



## DRIVERS OF PERCEPTIONS TOWARDS EURO ADOPTION AMONG THE YOUNG: EVIDENCE FROM BULGARIA

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### ABSTRACT

**Objectives:** Perceptions towards euro adoption in the general public are very important for the successful introduction of the common currency into a given economy. Young consumers tend to have lower interest and political participation rates, but their acceptance of a new currency is crucial. This paper investigates a sample of Bulgarian students in order to measure and model the preferences of young consumers towards adopting a new national currency, and potentially glean insights that could be useful for the formulation of public policy.

**Methods/Approach:** We survey a total of 296 predominantly young participants asking them both traditional demographic questions as well as behavioral and political ones such as social network and online video usage as well as policy stance and trust in institutions. The variables are used as predictors in a regression modelling framework that investigates the drivers behind the dynamics of euro perceptions.

**Results:** We find a strong and robust effect of overall trust in institutions on perceptions towards the euro, as well as an expected effect of the policy preference. The higher trust in institutions leads to a more positive attitude towards the adoption of the common currency. Similarly, more right-leaning pro-market policy preferences are also associated with a more favorable view of the euro. While the consumption of online videos is unimportant, the overall time spent in social networks does have a statistically significant positive effect on preferences.

**Conclusions:** The results give some initial directions as to what policy should be undertaken to most effectively inform young consumers on the benefits of adopting the euro as a new currency, and how this demographic can be segmented to deliver information most efficiently.

**Keywords:** euro adoption, euro attitudes, young consumers, institutional trust, social networks

**JEL classification:** B52; D12; Z13; Z18

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### INTRODUCTION

The adoption of a new currency is not only of deep economic importance but also has profound implications for the social and political dynamics of a country. With very few exceptions, every member state of the

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European Union has undertaken to join a single currency zone and exchange its national currency with the euro. Issues of public support towards the adoption of the euro are crucial for its successful adoption and operation, especially in challenging times (Hobolt & Wratil, 2015). As economic discourse become intertwined with identity politics, public perceptions become more pertinent, and likely, more volatile. It is therefore of significant interest as to what drives perceptions towards euro adoption, what policies could provide best support to the public in order to reach informed opinions. This rings even more true for the next generation of consumers – the European youth, who will experience the euro costs and benefits over the longest period among current generation but are still uninterested in politics and rather not participate in it (Kitanova, 2020). The latter holds particularly true for the emerging economies in the Union (ibid.).

In this respect, Bulgaria is an interesting case in point. The country is a relatively new member state of the EU and has yet to adopt the common European currency amid polarized public discourse. While Bulgaria does have an obligation to join the Eurozone under the Treaty on the Functioning of the European Union contingent upon fulfilling the Maastricht criteria, it has not committed to a specific date. In this way positive public perceptions can seep into politics to accelerate accession-friendly policies, while negative ones may delay adoption and thus lead to foregone economic benefits. Furthermore, research has pointed out that the euro adoption in Bulgaria is marred by significant public beliefs in its negative consequences, that are not grounded in economic fundamentals (Simeonov, 2022; Yotzov, 2023). It is thus of both academic and practical interest to measure the current attitudes of the public towards euro adoption and investigate what are the drivers behind them. Currently, there is limited research on predictors of the attitude towards the euro in Bulgaria. While simple measurements of these abound, they are not put in the context of the institutional environment, personal policy preferences, and behaviors. This holds particularly true for the segment of young people whose behavior and attitudes may diverge significantly from those of older generations. This paper thus tries to fill this gap by investigating what drives attitudes towards the common European currency among the young. We focus on a sample of university students to proxy the young people of the country. While the sample does contain very few more mature participants, it is overwhelmingly very young, with an average age of just 25 years. The survey investigates a set of traditional demographics variables (age, gender, occupation, place of residence, education) as well as more broad behavioral ones such as overall policy preferences (left- to right-leaning), time spent in social networks, consumption of online video content, and overall trust in institutions. We visualize data and test statistically which predictor among those are able to influence perceptions towards the euro. Based on the results, we outline a few policy recommendations.

The paper is structured as follows. The second section contains a review of extant literature. Section three outlines the methodology and data under study, and section four presents the major results. The final fifth section provides a discussion and concludes.



## LITERATURE REVIEW

The euro area was created on 1 January 1999 with its first 11 member states, which constitute its core. Nevertheless, these countries introduced physical euro banknotes and coins on 1 January 2002, which was a more significant change for the wider public. In the following two and a half decades the currency union gradually expanded, reaching 20 member-states, with the latest inclusion of Croatia in 2023. The adoption of the euro is a significant change for businesses, the financial system, and the government of any country, and public perception and expectations towards it have been studied in multiple countries that went through the exchange rate regime transition. Moreover, the attitudes towards the possible future changeover have been studied in countries both officially committed to the euro accession, as well as those that have no commitment in this respect.

A major topic around the euro adoption is its effect on inflation and therefore, a majority of the literature is focused on effects on inflation and inflation perceptions and expectations in the context of the euro area accession.

Multiple studies focus on the discrepancy between inflation perceptions and actual inflation found across many countries and largely come to similar conclusions. Álvarez González et al. (2004) studied the relationship between inflation perceptions and actual inflation in the context of Spain's euro accession. They find that the inflation rate for frequently purchased products is strongly correlated with inflation perceptions, compared to the headline inflation. With the introduction of the euro banknotes, the prices of frequently purchased products increased more significantly in contrast to the stability of the overall inflation index. Similar conclusions are made by Santos et al. (2002) focusing on the same phenomenon in Portugal, and two articles by Walschots (2002) and Buiten (2003) who focus on the Netherlands. Furthermore, Walschots (2002), Buiten (2003), and Pollan (2002) point out that the inflationary processes related to the goods and services that affect consumers' perceptions the most began in 2001 before the euro changeover and it was coincidental that consumers related the increase in prices with the euro adoption. Kurri (2006) argues that expectations of possible inflationary pressures due to the euro changeover may lead consumers to focus on price increases and ignore price reductions. Gamble (2005) brings up the issue of the euro illusion as consumers tend to look at nominal and not real value so lower nominal prices in euro are perceived as less expensive than higher nominal prices in the less valuable home currency.

Several studies focus on Italy and its experience of the euro area. Giovane and Sabbatini (2008) present a discussion of the divergence between inflation perceptions and actual inflation in the years after Italy's switch to the euro. They offer three explanations as to why this divergence occurred and in what situations perceptions might be more sensitive: larger price increases for more frequently purchased goods, a change in the distribution of price changes with more outlier increases, and greater differences in the consumption baskets for individuals from various socio-economic backgrounds. Giovane and Sabbatini (2008) also find that there



is a strong relationship between inflation perceptions and individual socio-demographic characteristics, especially gender, education, and personal economic conditions.

Jemec (2010) analyzed the relationship between actual inflation and inflation perceptions across 16 countries, 13 of which adopted the euro during the sample period. The main findings of the study point to exaggerated perceptions of inflation over the past 12 months and expectations for the following 12 months and large gaps between expectations, perceptions, and actual inflation triggered by the euro adoption. Pufnik (2017) studied the effects of the adoption of the euro on consumer prices and inflation perceptions. An analysis was performed on both actual inflation and perceptions in the countries that adopted the euro in January 2002. The study finds that the effect of the euro adoption on the headline HICP is between 0.1 and 0.3 percentage points but despite the modest increases in the actual price level, inflation perceptions grew sharply on average. Lunn and Duffy (2015) point out that there might a significant discrepancy between perceived and actual inflation which they attribute to the perceptual noise consumer may experience.

Zooming out from the topic of inflation expectations and perceptions, Jonung and Conflitti (2008) study general attitudes toward the euro adoption using data from the Flash Eurobarometer survey conducted in September 2006 covering the euro area member states that adopted the euro in 2002. The two survey questions used in the analysis asked if individuals perceived the euro adoption as “advantageous overall” or not and whether it made them “personally feel a little more European than before” or not. On the aggregate level, the authors found that close to a majority perceived the euro as advantageous overall and a fifth of the respondents felt their European identity was strengthened by the euro. Čabelková, Mitsche, and Strielkowski (2015) studied the attitudes towards EU integration and Euro adoption in Czechia. Their main finding is that the attitudes toward EU integration have deteriorated after 2004. A majority of the respondents are unsure about the benefits of the Euro adoption and even regard it as unnecessary and even harmful. Another finding is that the more respondents feel as citizens of the EU and the more they believe in the values of the EU and its ability to enforce them, the more they agree with the idea of EU integration and the Euro adoption.

Genge (2014) studied the Polish opinions on the euro adoption using latent class clustering analysis. The study found that euro supporters were less likely to be concerned by possible price increases. On the contrary, among the euro skeptics, 94% were afraid of price increases. Analyzing demographic variables and their relationship with opinion, the author found that older people were more critical of the euro. Also, individuals with a higher level of education have a strong prior of belonging to the euro supporters’ group. Zimková, Farkašovský, and Szostak (2018) studied how the euro is perceived in both euro-area member-states and non-member-states with respect to the economic performance in the respective country measured against the nominal convergence criteria.

Backé and Beckmann (2020) performed a more general study on the subjective attitudes towards the euro adoption across six EU member-states (Bulgaria, Croatia, Czechia, Hungary, Poland, and Romania) and four potential EU candidates (Albania, Bosnia and Herzegovina, North Macedonia, and Serbia). The authors use



data from the OeNB Euro Survey, which focuses on individual attitudes toward euroization, trust in institutions, monetary expectations, and financial institutions. Exposure to euroization tends to increase the likelihood of more optimistic euro adoption expectations. Similarly, trust in institutions and in the stability of currencies is associated with a higher likelihood of more optimistic euro introduction expectations. The same authors (Backé and Beckmann, 2022) use data from the OeNB Euro Survey to study the relationship between financial literacy and trust in institutions and individual attitudes toward euro adoption. They found that financially literate individuals are more likely to have definite expectations and preferences with respect to the timing of the euro area accession and tend to prefer euro adoption to take place earlier than they expect. Trust in institutions has a similar impact, with trust in both national and supranational institutions being positively associated with forming more realistic expectations and preferences and preferring the euro to be adopted sooner rather than later.

A final strand of research focuses on the association between media coverage and inflation perceptions. Lamla and Lein (2014) leverage a German media dataset to find how media coverage of inflation influences consumer attitudes. They find that, expectedly, the volume of news does impact inflation expectation in line with theoretical predictions. However, it is also the content and tone of content that matters. Biased content and coverage of past inflation in fact bias expectations formation.

Additionally, news on rising inflation have a more pronounced effects than ones about falling prices. Conrad et al. (2022) add further to this, showing that even through consumers do obtain those numbers from the media, their expectations are shaped by their own personal experience. Thus, individual experience is the lens through which agents interpret inflation information, with individuals who have experienced inflation being significantly more likely to expect a price hike. As consumers obtain ever more information from social media, it seems that their online interactions can also carry significant information on how they form price expectations (Angelico et al., 2022).

Finally, microeconomic studies on what drives perceptions of the euro adoption seem to be rarer. In the Bulgarian context general attitudes towards the common European currency are regularly measured but their predictors are insufficiently studied. Still, some authors note that the public tends to be influenced by a set of negative beliefs and concerns that have little economic basis. Simeonov (2022) points out no less than 21 such erroneous beliefs (“myths”) that shape public discourse but notes that current perceptions towards adoption are slightly more positive than negative (46% and 42%, respectively). Yotzov (2023) identifies seven major causes of concern for the general public (monetary sovereignty, inflation, rise in money supply, interest rates, fiscal position, and competitiveness) but the quantitative effect of those concerns on public perceptions is unclear.

When the broader attitudes towards the euro adoption are concerned, the results are much more heterogeneous because both the focus of the studies and the methods employed varied drastically. However, several interesting findings can be mentioned across the various studies. Men are more likely to have a more



positive outlook towards the euro adoption compared to women across multiple euro-area member-states. Individuals with higher financial literacy and stronger trust in institutions are more likely to have a positive outlook across a sample of 10 countries in Central, Eastern, and Southeastern Europe. For the individuals who are skeptical or neutral towards the euro adoption a major concern is the possible inflationary effects of the changeover. Further, the traditional and social media landscapes seem to have a persistent and strong effect on how individuals form their inflation expectations.

## **METHODOLOGY**

We conduct an economic survey on a sample of 296 predominantly young consumers and show how their preferences for the adoption of the Euro currency in Bulgaria are modulated by different demographics and behavioral variables. The primary objective of the study is to understand consumer perceptions and behavior in the context of the imminent adoption of the Euro currency in Bulgaria.

### *Data Collection*

The dataset resulting from the experiment comprises 296 participants primarily hailing from Sofia University, with various demographic and behavioral variables captured. The average age of respondents is approximately 25 years, ranging from 17 to 78 years. The average respondent falls into the income bracket of 1500-2000 BGN. This underlines that we are studying a sample of predominantly young consumers and thus expect to capture their attitudes. The utilization of an 11-point Likert scale for preference elicitation provides a nuanced understanding of participants' attitudes and perceptions, contributing to the study's construct validity. The 11-point scale is selected as it gives more opportunity to capture heterogeneity among agent preferences. This is particularly important as Simeonov (2022) reports that the Bulgarian public is almost equally divided in their preferences when asked a binary question, and thus shorter scales such as the 5-point one may just replicated the division, omit nuance and lead to a loss of potentially valuable information. The collection of a variety of demographic and behavioral variables enables a multifaceted analysis, strengthening the study's inferential power.

The survey itself was administered in Spring 2023 among Sofia University students in randomly selected courses. This is done to mitigate the issue of selection bias and aims to achieve a representative sample that captures the attitudes of the segment of young and educated consumers. Those may, and probably will, differ for other demographic groups. The survey instrument seems to be tailored to capture various aspects related to the perception of Euro adoption in Bulgaria, including trust in institutions and currency preference. This suggests high content validity. Furthermore, the survey includes both direct and indirect measurements (e.g., perception of Euro adoption and trust in institutions), which can contribute to construct validity.

### *Data Quality*



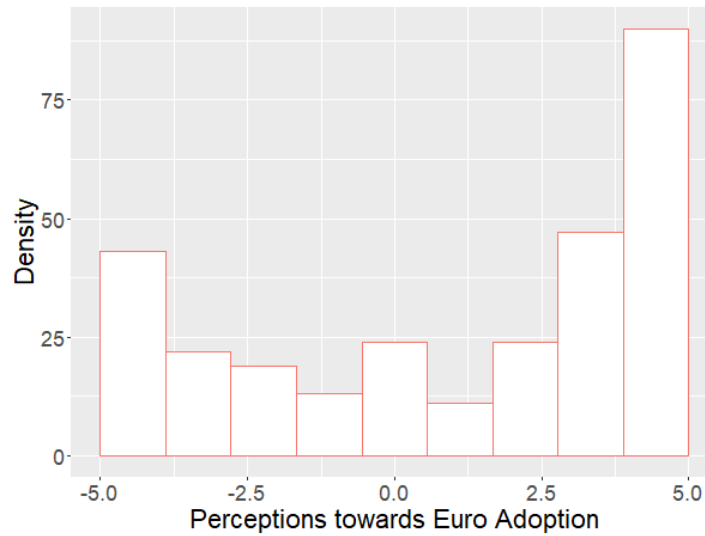
The sample is primarily composed of Sofia University students and is skewed towards younger individuals. This could limit the generalizability of the findings to a broader population. With 296 respondents, the sample size is moderate, which suggests that statistical inference may have to be carried out at the higher end of conventional levels of significance – at or below 10%. While this may be sufficient to analyze the behavioral drivers at large, it might not be large enough for highly granular subgroup analyses. The dataset captures a multitude of variables (see Table 1), both demographic and behavioral, which allows for multifaceted analyses. Given that the survey is designed around a very specific upcoming event (Euro adoption in Bulgaria), the data can provide insights that are highly contextual and therefore valuable for inference. Initial analyses show variations in perceptions and trust levels across different groups, indicating that the data has the potential to reveal meaningful patterns or trends.

This approach to data collection has a number of limitations, and results need to be interpreted with due consideration for those. The sample is not representative for the general public as it is specifically focused on the university populations. In this way it proxies the youngest professionals coming into the labor force. Naturally, there are older students as well and the sample reflects that, but they are a clear minority. Second, survey data represents stated and not revealed preferences. While the revealed preferences may be preferable, those are almost impossible to elicit before actual euro adoption. Third, the sample is moderate in size but not large and thus the sampling error may somewhat skew the results. In summary, while the dataset has some limitations related to generalizability and sample size, its focus on a specific context, as well as its variety of measured variables, suggests that it can be suitable for drawing certain types of inferences, particularly those related to the study's main focus on the perception of Euro adoption in Bulgaria.

### *Descriptive Statistics*

In the sample under study, we find some mostly positive attitudes towards adoption of the euro currency in Bulgaria. Its mean stands at 0.93 (with -5 being most negative and +5 being most positive) and the distribution of responses is clearly skewed to the right (see Figure 1). In fact, the distribution is characterized by twin peaks – a minority of very negative perceptions and a larger group of very positive ones. The hollowing-out in the middle likely indicates a dwindling group of undecided consumers that have yet to form their opinions. The large standard deviation (s.d. = 3.45) of the variable measuring perception towards euro adoption further emphasized the lack of consensus in this sample of young consumers. This observation underscores the contention that perceptions are not unidirectionally positive but exhibit substantial heterogeneity among respondents. Such dispersion may be reflective of the diverse and often polarized societal opinions on Euro adoption.

The full set of descriptive statistics of the sample under study is presented in Table 1. This is a relatively balanced sample in terms of gender, with females being somewhat overrepresented with almost 60%. The average age of participants stands at 25 years (s.d. = 8.17), but very few are somewhat older.



**Figure 1.** Histogram of Perceptions towards Euro Adoption

*Source:* Authors' illustration

In terms of where the primary residence of our respondents is, we find out that 32% of them live in a large regional center (9% in the capital), whereas the rest live in a smaller town or village. The average educational attainment stands at 3.45, which roughly corresponds to having or being in the process of obtaining a bachelor's degree. Most respondents are either working or currently studying, which is to be expected from such a young sample.

Survey participants are heavy users of social media. They spend on average 1-2 hours per day on social networks. About a third of them (31%) spend more than two hours per day on social networks. This behavior seems rather homogenous across the sample, as underscored by the relatively low standard deviation that we observe (standing at s.d. = 0.94), and also by the low skewness and kurtosis of this variable's distribution.

**Table 1.** Descriptive Statistics of the Sample

Variables	N	Mean	Std. Dev.	Median	Min	Max	Skew	Kurtosis
Gender Ratio	294	1.40	0.50	1	0	2	0.30	-1.70
Age	291	24.95	8.17	22	17	78	2.72	8.92
Location	294	2.51	0.78	3	0	3	-1.54	1.61
Education	295	3.45	0.75	3	1	6	1.17	1.22
Job	296	3.71	1.42	4	2	7	-0.23	-1.69
Social network usage	294	2.92	0.94	3	1	4	-0.57	-0.56
Online videos	294	2.73	1.13	3	1	4	-0.26	-1.35
Policy stance	273	3.41	1.22	3	1	5	-0.31	-0.80
Perceptions towards euro adoption	294	0.93	3.45	2	-5	5	-0.49	-1.17
Trust in institutions	234	-0.53	2.78	0	-5	5	-0.15	-1.07

*Source:* Own calculations





The sample participants are likewise avid consumers of online videos, spending on average between 30 minutes and 1 hour watching video clips on the internet.

Again, a sizable proportion of the respondents (35%) are even more extreme consumers of online video content, spending more than one hour daily watching it. Respondents have a rather liberal outlook on the world preferring market forces to shape society, with their policy stance averaging 3.41 (s.d. = 1.22), where 1 denotes left-leaning policy preferences, while 5 denotes right-leaning preferences. A final insight from the descriptives is contained in the fact that trust in institutions in Bulgaria remains at a low level. Asked for their confidence in the Central Bank and the Ministry of Finance on a Likert scale from – 5 (Very low) to 5 (Very high), respondents give a negative average of -0.53 (s.d. = 2.78).

## RESULTS AND DISCUSSION

As a first step towards understanding the drivers behind euro perceptions, we review the correlations between all pertinent features (see Table 2). The highest positive correlation with the attitude variable is the amount of trust respondents place in institutions. The correlation is relatively high with  $r = 0.48$ , and statistically significant at levels below 1%. This result is large expected and in line with results from the extant literature regarding the importance of institutions (see e.g. Backé and Beckmann, 2020; Backé and Beckmann, 2022). There is also a mid-sized correlation with the amount of social network usage (with  $r = 0.15$ ), which also reaches statistical significance at the 1% level. This positive correlation is not entirely expected, and we hypothesize that its relevance lies in the composition of the sample. While social network usage for the general public may mobilize negative sentiment, it seems that this runs the opposite direction for the younger demographic.

**Table 2.** Correlation Matrix of the Variables under Study

	Gender	Age	Location	Education	Job	Social network usage	Online videos	Policy stance	Attitude Euro	Trust in inst.
Gender	1.00	-0.10	0.02	-0.03	-0.03	-0.08	0.22	0.00	0.08	-0.03
Age	-0.10	1.00	0.15	0.60	0.38	-0.30	-0.31	0.02	0.01	0.14
Location	0.02	0.15	1.00	0.27	0.19	-0.08	-0.01	0.05	0.10	0.06
Education	-0.03	0.60	0.27	1.00	0.34	-0.24	-0.22	0.04	0.13	0.18
Job	-0.03	0.38	0.19	0.34	1.00	-0.23	-0.04	0.02	0.07	-0.02
Social network usage	-0.08	-0.30	-0.08	-0.24	-0.23	1.00	0.34	0.06	0.15	0.01
Online videos	0.22	-0.31	-0.01	-0.22	-0.04	0.34	1.00	0.00	0.05	-0.08
Policy stance	0.00	0.02	0.05	0.04	0.02	0.06	0.00	1.00	0.11	0.05
Attitude Euro	0.08	0.01	0.10	0.13	0.07	0.15	0.05	0.11	1.00	0.48
Trust in inst.	-0.03	0.14	0.06	0.18	-0.02	0.01	-0.08	0.05	0.48	1.00

Source: Own calculations



Other correlations are smaller in magnitude with education, policy stance and location being statistically significant and of smaller size. On the other hand, there is a very limited association between perceptions towards euro adoption and age, job type, and amount of online videos consumed. While the correlation matrix gives an initial overview of association among variables, a more formal inference procedure is needed to establish firm causal links. We thus regress the variable measuring attitudes towards the adoption of the euro as a national currency on the set of other relevant explanatory variables (see Table 3).

**Table 3.** Results of the Multiple Regression Model

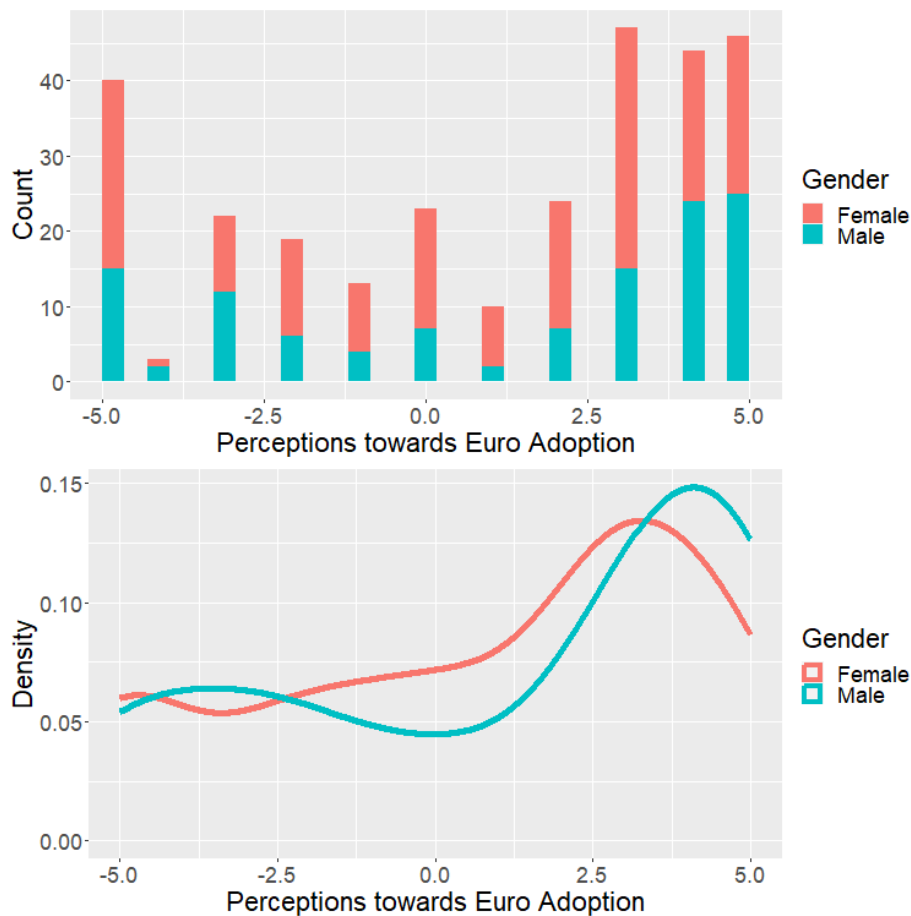
	<b>Coefficient</b>	<b>Standard Error</b>	<b>T-Statistic</b>	<b>P-value</b>
(Constant)	-2.63	1.84	-1.43	0.15
Gender	0.75	0.44	1.71	0.09*
Age	-0.05	0.03	-1.58	0.11
Location	0.11	0.32	0.33	0.74
Education	0.36	0.37	0.96	0.34
Job	0.14	0.17	0.81	0.42
Social network usage	0.59	0.24	2.44	0.02**
Online videos	-0.15	0.21	-0.71	0.48
Policy stance	0.31	0.17	1.82	0.07*
Trust in institutions	0.64	0.08	8.40	0.00***
	<b>R<sup>2</sup></b>	<b>0.321</b>	<b>Adj. R<sup>2</sup></b>	<b>0.289</b>

Source: Own calculations

Note: \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1% or below.

The overall model reaches statistical significance at levels below 1% and has a relatively good fit with  $R^2 = 0.32$  ( $Adj. R^2 = 0.29$ ). Demographic variables such as age, location, education, and occupation fail to reach statistical significance at conventional levels. This may partly be due to the somewhat limited variance in those variables, and those results need to be interpreted with care. As could be expected from previous research and the correlational structure of the data, the gender variable reaches statistical significance, albeit at the 10% level.

There seems to be a slight bias across genders, with the males being somewhat more positive towards adopting the euro. This is confirmed by looking both at the histogram of perceptions across genders, as well as in the smoothed density functions (see Figure 2). The trends are mainly driven by females giving proportionately more extremely negative responses (at -5), and being only moderately enthusiastic when they are positive. On the other hand, males give proportionately more very positive responses (at 4 and 5). The resulting distributions also show that males have less tendency to register middle-of-the-road opinions than females. The effect is of average size with a beta coefficient of 0.75, meaning that male participants have on average a 0.75 points more positive perception regarding euro adoption in the country.

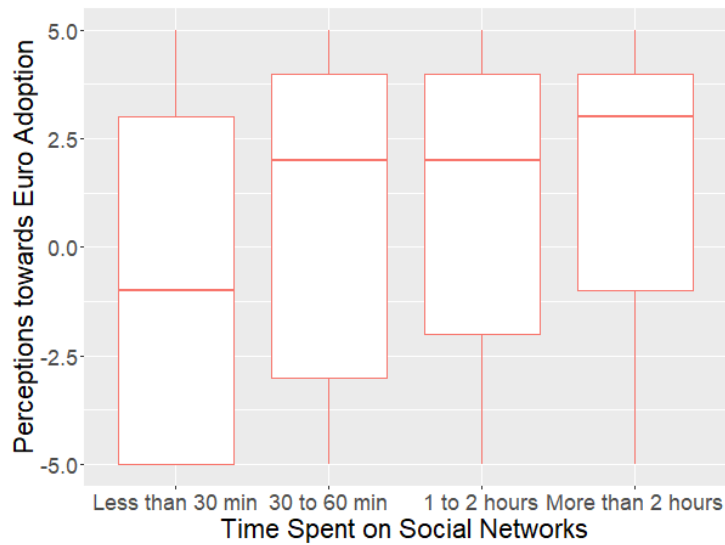


**Figure 2.** Histogram of Perceptions towards Euro Adoption

*Source:* Authors' illustration

There is a statistically and practically significant effect of the time spent on social networks on perceptions towards the euro in the sample under study. As we move from one category of usage to another (corresponding roughly to 30 minutes more), the respondents tend to get more positive on the adoption of the euro by an average of 0.59 points on the Likert scale (see also Fig. 3). This result is somewhat surprising as social networks are often associated with disinformation and conspiracy theories, but it seems that the young respondents are more influenced by their consumerist flavor and thus tend to be more favorable towards adopting the currency of countries with relatively higher socio-economic status. Further, it is the people who spend 30 minutes or less on social networks that have given the most negative attitudes ratings in the whole sample (at -5).

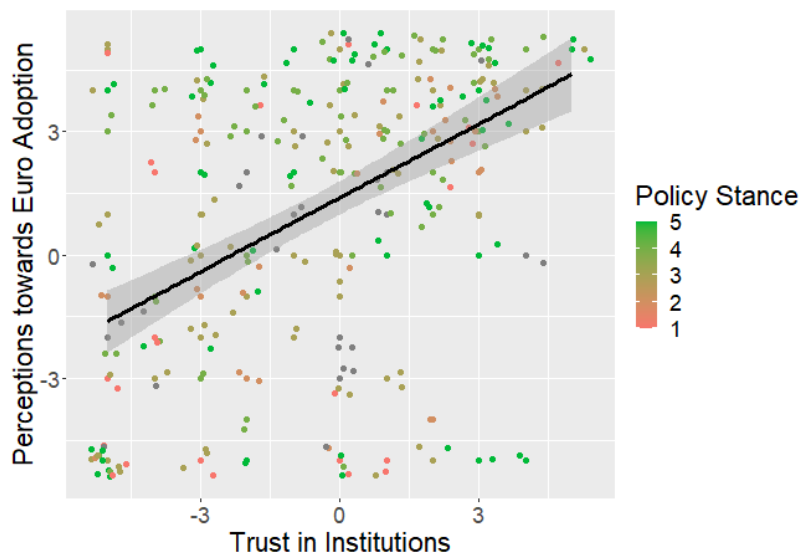
Two political attitude variables figure prominently among the drivers of the attitude towards adopting the euro. These are the political stance of the respondent and their trust in the monetary and fiscal authorities. The political stance variable reaches statistical significance at the 10% and approaches the 5% with  $p = 0.07$ .



**Figure 3.** Histogram of Perceptions towards Euro Adoption

Source: Authors' illustration

Its coefficient is of medium size and stands at 0.31, meaning that a person who rates themselves as 1 point more right-leaning will tend to be 0.31 points more positive towards adopting the euro. It is the respondents that have professed a proclivity for left-leaning policies with a focus on social issues that are most negative towards the euro as a new currency (see Figure 4).



**Figure 4.** Histogram of Perceptions towards Euro Adoption

Source: Authors' illustration

The best predictor of attitudes towards euro adoption overall seems to be trust in monetary and fiscal authorities, likely proxying for overall trust in institutions. The coefficient of trust in institutions is highly



significant at a level below 1% with a  $p < 0.005$ . Its magnitude stands at 0.64, meaning that a 1-point increase on the 11-point Likert scale on trust will increase the positive evaluation of the euro by 0.64 points. This is a robust and quantitatively important effect that remains intact under a wide range of alternative specifications of the regression model. While there are some outliers in the data such as one particularly old participant in the sample, they do not seem to significantly affect the quality of the model or the general trends revealed, as shown in Figure A (see Appendix 2).

As an additional robustness check, a restricted regression is calculated that only includes the variables that were found to be significant at least at the 10% level. Results are presented in Table 4. The variables Gender, Social network usage and Trust in institution remain statistically significant, and their coefficients retain their sign and magnitude. The policy stance variable is significant at the 10% in the full model, while in the restricted model it borders on the 10% significance but does not reach it. At any rate, its coefficient preserves its sign and magnitude. The explanatory power of the two models is also comparable.

**Table 4.** Results of the Restricted Multiple Regression Model

	<b>Coefficient</b>	<b>Standard Error</b>	<b>T-Statistic</b>	<b>P-value</b>
(Constant)	-2.33	1.06	-2.20	0.03**
Gender	0.81	0.42	1.94	0.05**
Social network usage	0.61	0.21	2.87	0.00***
Policy stance	0.27	0.17	1.54	0.12
Trust in institutions	0.61	0.07	8.16	0.00***
	<b>R<sup>2</sup></b>	<b>0.283</b>	<b>Adj. R<sup>2</sup></b>	<b>0.269</b>

Source: Own calculations

Note: \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1% or below.

The model explanatory power is largely driven by a single variable – trust in institutions. Within a simple linear regression with it as the only predictor, we register an adjusted  $R^2$  of 0.22. In a similar fashion, the amount of explained variance by the time spent on social networks is found to be around 2% (adjusted  $R^2$  of 0.02), while gender and policy each explain less than 1% of the observed variance.

The results obtained fit well with conclusions from other studies in the literature, especially with key insights from the research program of institutional economics. The data from a very specific sample – proxying the (mostly young) university population in Bulgaria – clearly shows that the most important driver for perceptions towards the euro currency is overall trust in institutions. It is an important predictor with quantitatively important magnitude – a three-point increase in the trust in institutions will lead to an almost two-point increase in positive perceptions towards the euro. This result points to the fact any information campaigns on the benefits of the euro should not focus narrowly on the costs and benefits of the currency per se, but also show how the institutional setup and workings would ensure a smooth transition towards a new currency. An increase in the trust in institutions will directly and positively affect the perceptions of the



currency they are introducing. This result is also very much in line with recent insights from Backé and Beckmann (2020, 2022).

A second set of results that shows the importance of the policy stance on euro perceptions fits neatly with Hobolt and Wratil's (2015) conclusions that part of the attitudes are driven by rational utilitarian cost-benefit analysis of the euro. It is thus hardly surprising that given the expected economic benefits of the euro, pro-market participants approve of the new currency more. This result also underscores a division in Bulgarian society – the traditional left tends to be more social, more nationalist, and less open to further integration in the European Monetary Union. It is therefore likely that more public resources and efforts will have to be expended towards informing social and demographic groups with political views on the left as they will tend to have more entrenched views.

A final point is the surprisingly positive effect of time spent on social networks like Facebook or Instagram. Despite often seeing them as hotbeds of conspiracy theories, it seems that respondents who spend more time in online networks are more positive towards euro adoption. This shows that delivering information materials through online networks can be an effective way of informing the public. Fears that the online environment can be detrimental seem to be disproved by the results at hand. Furthermore, the effects of the social network activity are very strong – in fact, it is the second most important predictor for attitudes towards the common European currency. This conclusion extends naturally the results of Angelico et al. (2022) showing the importance of social media when forming expectations of prices.

## CONCLUSIONS

Our results show cautious optimism on the part of university students in Bulgaria regarding the adoption of the euro. Trust in institutions and a pro-market policy stance are conducive to being positive about the introduction of the new currency for the sample under study. The former is clearly a point where monetary and fiscal authorities can focus their attention. Pro-social left policy attitudes are associated with more negative emotions towards the euro. Those sentiments are also important to be acknowledged and addressed as public authorities make an effort to transition from the national currency to the common European one. Such a study is a rare glimpse into drivers of popular perceptions – while surveys are rather common, the elicitation of perception drivers in parts of the Bulgarian population is a markedly new result. These insights may be used as a starting point for formulating policy and targeting communication campaigns towards different segments of the population. Furthermore, the results obtained may serve as an initial stepping stone to understanding how the student populations form their perception of matter pertaining to currency, pricings and financial expectations. These results aim to elucidate both the academic discourse as well as practical policymaking but need to be interpreted with caution given the size and composition of the sample. Further research covering other demographics, additional factors such as exposure to populist and anti-euro media content, and possibly investigating populations in other countries that are to adopt the euro can shed even more light on what



determines the dynamics of attitudes towards adopting a new currency such as the euro. A particularly interesting venue for future research would be a more detailed investigation of consumer perception drivers regarding the adoption of the euro currency with respect to different issues of concern (e.g. the “myths” of Simeonov (2022) or the topics outlined by Yotzov (2023)). Such an approach would possibly disentangle the umbrella measurement of trust in institutions into its component parts – trust in monetary ones and trust in fiscal ones. This will allow understanding of consumer attitude at a much greater level of granularity. At any rate, this paper is merely an initial step towards conceptualizing the nuanced and sophisticated ways in which economic agents approach currency reforms.

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Conceptualization, All authors; methodology, A.G. and I.A.; software, D.Sh.; validation, A.G. and I.A.; formal analysis, All authors; investigation, All authors; resources, M.Y.; data curation, L.D. and A.K.; writing—original draft preparation, D.Sh., M.Y., R.P.; writing—review and editing, G.M., H.E.; visualization, All authors; supervision, A.G., G.M., H.E.; project administration, A.G.; funding acquisition, All authors.

**All authors have read and agreed to the published version of the manuscript.**

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## Appendix 1: Survey Questions and Code Guide

Dear Participant,

You are participating in a survey on the attitudes towards the adoption of the euro as the official currency of the Republic of Bulgaria. Answer the questions honestly. In this way, your position towards the adoption of the euro will be clearly expressed. The survey is anonymous and the data from it will be used only for scientific purposes. It takes about 5-10 minutes to complete.

Thank you for your civic stance!

1. Gender (circle one):

- Male
- Female
- Other

2. Age (in years): \_\_\_\_\_ (free text)

3. Main residence for the last 5 years (circle one):

- Sofia
- Regional city
- Smaller city
- Other

4. Education (circle the highest educational degree obtained):

- Primary School
- Middle School
- High School
- Higher Education (Bachelor)
- Higher Education (Master)
- Higher Education (PhD)
- Other

5. Main occupation (circle the relevant):

- High School Student
- University Student
- Doctoral student
- Working in the public sector
- Working in the private sector
- Non-governmental organization
- Retired
- Other

6. If you are a student, at which university do you study (select one)?

- SU "St. Kliment Ohridski"
- Other (please fill in): \_\_\_\_\_ (free text)

7. If you are a student, indicate in which faculty is your major (circle all that apply to you)?

- Faculty of Economics
- Faculty of Philosophy
- Faculty of Law
- Other (please fill in): \_\_\_\_\_ (free text)



8. On average, how much time per day did you spend on social networks (Facebook, Instagram, TikTok) in the last week (circle one)?

- Less than 30 minutes
- Between 30 minutes and 1 hour
- Between 1 and 2 hours
- Over 2 hours

9. On average, how much time per day did you spend watching videos online (eg YouTube, vbox7, etc.) in the last week (circle one)?

- Less than 15 minutes
- Between 15 and 30 minutes
- Between 30 minutes and 1 hour
- Over 1 hour

10. What type of economic policies do you think should be implemented in the Republic of Bulgaria (circle one)?

- Left, with a predominantly social orientation
- More left
- Centrist
- More right-wing
- Right-wing, mainly market-oriented

11. What is your perception of the introduction of the euro as the official currency of the Republic of Bulgaria (circle one number)?

-5	-4	-3	-2	-1	0	1	2	3	4	5
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Very Negative

Neutral

Very Positive

12. How high is your trust in the Ministry of Finance and the Bulgarian National Bank (circle one number)?

-5	-4	-3	-2	-1	0	1	2	3	4	5
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Very Low

Medium

Very High

### Code Guide

Question Number	Response	Coded
1	Male	2
	Female	1
	Other	0
2	Number	Numeric
3	Sofia	3
	Regional city	2
	Smaller city	1
	Other	0
4	Primary School	1
	Middle School	2
	High School	3
	Higher Education (Bachelor)	4
	Higher Education (Master)	5
	Higher Education (PhD)	6

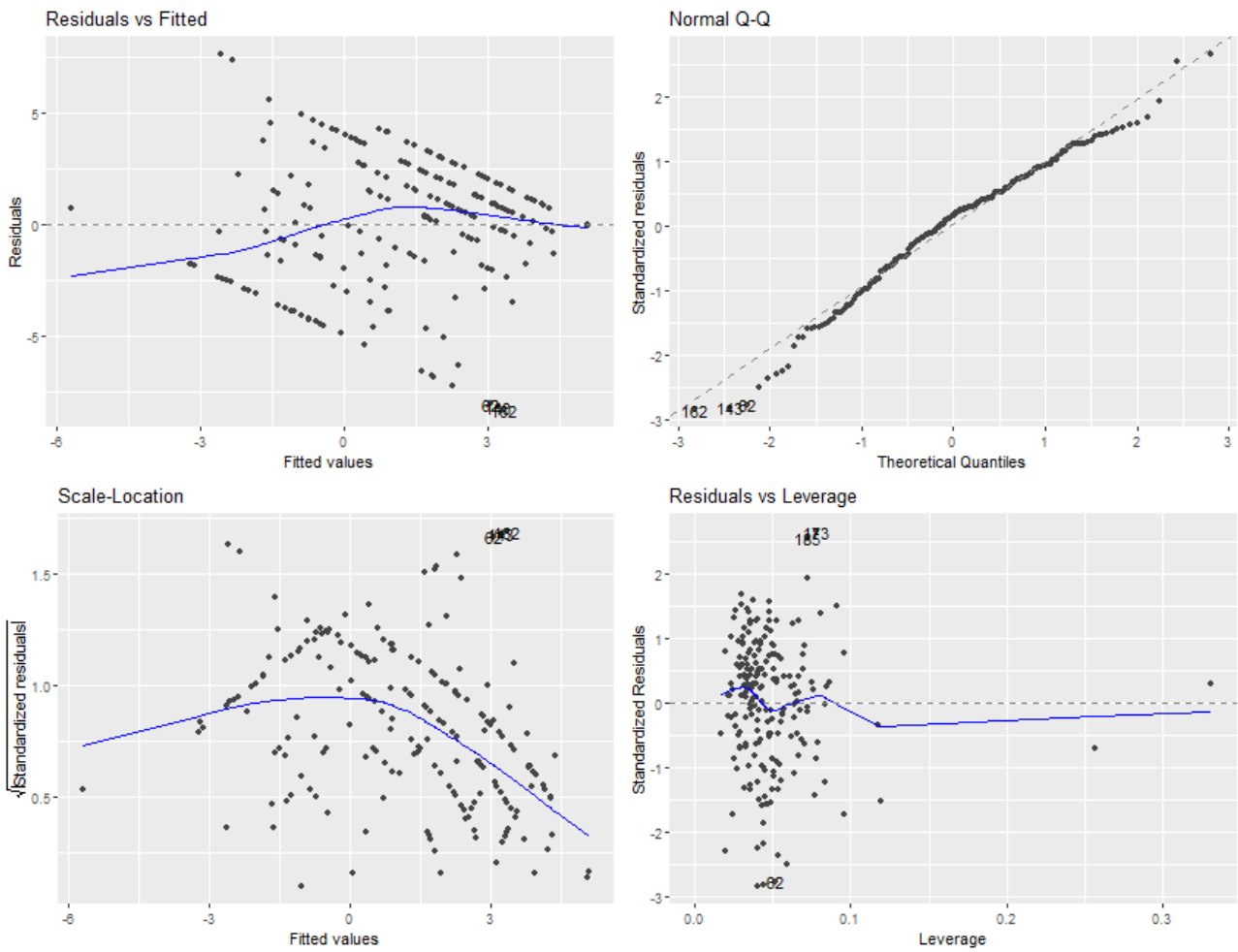


	Other	0
5	School student	1
	University Student	2
	Doctoral student	3
	Working in the public sector	4
	Working in the private sector	5
	Non-governmental organization	6
	Retired	7
	Other	0
6	SU "St. Kliment Ohridski"	1
	Other	0
7	Faculty of Economics	3
	Faculty of Philosophy	2
	Faculty of Law	1
	Other	0
8	Less than 30 minutes	1
	Between 30 minutes and 1 hour	2
	Between 1 and 2 hours	3
	Over 2 hours	4
9	Less than 15 minutes	1
	Between 15 and 30 minutes	2
	Between 30 minutes and 1 hour	3
	Over 1 hour	4
10	Left, with a predominantly social orientation	1
	More left	2
	Centrist	3
	More right-wing	4
	Right-wing, mainly market-oriented	5
11	Likert Scale from -5 to +5	Numeric
12	Likert Scale from -5 to +5	Numeric



## Appendix 2: Regression Diagnostics

**Figure A.** Regression Diagnostics Plot: Full Model



Source: Authors' calculations