



ALMA MATER STUDIORUM Università di Bologna

The socioeconomic roots of conspiracy beliefs

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WORKING PAPER

ECONOMIA CIVILE

198

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Abstract

Using the last wave of the European Social Survey we investigate factors associated with the formulation of conspiracy beliefs in 16 countries on three specific fields (politics, science, COVID-19). We find that around one third of respondents agree or strongly agree with such beliefs and that low education and self-declared financial hardships are significantly and positively correlated with them. Conspiracy believers express as expected lower trust toward parties and institutions, are less likely to vote and have stronger preferences for income redistribution.

Keywords: conspiracy beliefs, education, financial difficulties, income distribution. JEL numbers: A13, A14.

1. Introduction

Conspiracy beliefs are an established and recurring phenomenon in human history in which part of society develops a simplified narrative of the reality that helps heal the wounds of adverse events. Starting from historical episodes of tales about plague spreaders during epidemics and the identification of the Jews as responsible for the experienced unfavourable effects of the world economic and financial order, we arrive today at the ideas of the existence of small groups of powerful that control politics, science, and have spread COVID-19 to promote their own interests.

According to the EU¹ conspiracy belief is "the belief that certain events or situations are secretly manipulated behind the scenes by powerful forces with negative intent". This definition implies six common characteristics (a secret plot, the existence of a group of deliberate conspirators, some evidence supporting the theory, the attribution of related events to the conspiracy plot and not to accident, a simplistic division between good and bad people and the identification of a specific group of people (scientists, politicians, top managers, leaders of enemy countries) as scapegoat and responsible for it). Another common characteristic of conspiracy beliefs (implied by the combined and correlated features of the six items) is the sharp simplification of the reality where a negative shock hitting conspiracy believers finds clear cut identified responsible in conspirators and is not the combined outcome of chance and many concurring factors interacting in a complex system of causes and effects. In this respect conspiracy believers reasoning is the opposite of scientists. If attribution of causal links between two phenomena in science requires rigorous ex ante conditions in controlled randomized experiments and is quite difficult to verify ex post out of experimental conditions, causality for conspiracy believers is straightforward and immediately links the adverse event with the presumed action of conspirators.

Beliefs in conspiracy theories have been omnipresent throughout the history and particularly flourishing in times of societal crises or major shocking events. For example, different social

¹ <u>https://commission.europa.eu/strategy-and-policy/coronavirus-response/fighting-</u> disinformation/identifying-conspiracy-theories_en

studies focus on causes and consequences of conspiracism associated with the spread in Africa of Zika and HIV viruses (Klofstad et al., 2019), the assassination of President John F. Kennedy (McCauley and Jacques, 1979), the death of Diana, Princess of Wales (Douglas and Sutton, 2008), the 9/11 terrorist attacks (Laine and Parakkal, 2017; Stempel et al., 2007), and the COVID-19 pandemic (Kergall and Guillon, 2022; Pummerer et al., 2021).

The existing literature shows that conspiracy beliefs have several negative social consequences. First, they can stimulate hatred and violence toward the scapegoat group judged responsible for the conspiracy plot. Second, they disseminate mistrust toward institutions, thus significantly reducing bridging social capital. Third, they spread mistrust in scientific information. From this last point of view, in recent examples of COVID-19 and global warming, the value of scientific information is minimised, as the opinion or anecdote related to a single observation can have the same value of hundreds of scientific papers funding their conclusions on millions of observations. Again, the justification for it is another simplification where the variety of scientific sources and financers of research activities is not acknowledged and all publications are de facto are regarded as controlled by conspirators.

Our research provides an original contribution to the extensive literature that studies all the possible roots of conspiracy beliefs. Previous research has explored psychological factors that could potentially drive beliefs in conspiracy theories. These include people dispositional and psychological characteristics, such as the need to find patterns and meaning in the environment (Whitson and Galinsky, 2008), feeling of randomness (van Prooijen, Douglas and de Inocencio, 2018), anxiety (Grzesiak-Feldman, 2013), feeling of being powerless and high level of perceived uncertainty (van Prooijen and Jostmann, 2013; Abalakina-Paap et al., 1999), lack of control (Landau et al., 2015). Following Kay et al. (2013), situations that jeopardize people instrumental control, such as encountering adverse events, can lead them to explore alternative avenues of control, which may manifest through the endorsement of specific beliefs or worldviews in order to reestablishing a sense of order. Conspiracy also proved stronger when events are large-scale and especially when they lack a clear official explanation (Leman and Cinnirella, 2013). Prior studies have also considered social and demographic factors that influence conspiracy beliefs. People belonging to low-status social groups tend to embrace conspiracy theories more compared to those from higher-status groups (Crocker et al, 1999; Simmons and Parsons, 2005). Situational factors, such as being on the losing end of a power asymmetry, could lead to increased belief in conspiracy theories. Uscinski and Parent (2014) argue in this respect that conspiracy theories are for "losers" and tend to accuse those in power and their coalitions. Therefore, it is crucial to take into account the political, societal, and historical circumstances that make conspiracy theories appear credible.

With our research, our objective is to provide an original contribution to the literature focusing on the socioeconomic factors associated with conspiracy beliefs. Some studies have sought to outline the sociodemographic characteristics of individuals likely to embrace conspiracy theories. Among them, in the United States, Uscinski and Parent (2014) identified a connection between conspiracy and low education as well as lower income. Among recent contributions, drawing from historical survey data, and testing for the links between demographic variables and belief in conspiracies, Freeman and Bentall (2017) find that conspiracy believers are more likely to be male, unmarried, less educated, with lower income, unemployed, belong to ethnic minority groups, and have weaker social networks. As Casara et. al. (2022) show that economic inequality and conspiracy beliefs go hand in hand: economic inequality can cause insecurity and anxiety, which lead to conspiratorial thinking, as a way to control these emotions. Other studies have focused on the relationship between conspiracy beliefs and low levels of education (Douglas et al., 2016; van Prooijen, 2016). Despite these valuable contributions, cross-country evidence and causality tests on the nexus between socioeconomic drivers and conspiracy are still scarce or missing.

Our paper aims to contribute originally to this literature by providing a cross-country analysis, focusing on a specific economic factor represented by self-assessed financial difficulties, and establishing a causal relationship between financial stress and low levels of education and the belief in conspiracy theories, thus filling an existing gap in the economic literature regarding the socioeconomic drivers of conspiracy theories.

Our research hypothesis is that conspiracy beliefs are a simplified response to a complex problem directly hitting the wellbeing of those formulating such beliefs. The focus of our paper is in particular on financial difficulties under the assumption that a situation of financial stress is critical, painful and is lived by the respondent as a sort of personal failure. Conspiracy beliefs are therefore the elaboration of a narrative that attaches the responsibility for the poor respondent conditions to an external force (conspirators), thereby giving a sense of control and agency, alleviating responsibility and pain, and reducing the risk of loss of self-esteem. We also argue that the probability of believing to the conspiracy construction is negatively correlated with education levels since education gives the individual instruments to understand and elaborate upon complexity and reduces the possibility of believing in simplified versions of the reality.

Our empirical findings provide evidence that does not reject our null hypothesis. Low education and self-declared financial difficulties are factors that significantly affect the probability of being conspiracy believers in the three different domains considered in the paper (political, scientific, and COVID-19 conspiracy). In order to verify causality of the nexus among low education, financial difficulties and conspiracy beliefs we instrument the combination of the first two variables with the highest education degree of the respondent mother and find (with the help of a falsification test) that our instrument is valid and relevant and our findings confirmed in IV estimates. We also find that conspiracy believers have lower interpersonal trust and lower trust on institutions and are significantly more in favour of government policies for income redistribution, consistent with what assumed by the literature. We conclude by arguing that conspiracy beliefs can be contrasted with a short and long term strategy. The first is an intervention to tackle financial difficulties of the low income class by fostering a more progressive distribution of income. The second is higher investment in education.

2. Research hypothesis

Based on the above mentioned definition conspiracy beliefs are the credence that a small group of powerful individuals has a plot and strong control over reality so to influence it in directions that are unfavourable to conspiracy believers.

Our research hypothesis is that conspiracy beliefs have clear cut socioeconomic roots. The starting point is that formulations of conspiracy beliefs have a psychological function as they comply with the goal of satisfying a particular kind of preferences of conspiracy believers. More specifically, conspiracy believers find pleasure to develop a simplified version of the reality where a small, and well identified group of powerful individuals is responsible for the bad state of affairs suffered. In this respect they satisfy individual preference for control of the reality, and provide an external justification for a personal failure suffered that has the advantage of reducing personal responsibility and the related potential loss of self-esteem.

With regard to the socioeconomic roots of conspiracy beliefs, we argue that poor financial outcomes lead those suffering them to develop a narrative which can give sense and justify their outcome reducing their sense of responsibility and therefore their sorrow for the situation

they are living. In this perspective, low education is a necessary condition for the formulation of conspiracy beliefs because the mirage of conspiracy can deceive individuals only when their education is poor and their vision of reality abstracts from its complexity. This is because, as far as education grows, familiarity with scientific method should also grow and, with it, a more thorough investigation of causes of observed phenomena that typically depend on many concurring factors and cannot be explained by the action of few powerful actors. Furthermore, education in general and to the scientific method in particular, helps to see the difference between results of a scientific research based on thousand observations and causality links identified with rigorous method, on the one side, and an ad hoc interpretation of the reality not based on empirical data (on the other side). In addition, people with low education are more likely to believe that scientific production is not the outcome of a complex refereeing process in many different journals in a world populated by several different schools of thought but, on the contrary, believe that there is an almost unique source of power and funding that manipulates data and outcomes and can control publications and scientific careers.

Another typical premise of conspiracy beliefs is the lack of trust in political and scientific authorities. This attitude is again in our hypothesis directly related to the poor economic performance. If financial situation is poor individuals are less likely to be confident on authorities who, they tend to believe, act only on their interest and not on the interest of people. To sum up, the experience of financial problems and poor education concur in different ways to produce the essential components of the conspiracy belief that make its formulation more likely to occur (lack of understanding of the process of scientific production and selection, desire to create an ad hoc version of the reality that justifis one's own difficulties, propensity to believe in a grossly simplified version of the complexity of reality to increase the perceived control of it)

Ho: individuals with experience of financial difficulties and low education are more likely to formulate conspiracy plots.

3. The database and descriptive findings

Our three measures of conspiracy beliefs are drawn from the following questions available in wave 10 of the European Social Survey administered in the year 2020:

- *i)* A small secret group of people is responsible for making all major decisions in world politics (political conspiracy)
- *ii)* Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public (scientific conspiracy)
- *COVID-19 is the result of deliberate and concealed efforts of some government or organisation* (COVID-19 conspiracy)

All three questions must be answered by choosing among the following modalities: *agree strongly, agree, neither agree nor disagree, disagree, disagree strongly*. We consider as responses in favour of the credence of conspiracy beliefs the *agree strongly* and *agree* answers. The largest share of conspiracy believers is in the answers to question i) since more than one third of respondents (with 9.6 percent strongly agree and 25 percent agree) believe in political conspiracy. The share falls slightly with question two in scientists (7 percent strongly agree and 22 percent agree) and on COVID-19 (9 percent strongly agree and 19 percent agree)

(Figure 1, panels A-C). The average ESS sample of conspiracy believers hides large crosscountry variability, the lowest share being in Nordic countries (with Finland and Norway below 20 percent), the highest in Eastern European countries and the Balkans (with Bulgaria and North Macedonia above 70 percnt). These large country differences can be intuitively attributed to differences in education, social capital and quality of institutions. In the estimates that follow we will capture these factors with both individual data and country fixed effects. (Figure 2, panels A-C)

Descriptive statistics of the sample are presented in Table 2 (the variable legend in Table 1) and show that the sample is reasonably gender balanced (46 percent males). 4.3 percent of respondents are unemployed, 50% are married or co-habiting. Based on our research hypothesis our two main variables of interest are education and declaration of financial problems. Looking at the distribution of these two variables, we find that 22% of respondents have a tertiary education degree, while 6% less than lower education and 20% less than upper secondary education (Figure 1, panels D-E). In the question about financial problems respondents are asked how they feel about household's income nowadays. The four possible answers are living comfortably on present income (28.6 percent), coping on present income (46.45 percent), difficult to cope with on present income (18.7 percent), very difficult on present income (6.23 percent).

In order to see from a descriptive point of view whether declaration of financial problems affects the probability of being conspiracy believers we plot distributions for individuals without financial problems (living comfortably with present income) against distributions for individuals who declare it is difficult or very difficult to live with present income. The two distributions do not overlap, in large part showing a significantly higher inclination toward conspiracy for individuals finding it difficult to live with present income (Figure 3, panels A-C).

To check how education and financial problems affect the probability of being conspiracy believers we plot distributions of the conspiracy answers for individuals with high and low education, where we classify as high education respondents with a tertiary degree, and low education respondents with less than upper secondary education (Figure 3, panels D-F). Distributions of answers to the three conspiracy variables are markedly different for low and high education individuals, and for those declaring no income difficulties vis-à-vis saying that is difficult or very difficult to live with present income. More specifically, 35 percent more of those without financial problems disagree strongly on political and scientific conspiracies, while 55 percent more among them disagree strongly on the COVID-19 conspiracy versus their complementary groups (Figure 3, panels A-C). The share of those disagreeing strongly about political and scientific conspiracies are around 25 percent more among respondents with tertiary education versus those with less than secondary, and around 50 percent more among those disagreeing strongly about the COVID-19 conspiracy (Figure 3, panels D-F).

In all the three distributions comparisons for high/low education individuals and for respondents with/without financial problems the null hypothesis of no difference in distributions is rejected by Epps-Singleton tests.

4. Econometric findings

In order to test whether the observed correlations are significant when controlling for other concurring factors we estimate three versions of the following ordered probit model

$$\begin{aligned} Conspiracy_{i} &= \alpha_{0} + \sum_{b} \beta_{b} D_Education_{b,i} + \sum_{c} \gamma_{c} D_Income_problems_{c,i} + \alpha_{1} Male_{i} \\ &+ \sum_{d} \delta_{d} D_Ageclass_{d,i} + \sum_{f} \eta_{f} D_Income_Decile_{f,i} + \alpha_{2} NHMembers_{i} \\ &+ \sum_{d} \theta_{g} D_Employment_status_{g,i} + \sum_{h} \lambda_{h} D_Marital_status_{h,i} \\ &+ \sum_{p}^{g} \xi_{p} D_Country_{p,i} + u_{i} \end{aligned}$$

where our dependent variable (*Conspiracy_Belief*) is, in turn, the answer to one of the three (political, scientific, COVID-19) conspiracy questions. The dependent variable is discrete and qualitative, taking value 5 in case of strong agreement with the specific conspiracy beliefs, 4 in case of agreement, and up to 1 in case of strong disagreement.

Our two main variables of interest are declaration about living comfortably/not comfortably with present income (from living comfortably to having strong difficulties in living with present income), and ISCED highest education dummies attained by the respondent (from less than lower secondary education up to upper tertiary). In both cases we use dummies for each specific item in the corresponding responses. Other controls include a gender dummy, age classes, income decile dummies, number of household members and dummies for work and marital status.

Regression findings show that, for each of the three different regressions where dependent variables are in turn political, scientific and COVID-19 conspiracy beliefs, respondents who find very difficult to cope with present income are significantly more likely to express positions in favour of conspiracy beliefs vis-à-vis the benchmark of respondents declaring to live comfortably with present income (Table 3). Results on the education degree dummies do not reject as well our null hypothesis. Respondents with lower education degree are more likely to be conspiracy believers vis-à-vis the omitted benchmark of those with higher tertiary education. Among other controls, placement in high income deciles reduces the likelihood of conspiracy beliefs in the COVID-19 conspiracy estimate (more specifically, the two highest income deciles versus the lowest income decile omitted benchmark), while much less so in the scientific and political conspiracy believers) in two out of three cases (not for political beliefs) and a relational failure effect (divorced are more likely to be conspiracy believers vis-à-vis the married omitted benchmark).

In order to test more specifically the probability of becoming conspiracy believers we create a variable taking value one if the response to the given (political, scientific or COVID-19) conspiracy question is *strongly agree* or *agree* and zero if it is *disagree* or *strongly disagree*, dropping from the sample individuals saying that they *neither agree nor disagree*. We take this decision for two reasons. First, we consider the latter to be not easily classifiable among the two opposite groups of conspiracy believers and not believers. Second, we believe that the choice of not taking a position can conceal a less careful reflexion on the issue at stake.

A qualifying difference in the newly estimated specifications is that the dependent variable is no longer a discrete qualitative variable but a (0/1) variable taking the value one for conspiracy believers and zero otherwise. The specification is therefore estimated with probit and the advantage is that we can calculate a more clear quantitative effect of the impact of each significant driver on the likelihood of being a conspiracy believer.

Our findings on the significance of education and declaration of financial problems are confirmed. In terms of magnitude we find that being in the highest education level (upper tertiary) reduces by around 15 percent the likelihood of becoming a COVID-19 conspiracy

believer versus the lowest education level (less than lower secondary education), while declaring to have strong difficulties in coping on income increases it by 10 percent versus those declaring to live comfortably with present income. The same magnitudes are 22 and 9 percent in case of political conspiracy beliefs, and 12 and 10 percent in case of scientific conspiracy beliefs.

4.1 Instrumental variable approach

In order to verify whether the observed correlation among education, self-revealed financial problems and conspiracy beliefs hides a direct causality link we simplify our estimate by creating a dummy variable taking value one for individuals declaring financial problems (ie. saying it is difficult or very difficult to cope on income) and having less than lower secondary education. Our instrument for this variable is the highest degree of the respondent's mother. We assume that the instrument has the two required characteristics. First, it is relevant since we expect in the first stage that mother education is significant and positive in the probit regression where the dependent variable is the newly created variable combining self-declared financial problems and low education level. Second, it is valid since we believe that the instrument does not affect per se the probability of developing conspiracy beliefs.

First stage estimate confirms the relevance of the instrument. The second stage estimate shows that the instrumented variable is significant and with the expected sign. To test instrument validity, we develop a falsification test. We restrict the estimation sample of our benchmark specification to individuals without self-declared financial problems (saying that they live comfortably or coping on present income) and high (tertiary) education level and replace the instrumented variable with the instrument. We find that mother education is not significant in each of the three (political, scientific, COVID-19) conspiracy belief estimates. We therefore conclude that mother education affects conspiracy beliefs only through the instrumented variable (low education and self-declared financial problems) and is therefore a valid instrument.

5. Discussion and robustness checks

Given the correlation between income decile placement and self-declared financial problems we re-estimate the model without income decile dummies and see that magnitude and significance of self-declared financial difficulties is enhanced (results are omitted and available upon request). However, when we remove self-declared financial difficulties from our benchmark specification the significance of income decile dummies does not grow. We find therefore confirmation that the economic variable that matters more is self-declared financial difficulties. We also check the overlap between the two variables by looking at income decile placement of those declaring it is very difficult for them to live on present income. The overlap is not complete as, even though 39 percent of them are, as expected, in the first (lowest) income deciles, around 24 percent are above the third decile (of which 9 percent in the fourth decile and 7 percent in the fifth decile). We believe that there are two main interpretations of the lack of full overlap. First, financial difficulties depend not just on income but on the differences between household revenues and expenditures where stocks (such as net wealth and household debt) play a fundamental role. Second, part of the difference can also depend on a difference in economic aspirations and consumption lifestyles. It is in any case reasonable that conspiracy beliefs are associated with (and triggered by in case of causality) the self-declared perception of income inadequacy more than from the position in the income distribution per se.

We also wonder whether low education is a necessary condition for the formulation of conspiracy beliefs in the presence of financial difficulties. We therefore estimate the benchmark specification for the subsample of respondents with tertiary education and find that self-declaration of income difficulties is not significant in the scientific conspiracy estimate, while it remains so in the COVID-19 estimate.

A well-known problem with conspiracy beliefs is that they weaken trust in institutions and political participation. This is confirmed in our data since conspiracy believers (those providing the strongly agree or agree answer) trust significantly less on parliament and political parties than those who do not believe in conspiracy (those providing the strongly disagree or disagree answer) (Figure 4, panels A-C).

Last but not least, if our research hypothesis postulating an economic root to conspiracy beliefs is not rejected a straightforward consequence is that income redistribution is a policy direction to solve the problem, together with investment in education. Our analysis on redistribution preferences of conspiracy believers versus non-believers seems to support this hypothesis since the former are significantly more in favor of it (Figure 4, panels D-F). If a causality nexus from self-declared financial problems (mainly problems of individual in the lowest income deciles) and conspiracy beliefs exists, redistributive policies bringing the poorest into higher income deciles (or in any case raising their income) can contribute to solve the problem.

6. Conclusions

Conspiracy beliefs have a tragic historical tradition since in different periods the identification of a simplified interpretation of the reality and of a scapegoat group has been the shortcut leading to violence and further negative events. Well known historical examples are those of plague spreaders or, in many historical periods, the prosecution of the Jews.

Conspiracy beliefs are having a strong revival in these years, as the difficult times we live in (the COVID-19 epidemics, the increasing inequality within the country, coupled with widespread functional illiteracy, and the neglect of scientific authority in horizontal "one-toone" social media communication), are becoming fertile ground for the dissemination of these beliefs.

Our paper is the first to our knowledge to investigate socioeconomic drivers of conspiracy beliefs in a cross-country multivariate econometric perspective. Our research hypothesis is that conspiracy beliefs are a self-created narrative that weakens the sense of responsibility and guilt for adverse events that hit the individual, allowing a false sense of agency and control. Two necessary conditions to formulate such narrative are therefore the presence of an economic failure (self-declared financial difficulties) and a low level of education that makes it possible for the individual to formulate and to believe in such a simplified version of the reality. Our empirical findings do no reject the hypothesis since education and financial problems are significantly correlated with the three types of reported (political, economic and COVID-19 related) conspiracy beliefs. We perform robustness checks and use instrumental variables showing that our results are robust and are likely to identify a causality nexus.

If the estimated nexus hides a direct causality link (as our IV estimates seem to show) the straightforward policy implication is that conspiracy beliefs (and their negative social consequences of violence and mistrust on institutions) can be tackled with a mix of short term and long term policy measure. The short term measure is a direct intervention to reduce financial difficulties of low income individuals, a measure that can also have a positive effect on income distribution as advocated by the same conspiracy believers. The second (long term

measure) is more investment in education (and lifelong learning education) that can reduce in potential conspiracy believers the temptation of validating simplified interpretations of the reality by understanding and accepting its higher complexity.

A limit of our analysis is its cross-sectional structure due to absence of the conspiracy question in the previous ESS waves. It would be interesting in future research to see whether changes in income inequality can affect the propensity to formulate conspiracy beliefs. As well, a more direct test of the impact on conspiracy of inequality measures could tell us whether, beyond the experience of financial problems, the higher propensity of conspiracy believers for income redistribution hides a significant impact of local inequality on the propensity to formulate such beliefs.

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Figure 1 Distribution of the three (political, scientific, COVID-19) conspiracy variables, education and self-declared financial problems



Figure2 Conspiracy beliefs - country breakdown



Legend: average share of individuals that strongly agree or agree to the following propositions: i) a small secret group of people is responsible for making all major decisions in world politics (panel A); ii) groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public (panel B); iii) COVID-19 is the result of deliberate and concealed efforts of some government or organisation (panel C)

Table 1. Variable legend

Political conspiracy	A small secret group of people is responsible for making all major decisions in world politics (1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree)
Scientific conspiracy	Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public. (1=strongly agree; 2= agree; 3=

	neither agree nor disagree; 4= disagree; 5= strongly disagree)
Covid-19 conspiracy	COVID-19 is the result of deliberate and concealed efforts of some government or organisation. (1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree)
Feeling about income	Feeling about household income nowadays (1= living comfortably with present income; 2= coping on present income; 3= difficult on present income; 4= very difficult on present income)
ISCED education dummies	ES-ISCED I, less than lower secondary, ES- ISCED II, lower secondary, ES-ISCED IIIb, lower tier upper, ES-ISCED IIIa, upper tier upper secondary; ES-ISCED IV, advanced vocational, ES-ISCED V1, lower tertiary education, ES-ISCED V2, higher tertiary education.
Male	(0/1) dummy taking value one if the respondent is male.
Age	Respondent age
Newspapers reading	Newspapers reading, total time on average weekday.
Years of Education	Years of full-time education completed.
Mother's education	Mother's highest level of education (less than lower secondary, lower secondary, upper secondary vocational, upper secondary general, advanced vocational, lower tertiary education, higher tertiary education).
Income class	Placement of respondent household total net income in one of the income deciles of the country (1=lowest, 10=highest)
Household members	Number of household members
Marital status dummies	(0/1) dummies picking up the following marital status conditions: married, civil union, separated, divorced, widowed, never married
Employment status dummies	(0/1) dummies picking up the following employment status conditions: student, unemployed, inactive, paid worker, houseworker, disabled.

Tab 2 Descriptive statistics

Variable	Obs	Mean	St. dev	Min	Max
	27.915	311.535	122.227	1	5

Small secret group of people responsible for all decisions

Groups of scientists manipulate evidence	28.266	3.24	1.1654	1	5
COVID-19 is the result of efforts of	27 843	3 24997	1 229	1	5
governments	27.043	3.24337	1.225	-	5
Mother education degree	29.061	2.926	1.767	1	7
Male	33.351	0.463	0.499	0	1
Income					
1st decile	26.003	0.074	0.262	0	1
2nd decile	26.003	0.105	0.307	0	1
3rd decile	26.003	0.112	0.316	0	1
4th decile	26.003	0.119	0.324	0	1
5th decile	26.003	0.120	0.325	0	1
6th decile	26.003	0.109	0.311	0	1
7th decile	26.003	0.107	0.309	0	1
8th decile	26.003	0.098	0.298	0	1
9th decile	26.003	0.079	0.270	0	1
10th decile	26.003	0.076	0.266	0	1
Household members	33.212	2.550	1.332	1	13
ES-ISCED Education					
Lower secondary	33.351	0.063	0.243	0	1
Lower tier secondary	33.351	0.146	0.353	0	1
Upper tie secondary	33.351	0.134	0.431	0	1
Advanced vocational	33.351	0.300	0.458	0	1
Lower tertiary	33351	0.094	0.291	0	1
Highest tertiary	33.351	0.122	0.328	0	1
Age class					
Age below 20	33.351	0.042	0.202	0	1
21-30 age class	33.351	0.114	0.318	0	1
31-40 age class	33.351	0.142	0.349	0	1
41-50 age class	33.351	0.179	0.383	0	1
51-60 age class	33.351	0.172	0.377	0	1
61-70 age class	33.351	0.124	0.329	0	1
71-80 age class	33.351	0.048	0.214	0	1
81-90 age class	33.351	0.003	0.611	0	1
Trust in the government	23.766	44709	2.704	0	10
Trust in political parties	32.021	3.6222	2.464	0	10
Marital status					
Married	33.351	0.503	0.500	0	1
Separated	33.351	0.003	0.054	0	1
Divorced	33.351	0.021	0.144	0	1
Widowed	33.351	0.085	0.279	0	1
Never Married	33.351	0.093	0.291	0	1

Left-right scale

1	28.445	0.027	0.163	0	1
2	28.445	0.055	0.229	0	1
3	28.445	0.087	0.281	0	1
4	28.445	0.082	0.285	0	1
5	28.445	0.323	0.467	0	1
6	28.445	0.094	0.292	0	1
7	28.445	0.107	0.310	0	1
8	28.445	0.0911	0.288	0	1
9	28.445	0.030	0.170	0	1
10	28.445	0.055	0.228	0	1
Employment status					
Retired	353.933	0.264	0.441	0	1
Unemployed, in search	33.351	0.043	0.202	0	1
Unemployed, not in search	33.351	0.025	0.156	0	1
Health status: self-assesed					
Good	33.309	0.414	0.492	0	1
Fair	33.309	0.253	0.434	0	1
Poor	33.309	0.064	0.245	0	1
Very Poor	33.309	0.010	0.102	0	1
Countries					
Bulgaria	33.351	0.0814	0.273	0	1
Switzerland	33.351	0.0456	0.208	0	1
Czech Republic	32.351	0.074	0.0262	0	1
Estonia	33.351	0.046	0.209	0	1
Finland	33.351	0.047	0.212	0	1
France	33.351	.059	0.236	0	1
Greece	33.351	0.083	0.277	0	1
Croatia	33.351	0.047	0.213	0	1
Hungary	33.351	0.055	0.228	0	1
Israel	33.351	0.027	0.162	0	1
Italy	33.351	0.078	0.268	0	1
Latvia	33.351	0.049	0.217	0	1
North Macedonia	33.351	0.038	0.191	0	1
Netherlands	33.351	0.042	0.202	0	1
Norway	33.351	0.044	0.205	0	1
Portugal	33.351	0.0423	0.201	0	1
Slovenia	33.351	0.055	0.228	0	1
Slovakia	33.351	0.037	0.190	0	1

Figure 2 Conspiracy belief distribution for high and low education individuals and for individuals with/without financial difficulties



Figure legend: Financial problem group: individuals declaring is difficult or very difficult to live with present income. No financial problem group: individuals declaring to live comfortably with income. Horizontal axis: agreement on political conspiracy 1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree.

Green areas: distribution of political conspiracy beliefs for financial problem group, while not for no financial problem group. Brown areas: distribution of life satisfaction for both groups. Pink areas: distribution of political conspiracy beliefs for no financial problem group, while not for financial problem group.

Epps-Singleton Two-Sample Empirical Characteristic Function test 914.7 (0.000)





Figure legend: Financial problem group: individuals declaring is difficult or very difficult to live with present income. No





Figure legend: Financial problem group: individuals declaring is difficult or very difficult to live with present income. No financial problem group: individuals declaring to live comfortably with income. Horizontal axis: agreement on scientific conspiracy 1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree.

Green areas: distribution of political conspiracy beliefs for financial problem group, while not for no financial problem group. Brown areas: distribution of life satisfaction for both groups. Pink areas: distribution of political conspiracy beliefs for no financial problem group, while not for financial problem group. Epps-Singleton Two-Sample Empirical Characteristic Function test 961.62 (0.000)



Figure legend: high education group: individuals with tertiary degree. Low education group: individuals without lower secondary degree.



Table 3 Econometric findings on socio-economic determinants of conspiracy beliefs

	(1)	(2)	(3)
VARIABLES	Political conspiracy	Scientific conspiracy	COVID-19 conspiracy
Coping on present income	-0.0786*	-0.0966**	-0.117***
	(0.0432)	(0.0409)	(0.0420)
Difficult to live on present income	-0.133**	-0.132*	-0.201**
·	(0.0664)	(0.0744)	(0.0802)
Very difficult to live on present income	-0.211**	-0.249**	-0.228**
	(0.0897)	(0.114)	(0.0970)
ES-ISCED Education			
Less than lower secondary education	-0.303***	-0.462***	-0.433***
	(0.105)	(0.101)	(0.0953)
Lower secondary education	-0.282***	-0.469***	-0.444***
	(0.0563)	(0.0776)	(0.0758)
Lower tier secondary education	-0.249***	-0.424***	-0.475***
	(0.0663)	(0.0808)	(0.0764)
Upper tier secondary education	-0.235***	-0.350***	-0.304***
	(0.0485)	(0.0594)	(0.0538)
Advanced vocational education	-0.280***	-0.379***	-0.386***
	(0.0440)	(0.0450)	(0.0505)
Lower tertiary education	-0.127***	-0.171***	-0.126***
	(0.0349)	(0.0486)	(0.0453)
Male	-0.0604***	-0.0323	-0.0621***
	(0.0172)	(0.0215)	(0.0192)
Age class			
Age below 20	0.106	0.146**	0.0817
	(0.0731)	(0.0626)	(0.0602)
21-30 age class	0.0193	0.0519*	0.0195
	(0.0404)	(0.0301)	(0.0256)
31-40 age class	-0.00837	-0.00181	-0.0323
	(0.0264)	(0.0239)	(0.0219)
41-50 age class	-0.0341	-0.0160	0.0202
	(0.0269)	(0.0350)	(0.0323)
51-60 age class	0.00604	-0.0308	0.0659**
	(0.0300)	(0.0278)	(0.0262)
61-70 age class	-0.00860	-0.0213	0.146***
	(0.0353)	(0.0489)	(0.0353)
71-80 age class	-0.00418	-0.0331	0.202***
	(0.0662)	(0.0771)	(0.0563)
81-90 age class	-0.103	-0.0838	0.0754
	(0.130)	(0.0991)	(0.146)

In education	0.153***	0.195***	0.220***
	(0.0449)	(0.0354)	(0.0411)
Unemployed	-0.0617	-0.0157	-0.0883*
	(0.0488)	(0.0482)	(0.0532)
Inactive	-0.0979	-0.118**	-0.0900
	(0.0629)	(0.0584)	(0.0637)
Retired	0.0191	0.0561	0.0333
	(0.0424)	(0.0342)	(0.0353)
Income			
2nd decile	0.0284	-0.0393	0.0382
	(0.0523)	(0.0590)	(0.0587)
3rd decile	-0.0339	-0.0144	0.0353
	(0.0515)	(0.0516)	(0.0635)
4th decile	-0.0415	-0.00750	0.0445
	(0.0747)	(0.0756)	(0.0824)
5th decile	-0.0158	0.00285	0.0565
	(0.0753)	(0.0815)	(0.0892)
6th decile	0.0125	0.0436	0.116
	(0.0664)	(0.0837)	(0.0767)
7th decile	0.0212	0.0483	0.137*
	(0.0740)	(0.0914)	(0.0770)
8th decile	0.0968	0.135*	0.159**
	(0.0684)	(0.0809)	(0.0765)
9th decile	0.104	0.154*	0.195**
	(0.0911)	(0.0900)	(0.0840)
10th decile	0.188**	0.240**	0.310***
	(0.0837)	(0.107)	(0.0955)
N. of household members	-0.0120	-0.00655	-0.0307***
	(0.0104)	(0.00803)	(0.00879)
Marital Status			
Civil Union	-0.0942	-0.167**	-0.0985
	(0.0728)	(0.0784)	(0.102)
Separated	-0.0263	-0.0115	-0.0865**
	(0.0615)	(0.0737)	(0.0362)
Divorced	-0.0975***	-0.0877**	-0.105***
	(0.0376)	(0.0392)	(0.0296)
Widowed	0.00303	0.0201	-0.0451
	(0.0321)	(0.0307)	(0.0308)
Never married	-0.0311	-0.00138	-0.0236
	(0.0332)	(0.0320)	(0.0309)
Health status: self-assessed			
Self-assessed health: good	-0.0876***	-0.0667**	-0.0521
	(0.0281)	(0.0329)	(0.0388)

Self-assessed health: fair	-0.0946**	-0.0832**	-0.110***
	(0.0436)	(0.0387)	(0.0334)
Self-assessed health: poor	-0.0744	-0.0523	-0.0858
	(0.0620)	(0.0490)	(0.0591)
Self-assessed health: very poor	-0.0209	-0.136**	-0.0704
	(0.0657)	(0.0674)	(0.102)
Left-right scale			
1	0.158**	0.115	0.128*
	(0.0779)	(0.0894)	(0.0683)
2	0.101	0.166**	0.192***
	(0.0720)	(0.0729)	(0.0554)
3	0.0996*	0.113**	0.166***
	(0.0576)	(0.0502)	(0.0352)
4	0.0373	0.0519	0.0681*
	(0.0530)	(0.0487)	(0.0366)
5	-0.0248	-0.0625	-0.0725
	(0.0674)	(0.0774)	(0.0617)
6	0.0114	0.0230	0.0117
	(0.0635)	(0.0576)	(0.0521)
7	-0.00935	0.0297	-0.0199
	(0.0539)	(0.0625)	(0.0531)
8	0.00163	0.00439	-0.0355
	(0.0644)	(0.0785)	(0.0808)
9	0.0330	-0.00496	0.00898
	(0.0772)	(0.0844)	(0.0857)
10	0.0123	-0.0178	-0.118
	(0.0723)	(0.0785)	(0.104)
Switzerland	1.111***	0.984***	1.267***
	(0.0325)	(0.0365)	(0.0341)
Czech Republic	0.785***	0.653***	0.860***
	(0.0288)	(0.0309)	(0.0245)
Estonia	0.831***	0.509***	0.821***
	(0.0203)	(0.0145)	(0.0191)
Finland	1.126***	1.023***	1.315***
	(0.0270)	(0.0267)	(0.0304)
Greece	0.862***	0.986***	1.218***
	(0.0239)	(0.0245)	(0.0267)
Croatia	0.177***	0.321***	0.489***
	(0.0261)	(0.0325)	(0.0264)
Hungary	0.489***	0.544***	0.817***
	(0.0285)	(0.0322)	(0.0331)
Israel	0.647***	0.835***	1.463***
	(0.0424)	(0.0499)	(0.0422)

Italy	0.876***	0.928***	0.895***
	(0.0300)	(0.0327)	(0.0297)
Latvia	0.700***	0.765***	0.847***
	(0.0220)	(0.0165)	(0.0149)
North Macedonia	0.0709***	0.0597**	0.336***
	(0.0223)	(0.0254)	(0.0210)
Netherlands	1.006***	0.988***	1.572***
	(0.0407)	(0.0435)	(0.0421)
Norway	1.291***	0.973***	1.518***
	(0.0388)	(0.0474)	(0.0401)
Portugal	0.347***	0.471***	0.779***
	(0.0255)	(0.0234)	(0.0257)
Slovenia	0.204***	0.347***	0.640***
	(0.0309)	(0.0374)	(0.0318)
Slovakia	0.554***	0.553***	0.632***
	(0.0228)	(0.0212)	(0.0189)
Observations	19,722	19,85	19,667

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Dependent variables: (column 1) A small secret group of people is responsible for making all major decisions in world politics (1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree); (column 2) Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public (1=strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree); (column 3) COVID-19 is the result of deliberate and concealed efforts of some government or organization (1=strongly agree; 2= agree; 3= neither agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree). Omitted benchmark: female, married, lowest income decile, extreme left, very good self-assessed health, living comfortably with present income, employed, upper tertiary education, aged above 90, living in Bulgaria.

	(1)	(2)	(3)
VARIABLES	Political conspiracy	Scientific conspiracy	COVID-19 conspiracy
Coping on present income	0.0967**	0.102*	0.123*
	(0.0484)	(0.0572)	(0.0631)
Difficult to live on present income	0.227**	0.175*	0.292**
	(0.0880)	(0.106)	(0.123)
Very difficult to live on present income	0.295***	0.279*	0.338**
	(0.110)	(0.152)	(0.148)
ES-ISCED Education			
Less than lower secondary education	0.358***	0.666***	0.495***

Table 4 Variables affecting the probability of becoming conspiracy believer – probit estimates

	(0.132)	(0.118)	(0.0950)
Lower secondary education	0.296***	0.613***	0.449***
	(0.0675)	(0.0801)	(0.0864)
Lower tier secondary education	0.246***	0.536***	0.503***
	(0.0684)	(0.0880)	(0.0786)
Upper tier secondary education	0.255***	0.458***	0.291***
	(0.0534)	(0.0660)	(0.0569)
Advanced vocational education	0.328***	0.479***	0.395***
	(0.0607)	(0.0564)	(0.0490)
Lower tertiary education	0.0951	0.198***	0.0707
	(0.0623)	(0.0753)	(0.0741)
Male	0.112***	0.0832***	0.0790***
	(0.0237)	(0.0287)	(0.0204)
Age class			
Age below 20	-0.254**	-0.218**	-0.104
	(0.104)	(0.0906)	(0.0936)
21-30 age class	-0.0139	-0.0563	0.0142
	(0.0396)	(0.0399)	(0.0499)
31-40 age class	0.0264	0.0345	0.0437
	(0.0396)	(0.0342)	(0.0375)
41-50 age class	0.0528	-0.00253	-0.000372
	(0.0339)	(0.0532)	(0.0396)
51-60 age class	-0.00119	0.0316	-0.0481
	(0.0447)	(0.0434)	(0.0410)
61-70 age class	-0.00446	0.0585	-0.158***
	(0.0509)	(0.0674)	(0.0583)
71-80 age class	-0.0223	0.0154	-0.307***
	(0.0841)	(0.124)	(0.0931)
81-90 age class	0.0101	0.0439	0.0937
	(0.205)	(0.208)	(0.256)
In education	-0.238***	-0.275***	-0.319***
	(0.0711)	(0.0835)	(0.0606)
Unemployed	0.109	0.0600	0.104
	(0.0754)	(0.0877)	(0.0833)
Inactive	0.0846	0.139	0.0406
	(0.0708)	(0.0927)	(0.0927)
Retired	-0.0330	-0.0653	-0.0755
	(0.0513)	(0.0574)	(0.0513)
Income			
2nd decile	-0.00395	0.00503	-0.0414
	(0.0861)	(0.0834)	(0.0911)
3rd decile	0.0999	0.00271	-0.00329
	(0.0909)	(0.0881)	(0.0961)

4th decile	0.104	0.00326	-0.00971
	(0.112)	(0.104)	(0.123)
5th decile	0.0469	0.0196	-0.0179
	(0.115)	(0.112)	(0.125)
6th decile	0.0363	-0.0666	-0.120
	(0.103)	(0.119)	(0.104)
7th decile	0.0305	-0.0913	-0.156
	(0.102)	(0.114)	(0.102)
8th decile	-0.0619	-0.178*	-0.217**
	(0.0959)	(0.0995)	(0.102)
9th decile	-0.0600	-0.186	-0.212*
	(0.128)	(0.121)	(0.119)
10th decile	-0.175	-0.288**	-0.383***
	(0.120)	(0.137)	(0.137)
N. of household members	0.00858	0.000411	0.0434***
	(0.0129)	(0.0100)	(0.0143)
Marital Status			
Civil Union	0.141	0.212	0.161
	(0.0934)	(0.141)	(0.219)
Separated	0.0636	0.0367	0.152**
	(0.0637)	(0.0963)	(0.0682)
Divorced	0.131***	0.128**	0.178***
	(0.0436)	(0.0500)	(0.0469)
Widowed	0.0245	-0.0215	0.0901
	(0.0390)	(0.0344)	(0.0554)
Never married	0.0271	-0.0229	0.0416
	(0.0425)	(0.0451)	(0.0401)
Health status: self-assessed			
Self-assessed health: good	0.101**	0.0513	0.0516
	(0.0400)	(0.0463)	(0.0522)
Self-assessed health: fair	0.0892	0.0875	0.139**
	(0.0646)	(0.0560)	(0.0541)
Self-assessed health: poor	0.124	0.0455	0.130*
	(0.0768)	(0.0660)	(0.0728)
Self-assessed health: very poor	-0.0214	0.139	0.0786
	(0.0887)	(0.0924)	(0.160)
Left-right scale			
1	-0.108	-0.119	-0.0376
	(0.103)	(0.113)	(0.0694)
2	-0.0338	-0.221**	-0.270***
	(0.0912)	(0.104)	(0.0990)
3	-0.0112	-0.145*	-0.235***
	(0.0730)	(0.0761)	(0.0690)

4	0.00532	-0.0919	-0.0997
	(0.0806)	(0.0758)	(0.0728)
5	0.121	0.0466	0.0816
	(0.0737)	(0.0961)	(0.0786)
6	0.0543	-0.128	-0.0435
	(0.0840)	(0.0813)	(0.0681)
7	0.0901	-0.136*	-0.0353
	(0.0650)	(0.0799)	(0.0477)
8	0.0698	-0.0138	0.0341
	(0.0701)	(0.107)	(0.0988)
9	-0.0162	-0.0838	-0.0148
	(0.0734)	(0.103)	(0.116)
10	0.0116	0.0287	0.106
	(0.0607)	(0.0888)	(0.110)
Switzerland	-1.335***	-1.191***	-1.571***
	(0.0397)	(0.0475)	(0.0479)
Czech Republic	-1.027***	-0.821***	-1.170***
·	(0.0260)	(0.0359)	(0.0276)
Estonia	-1.109***	-0.665***	-1.100***
	(0.0216)	(0.0224)	(0.0282)
Finland	-1.511***	-1.379***	-1.779***
	(0.0356)	(0.0355)	(0.0454)
Greece	-1.089***	-1.260***	-1.604***
	(0.0239)	(0.0223)	(0.0295)
Croatia	-0.191***	-0.422***	-0.653***
	(0.0298)	(0.0417)	(0.0361)
Hungary	-0.639***	-0.777***	-1.103***
	(0.0287)	(0.0364)	(0.0345)
Israel	-0.934***	-1.162***	-1.948***
	(0.0552)	(0.0672)	(0.0628)
Italy	-1.143***	-1.201***	-1.210***
	(0.0337)	(0.0381)	(0.0401)
Latvia	-0.972***	-1.017***	-1.103***
	(0.0266)	(0.0250)	(0.0226)
North Macedonia	-0.0919***	-0.124***	-0.408***
	(0.0256)	(0.0317)	(0.0234)
Netherlands	-1.314***	-1.306***	-1.984***
	(0.0554)	(0.0614)	(0.0650)
Norway	-1.688***	-1.313***	-2.006***
	(0.0522)	(0.0680)	(0.0628)
Portugal	-0.400***	-0.648***	-1.080***
-	(0.0354)	(0.0305)	(0.0345)
Slovenia	-0.292***	-0.499***	-0.899***

	(0.0420)	(0.0476)	(0.0460)
Slovakia	-0.720***	-0.768***	-0.864***
	(0.0232)	(0.0234)	(0.0192)
Constant	0.183	0.0982	0.384**
	(0.153)	(0.219)	(0.175)
Observations	14.027	14 700	14 477
Observations	14,927	14,792	14,477

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Dependent variables: (column 1) A small secret group of people is responsible for making all major decisions in world politics (1=strongly agree or agree; 0= disagree or strongly disagree); (column 2) Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public (1=strongly agree or agree; 0= disagree or strongly disagree); (column 3) COVID-19 is the result of deliberate and concealed efforts of some government or organisation(1=strongly agree or agree; 0= disagree or strongly disagree); (column 2) . Respondents who say they neither agree nor disagree are dropped from the estimation sample. Omitted benchmark: female, married, lowest income decile, extreme left, very good self-assessed health, living comfortably with present income, employed, upper tertiary education, aged above 90, living in Bulgaria.

Figure 3 Opinions on government income redistribution policies for conspiracy believers and non believers



disagree; 4= disagree; 5= strongly disagree. Green areas: distribution for political conspiracy believers, while not for non believers. Brown areas: distribution for both groups. Pink areas: distribution for political Characteristic Function test 2475.03 (0.000)



	(1)	(2) Scientific conspiracy	(3) COVID-19 conspiracy
	Political conspiracy (sharp)	(sharp)	(sharp)
VARIABLES			
SECOND STAGE			
Low education/financial problems	3 128**	5 056***	5 196***
	(1 549)	(0.675)	(0.697)
FIRST STAGE	(1.5.15)	(0.070)	(0.0077)
Mother education	-0.00383***	-0.00346***	-0.00326***
	(0.000998)	(0.00101)	(0.00100)
Observations	13,512	13,373	13,082
Falsification test			
1/(part-time share border)			
Mother education	0.00471	-0.0325*	-0.0202
	(0.0134)	(0.0191)	(0.0151)
Observations	5,343	5,360	5,339

Table 5 The effect of education and financial problems on conspiracy beliefs - IV estimates

The table reports i) the second stage estimate coefficient of our main variable of interest (a dummy taking for individuals declaring financial problems (difficult or very difficult to cope on income) and having less than lower secondary education) when the benchmark model of table 3 is estimated using as instruments the highest education degree of the respondent's mother; ii) the first stage coefficient and significance of the instrument regressed on a specification where the dependent variable is the instrumented variable: iii) result of a falsification test reporting the impact of mother education where for all other included regressors the estimated model is that of Table 3 for the subsample of individuals without self-declared financial problems and tertiary education. The null hypothesis of the falsification test is that if the instrument added as regressor is not significant when the instrumented variable is set at zero, it means that it affects the dependent variable only through the instrumented variable. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

APPENDIX

Table 5: The effect of education and financial problems on conspiracy beliefs – IV estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Prob. of being conspiracy believer - Political conspiracy	Low education/financial problems	/	Prob. of being conspiracy believer - Scientific conspiracy	Low education/financial problems	/	Prob. of being conspiracy believer – COVID-19 conspiracy	Low education/financia problems
1	2 4 2 0 * *						F 40C***	
Low education/financial problems	3.128**			5.056***			5.196***	
	-1.549	0 0000 4***		(0.675)	0 00075**		(0.697)	0 00774***
Male	0.0662*	0.00884***		0.00464	0.00675**		-0.000392	0.00774***
	(0.0377)	(0.00282)		(0.0253)	(0.00286)		(0.0268)	(0.00286)
Age class								
Age below 20	0.168	-0.0968***		0.434***	-0.103***		0.525***	-0.102***
	(0.206)	(0.0115)		(0.129)	(0.0112)		(0.115)	(0.0114)
21-30 age class	-0.0242	0.0139**		-0.0677	0.0103*		-0.0396	0.0105*
	(0.0535)	(0.00623)		(0.0440)	(0.00626)		(0.0456)	(0.00624)
31-40 age class	0.0136	0.00910*		-0.0153	0.00817		-0.000376	0.00696
	(0.0437)	(0.00492)		(0.0369)	(0.00501)		(0.0382)	(0.00499)
41-50 age class	0.0480	-0.000920		0.0291	-0.00373		-0.000817	0.000641
	(0.0396)	(0.00480)		(0.0343)	(0.00487)		(0.0351)	(0.00485)
51-60 age class	0.00979	-0.00214		0.0165	-0.000575		-0.0263	-2.85e-06
	(0.0461)	(0.00583)		(0.0423)	(0.00594)		(0.0419)	(0.00589)
61-70 age class	-0.0102	-0.00184		0.0667	-0.00708		-0.0798	-0.00429
-	(0.0596)	(0.00761)		(0.0547)	(0.00776)		(0.0605)	(0.00772)
71-80 age class	0.0204	-0.0223**		0.0265	-0.00800		-0.0909	-0.0179*

	(0.0816)	(0.00956)	(0.0665)	(0.00968)	(0.0908)	(0.00973)
81-90 age class	0.102	-0.0398	0.0130	0.00658	-0.117	0.0269
	(0.215)	(0.0267)	(0.186)	(0.0270)	(0.191)	(0.0267)
In education	-0.192**	-0.00813	-0.122*	-0.00266	-0.133*	-0.00674
	(0.0794)	(0.00690)	(0.0662)	(0.00682)	(0.0781)	(0.00678)
Unemployed	0.128*	-0.0227***	0.187***	-0.0295***	0.136**	-0.0175**
	(0.0679)	(0.00799)	(0.0573)	(0.00814)	(0.0578)	(0.00815)
Inactive	0.0769	0.00337	0.0548	0.00669	-0.0272	0.0117
	(0.0880)	(0.0107)	(0.0822)	(0.0110)	(0.0825)	(0.0112)
Retired	0.0493	-0.0225***	0.0952**	-0.0242***	0.0698	-0.0212***
	(0.0584)	(0.00560)	(0.0462)	(0.00574)	(0.0485)	(0.00573)
Income						
2nd decile	0.0691	-0.0233***	0.116**	-0.0198***	0.153***	-0.0317***
	(0.0677)	(0.00725)	(0.0515)	(0.00733)	(0.0580)	(0.00737)
3rd decile	0.161**	-0.0272***	0.166***	-0.0270***	0.152***	-0.0278***
	(0.0643)	(0.00729)	(0.0522)	(0.00738)	(0.0546)	(0.00731)
4th decile	0.187***	-0.0217***	0.135***	-0.0203***	0.136**	-0.0212***
	(0.0593)	(0.00733)	(0.0517)	(0.00741)	(0.0531)	(0.00740)
5th decile	0.145**	-0.0227***	0.136**	-0.0170**	0.132**	-0.0208***
	(0.0637)	(0.00751)	(0.0526)	(0.00758)	(0.0543)	(0.00756)
6th decile	0.125*	-0.0253***	0.0969*	-0.0197**	0.0767	-0.0241***
	(0.0687)	(0.00767)	(0.0561)	(0.00777)	(0.0641)	(0.00775)
7th decile	0.101	-0.0166**	0.0483	-0.0117	0.0167	-0.0154*
	(0.0648)	(0.00786)	(0.0567)	(0.00795)	(0.0645)	(0.00791)
8th decile	-0.0332	-0.00671	-0.0547	-0.00421	-0.0623	-0.00750
	(0.0674)	(0.00804)	(0.0627)	(0.00814)	(0.0690)	(0.00810)
9th decile	-0.0257	-0.00756	-0.0644	-0.00228	-0.0675	-0.00669
	(0.0711)	(0.00843)	(0.0654)	(0.00854)	(0.0724)	(0.00851)

10th decile	-0.0965	-0.0112	-0.0672	-0.00660	-0.127	-0.00902
	(0.0845)	(0.00886)	(0.0732)	(0.00891)	(0.0904)	(0.00889)
N. Household members	-0.0110	0.00474***	-0.0231**	0.00467***	0.00182	0.00435***
	(0.0139)	(0.00138)	(0.0105)	(0.00139)	(0.0149)	(0.00139)
ES-ISCED Education						
Less than lower secondary education	-0.729	0.319***	-1.251***	0.318***	-1.359***	0.306***
	(0.556)	(0.00915)	(0.328)	(0.00894)	(0.299)	(0.00922)
Lower secondary education	-0.604	0.262***	-0.982***	0.257***	-1.142***	0.259***
	(0.457)	(0.00588)	(0.275)	(0.00594)	(0.256)	(0.00593)
Lower tier secondary education	0.277***	-0.0340***	0.440***	-0.0329***	0.407***	-0.0318***
	(0.0451)	(0.00554)	(0.0740)	(0.00560)	(0.0712)	(0.00559)
Upper tier secondary education	0.315***	-0.0349***	0.428***	-0.0363***	0.331***	-0.0359***
	(0.0379)	(0.00461)	(0.0602)	(0.00467)	(0.0416)	(0.00464)
Advanced vocational education	0.305***	-0.0137**	0.314***	-0.0119**	0.255***	-0.0133**
	(0.0539)	(0.00554)	(0.0791)	(0.00563)	(0.0664)	(0.00563)
Lower tertiary education	0.0654	-0.0132***	0.136***	-0.0146***	0.0673*	-0.0130**
	(0.0435)	(0.00505)	(0.0385)	(0.00511)	(0.0384)	(0.00504)
Marital Status						
Civil Union	0.162	-0.00875	0.124	0.00200	0.119	-0.00165
	(0.189)	(0.0237)	(0.179)	(0.0247)	(0.181)	(0.0239)
Separeted	0.0530	-0.00703	0.0487	-0.00886	0.0913	-0.00194
	(0.0741)	(0.00960)	(0.0686)	(0.00996)	(0.0725)	(0.00998)
Divorced	0.0896*	0.00429	0.0426	0.00565	0.0831*	0.00246
	(0.0479)	(0.00521)	(0.0433)	(0.00528)	(0.0479)	(0.00528)
Widowed	-0.0441	0.0198***	-0.108**	0.0193***	-0.0604	0.0216***
	(0.0573)	(0.00596)	(0.0429)	(0.00606)	(0.0524)	(0.00605)
Never Married	0.0130	0.00309	-0.00497	0.000965	-0.00909	0.00489
	(0.0340)	(0.00416)	(0.0298)	(0.00423)	(0.0312)	(0.00422)

Health status: self-assessed						
Self-assessed health: good	0.111***	-0.00888**	0.0824***	-0.00754**	0.0922***	-0.00932**
	(0.0293)	(0.00363)	(0.0272)	(0.00368)	(0.0276)	(0.00367)
Self-assessed health: fair	0.0926**	-0.0126***	0.0838**	-0.00793*	0.137***	-0.0135***
	(0.0367)	(0.00444)	(0.0325)	(0.00450)	(0.0344)	(0.00450)
Self-assessed health: poor	0.0311	0.0155**	-0.0629	0.0147**	-0.0472	0.0197***
	(0.0672)	(0.00688)	(0.0508)	(0.00700)	(0.0593)	(0.00704)
Self-assessed health: very poor	-0.0423	0.00195	0.126	-0.0118	-0.0379	0.0107
	(0.114)	(0.0146)	(0.100)	(0.0145)	(0.101)	(0.0143)
Left-right scale						
1	-0.136	0.000179	-0.0208	-0.0116	-0.00772	-0.00850
	(0.0891)	(0.0107)	(0.0824)	(0.0109)	(0.0802)	(0.0107)
2	-0.00917	-0.00665	-0.0682	-0.00839	-0.0943	-0.0101
	(0.0698)	(0.00847)	(0.0714)	(0.00865)	(0.0806)	(0.00854)
3	0.0244	-0.00957	-0.0400	-0.00499	-0.0940	-0.00825
	(0.0641)	(0.00782)	(0.0603)	(0.00803)	(0.0736)	(0.00794)
4	0.0141	-0.000322	-0.0442	0.00173	0.000350	-0.00728
	(0.0625)	(0.00786)	(0.0569)	(0.00806)	(0.0594)	(0.00801)
5	0.157***	-0.00596	0.0949*	-0.00684	0.112**	-0.00704
	(0.0559)	(0.00680)	(0.0507)	(0.00705)	(0.0526)	(0.00697)
6	0.0776	-0.00872	-0.00987	-0.00910	0.0454	-0.0118
	(0.0611)	(0.00772)	(0.0593)	(0.00792)	(0.0574)	(0.00786)
7	0.0632	0.00156	-0.0828	0.00195	0.0116	-0.00635
	(0.0617)	(0.00759)	(0.0578)	(0.00780)	(0.0563)	(0.00775)
8	0.0657	-0.0114	0.0299	-0.00765	0.0584	-0.0113
	(0.0620)	(0.00769)	(0.0559)	(0.00796)	(0.0568)	(0.00792)
9	-0.0381	0.00488	-0.0469	-0.00172	-0.0223	0.000758
	(0.0788)	(0.00999)	(0.0737)	(0.0103)	(0.0725)	(0.0101)

10	0.00616	-0.00600	0.0649	-0.00925	0.0750	-0.00713
	(0.0671)	(0.00841)	(0.0600)	(0.00867)	(0.0601)	(0.00848)
Coping on present income	0.145***	-0.0117***	0.132***	-0.0100***	0.141***	-0.00971***
	(0.0290)	(0.00364)	(0.0307)	(0.00368)	(0.0337)	(0.00370)
Difficult to live on present income	-0.407	0.207***	-0.937***	0.215***	-0.838***	0.203***
	(0.367)	(0.00535)	(0.190)	(0.00540)	(0.211)	(0.00544)
Very difficult to live on present income	-0.577	0.280***	-1.289***	0.298***	-1.214***	0.282***
	(0.493)	(0.00814)	(0.270)	(0.00822)	(0.279)	(0.00823)
Country						
Switzerland	0.669***	-0.0202**	0.531***	-0.0228***	0.644***	-0.0330***
	(0.0974)	(0.00809)	(0.115)	(0.00820)	(0.131)	(0.00813)
Czech Republic	-0.482***	-0.0117	-0.177*	-0.0114	-0.260*	-0.0220**
	(0.126)	(0.00870)	(0.0928)	(0.00880)	(0.139)	(0.00888)
Estonia	-0.174	-0.0264***	0.128*	-0.0305***	0.0151	-0.0344***
	(0.110)	(0.00844)	(0.0659)	(0.00854)	(0.0961)	(0.00860)
Finland	-0.280***	-0.0146*	0.164***	-0.0212**	0.0251	-0.0276***
	(0.105)	(0.00847)	(0.0591)	(0.00864)	(0.0820)	(0.00861)
Greece	-0.608***	-0.0157*	-0.249**	-0.0157*	-0.366**	-0.0234***
	(0.152)	(0.00838)	(0.116)	(0.00838)	(0.171)	(0.00842)
Croatia	0.466***	-0.00457	0.237***	-0.00943	0.271***	-0.0293***
	(0.104)	(0.00908)	(0.0816)	(0.00936)	(0.0677)	(0.00941)
Hungary	0.0122	0.0184**	-0.0942	0.0165*	-0.123*	-0.000376
	(0.0804)	(0.00892)	(0.0619)	(0.00893)	(0.0710)	(0.00897)
Israel	-0.0602	-0.0376***	0.00202	-0.0415***	-0.317	-0.0499***
	(0.116)	(0.0101)	(0.108)	(0.00983)	(0.217)	(0.00970)
Italy	-0.233*	-0.0419***	-0.0388	-0.0417***	0.0629	-0.0482***
	(0.137)	(0.00865)	(0.108)	(0.00875)	(0.102)	(0.00882)

Latvia	-0.171**	-0.0103		-0.0861	-0.0112		-0.0253	-0.0205**
	(0.0872)	(0.00930)		(0.0784)	(0.00920)		(0.0832)	(0.00926)
North Macedonia	0.553***	-0.00891		0.320**	0.00404		0.317***	-0.0144
	(0.116)	(0.00985)		(0.126)	(0.00994)		(0.0984)	(0.0101)
Netherlands	-0.406***	-0.0324***		-0.125	-0.0354***		-0.402*	-0.0395***
	(0.150)	(0.00870)		(0.120)	(0.00875)		(0.213)	(0.00870)
Norway	-0.752***	-0.0145*		-0.202*	-0.0137		-0.466**	-0.0237***
	(0.179)	(0.00863)		(0.107)	(0.00876)		(0.205)	(0.00866)
Portugal	0.302***	-0.0139		0.117*	-0.0169*		-0.0466	-0.0178*
	(0.0808)	(0.00959)		(0.0645)	(0.00949)		(0.0804)	(0.00990)
Slovenia	0.383***	0.00158		0.190**	-0.00573		0.0697	-0.0132
	(0.101)	(0.00914)		(0.0771)	(0.00933)		(0.0651)	(0.00939)
Slovakia		-0.00383***			-0.00346***			-0.00326***
		(0.000998)			(0.00101)			(0.00100)
athrho2_1			-0.588*			-1.210***		
			(0.334)			(0.335)		
Insigma2			-1.839***			-1.831***		
			(0.00608)			(0.00611)		
Constant	-0.530***	0.0330**		-0.533***	0.0297**		-0.476***	0.0435***
	(0.121)	(0.0141)		(0.153)	(0.0143)		(0.123)	(0.0142)
Observations	13,512	13,512	13,512	13,373	13,373	13,373	13,082	13,082

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1



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