December 2009 and June 2010. Whereas the public support has generally declined over this period, probably against the background of sovereign debt crises in the euro area, this decline was concentrated along some dimensions. Well-informed respondents tend to be significantly more supportive of the common currency than badly-informed ones, both in 2009 and – even more so – in 2010. Political views influence the attitude towards the euro, but they are by no means its main determinant. During the crisis, the conviction of euro being a 'strong, stable currency' has faded; instead, a negative attitude started to result from low income, high age and low economic knowledge. In 2010 a more negative attitude was represented by students, white-collar workers and big city residents.

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1. Introduction

The primary aim of our study is to identify individual characteristics that influence public support for the euro introduction in Poland. As a European Union (EU) Member State with derogation,[1] Poland is obliged to enter the euro area (EA) at some future date when all necessary conditions are met (Ministry of Finance 2010). This implies that, at some point, the euro changeover process in Poland will have to be intensified. It is normally accompanied by extensive information activities regarding the euro, and especially an official information campaign. Knowledge of what drives the public support for the euro can therefore be useful, taking into the account the importance of public opinion for decision-makers in democratic societies (Kaltenthaler, Anderson 2001).

To address this question, we use micro data collected in two surveys conducted on a representative samples by Ipsos Poland for the Polish Ministry of Finance. The scope of our analysis includes two subsamples: data collected in December 2009 and in June 2010. Our variable of interest, i.e. response to the question of the attitude to euro adoption, is categorical with 5 possible answers (definitely positive, rather positive, neutral/don't know, rather negative, definitely negative). Accordingly, we employ a binomial logit regression model (for negative vs positive attitude), ordered multinomial logit models (for a more nuanced perspective) and – as the latter specification is sometimes rejected by the data – unordered multinominal logit models.

The timespan 2009−2010 marked a very special period in the euro area's history. Specifically, at this time, the so-called Greek crisis began. It changed dramatically the situation in the European financial markets and triggered the process of reforming the economic governance of the EU. Before the announcement of Greece's financial problems, the euro was rather considered as a "safe harbour" or "save haven" amid the global financial turmoil in the aftermath of the Lehman Brothers' spectacular fall in September 2008. We argue, however, that the outlook apparently reversed later on, when the sovereign debt problems worsened across Europe. In 2011, the EA was facing sovereign debt crises of several countries (Greece and – to a lesser extent – Ireland and Portugal).

These developments have attracted extensive media coverage and – at least in Poland – have been one of the reasons for the revision of the euro adoption timetable. As a consequence, the inevitable need for financial assistance for the peripheral euro area countries may have had an impact on the public support for the euro not only in euro area countries, but also in non-EA states that prepare to join the club in the future. Therefore, our interest in investigating the determinants of the euro support particularly focuses on the period between the two points in time – after revealing the acute Greek public finance disease (end of 2009) till the period following the first agreement of the European leaders to assist Greece (May−June 2010). One should, however, remember that further escalation of the crisis in the euro area occurred in the second half of 2011.

All in all, this paper attempts to contribute to the existing literature by explaining (i) the determinants of public support for the euro adoption in Poland, as well as (ii) the initial changes that they underwent in the turbulent first half of 2010 when the so called Greek crisis erupted. Further evolution of public support for the euro adoption in Poland in response to the escalation of the crisis in the euro area remains open to future research.

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[1] Treaty of Accession, Offcial Journal of the European Union, 2003, L 236, http://ec.europa.eu/enlargement/archives/ enlargement_process/future_prospects/negotiations/eu10_bulgaria_romania/treaty_2003/content/index_en.htm.

The paper is organized as follows. In Section 2, we present a general overview of the figures illustrating public support for the euro introduction in Poland, using three different sources of data. Section 3 reviews the existing literature on the determinants of the support for the euro in various countries. Section 4 describes the data used and the methodology applied in our study. In Section 5 our results from logit models are presented. Section 6 concludes, discussing implications of our results for the information campaign in the euro changeover process in Poland.

2. Support for euro adoption in Poland in 2009−2010

In this paper, we use data from a survey conducted in December 2009 and June 2010 by Ipsos Poland for the Polish Ministry of Finance. To see the evolution of public support for the euro introduction since Poland's accession to the European Union, one has, however, to consider longer time series from Flash Eurobarometer (FE) or Public Opinion Research Center (CBOS – *Centrum Badania Opinii Społecznej*) surveys (see Figure 1). Before the accession, in January 2002, the Poles were very enthusiastic about the single currency. Exactly at that time, the euro was introduced in the form of banknotes and coins in the first twelve European countries. However, the negative publicity surrounding the perceptions of prices in euro had not appeared then on a full scale in the media yet. According to FE data, although in the first years after the introduction of the 'physical' euro the number of euro sceptics outweighed the number of euro enthusiasts in Poland (2004−2005), later – between 2006 and 2009 (with a single exception of May 2008) the share of euro supporters in Poland exceeded the number of opponents. In 2008 and 2009, the same was visible in the CBOS data. A higher share of euro supporters in 2008 could probably be linked to an association of the euro with a 'safe harbour' idea at the beginning of the financial turmoil. In 2009, the enthusiasm was further fostered by the successful euro changeover in Poland's neighbour – Slovakia. According to the FE data, however, it was already the second half of 2009 when the difference between the number of supporters and opponents of the euro narrowed to 1 p.p. (45 and 44% respectively).

We attach here special attention to the period 2009−2010. It was marked by a drop of support for the euro introduction in Poland. Specifically, according to the Ipsos/MoF data analysed in this paper, the support (i.e. the aggregate share of respondents who described their attitude towards the euro adoption in Poland as definitely positive and rather positive) dropped by 5 percentage points to 38% (Figure 2) between December 2009 and June 2010. Simultaneously, the share of negative attitudes towards the euro increased by 4 p.p., to 47%. This changed the landscape of public support for adoption of the common currency in Poland in comparison with December 2009, when the number of supporters and opponents was equal (43%) – which was broadly consistent with the abovementioned FE data. Afterwards, the support for the euro decreased even further (FE data from September 2010 and CBOS data from March 2011, see Figure 1).

These developments could be primarily linked to the events that occurred in the euro area in (late) 2009 and especially 2010 and continued thereafter. The announcement by the new (on that time) Greek government of the true stance of the country's public finance in the second half of 2009 marked the beginnings of the sovereign debt crises in the euro area. In May 2010, EA States agreed on loan facility for Greece (which was already inevitable at that time), financial help was

also needed later in 2010 for Ireland and in early 2011 for Portugal. Meanwhile, the EU made several crucial steps on the path of economic governance reforms. Notably, the so called European Semester was launched and further changes are still underway.

The gradual drop of support for the euro starting from the second half of 2009 was a wider phenomenon among New Member States of the EU preparing for the introduction of the euro (see Figure 3). Looking at international comparison, we can see that the negative trend in the level of support for the euro over the years from late 2009 to mid-2010 was observed in almost every single country from the group. The only exception here is Estonia, where the support did not decrease further in the second half of 2010 (which was the case in all the other countries) due to an intensive information campaign in the last months prior to the euro introduction in January 2011.

As a general observation, it can be also added that the support for the euro adoption in Poland is somewhat below the average for New Member States of the EU preparing for the introduction of the euro. However, it is much higher than in Latvia, Czech Republic and Estonia.

3. What explains the euro-enthusiasm? Review of empirical evidence

Existing research reveals a range of determinants of public support for the euro. Studies conducted so far analysed both individual characteristics and/or country-specific characteristics that exert a significant impact on the support for the common European currency. Jonung and Vlachos (2007) provide a stylized summary of previous econometric results. Most of them are based on the data from Eurobarometer surveys. However, a number of studies are founded on country-specific surveys (see for instance: Isengard, Schneider 2006 – for Germany; Gabel, Hix (2005) – for the United Kingdom; Hobolt, Leblond 2009 – for Denmark and Sweden; or van Everdingen, van Raaij 1998 – for the Netherlands), notably some of them using exit polls data collected on the days of referenda on the euro adoption – which took place in Denmark in 2000 (see Jupille, Leblang 2007) and Sweden in 2003 (see Jonung, Vlachos 2007; Jupille, Leblang 2007). Usually, support for the euro prior to its introduction was analysed. By contrast, Isengard and Schneider (2006) focus on explaining changes in individual perceptions of the euro in Germany after its introduction in the form of banknotes and coins. Banducci, Karp and Loedel (2009), on the other hand, compare determinants of support for the euro in the euro area members and countries outside the eurozone.

Age. Age is a standard control variable. As Jonung and Vlachos (2007) and Jonung and Conflitti (2008) point out, no systematic pattern emerges for age in the bulk of empirical studies. However, several studies find age significant (see e.g. Banducci, Karp, Loedel 2003; Allam, Goerres 2008; Jonung, Conflitti 2008). On the one hand, it can be argued that the older generation would be in favour of the single currency viewed as a guarantee of peace in Europe. We think, however, that this does not necessarily apply to the New Member States of the EU, as the history of their European integration is relatively short. Consequently, the underlying ideas, in which the beginnings of the integration in Europe after the second World War are rooted, may not be that apparent to their populations as it is the case in the so called "old" Member States. We would rather support another view, that older people would be more critical towards the euro as they may find the adjustment to the new currency more difficult than younger people. Furthermore, elderly people in Poland

remember currency changeovers as poverty-inducing and they may be particularly sensitive to all potential aspects of sovereignty issues due to historical conditions.

Several studies find age significant (see e.g. Banducci, Karp, Loedel 2003; Allam, Goerres 2008; Jonung, Conflitti 2008). The results obtained by Allam and Goerres (2008) show that younger people are more likely to have an opinion towards the euro. Among the Swedes, Jonung and Vlachos (2007) found a non-linear pattern for age – an average effect of being a year older was positive, but this effect was smaller for older than for younger voters, who took part in the referendum in 2003.

Sex. Similarly, sex is also a commonly adopted control variable and usually it is found to be significant. Women tend to be more euro-sceptical then men (Hayo 1999; Banducci, Karp, Loedel 2003; Isengard, Schneider 2006; Jonung, Vlachos 2007; Allam, Goerres 2008; Banducci, Karp, Loedel 2009). This is probably linked to the general differences in social preferences and risk-aversion between the genders (Croson, Gneezy 2009), as the women are as a rule more risk averse than men (see for instance Borghans et al. 2009). Correspondingly, it has been found, i.a. among the Italian consumers, that inflation perceptions are also higher for women (del Giovane, Fabiani, Sabbatini 2008).

Income. It is a generally shared view in the literature that individual socio-economic resources like human capital (education) and financial capital (income and wealth) determine whether an individual is likely to gain or lose from the monetary integration with free movement of capital, labour and goods across borders (see e.g. Gabel 1998; Isengard, Schneider 2006; Jonung, Vlachos 2007; Jupille, Leblang 2007). The openness of capital markets, lower inflation and potentially reduced extent of redistributive policies that membership of a monetary union brings about are considered to be more favourable for wealthy people and holders of financial assets. Therefore, citizens with high incomes are as a rule more in favour of the euro than those with low incomes. The significance of this relationship was confirmed in a wide range of studies.

Occupation. Occupation goes hand in hand with income. Opportunities provided by membership of monetary union are particularly strong for highly skilled workers. For instance, according to the results obtained by Jonung and Vlachos (2007), white-collar workers, self-employed and entrepreneurs were more in favour of the euro in comparison with blue-collar workers. Empirical studies show also that the employed are usually more positive towards the euro than the unemployed (for the results for countries outside the eurozone see Banducci, Karp, Loedel 2009).

Locality. For locality, the same way of reasoning as for occupation and income applies. Citizens living in urban, and especially metropolitan, areas are likely to benefit economically more from the effects of monetary integration than inhabitants of rural areas. On the aggregate level for the euro area, Jonung and Conflitti (2008) found a strong relationship for this variable – respondents from urban and metropolitan areas expressed greater support towards the euro than respondents living in rural areas. At a country level locality did not turn out to be strongly related to the opinions towards the euro, however. Also Jupille and Leblang (2007) and Jonung and Vlachos (2007) confirmed in the case of Sweden that inhabitants of rural areas were more likely to vote "no" in the referendum and simultaneously the support for the euro was higher in larger cities.

Balance of costs and benefits of euro adoption. Obviously, it can be expected that those who anticipate the adoption of the euro to prove beneficial from both individual and national economy perspective would be more supportive towards the monetary integration than others. Support for the euro can be explained from an utilitarian standpoint. From this perspective – described, among others, by Gabel (1998) in the context of support for the European integration in general – support for the euro is based on an individual economic "calculation" (as Jupille and Leblang, 2007 call it), a rational cost-benefit analysis of adopting the single currency from the point of view of economic self-interest. In this view, those who economically benefit more from the monetary integration are simply more likely to support the euro. However, this perspective apparently does not apply to all societies – Gabel and Hix (2005) did not confirm this hypothesis for the British citizens. On the contrary to what they had expected, economic calculations were not a significant factor in determining the support for the euro in the UK.

In this context, level of GDP per capita might have an influence on the support for the euro. Two potential explanations are possible here (Allam, Goerres 2008). On the one hand, members of richer societies may hesitate less to take the potential risk of further economic integration. On the other hand, members of economically less prosperous societies might perceive the eurozone accession as a way to improve their country's credibility and gain a stable and strong currency. The authors identified level of GDP per capita as a significant determinant of the support for the euro.

Assessment of euro-related benefits for an individual and for the economy. The findings of Allam and Goerres (2008) deserve special attention: they concluded that macro-level variables (economic, historical and related to national identity) have stronger impact than micro-level variables of economic self-interest in the case of transition economies. In other words, for transition economies distributional issues seem to matter less than the aggregate national performance and experience of a country. The authors formulate an important advice for political leaders from transition countries: 'Political parties that garner support for the euro should therefore concentrate on economic consolidation and political stability rather than politicizing a winner-loser cleavage'. The strong effect of macro expectations on the attitude towards the euro was also identified by van Everdingen and van Raaij (1998). Using data for the Netherlands, they confirmed their hypothesis about the existence of both a direct and an indirect effect of macro-variables on the attitudes towards the euro. The indirect effect works through micro-expectations because people seem to "translate" macro indicators into micro ones, relevant for their personal wellbeing.

Among the benefits of the euro adoption, strong and stable currency can be mentioned. Previous studies found that a strong currency can be regarded by citizens as a symbol of economic strength. People are less likely to surrender a strong currency than a weak one (Banducci, Karp, Loedel 2003) and, by the same token, are less willing to accept the euro when it is seen as week vis-à-vis other world currencies (Hobolt, Leblond 2009).

While concerning improvement in country's economic situation – another potential benefit from euro adoption – the results obtained by Gärtner (1997) are noteworthy: the looser monetary and fiscal policy were in the past, the more citizens welcomed the euro. Moreover, past inflation and the public debt explained almost 75% of cross-country differences in euro acceptance ratios. The finding related to the inflation record in the past was similar in a study by Kaltenthaler and Anderson (2001), also Banducci, Karp and Loedel (2003) confirmed the significance of inflation

as one of determinants of euro support. The former authors also found that the higher level of unemployment a country had between 1994 and 1997, the higher was on that time the support for the euro in a given EU Member State. Another view – for the countries of Central and Eastern Europe – is that support for the euro is facilitated by the success of economic transition. A good economic condition of a country increases the support for the single currency and simultaneously the EMU membership is expected to be a guarantee for the continuation of economic reforms (Allam, Goerres 2008).

A straightforward cost of euro adoption is represented by difficulties in recognizing or adapting to new banknotes and coins, which can be seen in the context of the results obtained by Isengard and Schneider (2006). They showed for Germany that individuals who had difficulties in handling the money after the introduction of euro banknotes and coins usually continued to be concerned about the euro thereafter (for those persons also the probability of becoming concerned about the euro – even if they had not been concerned before – rose after its introduction).

The existing literature identified national identity as a particularly important determinant of the euro support. Often people perceive introduction of the euro as a potential threat for the national identity – what would stand for a cost of the euro introduction. Allam and Goerres (2008) argue that the formation of the attitudes towards the euro is much more complex than any economic analysis of weighing the individual costs and benefits would suggest. The monetary union is not a purely economic project, but by far a political one either. Thus, one perspective alone is unable to adequately address the questions of variations in support for the euro. As a result an additional dimension, capturing the effects of national identity, should be added to the analysis. In sum, the authors point to the complementary effects of economics, politics and identities. The negative effect of a high level of national identity on the euro support was found significant in a bulk of studies (see e.g. van Everdingen, van Raaij 1998; Kaltenthaler, Anderson 2001; Gabel, Hix 2005; Allam, Goerres 2008). Remarkably, Banducci, Karp and Loedel (2009) concluded that in the countries inside the EA the economic evaluations are important while identity plays a more important role the outside the EA. Müller-Peters (1998) explains the attitude towards the euro on the basis of different aspects of national identity. She differentiates between the notions of patriotism (categorization dimension) and nationalism (discrimination dimension) and adds the third dimension of European patriotism. From these three, only the European patriotism and the nationalistic stance have particular explanatory power. The first one has a positive impact on the attitude towards the euro, while the second dampens the support.

Concerns about price increases associated with the adoption of the euro are a deeply rooted phenomenon across Europe. Almost a year after the euro introduction in form of banknotes and coins more than 80% of euro area citizens expressed the opinion that price conversions in the euro changeover process were carried out to their detriment (European Commission 2002), i.e. added to the increases of prices. The widespread perception of substantial price increases caused by the changeover to the euro did not find confirmation in official statistics, however. According to (Eurostat 2003), the euro changeover effects on prices did not exceed 0.3 p.p. in 2002. What counts, then, is the perceived inflation. Banducci, Karp and Loedel (2009) found that concerns about high inflation dampen the support for the euro both inside and outside the euro area. Respondents who were unsure about the rate of actual inflation or who believed that it exceeds 5% were less supportive towards the euro. In contrast, for perceived inflation rate between 2 and 5% the effect was insignificant.

(Objective) knowledge. (Subjective) level of being informed about the euro and its introduction. Existing research shows that economic knowledge might be the most critical factor influencing the public opinion on economic issues (Walstad 1997). The level of knowledge is also usually found to affect the support for the euro. In the literature, variables accounting for different kinds of knowledge are used – either proxies for general knowledge/information level (see e.g. Isengard, Schneider 2006, who use the highest level of school attainment, use of Internet and political interest as indicators) or for (objective) knowledge about the EU (see Hayo 1999, who constructs an indicator based on answers to four factual questions about EU and its institutions). Better informed individuals are to a considerable extent more likely to know more about the monetary union and the euro. Higher level of knowledge – either general or specifically EU-related – influences positively the support for the euro, while lower level of knowledge tends to weaken the support (due to the fear of the unknown). To illustrate this view, Jonung and Vlachos (2007) quote Margot Wallström, Swedish EU Commissioner, who said in the evening of the euro referendum day in Sweden that "the fear of the unknown was greater than we had thought", suggesting that the negative outcome of the vote relied heavily on the lack of knowledge about the European integration among the Swedish citizens. Hayo (1999) demonstrated a positive correlation between the knowledge about the EU and the attitude towards the single European currency, simultaneously highlighting that it is not linear. He showed that opponents of the monetary union tend to have higher values of the knowledge index than the undecided individuals (who often know nothing about the EU), while – on average – the supporters are the best informed group. Based on these findings, Hayo concludes that it is not enough to raise the level of knowledge about the EU just a little bit if it is very low (this could mean that undecided individuals move to the group of euro-opponents), but rather more effort should be put into informing the citizens in order to increase the support for the euro (as euro-supporters rank on the knowlegde-index scale much higher than the other two groups).

Partisanship. Political attitudes are considered to be an important factor influencing individual opinions on the euro. Right-wing supporters, who prefer an orthodox economic policy, would rather support the euro, whereas those with leftist leanings would be sceptical of the benefits of the monetary union. Isengard and Schneider (2006) found that prior to the introduction of the euro banknotes and coins, the Germans with a long-lasting preference for the liberal and green parties used to have less concerns about the euro than supporters of the social democrats, who on the other hand were less concerned than supporters of the extreme right-wing parties (this latter group also used not to lose their concerns after the changeover). In contrast, Gabel and Hix (2005) used two different proxies for the UK citizens' partisanship[2] and found mixed support for the view that parties shape citizens' preferences on the single currency. For Sweden, Jonung and

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[2] In their study, Gabel and Hix (2005) analysed data from two different surveys. First of them, a Eurobarometer survey, asked the respondent for which party she intends to vote if there were an election tomorrow. The second survey, the British Election Panel Study, asked of what political option (party) the respondent considers herself. Both variables were used to create dummy variables for each particular partisanship. The authors argue that the difference between these two measures may be significant. The first measure is a considerably weaker conception of partisanship than the type of support expressed in the second case, which is closer to the traditional conception of 'party identification'. A voter identifying herself with a given party is probably more likely to be influenced by the policy positions of that party. In our study, however, a measure of the first type is used due to the data limitation.

Vlachos (2007) concluded that the further to the left, the higher was the probability of a "no" vote in the euro referendum. Though, the authors note that since left-leaning voters are predominantly low-income earners, it is difficult to separate the effect of politics and the one of economic factors.

Assessment of domestic politics/support for the national government. Several definitions of this variable are possible and two interpretations apply (Allam, Goerres 2008). On the one hand, more positive assessment of the domestic political system might lead to higher support for the euro. On the other hand, further integration might be perceived as cure for perceived parlous state of domestic politics. Allam and Goerres (2008) use two proxies to capture an individual's attitude towards the national political system – degree of satisfaction with democracy in a given country and an additive index of the degree of trust in national parliament, legal system and national government. Especially an individual's satisfaction with democracy was found significant – respondents who assessed the national system as adequate were more willing to support the EMU. Jupille and Leblang (2007) found that in the Danish and the Swedish referenda, individuals with higher level of trust in politicians were more likely to vote in favour of the euro adoption. The authors point out that one can treat the referendum on the euro adoption as "an explicit vote of confidence" in the ruling party. Conversely, Hobolt and Leblond (2009) found on the basis of different approach and data for the same countries that the government support positively signed, but insignificant.

Attitude towards the EU/Europe. Müller-Peters (1998) uses emotional commitment to Europe and its people and one's feeling of being more involved with European matters then outside European ones as measures of European patriotism (Kosterman, Feshbach 1989). She found a positive correlation between the European patriotism and the attitude towards the euro, confirmed for majority of European countries. It implies that attachment to Europe most likely translates into support for the euro as a common European symbol. Banducci, Karp and Loedel (2009) show similar results for the EU identity and attitude towards the EU membership. The stronger the attachment to the EU and the better the evaluation of a country's EU membership, the higher the support for the euro. Both variables were found significant for both groups – countries within and outside the euro area. In this sense, one may conclude that the general attitudes towards the EU shape also the support for the single currency. Furthermore, Banducci, Karp and Loedel (2003) showed that positive attitudes towards the EU can strengthen the support for the euro and common monetary policy (being one of EU supranational policies) even when it is not in one's economic self-interest. In other words, strong support for EU governance might even counter economic self-interest, which would otherwise dampen the support for the euro. Basing on Gabel and Hix (2005), is can also be added that – in the case of British citizens – more positive assessment of the EU membership increased the probability of support for the euro especially much for well informed citizens. The described effect does not, however, seem to work the other way round. Jupille and Leblang (2007) showed – for Danes and Swedes – that scepticism towards the euro does not imply the opposition to EU membership. In other words, one can oppose the introduction of the euro, while simultaneously supporting the country's EU membership. One should note here, that Denmark (like the UK and unlike Sweden) is an opt-out country, i.e. can choose whether to adopt the euro or not.

Region. Another source of influence on the support for the euro may stem from so called border effect. Residents of border regions with another euro area country are considered to be more supportive towards the single currency, as they are expected to benefit more from increased cross-border shopping or exchange of goods and services (see Jonung, Vlachos 2007; Allam, Goerres 2008; Gabel 1998 – for the case of support for the European integration).

Moreover, in some studies other explanatory variables are used, i.a.: membership of a trade union, general attitude towards the future, size of the country (population), unemployment and number of casualties during the Second World War.

4. Data and methodology

Our empirical investigation is based on a unique survey dataset collected by Ipsos Poland for the Ministry of Finance in Poland. The questions were designed by the Ministry of Finance. The survey was conducted twice, in December 2009 and June 2010 via face to face interviews, on a representative sample of 1001 and 1005 (respectively) Poles aged 15 and more. The respondents were located in 100 and 145 communities (NUTS 5 level units in Poland), drawn with probabilities proportional to their number of inhabitants. The sample is structured with respect to gender, age and education level so as to reflect the distribution of these qualities in the Polish population.

Because the paper is intended to analyse the general public's support of the euro adoption in Poland, the dependent variable is based on the responses to the following question on a 5-degree Likert scale: What is your attitude towards euro adoption in Poland?

1. definitely positive;
2. rather positive;
3. rather negative;
4. definitely negative;
5. don't know, not sure.

Having regard to estimation efficiency as well as exploiting full available information, and for robustness of the analysis, we consider 4 versions of the dependent variable:

A. 2 categories: positive (1 + 2) and negative (3 + 4);
B. 3 categories: positive (1 + 2), neutral (5) and negative (3 + 4);
C. 4: categories: definitely positive (1), rather positive (2), rather negative (3) and definitely negative (4);
D. all 5 categories.

Options A and B should take advantage of a smaller number of categories, provided that the aggregated groups are sufficiently homogeneous. Options C and D, on the other hand, account for the information on the strength of the positive or negative attitude. Also, we make no prior assumptions about the usability of group 5 as the neutral category on the Likert scale and hence differentiate between options A and B on the one hand, and C and D (respectively) on the other hand.

The use of categorical variable as explained variable requires an adequate econometric model type. The binomial logit model defines the probability of unit *i* belonging to one of two groups as

$$\pi_i = \frac{\exp(x_i'\beta)}{1+\exp(x_i'\beta)}$$

which implies

$$\ln(\frac{\pi_i}{1-\pi_i}) = \beta_0 + x_i'\beta$$

There are two possible generalizations of this model to the case in which the dependent variable has more than two categories (indexed $j = 1,...,J$). Firstly, assuming that the groups can be ordered into a sequence and that the independent variable set x affects the logit link between category pairs in a linear way and independently of the selected pair, one can formulate the multinomial logit regression model. Assuming unity scale (see e.g. Woolridge 2002, for details), the logit link function can be generalized to

$$\ln\left(\frac{\sum_{l=1}^{j}\pi_{i,l}}{1-\sum_{l=1}^{j}\pi_{i,l}}\right) = \beta_{0,j} + x_i'\beta$$

for categories $j = 0,..., J-1$.

As compared to the binary logit model, there is a category-dependent constant (thresholds, $\beta_{0,j}$, monotonously increasing in j). The last category J (or, equivalently, the first one) serves as a reference category. Secondly, further generalization comprises dropping the assumption of dependent variable category ordering and hence the equality of coefficient vectors β. The resulting multinomial regression model defines the probability of unit I belonging to category j as

$$\pi_{i,j} = \frac{\exp(x_i'\beta_j)}{1+\sum_{k=1}^{J-1}\exp(x_i'\beta_k)}$$

with J denoting the last category treated as the base category, i.e. the model in terms of logit can be expressed as

$$\ln(\frac{\pi_{ij}}{\pi_{iJ}}) = \beta_{0,j} + x_i'\beta_j$$

To differentiate between the two models, one can use the test of parallel lines, i.e. test the validity of $\beta_{0,j} + x_i'\beta$ against the encompassing alternative of $\beta_{0,j} + x_i'\beta_j$ with the usual chi-squared distributed likelihood ratio statistic.

Here, we use a logit regression model (option A) and – due to existence of a logical order – an ordered logit regression model. However, taking into consideration the specific nature of the answer 5 (neutral), as well as rejection of the null hypothesis in the test of parallel lines in some ordered logit models (see Table 2) we also run multinomial logit regression. This allows us to take more insight into possible asymmetries between more or less definite attitude on the positive

and negative side, the validity of the group 5 as the neutral one on 5-grade scale and the reasons for the rejection of the null hypothesis in the abovementioned test. 7 versions of the model were estimated, according to the number of dependent variable categories and model type: 1 binomial logit, 3 ordered multinomial logit (Table 2) and 3 unordered multinomial logit models (Table 3).

The set of possible explanatory variables has been designed so as to reflect the basic hypotheses considered in the literature, as described in Section 3 (see Table 1). However, due to constraints related to the design of the questionnaire this set of variables is limited. Specifically, attitude towards the EU/Europe is missing as a possible important explanatory variable.

The set of possible explanatory variables is limited by the design of the questionnaire and has been designed so as to reflect the basic hypotheses considered in the literature, as described in Section 3 (see Table 1). However, due to constraints related to the design of the questionnaire this set of variables is limited. Specifically, attitude towards the EU/Europe is missing as a possible explanatory variable. With regard to key benefits, for instance, one also should mention that the set of dummies was designed from a perspective of an average citizen, who is not necessarily familiar with the results of research focused on the balance of benefits and costs of euro adoption for Poland (see NBP 2004; 2009). Therefore, the set of dummies does not contain explicitly specific economic benefits like a fall of interest rates stemmed from elimination of bilateral exchange rate risk premium, but rather rests with the general ideas like more favourable conditions for the external trade development and improvement in Poland's economic situation. The current crisis in the euro area showed, moreover, that the expected so far convergence of interest rates after the euro adoption may not neccesarily occur (or at least not to a scale observed in the first ten years of the euro). Greece, Portugal and Ireland are the most pronounced examples. Answer category something else was available to the respondents.

The estimated models were specified according to the principle „from general to specific". First, the entire set of possible explanatory variables was taken into consideration (see Table 1). The general models (see Tables 4−5) contained a number of insignificant explanatory variables which were subsequently eliminated from the models one by one. The use of mechanical criterion (highest p-value) was complemented with cross-checking between individual model variants and some discretionary validation to avoid random dropping of some significant, but collinear variables. However, the order of variable elimination did not affect the final results. Model parameters were estimated separately for 2009 and 2010 sample.[3]

5. Results from the logit models

We expected that respondents who anticipate the euro to prove beneficial from both individual and national economy perspective would obviously be more supportive and those who have exactly opposite expectations, would be much less supportive. Situation was not clear, however, in case of the intermediate options, i.e.: "The euro will be beneficial for the economy, but not for myself" and "The euro will not be beneficial for the economy, but it will be such for myself". Following Allam and Goerres (2008), we could expect that respondents who chose the former of the intermediate

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[3] Estimation results for the aggregate sample and significance tests of individual coefficient differences are available from the authors upon request or can be found in the working paper version of the article.

options would be ready to support the euro, if it is indeed the economic consolidation what they value most. It might, however, also have been the case that the two intermediate options were somehow confusing for the respondents, so that no clear pattern could have been be identified.

As expected, the conviction of the euro (not) being beneficial is one of the main drivers of positive (negative) attitude towards the common currency. This is, however, only true when future benefits or losses are evaluated both on the macro level (i.e. for the economy) and the micro level (for oneself). The respondents who thought that the euro would be beneficial for themselves, but not for the entire economy, tended significantly towards a negative attitude to the euro in 2009 (thereby confirming the findings of Allam and Goerres, 2008). In 2010, this coefficient ceased to be significantly different from 0. Also, in both samples, the magnitude of the positive effect was stronger than the negative one. The results of unordered multinomial regression reveal additionally that conviction of low benefits from the euro adoption allows to differentiate predominantly between euro-enthusiasts and euro-skeptics (and not necessarily between euro-enthusiasts and undecided respondents). Moreover, the respondents' view that the euro would be beneficial for themselves (but not the economy) matters for differentiation between definitely positive and rather positive (in favour of the former). This observation, however, is also limited to 2009 survey.

Among 7 benefits under consideration, only few were insignificant as explanatory variables for the attitude to the euro, and the significant ones had a correctly signed (negative) parameter. Some interesting observations, however, can be made with respect to change between 2009 and 2010. First and above all, the belief in "strong and stable currency" has ceased to be the benefit that most remarkably influenced the attitude to common currency. This variable's parameter has in fact decreased (in magnitude) substantially in all specifications. Secondly, in 2010, euro-enthusiasm thrived mainly on the euro's association with prestige and external trade development. Thirdly, many of the dummy variables describing key indicated benefits (especially "facility for shopping", "external trade development" and "improvement in economic situation") can account for the rejection of the null hypothesis in the tests of parallel lines for 2009 sample. In fact, these variables do not contribute to an efficient discrimination between the positive and neutral groups, while markedly delimiting the group with negative attitude to the euro. This suggests that the neutral group cannot be seen as the median element on the Likert scale and needs an appropriate, separate analysis. Fourthly, it should also be noted that the tourism – while insignificant in 2009 – has become significant in 2010. All this allows to conclude that the mapping from perceived benefits to support of the common currency has undergone some evolution in the Polish society during the turbulent first half of 2010.

Differences between 2009 and 2010 in terms of key concerns and fears associated with the euro adoption are even more remarkable. Although all the significant estimates are signed correctly again (positive in this case), the number of insignificant ones is considerably higher, especially in 2010. In 2009, the main driver of euro-skepticism on this list was "losing national identity", followed by "deterioration in personal finance" and "difficulties with currency conversion". Half a year later, "fear of poverty and inequalities" turned into the dominant factor influencing the negative attitude to euro adoption, while currency conversion and national identity issues did not seem to play a substantial role. The analysis of the unordered multinomial regressions also reveals that respondents with positive and neutral attitude to the euro seemed to be a homogenous group in terms of key reported concerns, and euro-related fears allowed only to better identify the opponents.

Not surprisingly, the respondents who do not fear substantial price increases after the euro adoption are generally more supportive of the common currency introduction. Also, the lower the expected price increases, the more favourable attitude (4 groups were taken into account: no price hikes, not sure, moderate hikes and substantial hikes). In this case, there is no remarkable difference pattern between the 2009 and 2010 survey. Interestingly, the abstract "fear of price hikes" has turned out to be a robustly significant inhibitor of the support for the common currency, as opposed to more specific "fear of rounding up prices by entrepreneurs", although they might appear as similar. The latter variable was insignificant whether or not the former was included in the model. An explanation of this is twofold. Firstly, the fear of price hikes does in fact reduce the support of the common currency, but – in respondents' view – these hikes do not necessarily have to result from rounding up. Secondly, there is a widespread opinion that prices will rise after the euro adoption, but the respondents do not attribute this rise to entrepreneurial malpractice, but – in whatever way – to the euro as such. This issue deserves more attention in future studies.

Another key determinant of the euro adoption is the self-perceived level of information on the common currency. Since in effect of information campaigns people feel better informed (i.e. subjective level of being informed rises), we share the argument of the European Commission (2008) that there is a link between national communication activities on the euro and the citizens' support for the introduction of the common currency. In this study, the appropriate parameters standing for the self-perceived level of knowledge turned out to be significant and signed fully in line with our expectations. Citizens who feel well (or very well) informed about the euro are more supportive of the common currency as compared to the base group of very badly informed respondents. Four facts are noteworthy at this point. Firstly, the magnitude of the parameters clearly exceeds the analogous values for most of the other dummy variables. Secondly, even the respondents who feel "badly" informed about the euro represent a significantly more positive attitude towards it than those who declare themselves as "very badly" informed, which suggests the existence of substantial potential marginal gains from the information campaign. Thirdly, the magnitude of the abovementioned coefficients was significantly higher in 2010 than in 2009. The personal knowledge of the euro-related issues has gained on importance during the euro-crisis in 2010. It might be associated with better availability of euro-related information in the presence of extensive media coverage of the Greek crisis, and in the absence of any official, coordinated information campaign at that time. As a result, such information was not as scarce as it had been before. In practice, the outflow of euro-enthusiasts was not "flat", but highly concentrated in the groups that are badly informed of the common currency. Fourthly, the group that was unable to answer whether or not they are well-informed did not significantly differ from the very badly informed group (unlike the badly informed one).

Both economic knowledge (objective and subjective jointly) and income seem to have gained significance in 2010. The proxy for the former (as weighted sum of scores based on questions testing basic knowledge of macroeconomic concepts, as well as self-perceived level of familiarity with economics), as well as the natural logarithm of the latter, increase the support for euro adoption. It might be seen as a confirmation that wealthier and better-educated citizens more strongly support the euro-idea during its crisis that started in 2010.

Unemployment or non-employment does not influence the attitude to the euro, as compared to the reference group of blue-collar workers and peasants. However, 3 other groups differ

significantly in this respect from the base category. Firstly, pensioners are significantly more euro-skeptical (both in 2009 and 2010). Secondly, students were more euro-enthusiastic in 2009, but not any more in 2010. Finally, against our expectations, white-collar workers and entrepreneurs became significantly more euro-skeptical in 2010 than the blue-collars. To look for an explanation of this puzzle, a more detailed disaggregation of these groups should be considered.

Political preferences were also seen as a possible driver of the attitude towards the euro, as the adoption of common currency is one of the issues which are not subject to general consensus in the highly polarised Polish political scene. Approximately 50% of respondents declared themselves as non-voters (which broadly reflects the official voter frequency data); out of the rest, the dominant groups was formed by the supporters of Civic Platform, as well as Law and Justice. We hypothesized that supporters of the ruling Civic Platform party (PO) would be the most positive towards the euro introduction, whereas the Law and Justice party (PiS) would be not only much less in favour but rather against the introduction of the euro in the foreseeable future, as according to their program formulated in 2009, Poland should first reach 80% of the EU average GDP per capita level. In line with these prior expectations, all the coefficients of dummy variables were estimated as positive, whereby most of them were significantly higher than zero.

In particular, in 2009 the Law and Justice voters exhibited the strongest negative contribution of their political preference to the support for the euro as compared to the base group of Civic Platform voters, followed by Democratic Left Alliance (SLD) voters and non-voters. At that time, the dummy variable for voters of Polish Peasant Party (PSL, junior coalition partner of the Civic Platform) was insignificant. This has changed in 2010, when the non-voter dummy turned insignificant. The parameter of dummy for Law and Justice voters remained significant and positively signed. Interestingly, the strongest ceteris paribus "political" effect can be attributed to leftist voters, while the left party itself does not seem to be a declared opponent of the common currency. Also, in some model specifications, the Polish Peasant Party voters started to deviate significantly from the Civic Platform voters (in minus in terms of the attitude to the euro). It has to be noted, however, that SLD and PSL data is characterized by small samples, which might affect the results. Summing up, the political preferences remain a significant contributor to explaining the attitude towards the euro, while – at the same time – not the main one.

The residence of the respondents, classified into 4 groups (cities over 200 000 inhabitants, between 50 000 and 200 000, below 50 000 and rural areas as the base category), was generally insignificant as a determinant of the common currency support.[4] This is against our prior expectations of rural areas or small city inhabitants being more euro-skeptical. Neither does the cross-tabulation of this variable against the attitude towards the euro reveal any dependence pattern (see Table 6). If anything, the inhabitants of big cities seemed to be more euro-skeptical in 2010 than people from the rural areas (controlling for other factors). A significant, positive coefficient for this group's dummy variable was obtained in the models with 2 and 4 versions of the dependent variable, i.e. without the neutral group. The unordered logit analysis suggests additionally that it was the big city in 2010 where the adherence to the neutral group was more probable than to

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[4] Chi-square and Cramer's V values are available from the authors upon request or can be found in the working paper version of the article.

the euro-supportive group. It might be an interesting finding for further investigations, aimed at developing an optimum design of the information campaign in the process of euro adoption in Poland.

The age of respondents did not exert a significant influence on the dependent variables in 2009. In 2010, however, its significant negative role in determining the attitude to the euro can be observed. Note that this is the case in 4- and 5-category models. Accordingly, the unordered multinomial regression reveals that it matters only for differentiation between the extreme attitudes, i.e. definitely positive and definitely negative. On the other hand, it does not help to efficiently discriminate between the "rather yes", "rather no" and "I don't know" options.

Surprisingly, variable indicating sex of respondents were found insignificant in all employed specifications. This is contrary to our expectations and the usual results established in the literature, described in Section 3. We thus do not include this variable in the presented estimation results.

The household count has turned out to be an insignificant variable in all the variations of the model.

6. Conclusions

This study investigates the determinants of support for the euro adoption in Poland in 2009 and 2010. Using two unique survey datasets, collected in December 2009 and June 2010, we estimate ordered and unordered logit models explaining the respondents' attitude to the introduction of the common currency.

We find that the declared level of information about the euro is a key driver of this attitude, both in 2009 and – even more so – in 2010. Moreover, in 2010, a proxy for the respondents' economic knowledge has become significant. The relative importance of these factors has increased in the context of the sovereign debt crises in the euro area peripheral countries, which were the main topic of euro-related media coverage in the first half of 2010. These results additionally emphasize the importance of extensive and well-targeted information campaign. Also, there could be substantial marginal gains from such campaign, as even "badly informed" citizens are significantly more supportive of the common currency than "very badly informed" ones.

Our study identified some characteristics of population subgroups which are crucial for expaining the support for the introduction of the single currency in Poland. We found namely that pensioners as well as Law and Justice party (PiS) supporters are the most euro-sceptical occupation and partisanship groups in Poland, irrespective from current economic and political developments. Moreover, contrary to our expectations and to results confirmed in a wide range of previous studies, sex turned out to be insignificant in explaining the public support for the euro.

The results also shed some light on the motives behind the support for the euro. Obviously, those who are convinced that the euro will be beneficial both on the macro and the micro level (i.e. for the economy and for themselves) strongly support the euro. On the contrary, those who think exactly the opposite are against the euro introduction. At the same time it is noteworthy that the conviction of low benefits from the euro adoption allows to differentiate predominantly between euro-enthusiasts and euro-sceptics (and not necessarily between euro-enthusiasts and undecided respondents).

A clear implication for the future information campaign is that communicating benefits and costs of the euro, as well as addressing public concerns regarding the single currency, are key to raising the support for the euro. Our results demonstated that the public perception is not fixed, but evolves with economic and political developments, so that new attitudes and concerns appear. Information campaign should therefore be flexible and adjust to the changing circumstances.

The comparison of 2009 and 2010 results allows us to take insights into how the determinants of the attitude to the euro evolved against the background of the euro area crisis. Whereas the public support has generally declined over this period, this decline was concentrated along some dimensions. First of all, the conviction of euro being a „strong, stable currency" has definitely ceased to drive a positive attitude towards it. Instead, a negative attitude started to result from low income or high age (previously insignificant). Most surprisingly, a relatively more negative attitude in 2010 was represented by students, white-collar workers (as compared to blue-collars), as well as big city residents (as compared to the residents of rural areas). On the other hand, the outflow of common currency supporters was not concentrated in any single electorate of the political parties.

The above conclusions might be of interest to the policymakers, especially those responsible for the profile of the information campaign that should precede the future currency changeover in Poland. They also contribute to better understanding of the dynamics standing behind the public support figures.

Nevertheless, some puzzling evidence discovered in this study needs reconsideration when designing the questionnaire and after future iterations of this survey. Firstly, the dichotomy between (low) "fear of rounding-up prices by entrepreneurs" and (high) "fear of price hikes after the euro adoption" raises the question what stand behind the perception of the latter factor. Secondly, the lack of relationship between residence and attitude towards the euro seems to be puzzling enough to deserve more detailed investigation. Thirdly, a more detailed breakdown in terms of labour market situation might be desirable, possibly along the line of hypothesised euro-related personal benefits and costs.

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Acknowledgements

Appendix

Figure 1

Attitude towards euro adoption in Poland – Flash Eurobarometer and CBOS data
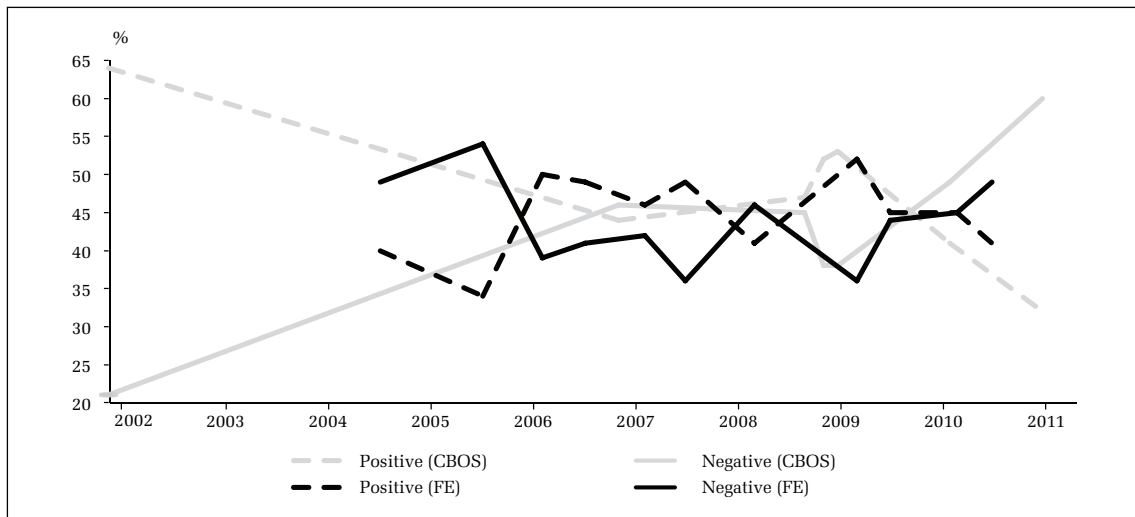
Source: European Commission, CBOS.

Figure 2

Attitude towards the euro adoption in Poland − Ipsos/MoF
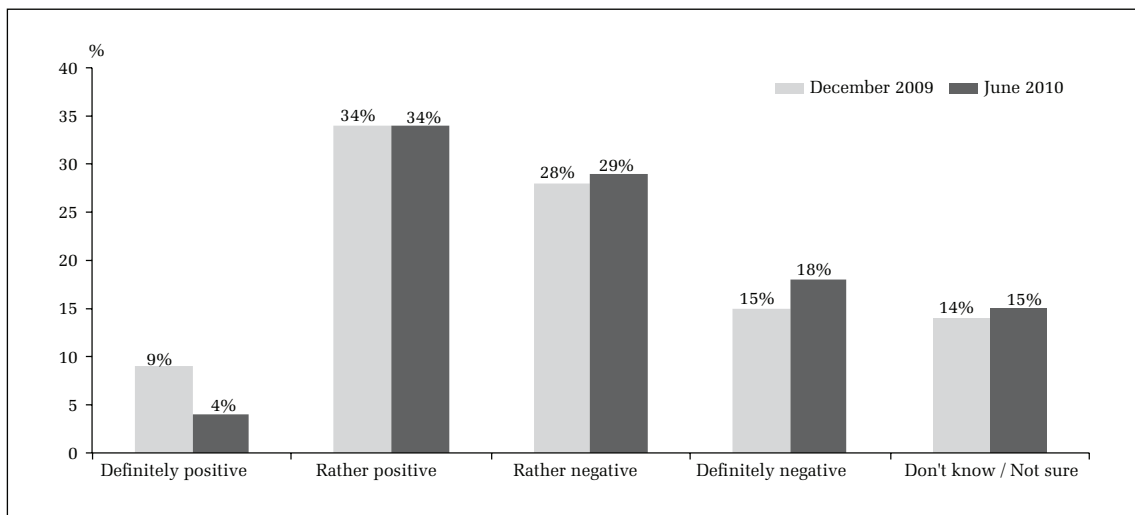
Source: Ipsos/MoF.

Figure 3

Support for the euro adoption in the New Member States of the EU
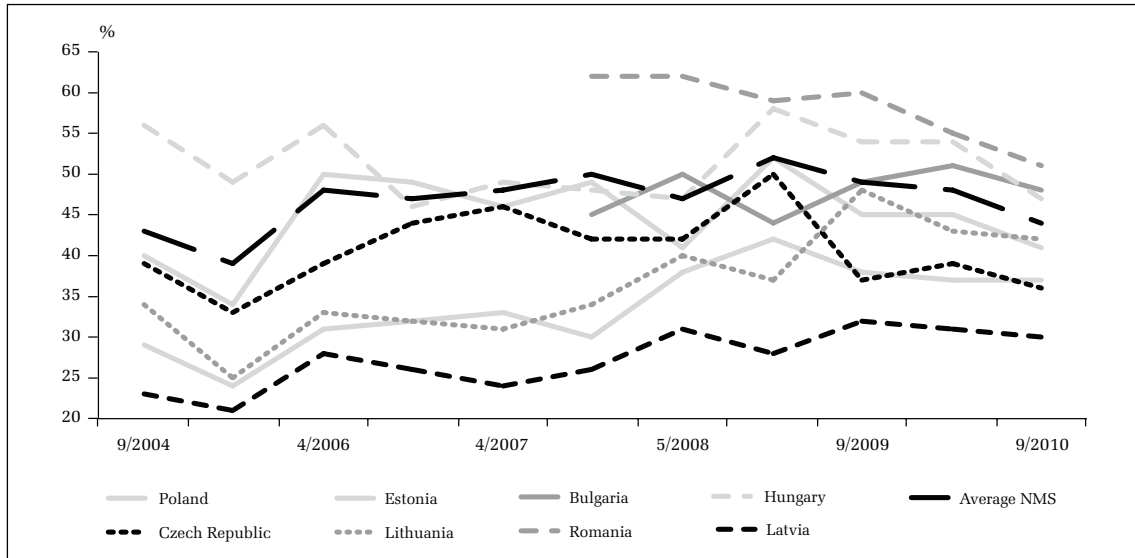
Note: weighted average, including data for Slovenia (till 2006), Cyprus and Malta (till 2007) and Slovakia (till 2008).
For details see European Commission (2010).

Source: European Commission.

Table 1
Set of potential explanatory variables

| Determinant	Variable description	Hypothesis for Poland
Age	Years	Support for the euro would decrease with age
Household count	Number of people in the household	Support for the euro would decrease with the size of a family
Sex	Dummy variable: (1) woman, (2) man	Support for the euro would be lower among women
Economic knowledge[1]	A proxy variable for the level of economic awareness, calculated as sum of the following components: (1) 1 for responding correctly to the question „What was the average inflation rate in Poland over the last two years?" (i.e. selecting „1-5%" rather than „0%", „5-10%", „>10%" or „I don't know"); (2) 1 for responding to the question „What/Who determines the zloty exchange rate?" by selecting „the market" or jointly „the market" and „National Bank of Poland" (rather than „Government/Ministry of Finance", „Monetary Policy Council", „European Union", „International organisations such as IMF" or others); (3) 1 for (declared) knowledge of at least 4 of 5 of the following concepts: „task budgeting", „budget deficit", „zloty exchange rate", „flat tax rate", „GDP"; (4) 1 for correct recognition of the Ministry of Finance competence (i.e. selecting at least 3 of the following: „distributing funds and planning spendings", „preparing and managing the state budget", „managing, planning and controlling the finance", „taxes", „subventions/interventions", „legal acts", while not selecting any of the following: „setting the exchange rate", „setting the interest rate", „I don't know"); (5) in 2010, there is an additional component: 1 for responding correctly to the question „Is Poland obliged to adopt the euro?" („yes" rather than „no" or „I don't know")	Support for the euro would increase with the level of economic knowledge
Income	Natural logarithm of the declared household's per capita income	Support for the euro would increase with the level of income
Personal euro-related cost and benefit balance	4 options: (1) beneficial for the economy and myself, (2) beneficial for the economy but not myself, (3) beneficial for myself but not for the economy, (4) beneficial neither for the economy nor for myself	Support for the euro would be positively correlated with expectations of positive consequences of its introduction

Key benefits	Set of dummy variables indicating at most 3 key benefits from the euro adoption in Poland, selected from the following list: adopting a strong and stable currency; facility for shopping and travelling in the other states of the euro area; more favourable conditions for the external trade development; development of tourism; improvement in Poland's economic situation; increased prestige of Poland on the European and the global scene	Support for the euro would be positively correlated with expectations of positive consequences of its introduction
Key concerns	Set of dummy variables indicating at most 3 key concerns associated with the euro adoption in Poland, selected from the following list: difficulties with recognising or adapting to new banknotes and coins; difficulty with converting values from the zloty to the euro; rounding up and increasing prices by the sellers; losing part of the national identity; deterioration of one's own financial situation; increase in poverty and social inequalities; losing control over the economic policy	Support for the euro would be negatively correlated with expectations of negative consequences of its introduction
Locality	Cities > 200 000, cities 50 000–200 000, cities < 50 000 or rural areas	Support for the euro would be higher among inhabitants of urban areas
Self-perceived knowledge about the euro	4 categories: (1) very well informed, (2) rather well informed, (3) rather badly informed, (4) very badly informed, (5) I don't know / I'm not sure	Support for the euro would increase with the level of knowledge about it
Labour market situation	5 categories: (1) unemployed or non-employed, (2) student, (3) pensioner, (4) white-collar or entrepreneur, (5) blue-collar or peasant	Support for the euro would be higher among empolyed persons, specifically white-collars or entrepreneurs and students
Partisanship	5 categories: (1) wouldn't vote next Sunday, (2) PiS (Law and Justice), (3) SLD (Democratic Left Alliance), (4) PSL (Polish Peasant Party), (5) PO (Civic Platform)	Support for the euro would be higher among supporters of the ruling Civic Platform party
Expectation of substantial price increase after euro adoption	4 categories: (1) no, (2) only to a very limited extent, (3) to a moderate extent, (4) to a considerable extent, (5) I don't know / I'm not sure	Support for the euro would be negatively correlated with higher expectations of substantial price increase after euro adoption

[1] Note that the proxy variable for economic knowledge employed in our study combines both the objective and subjective knowledge elements.

Table 2
Estimation results for binomial and ordered logit models (dependent variable: support for the euro adoption)

		Logit				Logit for ordered categories							
		2009		2010		3 categories				4 categories				5 categories			
						2009		2010		2009		2010		2009		2010	
		coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value
Constant	1	0.829	0.059	6.490	0.005	-1.181	0.000	-4.176	0.006	-4.966	0.000	-9.281	0.000	-4.743	0.000	-8.036	0.000
	2					-0.174	0.573	-3.177	0.037	-1.314	0.000	-4.874	0.001	-1.447	0.000	-4.089	0.002
	3									1.445	0.000	-2.147	0.155	-0.475	0.069	-3.092	0.017
	4													1.768	0.000	-1.039	0.422
Will the euro be beneficial and for whom?	the economy and myself	-1.537	0.000	-1.280	0.028	-1.510	0.000	-1.663	0.000	-1.246	0.000	-1.338	0.000	-1.347	0.000	-1.428	0.000
	the economy but not myself																
	myself but not the economy	0.997	0.006			0.865	0.002			0.652	0.023			0.678	0.007		
	neither the economy nor myself	1.329	0.000	1.222	0.012	1.226	0.000	1.340	0.000	1.031	0.060	0.908	0.001	1.095	0.000	0.999	0.000
Age (years)												0.019	0.044			0.013	0.109
Key benefits	strong and stable currency	-1.388	0.000	-0.762	0.075	-1.142	0.000	-0.754	0.014	-1.322	0.030	-0.674	0.030	-1.171	0.000	-0.658	0.016
	facility for shopping	-0.734	0.002	-0.775	0.026	-0.528	0.003			-0.588	0.054	-0.642	0.012	-0.519	0.000	-0.389	0.080
	external trade development	-0.617	0.014	-1.187	0.001	-0.447	0.001	-0.801	0.022	-0.565	0.000	-1.025	0.000	-0.475	0.003	-0.850	0.000
	tourism			-1.026	0.007			-0.559	0.035			-0.612	0.031			-0.444	0.064
	improvement in economic situation	-0.861	0.002	-1.157	0.015	-0.528	0.016			-0.365	0.020	-0.817	0.009	-0.307	0.080	-0.492	0.074
	more prestige	-0.814	0.012	-1.658	0.001	-0.612	0.011	-0.988	0.004	-0.495	0.000	-0.895	0.006	-0.453	0.017	-0.871	0.003
Key concerns	new banknotes and coins	0.659	0.026	1.099	0.067					0.440	0.029			0.294	0.100		
	difficulty with currency conversion	0.413	0.100			0.326	0.076			0.367	0.000			0.349	0.020		
	rounding up prices																
	losing national identity	0.853	0.025			0.682	0.022			0.542	0.000			0.570	0.012		
	deterioration in personal finance	0.630	0.007	0.921	0.008	0.569	0.001			0.511	0.000			0.504	0.000	0.311	0.097
	poverty and inequalities	0.460	0.071	1.137	0.004			0.473	0.053	0.000	0.030	0.517	0.027			0.432	0.032
	losing control over economic policy			1.475	0.010	0.789	0.017			0.549	0.000	0.784	0.033	0.644	0.012		

Note: this is a rotated landscape table. Each model is reported as a pair of values: estimated coefficient (bold) with its p‑value (italic, shown here in parentheses). The full rows contain eight model specifications (1)–(8).

Variable	Category	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Economic knowledge		-0.424 (0.015)				-0.348 (0.004)			-0.207 (0.048)
Income (ln)		-0.617 (0.055)			-0.381 (0.077)		-0.526 (0.013)		-0.430 (0.018)
Residence	cities > 200 000	0.143 (0.618)	0.907 (0.091)	0.219 (0.293)	0.372 (0.290)	-0.035 (0.861)	0.611 (0.073)	0.031 (0.859)	0.462 (0.112)
	cities 50 000−200 000	-0.418 (0.187)	0.008 (0.987)	-0.371 (0.114)	-0.118 (0.693)	-0.058 (0.777)	-0.007 (0.981)	-0.145 (0.428)	-0.054 (0.826)
	cities < 50 000	0.109 (0.697)	-0.208 (0.581)	0.224 (0.275)	-0.117 (0.654)	0.214 (0.252)	-0.350 (0.173)	0.229 (0.166)	-0.108 (0.620)
	country (base)								
Do you feel well-informed about the euro?	v. well and well	-1.024 (0.003)	-2.402 (0.000)	-1.063 (0.000)	-1.927 (0.000)	-1.022 (0.000)	-1.433 (0.000)	-1.011 (0.000)	-1.376 (0.000)
	not sure	0.014 (0.977)	-0.610 (0.460)	-0.226 (0.469)	-0.694 (0.105)	-0.296 (0.388)	-0.294 (0.582)	-0.348 (0.188)	-0.374 (0.323)
	badly	-0.472 (0.079)	-1.375 (0.002)	-0.331 (0.082)	-0.767 (0.006)	-0.665 (0.000)	-0.950 (0.000)	-0.496 (0.002)	-0.642 (0.005)
	v. badly								
Labour market	unemployed or non-employed	-0.436 (0.242)	-0.068 (0.902)	-0.389 (0.178)	-0.047 (0.902)	-0.245 (0.374)	0.146 (0.705)	-0.288 (0.236)	0.173 (0.599)
	student	-1.127 (0.007)	-0.186 (0.771)	-0.868 (0.004)	-0.642 (0.168)	-0.845 (0.001)	0.521 (0.275)	-0.781 (0.001)	0.017 (0.967)
	pensioner	0.919 (0.001)	1.009 (0.018)	0.474 (0.020)	0.775 (0.006)	0.516 (0.007)	0.559 (0.120)	0.391 (0.018)	0.577 (0.061)
	white-collar, entrepreneur	0.043 (0.879)	0.976 (0.030)	-0.001 (0.995)	0.781 (0.015)	-0.151 (0.444)	0.883 (0.004)	-0.132 (0.455)	0.870 (0.001)
	blue-collar, peasant								
Supported political party	not voting	0.754 (0.003)	0.263 (0.527)	0.562 (0.003)	0.441 (0.116)	0.374 (0.033)	0.268 (0.353)	0.342 (0.028)	0.298 (0.224)
	PiS (Law and Justice)	1.014 (0.003)	0.530 (0.235)	0.979 (0.000)	0.718 (0.018)	0.326 (0.161)	0.749 (0.011)	0.525 (0.011)	0.797 (0.002)
	SLD (Democratic Left Alliance)	0.769 (0.052)	1.436 (0.044)	0.816 (0.005)	1.306 (0.015)	0.343 (0.201)	1.390 (0.011)	0.485 (0.040)	1.342 (0.004)
	PSL (Polish Peasant Party)	0.468 (0.505)	0.565 (0.260)	0.548 (0.313)	0.522 (0.151)	0.083 (0.856)	0.849 (0.018)	0.266 (0.533)	0.680 (0.028)
	PO (Civic Platform, base)								
Fear of price increases	no	-1.973 (0.003)	-1.914 (0.039)	-1.337 (0.011)	-0.731 (0.268)	-2.605 (0.000)	-1.412 (0.019)	-2.210 (0.000)	-0.983 (0.070)
	not sure	-1.362 (0.000)	-1.304 (0.005)	-1.148 (0.000)	-0.725 (0.015)	-1.024 (0.000)	-1.285 (0.000)	-1.006 (0.000)	-1.018 (0.000)
	moderate	-1.035 (0.000)	-0.722 (0.048)	-0.965 (0.000)	-0.693 (0.007)	-0.986 (0.000)	-0.753 (0.004)	-0.931 (0.000)	-0.663 (0.004)
	substantial (base)								
Pseudo-R²	Cox-Snell	0.488	0.507	0.452	0.541	0.572	0.519	0.529	
	Nagelkerke	0.651	0.682	0.524	0.587	0.626	0.547	0.559	
	McFadden	0.483	0.519	0.303	0.305	0.345	0.244	0.257	
Test of parallel lines (p-value)		—	—	0.000	0.122	0.033	0.920	0.002	0.910

Notes: the dependent variable categories are ordered from the most to the least euro-enthusiastic, hence a negative parameter implies a positive influence of a variable's growth on the attitude to the euro. In particular, for dummy explanatory variables, a negative parameter value suggests improvement of the attitude to the euro when a factor is present. For categorical explanatory variables (i.e. locality), estimated coefficients (i.e. for cities > 200 000, cities 50 000−200 000 and cities < 50 000) are interpreted in terms of difference from the base category (i.e. country).

Table 3a
Estimation results for multinominal logit models (dependent variable: support for the euro adoption)

		3 categories							
		2009				2010			
		2		3		2		3	
		coef	p-value	coef	p-value	coef	p-value	coef	p-value
Constant	1	**0.404**	0.403	1.095	0.007	0.349	0.456	1.799	0.000
	2								
	3								
	4								
Will the euro be beneficial and for whom?	the economy and myself	-1.723	0.000	-1.476	0.000	-2.401	0.000	-2.023	0.000
	the economy but not myself / myself but not the economy	0.160	0.739	0.974	0.007				
	neither the economy nor myself	0.031	0.940	1.309	0.000	0.284	0.488	1.584	0.000
Age (years)									
Key benefits	strong and stable currency	-0.687	0.019	-1.401	0.000	-0.738	0.018	-0.767	0.002
	facility for shopping	-0.578	0.040	-0.702	0.002				
	external trade development	-0.356	0.240	-0.583	0.017	-0.797	0.005	-0.987	0.000
	tourism	-0.709	0.044	-0.720	0.008	0.053	0.849	-0.799	0.001
	improvement in economic situation	-0.167	0.642	-0.796	0.010	-0.968	0.013	-1.152	0.000
	more prestige								
Key concerns	new banknotes and coins								
	difficulty with currency conversion	0.206	0.472	0.413	0.080				
	rounding up prices								
	losing national identity	-0.011	0.983	0.762	0.040				
	deterioration in personal finance	0.146	0.595	0.664	0.003				
	poverty and inequalities								
	losing control over economic policy	0.523	0.330	0.821	0.055				

		B	Sig.	B	Sig.	B	Sig.	B	Sig.
Economic knowledge									
Income (ln)									
Residence	cities > 200 000	**0.675**	**0.032**	0.204	0.451	**0.739**	**0.019**	0.208	0.447
	cities 50 000−200 000	-0.277	0.446	-0.475	0.120	0.035	0.920	0.111	0.696
	cities < 50 000	-0.068	0.835	0.196	0.460	0.155	0.613	0.036	0.888
	country (base)								
Do you feel well-informed about the euro?	v. well and well	**-1.430**	**0.001**	**-1.227**	**0.000**	**-2.143**	**0.000**	**-1.976**	**0.000**
	not sure	0.451	0.323	-0.153	0.740	0.113	0.788	**-0.758**	**0.066**
	badly	**-0.956**	**0.001**	**-0.562**	**0.028**	**-1.278**	**0.000**	**-0.947**	**0.001**
	v. badly								
Labour market	unemployed or non-employed	-0.761	0.087	-0.535	0.143	0.105	0.810	0.217	0.552
	student	**-1.192**	**0.005**	**-1.243**	**0.002**	**-0.711**	**0.093**	**-0.794**	**0.030**
	pensioner	0.450	0.148	**0.831**	**0.002**	**0.594**	**0.062**	**0.759**	**0.006**
	white-collar, entrepreneur	**-1.414**	**0.000**	0.009	0.973	-0.100	0.758	0.259	0.325
	blue-collar, peasant								
Supported political party	not voting	**1.055**	**0.001**	**0.788**	**0.001**	0.208	0.481	0.299	0.223
	PiS (Law and Justice)	0.360	0.390	**1.069**	**0.001**	**0.918**	**0.006**	**1.368**	**0.000**
	SLD (Democratic Left Alliance)	**0.974**	**0.031**	**0.924**	**0.014**	**1.466**	**0.022**	**1.644**	**0.002**
	PSL (Polish Peasant Party)	-0.628	0.590	0.392	0.563	0.487	0.247	0.580	0.096
	PO (Civic Platform, base)								
Fear of price increases	no	-0.841	0.324	**-1.687**	**0.011**	-0.756	0.382	**-1.343**	**0.025**
	not sure	-0.289	0.412	**-1.481**	**0.000**	0.437	0.175	**-1.123**	**0.000**
	moderate	**-0.655**	**0.037**	**-1.135**	**0.000**	-0.214	0.458	**-1.034**	**0.000**
	substantial (base)								
Pseudo-R²	Cox-Snell	0.514				0.486			
	Nagelkerke	0.595				0.561			
	McFadden	0.361				0.330			

Notes: the most euro-enthusiastic category of the dependent variable (1) was set as the base category, and hence a negative parameter implies a positive influence of a variable's growth on the attitude to the euro. In particular, for dummy explanatory variables, a negative significant parameter value suggests improvement of the attitude to the euro when a factor is present. For categorical explanatory variables (i.e. locality), estimated coefficients (i.e. for cities > 200 000, cities 50 000–200 000 and cities < 50 000) are interpreted in terms of difference from the base category (i.e. country).

Table 3b
Estimation results for multinominal logit models (dependent variable: support for the euro adoption)

		4 categories											
		2009						2010					
		2		3		4		2		3		4	
		coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value
Constant	1	2.611	0.000	2.919	0.000	2.307	0.003	15.282	0.001	20.008	0.000	17.130	0.002
	2												
	3												
	4												
Will the euro be beneficial and for whom?	the economy and myself	-1.525	0.000	-3.064	0.000	-2.226	0.004	-1.152	0.050	-2.515	0.001	-3.090	0.017
	the economy but not myself												
	myself but not the economy	-1.381	0.019	-0.184	0.752	-0.012	0.986						
	neither the economy nor myself	16.154	0.000	17.283	0.000	17.683	0.000	15.474	0.000	17.143	0.000	17.705	0.000
Age (years)								0.012	0.638	0.016	0.570	0.055	0.069
Key benefits	strong and stable currency	-0.671	0.020	-1.750	0.000	-2.828	0.000	0.055	0.927	-0.458	0.504	-2.891	0.020
	facility for shopping	-0.317	0.264	-0.970	0.005	-1.183	0.007	-0.856	0.144	-1.293	0.045	-2.205	0.004
	external trade development	-0.222	0.444	-0.670	0.061	-2.197	0.000	-0.854	0.124	-1.958	0.002	-3.078	0.000
	tourism												
	improvement in economic situation	0.446	0.153	-0.261	0.512	-1.789	0.015	-0.885	0.154	-1.429	0.048	-2.087	0.024
	more prestige	-0.047	0.890	-0.720	0.101	-1.223	0.048						

		(1) b	(1) p	(2) b	(2) p	(3) b	(3) p	(4) b	(4) p	(5) b	(5) p	(6) b	(6) p
	new banknotes and coins												
	difficulty with currency conversion	0.208	0.495	0.516	0.160	1.091	0.010						
	rounding up prices												
Key concerns	losing national identity	0.404	0.398	0.961	0.089	1.705	0.008						
	deterioration in personal finance	0.350	0.351	0.944	0.022	0.934	0.040						
	poverty and inequalities	0.196	0.794	1.049	0.189	1.387	0.097						
	losing control over economic policy												
Economic knowledge								-0.451	0.186	-0.793	0.031	-1.018	0.010
Income (ln)								**-1.515**	**0.009**	**-2.152**	**0.001**	**-2.121**	**0.002**
Residence	cities > 200 000	-0.549	0.142	-0.335	0.440	-0.403	0.438	0.811	0.378	**1.765**	**0.081**	**2.075**	**0.055**
	cities 50 000−200 000	-0.540	0.156	**-1.058**	**0.023**	-0.470	0.374	0.442	0.571	0.755	0.371	0.510	0.577
	cities < 50 000	0.006	0.987	0.108	0.806	0.432	0.390	0.604	0.422	0.446	0.583	-0.168	0.846
	country (base)												
Do you feel well-informed about the euro?	v. well and well												
	not sure												
	badly												
	v. badly												
Labour market	unemployed or non-employed	-0.557	0.270	-0.932	0.112	-0.914	0.190	-0.978	0.370	-1.034	0.374	-0.142	0.910
	student	-0.635	0.138	**-1.481**	**0.008**	**-2.603**	**0.002**	-0.308	0.746	-1.037	0.361	1.347	0.305
	pensioner	-0.238	0.600	0.652	0.191	**1.072**	**0.049**	0.422	0.750	0.978	0.476	1.205	0.403
	white-collar, entrepreneur	-0.407	0.256	-0.402	0.343	-0.519	0.310	0.624	0.366	1.134	0.143	**2.233**	**0.013**
	blue-collar, peasant												

	not voting	0.008	0.979	**0.864**	**0.023**	**0.916**	**0.044**	-0.530	0.504	-0.010	0.991	0.296	0.751
	PiS (Law and Justice)	0.259	0.581	**1.436**	**0.008**	0.979	0.125	0.078	0.928	0.699	0.455	**1.705**	**0.088**
Supported political party	SLD (Democratic Left Alliance)	-0.082	0.871	0.716	0.223	0.619	0.371	-0.121	0.933	0.951	0.536	2.316	0.169
	PSL (Polish Peasant Party)	-0.903	0.277	-0.257	0.794	-0.523	0.641	-0.379	0.650	0.212	0.821	1.310	0.210
	PO (Civic Platform, base)												
	no	-1.288	**0.028**	-2.802	**0.001**	-22.825	**0.000**	-2.302	**0.090**	-3.375	**0.033**	-2.454	0.163
Fear of price increases	not sure	**1.241**	**0.028**	0.013	0.984	**-1.378**	**0.061**	-1.058	0.413	-1.780	0.180	**-3.156**	**0.022**
	moderate	0.503	0.237	-0.582	0.199	**-1.353**	**0.009**	-0.935	0.423	-1.822	0.124	**-2.376**	**0.053**
	substantial (base)												
Pseudo-R²	Cox-Snell	0.580						0.579					
	Nagelkerke	0.630						0.633					
	McFadden	0.341						0.351					

Notes: the most euro-enthusiastic category of the dependent variable (1) was set as the base category, and hence a negative parameter implies a positive influence of a variable's growth on the attitude to the euro. In particular, for dummy explanatory variables, a negative significant parameter value suggests improvement of the attitude to the euro when a factor is present. For categorical explanatory variables (i.e. locality), estimated coefficients (i.e. for cities > 200 000, cities 50 000–200 000 and cities < 50 000) are interpreted in terms of difference from the base category (i.e. country).

Table 3c
Estimation results for multinominal logit models (dependent variable: support for the euro adoption)

		5 categories															
		2009								2010							
		2		3		4		5		2		3		4		5	
		coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value	coef	p-value
Constant	1	2.368	0.001	2.915	0.000	3.332	0.000	3.718	0.000	14.878	0.001	14.890	0.004	18.860	0.000	15.869	0.003
	2																
	3																
	4																
Will the euro be beneficial and for whom?	the economy and myself	-1.584	0.000	-3.015	0.000	-3.057	0.000	-2.520	0.002	-1.220	0.037	-3.265	0.001	-2.621	0.001	-3.088	0.014
	the economy but not myself																
	myself but not the economy	-1.532	0.010	-1.060	0.113	-0.559	0.343	-0.453	0.517								
	neither the economy nor myself									15.933	0.000	16.305	0.000	17.528	0.000	18.048	0.000
Age (years)										0.017	0.494	0.007	0.805	0.020	0.468	0.051	0.078
Key benefits	strong and stable currency	-0.788	0.007	-1.401	0.000	-2.063	0.000	-3.022	0.000	0.043	0.943	-1.402	0.072	-0.533	0.434	-2.931	0.017
	facility for shopping	-0.340	0.231	-0.884	0.019	-1.081	0.002	-1.324	0.002	-0.764	0.183	-1.674	0.014	-1.174	0.062	-2.131	0.004
	external trade development	-0.298	0.311	-0.654	0.100	-0.747	0.037	-2.225	0.000	-0.869	0.117	-2.499	0.000	-1.897	0.002	-2.917	0.000
	tourism																
	improvement in economic situation	0.394	0.211	-0.369	0.412	-0.277	0.482	-1.730	0.018	-0.938	0.131	-1.464	0.060	-1.375	0.054	-1.815	0.045
	more prestige	-0.040	0.907	-0.253	0.589	-0.751	0.084	-1.178	0.052								

		coef.	p	coef.	p	coef.	p	coef.	p
Key concerns	new banknotes and coins								
	difficulty with currency conversion	0.308	0.319	0.567	0.152	0.556	0.128	1.057	0.012
	rounding up prices								
	losing national identity	0.385	0.432	0.303	0.653	1.042	0.067	1.782	0.006
	deterioration in personal finance	0.388	0.303	0.502	0.249	1.041	0.010	0.911	0.041
	poverty and inequalities	0.106	0.886	1.411	0.079	1.012	0.195	1.381	0.089
	losing control over economic policy	1.241	0.171	1.638	0.109	2.009	0.038	2.249	0.027
Economic knowledge		-0.399	0.232	-0.593	0.112	-0.675	0.058	-0.857	0.025
		-1.509	0.010	-1.593	0.015	-2.065	0.001	-1.987	0.003
Income (ln)		-0.539	0.151	0.232	0.609	-0.235	0.581	-0.462	0.365
Residence	cities > 200 000	0.757	0.412	**1.758**	**0.090**	1.522	0.127	**1.865**	**0.075**
		-0.524	0.168	-0.700	0.158	**-1.007**	**0.028**	-0.461	0.370
	cities 50 000–200 000	0.416	0.595	0.711	0.419	0.564	0.501	0.317	0.724
		-0.020	0.958	-0.070	0.882	0.095	0.827	0.461	0.350
	cities < 50 000	0.691	0.359	1.031	0.215	0.663	0.409	0.239	0.778
	country (base)								
Do you feel well-informed about the euro?	v. well and well	0.256	0.578	**-1.213**	**0.037**	**-0.995**	**0.061**	-0.767	0.204
	not sure	12.699	0.962	12.971	0.961	12.715	0.962	11.572	0.965
	badly	0.647	0.139	-0.432	0.369	0.287	0.536	-0.755	0.132
	v. badly								

	unemployed or non-employed	-0.581	*0.250*	**-1.289**	***0.040***	-0.930	*0.107*	-1.090	*0.110*	-0.948	*0.385*	-0.731	*0.540*	-0.987	*0.392*	-0.212	*0.864*
	student	-0.538	*0.205*	**-1.696**	***0.003***	**-1.439**	***0.008***	**-2.660**	***0.001***	-0.237	*0.802*	-1.041	*0.359*	-1.239	*0.267*	0.600	*0.633*
Labour market	pensioner	-0.196	*0.671*	0.322	*0.535*	0.578	*0.249*	0.877	*0.105*	0.354	*0.788*	1.183	*0.397*	1.008	*0.458*	1.447	*0.308*
	white-collar, entrepreneur	-0.414	*0.254*	**-1.782**	***0.000***	-0.274	*0.520*	-0.574	*0.262*	0.642	*0.353*	0.668	*0.422*	1.236	*0.107*	**2.352**	***0.008***
	blue-collar, peasant (base)																
	not voting	-0.088	*0.781*	**0.977**	***0.019***	**0.766**	***0.043***	**0.755**	***0.090***	-0.603	*0.447*	0.169	*0.848*	0.020	*0.981*	0.368	*0.688*
	PiS (Law and Justice)	0.167	*0.725*	0.482	*0.419*	**1.269**	***0.018***	0.743	*0.240*	0.104	*0.904*	0.812	*0.396*	0.783	*0.393*	**1.707**	***0.080***
Supported political party	SLD (Democratic Left Alliance)	-0.063	*0.902*	0.896	*0.157*	0.919	*0.116*	0.712	*0.295*	-0.164	*0.910*	0.463	*0.784*	0.750	*0.629*	1.885	*0.259*
	PSL (Polish Peasant Party)	-0.879	*0.294*	-1.436	*0.289*	-0.358	*0.710*	-0.862	*0.431*	-0.401	*0.634*	0.675	*0.489*	0.111	*0.904*	0.997	*0.327*
	PO (Civic Platform, base)																
	no	**-1.261**	***0.034***	**-1.832**	***0.062***	**-2.210**	***0.006***	-22.782	**2009**	-2.088	*0.117*	-2.202	*0.208*	**-2.903**	***0.061***	-1.791	*0.293*
Fear of price increases	not sure	**1.070**	***0.062***	0.667	*0.288*	-0.469	*0.445*	**-2.116**	***0.004***	-0.975	*0.448*	-0.121	*0.927*	-1.477	*0.260*	**-2.623**	***0.053***
	moderate	0.431	*0.324*	-0.327	*0.507*	-0.732	*0.111*	**-1.702**	***0.001***	-0.839	*0.471*	-0.790	*0.513*	-1.627	*0.168*	**-2.114**	***0.082***
	substantial (base)																

Pseudo-R²			
Cox-Snell	0.597	0.575	
Nagelkerke	0.628	0.607	
McFadden	0.303	0.292	

Notes: the most euro-enthusiastic category of the dependent variable (1) was set as the base category, and hence a negative parameter implies a positive influence of a variable's growth on the attitude to the euro. In particular, for dummy explanatory variables, a negative significant parameter value suggests improvement of the attitude to the euro when a factor is present. For categorical explanatory variables (i.e. locality), estimated coefficients (i.e. for cities > 200 000, cities 50 000–200 000 and cities < 50 000) are interpreted in terms of difference from the base category (i.e. country).

Table 4a
Estimation results for binomial logit model (dependent variable: support for the euro adoption)

		Logit					
		all		general			
				2009		2010	
		coef	p-value	coef	p-value	coef	p-value
Constant	1	2.146	0.210	-0.456	0.864	7.429	0.006
	2						
	3						
	4						
Will the euro be beneficial and for whom?	the economy and myself	-0.962	0.008	-0.994	0.048	-1.133	0.072
	the economy but not myself	0.269	0.313	0.339	0.399	0.471	0.285
	myself but not the economy	0.339	0.349	0.655	0.233	-0.135	0.813
	neither the economy nor myself	1.454	0.000	1.517	0.003	1.489	0.010
Age (years)		0,006	0.502	0.001	0.953	0.006	0.664
Household count		-0,068	0.441	-0.098	0.470	-0.108	0.436
Key benefits	strong and stable currency	-1.170	0.000	-1.509	0.000	-0.742	0.089
	facility for shopping	-0.750	0.000	-0.948	0.003	-0.771	0.031
	external trade development	-0.821	0.000	-0.644	0.057	-1.264	0.001
	tourism	-0.373	0.145	0.122	0.760	-1.081	0.007
	improvement in economic situation	-0.842	0.001	-1.128	0.002	-1.197	0.014
	more prestige	-0.984	0.001	-1.013	0.013	-1.673	0.001
Key concerns	new banknotes and coins	0.966	0.001	0.959	0.011	1.155	0.060
	difficulty with currency conversion	0.200	0.393	0.507	0.135	-0.137	0.737
	rounding up prices	-0.227	0.274	-0.313	0.307	-0.168	0.611
	losing national identity	0.452	0.146	1.023	0.044	0.134	0.773
	deterioration in personal finance	0.671	0.002	0.670	0.035	0.937	0.008
	poverty and inequalities	0.637	0.007	0.351	0.292	1.139	0.005
	losing control over economic policy	0.875	0.024	0.432	0.463	1.478	0.011

Economic knowledge		0.026	0.812	0.361	0.059	-0.445	0.012
Income (ln)		-0.231	0.303	0.059	0.867	-0.752	0.031
Residence	cities > 200 000	0.823	0.007	0.986	0.023	0.988	0.073
	cities 50 000–200 000	-0.041	0.887	0.045	0.919	0.067	0.885
	cities < 50 000	0.110	0.656	0.598	0.110	-0.211	0.582
	country (base)						
Do you feel well-informed about the euro?	v. well and well	-1.283	0.000	-0.737	0.120	-2.468	0.000
	not sure	-0.428	0.409	-0.993	0.179	-0.537	0.520
	badly	-0.567	0.026	-0.119	0.741	-1.412	0.003
	v. badly						
Labour market	unemployed or non-employed	-0.086	0.811	-0.150	0.773	-0.180	0.749
	student	-0.578	0.200	-1.119	0.098	0.062	0.931
	pensioner	0.878	0.009	1.219	0.012	0.759	0.176
	white-collar, entrepreneur	0.248	0.360	-0.259	0.499	1.027	0.025
	blue-collar, peasant						
Supported political party	not voting	0.821	0.001	1.380	0.000	0.202	0.632
	PiS (Law and Justice)	0.833	0.003	1.399	0.001	0.432	0.343
	SLD (Democratic Left Alliance)	0.668	0.077	0.449	0.360	1.519	0.036
	PSL (Polish Peasant Party)	0.734	0.071	1.375	0.219	0.618	0.229
	PO (Civic Platform, base)						
Fear of price increases	no	-1.698	0.007	-2.716	0.004	-1.900	0.046
	not sure	-1.070	0.001	-1.274	0.009	-1.203	0.019
	moderate	-1.083	0.000	-1.460	0.000	-0.739	0.053
	substantial (base)						
Pseudo-R^2	Cox-Snell	0.474		0.495		0.511	
	Nagelkerke	0.633		0.661		0.686	
	McFadden	0.464		0.494		0.524	
Test of parallel lines (p-value)		–					

Table 4b

Estimation results for binomial logit model (dependent variable: support for the euro adoption)

		Logit				
		all		specific		diff
		coef	p-value	coef	p-value	p-value
Constant	1	1.407	0.313	0.305		0.135
	2					
	3					
	4					
Will the euro be beneficial and for whom?	the economy and myself	-0.975	0.008	0.062		0.921
	the economy but not myself	0.277	0.296	0.276		0.409
	myself but not the economy	0.368	0.307	-0.541		0.351
	neither the economy nor myself	1.464	0.000	0.344		0.558
Age (years)						
Household count						
Key benefits	strong and stable currency	-1.172	0.000	0.833		0.049
	facility for shopping	-0.778	0.000	0.218		0.533
	external trade development	-0.841	0.000	-0.363		0.35
	tourism	-0.395	0.121	-0.710		0.123
	improvement in economic situation	-0.851	0.001	0.416		0.389
	more prestige	-0.969	0.001	-0.297		0.559
	new banknotes and coins	0.965	0.001	0.307		0.591
	difficulty with currency conversion	0.194	0.404	-0.141		0.727
	rounding up prices					
Key concerns	losing national identity	0.491	0.113	-0.784		0.167
	deterioration in personal finance	0.658	0.002	0.346		0.281
	poverty and inequalities	0.633	0.007	0.790		0.041
	losing control over economic policy	0.869	0.026	1.016		0.167
Economic knowledge		0,016	0.882	-0.042		0.723
Income (ln)		-0,128	0.522	0.038		0.2

Residence	cities > 200 000	0.820	0.007	0.344	0.479
	cities 50 000−200 000	-0.050	0.861	0.484	0.293
	cities < 50 000	0.097	0.690	-0.257	0.493
	country (base)			0.606	0.063
Do you feel well--informed about the euro?	v. well and well	-1.298	0.000	-0.383	0,377
	not sure	-0.391	0.443	1.505	0,099
	badly	-0.602	0.017	0.039	0,886
	v. badly			1.449	0,002
Labour market	unemployed or non-employed	-0.077	0.830	0.809	0,166
	student	-0.744	0.072	0.919	0,224
	pensioner	1.079	0.000	-0.310	0,417
	white-collar, entrepreneur	0.213	0.428	0.715	0,067
	blue-collar, peasant			0.176	0,617
Supported political party	not voting	0.828	0.001	0.125	0,73
	PiS (Law and Justice)	0.861	0.002	0.112	0,801
	SLD (Democratic Left Alliance)	0.647	0.085	1.359	0,062
	PSL (Polish Peasant Party)	0.760	0.062	-0.286	0,801
	PO (Civic Platform, base)			0.407	0,21
Fear of price increases	no	-1.603	0.010	**0.551**	**0,637**
	not sure	-1.028	0.001	**0.554**	**0,204**
	moderate	-1.077	0.000	**0.333**	**0,256**
	substantial (base)			0.067	0,85
Pseudo-R^2	Cox-Snell	0.473		—	
	Nagelkerke	0.631		—	
	McFadden	0.462		—	
Test of parallel lines (p-value)		—		—	

Table 4c
Estimation results for ordered logit models, 3 categories (dependent variable: support for the euro adoption)

		Ologit					
		general					
		all		2009		2010	
		coef	p-value	coef	p-value	coef	p-value
Constant	1	-1.864	0.144	-0.363	0.846	-4.795	0.011
	2	-0.875	0.492	0.683	0.716	-3.763	0.045
	3						
	4						
Will the euro be beneficial and for whom?	the economy and myself	-1.210	0.000	-1.306	0.001	-1.267	0.008
	the economy but not myself	0.298	0.125	0.119	0.672	0.679	0.025
	myself but not the economy	0.464	0.085	0.570	0.150	0.158	0.703
	neither the economy nor myself	1.331	0.000	1.260	0.000	1.464	0.000
Age (years)		0.001	0.881	-0.001	0.890	0.004	0.688
Household count		-0.020	0.759	-0.035	0.711	-0.091	0.332
Key benefits	strong and stable currency	-1.029	0.000	-1.253	0.000	-0.684	0.032
	facility for shopping	-0.538	0.001	-0.690	0.003	-0.326	0.212
	external trade development	-0.618	0.001	-0.409	0.111	-0.859	0.002
	tourism	-0.111	0.570	0.387	0.197	-0.652	0.021
	improvement in economic situation	-0.526	0.010	-0.789	0.005	-0.558	0.104
	more prestige	-0.704	0.001	-0.558	0.063	-1.163	0.001
Key concerns	new banknotes and coins	0.374	0.087	0.350	0.206	0.426	0.285
	difficulty with currency conversion	0.144	0.414	0.377	0.125	-0.062	0.830
	rounding up prices	-0.217	0.161	-0.287	0.194	-0.230	0.334
	losing national identity	0.418	0.087	0.940	0.015	0.093	0.786
	deterioration in personal finance	0.489	0.002	0.575	0.010	0.467	0.049
	poverty and inequalities	0.347	0.036	0.210	0.367	0.632	0.015
	losing control over economic policy	0.521	0.063	0.633	0.140	0.665	0.096

		coef.	p	coef.	p	coef.	p
Economic knowledge		0.102	0.219	0.274	0.047	-0.170	0.175
Income (ln)		-0.175	0.300	-0.014	0.956	-0.492	0.045
Residence	cities > 200 000	0.545	0.014	0.774	0.012	0.518	0.162
	cities 50 000−200 000	-0.126	0.550	-0.059	0.850	-0.096	0.758
	cities < 50 000	0.255	0.157	0.704	0.007	-0.041	0.878
	country (base)						
Do you feel well-informed about the euro?	v. well and well	-1.200	0.000	-0.704	0.041	-1.891	0.000
	not sure	-0.474	0.113	-0.788	0.065	-0.419	0.360
	badly	-0.337	0.062	-0.040	0.870	-0.706	0.016
	v. badly						
Labour market	unemployed or non-employed	-0.099	0.712	-0.264	0.490	-0.169	0.668
	student	-0.629	0.062	-0.893	0.062	-0.302	0.558
	pensioner	0.645	0.009	0.704	0.037	0.545	0.161
	white-collar, entrepreneur	0.243	0.246	-0.207	0.470	0.945	0.004
	blue-collar, peasant						
Supported political party	not voting	0.600	0.001	0.874	0.001	0.386	0.189
	PiS (Law and Justice)	0.874	0.000	1.201	0.000	0.641	0.040
	SLD (Democratic Left Alliance)	0.686	0.017	0.637	0.075	1.281	0.020
	PSL (Polish Peasant Party)	0.621	0.046	1.220	0.129	0.519	0.166
	PO (Civic Platform, base)						
Fear of price increases	no	**-1.147**	**0.021**	**-2.164**	**0.009**	**-0.712**	**0.295**
	not sure	**-0.681**	**0.002**	**-0.713**	**0.027**	**-0.619**	**0.068**
	moderate	**-0.867**	**0.000**	**-1.066**	**0.000**	**-0.554**	**0.042**
	substantial (base)						
Pseudo-R^2	Cox-Snell	0.447		0.470		0.468	
	Nagelkerke	0.516		0.543		0.543	
	McFadden	0.295		0.316		0.319	
Test of parallel lines (p-value)		1.000		0.759		0.511	

Table 4d
Estimation results for ordered logit models, 3 categories (dependent variable: support for the euro adoption)

		Ologit			
		3			
		all		specific	diff
		coef	p-value	coef	p-value
Constant	1	-1.556	0.137	0.088	0.427
	2	-0.570	0.585		
	3				
	4				
Will the euro be beneficial and for whom?	the economy and myself	-1.207	0.000	0.004	0.992
	the economy but not myself	0.306	0.115	0.289	0.129
	myself but not the economy	0.459	0.087	-0.469	0.192
	neither the economy nor myself	1.336	0.000	0.293	0.314
Age (years)					
Household count					
Key benefits	strong and stable currency	-1.004	0.000	0.494	0.038
	facility for shopping	-0.560	0.001	0.208	0.322
	external trade development	-0.630	0.000	-0.254	0.253
	tourism	-0.116	0.550	-0.758	0.003
	improvement in economic situation	-0.522	0.010	-0.207	0.468
	more prestige	-0.692	0.002	-0.355	0.261
	new banknotes and coins	0.371	0.089	0.177	0.556
	difficulty with currency conversion	0.137	0.436	-0.321	0.155
	rounding up prices				
Key concerns	losing national identity	0.437	0.073	-0.649	0.063
	deterioration in personal finance	0.492	0.001	0.030	0.863
	poverty and inequalities	0.355	0.031	0.027	0.89
	losing control over economic policy	0.546	0.051	-0.489	0.218

Economic knowledge					
Income (ln)		-0.132	*0.377*	0.013	*0.523*
Residence	cities > 200 000	0.522	*0.018*	-0.068	*0.769*
	cities 50 000−200 000	-0.121	*0.560*	0.493	*0.064*
	cities < 50 000	0.241	*0.178*	-0.003	*0.99*
	country (base)			0.060	*0.733*
Do you feel well-informed about the euro?	v. well and well	-1.152	*0.000*	-0.086	*0.738*
	not sure	-0.460	*0.123*	0.214	*0.536*
	badly	-0.328	*0.066*	0.068	*0.665*
	v. badly			0.185	*0.403*
	unemployed or non-employed	-0.097	*0.715*	0.584	*0.094*
	student	-0.661	*0.033*	0.045	*0.901*
Labour market	pensioner	0.680	*0.000*	-0.031	*0.88*
	white-collar, entrepreneur	0.274	*0.183*	0.216	*0.328*
	blue-collar, peasant			-0.032	*0.868*
	not voting	0.598	*0.001*	-0.015	*0.933*
	PiS (Law and Justice)	0.883	*0.000*	0.228	*0.368*
Supported political party	SLD (Democratic Left Alliance)	0.678	*0.018*	0.413	*0.377*
	PSL (Polish Peasant Party)	0.628	*0.042*	0.074	*0.898*
	PO (Civic Platform, base)			0.080	*0.672*
Fear of price increases	no	**-1.075**	***0.030***	0.477	*0.481*
	not sure	**-0.635**	***0.004***	0.345	*0.139*
	moderate	**-0.847**	***0.000***	0.025	*0.88*
	substantial (base)			-0.05	*0.79*
Pseudo-R²	Cox-Snell	0.445		–	
	Nagelkerke	0.515		–	
	McFadden	0.294		–	
Test of parallel lines (p-value)		1.000		–	

Table 5a
Estimation results for ordered logit models, 4 categories (dependent variable: support for the euro adoption)

		Ologit					
		general					
		all		2009		2010	
		coef	p-value	coef	p-value	coef	p-value
Constant	1	-5.961	0.000	-3.744	0.035	-10.970	0.000
	2	-2.128	0.079	0.032	0.985	-6.493	0.000
	3	0.441	0.715	2.708	0.125	-3.735	0.039
	4						
Will the euro be beneficial and for whom?	the economy and myself	-1.028	0.000	-0.908	0.007	-1.204	0.004
	the economy but not myself	0.163	0.426	0.235	0.420	0.172	0.587
	myself but not the economy	0.219	0.427	0.410	0.316	-0.061	0.880
	neither the economy nor myself	0.986	0.000	0.962	0.003	1.007	0.003
Age (years)		0.011	0.062	0.004	0.661	0.020	0.040
Household count		-0.046	0.468	-0.025	0.781	-0.167	0.081
Key benefits	strong and stable currency	-1.029	0.000	-1.284	0.000	-0.608	0.054
	facility for shopping	-0.658	0.000	-0.662	0.002	-0.702	0.007
	external trade development	-0.764	0.000	-0.513	0.029	-1.052	0.000
	tourism	-0.182	0.337	0.231	0.394	-0.643	0.028
	improvement in economic situation	-0.513	0.007	-0.479	0.053	-0.916	0.004
	more prestige	-0.609	0.002	-0.556	0.034	-0.955	0.004
Key concerns	new banknotes and coins	0.324	0.099	0.594	0.019	-0.314	0.354
	difficulty with currency conversion	0.139	0.389	0.417	0.058	-0.224	0.383
	rounding up prices	-0.023	0.869	-0.153	0.443	0.110	0.617
	losing national identity	0.125	0.573	0.450	0.172	-0.169	0.602
	deterioration in personal finance	0.322	0.028	0.422	0.049	0.347	0.114
	poverty and inequalities	0.318	0.039	0.201	0.349	0.454	0.056
	losing control over economic policy	0.463	0.072	0.321	0.412	0.810	0.031

Economic knowledge		-0.114	*0.141*	0.043	*0.731*	-0.352	*0.004*
Income (ln)		-0.185	*0.238*	0.107	*0.642*	-0.719	*0.002*
Residence	cities > 200 000	0.360	*0.087*	0.244	*0.392*	0.610	*0.080*
	cities 50 000−200 000	0.014	*0.941*	0.098	*0.725*	-0.098	*0.743*
	cities < 50 000	0.025	*0.881*	0.332	*0.164*	-0.395	*0.129*
	country (base)						
Do you feel well-informed about the euro?	v. well and well	-1.053	*0.000*	-0.870	*0.006*	-1.433	*0.000*
	not sure	-0.495	*0.173*	-0.757	*0.158*	-0.261	*0.634*
	badly	-0.697	*0.000*	-0.533	*0.025*	-0.997	*0.000*
	v. badly						
Labour market	unemployed or non-employed	0.034	*0.894*	-0.048	*0.894*	0.124	*0.751*
	student	-0.147	*0.630*	-0.636	*0.129*	0.741	*0.129*
	pensioner	0.570	*0.018*	0.730	*0.027*	0.451	*0.234*
	white-collar, entrepreneur	0.280	*0.153*	-0.195	*0.458*	0.970	*0.002*
	blue-collar, peasant						
Supported political party	not voting	0.404	*0.022*	0.450	*0.055*	0.223	*0.444*
	PiS (Law and Justice)	0.573	*0.004*	0.301	*0.301*	0.742	*0.012*
	SLD (Democratic Left Alliance)	0.562	*0.036*	0.273	*0.401*	1.498	*0.006*
	PSL (Polish Peasant Party)	0.755	*0.011*	0.954	*0.153*	0.928	*0.012*
	PO (Civic Platform, base)						
Fear of price increases	no	-1.837	*0.000*	-2.521	*0.000*	-1.398	*0.025*
	not sure	-1.011	*0.000*	-0.946	*0.004*	-1.181	*0.001*
	moderate	-0.865	*0.000*	-1.051	*0.000*	-0.673	*0.014*
	substantial (base)						
Pseudo-R²	Cox-Snell	0.522		0.520		0.580	
	Nagelkerke	0.569		0.567		0.634	
	McFadden	0.295		0.294		0.352	
Test of parallel lines (p-value)		0.015		0.862		0.998	

Table 5b

Estimation results for ordered logit models, 4 categories (dependent variable: support for the euro adoption)

| | Ologit 4 | | | |
	all		specific	diff
	coef	p-value	coef	p-value
Constant 1	-5.514	0.138	0.35	0.013
Constant 2	-1.685	0.055		
Constant 3	0.882	0.000		
Constant 4				
Will the euro be beneficial and for whom? — the economy and myself	-1.124	0.000	0.353	0.295
the economy but not myself	0.133	0.000	-0.263	0.56
myself but not the economy	0.904	0.350	0.447	0.128
neither the economy nor myself				
Age (years)	0.012	0.000	0.007	0.006
Household count				
Key benefits — strong and stable currency	-1.027	0.348	0.662	0.021
facility for shopping	-0.656	0.096	0.147	0.575
external trade development	-0.753	0.002	-0.145	0.606
tourism	-0.178	0.000	-0.607	0.075
improvement in economic situation	-0.496	0.000	0.053	0.877
more prestige	-0.617	0.000	-0.095	0.79
new banknotes and coins	0.327	0.042	-0.345	0.342
difficulty with currency conversion	0.151	0.543	-0.261	0.345
rounding up prices				
Key concerns — losing national identity	0.134	0.000	-0.390	0.343
deterioration in personal finance	0.323	0.074	0.287	0.175
poverty and inequalities	0.312	0.027	0.587	0.018
losing control over economic policy	0.457	0.347	0.500	0.31

Economic knowledge		-0.115	0.000	0.049	0.556
Income (ln)		-0.132	0.008	0.047	0.021
Residence	cities > 200 000	0.357	0.088	0.680	0.052
	cities 50 000–200 000	0.017	0.928	0.329	0.282
	cities < 50 000	0.025	0.879	-0.119	0.644
	country (base)			0.592	0.009
Do you feel well-informed about the euro?	v. well and well	-1.025	0.000	**0.136**	**0.634**
	not sure	-0.496	0.170	1.237	0.067
	badly	-0.678	0.000	**0.169**	**0.397**
	v. badly			0.714	0.007
Labour market	unemployed or non-employed	0.069	0.787	0.739	0.077
	student	-0.155	0.611	0.691	0.159
	pensioner	0.616	0.008	0.248	0.311
	white-collar, entrepreneur	0.265	0.175	0.598	0.034
	blue-collar, peasant			0.027	0.915
Supported political party	not voting	0.395	0.024	0.233	0.347
	PiS (Law and Justice)	0.575	0.004	0.717	0.015
	SLD (Democratic Left Alliance)	0.559	0.037	1.130	0.043
	PSL (Polish Peasant Party)	0.729	0.013	0.120	0.866
	PO (Civic Platform, base)			0.120	0.606
Fear of price increases	no	-1.848	0.000	**1.234**	**0.082**
	not sure	-1.069	0.000	**0.389**	**0.234**
	moderate	-0.873	0.000	**0.335**	**0.119**
	substantial (base)			0.265	0.233
Pseudo-R²	Cox-Snell	0.522		–	
	Nagelkerke	0.568		–	
	McFadden	0.295		–	
Test of parallel lines (p-value)		0.067		–	

Table 5c
Estimation results for ordered logit models, 5 categories (dependent variable: support for the euro adoption)

		Ologit					
		5					
		general					
		all		2009		2010	
		coef	p-value	coef	p-value	coef	p-value
Constant	1	-5.570	0.000	-3.794	0.013	-9.598	0.000
	2	-2.021	0.056	-0.300	0.843	-5.587	0.000
	3	-1.062	0.314	0.688	0.650	-4.579	0.003
	4	0.965	0.361	2.842	0.062	-2.506	0.109
Will the euro be beneficial and for whom?	the economy and myself	-1.164	0.000	-1.166	0.000	-1.213	0.001
	the economy but not myself	0.235	0.174	0.130	0.595	0.431	0.098
	myself but not the economy	0.362	0.128	0.435	0.210	0.108	0.756
	neither the economy nor myself	1.103	0.000	1.021	0.000	1.173	0.000
Age (years)		0.007	0.192	0.001	0.909	0.013	0.101
Household count		-0.022	0.679	-0.004	0.957	-0.125	0.112
Key benefits	strong and stable currency	-0.964	0.000	-1.175	0.000	-0.607	0.028
	facility for shopping	-0.555	0.000	-0.608	0.002	-0.434	0.055
	external trade development	-0.676	0.000	-0.429	0.041	-0.898	0.000
	tourism	-0.069	0.678	0.346	0.157	-0.509	0.040
	improvement in economic situation	-0.418	0.015	-0.457	0.043	-0.605	0.032
	more prestige	-0.539	0.003	-0.430	0.071	-0.884	0.003
Key concerns	new banknotes and coins	0.184	0.286	0.371	0.095	-0.176	0.552
	difficulty with currency conversion	0.151	0.293	0.402	0.039	-0.149	0.513
	rounding up prices	-0.061	0.628	-0.164	0.349	-0.030	0.876
	losing national identity	0.192	0.343	0.576	0.057	-0.108	0.707
	deterioration in personal finance	0.342	0.008	0.478	0.010	0.323	0.089
	poverty and inequalities	0.272	0.042	0.184	0.323	0.427	0.037
	losing control over economic policy	0.357	0.115	0.439	0.207	0.501	0.119

Economic knowledge		-0.017	0.806	0.122	0.273	-0.219	0.039
Income (ln)		-0.165	0.232	0.063	0.755	-0.609	0.003
Residence	cities > 200 000	0.301	0.099	0.297	0.231	0.497	0.093
	cities 50 000–200 000	-0.066	0.697	0.007	0.977	-0.111	0.662
	cities < 50 000	0.133	0.367	0.440	0.035	-0.165	0.459
	country (base)						
Do you feel well-informed about the euro?	v. well and well	**-1.051**	**0.000**	**-0.793**	**0.004**	**-1.472**	**0.000**
	not sure	-0.539	0.039	-0.754	0.044	-0.356	0.356
	badly	**-0.506**	**0.001**	**-0.345**	**0.090**	**-0.734**	**0.002**
	v. badly						
Labour market	unemployed or non-employed	0.030	0.894	-0.119	0.707	0.040	0.905
	student	-0.322	0.233	-0.647	0.083	0.160	0.700
	pensioner	0.539	0.009	0.660	0.019	0.448	0.166
	white-collar, entrepreneur	0.277	0.114	-0.182	0.440	0.928	0.001
	blue-collar, peasant						
Supported political party	not voting	0.400	0.009	0.434	0.036	0.327	0.188
	PiS (Law and Justice)	0.694	0.000	0.533	0.039	0.782	0.002
	SLD (Democratic Left Alliance)	0.613	0.010	0.400	0.167	1.447	0.002
	PSL (Polish Peasant Party)	0.678	0.009	1.019	0.093	0.744	0.018
	PO (Civic Platform, base)						
Fear of price increases	no	**-1.619**	**0.000**	**-2.378**	**0.000**	**-0.976**	**0.079**
	not sure	**-0.813**	**0.000**	**-0.713**	**0.010**	**-0.924**	**0.001**
	moderate	**-0.816**	**0.000**	**-0.941**	**0.000**	**-0.606**	**0.010**
	substantial (base)						
Pseudo-R^2	Cox-Snell	0.495		0.502		0.536	
	Nagelkerke	0.522		0.529		0.566	
	McFadden	0.230		0.235		0.262	
Test of parallel lines (p-value)		0.822		0.004		0.832	

Table 5d
Estimation results for ordered logit models, 5 categories (dependent variable: support for the euro adoption)

		Ologit 5				
		all		specific		diff
		coef	p	coef	p	p
Constant	1	-5.538	0.000	0.346		0.005
	2	-1.989	0.021			
	3	-1.032	0.231			
	4	0.985	0.254			
Will the euro be beneficial and for whom?	the economy and myself	-1.307	0.000	0.318		0.326
	the economy but not myself					
	myself but not the economy	0.256	0.239	-0.253		0.527
	neither the economy nor myself	1.005	0.000	0.466		0.079
Age (years)						
Household count						
	strong and stable currency	-0.966	0.000	0.598		0.023
	facility for shopping	-0.554	0.000	0.204		0.388
	external trade development	-0.639	0.000	-0.163		0.525
Key benefits	tourism	-0.080	0.632	-0.593		0.048
	improvement in economic situation	-0.401	0.018	0.113		0.717
	more prestige	-0.545	0.002	-0.176		0.59
	new banknotes and coins	0.189	0.273	-0.080		0.802
	difficulty with currency conversion	0.168	0.242	-0.147		0.55
	rounding up prices					
Key concerns	losing national identity	0.211	0.297	-0.472		0.211
	deterioration in personal finance	0.343	0.008	0.230		0.218
	poverty and inequalities	0.255	0.056	0.485		0.022
	losing control over economic policy	0.345	0.127	0.125		0.774

Economic knowledge	-0.018	*0.792*	0.039	*0.598*
Income (ln)	-0.120	*0.332*	0.048	*0.009*
Residence — cities > 200 000	0.293	*0.107*	0.511	*0.089*
cities 50 000–200 000	-0.063	*0.709*	0.376	*0.163*
cities < 50 000	0.128	*0.385*	-0.049	*0.828*
country (base)			0.569	*0.004*
Do you feel well-informed about the euro? — v. well and well	**-1.022**	***0.000***	**0.043**	***0.871***
not sure	-0.544	*0.036*	0.931	*0.039*
badly	**-0.485**	***0.001***	**0.179**	***0.313***
v. badly			0.649	*0.004*
unemployed or non-employed	0.052	*0.814*	0.681	*0.063*
student	-0.463	*0.062*	0.402	*0.36*
Labour market — pensioner	0.739	*0.000*	0.322	*0.121*
white-collar, entrepreneur	0.261	*0.135*	0.643	*0.013*
blue-collar, peasant			0.041	*0.853*
not voting	0.379	*0.013*	0.353	*0.091*
PiS (Law and Justice)	0.707	*0.000*	0.512	*0.047*
Supported political party — SLD (Democratic Left Alliance)	0.620	*0.009*	0.964	*0.051*
PSL (Polish Peasant Party)	0.677	*0.009*	-0.012	*0.985*
PO (Civic Platform, base)			0.167	*0.428*
Fear of price increases — no	-1.636	***0.000***	1.420	*0.036*
not sure	**-0.856**	***0.000***	0.365	*0.165*
moderate	**-0.819**	***0.000***	0.264	*0.168*
substantial (base)			0.335	*0.088*
Pseudo-R² — Cox-Snell	0.493		–	
Nagelkerke	0.520		–	
McFadden	0.229		–	
Test of parallel lines (p-value)	0.998		–	

Table 6
Crosstabulation for 2009 and 2010: attitude towards euro adoption *vs* residence and declaired level of information

2009		Residence				Total
		cities > 200 000	cities 50 000–200 000	cities < 50 000	rural area (base)	
Attitude towards euro adoption in Poland	**Definitely positive**					
	% within attitude towards euro	25.80	22.60	21.50	30.10	
	% within residence	10.80	12.20	8.80	7.40	
	% total	2.40	2.10	2.00	2.80	9.30
	Rather positive					
	% within attitude towards euro	20.10	18.30	24.00	37.60	
	% within residence	30.50	36.00	35.50	33.60	
	% total	6.80	6.20	8.10	12.70	33.80
	Don't know, not sure					
	% within attitude towards euro	27.70	13.90	18.20	40.10	
	% within residence	17.00	11.00	11.00	14.60	
	% total	3.80	1.90	2.50	5.50	13.70
	Rather negative					
	% within attitude towards euro	24.60	13.20	22.40	39.90	
	% within residence	30.90	21.50	27.60	29.60	
	% total	6.90	3.70	6.30	11.20	28.10
	Definitely negative					
	% within attitude towards euro	15.80	21.70	25.70	36.80	
	% within residence	10.80	19.20	17.10	14.80	
	% total	2.40	3.30	3.90	5.60	15.20
Total	% total	22.30	17.20	22.80	37.80	100.00

2009		Do you feel well-informed about the euro?				
		v. well and well	not sure	badly	v. badly	Total
Definitely positive						
	% within attitude towards euro	46.20	0.00	41.90	11.80	
	% within level of feeling informed	22.60	0.00	8.20	4.10	
	% total	4.30	0.00	3.90	1.10	9.30
Rather positive						
	% within attitude towards euro	28.40	4.70	53.60	13.30	
	% within level of feeling informed	50.50	22.90	38.30	16.80	
	% total	9.60	1.60	18.10	4.50	33.80
Attitude towards euro adoption in Poland	**Don't know, not sure**					
	% within attitude towards euro	8.00	18.20	36.50	37.20	
	% within level of feeling informed	5.80	35.70	10.60	19.00	
	% total	1.10	2.50	5.00	5.10	13.70
	Rather negative					
	% within attitude towards euro	8.90	8.20	54.80	28.10	
	% within level of feeling informed	13.20	32.90	32.60	29.50	
	% total	2.50	2.30	15.40	7.90	28.10
	Definitely negative					
	% within attitude towards euro	9.90	3.90	32.20	53.90	
	% within level of feeling informed	7.90	8.60	10.40	30.60	
	% total	1.50	0.60	4.90	8.20	15.20
Total	% total	19.00	7.00	47.30	26.80	100.00

2010		Residence				Total
		cities > 200 000	cities 50 000–200 000	cities < 50 000	rural area (base)	
Definitely positive						
	% within attitude towards euro	14.00	27.90	27.90	30.20	
	% within residence	2.80	6.90	5.10	3.40	
	% total	0.60	1.20	1.20	1.30	4.30
Rather positive						
	% within attitude towards euro	21.30	18.00	24.30	36.40	
	% within residence	33.00	35.10	34.70	32.60	
	% total	7.20	6.10	8.20	12.20	33.60
Don't know, not sure						
Attitude towards euro adoption in Poland	% within attitude towards euro	28.20	14.80	22.10	34.90	
	% within residence	19.30	12.60	14.00	13.80	
	% total	4.20	2.20	3.30	5.20	14.80
Rather negative						
	% within attitude towards euro	19.90	15.10	24.30	40.80	
	% within residence	26.60	25.30	30.10	31.60	
	% total	5.80	4.40	7.10	11.80	29.10
Definitely negative						
	% within attitude towards euro	21.90	19.10	20.80	38.30	
	% within residence	18.30	20.10	16.10	18.60	
	% total	4.00	3.50	3.80	7.00	18.20
Total	% total	21.70	17.30	23.50	37.50	100.00

2010

	Do you feel well-informed about the euro?				
	v. well and well	**not sure**	**badly**	**v. badly**	**Total**
Definitely positive					
% within attitude towards euro	46.50	11.60	27.90	14.00	
% within level of feeling informed	9.10	5.40	2.70	2.40	
% total	2.00	0.50	1.20	0.60	4.30
Rather positive					
% within attitude towards euro	39.60	5.00	48.50	6.80	
% within level of feeling informed	61.20	18.30	37.10	9.20	
% total	13.30	1.70	16.30	2.30	33.60
Don't know, not sure					
% within attitude towards euro	10.10	22.80	36.20	30.90	
% within level of feeling informed	6.80	36.60	12.20	18.30	
% total	1.50	3.40	5.40	4.60	14.80
Rather negative					
% within attitude towards euro	12.70	7.50	51.00	28.80	
% within level of feeling informed	16.90	23.70	33.70	33.50	
% total	3.70	2.20	14.80	8.40	29.10
Definitely negative					
% within attitude towards euro	7.10	8.20	34.40	50.30	
% within level of feeling informed	5.90	16.10	14.30	36.70	
% total	1.30	1.50	6.30	9.20	18.20
Total					
% total	21.80	9.30	44.00	25.00	100.00

Attitude towards euro adoption in Poland

Table 7
Crosstabulation for 2009 and 2010: attitude towards euro adoption *vs* partisanship

2009		not voting	PiS (Law and Justice)	SLD (Democratic Left Alliance)	PSL (Polish Peasant Party)	PO (Civic Platform)	Total
				Supported political party			
Definitely positive	% within attitude towards euro	30.40	9.80	8.70	3.30	47.80	
	% within supported political party	6.60	6.20	8.70	13.60	14.90	
	% total	2.90	0.90	0.80	0.30	4.50	9.40
Rather positive	% within attitude towards euro	34.10	13.50	8.10	1.80	42.50	
	% within supported political party	26.90	31.00	29.30	27.30	48.10	
	% total	11.70	4.60	2.80	0.60	14.50	34.20
Attitude towards euro adoption in Poland — Don't know, not sure	% within attitude towards euro	58.50	12.60	11.10	0.70	17.00	
	% within supported political party	18.60	11.70	16.30	4.50	7.80	
	% total	8.10	1.70	1.50	0.10	2.40	13.80
Rather negative	% within attitude towards euro	45.80	19.60	10.20	2.90	21.50	
	% within supported political party	29.70	37.20	30.40	36.40	20.00	
	% total	12.90	5.50	2.90	0.80	6.00	28.10
Definitely negative	% within attitude towards euro	54.20	14.10	9.90	2.80	19.00	
	% within supported political party	18.20	13.80	15.20	18.20	9.20	
	% total	7.90	2.00	1.40	0.40	2.80	14.50
Total	% total	43.40	14.80	9.40	2.20	30.20	100.00

2010		Supported political party					
		not voting	PiS (Law and Justice)	SLD (Democratic Left Alliance)	PSL (Polish Peasant Party)	PO (Civic Platform)	Total
	Definitely positive						
	% within attitude towards euro	23.80	19.00	2.40	9.50	45.20	
	% within supported political party	3.80	3.20	2.70	4.30	5.40	
	% total	1.00	0.80	0.10	0.40	1.90	4.20
	Rather positive						
	% within attitude towards euro	22.10	11.00	3.00	9.30	54.60	
	% within supported political party	28.10	15.00	27.00	33.30	51.80	
	% total	7.50	3.70	1.00	3.10	18.40	33.70
Attitude towards euro adoption in Poland	**Don't know, not sure**						
	% within attitude towards euro	29.70	24.30	4.10	9.50	32.40	
	% within supported political party	16.70	14.60	16.20	15.10	13.60	
	% total	4.40	3.60	0.60	1.40	4.80	14.90
	Rather negative						
	% within attitude towards euro	29.30	32.40	3.80	8.40	26.10	
	% within supported political party	31.90	37.70	29.70	25.80	21.20	
	% total	8.50	9.40	1.10	2.40	7.60	28.90
	Definitely negative						
	% within attitude towards euro	28.20	40.30	5.00	11.00	15.50	
	% within supported political party	19.40	29.60	24.30	21.50	7.90	
	% total	5.10	7.40	0.90	2.00	2.80	18.20
Total							
	% total	26.50	24.90	3.70	9.40	35.50	100.00