
A Perspective on Universal Basic Income

*“The money we own is the instrument of freedom,
the one we chase is that of servitude.”*
Jean-Jacques Rousseau / Les Confessions

PhD. Associate Professor Sorin Daniel Manole (danielsorinmanole@yahoo.com)
“Constantin Brâncoveanu” University

PhD. Professor Iuliana Ciocchină (iulianaciocchina@yahoo.com)
“Constantin Brâncoveanu” University

PhD candidate Ana Maria Bocăneală¹ (anamaria.bocaneala@gmail.com)
Bucharest University of Economic Studies (ASE)

ABSTRACT

This paper research studies the degree of familiarity with individuals' concept of a Universal Basic Income and the level they attribute to the necessity of a Universal Basic Income. For this purpose, the Internet survey, specifically e-mail and simple webpage, and snowball sampling technique were used. Subjects were recruited from the population of Europe and North America. The sample consisted of 456 people with a country of residence in this area (420 from 14 European countries and 36 North Americans). After processing the responses, it was found that respondents are generally not familiar with the concept of a Universal Basic Income and that the necessity of a Universal Basic Income is rated at a medium level. The paper also tests the hypotheses that Geographical Region and Age are predictors of both familiarity with Universal Basic Income and opinion about the necessity of a Universal Basic Income. The testing of these hypotheses is carried out using multinomial logistic regression and through the results obtained, the hypotheses are confirmed.

Key Words: *Universal Basic Income, necessity of a Universal Basic Income, familiarization with the concept of Universal Basic Income.*

JEL: *F61, D63, H27*

1. corresponding author

INTRODUCTION:

The world we live in is where change is being reshaped by multiple forces: the IT revolution, the crisis of the vacuum, the globalization of trade, and military conflicts. All of these create threats and opportunities which, adequately assessed, can lead to the well-being of humanity. The Covid-19 pandemic has revived the idea of a universal income in many countries. There are various experiences of universal basic income (UBI) in many countries, but there is also the related problem of identifying sources of funding for universal income. The provision of a universal income involves some key questions, such as whether everyone needs to be helped. A second question is how they can be helped so that money is not wasted. And, the third aspect would be that in the long run people become inefficient in their jobs, i.e. they no longer feel valued at work. The concept of a basic income is currently at the heart of the discussions on the future of our social models. Guy Standing mentions (Standing, 2020) that UBI represents a new economic vision, a necessary pillar for reimagining work and economic security in our world full of crisis. UBI would ensure basic economic security for all citizens, offering every legal resident of a country an equal monthly amount of money, without conditions, as an economic right. The recent increase in interest in UBI places several countries at the forefront of the need to implement these social policies. For example, the Swiss voted against a proposed UBI program (2016), but other countries took the idea further (eg Finland and Canada, India).

In Switzerland, the basic income initiative has long been on the table. In 2016, the initiative for an unconditional basic income (UBI) was rejected by 77% of the electorate. In March 2023, some 70,000 signatures were delivered to the Swiss Federal Chancellery in the format of a petition for an unconditional basic income. In the city of Zurich, the initiative known as “For a scientific test of a basic income” is being implemented; this aims to provide 500 people with an income at least equal to the ordinary social minimum for three years. It is a scientifically supervised pilot test to find out what kind of reaction this basic income triggers.

Finland launched its pilot UBI program on 1 January 2017. Thus, it became the first European country to pay the unemployed a minimum income. The amount is equivalent to 560 euros and is paid to eligible persons aged between 25 and 58 years and they continued even if they find work. The first sample included a total of 2,000 randomly selected people India used UBI as a potential anti-poverty tool. The results of UBI implementation were expressed in non-monetary terms, namely better child nutrition, health care, and school attendance/performance. Another important result to mention, social and

psychological effects were observed: for example: initiative in decision-making (Sputnik International, 2017). The proposed UBI amount is now set at rupees 7,620 (\$113) per person per year for individuals in the target group.

Our paper is divided into several parts; the first part includes a brief review of the literature and studies of international institutions concerned with the effects of implementing basic income policies. The second part comprises the research methodology - which involves detailing how to obtain the data used in the research. The third part is for Results and Discussion. And, the last part is the Conclusions.

BRIEF REVIEW OF THE LITERATURE

Unconditional basic income is money for general use, which is provided independently of an income test and is given full autonomy over its use for specific individuals (Bohnenberger, 2019). Basic income consists of a regular income payment for each individual without a means test and without being asked for anything in return. The International Monetary Fund (IMF) notes that universal basic income is an income support mechanism, usually intended to reach all (or a very large part of the population) without conditions (Francese and Prady, 2018). The Basic Income Earth Network (BIEN) offers another definition of basic income, namely, basic income is a regular cash payment delivered unconditionally to everyone, individually, without the need for means testing or labor (BIEN, 2023). UBI pays all individuals unconditionally and regularly, promoting security for vulnerable groups in society while avoiding weakening the welfare of the poor by replacing existing social insurance and social services (Lee et al., 2020). Mouvement Francaise pour un Revenu de Base (MFRB) defines income as income paid to each individual member without conditions or matching (MFRB, 2023). The French association attributes certain attributes to universal basic income (UBI), namely: it is universal (all members of the community receive it), individual (it is paid to each member of the household, regardless of the income of other members), unconditional (it does not require justification for seeking employment), cumulative (it is added to any income), ad vitam (it is paid automatically, from birth to death, thus providing lifelong security).

Research (Van Parijs and Vanderborght, 2019, p. 23) notes that basic income is not just an ingenious measure that can alleviate some of the problems facing society today; universal income is one of the central pillars of a free society, an essential element we need to turn threats into opportunities and anxiety into hope (Van Parijs and Vanderborght, 2019, p. 23). In response to growing trends of inequality around the world, the policy of a universal basic

income (UBI) is gaining ground in both academic circles and the political arena. (Hall et al., 2019). An argument for UBI cited in recent research suggests that UBI provides people with basic economic security, as they can combine working at home with part-time work (Kangas and Ylikm, 2023).

The issue of universal basic income in the world is much more complex and cannot be addressed without economic, social, and political analysis. The provision of a basic income acts as a poverty reduction tool and leads to a reduction in economic inequality (Bertotti, 2021). The study of UBI involves the fields of ethics and philosophy, social studies, and psychology and addresses questions underlying human dignity, freedom, and justice or the principle of reciprocity, in addition to strictly economic aspects (de Paz-B. et al., 2020). Some research indicates that the implementation of basic income would provide every citizen with a basic level of financial security, reducing poverty and, in terms of the economy, would encourage entrepreneurship and could help compensate for jobs lost due to technological advances, e.g. robotics, automation (Hamilton et al., 2023). On the other hand, there are some voices opposing a UBI and expressing concerns about its affordability, its cost to taxpayers, and the potential suppression of growth-enhancing investment, as well as the disincentive it may pose to labor (Ashford et al., 2020).

UBI projects have been tested as pilot projects in several countries, for example, Spain plans to introduce a large-scale system in response to the economic turmoil caused by the current pandemic. As a result, around 850,000 low-income households will receive a monthly payment of USD 1145 (Moriarty and Honnery, 2020). A survey in the UK shows that the idea of a UBI-based system as a way of protecting the livelihoods of individual cultural workers is still much debated (Doustaly and Roy, 2022). The basic income experiment in Finland has encouraged an interesting cycle around trust; trust in others and institutions is an essential element of developed societies (Allas et al., 2020). Finland ranks first in global measures of happiness and also boasts the second-highest rating of trust in others. Research shows that to counteract the major changes that today's society is going through; action is needed on several fronts, such as the transformation of education, robotization, and economic security.

The basis of this economic security can be this single income, paid to every member of society, regardless of other sources of income. UBI is a benefit to society as a whole, minimum income schemes can act as macroeconomic stabilizers in the face of economic shocks (European Parliament, 2017).

Eduardo Suplicy (Suplicy and Dallari, 2019) who is a well-known advocate of universal basic income, with his famous "exit is out the door" formula, has suggested that implementing basic income is the best way

out of poverty. Research shows that the opportunity of UBI is to expand the financial freedom of the individual (Thomas et al., 2023). The authors (Thomas et al., 2023) also note that UBI is a means of moral reintegration and bipartisan support. Gotz Werner, the most influential advocate of universal basic income in Germany since 2005, said that for him basic income is not a contradiction with business, with productivity, but a prerequisite. Freedom is not a nice word; it is the very nature of human existence, and “the purpose of people is to generate freedom” (Schmidt, 2022). He also noted that “only with UBI do we have a free labor market, which implies freedom for market participants, i.e. to be able to say no to a bad offer and yes to a good one. Research shows that the implementation of UBI shows a clear improvement in the quality of life of its beneficiaries in terms of physical health, mental health, or stress levels (Goutier, 2021). In the 2017 United Nations Special Report on Human Rights and Extreme Poverty, Professor Philip Alston called for a more serious investigation into the desirability of a universal basic income, which he described as “the best solution to extreme poverty” and, the case for a universal basic income is a “bold and imaginative” solution to economic insecurity” (Alston, 2017).

European policies on minimum income guarantees as a tool to combat poverty argue that minimum income guarantee schemes are transitional tools in the process of reducing and combating poverty, social exclusion, and inequality (Official Journal of the European Union, 2017). It is also recommended that UBI policies should be perceived as a social investment. Research from India reveals that UBI can be an effective way to support low-income households and can also play an important role in generating public support for the implementation of structural reforms in support of economic growth (Coady and Prady, 2018). UBI holds an attractive promise of change in several areas such as: fairness of social contracts, power relations in labor markets, and gender equality (Gentilini et al., 2020). Thus, an effective UBI policy can mitigate the effects of automation/ robotization-induced unemployment and reduce fears about artificial intelligence.

The 2010 Nobel Laureate in economics, Christopher Pissarides, believes that to meet the challenges of digitization it is important to look for smarter strategies: universal minimum income is one such way, as long as we know how to implement it without removing incentives to work at the bottom of the market (Yamamori, 2016). Timotheus Höttges, CEO of Deutsche Telekom until January 2014, mentioned that UBI could be a solution in society through the technological changes of digitalization (Futurism, 2017). Research shows that UBI empowers people, makes people live according to their own ideas, desires, and norms, and allows people to take some risks in everyday

life more easily (Straubhaar, 2017). People feel safe, gain confidence, and critical situations will not let them down, but will evaluate future challenges as opportunities rather than threats. Findings on UBI policies and practices are generally positive, thus alleviating poverty and improving health and education outcomes, with minimal effects on labor market participation (Hasdell, 2020). There is also strong evidence that additional family resources improve children's outcomes, including school and health outcomes (Hoynes and Rothstein, 2019). People included in the UBI experimental studies experienced less mental stress, depression and loneliness, and their cognitive functioning was perceived to be better; their satisfaction with life was significantly higher (Allègre, 2020). Thus, the experimental universal income had moderate positive effects on employment and positive effects on economic security, and mental health. Therefore, the results of the UBI experiments seem to argue in favor of a universal income. In the context of the many interconnected crises, UBI could be, on the one hand, a safety net for people in precarious situations and, on the other hand, a real economic and political oxygen that would allow the reorientation of certain country-specific national priorities (Arnsperger, 2015).

METHODOLOGY

The research was based on online surveys on the Internet, using e-mail and web pages. A survey whose objectives are to find out how familiar people are with Universal Basic Income and to assess the extent, to which the need for Universal Basic Income is perceived, cannot be conducted otherwise. The general population is the population of Europe and North America. The snowball sampling technique, a non-random sampling method, was used to conduct the study. However, in general, this technique gives results close to the results of random sampling when used with sound procedures and commitment (Van Meter, 1990; Petersen and Valdez, 2005; Atkinson and Flint, 2001; Cohen and Arieli, 2011; Baltar and Brunet, 2012).

A sample is representative if the results obtained for this subgroup extend, in probabilistic terms, to the group under investigation. The representativeness of a sample is its ability to reproduce as faithfully as possible the structure and essential features of the general population (Săvoiu et al., 2005, p. 88). In the case of random selection, the representativeness of the sample is ensured by its size and by the sampling procedure, chosen according to the characteristics of the original population (Manole, 2007, p. 137).

The research aims to verify the following hypotheses: Hypothesis 1: People are not familiar with the concept of Universal Basic Income.

Hypothesis 2: People consider Universal Basic Income to be of average utility. Hypothesis 3: People believe to some extent that Universal Basic Income contributes to eliminating poverty and to reducing economic inequality, allows for the simplification of the existing social welfare system, ensures a minimum standard of living, can ensure better stability and economic security, raises overall wellbeing and can ensure more comfortable living for the beneficiaries and their families. Hypothesis 4: People believe to some extent that a large amount of money would be necessary to fund the provision of a decent basic income to every individual and Universal Basic Income would be limited by the country's situation. Hypothesis 5: People don't believe that Universal Basic Income could be a solution that would best satisfy the needs of modern living. Hypothesis 6: Familiarity with Universal Basic Income depends on Geographical Region and Age. Hypothesis 7: Opinion on the the need of Universal Basic Income depends on Geographical Region and Age. The questionnaire contains 14 items that target basic information (related to the research issue) and 5 items that target classification information (related to socio-economic and demographic characteristics). Among the 14 items aimed at basic information, we retained for this study only those that provide information about the necessity of a Universal Basic Income and familiarization with the concept of Universal Basic Income.

In this paper, the research carried out is more than qualitative research, because although it is exploratory, it does not remain at a descriptive level. The results obtained at the sample level can be extended, perhaps with a margin of error of more than 5%, to the general community. Thus, we can consider that the results of the study are quite representative, as 456 respondents have their country of residence in this area (420 from 14 European countries and 36 from the North American continent). A further argument for this is the structure of the sample by age group, gender, level of education, and professional status (Table no. 1).

Demographic Profile of Sample of Respondents

Table no. 1

Profile Particulars		Number of Respondents	Percentage	Total Number of Respondents
Age (years)	under 25	112	24.56	456
	26 to 35	143	31.36	
	36 to 45	83	18.20	
	46 to 55	82	17.98	
	56 to 65	36	7.89	
	over 66	0	0.00	
Gender	Male	207	45.39	456
	Female	249	54.61	
Level of education	Master's Degree/Phd	239	52.41	456
	Bachelor's Degree	164	35.96	
	High School	51	11.18	
	Professional School	2	0.44	
	Minimum Level of Training	0	0.00	
Professional status	Employed	235	51.54	456
	Student	133	29.17	
	Retired	15	3.29	
	Housewife/husband	4	0.88	
	Unemployed	31	6.80	
	Other	38	8.33	
Current Country	Belgium	15	3.29	456
	Canada	27	5.92	
	Denmark	29	6.36	
	Finland	30	6.58	
	Germany	26	5.70	
	Greece	7	1.54	
	Italy	19	4.17	
	Netherlands	33	7.24	
	Romania	101	22.15	
	Sweden	9	1.97	
	Switzerland	7	1.54	
	UK	125	27.41	
	USA	9	1.97	
Another country	19	4.17		
Country of origin	Belgium	15	3.29	456
	Canada	12	2.63	
	Denmark	13	2.85	
	Finland	29	6.36	
	France	11	2.41	
	Germany	30	6.58	
	Greece	11	2.41	
	Italy	20	4.39	
	Netherlands	33	7.24	
	Portugal	5	1.10	
	Romania	152	33.33	
	Sweden	8	1.75	
	Switzerland	8	1.75	
	UK	70	15.35	
	USA	16	3.51	
Another country	23	5.04		

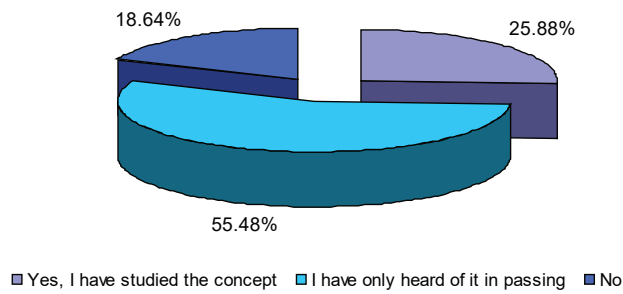
Source: Author's own

Results and Discussions

The answers to question Q2. „Are you at all familiar with the concept of a Universal Basic Income?” are summarised in Figure no. 1.

Answers to question Q2

Figure no. 1

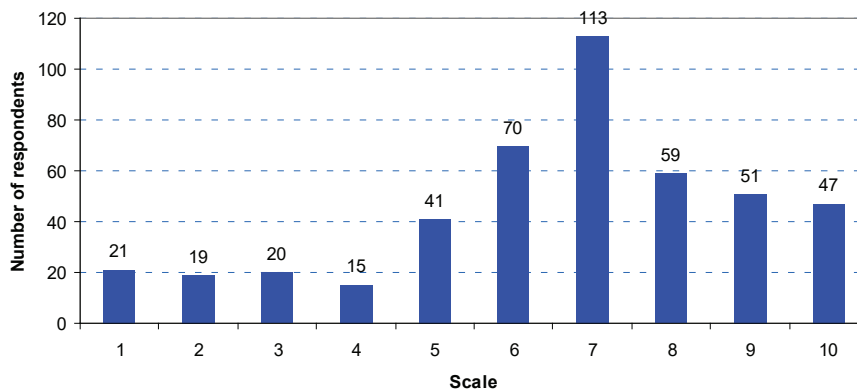


Source: Author's own

As the figure indicates, more than half of the respondents have only heard of, and only a quarter have studied the concept of a Universal Basic Income. Therefore, Hypothesis 1 is verified. For Item Q3. „On a scale from 1 to 10 please place, in your opinion, the necessity of a Universal Basic Income? (1-little needed, 10-very needed)” the distribution of the necessity of a Universal Basic Income rating is shown in Figure No. 2.

Answers to question Q3

Figure no. 2



Source: Author's own

As shown in Figure 2, responses that quantify a low level of usefulness (scores 1-4) have low frequencies, while the others (scores 5-10) have high frequencies, with a maximum of 7. The average score for Q3. is 6.57, which means that Universal Basic Income is considered to be quite useful in the general opinion. Hence, Hypothesis 2 is verified. There are also significant differences between the opinions expressed by respondents, as the standard deviation is 2.35.

Item Q7. „Please express whether you agree or disagree with the following statements regarding Universal Basic Income.” has the response variants: Completely agree, Agree, Neither agree nor disagree, Disagree, and Disagree completely, which were quantified by the values: 2, 1, 0, -1, and -2 respectively. After processing the responses to this item, the results presented in Table No. 2 were obtained.

Characterization of the answers to the question Q7

Table no. 2

Statement	Mean	Std. Deviation	Total Number of Respondents
1. contributes to eliminating poverty and to reducing economic inequality	0.81	1.038	456
2. allows for the simplification of the existing social welfare system	0.58	1.038	456
3. diminishes the effects of there being increasingly fewer jobs in the future	0.43	1.004	456
4. stimulates entrepreneurial drive	-0.10	1.081	456
5. ensures a minimum standard of living	1.11	0.839	456
6. can ensure better stability and economic security	0.73	1.016	456
7. raises overall wellbeing	0.72	1.000	456
8. can ensure more comfortable living for the beneficiaries and their families	1.01	0.804	456

Source: Author's own

We can notice that the respondents' opinions are quite dispersed for all statements, as the standard deviation takes values around 1, except for statements 5, and especially 8, where the dispersion of data relative to its mean is about 0.8. As can be seen from the table above, for statements 1, 5, and 8, the general choice of the respondents is Agree, for statements 2, 6, and 7, we have agree with some reservations, for 3, the average score can be classified as a “weak” agreement, and for 4, the respondents have pronounced themselves

by Neither agree nor disagree. Thus, Hypothesis 3 has been proven. Item Q10. „To what extent do you agree with the following statements regarding the negative impact of implementing a Universal Basic Income?” has the response variants: Completely agree, Agree, Neither agree nor disagree, Disagree, and Disagree completely, which have been quantified by the values: 2, 1, 0, -1, and -2 respectively. After processing the responses, the information summarized in Table no. 3 was obtained.

Characterization of the answers to the question Q10

Table no. 3

Statement	Mean	Std. Deviation	Total Number of Respondents
1. a large amount of money would be necessary to fund the provision of a decent basic income to every individual	0.66	1.104	456
2. it would increase immigration	0.00	1.089	456
3. a basic income would not guarantee physiological needs are met	0.07	1.070	456
4. would lead to an increase in voluntary unemployment, which affects both mental and physical wellbeing	-0.02	1.081	456
5. would affect the economy and lead to decreased productivity	-0.23	1.048	456
6. would give the government too much power and make citizens more easily controlled through dependence	0.00	1.182	456
7. would be limited by the country's situation	0.59	1.087	456

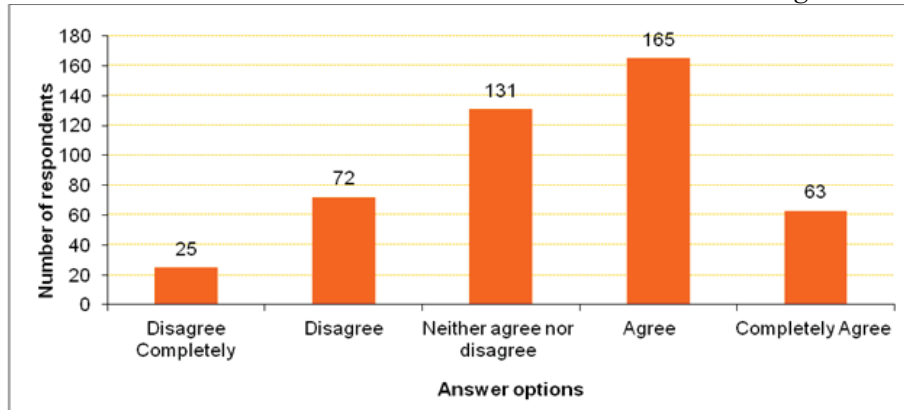
Source: Author's own

As can be seen from the table above, respondents' views are quite dispersed on all statements, as the standard deviation takes values close to 1. Also, for statements 2-6, respondents' overall opinion is at or close to Neither agree nor disagree, while for statements 1 and 7, we have agreement with some reservations. Therefore, Hypothesis 4 is confirmed.

Item Q12. „Do you consider that Universal Basic Income could be a solution that would best satisfy the needs of modern living?” has as answer options: Completely agree, Agree, Neither agree nor disagree, Disagree, Disagree completely. To these, we assigned the values: 5, 4, 3, 3, 2, and 1 respectively.

Answers to question Q12

Figure no. 3



Source: Author's own

From Figure No. 3, it appears that most responses are concentrated on Neither agree nor disagree (131) and especially Agree (165). There is a weak agreement to indifference, as the average score is 3.37. Hence, Hypothesis 5 is verified. Also, as the standard deviation is 1.07, it appears that opinions are quite dispersed.

Next, we propose to test the hypotheses that both familiarity with Universal Basic Income (Q2) and opinion about the necessity of a Universal Basic Income (Q3) can be estimated based on Geographical Region and Age. For this purpose, multinomial logistic regression has been used. All variables are category variables. The independent variables Geographical Region (based on Current Country) are variants: Eastern Europe, Northern Europe, Southern Europe, Western and Central Europe, Northern America, and Age are three categories 1 = age group under 35, 2 = age group 36 to 45, 3 = age group over 46. For the first question, the question “Are you at all familiar with the concept of a Universal Basic Income?” was asked, and the response options were: I have only heard of it in passing, No, Yes, I have studied the concept. For the second question, the item “On a scale from 1 to 10 please place, in your opinion, the necessity of a Universal Basic Income (1-little needed, 10-very needed)” was used. Since the opinion on the necessity of a Universal Basic Income had a large number of categories (10), we grouped them as follows: 1 with 2, 3, and 4, forms the new category 1 (low necessity), 5 with 6, forms the new category 2 (medium necessity) and 7 with 8, 9 and 10, forms category 3 (high necessity). Table no. 4. shows the distribution of variable used in the first model.

Case Processing Summary for Acquaintance

Table no. 4

		Number	Marginal Percentage
Acquaintance	I have only heard of it in passing	253	55.5%
	No	85	18.6%
	Yes, I have studied the concept	118	25.9%
Age	1	255	55.9%
	2	83	18.2%
	3	118	25.9%
Geographical Region	Eastern Europe	110	24.1%
	Northern America	36	7.9%
	Northern Europe	71	15.6%
	Southern Europe	29	6.4%
	Western and Central Europe	210	46.1%
Valid		456	100.0%
Missing		0	
Total		456	
Subpopulation		15	

Source: Author's own

Table no. 5. contains information about Multinomial logistic regression with Acquaintance as dependent variable. The part of the table related to Model Fitting Information shows us whether final model (with Geographical Region and Age as predictors) is a significant improvement on the model contains none of the predictor variables (Upadhyay et al., 2012; Bayaga, 2010). Because the probability in table (Sig.) is less than 0.05, we reject the null hypothesis that there is no difference between the null (intercept only) model and the final model (Bayaga, 2010; Hrimiuc, 2014). The part in the table on Goodness-of-Fit contains Pearson and Deviance statistics which test how well the model fits the data (Chan, 2005; Upadhyay et al., 2012). The probabilities associated with the two statistics (Sig.) are higher than the significance threshold of 0.05, so the model adequately fits the data (Chan, 2005; Upadhyay et al., 2012). Also in the table appear three pseudo R-square values that show the measures of correlation between the combination of explanatory variables and response variable (Hrimiuc, 2014). These show that we have a correlation with a value

of 0.33-0.47 (obtained by extracting the square root of the values of pseudo-R-squareds). Finally, Likelihood Ratio Tests shows which predictors had a significant effect in model (El-Habil, 2012; Upadhyay et al., 2012). Because the probabilities associated with Chi-Square statistics (Sig.) are all lower than the significance threshold of 0.05, hence there is a relationship between each of predictors and the dependent variable (El-Habil, 2012).

Results of Multinomial logistic regression for Acquaintance

Table no. 5

Model Fitting Information					
Model	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	195.652				
Final	105.181	90.471	12	0.000	
Goodness-of-Fit					
	Chi-Square	df	Sig.		
Pearson	19.554	16	0.241		
Deviance	20.783	16	0.187		
Pseudo R-Square					
Cox and Snell	0.189	Nagelkerke	0.219	McFadden	0.106
Likelihood Ratio Tests					
Effect	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood of	Chi-Square	df	Sig.	
	Reduced Model				
Intercept	107.569	0.000	0	.	
Age	154.298	46.730	4	0.000	
GeographicalRegion	160.099	52.530	8	0.000	

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Source: Author's own

Table no. 6, which is the classification table, indicates us the degree of accuracy of the parameters estimates provided by model (Hrimiuc, 2014; Peng et al., 2002). We notice that the model is best at predicting respondents with "I have only heard of it in passing" (88.5% of the cases are correct). The model also makes 59.4% correct predictions. Thus, Hypothesis 6 is confirmed.

Precision of estimations for Acquaintance

Table no. 6

Observed	Predicted			Percent Correct
	I have only heard of it in passing	No	Yes, I have studied the concept	
I have only heard of it in passing	224	1	28	88.5%
No	75	5	5	5.9%
Yes, I have studied the concept	76	0	42	35.6%
Overall Percentage	82.2%	1.3%	16.4%	59.4%

Source: Author's own

Table 7 shows the frequencies and percentages for each category of variables considered in the second model.

Case Processing Summary for Necessity

Table no. 7

		Number	Marginal Percentage
Necessity	1	75	16.4%
	2	111	24.3%
	3	270	59.2%
Age	1	255	55.9%
	2	83	18.2%
	3	118	25.9%
Geographical Region	Eastern Europe	110	24.1%
	Northern America	36	7.9%
	Northern Europe	71	15.6%
	Southern Europe	29	6.4%
	Western and Central Europe	210	46.1%
Valid		456	100.0%
Missing		0	
Total		456	
Subpopulation		15	

Source: Author's own

Information regarding estimated model is presented in Table no. 8. So, model with Geographical Region and Age as dependent variables provides better predictions than the null model, since the probability associated

with the Chi-Square statistic is less than 0.05. Also, because probabilities associated with the Pearson and Deviance statistics are greater than 0.05, it turns out that the model adequately fits the data. The pseudo R-squareds (Cox-Snell, Nagelkerke, McFadden) show that the level of correlation between Geographical Region together with Age and necessity of a Universal Basic Income is 0.21-0.38. Finally, we note that both age and geographical region have a significant effect on the need for universal income.

Results of Multinomial logistic regression for Necessity

Table no. 8

Model Fitting Information					
Model	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	282.432				
Final	104.827	177.605	12	0.000	
Goodness-of-Fit					
	Chi-Square	df	Sig.		
Pearson	20.162	16	0.213		
Deviance	21.446	16	0.162		
Pseudo R-Square					
Cox and Snell	0.323	Nagelkerke	0.379	McFadden	0.205
Likelihood Ratio Tests					
Effect	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.	
Intercept	104.827	0.000	0	.	
Age	256.697	151.871	4	0.000	
Geographical Region	140.376	35.550	8	0.000	

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Source: Author's own

The last table presents the precision of the estimates provided by the model for categories regarding the opinion of necessity of a Universal Basic Income and the overall precision of prediction.

Precision of estimations for Necessity

Table no. 9

Observed	Predicted			
	1	2	3	Percent Correct
1	50	11	14	66.7%
2	19	37	55	33.3%
3	30	13	227	84.1%
Overall Percentage	21.7%	13.4%	64.9%	68.9%

Source: Author's own

As shown in Table no. 9., the best prediction is in category “3” of Necessity (84.1%), and the overall percentage of correct classifications is acceptable (68.9%). Therefore, Hypothesis 7 is confirmed.

Conclusions

Through our research, which is based on quantitative, questionnaire-based research, we examined how familiar respondents are with the concept of a universal basic income and how people in Europe and North America view the need for a universal basic income. The study was carried out on a sample of 456 subjects obtained through an online survey using the snowball sampling technique. After processing the responses, it turned out that the Concept of a Universal Basic Income was generally unfamiliar to them, as 55.5% of respondents had only heard of it in passing and only 25.9% had studied it. On the item that asked respondents to rate on a scale from 1 to 10 the necessity of a Universal Basic Income (1 little needed, 10 very needed), the mean score was 6.57 and the standard deviation was 2.35. This shows that Universal Basic Income is considered quite useful and that there are large differences between the opinions expressed. Similarly, on the statement “Universal Basic Income could be a solution that would best satisfy the needs of modern living”, respondents gave a weak agreement, to indifferent (mean score 3.37, for quantification: 5-Completely agree, 4-Agree, 3-Neither agree nor disagree, 2-Disagree, 1-Disagree completely), and there are major differences between their options (standard deviation 1.07).

At the same time, using multinomial logistic regression, it was shown that both familiarity with Universal Basic Income and opinion about the necessity of a Universal Basic Income depend on the Geographical Region (with variants: Eastern Europe, Northern Europe, Southern Europe, Western and Central Europe, Northern America) and Age (with three categories 1 = age group under 35, 2 = age group 36 to 45, 3 = age group over 46).

However, the study presents certain limitations, due to the fact that we do not have the sample representativeness ensured at the best level. First, the sample volume is not large enough in relation to the total population volume. Secondly, the snowball sampling technique does not generate random samples. Also, even though efforts were made to ensure that the variants of the variables recorded in the sample subjects covered the range of variants as well as possible, the overall population is not homogeneous, so stratification (by Age, Gender, Level of education, Professional status etc.) would be necessary. Therefore, we propose to eliminate these drawbacks, in a future scientific work, in which we will analyze the dependence of the familiarity with Universal Basic Income and the opinion about the necessity of a Universal Basic Income on several variables, such as Gender, Level of education, Professional status

etc. together with Age, in the case of Romania. Thus, for the sample to be representative a stratified survey will be carried out and non-responses will be taken into account when determining the sample volume.

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