

Explaining the Hungarian individual Euroscepticism

Several economic, cultural, institutional or political factors have been identified in order to explain the individual support for the European integration. This paper examines the applicability of these models in case of Hungary. Data from the most recent Eurobarometer survey is used to build a linear regression model in which the lack of individual support, the Euroscepticism is explained. The results show that most of the identified factors have a significant influence. The whole model explains a lot of the variance of the individual Euroscepticism in the Hungarian context. However, some deviations suggest that it would be important and meaningful to analyze the local factors as well.

Keywords: Euroscepticism, European integration, public opinion, Hungary

Introduction

According to the latest Eurobarometers, the level of Euroscepticism increases both on the individual and on the party level in the European Union. The literature identifies several variables which seem to explain this phenomenon. These articles have a broad scope including almost all the member states, however the number and pattern of these variables vary across the EU (Hooghe and Marks, 2007; Riishoj 2004). Since on the individual level it has not been researched in Hungary, I intend to explain a huge part of the variance of the individual Euroscepticism in the country.

Within the literature on the roots of individual Euroscepticism both macro (Eichenberg and Dalton, 1993; Netjes, 2004) and micro-level variables are identified.¹ Given the new developments in the post-Maastricht European Union, Dalton and Eichenberg (2007) argue that the latter ones have growing importance. Within the micro-level framework four major

empirically examined perceptions can be identified according to which socio-economic, cultural, institutional or political factors explain Euroscepticism. The first emphasizes the influence of individual perception of the changes caused by the European Union both in individual well-being and in the national economy (Gabel and Whitten, 1997). The second emphasizes the effect of exclusive national identity (Carey and Lebo, 2001). The third incorporates trust in the national government (Gabel, 1998) or in the European institutions (McLaren, 2007). The fourth identifies partisanship (Gabel, 1998), cognitive political mobilization (Janssen, 1991) and – without empirical evidence - political values (Gabel, 1998) as explaining variables. There are authors who use several perceptions – the first two (De Vries and Edwards, 2009) or the first three (McLaren, 2007). Demographic variables are also used in the literature – age, gender, income and level of being religious (Gabel and Whitten, 1997; Lubbers and Scheepers, 2007).

In my paper I intend to explain the individual Euroscepticism in Hungary using the main variables identified by the general literature – that basically focuses on all or on a huge part of the European Union member states. Firstly, I present the operationalization of the variables I use. Then, I show and finally I discuss the results of the empirical research.

Description of data collection

Source of data

In order to answer the research question, the method used is a desk research. The data used is Eurobarometer 73.4 published in May 2010. Eurobarometer surveys as the source are accepted and widely used in this field. Mainly, all the articles presented in the introduction do a desk research based on these surveys – however, the recent Eurobarometers make it impossible to analyze some of the important relationships (McLaren, 2007). The data were collected between 7 and the 23 May 2010 by TNS Hungary. A multi-stage random sampling

procedure was used. The effective number of the sample is 1021. For data collection personal interviews, for capturing them the CAPI were used (GESIS, 2010). Since only the Hungarian individuals are analyzed in the paper, the irrelevant parts were deleted – what means all the other countries' respondents. In the following two chapters I present how the variables are created and measured.

Dependent variable²

In the research the variable to be explained is the Euroscepticism. There are several ways to measure it. Basically the three major ways are: the evaluation of the own country's advantages or disadvantages from being a member of the EU (e.g. Gabel, 1998), the perception on the integration process (e. g. De Vries and Edwards, 2009), the personal feelings (e. g. McLaren, 2007) or a mixture of them. Due to the level of measurement – the selected variable is the only one measured on a 5-point scale and with a normal distribution in the used survey³ –, to theoretical reasons – the measurement of the first way is very similar to the measurement of one of the independent variables – and to practical ones – there is no question for the second way -, I decided to use the third approach. The question with which Euroscepticism is measured is the following: “In general, does the European Union conjure up for you a very positive (1), fairly positive (2), neutral (3), fairly negative (4) or very negative (5) image?”⁴ The original variable was recoded into a 0-4 scale. The higher the value is, the more Eurosceptic the respondent is. The mean of the Euroscepticism is 1,74, what means that Hungarians are rather not Eurosceptic.

Independent variables

Based on the literature review presented in the introduction, there are five main groups of independent variables which explain Euroscepticism. While measuring them, I do not use

exactly the same questions that were used in other articles, since some of them were changed in the survey and some of them seem not to be the most applicable in my research.

The first variable group consists of the perceived economic changes – caused by the European Union - both in the individual well-being and in the national economy. Thus, two variables are created. The first attitude is measured with the following statements: “For each of the following achievements of the European Union, could you tell me whether you have benefited from it or not: 1, Strengthened rights of air transport passengers in the EU. 2, Receiving medical assistance in another EU country. 3, Less expensive communication costs when using a mobile phone in another EU country. 4, Improved consumers rights when buying products or services in another EU country. 5, No\ less border controls when travelling abroad.” After recoding all the variables, adding them up, recoding and transforming them, the new variable is measured on a 0-5 scale where the higher the value is, the better the perception of the European Union’s effect on personal well-being – not just in an economic sense - is. The second attitude is measured with the following statement: “Taking everything into account, would you say that (OUR COUNTRY) has on balance benefited or not from being a member of the European Union?” After recoding it to a 0-1 value dummy variable, value 1 is the better and value 0 is the worse perception of the European Union’s effect on national economy. Based on the reviewed literature and given the codings, negative relationship is expected with the dependent variable in both cases.

The second group incorporates exclusive national identity. It is measured with a question to which only one answer can be given: “In the near future, do you see yourself as (NATIONALITY) only, (NATIONALITY) and European, European and (NATIONALITY) or European only?” After recoding the variable, value 1 means exclusive national identity – for respondents who chose the first option -, while 0 is for inclusive identity – for respondents

who chose the second, the third or the fourth answers. Based on the reviewed literature and given the codings, positive relationship is expected with the dependent variable.

The third group incorporates trust in national government and in European Union's institutions. Thus, two variables are created. The first kind of trust is measured with "For each of the following institutions, please tell me if you tend to trust it or tend not to trust it: National government". After recoding it to a 0-1 value dummy variable, value 1 is the higher, while value 0 is the lower trust. The second type of trust is measured with: "For each of the following European bodies, please tell me if you tend to trust it or tend not to trust it: 1, The European Parliament. 2, The Court of Justice of the European Union. 3, The European Council. 4, The Committee of the Regions of the European Union. 7, The Council of the European Union. 8, The European Commission". Three of the institutions (the European Ombudsman, The Committee of the Regions of the European Union, the European Economic and Social Committee) are excluded because of the high number of do not know answers. After recoding all the variables, adding them up, recoding and transforming them, the new variable is measured on a 0-6 scale where the higher the value is, the higher the trust in European Union's institutions is. Based on the reviewed literature and given the codings, negative relationship is expected with the dependent variable in both cases.

The fourth group incorporates party preferences, cognitive political mobilization and political values. Partisanship – party preferences – can not be measured since this particular Eurobarometer does not have questions neither about latest voting nor about possible voting. Cognitive mobilization is measured with the following question: "When you get together with friends or relatives, would you say you discuss frequently occasionally or never about: 1, National political matters, 2, European political matters, 3, Local political matters". After recoding all the variables, adding them up, recoding and transforming them again, the new variable is measured on a 0-6 scale where the higher the value is, the more the respondent

discusses political issues, thus the more his/her cognitive political mobility is. Values are measured with the following question: "In political matters people talk of "the left" and "the right". How would you place your views on this scale?" A self-placement on a left-right scale is not the best measurement for values, however a placement based on attitudinal questions is not possible, since other related questions were not included in the survey. The higher the value is, the more the person is on the right-wing. Based on the reviewed literature and given the codings, negative relationship is expected with the dependent variable in case of cognitive political mobilization and no relationship in case of political values.

The fifth group is for the demographic independent variables. Gender is measured with a recoded dummy variable where 0 value is for females and 1 is for males. Age is measured with the following question: "How old are you?" The higher the value is, the higher the age is. Religiousness and income can not be measured due to the lack of relevant questions. Based on the reviewed literature, if there is a relationship with the dependent variable in case of the age it is negative. Besides, females are expected to be more eurosceptic.

The conceptualization and measurement of the variables are summarized in Table 1.

[Table 1 about here]

Model specification

In order to explain as much as possible of the variance of Hungarian individuals' Euroscepticism, a linear regression model is used. The dependent variable is Euroscepticism. The numeric independent variables are the perception of the change in self well-being caused by the European Union, trust in European Union's institutions, the respondent's cognitive mobility, left-right values and age. The dummy variables, which are the perception of the change in national economy caused by the European Union, national identity, trust in national

government and gender, can be used both as numeric or categorical independent variables. Due to the coding – they are factors in the model – they are considered to be the latter.

Presentation and discussion of the empirical results

In this chapter I present the results, then I describe the main problems with the model used and the ways how they are corrected if it is possible to do so. Finally, I discuss the results of the statistical analysis and the main information that can be extracted from it.

[Table 2 about here]

Firstly, all the hugest outliers – that have a value more than 0,12 showed by the Cook's distance plot – are deleted - 25 cases in total⁵. After the delete of the outliers all the main assumptions of the linear regressions are checked. The mean independence assumption is probably met, since the distribution of residuals is normal and their mean is almost zero – $5,848620 \cdot 10^{-18}$ or for standardized residuals $-1,549888 \cdot 10^{-4}$. There is probably heteroskadasticity in the model – since the line in the scale-location plot is not flat –, however the usage of the robust to homoskadasticity option should solve this problem. There is no autocorrelation in the model due to the independence of the cases which is probably provided by the sampling method used. The relationship between the independent variables and the dependent variable seems to be linear in all the cases. Both the correlations and the values of Variance Inflation Factor show that the independent variables do not correlate with each other, thus there is no multicollinearity. Basically, the model seems to meet most of the assumptions of the linear regression models. The main problem which is not solved is the huge number of outliers. Besides, there is a slight deviation from the line at both ends in the Q-Q plot.

In the following paragraphs the results of the research are discussed based on the coefficients and the levels of significance. However, the focus is rather on the findings that contradict the literature. The intercept shows that a 0 year old woman who has the worse opinion of the changes caused by the European Union both in the self well-being and in the national economy, who has an inclusive national identity, who has no trust in the national government and in the European Union's institutions, who do not discuss political issues at all and who sees herself on the left-wing of the political ideology scale is rather Eurosceptic. Her value of Euroscepticism would be 2,21 points on a 0-4 scale.

One can state with 99% level of confidence that the perception of the change in the self well-being caused by the European Union has a negative – rather weak - effect on the Euroscepticism. It means that the better the perception is, the lower the Euroscepticism is. The finding supports the general theory.

One can state with 99,9% level of confidence that the perception of the change in the national economy caused by the European Union has a negative – rather strong - effect on the Euroscepticism. It means that respondents with the better perception – measured by a dummy variable - have lower values of Euroscepticism. The finding supports the general theory.

One can state with 99,9% level of confidence that the exclusive national identity has a positive – medium-size - effect on the Euroscepticism. It means that if someone is rather a nationalist – measured by a dummy variable -, the higher value of Euroscepticism he/she has. The finding supports the general theory.

One can state with 99,9% level of confidence that the trust in national government has a negative – medium-size - effect on Euroscepticism. It means that the respondents who chose the rather trust option – in a dummy variable - are less Eurosceptic. The finding supports the general theory.

One can state with 99,9% level of confidence that the trust in European Union's institutions has a negative – medium-size - effect on the Euroscepticism. It means that the higher the trust is, the lower the Euroscepticism is. The finding supports the general theory.

One can state with 95% level of confidence that the cognitive political mobility has a positive – rather weak - effect on the Euroscepticism. It means that the more political issues the respondent discusses, the higher Euroscepticism he/she has. The finding contradicts the general theory. Janssen (1991) finds a positive relationship between cognitive political mobility and the support for European integration.

One can state with 95% level of confidence that the age has a positive – rather very weak - effect on the Euroscepticism. It means that the older the respondent is, the lower level of Euroscepticism he/she has. The finding contradicts the general theory. According to McLaren (2007) there is no significant relationship, while according to Lubbers and Scheepers (2007) there is a negative relationship. The explanation of this phenomenon is probably related to the special circumstances in Hungary. Older people probably have larger Euroscepticism because of their historical experience and huge fears. Probably, the results would be similar in almost all the new member states in East or Central Europe.

There is no statistically significant relationship between the gender and the Euroscepticism and between the political values and the Euroscepticism. The first contradicts the reviewed literature, since all the authors show a significant relationship (e.g. Gabel, 1998; Lubbers and Scheepers, 2007). The latter is rather in the focus of a debate. Janssen (1991), Gabel (1998) and McLaren (2007) show that there is no statistically significant relationship when they examine the Silent Revolution theory proposed by Inglehart which claims its existence. The measurement in my paper is not the most appropriate to test the theory – since a self placement scale was used -, however my results support the former authors. Probably,

instead of measuring the difference between left and right wing, a moderate-extremist political ideology scale should have been used.

According to the F-test the whole model is significant. The R^2 is 0,6419 which means that the independent variables explain 64,19% of the variance of the Hungarian individuals' Euroscepticism.⁶ My model seems to explain more of the variance of the Euroscepticism than the general models do. However, the huge coefficient of one of the independent variables – which is the perception of effects on national economy - should be analyzed a bit more. As far as I am concerned, as a consequence of the conceptualization and operationalization of the dependent variable and this particular independent variable, they measure something very related. However, the use of the propositions made by the literature about their conceptualizations would result even larger relations between the two variables. Nevertheless, it should be emphasized that though the results are impressive, there is a slight chance of tautology. Thus, in a future research probably a slightly different conceptualization of the dependent variable is required.

Conclusion

In my final paper I intended to explain the level of individual Euroscepticism in Hungary. My results show that the general explanations provided by the literature mainly exist within the Hungarian circumstances as well. All the identified socio-economic, cultural, institutional attributes and some of the political and the demographic characteristics seem to have an effect on this attitude. The findings mainly support the assumptions found in the literature, only the relationships with cognitive political mobility, age and gender show a slight difference – probably because of the special local circumstances.

There are three areas in which my paper could be changed and improved in the future. Firstly, I would measure some of the variables in a different way because of some discussed

reasons. Secondly, I would use a different survey for the desk research in order to incorporate some of the excluded variables – such as party preferences, level of religiousness or income. Thirdly, I would add some country specific independent variables which were not covered in the current research.

The Euroscepticism is a very well researched topic both in general and in separate Western European cases. However, in Hungary the topic has not been really researched yet. The aim of this final paper is to fill this gap. Besides, I consider this topic important, since even with the recent decline in support for the European integration, European Union is one of the institutions in which Hungarians have the most trust. This is a successful and accepted institution in this country, thus the roots of its large support should be studied more.

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Notes

1 There are examples for the use of variables on both levels. De Vries and Edwards (2009) show that the voters of far-right and far-left parties have a huger Euroscepticism for different reasons - national identity in the former and economic considerations in the latter case.

2 Note that for both dependent and independent variables, I recode do not know answers as NA. Thus respondents who did not answer are excluded from the analysis. It may cause problems, since in some cases a lot of people did not answer. This is why I do not use variables with a high number of do not know answers. Some articles recode and incorporate the do not know answers as a centre category (McLaren, 2007) without any justification of that method.

3 A mixture of the three types would have been more appropriate. However, Principal Component Analysis is not known for me and computing an average in this case would have been questionable due to the different nature of the three types of variables.

4 All the questions are from Eurobarometer 73.4 (2010).

5 All the cases should have been deleted which were above 4/1021, thus I did not do a full job in this aspect. The following cases were excluded: case 125, 155, 159, 161, 255, 258, 280, 289, 292, 317, 410, 421, 422, 423, 430, 513, 525, 572, 637, 701, 725, 782, 793, 870, 975.

6 Note that the R^2 and adjusted R^2 are extracted from the model where the robust to heteroskedasticity option was not used, since in the model in which the option is used these scores are not given by Deducer.

Table 1 Conceptualization and operationalization of the dependent and independent variables

Concept	Variable	Question	Coding
Dependent variable			
Euroscepticism	Euroscepticism	In general, does the European Union conjure up for you a very positive, fairly positive, neutral, fairly negative or very negative image?	0-4
Independent variables			
Perceived economic changes	Self well-being	For each of the following achievements of the European Union, could you tell me whether you have benefited from it or not. (in the text)	0-5
	National economy	Taking everything into account, would you say that (OUR COUNTRY) has on balance benefited or not from being a member of the European Union?	0-1
Cultural	National identity	In the near future, do you see yourself as (NATIONALITY) only, (NATIONALITY) and European, European and (NATIONALITY), European only?	0-1
Institutional	Trust in national government	For each of the following institutions, please tell me if you tend to trust it or tend not to trust it: national government.	0-1
	Trust in European Union's institutions	For each of the following European bodies, please tell me if you tend to trust it or tend not to trust it. (in the text)	0-6
Political	Cognitive political mobility	When you get together with friends or relatives, would you say you discuss frequently, occasionally or never about: national, European, local political matters?	0-6
	Party preferences		
	Political values	In political matters people talk of "the left" and "the right". How would you place your views on this scale?	0-9
Demographic	Gender	Gender	0-1
	Age	How old are you?	15-88
	Religiousness		
	Income		

Source: Eurobarometer 73.4, May 2010. Basic Bilingual Questionnaire. TNS Opinion & Social

Table 2 Explaining individual Euroscepticism in Hungary (variable code: qa_15_vers.tr)

Variable	Coefficient	Standard Error	Variable code
(Intercept)	2,21190****	0,11988	
Self well-being	-0,04549***	0,01597	qe5_sum_vers.tr
National economy	-0,66138****	0,05765	qa10a_vers2
National identity	0,23567****	0,05005	qe1_vers
Trust in national government	-0,20287****	0,05051	qa14_2_vers2
Trust in European Union's institutions	-0,11522****	0,01273	qa18_sum_vers.tr
Cognitive political mobility	0,03701**	0,01631	qa2_sum_vers.tr
Political values	0,01413	0,01058	d1_vers.tr
Gender	0,01180	0,04790	d10_vers
Age	0,00274**	0,00129	vd11
R ²	0,6419		
Adjusted R ²	0,6349		

**** p< 0,001, *** p<0,01, **p <0,05, *p<0,1