

# EUROPEAN ECONOMY

Economic Papers 313 | March 2008



Is the euro advantageous?  
Does it foster European feelings?

Europeans on the euro after five years

Lars Jonung and Cristina Conflitti

**Economic Papers** are written by the Staff of the Directorate-General for Economic and Financial Affairs, or by experts working in association with them. The Papers are intended to increase awareness of the technical work being done by staff and to seek comments and suggestions for further analysis. The views expressed are the author's alone and do not necessarily correspond to those of the European Commission. Comments and enquiries should be addressed to:

European Commission  
Directorate-General for Economic and Financial Affairs  
Publications  
B-1049 Brussels  
Belgium  
E-mail: [Ecfm-Info@ec.europa.eu](mailto:Ecfm-Info@ec.europa.eu)

This paper exists in English only and can be downloaded from the website  
[http://ec.europa.eu/economy\\_finance/publications](http://ec.europa.eu/economy_finance/publications)

A great deal of additional information is available on the Internet. It can be accessed through the Europa server (<http://europa.eu>)

ISBN 978-92-79-08238-2  
doi: 10.2765/57560

© European Communities, 2008

# Is the euro advantageous? Does it foster European feelings?

## Europeans on the euro after five years

Lars Jonung \* and Cristina Conflitti \*\*

March, 2008

### Abstract:

The introduction of the euro as a currency in physical existence in January 2002 was a major step in the European integration process. The purpose of this paper is to explore how a representative selection of 12 000 Europeans across all countries in the euro area view the effects of the euro five years after its introduction. The empirical analysis uses multinomial logistic regressions to explore the responses to two questions from the Flash Eurobarometer survey conducted in September 2006. The first question asked if the adoption of the euro was *advantageous overall* or not. The second one asked if using the euro had made *you personally feel a little more European than before* or not.

At the aggregate country level, close to a majority perceived the euro as *advantageous overall*, while about a fifth of the respondents replied that their European identity was strengthened by the euro. At the disaggregated level two major findings emerge. First, there are substantial differences across member states in the euro area with respect to the perceived effects of the introduction of the euro. Second, by means of a set of statistical tests we find significant differences across individual socio-demographic groups within the euro-area countries. Men are more positive towards the single currency than women. More men than women also feel more European since the introduction of the euro. Attitudes towards the euro and the feeling of being European are positively related to the respondents' level of education. Age, occupation and locality also have a bearing.

Those who view the euro as *advantageous overall* stress that it has made it less costly to travel and easier to compare prices. Those who regard the euro as *disadvantageous overall* do so on the basis of the argument that it has caused prices to increase. Attitudes towards the euro appear to be primarily based on the daily experience of shopping and travelling, not on considerations of growth and employment.

Our individual-level findings are consistent with those of earlier studies concerning determinants of public attitudes towards the single currency and European economic integration. However, it remains a formidable task to explain, using economic and political theory, the wide differences in public attitudes towards the effects of the euro within and across euro-area countries.

**Key words:** European integration, euro, EU, public attitudes, opinion polls, multinomial logistic regression.

**JEL classification:** C35 and E65.

Please note: The views expressed here are those of the authors. They do not represent the view of DG ECFIN.

\* Lars Jonung, DG ECFIN, Brussels; [Lars.Jonung@ec.europa.eu](mailto:Lars.Jonung@ec.europa.eu)

\*\* Cristina Conflitti, ECARES Université Libre de Bruxelles; [cristina\\_conflitti@hotmail.com](mailto:cristina_conflitti@hotmail.com)

## **1. Introduction<sup>1</sup>**

The introduction of the euro as the single currency of the Economic and Monetary Union is one of the most far-reaching steps undertaken to promote European integration and unity. At the time of writing, 15 European Union countries (the euro-area members) had adopted the single currency, 12 of them having used the euro in their daily life since January 2002.<sup>2</sup>

The purpose of this report is to analyse two issues: first, whether Europeans believe that the adoption of the euro has been advantageous to them, and second, whether using the euro in their daily life has made them feel more European than they did before. The analysis is based on an opinion poll carried out explicitly to survey attitudes towards the euro five years after its introduction.

This study is structured as follows. Section 2 describes the data used. Section 3 discusses what results can be expected judging from previous research. Section 4 summarizes the opinion poll at the aggregate country level. Section 5, the main section, presents an econometric analysis using individual-level data, based on a breakdown of the respondents into various groups. Section 6 presents the main motives behind the respondents' answers. Section 7 concludes.

## **2. Data**

The data source for this study is Flash Eurobarometer 193 of September 2006.<sup>3</sup> The survey was mainly carried out by telephone. It covered over 12 000 randomly selected citizens (around 1 000 for each country in the euro area up to 2006: Austria (AT), Belgium (BE), Finland (FI), France (FR), Germany (DE), Greece (EL), Ireland (IE), Italy (IT), Luxembourg

---

<sup>1</sup> We have received constructive comments from Stefan Appel, Pietro Biroli, Heidi Cigan, Björn Döhring, Roberta Friz, Staffan Lindén, David Veredas and Clara Zverina. Sophie Bland has given us linguistic guidance.

<sup>2</sup> Slovenia, which introduced the euro in January 2007, is not included in our analysis.

<sup>3</sup> The survey was conducted on behalf of the European Commission as part of the regular Flash Eurobarometer. See European Commission (2006).

(LU), the Netherlands (NL), Portugal (PT) and Spain (ES). To get a representative sampling, the replies were post-stratified.<sup>4</sup>

We focus on the answers to two questions, question 14 and question 17, which asked respondents in each euro-area member country about their opinion of the consequences of the euro and how the introduction of the euro has influenced their feeling of being European. The first question was framed as *"In your opinion, is the adoption of the euro advantageous overall and will strengthen us for the future, or rather the opposite, disadvantageous overall and will weaken us?"* The second question was phrased as *"Since using the euro, do you personally feel a little more European than before, a little less or would you say that your feeling of being European has not changed?"* See Table 1 for the exact reply alternatives to each question.

The dataset allows for a breakdown of the respondents into the following socio-demographic groups: sex, age (15-24, 25-39, 40-54, over 55), level of education (finished full-time education at 15, at between 16 and 20, at over 20, still in education), occupation (self-employed, employee, manual worker, not employed)<sup>5</sup>, and locality (metropolitan zone, other town/urban centre, rural zone). We will use these five socio-demographic characteristics as explanatory variables in our empirical work.

### **3. What do we expect to find?**

A number of studies using opinion poll data has examined the determinants of public attitudes towards the euro and towards European integration. These studies are based on either individual-level or country-level data. A set of common results emerge from the individual-based research as summarized below.<sup>6</sup>

---

<sup>4</sup> Post-stratification is a technique used in sample surveys to improve the degree of representativeness. From a statistical point of view, it improves the precision and the efficiency of the estimators. Survey weights are adjusted to force the estimated numbers of units in each of a set of cells to be equal to known population totals.

<sup>5</sup> Self-employed includes inter alia farmers, professionals and managers; employee includes inter alia middle management, civil servants and office clerks; manual workers includes inter alia supervisors and unskilled manual workers, and not working includes inter alia students, retired people, and job seekers.

<sup>6</sup> This summary is based on section 4.3 in Jonung and Vlachos (2007).

*Sex:* Many studies adopt sex as a control variable, usually finding a significant effect. As a rule, men are more positive towards the euro than women. Hardly any convincing economic reasons for this sex effect have been established so far in spite of its significance. A large literature in psychology and sociology has documented fundamental differences between the two genders in preferences. This literature indicates that women are more risk adverse than men, that there are gender differences in social preferences<sup>7</sup> and gender differences in competitive behaviour.<sup>8</sup>

*Age:* Age is a standard control variable. However, no systematic pattern emerges in the bulk of empirical studies. It has been argued that older respondents may have a more marked preference for the single currency than younger respondents because they remember the devastation of World War II. Thus, they may view the euro as a guarantee of peace in Europe, a new currency that might prevent wars in the future. On the other hand, older people may find adjusting to a new currency more difficult than younger people, making them more critical of the euro.

*Education:* The level of education is commonly a significant variable in empirical work, showing that support for the euro increases with the level of education. A common explanation for this pattern is that individuals with higher education are able to benefit economically more from the market opportunities created by the euro through trade, finance and labour mobility than individuals with lower education. Education may also serve as a proxy for access to information. Those who are well informed about the EU and the euro are commonly more positive towards the single currency.

*Occupation and income:* Citizens with high occupational skills and thus with high incomes are usually more in favour of the euro than those with low skills and low incomes. The first group is likely to gain more from a monetary union with free movement of capital and labour

---

<sup>7</sup> Social preferences may influence the labour market in a number of ways. Social preferences determine what type of jobs individuals choose as they are trading off income and other attributes of jobs. Social preferences are modelled in economics in the form of altruism, inequality-aversion or reciprocity. See Croson and Gneezy (2004).

<sup>8</sup> Anecdotal evidence suggests that women are more reluctant than men to engage in competitive interactions like tournaments and bargaining. See Croson and Gneezy (2004).

across borders than the second group. Empirical studies also conclude that the unemployed are usually less in favour of the euro than those in employment.

*Locality:* Respondents living in urban areas are as a rule found to be more positive towards the euro and European integration than those living in rural areas. Urban areas are likely to benefit more from the effects of increased economic integration than rural areas.

*Other factors:* The design of the Flash Eurobarometer restricts our choice of background variables to sex, age, education, occupation and locality. However, studies using larger databases demonstrate that public attitudes are affected by additional characteristics like personal income and wealth, political outlook, support for the national government, the extent of knowledge about the euro and EU, etc.<sup>9</sup> Our limited dataset means that we cannot assess the impact of these "other factors", though we note that they may influence respondents' replies.

Judging from the literature on public attitudes towards the single currency, we expect more men than women to find the euro advantageous overall. We do not expect any systematic pattern with respect to age. The share of those viewing the euro as advantageous is expected to be higher among well-educated respondents than among those with lower levels of education. The same holds for self-employed and employees compared to manual workers and unemployed respondents. Respondents in urban and metropolitan areas are likely to be more in favour of the euro than respondents in rural areas.

Concerning the effects of the euro on *feeling European*, the literature gives no firm hints as to what we can expect. Most likely the patterns expected above for the five characteristics will emerge in the answers to the question about European identity. Finally, we do not expect the determinants of the attitudes towards the euro to be identical across all euro-area member states. National factors will likely matter.

---

<sup>9</sup> See the review of the literature in Jonung and Vlachos (2007). Anderson and Reichert (1996), Banducci, Karp and Loedel (2003), Gabel (1998), Gärtner (1997) and Insengard and Schneider (2006) are examples of studies of public attitudes towards the euro.

#### 4. A look at the country level

An inspection of the replies to question 14, see Chart 1, reveals marked differences across countries and across groups in every country. At the euro-area level the adoption of the euro is positively perceived by 48 % of the respondents, with most euro-area countries finding it advantageous. Exceptions are Greece (38 %), Italy (41.4 %) and the Netherlands (38.4 %), where most respondents considered it *disadvantageous*. Germany is a case in-between, with only a 2-percentage-point difference between the *advantageous* (46 %) and the *disadvantageous* (44 %) category.

An analysis of the socio-demographic variables at the euro-area level, see Table 2, shows that more men than women, more young (15-24 years old) than older respondents view the adoption of the euro as *advantageous*, more respondents still in education and who stayed in education until at least 20 years of age than the less educated, more self-employed and employed compared to manual workers, and more of those living in metropolitan areas and towns than those living in rural areas.<sup>10</sup> Summary statistics of the background variables for the euro area are also displayed in Table 3.

At the country level, more men than women generally perceive the introduction of the euro as advantageous. The same holds for respondents with a high education level, who live in urban centres and are employed. Only in Ireland and Luxembourg, however, do older respondents view the euro as *advantageous overall*. (Table A1 and A2 in Appendix A).

Examining the three countries where a majority of the respondents find the euro *disadvantageous overall* (Greece, Italy and the Netherlands), we see that the categories which hold relatively the most negative attitude towards the euro are women, respondents with a low education level, manual workers, those aged 25-54 and respondents living in rural areas and towns. (Tables A3 and A4 in Appendix A).

Question 17 about whether or not using the euro as the daily currency has increased the feeling of being European (see the exact wording in Table 1) reveals that the impact of the single currency on European identity is mostly considered ‘not influential’: more than

---

<sup>10</sup> Relative comparison within categories of each group.



two-thirds of the respondents (77.9 %) answer that there has been no change in their feeling of being European. The share of respondents giving this answer is particularly high in Austria, Belgium, Finland, Germany, Greece and the Netherlands. Chart 2 demonstrates that Ireland is a clear exception: most of the Irish respondents feel a *little more European* since using the euro (64.4 %) while only 26.2 % answered *nothing has changed*.

Considering the socio-demographic variables, Table A5 and A6 in Appendix A demonstrate that women feel less affected by the euro and perceive less change in their European identity as a result of its introduction. The answers are even more clear-cut by age, with young respondents stating that they do not consider using the euro to have changed their European identity. This may partially be explained by the fact that many of them have little or no experience of using the old national currencies as well as the euro. Respondents with a low educational level and manual workers/unemployed do not feel more European as a result of using the euro, and nor do respondents living in rural areas. As noted above, the euro has had a stronger effect on feelings of Europeanness in Ireland than in any other country. This holds in particular for men, older respondents, highly educated people, employed and self-employed people and respondents living in metropolitan areas. (Table A7 in Appendix A).

## 5. Econometric analysis of individual-level data

Our inspection of the data above reveals differences in the responses of various socio-demographic groups at the aggregate level across the euro area. In order to pursue the analysis at the individual level, we now take two steps.<sup>11</sup>

First, we conduct both chi-square and ANOVA tests.<sup>12</sup> Second, we run multinomial logistic regressions to further investigate the relationship between the dependent variables, which are the replies to the two questions displayed in Table 1 and our socio-demographic variables.

Table 4 and 5 report the  $\chi^2$  for all the independent variables, as well as ANOVA tests for the responses to each question separately and sex, age, education level, occupation and locality.<sup>13</sup>

---

<sup>11</sup> See also the summary statistics for the variables used in our study in Table 3.

<sup>12</sup> Agresti (2002) and Greene (2003).

These tests<sup>14</sup> reveal potential effects of the independent on the dependent variables. In this way, we assess whether there is a significant difference between the groups being compared overall. The results reported in Table 4 (chi-squared column) show that the perception of whether the euro is advantageous or disadvantageous (question 14) is related to all the socio-demographic variables for most of the euro-area members. The exceptions where the chi-square test was not significant were for occupation in Germany and Ireland and for locality in most of the countries.

In addition, Table 4 demonstrates that men regard the euro as being more advantageous than women in all 12 countries of the monetary union. A larger share of young respondents perceives the euro as advantageous than older respondents. The exception here is Luxembourg, where older respondents are more positive than young ones. The employed and self-employed generally hold a positive view of the effects of the euro while in most euro-area countries respondents with low educational levels and those living in rural areas regard the euro as having had a negative effect.

Concerning the effect of the euro on feeling *more European* after the euro adoption, see question 17 in Table 1. Table 5 demonstrates that the  $\chi^2$  test is significant for sex in 7 countries out of 12, education is always significant and locality is significant in all member countries except Germany, Greece, Luxembourg and Spain. Occupation is significant for Austria, Italy, the Netherlands and Spain. The analysis of variance shows that the euro has made more men than women feel *more European*. The same effect is found for well-educated respondents and respondents living in metropolitan areas.

---

<sup>13</sup> The chi square test is a standard test to examine relationships between categorical variables. It is used to determine whether a relationship between two categorical variables in a sample is likely to reflect a real association between these two variables in the population.

<sup>14</sup> ANOVA is adopted when analysing relationships between a categorical independent variable and a normally distributed interval dependent variable. It is a test of the difference in the means of the dependent variable broken down by the level of the independent. The key statistic in ANOVA is the F-test of difference of group means, testing if the means of the groups of the independent variables are different enough *not* to have occurred by chance. If the group means do not differ significantly then it is inferred that the independent variable(s) do not have an effect on the dependent variable. For the ANOVA results reported in Table 3 and 4 we have adopted the Levene homogeneity test and the post hoc test in SPSS.

Let us now turn to the regression analysis.<sup>15</sup> Questions about attitudes in public opinion surveys with multiple response alternatives often take the form of Likert-type scales, for example a scale like 'strongly agree,' 'agree,' 'undecided,' 'disagree,' and 'strongly disagree', or ordered categories such as 'never, sometimes, and always'. In other multiple-response polls, the categories of the dependent variable can be discrete, nominal or unordered. In these cases, multinomial logistic regressions or multinomial logit are appropriate econometric techniques.<sup>16</sup>

In the Eurobarometer survey we are examining, the dependent variable in each of the questions is unordered, see Table 1. Thus, we adopt a multinomial logistic regression.<sup>17</sup> This model estimation compares multiple groups through a combination of binary logistic regressions. The data for each individual,  $i$ , in our two regressions consist of the following variables:

*First regression based on question 14 in Table 1:*

- Is the adoption of the euro ( $Y$ ): (1) disadvantageous overall, (2) neither one or the other, no change, (3) DK/NA,<sup>18</sup> (4) advantageous overall;
- Regressors ( $X$ ): sex, age, level of education, occupation and locality.

*Second regression based on question 17 in Table 1:*

- Feeling European ( $Y$ ): (1) a little less European, (2) nothing has changed, (3) DK/NA, (4) a little more European;
- Regressors ( $X$ ): sex, age, level of education, occupation and locality.

The estimated equation is the following:

$$(1) \quad \text{prob}(Y_i = j) = \frac{e^{\sum_{k=1}^K \beta_{jk} x_{ik}}}{1 + \sum_{j=1}^{J-1} e^{\sum_{k=1}^K \beta_{jk} x_{ik}}}$$

---

<sup>15</sup> The multinomial logistic regression model is one type of discrete outcome or qualitative response models useful to study for a dependent variable that indicates in which one of the  $m$  mutually exclusive categories the outcome of interest falls. These models adopt the maximum likelihood estimation method. This method requires assumptions about the probability distribution function. Logit and logistic models use the standard logistic probability distributions.

<sup>16</sup> See for example Jupille and Leblang (2007) studying the Danish and Swedish euro referenda for such an application.

<sup>17</sup> Borooah (2001), Futing (1994), Cameron and Trivedi (2005).

<sup>18</sup> DK/NA stands for don't know/no answer.

The *betas* have two subscripts, *k* to distinguish the five *x* variables, and *j* to distinguish the four response categories.

The coefficients in the logistic regression are in terms of the log-odds units (logit). The parameter estimates are calculated relative to the reference category and the interpretation for a multinomial model is relative to the reference category.<sup>19</sup> Other useful results of the multinomial logistic model come from the "marginal effects" on the choice probabilities of a change in the regressor for a given individual.<sup>20</sup> As demonstrated in Chart 1, the *advantageous* and *disadvantageous* answers have bigger shares than those of the other response categories. Thus, we consider them as the main answers. Hence, the results of the first multinomial logistic regression are explained only for these two replies.

Our results are summarized in Table 6 and Table 7. The first model refers to those countries with a higher percentage of positive view of the effects of the euro: here *disadvantageous overall* serves as the reference category. The second model refers to Greece, Italy and the Netherlands where more respondents thought that the euro had negative than positive effects: now *advantageous overall* serves as the reference category. The coefficients shown in Table 6 and 7 represent marginal effects. In Table 6 for example, the estimate of 0.529 means that respondents in that group are more likely to be in the advantageous category relative to the reference group (*disadvantageous overall*). On the other hand in Table 7, a coefficient of -0.845 means that respondents are less likely to choose the *disadvantageous* reply relative to the reference category (*advantageous overall*).

---

<sup>19</sup> The reference category refers to the dependent variable and it is usually the last or modal category. The choice of the reference category is irrelevant for the estimation. It is up to the researcher to decide on the reference category. The model pairs each response category with the chosen reference category.

<sup>20</sup> In the statistics literature a common interpretation of the coefficients is in terms of marginal effects on the risk ratio or on the odds ratio (also called relative risk ratio): The marginal effect on the risk

ratio is  $\frac{\partial}{\partial x_k} \log \left( \frac{\text{prob}(Y_i = j)}{\text{prob}(Y_i = r)} \right) = \beta_{jk}$ . This expression refers to a particular response category. From

the sign of the betas we can infer the direction of change in the risk ratio; the relative probability of  $Y_i = j$  increases if the beta coefficient is larger than zero and decreases if beta is less than zero. However, the direction of a change in the probability of observing a certain outcome cannot be inferred from the sign of beta. The reason is that in a multinomial model a change in the value of a variable for a particular person affects the probability of *every* outcome. Since these probabilities are constrained to sum to unity, whether one probability goes up or down depends upon the effects on other probabilities; therefore it does not depend only upon the sign of  $\beta$ . See Borooah (2001), Cameron and Trivedi (2005).

In general, our results are consistent with the results found previously. As Table 6 shows, men were more likely to be in the *advantageous* category than in the *disadvantageous* one (except in Ireland and Luxembourg).<sup>21</sup> In most cases "respondents between the ages of 25 and 54" are less likely to be in the *advantageous* than in the *disadvantageous* group.<sup>22</sup> In all countries, the educational category "left education at 15 or before" shows negative significant coefficients confirming that respondents with high education are more in favour of the euro.

On the other hand, Table 7 shows that the "male" category has negative significant coefficients, while "low education level" (for the 3 countries) and respondents "living in metropolitan areas or towns" have positively significant coefficients (for the Netherlands). These results are in line with previous results: men are usually more in favour of the euro, low-educational-level respondents are less in favour, metropolitan areas and towns are usually more in favour except in the Netherlands, and young respondents and the employed are also in favour.<sup>23</sup>

The second multinomial logistic regression, based on the replies to question 17, is estimated for all the countries which reported *your feeling of being European has not changed* by the euro as the largest share of total responses, here using as the reference category *feel a little more European*. On the other hand, for Ireland where the majority share of the respondents answered *feel a little more European*, the estimation was conducted using *has not changed* as the reference category. The results are presented in Table 8 and Table 9. As before, the coefficients represent marginal effects.

Table 8 illustrates that men were less likely to be in the category *has not changed* than in *a little more European*.<sup>24</sup> In Spain, France, Luxembourg and the Netherlands young respondents (15-39 years old) were more likely to answer that *nothing has changed*. In all countries, except for Greece and Austria, respondents with low education were more likely to answer *nothing has changed*.<sup>25</sup> In Belgium, Germany, France, Italy, the Netherlands and Finland

---

<sup>21</sup> Coefficients have positive sign.

<sup>22</sup> Coefficients have negative sign.

<sup>23</sup> These socio-demographic characteristics are also associated with the determinants of inflation perceptions in the EU. Higher perceptions of inflation are found for women, unemployed and less educated individuals. See Del Giovane, Fabiani and Sabbatini (2007).

<sup>24</sup> Coefficients have negative sign.

<sup>25</sup> Coefficients have a positive sign.

respondents living in metropolitan areas and towns were less likely to reply *nothing has changed*.

Table 9, which displays the regression results for Ireland only, shows that men were more likely to be in the category *a little more European* than in the category *nothing has changed*. Respondents with a low level of education and living in metropolitan areas were less likely to be in the *little more European* category than in the reference category (*nothing has changed*).

Following the individual country analysis, the same multinomial logistic regressions are made for the euro-area aggregate.<sup>26</sup> For these estimations, we use a pooled multinomial logistic model. The results, summarized in Table 10 and Table 11, show all the variables in both the regressions to be significant, i.e. at least one of the categories of each predictor variable has an impact on the probability of a certain answer to question 14 and question 17. The significance of the coefficients and their signs are commonly in line with previous outcomes. Men were more likely to be in *advantageous overall* than in the *disadvantageous* category and were less likely to be in the *nothing has changed* group than in the *a little more European* one after using the euro; older respondents, manual workers and respondents with low education were less likely to be in the *advantageous* group than in the *disadvantageous* group; young and low/medium-educated respondents were more likely to be in the *nothing has changed* than in the *feel a little more European* category.<sup>27</sup>

Considering the coefficients related to the country dummies, Table 10 demonstrates that Austria, Finland, Ireland and Luxembourg show higher positive significant coefficients. This means that these four countries were more likely to be in the *advantageous overall* category than in the *disadvantageous* one. This is consistent with the picture in Chart 1, where these countries have the highest percentage for the answer *advantageous overall*. In Table 11, Ireland and Italy show positive significant coefficients, i.e. they were more likely to be in the *a little more European* than in the *nothing has changed* group after using the euro. This is

---

<sup>26</sup> Different weights were used for the country analysis estimation and for the euro-area level estimation.

<sup>27</sup> Using primarily country level data, not individual data, from the Standard Eurobarometer surveys for 1999-2005, Deroose, Hodson and Kuhlmann (2007) discuss the determinants of the legitimacy of the euro. Their conclusions are consistent with our findings although they do not use a breakdown of the respondents into different socioeconomic and demographic categories as we do.

consistent with Chart 2, where Ireland and Italy are the two countries with the highest percentage in the category *a little more European*.

Next, we pursue the analysis further by calculating the marginal effects. For the euro-area models, we present the marginal effects of the multinomial logistic regressions in Table 12 and Table 13. In Table 12 the marginal effects of country dummies indicate that respondents in Austria, Finland, Ireland and Luxembourg have a more positive perception of the euro than respondents in Germany. On the other hand, Greece and the Netherlands have a more negative perception than Germany. Table 13 shows that Ireland and Italy have a higher level of *feeling European* than Germany; other countries do not show a marked difference in the marginal effect compared to Germany.

The coefficients in Table 12 and 13 can be interpreted as the probability of giving a certain reply. Thus an estimate of 0.287 for Ireland in Table 12 (see the country dummies) implies that the Irish respondents are 28.7 per cent more likely to answer that the euro is advantageous than the German respondents. Similar, in Table 13 the country dummy for Ireland of 0.514 suggests that the Irish respondents are 51.4 per cent more likely than the German respondents to answer that they feel *a little more European* as a result of the introduction of the euro.

## **6. Motives behind the perception of the euro**

In the sections above, we have shown how the effects of the euro are perceived by respondents across the euro area. We do not know, however, the underlying determinants of their attitudes towards the euro. Most importantly, we do not know which factors make the public view the euro as *advantageous* or *disadvantageous*. With the aim of achieving a better understanding of these determinants, we explore the answers to two additional questions in the survey.

Those respondents who answered *advantageous overall* (see question 14 in Table 1), were asked the following question: *In your opinion, which are the main advantages of the adoption of the euro for your country?* Respondents could give spontaneous answers. These replies

were then coded by the interviewer and grouped into eight groups (*Travels abroad less costly and easier, easier to compare prices, lower interest rates and lower debt-servicing charges, sounder public finances, more stable prices, reinforces the place of Europe in the world, improvement of growth and employment and finally other*).

Respondents who answered *disadvantageous overall* (see question 14 in Table 1), were asked: *In your opinion, what are the main disadvantages of the adoption of the euro for your country?* Here too, respondents could give spontaneous answers. Their replies were coded by the interviewer and grouped into eight categories (*Price increases, loss of sovereignty, more unemployment and less growth, complicates everyday life, generates too-low interest rates, too rigid for public spending, loss of competitiveness and other*).

We report a summary of the motives for the advantages and disadvantages of the euro in Table 14 and Table 15.

As the main advantages, measured as the replies with the highest percentage, respondents replied *travel abroad less costly and easier, easier to compare prices, reinforces the place of Europe in the world and more stable prices*. Most of those who answered that travel is *less costly* and that *it is easier to travel abroad* were men, older than 55, who were in full-time education until 16-20 years of age, living in urban areas and not working. Those who answered as an advantage that *it is easier to compare prices*, were primarily men, 40-54 years old, educated beyond the age of 20, living in rural areas and not working. For the answer *reinforce the place of Europe in the world*, respondents were men, 40-54 years old, educated beyond the age of 20, living in urban areas and not working. Finally, those who replied *prices are more stable* were also men, 40-54 years old, educated beyond the age of 20, living in urban areas and employed.<sup>28</sup>

As the main disadvantages (replies with the highest percentage in Table 15), respondents answered *price increases, complicates everyday life and more unemployment and less growth*. Most of those who gave at least one of these three replies were women, older than 55, who had been in full-time education until the age of 16-20, living in rural areas and not working.<sup>29</sup>

---

<sup>28</sup> For more details, see Table 14.

<sup>29</sup> For more details, see Table 15.



We conclude that there is a clear difference between men and women in the evaluation of the costs and benefits of the euro. Women reply that price increases are the main motive for viewing the euro as *disadvantageous*. This is consistent with the finding that women have higher perceptions of inflation than men in many euro-area countries. Table 14 and Table 15 also suggest that the daily life experience of individuals of shopping and travelling (like *less costly to travel abroad* and *easier to compare prices*) predominate over perceived macroeconomic effects of the euro (like *more stable prices* and *more unemployment and less growth*).<sup>30</sup>

## 7. Conclusions

The euro was introduced physically in January 2002 in 12 EU member states. How did Europeans view the euro five years after its introduction? We arrive at an answer to this question by exploring how a representative selection of 12 000 Europeans across all countries in the euro area viewed the effects of the euro in 2006. Our empirical analysis is based on two questions included in the Flash Eurobarometer survey of September 2006. The first question asked respondents if the adoption of the euro was *advantageous overall* or not. The second one asked if using the euro had made the respondents *personally feel a little more European than before* or not.

At the euro-area level, close to a majority perceived the euro as *advantageous overall*, while about a fifth of the respondents replied that their European identity was strengthened by the euro. Ireland is an exception. Here the largest share of respondents replied that the euro was *advantageous overall* and that they felt a *little more European*. Judging from the data, the respondents had a more favourable opinion about the overall effects of the euro than about the effect of the euro on their European identity.

At the disaggregated level two major findings emerge. First, there are substantial differences across member states in the euro area concerning the perceived effects of the euro. Second, our statistical tests show significant differences at the individual level across socio-

---

<sup>30</sup> Additional analysis of the answers displayed in Table 14 and 15 may be undertaken. At this stage, however, we are not pursuing this line of work.

demographic groups. Men are more positive regarding the impact of new currency than women. They also feel more European since the introduction of the euro. Attitudes towards the euro and the feeling of being European are also positively related to the level of education of the respondents. Age and occupation are not strongly related to opinions towards the euro and its impact on European identity. The same holds for locality at the country level. On the other hand, at euro-area-aggregate level, locality exerts a strong influence on attitudes towards the euro; respondents living in metropolitan areas and towns are more in favour of the euro than inhabitants of rural areas.

Our database also permits an examination of the main arguments used by the respondents to motivate their views on the advantages and disadvantages of the single currency. Those who view the euro as advantageous overall do so on the basis that the euro has made it less costly to travel and easier to compare prices. They are primarily men with higher education. Those who regard the euro as disadvantageous overall do so on the basis that the euro has caused prices to increase. The attitudes towards the euro appear to be based primarily on daily life experience in shopping and travelling rather than on macroeconomic considerations relating to growth and employment.

Our individual-level findings are consistent with those of earlier studies concerning determinants of public attitudes towards the euro and European economic integration. Here too, sex and education stand out as strongly related to the public's attitudes towards the euro. There still remains the formidable task of explaining, using economic and political theories, the wide differences in European attitudes towards the effects of the euro across societies and countries. These differences in attitude are likely to present a challenge for policy-makers in the euro area.

## References:

- Agresti, A., (2002), *Categorical data analysis*, Wiley.
- Anderson, C.J. and M. Shawn Reichert, (1996), "Economic benefits and support for membership in the EU: A cross-national analysis", pp. 231-249, *Journal of Public Policy*.
- Banducci, S., J. Karp and P. Loedel, (2003), "The euro, economic interests and multi-level governance: examining the support for the common currency", pp. 685-703, *European Journal of Political Research*.
- Borooah, V.K., (2001), *LOGIT and PROBIT. Ordered multinomial models*, Quantitative Studies in the Social Sciences, 138, Sage Publications.
- Cameron, A. C. and P. K. Trivedi, (2005), *Microeconometrics. Methods and applications*, Cambridge University Press.
- Crosen, R. and U. Gneezy, (2004), "Gender differences in preferences", KSG Harvard Research paper.
- Del Giovane, P., S. Fabiani and R. Sabbatini, (2007), "What's behind 'Inflation perceptions'? A survey-based analysis of Italian consumers", forthcoming in *Working Papers Series*, Banca d'Italia, Rome.
- Deroose, S., D. Hodson and J. Kuhlmann, (2007), "The legitimation of EMU: Lessons after seven years of the euro", pp. 800-819, *Review of International Political Economy*.
- European Commission, (2006), "The eurozone, 5 years after the introduction of the common currency", Flash Eurobarometer 193. [http://ec.europa.eu/public\\_opinion/flash/fl193\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl193_en.pdf)
- Futing Liao, T., (1994), *Interpreting probability models. Logit, probit and other generalized linear models*, Quantitative Studies in the Social Sciences 101, Sage Publications.
- Gabel, M., (1998), "Public support for European integration: an empirical test of five theories", pp. 333-354, *Journal of Politics*.
- Gärtner, M., (1997), "Who wants the euro - and why? Economic explanations of public attitudes towards a single European currency", pp. 487-510, *Public Choice*.
- Greene, W. H., (2003) *Econometric analysis*, 5th edition Prentice Hall.
- Hayo, B., (1999), "Knowledge and attitude towards European Monetary Union", pp 641-651, *Journal of Policy Modeling*.
- Insengard, B. and T. Schneider, (2006), "The euro perception in the German population", Discussion paper nr. 11, Universität Flensburg.
- Jonung, L. and J. Vlachos, (2007), "The euro - what's in it for me? An economic analysis of the Swedish euro referendum 2003", report 2007:2, Swedish Institute for European Policy Studies, Stockholm.
- Jupille, J. and D. Leblang, (2007), "Voting for change: Calculation, community and euro referendums", pp. 763-782, *International Organizations*.

Table 1. The effects of the euro. Two questions in the Flash Eurobarometer 2006

---

Question 14: *In your opinion, is the adoption of the euro advantageous overall and will strengthen us for the future, or rather the opposite, disadvantageous overall and will weaken us?*

---

Advantageous overall (4)

Disadvantageous overall (1)

Neither one or the other, no change(2)

Do not know/No answer (3)

---

---

Question 17: *Since using the euro, do you personally feel a little more European than before, a little less or would you say that your feeling of being European has not changed?*

---

A little more European (4)

A little less European (1)

Nothing has changed (2)

Do not know/No answer (3)

---

Comment: The code in parenthesis refers to the coding used in SPSS for all estimation.

Source: Flash Eurobarometer 193, European Commission (2006).

Table 2. The adoption of the euro: Replies across sex, age, education, occupation and locality in the euro area, per cent

		<i>Advantageous overall</i>	<i>Disadvantageous overall</i>	<i>Neither one or the other. no change</i>	<i>Don't know/no answer</i>
Sex					
	Male	56	30.8	7.3	5.9
	Female	40.5	43.7	7.3	8.5
Age					
	15-24 years	60.4	29.6	6.8	3.2
	25-39 years	50.8	37.1	6.6	5.4
	40-54 years	45.4	40.2	7.4	7
	+55 years	43.1	38.8	7.8	10.3
Education (end of)					
	Still in	63.2	29.2	3.9	3.7
	Less than 15	31.9	50.5	7.6	10
	16-20 years	43.9	41	7.9	7.2
	+20 years	61.5	25.6	7.5	5.4
Occupation					
	Not working	44.5	41	6.4	8.1
	Manual worker	38.2	44.6	9.4	7.8
	Self-employed	51.9	34.2	8.8	5.1
	Employed	54.6	31.3	7.8	6.3
Locality					
	Metropolitan area	54.1	31.5	8.4	6
	Other town	49.7	36.1	7.4	6.8
	Rural zone	43.8	41.5	6.6	8.1

Source: Flash Eurobarometer 193, European Commission (2006).

Table 3. Summary statistics for the euro area. 12 078 observations

Independent variables	Mean	S.D.
<i>Sex</i>		
Male	0.48	0.49
Female	0.52	0.49
<i>Age</i>		
15-24 years	0.14	0.36
25-39 years	0.22	0.42
40-54 years	0.29	0.45
+55 years	0.34	0.47
<i>Education (end of)</i>		
Still in	0.10	0.30
Less than 15	0.19	0.39
16-20 years	0.42	0.49
+20 years	0.28	0.45
<i>Occupation</i>		
Not working	0.50	0.50
Manual worker	0.08	0.27
Self-employed	0.09	0.29
Employed	0.32	0.47
<i>Locality</i>		
Metropolitan area	0.20	0.40
Other town	0.38	0.48
Rural zone	0.41	0.49

Comment: The means of the variables correspond to the shares of these categories in overall answers to the respective questions, e.g. an average of 0.52 “female” implies that 52 % are female and 48 % are male.

Table 4. *Is the adoption of the euro advantageous overall...?  $\chi^2$  and ANOVA tests for euro-area countries*

Country	$\chi^2$	ANOVA overall				
		Sex	Age	Education	Occupation *	Locality **
Austria	All independent variables are significant except locality	Men> Women	15-24 >55+	less 15<all the other categories; 16-20 <20+ and still in edu	MW <all the other categories	-
Belgium	All independent variables are significant except locality	Men> Women	15-24 >40-54 and 55+ ; 25-39 > 40-54 and 55+	Less 15<20+ and still in edu; 16-20<20+ and still in edu	EM>MA and NW	ME > RZ
Finland	All independent variables are significant	Men> Women	55+< all the other categories	less 15 <all the other categories; 16-20 <20+ and still in edu	NW <SE and EM	ME < OT and RZ
France	All independent variables are significant	Men> Women	15-24 >40-54 and 55+; 25-39 > 55+	less 15 < all the other categories; 16-20 <20+ and still in edu	EM >MW and NW	RZ <ME and OT
Germany	All independent variables are significant except occupation and locality	Men> Women	15-24 >40-54	less15 <20+ and still in edu; 16-20 <20+ and still in edu	-	OT > than RZ
Greece	All independent variables are significant	Men> Women	15-24 < all the other groups	20+ >all the other categories	NW < SE & EM	RZ < ME and OT
Ireland	All independent variables are significant except occupation and locality	Men> Women	-	less 15 <16-20 and 20+; 16-20 > still in edu	-	-
Italy	All independent variables are significant	Men> Women	15-24 >25-39	less 15 <all the other categories	-	ME > OT and RZ
Luxembourg	All independent variables are significant except locality	Men> Women	15-24 < 55+	20+ > all the other categories; less 15 <16-20	MW< all the other categories; NW< EM	-
The Netherlands	All independent variables are significant except locality	Men> Women	-	less 15 < 20+; 16-20 <20+	-	-
Portugal	All independent variables are significant	Men> Women	15-24 > 40-54 and 55+; 25-39 > 40-54 and 55+	less 15 <all the other categories	EM > MW and NW	RZ < ME and OT
Spain	All independent variables are significant except locality	Men> Women	15-24>all the other categories	less 15 < 20+ and still in edu; 16-20 <20+ and still in edu	EM > NW and MW	-

Table 5. *Since using the euro, do you personally feel a little more European than before,...?*  $\chi^2$  and ANOVA tests for euro-area countries

Country	$\chi^2$	ANOVA overall				
		Sex	Age	Education	Occupation *	Locality **
Austria	All independent variables are significant	Men> Women	15-24 > other categories	Still in education> other categories	MW < NW	-
Belgium	Education and locality are significant	-	-	20+ > other categories	-	ME > RZ
Finland	Education and locality are significant	-	-	20+ > other categories	-	ME > RZ
France	Sex, education and locality are significant	Men> Women	-	20+ > less than 15 and 16/20	-	RZ < ME
Germany	Sex and education are significant	Men> Women	-	20+ > less than 15 and 16/20	-	ME> other categories
Greece	Sex and education are significant	Men> Women	-	20+ > 16/20 at 0.05	-	-
Ireland	Sex, education and locality are significant	Men> Women	-	less 15< 20+ and still in education	-	-
Italy	All independent variables are significant except age	Men> Women	-	20+ > other categories	-	ME > RZ
Luxembourg	Education is significant	-	-	Still in education > less than 15 and 16/20; 20+ >less than 15 and 16/20	-	-
The Netherlands	Education, occupation and locality are significant	-	-	20+ > less than 15 and 16/20	-	ME > RZ
Portugal	Sex, education and locality are significant	-	-	20+ > less than 15 and 16/20	-	RZ < ME
Spain	Age, education and occupation are significant	Men> Women	-	less 15 < 20+ and still in edu	-	-

Comment:  $\chi^2$  and ANOVA; significance level fixed at 0.05. ANOVA: If the F-test is significant, the mean of the dependent variable differs among the groups of the independent variables. The ANOVA test only reports significant results.

\* EM= employed, SE= self-employed, MW= manual worker, and NW= not working.

\*\* ME= metropolitan areas, OT= other towns and RZ= rural zones.



Table 6. Multinomial logistic regression about the euro perception- *advantageous* coefficients relative to *disadvantageous overall* as reference category

Country	Sex (base category female)	Age (base category +55 years)			Education (base category +20 years)			Occupation (base category not working)			Locality (base category rural zone)	
		male	15-24y	25-39y	40-54y	Still in education	Less than 15y	16-20y	Self employed	Employed	Manual worker	Metropolitan
Austria	1.051* (.176)	0.270 (.304)	-0.376 (.277)	-0.128 (.256)	0.748 (.473)	-0.777* (.279)	-0.225 (.228)	0.608 (.333)	0.442 (.247)	-0.764 (.316)	0.352 (.213)	-0.050 (.207)
Belgium	0.529* (.191)	-0.309 (.395)	0.128 (.331)	-0.558* (.257)	0.533 (.486)	-1.258* (.318)	-0.869* (.225)	0.329 (.334)	1.028* (.278)	-0.117 (.329)	0.707 (.300)	0.156 (.188)
Finland	0.504* (.193)	0.391 (.456)	-0.002 (.308)	-0.299 (.294)	-0.050 (.467)	-1.371* (.322)	-0.856* (.223)	0.861* (.420)	0.487 (.272)	0.698 (.500)	0.438 (.279)	-0.225 (.228)
France	0.564* (.165)	0.950* (.392)	-0.259 (.280)	-0.053 (.274)	-0.631 (.521)	-1.824* (.304)	-1.09* (.197)	0.119 (.344)	0.179 (.266)	-0.327 (.321)	0.452 (.227)	0.347 (.177)
Germany	0.643* (.146)	-0.19 (.289)	-0.0411 (.238)	-0.0616* (.212)	-0.089 (.387)	-1.233* (.247)	0.649* (.179)	-0.111 (.312)	0.271 (.198)	-0.291 (.296)	0.152 (.181)	0.371** (.168)
Ireland	0.351 (.182)	-1.242* (.379)	-0.701* (.307)	-0.623* (.288)	0.739 (.417)	-1.015* (.349)	0.284 (.217)	0.360 (.349)	0.461 (.254)	-0.437 (.484)	-0.007 (.220)	0.002 (.214)
Luxembourg	0.312 (.108)	-1.690* (.405)	-0.835* (.313)	-0.611 (.288)	-0.032 (.470)	-1.653 (.319)	-0.699 (.250)	0.039 (.363)	0.247 (.280)	-0.413 (.340)	-0.011 (.254)	-0.133 (.203)
Portugal	0.552* (.166)	0.821* (.325)	0.708* (.272)	0.049 (.254)	-0.234 (.393)	-0.708* (.242)	0.672* (.227)	-0.121 (.281)	0.178 (.242)	-0.503 (.350)	0.427 (.244)	0.472 (.181)
Spain	0.763* (.179)	0.439 (.370)	-0.179 (.251)	-0.20 (.243)	0.366 (.406)	-0.979* (.253)	-0.620* (.218)	0.045 (.283)	0.481* (.230)	-0.333 (.375)	0.058 (.230)	0.080 (.196)

Comment: Coefficients refer to the comparison *advantageous* relative to *disadvantageous*.

\* Significance level at 0.05.

\*\* This coefficient is significant for the Wald test but it is not significant for the likelihood ratio test. As Agresti (1998) state, the LRT is more reliable than the Wald test. The Wald test and the Likelihood Ratio test are tests involving the likelihood function.

Standard errors reported in parenthesis.

Table 7. Multinomial logistic regression about the euro perception- *disadvantageous* coefficients relative *advantageous overall* as reference category

Country	Sex (base category female)	Age (base category +55 years)			Education (base category +20 years)			Occupation (base category not working)			Locality (base category rural zone)	
		male	15-24y	25-39y	40-54y	Still in education	Less than 15y	16-20y	Self employed	Employed	Manual worker	Metropolitan
Greece	-0.845* (.160)	1.312* (.382)	0.496 (.240)	0.387 (.235)	0.324 (.380)	1.274* (.257)	-0.685* (.187)	-0.215 (.243)	-0.146 (.223)	0.371 (.547)	-0.422 (.227)	-0.204 (.188)
Italy	-0.732* (.163)	0.191 (.358)	0.581* (.232)	0.182 (.201)	0.117 (.406)	1.043* (.236)	0.582 (.212)	-0.106 (.264)	-0.154 (.224)	0.417 (.322)	-0.358 (.216)	0.016 (.157)
Netherlands	-0.510* (.154)	0.017 (.401)	0.691* (.246)	0.660* (.232)	0.408 (.423)	0.983* (.341)	-0.631* (.171)	-0.523 (.336)	-0.669* (.209)	-0.025 (.461)	0.307 (.234)	0.317** (.160)

Comment: Coefficients refer to the comparison *disadvantageous* relative to *advantageous*.

\* Significance level at 0.05.

\*\* This coefficient is significant for the Wald test but it was not significant for the Likelihood Ratio Test (LRT). The LRT is more reliable than the Wald test according Agresti (1998). The Wald test and the Likelihood Ratio test are tests involving the likelihood function estimation.

Standard errors reported in parenthesis.

Table 8. Multinomial logistic regression concerning *your feeling of being European has not changed?* with *feel a little more European* as reference category

Country	Sex (base category <i>female</i> )	Age (base category +55 years)			Education (base category +20 years)			Occupation (base category <i>not working</i> )			Locality (base category <i>rural zone</i> )	
	<i>male</i>	15-24y	25-39y	40-54y	Still in <i>education</i>	Less than 15y	16-20y	Self <i>employed</i>	Employed	Manual <i>worker</i>	Metropolitan	Town
Austria	-0.594* (.402)	-0.114 (.322)	0.346 (.316)	0.533 (.300)	-0.549 (.405)	0.619 (.333)	0.431 (.240)	-0.277 (.339)	-0.112 (.280)	0.566 (.449)	0.081 (.238)	-0.454* (228)
Belgium	-0.307* (.190)	0.388 (.404)	0.722 (.312)	0.244 (.256)	1.002* (.486)	1.937* (.455)	-1.00* (.210)	0.206 (.325)	0.071 (.256)	0.289 (.403)	-0.531* (.248)	-0.120 (.202)
Finland	-0.232 (.181)	0.450 (.422)	-0.015 (.284)	-0.138 (.283)	0.599 (.425)	1.611* (.470)	0.822* (.215)	-0.180 (.363)	0.047 (.262)	0.214 (.474)	-0.824* (.259)	-0.285 (.257)
France	-0.530* (.175)	2.004* (.471)	1.302* (.302)	0.697* (.284)	-0.987 (.536)	1.075* (.373)	0.982* (.207)	-0.575 (.356)	-0.488 (.283)	-0.008 (.388)	-0.588* (.231)	-0.332 (.203)
Germany	-0.561* (.203)	-0.536 (.389)	0.152 (.338)	0.065 (.293)	0.724 (.503)	0.957* (.363)	0.647* (.230)	-0.566 (.380)	0.026 (.277)	0.584 (.469)	-0.706* (.277)	0.272 (.254)
Greece	-0.670* (.202)	-0.509 (.451)	0.313 (.302)	0.156 (.289)	1.108* (.496)	0.385 (.307)	0.521 (.289)	-0.139 (.297)	0.074 (.287)	0.774 (.809)	-0.019 (.302)	-0.359 (.243)
Italy	-0.352* (.164)	0.129 (.364)	0.285 (.230)	0.274 (.202)	0.350 (.411)	0.535* (.232)	0.223 (.202)	-0.273 (.255)	-0.379 (.218)	0.364 (.348)	-0.318 (.210)	-0.378* (.162)
Luxembourg	-0.060 (.208)	1.769* (.574)	0.600* (.275)	0.426 (.256)	1.374* (.591)	0.799* (.305)	0.535* (.204)	-0.603 (.322)	-0.225 (.262)	-0.361 (.359)	0.214 (.229)	0.049 (.186)
Netherlands	-0.594* (.402)	0.650 (.599)	0.871* (.328)	0.404 (.294)	0.282 (.631)	1.419* (.584)	0.732* (.230)	-0.847* (.402)	-0.382 (.280)	0.123 (.811)	-0.670* (.296)	-0.377 (.222)
Portugal	-0.593* (.177)	-0.315 (.335)	0.051 (.290)	-0.195 (.273)	0.713 (.387)	0.793* (.249)	0.758* (.232)	-0.073 (.291)	0.283 (.259)	0.037 (.378)	0.646* (.273)	0.363 (.189)
Spain	-0.583* (.186)	0.993* (.392)	0.393 (.268)	0.059 (.264)	-1.174* (.388)	0.900* (.297)	0.310 (.222)	-0.575 (.301)	-0.283 (.259)	-0.925* (.389)	0.289 (.249)	-0.059 (.205)

Table 9. Multinomial logistic regression about European identity - *feel a little more European* coefficients relative to *nothing has changed* as reference category

<i>Country</i>	<i>Sex</i> (base category <i>female</i> )	<i>Age</i> (base category +55 years)			<i>Education</i> (base category +20 years)			<i>Occupation</i> (base category <i>not working</i> )			<i>Locality</i> (base category <i>rural zone</i> )	
		<i>male</i>	<i>15-24y</i>	<i>25-39y</i>	<i>40-54y</i>	<i>Still in education</i>	<i>Less than 15y</i>	<i>16-20y</i>	<i>Self employed</i>	<i>Employed</i>	<i>Manual worker</i>	<i>Metropolitan</i>
Ireland	0.376* (.162)	0.217 (.342)	0.236 (.256)	0.477* (.238)	-0.408* (.468)	-0.822* (.379)	-0.334 (.406)	0.158 (.294)	0.172 (.220)	0.088 (.516)	-0.583* (.193)	-0.042 (.196)

Comment: Coefficients refer to the comparison *nothing has changed* relative to *feel a little more European* in Table 7 and *little more European* relative to *nothing has changed* in Table 8.

\* Significance level at 0.05.

Table 10. Multinomial logistic regression for the perception of the euro as *advantageous* with *disadvantageous overall* as reference category (euro area)

Independent variables	Coefficients	S.E.
Country dummies		
<i>Austria</i>	1.005*	0.121
<i>Belgium</i>	0.959*	0.128
<i>Greece</i>	-0.377*	0.113
<i>Finland</i>	1.158*	0.123
<i>France</i>	0.419*	0.111
<i>Ireland</i>	1.240*	0.129
<i>Italy</i>	-0.078	0.114
<i>Luxembourg</i>	1.256*	0.126
<i>Netherlands</i>	-0.361*	0.114
<i>Portugal</i>	0.306*	0.121
<i>Spain</i>	0.732*	0.115
<i>Germany</i>	Base category	
Sex		
<i>Male</i>	0.647*	0.072
<i>Female</i>	Base category	
Age		
<i>15-24y</i>	0.132	0.175
<i>25-39y</i>	-0.330*	0.112
<i>40-54y</i>	-0.317*	0.102
<i>+55y</i>	Base category	
Education (end of)		
<i>Still in education</i>	-0.232	0.200
<i>Less than 15y</i>	-1.205*	0.113
<i>16-20y</i>	-0.722*	0.086
<i>+20y</i>	Base category	
Occupation		
<i>Self-employed</i>	0.101	0.128
<i>Employed</i>	0.306*	0.097
<i>Manual worker</i>	-0.312*	0.154
<i>Not working</i>	Base category	
Locality		
<i>Metropolitan</i>	0.229*	0.099
<i>Town</i>	0.154*	0.077
<i>Rural zone</i>	Base category	
Number of observations	11252	
Log likelihood	-11469.944	
Pseudo R <sup>2</sup>	0.0670	

Comment: \* Significance level at 0.05.

Table 11. Multinomial logistic regression about the European identity. *Little more European* coefficients relative to *nothing has changed* as reference category (euro area)

Independent variables	Coefficients	S.E.
<b>Country dummies</b>		
<i>Austria</i>	0.182	0.159
<i>Belgium</i>	0.207	0.151
<i>Greece</i>	0.048	0.145
<i>Finland</i>	0.104	0.141
<i>France</i>	0.467*	0.137
<i>Ireland</i>	2.634*	0.139
<i>Italy</i>	1.176*	0.136
<i>Luxembourg</i>	0.499*	0.137
<i>Netherlands</i>	-0.159	0.147
<i>Portugal</i>	0.591*	0.145
<i>Spain</i>	0.381*	0.141
<i>Germany</i>	Base category	
<b>Sex</b>		
<i>Male</i>	0.449*	0.081
<i>Female</i>	Base category	
<b>Age</b>		
<i>15-24y</i>	-0.426*	0.213
<i>25-39y</i>	-0.433*	0.126
<i>40-54y</i>	-0.192*	0.113
<i>+55y</i>	Base category	
<b>Education (end of)</b>		
<i>Still in education</i>	-0.026	0.233
<i>Less than 15y</i>	-0.906*	0.125
<i>16-20y</i>	-0.552*	0.092
<i>+20y</i>	Base category	
<b>Occupation</b>		
<i>Self-employed</i>	0.310*	0.140
<i>Employed</i>	0.145	0.112
<i>Manual worker</i>	-0.258	0.192
<i>Not working</i>	Base category	
<b>Locality</b>		
<i>Metropolitan</i>	0.356*	0.111
<i>Town</i>	0.179*	0.088
<i>Rural zone</i>	Base category	
Number of observations	11252	
Log likelihood	-6551.535	
Pseudo R <sup>2</sup>	0.0676	

Comment: \* Significance level at 0.05.

Table 12. Marginal effects of the pooled multinomial logistic regression for explaining attitudes towards the euro

Independent variables	The euro is advantageous	Neither one or the other, no change	The euro is disadvantageous
<b>Country dummies</b>			
<i>Austria</i>	0.155*	0.026	-0.192*
<i>Belgium</i>	0.065*	0.053*	-0.211*
<i>Greece</i>	-0.125*	0.039*	0.034
<i>Finland</i>	0.112*	0.034*	-0.227*
<i>France</i>	0.027	0.049	-0.118*
<i>Ireland</i>	0.287*	0.029*	-0.199*
<i>Italy</i>	-0.023	-0.041	0.011
<i>Luxembourg</i>	0.132*	-0.002*	-0.233*
<i>Netherlands</i>	-0.141*	0.097*	0.013
<i>Portugal</i>	-0.039	0.044*	-0.118*
<i>Spain</i>	0.069*	0.104*	-0.175*
<i>Germany</i>	Base category	Base category	Base category
<b>Sex</b>			
<i>Male</i>	0.150*	-0.004	-0.124*
<i>Female</i>	Base category	Base category	Base category
<b>Age</b>			
<i>15-24y</i>	0.043	0.021	-0.017
<i>25-39y</i>	-0.046	-0.019	0.091*
<i>40-54y</i>	-0.055*	-0.010	0.077*
<i>+55y</i>	Base category	Base category	Base category
<b>Education (end of)</b>			
<i>Still in education</i>	-0.034	-0.044	0.062
<i>Less than 15y</i>	-0.264*	0.001*	0.236*
<i>16-20y</i>	-0.164*	0.003	0.142*
<i>+20y</i>	Base category	Base category	Base category
<b>Occupation</b>			
<i>Self-employed</i>	0.017	0.0257	-0.024
<i>Employed</i>	0.061*	0.009	-0.065*
<i>Manual worker</i>	-0.084*	0.034	0.049
<i>Not working</i>	Base category	Base category	Base category
<b>Locality</b>			
<i>Metropolitan</i>	0.045*	0.017	-0.049*
<i>Town</i>	0.038*	0.005*	-0.028
<i>Rural zone</i>	Base category	Base category	Base category

Comment: \* Significance level at 0.05.

Table 13. Marginal effects of the pooled multinomial logistic regression for explaining the feeling of being European

Independent variables	A little more European	Nothing has changed	A little less European
<b>Country dummies</b>			
<i>Austria</i>	0.023	-0.044	0.007
<i>Belgium</i>	0.031	-0.035	-0.007*
<i>Greece</i>	0.001	-0.032	0.025*
<i>Finland</i>	0.014	-0.024	0.001
<i>France</i>	0.072*	-0.083*	0.007
<i>Ireland</i>	0.514*	-0.578*	0.060*
<i>Italy</i>	0.208*	-0.215*	0.001
<i>Luxembourg</i>	0.084*	-0.086*	-0.0005
<i>Netherlands</i>	-0.0277	-0.006	0.012
<i>Portugal</i>	0.094*	-0.121*	-0.0006
<i>Spain</i>	0.059*	-0.063*	-0.0008
<i>Germany</i>	Base category	Base category	Base category
<b>Sex</b>			
<i>Male</i>	0.065*	-0.069*	0.005
<i>Female</i>	Base category	Base category	Base category
<b>Age</b>			
<i>15-24y</i>	-0.054*	0.072*	-0.013*
<i>25-39y</i>	-0.058*	0.061*	0.001
<i>40-54y</i>	-0.027	0.028	0.002
<i>+55y</i>	Base category	Base category	Base category
<b>Education (end of)</b>			
<i>Still in education</i>	-0.006	-0.007	0.016
<i>Less than 15y</i>	-0.114*	0.087*	0.019*
<i>16-20y</i>	-0.0804*	0.069*	0.008
<i>+20y</i>	Base category	Base category	Base category
<b>Occupation</b>			
<i>Self-employed</i>	0.051	-0.042	-0.004
<i>Employed</i>	0.022*	-0.019	-0.004
<i>Manual worker</i>	-0.035	0.038	-0.005
<i>Not working</i>	Base category	Base category	Base category
<b>Locality</b>			
<i>Metropolitan</i>	0.055*	-0.056*	0.003
<i>Town</i>	0.026*	-0.026*	0.004
<i>Rural zone</i>	Base category	Base category	Base category

Comment: \* Significance level at 0.05.



Table 14. The four main advantages of the euro. A socio-demographic breakdown

	Travel abroad less costly and easier to travel	Easier to compare prices	Reinforce the place of Europe in the world	More stable prices
Background characteristics	45.9 % <sup>1)</sup>	30.2 % <sup>1)</sup>	27.2 % <sup>1)</sup>	11.2 % <sup>1)</sup>
Sex				
Male	1422	986	959	440
Female	1237	763	617	209
Age				
15-24y	555	325	274	121
25-39y	589	392	453	156
40-54y	681	521	457	179
+55y	824	509	391	191
Education (end of)				
Still in education	398	247	232	101
Less than 15y	337	217	159	73
16-20y	943	617	504	213
+20y	906	620	648	238
Occupation				
Self-employed	242	179	192	72
Employed	930	652	593	277
Manual worker	152	93	87	26
Not working	1313	813	700	272
Locality				
Metropolitan	647	371	381	136
Town	1049	665	658	265
Rural zone	960	665	536	246

Comment: The table is based on 5 794 individuals who answered *advantageous overall* to question 14 (see Table 1). <sup>1)</sup> Percentage of 5 794 individuals that replied as advantage *Travel abroad less costly and easier, easier to compare prices, reinforces the place of the Europe in the world and more stable prices*.

For the socio-demographic breakdown, we report the number of respondents who replied yes to *travel abroad less costly and easier, easier to compare prices, reinforces the place of Europe in the world and more stable prices* as possible advantages. For example, 1 422 is the number of men whose answer was *travel abroad less costly and easier*.

Table 15. The three main disadvantages of the euro. A socio-demographic breakdown

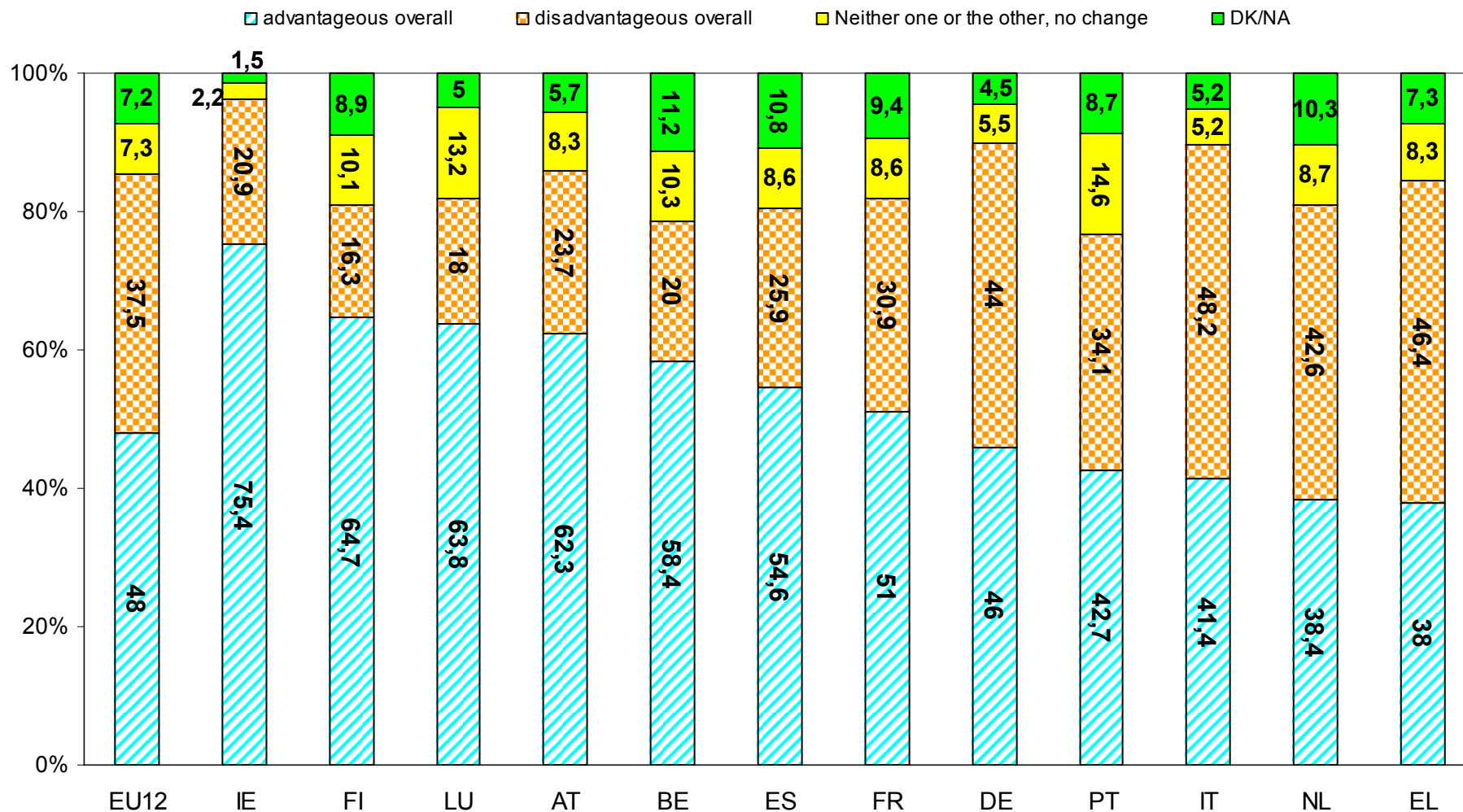
	Prices increase	Complicates everyday life	More unemployment and less growth
Background characteristics	81.4 % <sup>1)</sup>	18.5 % <sup>1)</sup>	7 % <sup>1)</sup>
Sex			
<i>Male</i>	1389	276	111
<i>Female</i>	2298	562	207
Age			
<i>15-24y</i>	464	76	31
<i>25-39y</i>	835	180	64
<i>40-54y</i>	1151	259	104
<i>+55y</i>	1218	319	113
Education (end of)			
<i>Still in education</i>	318	51	21
<i>Less than 15y</i>	939	259	91
<i>16-20y</i>	1584	337	131
<i>+20y</i>	682	135	57
Occupation			
<i>Self-employed</i>	299	70	29
<i>Employed</i>	994	186	79
<i>Manual worker</i>	313	37	29
<i>Not working</i>	2059	538	175
Locality			
<i>Metropolitan</i>	629	144	52
<i>Town</i>	1362	315	118
<i>Rural zone</i>	1662	378	147

Comment: The table is based on 4 529 individuals who answered *disadvantageous overall* to question 14 (see Table 1).

<sup>1)</sup> Percentage of 4 529 individuals that replied as a disadvantage *prices increase, complicates everyday life and more unemployment and less growth*.

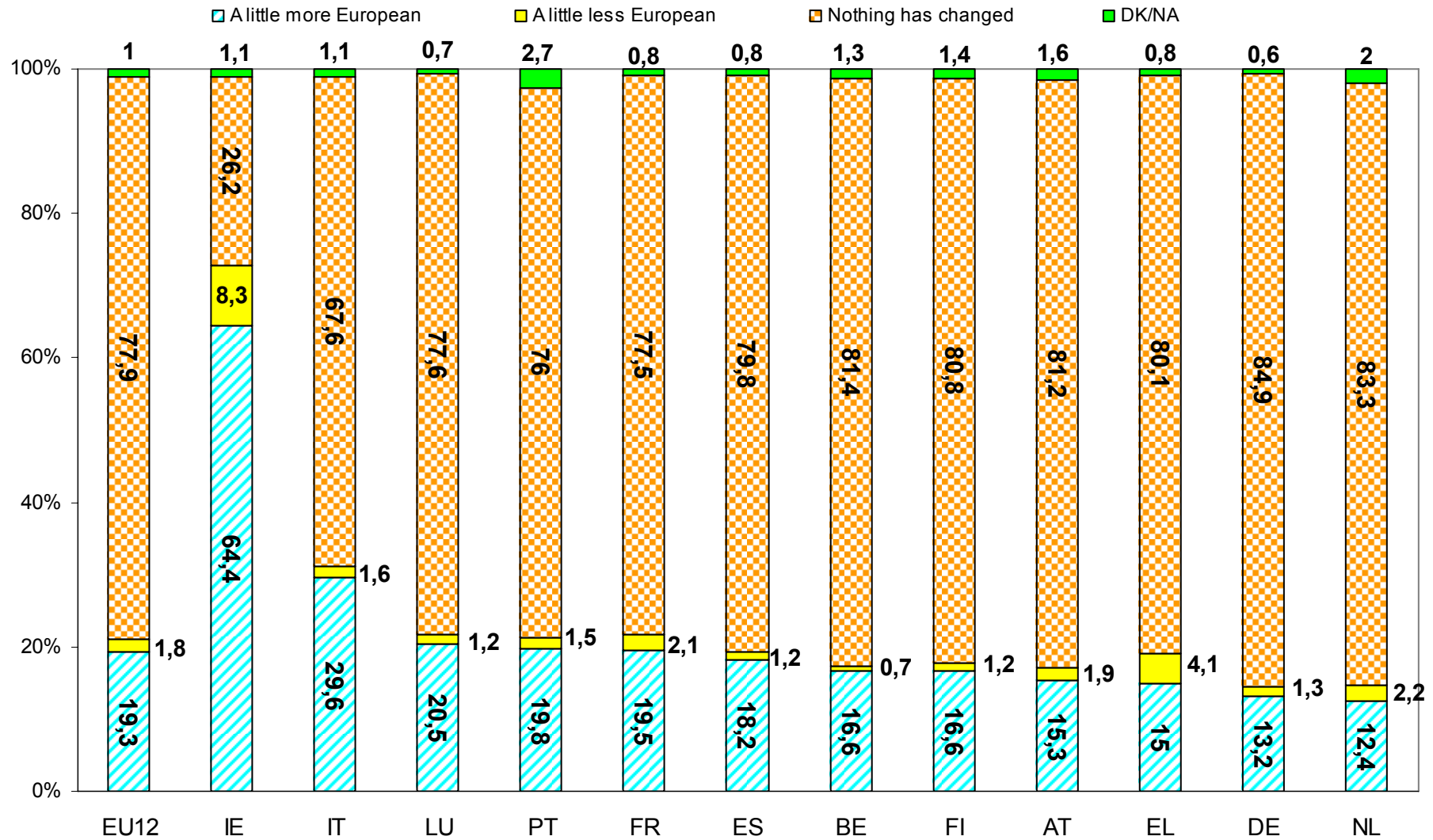
For the socio-demographic breakdown we report the number of respondents who replied yes to *prices increase, complicates everyday life and more unemployment and less growth* as possible disadvantages.

Chart 1. *Is the adoption of the euro advantageous overall ... ? Opinions 5 years after the introduction of the euro*



Source: Flash Eurobarometer 193, European Commission (2006).

Chart 2. *Since using the euro, do you personally feel a little more European ...?* Opinions 5 years after the introduction of the euro



Source: Flash Eurobarometer 193, European Commission (2006).

## Appendix A

Table A1. *In your opinion, is the adoption of the euro advantageous overall ...?* Percentage of *advantageous overall* replies according to sex and age among the euro-area member states (MS)

MS	Sex		Age			
	Male	Female	15-24y	25-39y	40-54y	+55y
BE	66	51.3	67	71	54	51.4
DE	54.6	37.9	58.7	43.7	39.6	47.8
ES	63.6	46	77	57.4	55.4	40.5
FR	56.8	45.7	67.9	59.7	50.9	37.7
IE	79.2	71.4	70.2	77.2	78.2	77.4
LU	69.8	58	57.7	63.3	64.4	66.8
AT	72.1	53.1	71.7	62	61.7	58.4
PT	50.5	35.6	58.9	54	37.5	31.2
FI	69.8	59.9	72.4	75.4	68	53.1

Table A2. *In your opinion, is the adoption of the euro advantageous overall ...?* Percentage of the *advantageous overall* replies according to education, occupation and locality among the euro-area member states (MS)

MS	Education				Occupation				Locality		
	Less 15y	16-20y	+20y	Still in education	Self-employed	Employee	Manual worker	Not working	Metropolitan area	Other town	Rural zone
BE	40.7	47.8	71.2	75.9	66.7	66.6	50.5	53.8	66.1	57.1	57.5
DE	32	42.7	56	62	44.8	47.6	34.8	47.3	48.9	51.4	42.1
ES	38.5	51.8	65.3	79.1	56.1	64.3	40.2	49.3	56.2	56.6	51.1
FR	26.2	42.9	68.9	79.4	50.7	58.2	41.7	43.4	60.3	53.5	44.4
IE	55.2	81.1	77.4	71.2	81.3	79.6	68.4	73.1	75.9	75.6	75
LU	43	61.3	77.1	61.1	70.7	72.3	46.9	60.8	68.8	60.3	64.6
AT	45.8	60.4	73.1	80.2	67.3	67.2	44	61.2	64.9	62	61
PT	31	45.5	56	58.6	43.6	50.3	31.6	39.4	50.3	47.1	34
FI	38.5	57.2	74.9	78.9	83.7	71	67.1	55.7	73	63.4	57.5

Table A3. *In your opinion, is the adoption of the euro ... disadvantageous overall ...?* Percentage of the *disadvantageous overall* replies according to sex and age in Greece, Italy and the Netherlands

MS	Sex		Age			
	Male	Female	15-24y	25-39y	40-54y	55+y
Greece	36.8	55.6	64.5	44.8	42.6	41.6
Italy	37.7	57.9	39.7	55.7	48.8	47.6
The Netherlands	35.7	49.3	40	44.8	46.5	38.8

Table A4. *In your opinion, is the adoption of the euro ... disadvantageous overall ...?* Percentage of *disadvantageous overall* replies according to education, occupation and locality in Greece, Italy and the Netherlands

MS	Education (end of)				Occupation				Locality		
	Less 15y	16-20y	+20y	Still in education	Self-employed	Employee	Manual worker	Not working	Metropolitan area	Other town	Rural zone
EL	53	49.1	32.1	59.5	38.8	38.5	50.3	51.7	38.8	45.7	53.4
IT	59	48.6	34.4	38.3	38.3	39.5	56.5	51.4	35.3	50	51.6
NL	51.7	48.3	35	43	41	38.2	49.2	45.4	43.4	46.2	39

Table A5. *Since using the euro... would you say that your feeling of being European has not changed?*  
 Percentage of the *not changed* replies according to sex and age in euro-area member states (MS)

MS	Sex		Age			
	Male	Female	15-24y	25-39y	40-54y	+55y
BE	79.4	83.2	83.5	84.1	81.1	79
DE	80.8	88.8	83.8	85.7	85.6	84.4
EL	74.7	85.4	82.3	84	79.4	76.6
ES	73.2	86	78.5	80.8	77.2	81.3
FR	74.3	80.5	87.2	79.2	75.2	74.6
IT	63.2	71.8	69.2	69.3	68.4	65.1
LU	75.5	79.6	79	78.4	78.8	75.2
NL	82.4	84.2	89.6	87.2	81.1	79.9
AT	77.2	84.9	71.6	84.1	86.5	79.8
PT	72.8	79	76.9	76	74.5	76.3
FI	80.2	81.3	88.8	78.9	76.5	82.6

Table A6. *Since using the euro...would you say that your feeling of being European has not changed?*  
 Percentage of the *not changed* replies according to education, occupation and locality in euro-area member states (MS)

MS	<i>Education</i>				<i>Occupation</i>				<i>Locality</i>		
	Less 15y	16-20y	+20y	Still in education	Self-employed	Employee	Manual worker	Not working	Metropolitan area	Other town	Rural zone
BE	92.2	85	72.2	87.4	81	79.3	88.4	81.5	73.7	80.7	85.1
DE	88.2	87.5	78.5	84	78.2	84.8	91.5	84.6	76.1	90.3	85.6
EL	79.3	82.1	76.6	85.7	75.1	79.1	92	81.8	81	78.8	83.7
ES	86	80.5	76.9	70.6	74.8	79.1	68.3	82.5	83.6	77.5	80.1
FR	85.8	82.3	69.3	75.2	73.9	76.1	85.2	78	70.8	75.3	83.2
IT	72.1	66.4	58.7	68.7	61	59.6	75.1	70.2	64.5	63.5	72.8
LU	80.9	81.4	73.4	71.8	71.6	78.1	80.1	78.5	79.6	77.8	76.6
NL	83.3	86.7	78.1	89.4	74.4	82.8	92.9	84.2	73.1	83.3	86.1
AT	84.6	84.6	77	65.7	79.9	83.5	87.7	78.8	83.6	74.9	82.6
PT	77.4	78.6	69.5	77.9	71.2	77.7	71.5	76.6	80.1	77.6	71.4
FI	90	86.1	73	87.1	77.8	78.4	85.4	82.9	73	83.6	85



Table A7. *Since using the euro, do you personally feel a little more European than before...? Percentage of little more European replies in Ireland*

Background characteristics		<i>feel a little more European than before</i>
<i>Sex</i>		
	Male	68.7
	Female	59.7
<i>Age</i>		
	15-24 years	68
	25-39 years	64.3
	40-54 years	69.4
	+55 years	54.2
<i>Education (end of)</i>		
	Still in	43.7
	Less than 15	62
	16-20 years	67
	+20 years	71.1
<i>Occupation</i>		
	Not working	66.8
	Manual worker	65.2
	Self employed	55.5
	Employed	60
<i>Locality</i>		
	Metropolitan area	60.3
	Other town	68.9
	Rural zone	63.8