

# THE IMPACTS OF ADOPTING THE EURO IN BULGARIA

*An NCEEER Working Paper by*

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## **Executive Summary**

Unique survey data from Bulgaria, collected during the 2012 eurozone crisis, show that the population expects mostly negative consequences from adopting the euro. The respondents expect that the economic situation of the average Bulgarian and their own personal economic situation would deteriorate if Bulgaria joins the eurozone. Nonetheless, many people remain in favor of joining the European Monetary Union (EMU). The support for EMU membership is driven by the perception that the EMU is an insurance mechanism where member states receive financial assistance in times of crisis, epitomized by the recent bailout of Greece. As a result, many Bulgarians support joining the EMU, despite the expected negative consequences.

## **I. Introduction**

Bulgaria is one of the new members of the European Union (EU) and, by virtue of its EU accession contract, it has to adopt the euro. The timing, however, is not specified and the Bulgarian policymakers can choose to accelerate or delay the switch to the euro based on the costs and benefits of such a change. Bulgaria has had a currency board fixing the local currency (the lev) to the euro for over a decade. It also satisfies the Maastricht criteria for low budget deficit, low debt, and low inflation. In that sense, it is only a step away from eurozone membership. That, however, does not imply that Bulgaria would enter the eurozone. The switch from the currency board to the euro does entail changes in the economic environment. Moreover, the recent turmoil in the euro area might have influenced the popular support for joining the European Monetary Union (EMU) which is important as the decision to join is political and has to enjoy public support.

In this paper we use unique survey data to investigate the expected costs and benefits of adopting the euro in Bulgaria. The survey was carried out in February 2012 as the eurozone debt crisis was unfolding. We find that most Bulgarians expected negative consequences from adopting the euro for the average Bulgarian citizen as well as for them personally. Yet, almost half of the population was in favor of joining the European Monetary Union (EMU). People viewed the EMU as an insurance mechanism where countries in trouble can access funding from the union. That perception created support for joining the EMU despite the negative expected consequences.

Our findings contribute to the literature investigating the effects of bailouts. Some papers point out that the bailouts of banks, firms and other entities may be efficient as they prevent problems from escalating (Mishkin, 1995, Santomero and Hoffman, 1998, Freixas et al., 1998)

while others argue that they distort incentives and lead to excessive risk taking (Goodfriend and King, 1988, Bordo and Schartz, 2000). In our case, we find that respondents in Bulgaria are influenced by the option to receive bailouts in their decision to support joining the EMU. In fact, this motivation is so strong that it overrides the negative expected consequences from the eurozone membership. Moreover, respondents believe that EMU membership can help Bulgaria borrow more money and this too is a motivation to support the EMU membership. These findings suggest that the anticipation of bailouts does distort incentives and creates a moral hazard problem.

We also build upon a large literature on the choice between different exchange rate regimes including Edwards (1996), Von Hagen and Zhou (2007), Poirson (2001) and Calvo and Reinhart (2002), and on the choice of exchange rate regimes in the transitional countries including Markiewicz (2006), Von Hagen and Zhou (2005), Klyuev (2002), and Frieden et al. (2010). Unlike the previous literature that investigates the choice between fixed and flexible exchange rates, we study the switch from a fixed exchange rate to a monetary union. To our knowledge there are no other papers studying this issue but it is an important one as the road to EMU membership goes through fixed exchange rate regimes for several countries in Eastern Europe, e.g. Latvia and Lithuania. One other country, Estonia, already transitioned from a currency board to eurozone membership.

Furthermore, much of the literature uses macro level variables to investigate the choices of exchange rate regimes. That approach hides important heterogeneity among the population within the country. Blomberg et al. (2005), Frieden (2002) and Frieden et al. (2001) show that the preferences regarding different currency policy choices differ substantially across social groups. The influence of these groups through the political institutions of the country

ultimately determines the exchange rate regimes choice. In support of that literature, we find substantial variation of expectations and attitudes among the respondents that carry over into different preferences over currency policy.

One important advantage of the survey data compared to the economic data used in earlier studies is that we can investigate *hypothetical* as opposed to actual policy changes. With the survey data we can analyze the grounds for a policy change in advance of the change. We can also find out the reasons why a policy change did not happen. Such analysis is not possible with macro data using only actual policy changes. Moreover, running a custom-made survey allows us to time it well so we investigate an issue at a moment when it is most pressing. In our case, we ask about the insurance benefits of the EMU exactly when the EMU is engaged in bailouts.

The rest of the paper is structured as follows. The next section presents the survey data and summary statistics. Section 3 provides empirical analysis and Section 4 concludes with final remarks.

## **II. Survey data**

The paper uses data from a national consumer survey in Bulgaria administered in February 2012 during a severe financial and economic crisis in the eurozone. More specifically, Bulgaria's neighbor to the south, Greece, was on the brink of default on its international debt and a possible exit from the EMU. Such an exit could have precipitated contagion to other EMU member states with high debt including Spain and Italy, a threat that mobilized EMU leaders to provide substantial financial assistance to Greece in exchange for domestic economic reforms and cuts in government spending. However, the reforms were delayed and the EMU did not

seem able to produce coherent policies to safeguard the euro. A series of efforts fell short of convincing investors that the eurozone problems were under control. In that environment the survey asked Bulgarians if they want to join the EMU.

The survey contains responses from 1000 individuals and its demographic structure in terms of age, education level, income, and gender is representative of the population of 7.5 million people. It was carried out by the network of professional interviewers of Vitosha Research, one of the major polling agencies in Bulgaria<sup>1</sup>. Respondents were asked about their views on the following idea:

*Statement 1:* Bulgaria should keep the currency board but make significant efforts to join the European Monetary Union.

Table 1 shows that most people had an opinion about the euro, i.e. the “I don’t know responses” were very few. Respondents were about equally split in their opinions: 45 percent believed that it was a good idea or a very good idea to pursue EMU membership while 49.9 percent believed that it was a bad or a very bad idea.

Next, the survey inquired about the expected effects of joining the eurozone by asking respondents whether various economic indicators would improve, deteriorate or not change as a result of adopting the euro. Table 2 shows that the most important benefit associated with the euro is the growth in exports: 37 percent of the respondents believed that exports would increase. In terms of overall output, about one third of the respondents expected an improvement, one third expected deterioration, and one third expected no change. The expected impacts on employment were similar. The greatest problem associated with the euro was the expected price increases. More than 50 percent of the respondents expected less price stability after joining the

<sup>1</sup> The survey questionnaire and the data are available from the authors upon request.

eurozone. While the expectations about the macroeconomic indicators were more or less balanced in terms of costs and benefits, the expectations on the individual level are starkly negative. Only 24 percent of the respondents expected an improvement of the economic situation of the average citizen and only 21 percent of the respondents expected an improvement in their personal economic situation. Nonetheless, as we saw in the previous table, about half of the population was in favor of joining the EMU.

Respondents could also answer whether they agreed or disagreed with the following statements:

*Statement 2:* Membership in the EMU is an insurance mechanism; it may cost money but a country can receive financial help if it needs it.

*Statement 3:* If the country is a member of the EMU, it could borrow more because it would receive financial help from the union in case it cannot pay it back.

*Statement 4:* The problems in Greece are more difficult because Greece uses the euro.

*Statement 5:* Greece receives financial help from European countries because it is part of the Eurozone.

Table 3 shows that almost 20 percent of the respondents strongly agreed with Statement 2 and another 47 percent agreed with it. Only 5.5 percent strongly disagreed. In other words, the vast majority of Bulgarians view the EMU as an insurance mechanism that can deliver financial help in times of crisis. Later we explore the effects of these perceptions on the support for joining the eurozone. A large percent of the population (45 percent) also believed that EMU membership would allow Bulgaria to take more credits because it would receive help if it cannot pay back. Less than 10 percent of the respondents disagreed with that statement. This is evidence for the moral hazard problems associated with implicit and explicit bailout guarantees.



It is interesting that relatively few respondents (25 percent) attribute the crisis in Greece to its eurozone membership. A much larger percent of the respondents (61 percent) do not believe that the euro had aggravated the problems in Greece. Yet, most people believe that Greece has been bailed out because of its EMU membership. Thus, the cost/benefit analysis of the situation in Greece seems in favor of EMU membership: the membership did not cause the debt problems but it, nonetheless, ensured financial help from the union. Such an interpretation reinforces the view that the EMU is an insurance mechanism.

### **III. Explaining the support for EMU membership**

We investigate the determinants of support for the adoption of the euro using demographic variables as well as several variables based on the questions discussed above. Table 4 presents the estimated results of probit models where the dependent variable is a dummy variable that equals 1 if a respondent believed that adopting the euro was either a good idea or a very good idea, and zero otherwise. We report the marginal effects from the probit estimations instead of the estimated coefficients which makes the interpretation of the quantitative effects more straightforward.

The explanatory variable of primary interest is based on the question about the insurance mechanism associated with adopting the euro. Similar to the dependent variable, we construct a dummy variable *Insurance*, which equals 1 if a respondent either agreed or strongly agreed that membership in the EMU serves as an insurance mechanism, and zero otherwise. In the same manner we create the dummy variables *Borrowing Capacity*, *Difficulty in Greece*, and *Financial help to Greece* that equal 1 if a respondent either agreed or strongly agreed to Statements 3-5 respectively, and zero otherwise.

We also enter a variable *Education* equal to 1 if a respondent had higher education and 0 otherwise; a variable *Male* equal to 1 for male respondents and 0 for female respondents; *Income* in terms of income groups; and *Age* in number of years. Respondents' level of education can be thought of as a proxy for how informed respondents are about the economy. The effect of education is ambiguous. One could argue that removing the currency board and the ensuing adoption of the euro would give boost to economic activity through increased trade with Europe. However, joining a currency union could also be detrimental with the country losing the option to restore currency flexibility and monetary autonomy if that becomes necessary at some point in the future. Thus, the opinion of an informed person is difficult to predict. Vis-a-vis the variable *Age*, older respondents may have stronger memories of the pre-currency board financial instability during the 1990's and may therefore be more supportive of moving from a currency board to an even less revocable fixed exchange rate regime, i.e. to the EMU.<sup>2</sup> The currency board was implemented 15 years before the survey and many younger people have no personal knowledge of the pre-crisis experience. By the same token, individuals with higher income might have a greater stake in preserving financial stability with eurozone membership.

The benchmark estimation in column one of Table 4 shows that people who viewed the EMU as an insurance mechanism were more likely to support joining the EMU. In fact, a respondent who believed that the EMU provided insurance was 27.7 percent more likely to support adopting the euro. The second column of estimations adds two variables for the expected impacts of joining the eurozone. These variables are *National benefits*, which equals 1 if a respondent believed that adopting the euro would improve the economic situation of the average Bulgarian, and 0 otherwise and the variable *Personal benefits*, which equals 1 if a respondent

<sup>2</sup> See Dobrinsky (2000), Berlemann, Hristov, and Nenovsky (2002) and Miller (2001) for an account of Bulgaria's turbulent macroeconomics in the 1990's.

believed that adopting the euro would improve her/his own personal economic status, and 0 otherwise. The results show that people who anticipated an improvement in the economic situation of the average Bulgarian were 35 percent more likely to support EMU membership compared to respondents who expected either no change or deterioration. The impact of the expected benefits on the personal level is also statistically significant but smaller in magnitude. *Personal benefits* raise the support for the euro by only 11 percent. Thus, Bulgarians are motivated less by their personal economic situation and more by the average economic situation of citizens in general in their support for the euro.<sup>3</sup> Notice also that *Insurance* is positive, statistically significant, and of similar size to the estimated coefficient in column one. In other words, viewing the EMU as an insurance mechanism generates support for it irrespective of whether or not a respondent expected other benefits, either on the personal or on the national level. The two influences: the impacts on the economy and the EMU as insurance seem to be independent and to have their own impacts of roughly similar size.

The remaining columns in Table 4 add *Borrowing Capacity*, *Difficulty in Greece* and *Financial help to Greece*. Each of these variables is statistically significant. Being able to borrow more creates support for EMU membership emphasizing the result that potential bailouts make the EMU more attractive. Respondents who perceive that the woes of Greece are associated with Greece's membership in the EMU are about 19 percent less likely to support the adoption of the Euro. However, *Financial help to Greece* is positive and statistically significant suggesting that respondents who associated the help to Greece with its EMU membership were more likely to support the EMU membership for Bulgaria.

The results across all estimations also show that older respondents were more likely to

<sup>3</sup> This finding echoes the results of a large literature on sociotropic vs. egocentric political voting. See Kinder and Kiewiet (1979, 1981).

support adopting the euro. This result could be explained by a lack of trust in an independent monetary authority (central bank) by older respondents based on the negative past experience with discretionary monetary policy. As such, the older generation is more willing to support policy changes that tie the hands of the central bank. None of the other demographic variables is statistically significant.

### ***Robustness with additional control variables***

For robustness, in Table 5 we add two more variables in order to account for the impact of trust and credibility on the support for the euro: *Trust in EU Institutions* that takes the value 1 if a respondent either agreed or strongly agreed that European Union institutions can be trusted, and 0 otherwise, and *Trust in Bulgarian Institutions* constructed in a similar manner. We introduce the two variables one at a time and then enter them together in columns three and four. Half of the respondents (50.3 percent) trust EU institutions and only a quarter (23.2 percent) trust Bulgarian institutions.

Both trust variables are positive and statistically significant but *Trust in EU Institutions* has a greater coefficient size. Looking at column three, respondents who trust European institutions are 20 percent more likely to support the adoption of the euro compared to the 10 percent impact of *Trust in Bulgarian Institutions*. That *Trust in EU Institutions* is positive can be expected as the euro would bind Bulgaria into these institutions. The positive and significant effect on *Trust in Bulgarian Institutions* demonstrates Bulgarians' support of their government's policy which, at that time, was to join the EMU as soon as possible.

In the fourth column of Table 5 we introduce two more variables associated with the national and personal costs of adopting the euro. The variable *National Cost* equals 1 if a

respondent expected the economic situation of the average Bulgarian to deteriorate, and zero otherwise. The variable *Personal Cost* was constructed in the same way: if a respondent expected his/her personal economic status to deteriorate then the variable takes on the value of 1, and zero otherwise. The purpose of including these variables is to test for asymmetries of the perceived costs and benefits of adopting the euro, i.e. whether perceived costs would impact the support for the euro more/less strongly compared to the perceived benefits. Thus, the reference (excluded) group is composed of respondents who expected no change from the adoption of the euro.

We find a similar impact from the expected costs and benefits with one exception. The expected benefits on the personal level do not create much support for the euro but the expected costs on the personal level create opposition to the euro. From a policy standpoint, that result implies that garnering support for the euro should focus on lowering the cost of the switchover as opposed to emphasizing the potential benefits. Finally, notice that *Insurance* is positive and statistically significant in all estimations. The view of the EMU as an insurance mechanism remains strong after we control for trust and personal costs and benefits.<sup>4</sup>

### ***Robustness with alternative estimation techniques***

In order to check for the robustness of the results presented in the previous tables we utilize different estimation methods, the results of which are reported in Table 6. In the first and second column we estimated ordered probit models, where the dependent variable takes five

<sup>4</sup> We also estimated models controlling for the expected costs and benefits of adopting the euro vis-a-vis macroeconomic indicators, namely prices, output, employment, and exports. The results show that the expected gains lead to more support for the adoption of the euro, while the expected costs result in less support for the euro. Most importantly, even controlling for macroeconomic indicators the support for adopting the euro still increases with the perception of the EMU as an insurance mechanism. These results are available upon request.

values ranging from 1 indicating strong support for the euro to 5 that indicates strong opposition to the euro. However, for the variable of interest *Insurance* we construct two versions for the estimations. In column one we use a dummy variable that equals 1 if a respondent either agreed or strongly agreed that joining the EMU served as an insurance mechanism, and zero otherwise. In column two we use a variable that ranges from 1 (strongly believe that EMU serves as an insurance mechanism) to 5 (do not believe that EMU serves as an insurance mechanism). The advantage of the ordered probit estimations compared to the probit model is that they utilize more of the variation in the data. However, the sizes of the estimated effects are not as directly obvious as in the probit model.

The estimation of the first specification, an ordered probit methodology with a dependent variable that takes five different values, shows that respondents who perceived the EMU to be an insurance mechanism were more likely to support the adoption of the euro. The coefficient estimate on this effect is highly statistically significant. The direction of the effect and its statistical significance is confirmed in column two where we use the dummy dependent variable but we switch to the insurance variable that takes five different values. In that model, a one-step increase in the perception of insurance leads to about 12 percentage points greater support for the adoption of the euro.

Finally, in the last column we report the estimation of a Heckman (1979) selection model where we estimate jointly the decision to give an answer to the question about currency policy and the determinants of the support for the adoption of the euro. The motivation for estimating that model is that the decision to give an answer might be correlated with the decision to give a particular answer. Therefore, not accounting for the former might bias the estimation of the latter. Whether or not this concern for a selection bias is justified is indicated by the significance

of  $\rho$ , the correlation coefficient of the standard errors from the two equations. In our case, the correlation coefficient is not statistically significant indicating that selection bias is not an issue. Furthermore, the insurance variable is positive and significant, indicating that support for the adoption of the euro increases by 39 percent if the EMU is considered to be a safety net. Looking at the remaining explanatory variables, we observe that *Age*, *Trust in EU Institutions*, and *Trust in Bulgarian Institutions*, as well as expected benefits from the euro are still associated with greater support for EMU membership.

#### **IV. Final Remarks**

The survey data analyzed in this paper show that Bulgarians expect that a potential eurozone membership would have a largely negative impact on various macroeconomic indicators and on their own personal economic situation as well as on the economic situation of the average household. These expectations lower the support for EMU membership. However, a large fraction of the population views the EMU as an insurance mechanism. Many people believe that if Bulgaria was part of the eurozone and experienced financial difficulties it would receive help. As a result, about half of the population supports EMU membership despite the expected negative impacts.

Our results suggest that EMU membership could create moral hazard in the sense that providing a safety net encourages risk taking. Many respondents believed that Bulgaria would be able to borrow more and receive assistance if it fails to pay back its credits. These perceptions seem correct given the bailout in Bulgaria's southern neighbor Greece. That, of course, creates a challenge for the EMU going forward how to balance the need to guarantee the solvency for each member state and the need to motivate fiscal discipline.

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## Appendix

Table 1. Support for Adoption of the euro in Bulgaria

	Pursue EMU membership
Very good idea	12.0
Good idea	33.0
Bad idea	37.9
Very bad idea	11.6
I don't know	5.5
Total	100.0

Notes: The numbers are the percent of the total by type of response.

Table 2: Expected Effects from Adopting the Euro in Bulgaria

	Price stability	Output	Employment	Exports	Economic situation of the average Bulgarian	Personal economic situation
Will improve	24.65	31.41	27.93	37.48	24.06	21.07
No change	15.81	27.63	28.73	24.25	24.75	32.9
Will deteriorate	51.09	28.63	31.71	23.16	44.93	40.36
I don't know	8.45	12.33	11.63	15.11	6.26	5.67
Total	100	100	100	100	100	100

Notes: The numbers are the percent of the total by type of response.

Table 3. Problems and Benefits Associated with EMU Membership

	EMU membership means that Bulgaria would receive assistance	EMU membership means that Bulgaria could borrow more	Problems in Greece are associated with the euro	Greece receives financial assistance because it is an EMU member
Strongly Agree	19.58	9.05	9.74	30.02
Agree	47.32	36.08	16	45.13
Neither agree or disagree	10.14	11.33	5.67	5.37
Disagree	14.51	26.84	41.65	10.93
Strongly Disagree	5.57	9.54	19.48	4.08
I don't know	2.88	7.16	7.46	4.47
Total	100	100	100	100

Notes: The numbers are the percent of the total by type of response.

Statement 2: Membership in the EMU is an insurance mechanism, it may cost money, but a country can receive financial help if it needs it.

Statement 3: If the country is a member of the EMU, it could borrow more because it would receive the help from the Union in case it cannot pay it back.

Statement 4: The problems in Greece are more difficult because Greece uses the euro.

Statement 5: Greece receives financial help from European countries because they are part of the eurozone.

Table 4. Support for the Adoption of the Euro in Bulgaria

	Dependent variable: 1 if adopting the euro is a good/very good idea, 0 otherwise					
	(1)	(2)	(3)	(4)	(5)	(6)
Insurance	0.277*** (0.0328)	0.237*** (0.0347)				0.227*** (0.0351)
Borrow			0.179*** (0.0348)			
Greece problem				- 0.190*** (0.0372)		-0.176*** (0.038)
Financial help					0.0776* (0.0403)	
National benefits		0.350*** (0.0513)	0.365*** (0.0498)	0.363*** (0.0501)	0.368*** (0.0492)	0.345*** (0.0521)
Personal benefits		0.114* (0.0607)	0.112* (0.0607)	0.128** (0.0607)	0.129** (0.0596)	0.113* (0.0615)
Education	-0.0306 (0.0344)	-0.014 (0.0362)	0.00564 (0.0361)	0.00637 (0.0359)	0.00169 (0.0358)	-0.0113 (0.0364)
Male	0.0206 (0.0341)	0.0213 (0.0357)	0.0203 (0.0357)	0.0264 (0.0355)	0.0309 (0.0353)	0.0179 (0.036)
Age	0.0282** (0.0112)	0.0355** * (0.0119)	0.0413** * (0.0117)	0.0344** * (0.0117)	0.0374** * (0.0117)	0.0351*** (0.012)
Income	0.0012 (0.00141 )	0.00159 (0.0014)	0.00174 (0.00143)	0.00139 (0.00139 )	0.00163 (0.00139)	0.00133 (0.0014)
Model Chi2(7)	67.15	155.12	146.96	143.83	129.66	163.98
Number of obs.	904	904	904	904	904	904

Notes: The reported coefficients in columns (1)-(6) are marginal effects. Standard errors in parenthesis.  
\*\*\*(\*\*,\*) indicates statistical significance at the 1 (5,10) percent level.

Table 5. Support for the Adoption of the Euro in Bulgaria – additional control variables

	Dependent variable: 1 if adopting the euro is a good/very good idea, 0 otherwise			
	(1)	(2)	(3)	(4)
Insurance	0.179*** (0.0377)	0.217*** (0.0356)	0.165*** (0.0382)	0.165*** (0.0386)
National benefits	0.348*** (0.0518)	0.342*** (0.0519)	0.342*** (0.0524)	0.251*** (0.0604)
Personal benefits	0.0948 (0.0617)	0.115* (0.061)	0.0966 (0.062)	0.046 (0.0641)
National cost				-0.137*** (0.0505)
Personal cost				-0.109** (0.0504)
Trust in EU institutions	0.206*** (0.0384)		0.195*** (0.039)	0.183*** (0.04)
Trust in Bulg. institutions		0.127*** (0.0404)	0.106** (0.0412)	0.109*** (0.0418)
Education	-0.0235 (0.0368)	-0.0136 (0.0363)	-0.0226 (0.0368)	-0.0127 (0.0372)
Male	0.014 (0.0362)	0.0202 (0.0358)	0.013 (0.0363)	0.0119 (0.0366)
Age	0.0407*** (0.012)	0.0315*** (0.0121)	0.0371*** (0.0122)	0.0343*** (0.0123)
Income	0.0019 (0.00141)	0.00143 (0.0014)	0.00173 (0.00142)	0.00169 (0.0014)
Model Chi2(7)	175.92	160.39	178.99	201.84
Number of obs.	904	904	904	904

Notes: The reported coefficients in columns (1)-(4) are marginal effects. Standard errors in parenthesis. \*\*\*(\*\*,\*) indicates statistical significance at the 1 (5,10) percent level.

Table 6. Support for the Adoption of the Euro in Bulgaria: Alternative Estimations

	Ordered probit model Insurance: 1/0 values (1)	Ordered probit model Insurance: 1-5 values (2)	Heckman selection model (3)
Insurance	0.377*** (0.0766)	0.120*** (0.0267)	0.393*** (0.0982)
National benefits	0.631*** (0.119)	0.646*** (0.118)	0.916*** (0.15)
Personal benefits	0.304** (0.119)	0.285** (0.118)	0.167 (0.155)
Trust in EU institutions	0.336*** (0.0776)	0.338*** (0.0782)	0.482*** (0.0977)
Trust in Bulg. Instit.	0.151* (0.0839)	0.166** (0.084)	0.256** (0.0999)
Education	0.0562 (0.0734)	0.0441 (0.0741)	-0.0665 (0.0914)
Male	0.0904 (0.0721)	0.0887 (0.0723)	-0.0279 (0.0903)
Age	0.0550** (0.0242)	0.0619** (0.0242)	0.111*** (0.0299)
Income	0.00111 (0.00315)	0.00114 (0.00299)	0.00451 (0.00349)
Constant (cut1)	-2.448*** (0.182)	-1.922*** (0.194)	(1.455*** (0.202)
Constant (cut2)	-1.215*** (0.164)	-0.691*** (0.178)	
Constant (cut3)	-0.0114 (0.154)	0.516*** (0.174)	
Constant (cut4)	0.669*** (0.152)	1.203*** (0.177)	

Dependent variable: 1 if a respondent provided an answer, 0 otherwise

Age			-0.0288 (0.0453)
Education			0.0454 (0.142)
Male			0.218 (0.14)
Income			-0.0013 (0.00511)
High social status			0.236* (0.136)
Constant			1.511*** (0.285)
Model Chi2(9)	180.40	175.06	177.30

Wald test of ind. Eq.			0.4840
Number of obs.	904	904	904

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Notes: Columns (1) and (2) report coefficient estimates of an ordered probit model. Column (3) reports the coefficients of a Heckman selection (probit) model. Standard errors in parenthesis. \*\*\*(\*\*, \*) indicates statistical significance at the 1 (5,10) percent level.