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ATTITUDES AND PERCEPTIONS OF COMMON EUROPEAN CURRENCY AMONG RESIDENTS OF NORTHERN LUBELSKIE PROVINCE

STOSUNEK I PERCEPCJA WSPÓLNEJ WALUTY EUROPEJSKIEJ PRZEZ MIESZKAŃCÓW PÓŁNOCNEJ LUBELSZCZYZNY

Key words: survey, probit model, rural resident, full-time employment, NUTS regions, Eurozone

Słowa kluczowe: badania ankietowe, model probitowy, mieszkańcy terenów wiejskich, zatrudnienie, region NUTS, strefa euro

Abstract. This study identifies respondent characteristics influencing the opinion of Polish residents regarding the euro. Using data collected from 200 residents of Łuków and Biała Podlaska districts in Lubelskie Province, a decision model was specified where the choice of opinion about the euro was determined by demographic and socio-economic characteristics, household size, and location. Results show that the largest change in probability of choosing the opinion that the euro would strengthen in the future resulted from an increase in income and number of children in a household, but the probability would decrease, although by a small amount, if a respondent resided in a rural area or was fully employed.

Introduction

The stability of the Eurozone faces uncertainty following years of turmoil from the unprecedented series of public finance crises in Ireland, Portugal, Spain and Greece. Several other economies of the Eurozone have also been affected. The rescue package extended to Greece by the European Central Bank, international financial organizations, and governments dwarfs any previous efforts to assist countries facing a financial crisis. Against this background, there is an on-going debate about whether Poland should join the Eurozone, under what conditions, and when. The discussion intensified after Russia's annexation of Crimea and the insurgency in eastern Ukraine, as both Russian and Ukrainian markets have been important importers of Polish products, including food. Consequently, Polish authorities have to consider not only the Eurozone's troubling condition and effects on the competitiveness of the national economy, but the economic threats resulting from the military conflict in Eastern Europe. However, the most important factor is domestic public sentiment, as adopting the euro as a currency evokes various, often contradictory opinions. For example, in surveys monitoring public opinion, 32% supported the adoption of the euro in December 2014 [Wacko-Jasińska 2014], but the support dropped to 16% in April 2015 [ceo.com.pl 2015]. Empirical evidence indicates that firms opt for adopting the common currency, which would simplify business transactions and eliminate the exchange rate risk [Dzikowska et al. 2010], while many individuals are fearful of price [Przybyszewski, Tyszka 2007] and income uncertainties following the elimination of a national currency. There are other factors that are relevant and in need of consideration [Przybyszewski et al. 2014], but foremost is the public acceptance and support for this major economic change. The dynamics of public opinion are an essential part of the political process leading to the adoption of the euro and it has been suggested that overall stability should be emphasized over the distributional effects [Allam, Goerres 2008]. Rigorous studies of public attitudes towards common European currency are non-existent in Poland, but such studies showed diverse perceptions prior to the creation of the Eurozone nearly 20 years ago [Müller-Peters 1998]. The current study attempts to fill the gap in the existing literature on the subject of attitudes and the adoption of the common currency.

This paper reports on attitudes towards the common European currency among residents of two districts in one of the least developed regions of the European Union (EU), namely the districts of Biała Podlaska and Łuków in Lubelskie Province, Poland. The data were collected from 200 respondents, equally distributed between residents of both districts, in spring 2015. The prepared questionnaire was pre-tested on a small group of individuals prior to being distributed among randomly selected individuals in Łuków and Biała Podlaska. The survey questions covered several areas related to respondent use of financial services, opinions about financial service providers, information sources, and views related to national and common European currencies, among others. The specific issue discussed in the current paper is the respondent opinion about a common European currency. The data were collected prior to the recent issue nicknamed the “Grexit”: the possible declaration of bankruptcy by Greece and its exit from the Eurozone. In this respect, the presented results provide a unique glimpse of public attitudes when the situation in the Eurozone was relatively calm and not subject to daily media reports.

Material and methods

This study attempts to discern respondent views regarding an important economic policy issue. The adoption of the euro has suddenly become a major issue. Economic security and the role of a stable currency vis-à-vis Russia’s aggression against Ukraine, the timeline of adopting the euro that followed those developments, and the upcoming presidential and parliamentary elections have concerned the public and government. Attitudes towards the common European currency have not been favorable among the country’s population despite the fact that several countries neighboring Poland joined the Eurozone.

The motive behind the survey was the exploration of views among the population of lesser developed, predominantly rural areas of Poland. Previous studies and surveys revealed that residents in large cities held relatively favorable views of adopting the euro. However, the issue of terminating the national currency is too important to ignore the opinions of citizens living in small urban centers or rural areas. Their attitudes could be a key factor in the final decision about entering the eurozone assuming Poland meets all necessary conditions imposed on Eurozone countries. Furthermore, the on-going difficulties in the Eurozone reflected in sluggish economic growth and periodic intensification of the fiscal problems in member countries, especially Greece, have been reported in Polish media and might have affected public opinion. Therefore, the specific issue addressed in this paper focuses not on opinions about the euro situation at the time of the survey, but about the future of the euro; in particular, whether the euro would strengthen its position or not survive the current crisis. Such formulation of the issue implies that if an individual believes that the euro would strengthen its position, then the acceptance of euro as a domestic currency was more likely. The question of adoption becomes irrelevant if the currency, as some believe, would not survive the on-going crisis.

The choice between the two statements is the only observed manifestation of the respondent’s views. The common approach to decision modeling involves a limited dependent variable technique. A commonly applied estimation technique is logit regression, or its less demanding alternative, the probit regression. The latter is applied in the current study. Details of the probit regression, where the dependent variable assumes the value of 1 if the individual’s choice is observed, 0 otherwise, have been presented in many studies, therefore, the derivation has been omitted for the sake of space. Here, the modeled decision assumes the value of 1 if the respondent believed that the euro would not survive the current crisis, 0 otherwise.

Data

The self-administered questionnaire was used to collect data among randomly selected respondents in Łuków and Biała Podlaska between early February and early May 2015. The total sample of 200 observations was equally split between residents of Łuków and Biała Podlaska districts. In Biała Podlaska, the questionnaires were collected in seven city neighborhoods and

in three villages, two of them located on the outskirts of town and another located about 18 km from the city. In each area, the collection of questionnaires stopped once 10 completed questionnaires were obtained. The standard procedure of data collection started with an acquaintance of the enumerator in each neighborhood, but subsequently involved visiting door-to-door asking for participation in the study. In Biała Podlaska, an initial inquiry about the completion of the questionnaire resulted in refusal on 62 occasions and the most frequent explanation was the lack of time or interest in the study. Less often the reason behind non-participation was the absence of a person 25 years old or older in the household at the time of the visit. Overall, men were less likely to refuse to complete the questionnaire. In Łuków, the neighboring town of Stoczek Łukowski, and two nearby villages, respondents were recruited from among acquaintances of the enumerator in the town.

Table 1 shows the selected demographic and socio-economic characteristics of the full sample of 200 respondents. The average respondent was nearly 40 years old. More men than women participated in the study in contrast to many consumer studies. Also, the study involved more married respondents (68%) than singles and the majority of respondents reported having at least one child in their household. About 28% of respondents had a university degree. More than 60% were fully employed and 32% reported the monthly household income between 1,500 PLN and 2,500 PLN. The majority was urban dwellers, 25% were from rural areas, and some (12%) were from other areas than the two large towns, Łuków and Biała Podlaska.

Table 1. Descriptive statistics of selected demographic, socioeconomic and location characteristics
Tabela 1. Statystyka opisowa wybranych cech demograficznych, socjoekonomicznych i miejsca zamieszkania

Variable name/ <i>Nazwa zmiennej</i>	Units/ <i>Jedn.</i>	Mean/ <i>Średnia*</i>	Std. deviation/ <i>Odchylenie standardowe</i>	Min/ <i>Minimum</i>	Max/ <i>Maksimum</i>
Gender/ <i>Płeć</i>	1= man/ <i>mężczyzna</i>	0.53	-	0	1
Age/ <i>Wiek</i>	years/ <i>lata</i>	39.81	10.74	24	69
Children/ <i>Obecność dzieci</i>	1= no more than 2 children/ <i>nie więcej niż 2 dzieci</i>	0.80	-	0	1
Education/ <i>Wykształcenie</i>	1= university degree/ <i>wyższe, 0 = other/inne</i>	0.275	-	0	1
Marital status/ <i>Stan cywilny</i>	1 = married/ <i>zamężna –żonaty,</i> 0 = other/ <i>inne</i>	0.68	-	0	1
Employment status/ <i>Zatrudnienie</i>	1= fully employed/ <i>pełny etat, 00 = other/inne</i>	0.62	-	0	1
Income/ <i>Dochód</i>	income category/ <i>kategoria dochodu</i>		-	1	8
Location 1/ <i>Wieś</i>	1 = village/ <i>wieś, 0 = other/inne</i>	0.25	-	0	1
Location 2/ <i>Miasto</i>	1 = town with no more than 25,000 residents/ <i>miasto do 25</i> <i>tys. mieszkańców, 0 = other/inne</i>	0.12	-	0	1

* in case of binary variables the reported figure is a share/*w przypadku zmiennej binarnej liczba oznacza udział*
Source: own study

Źródło: opracowanie własne

Empirical model estimation

The specified empirical model limited the explanatory variable exclusively to demographic and socio-economic characteristics in order to develop an easily identifiable profile of those who believed the euro would not survive the current crisis and, presumably, shared a negative opinion about adopting the euro as a national currency. Knowledge of the profile can be used to educate the public should the decision to adopt the euro because urgent or to gauge attitudes of the segment of the population which feels the euro would not last as a supranational currency.

Table 2 shows the probit estimation results. Among explanatory variables, four demographic, socio-economic, and location factors are considered statistically significant. In particular two estimated coefficients (rural residence and full-time employment) are statistically significant at a level exceeding 10%. However, because both are important and the signs are consistent with expectations, their effect is considered relevant and deserving analysis.

Table 2. Probit estimation results for the opinion about the future perspectives of euro strengthening or not surviving the on-going crisis

Tabela 2. Wyniki obliczeń modelu probitowego dotyczącego opinii przyszłej perspektywy wzmocnienia euro względem opinii, że euro nie przetrwa trwającego kryzysu

Variable name/Zmienna	Coefficient/ Współczynnik	Std. err./ Błąd stand.	χ^2	Propability > χ^2 / prawdopodobieństwo > χ^2	Marginal effects/Efekty krańowe
Intercept/Stała	0.967	0.667	2.10	0.147	NS
Socio-economic factors/Czynniki socjoekonomiczne					
Income/Dochód	0.164*	0.064	6.65	0.009	0.028
Education/Wykształcenie	0.568	0.377	2.27	0.132	0.100
Full-time employment/ Pełne zatrudnienie	-0.455**	0.283	2.58	0.108	-0.077
Demographic factors/Czynniki demograficzne					
Gender/Płeć	-0.199	0.262	0.58	0.448	NS
Age/Wiek	-0.009	0.102	0.50	0.479	NS
Married/zamężna/zonaty	-0.012	0.333	0.00	0.970	NS
Children in a household/ Obecność dzieci	0.875*	0.390	5.04	0.025	0.148
Location/Rodzaj miejscowości					
Village/Wieś	-0.459**	0.283	2.62	0.106	0.078
Small town/Małe miasto	0.316	0.441	0.51	0.474	NS

*, ** denote the significance at 5% and +10% levels, respectively/oznacza istotność odpowiednio na poziomie 5% i 10%, NS – no data/brak danych

Source: own study

Źródło: opracowanie własne

Respondents with no more than two children significantly differ from those with three or more children in the household in their view of the future of euro, i.e., those with fewer or no children in a household are more likely to believe that the euro would strengthen in the future. Among the socio-economic variables, having full-time employment as compared to part-time employment, being retired, disabled, unemployed, or in school resulted in a smaller likelihood of seeing the future strengthening of the euro. This result is somewhat unexpected and could be associated with economic uncertainty regarding employment. One of the common views is that by joining the Eurozone the competitive position of the Polish economy would change and could lead to job losses. In contrast, respondents with higher incomes viewed the future of the euro more optimistically than those with lower income. Income is an important measure of well-being as well as an implicit indicator of budget constraints; therefore, those with more income likely feel more confident about the future in general, including a stronger euro. Finally, residents of rural areas had a lower likelihood of sharing the view that the euro would strengthen in the future. The result is not unexpected when viewed in the context of attitudes towards Poland's accession to the EU, when many rural residents, especially from farm households, were opposing that idea. Only after the accession did opinion dramatically reverse in response to financial support payments and access to grants for modernizing farms. However, given the results of the current estimation, it would be unwise to ignore the reservations of rural residents about the future strengthening of the euro. The rural population represents about half of Poland's citizenry.

Coefficients of statistically insignificant variables are not commonly discussed, but in the case of the current study it is worthwhile to mention a few effects. First, the coefficient indicating the respondent's university education is associated with the view that the euro would strengthen in the future. The result is helpful in selecting the targeted audience for possible public education about euro adoption. Second, the signs of the statistically insignificant variables are somewhat useful to anticipate views about the future of the euro by the region's residents. Specifically, the negative effects are associated with advancing age, gender (male), and marital status. The first two directional effects were associated with the possibility of financial exclusion in the region [Olichwiroicz, Florkowski 2015]. The absence of statistical significance advises caution in drawing conclusions, but, within the context of this and previous studies the results may help interpret the overall results.

From a practical policy standpoint, knowledge of the magnitude of change in response probability to a change in the explanatory variable value is of primary importance. However, the estimated probit coefficients have to be further converted into a probability change [Mullahy 2011]. Table 2 shows the effect of the four variables considered statistically significant. In the case of continuous variables, the calculation results in marginal effects, but in the case of binary variables, the effect measures the probability of the latter changing its value from 0 to 1. The effects reported in the current study were obtained using procedures in SAS.

The effect of response change to income is substantial. An increase of household income by 1000 PLN causes a 28% increase in the probability that a respondent shares the opinion that the euro will strengthen in the future. This is a very important result because the area covered by the survey is in one of the least developed regions of the EU according to the NUTS classification. Indeed, the average income in Lubelskie Province is less than the average in Poland. Because the average incomes in Poland have been rising, it could be that an even larger share of the public will see the euro as a strengthening currency over time. The result also coincides with earlier studies on attitudes towards adoption of the euro, where individuals whose income level was relatively high compared to the national average were more supportive [Allam, Goerres 2008].

An individual switching employment status to full-time has a 7.7% lower probability of believing that the euro will strengthen in the future as compared to those with another employment status including those unemployed or retired. The effect is not very large, but indicates possible anxiety about the job market in response to a stronger euro, echoing some earlier reports [Przybyszewski et al. 2014]. Indeed, if the euro strengthened while Poland retained its national currency, the relative competitiveness of Polish goods could be expected to increase, leading to more jobs. At present, however, such perceptions are not likely shared by many. Rather, the obtained result seems to reflect concerns about the distributional effects of the adoption of the euro in direct contradiction to recommendations to avoid such framing of the issue [Allam, Goerres 2008]. A marginally insignificant effect is associated with having a university education as compared to lower educational attainment levels. Respondents with a university degree had a 10% higher probability of sharing the view that the euro will strengthen over time as compared to respondents who received less formal education.

A relatively larger change in probability is associated with having no more than two children in a household as compared to having more children. The former leads to an increase of 14.8% in the probability of choosing the view that the euro will strengthen in the future. Finally, being a resident of a rural area implies a 7.8% lower probability of sharing the view that the euro will strengthen as compared to residents of the two large capitals of Łuków and Biała Podlaska districts.

Conclusions

The current study focused on quantification of demographic and socio-economic characteristics of an individual and their view of the euro's future. In contrast to several earlier studies exploring Polish attitudes towards the euro and Poland joining the Eurozone, the study examined a less drastic issue of the future strengthening of the euro as compared to the euro not surviving the on-going crisis.

The study is based on a sample of 200 respondents from the two districts of Łuków and Biała Podlaska located in northern Lubelskie Province and collected in the late winter and early spring of 2015. Using the latent variable model, the equation was estimated using the probit technique and identified four characteristics relevant to the choice of the view that the euro will strengthen in the future. The largest increase in the probability of sharing that view was associated with an increase in income. The effect of having no more than two children in the household lowered the probability of the choice by about one half, but still favored the choice of the option that the future of the euro will strengthen. However, having full employment or residing in a village decreases, though by small amount (less than 8%), the probability of expecting the euro to strengthen.

Knowledge of magnitude in probability change is relevant to policymakers and public education promoters. Identified factors allow narrowing the scope of campaigns about the benefits of adopting the euro, while also sensitizing policymakers to the possible effects of introducing the euro among inhabitants of the underdeveloped areas of Poland and the EU. Addressing the anxieties, especially with regard to job stability and security cannot be ignored. Moreover, those with large families, living in rural areas, and having less than a university-level education require particular care in explaining the anticipated effects of switching to the euro from the national currency once the macroeconomic conditions and policy needs permit it.

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Streszczenie

Celem badań była identyfikacja cech respondentów, które wpływają na wybór opinii, że pozycja euro będzie ulegała wzmocnieniu w przeciwieństwie do rozpadu strefy. Wykorzystując zebrane dane ankietowe spośród 200 mieszkańców powiatu łukowskiego i bialsko-podlaskiego w województwie lubelskim, skonstruowano model decyzji wyboru jednej z ww. opcji dotyczących euro w odpowiedzi na zmiany w cechach demograficznych i socjo-ekonomicznych badanych osób i ich rodzin. Wyniki wskazują, że głównymi czynnikami podnoszącymi prawdopodobieństwo wyboru opinii o wzmocnianiu się pozycji euro były zmiany dochodów rodziny, a następnie liczby dzieci i obecność dzieci w rodzinie. Mniejsze prawdopodobieństwo wyboru takiej opinii dotyczyło respondentów z terenów wiejskich oraz zatrudnionych na pełny etat.

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