

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Fortunato, Piergiuseppe; Pecoraro, Marco

Working Paper Yes, the medium matters: How Facebook and Twitter boost populism in Europe

IRENE Working Paper, No. 20-01

Provided in Cooperation with: Institute of Economic Research (IRENE), University of Neuchâtel

Suggested Citation: Fortunato, Piergiuseppe; Pecoraro, Marco (2020) : Yes, the medium matters: How Facebook and Twitter boost populism in Europe, IRENE Working Paper, No. 20-01, University of Neuchâtel, Institute of Economic Research (IRENE), Neuchâtel

This Version is available at: https://hdl.handle.net/10419/213485

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU

University of Neuchatel Institute of Economic Research IRENE Working paper 20-01

Yes, The Medium Matters: How Facebook and Twitter boost Populism in Europe

Piergiuseppe Fortunato Marco Pecoraro



Institut de recherches économiques

Yes, The Medium Matters: How Facebook and Twitter boost Populism in Europe

January 2020

Piergiuseppe Fortunato (UNCTAD) and Marco Pecoraro (University of Neuchatel)

Abstract

This paper examines how socio-economic characteristics, changes in the technology of political communication and their interactions affect the sentiments of the electorate and favor the spread of populist ideas in Europe. Using both European-wide and national surveys we find a significant association between exposure to online political activity and diffusion of populist ideas such as Euroscepticism only among less educated and economically vulnerable individuals. We also show that it is not the use of the internet per se that matters but the specific use of social networks for political activity.

Keywords: Populism, Euroscepticism, Internet, Social Networks, Education.

JEL classification: D72, N34, L82, L86, Z13.

1. Introduction

Populist and nationalist ideas are taking off in the great majority of western democracies, particularly since 2016 – the year of the Brexit referendum and the election of Donald Trump as the 45th president of the United States of America. In Europe, populist parties are in control of Hungary and Poland while Italy was until recently home to a coalition formed by La Lega and Cinque Stelle. Where populists are not in power, they have either met with significant approval or won legislative representation in the past decade. Marine Le Pen's Front National, Geert Wilders' PVV, and Germany's AfD, to mention the best-known examples, reflect the rise of populist parties.

But the rise of populism, especially in Europe, has been a long time coming. Hopkin and Blyth (2018) document the evolution of what they define as anti-establishment parties over the last quarter of century. They show that the combined average vote share of right-wing populist and nationalist parties, parties of the radical left, and secessionist parties in multinational states almost doubled since 1990, reaching a figure of around 35 per cent. As documented by Dalio et al. (2017) the last time we saw a comparable diffusion of antiestablishment parties was in the mid-1930s, when their support peaked at the 40 per cent.

One common thread across all these movements is the rejection of the contemporary political and economic elites, of the globalized form of capitalism that they have promoted, and of the institutions around which such a model has been built. Attacking unfettered markets and opposing integration and mobility has become the mantra of populist propaganda on both sides of the Atlantic. From this perspective, one might argue that the

roots of the populist backlash can be found in the economic dynamics (and failures) of the last thirty years and in the social fallout.

Indeed, since the early 1990s, real wages stagnated in most western countries while prices in asset markets recorded massive growth, before and after the 2007-08 crisis (UNCTAD, 2017). Policy decisions fortified winner-take-all markets and eroded labor-market protections, as well as norms restricting pay differentials (Rodrik, 2018). Low-educated workers have paid the highest price, and the divide between their income and those earned by highly educated individuals has increased since the late 1980s (Acemoglu and Autor, 2010). As a consequence, inequality has continued on a long-run, upward trajectory, contributing to a rising sense of anxiety in large sectors of the population and, in turn, generating a latent *demand* for populist political platforms.

But demand changes alone can hardly account for the radical political shifts that are taking place in western democracies. In fact, the *supply* side of contemporary politics has also been shaken by significant shocks along the last decade or so. The technology of political communication has changed dramatically. The social networks, able to reach so many so quickly, has changed how political actors and citizens relate to each other, favouring more direct and frequent communication between leaders and their base (Maldonado, 2017).

The emergence of up-from-under communication, which creates in voters the feeling of a direct link that forges a bond with their leaders, is fostering the personalization of politics. This development has led many observers to identify a brand-new model of conducting politics and electoral campaigns, a Politics 2.0 (see, e.g., Baldwin-Philippi, 2018, and Campante et al, 2018). This new political playing field, in turn, might disproportionally favor populist discourse, which is traditionally based on the figure of a strong leader and on political platforms that are flexible and adaptable to the changing sentiments of the voters, rather than on ideology or competency.

This paper aims at assessing the relative importance, and the potential interactions, of demand (economic/social) and supply (technological/communication) factors for the emergence and the proliferation of populist ideas. In particular, we examine how the diffusion of critical opinions on European integration relates to these factors. Euroscepticism represents, in fact, a mantra for the majority of European populist movements. Some of the most important supranational institutions are widely perceived as technocratic bodies lacking a full democratic legitimacy. In order to gauge the attitudes of European citizens towards the EU we employ the 8th round of the European Social Survey (ESS) and several rounds of the Italy's Multipurpose Household Survey (MHS). Both surveys contain precise questions on individual attitudes towards the EU and on the use of the internet as a source of political information. The MHS however also allows us to distinguish between the simple exposure to political information online and the specific use of social networks for that purpose.

Recent research confirms the existence of a strong association between populism, Euroscepticism and exposure to online political activity. According to the classification recently proposed by Rooduijn et al. (2019) over the 75 per cent of Eurosceptic parties in Europe can be classified as populist movements. And Eurosceptics clearly dominate social media spaces. Hendrickson and Galston (2017), for example, show that during the Brexit campaign the Facebook posts of the United Kingdom Independence Party received 4,000 likes on average, twice the number received by the Conservative Party.^{1 2} This paper moves one step forward and characterizes the exact conditions under which exposure to online political activity is associated to populist/Eurosceptic ideas; we find a positive and significant association only when restricting our attention on relatively less educated and economic vulnerable individuals. Furthermore, when distinguishing between different uses of the internet to acquire political information, our results highlights that it is not the use of internet per se that is associated with distrust in EU institutions but the specific use of social media by lower-educated individuals.

The remainder of this paper is organized as follows. Section 2 provides an operational definition of populism and uses it to discuss why the emergence of populist movements is affected by economic and social characteristics as well as by changes in the technology of political communication. It also discusses the case of using Euroscepticism as a testing ground for populism. Section 3 illustrates the datasets that we employ along with some illustrative stylized facts. Section 4 outlines our empirical strategy and presents the results of different econometric specifications. Section 5 concludes.

2. The roots of Populism

Along the last decade populism has attracted the attention of social scientists and political commentators (see e.g. Bale et al. 2011, Acemoglu et. Al. 2013, Berezin 2013 and Rovira Kaltwasser, 2013). It has been defined according to different political, economic or social characteristics and examined from a variety of different theoretical perspectives (Gidron and Bonikowski, 2015).

This diversity of analytical frameworks is not surprising considering the role that populist politics is playing in contemporary democracies. The ability of populist movements to activate new forms of political engagement can be particularly important in an era of broad decline in formal political participation (Skocpol and Williamson 2012). Nevertheless, in unstable or less solid democracies, populism may erode democratic institutions and favor the emergence of "quasi-authoritarian" regimes (Levitsky and Loxton, 2012 and 2013). Populism is also closely related to political polarization and may therefore push party systems to the verge of collapse (Pappas, 2013).

¹ Similarly, Members of European Parliament (MEPs) belonging to the anti-EU group 'Europe of Nations and Freedom' have their tweets shared on average 5 times more than the MEPs from mainstream parties. This trend is mirrored by the far left; the European United Left–Nordic Green Left, which comprises political parties of socialist and communist orientation, holds just over 4 per cent of seats in parliament but makes up nearly 30 percent of MEPs twitter followers.

² The same association between populism and social media exists on the other side of the Atlantic; Allcott and Gentzkow (2017) indicate that, in the context of the 2016 US election, online 'fake news' were heavily tilted in favor of Donald Trump over Hillary Clinton, and that the average pro-Trump (or anti-Clinton) article was shared more on Facebook than the average pro-Clinton (or anti-Trump) article.

The challenge of defining populism is at least partially related to this multifaceted relation with (and impact on) the traditional institutional architecture of democracy, and to the fact that the term has been used to describe political movements, parties and leaders across different times and places, and with very different historical significance. In an attempt to identify the common traits of populist politics, Cas Mudde defines populism as "a thin-centered ideology that considers society to be ultimately separated into two homogenous and antagonistic groups, 'the pure people' versus 'the corrupt elite,' and which argues that politics should be an expression of the *volonté générale* (general will) of the people" (Mudde 2004, 543).

According to this influential definition, populism should rest on: (i) conflictual political platforms built on the underlying conflict of interest between the people and the elite, and (ii) the willingness to address, as directly as possible, the voters, thereby giving primacy to popular sovereignty. Any factor heightening the popular resentment towards the elite, therefore, would benefit populist movements by making the confrontational dimension relatively more important in political decision making vis-à-vis other important determinants of voting decisions, like values or competency. As it would any factor facilitating the connection, or at least the perceived connection, between political leaders and voters.

2.1 A case of Demand and Supply

Over the last 25 years real wages have stagnated in all the biggest western economies. Loweducated/low-skilled workers employed in fabrication and assembly tasks have faced particularly strong downward pressure on their incomes while highly educated individuals and capital owners have experienced constant increases in the respective share of gross value added (Timmer et al., 2013). This explains the progressive deterioration in the functional distribution of income and the long run increasing trend of inequality. The famous 'elephant graph' proposed by Branko Milanovic shows how the top 1 percent of the income spectrum has captured 27 percent of total growth since 1980 while the bottom 50 percent captured just 12 percent of the increased global income generated over the period, and that amount is largely explained by the rise of China and India (Milanovic, 2016). Increasing inequality has fueled resentment towards that 1 per cent of winners and generated a diffuse sense of anger and anxiety (UNCTAD, 2017).

Indeed, not only has the income distribution became more unequal but we have also been witnessing to an increasing divide between labor productivity and compensation. As shown in Figure 1 below, growth in real wages diverged from productivity growth since the early 1980s in most western countries increasing the perception of unfairness (UNCTAD, 2017). This perception in turn, by making the divide between the elite and the loweducated/low-skilled part of the population more central to the public debate, sharpens

political confrontation and increases the space for populist platforms designed to match demands for social justice.³



Figure 1: Gap between Productivity and Real Hourly Compensation in Manufacturing, 1960 - 2016

Source: UNCTAD (2017).

Several studies have recently linked political support for populists to economic shocks. Autor et al. (2017) have shown that votes for Trump in the 2016 presidential election across US communities were strongly correlated with the magnitude of adverse trade shocks stemming from greater economic integration with China. All else being equal, the greater the loss of jobs due to rising imports from China, the higher the support for Trump.

Similar results hold for Western Europe. Higher penetration of Chinese imports has been found to be associated to support for Brexit in Britain and to the emergence of nationalist parties in continental Europe (Colantone and Stanig, 2016a, 2016b and 2018). Also, economic insecurity has been shown to play a statistically significant role in explaining voters' preferences (Algan et al., 2017, Becker et al., 2017, and Guiso et al., 2017). And in Sweden, increased labor-market insecurity has been linked empirically to the rise of the farright Sweden Democrats (Dal Bo et al., 2019).

At the same time, increased exposure to immigrants appears to induce more negative attitudes towards immigration among low-educated workers or those working in economically declining sectors (e.g. Mayda, 2006; Pecoraro and Ruedin, 2017 and 2019).

³ Since education is essential for managing information flows and developing the cognitive skills that are necessary to effectively participate in a representative democracy (Milligan et al., 2004, and Ostrom, 2006), low-educated individuals can also be also more vulnerable to political propaganda.

While the labor market impact of immigration tends to be limited for the host population (e.g. Card, 2009; Clemens and Hunt, 2019), the support for far-right parties – along with anti-immigration attitudes – often increases in regions which experienced larger inflows of migrants, in particular when the latter are involuntary (Becker and Ferrara, 2019).

According to Cas Mudde, populism relies not only upon the opposition between people and elite, but also upon democracy's ideology as the rule *of* the people *by* the people *for* the people. No pure direct democracy, however, is feasible in large and complex societies, and in fact a combination of democratic and liberal elements is what characterizes modern democracies since the ratification of U.S. Constitution in 1788 (Canovan, 2002). Yet populist movements act as if a pure direct democracy were feasible by trying to create in voters the feeling of being directly addressed, and by offering emotionally charged political platforms to achieve this goal (Maldonado, 2017).

The evolution of the technology of political communication since the early 2000s, and accelerated in the last decade, have favored the deployment of such a strategy and rewarded the kind of political performance at which populist movements excel. The digitization of the public sphere, in fact, has changed how political actors and citizens relate to each other favoring a more direct and frequent communication between leaders and their base through different social networks. This social media-powered communication, in turn, by increasing the frequency of interactions and (allegedly) eliminating any filter, reinforces in the electorate the impression that populist leaders are trying to address directly their will/needs. Recent research confirms that the disintermediation processes that characterize the social media system (Chadwick, 2013) has indeed fostered the spread of populist ideology in a fragmented form (Aalberg et al., 2016; Bracciale, Martella, 2017; Engesser et al., 2017; Wirth et al., 2016).

Furthermore, within the digitized public sphere, it is not only the populist leader that communicates with followers, but also followers communicate among each other. Voters are therefore not simply pushed (by the populist leader's social media strategy) but they also pull by engaging actively in digital media or keeping up the digital bonding that expresses support for the populist movement (Neuman, 2016). This mechanism, in turn, has facilitated the vast circulation of populist content with high potential impact (Mazzoleni and Bracciale, 2018) and explains how large Silicon Valley corporations such as Facebook and Google have seen their platforms colonised by populist political actors and their messages (Gerbaudo, 2018).

2.2 Euroscepticism as a testing ground for Politics 2.0

An extensive literature has documented the close relationship between populism and Euroscepticism (see e.g. Ruzza, 2009, and Harmsen, 2010). Indeed, the call of national sovereignty, or "power to the nations", which characterizes Eurosceptic political forces around the continent echoes the populist motto of "power to the people". In the populist rhetoric, devolving political power to democratically elected national governments, and away from the technocratic elites, is seen as a first step to realizing the general will of the people. The multiple shocks that hit the European Union along the last decade or so, the

Great Recession, the migration crisis, and Brexit, reinforced the Eurosceptic profile of populist movements making them the principal beneficiaries of these crises (Pirro and Taggart, 2018).

This almost symbiotic relationship is well reflected in the data collected by Rooduijn et al. (2019) which assemble all the European parties that can be classified as populist, far right, far left and/or Eurosceptic, and obtained at least 2 per cent of the vote in at least one national parliamentary election since 1998. They document a clear overlap between Eurosceptic and populist parties, with over three quarter of populist movements also classified as Eurosceptic.

The existence of such a relationship clarifies why we believe that the views on the EU and its main institutions can be considered as a valid testing ground for populism. Variables associated with negative attitudes towards the EU should also be associated to a large extent with populist political preferences.

3. The Data

In the remainder of this paper we examine the main correlates of Euroscepticism as a testing ground for the diffusion of populist ideas in the continent. Looking at both demand and supply side explanatory variables we test the idea that economic losers (low-educated, unemployed, low-income citizens) exposed to online politics should be more inclined to have a negative attitude towards the EU, in particular when online exposure operates through social media. More specifically, we employ the 8th round of the European Social Survey and several iterations of ISTAT Multi-purpose Survey of Italian Families on 'Aspects of Everyday Life' (Indagine Multiscopo sulle Famiglie), and estimate how socio-economic conditions, exposure to online politics and the interaction between them correlate with Euroscepticism.

3.1 European Social Survey

The European Social Survey (ESS) is a multi-country survey that monitors changing public attitudes and values within Europe and develops a series of European social indicators, including attitudinal indicators. In the eighth round, the survey covers 23 countries and over 50,000 individuals (see www.europeansocialsurvey.org). The key topics covered by the ESS include social trust; political interest and participation; socio-political orientations; social exclusion; national, ethnic and religious allegiances; climate change, energy security and energy preferences; welfare; human values; demographics and socioeconomics. More importantly for our aims, the survey also investigates the attitude towards the EU and, only from the 8th round on, it includes a series of questions on online political activity, to assess whether the respondent posted or shared anything about politics online, for example on blogs, via email or on social media.⁴

⁴ The correlation between having a negative attitude towards the EU (i.e. preference for "EU exit") and voting for populist movements (following the definition proposed by Rooduijn et al., 2019) in the data of the

To measure Euroscepticism, we use a specific question on whether respondents declare themselves in favor for their own country leaving the EU as recorded in the 8th round of the ESS in 2016. This question was asked in the 17 countries that participated to the 2016 round of the survey.⁵ We construct the dummy variable *EU exit* equal to 1 in the case of an affirmative answer and 0 otherwise. As shown in Table 1, the average share of respondents in favor of leaving the EU is 22 per cent either based on the full ESS sample (Panel A) or on the sample of individuals in paid work (Panel B). The variance across countries is considerable (results not shown); residents from Spain emerge as the least Eurosceptic (9 per cent) while on the other side of the spectrum we find the UK (47 per cent).

		Panel A : Full	sample	Panel B : Sample of individuals in				
					paid work			
Variable	Mean	Linearized	Observations	Mean	Linearized	Observations		
		S.E.			S.E.			
EU exit (yes/no)	0.22	0.00	28,598	0.22	0.01	13,165		
online politics (yes/no)	0.21	0.00	28,598	0.26	0.01	13,165		
years of education	13.10	0.04	28,598	14.31	0.05	13,165		
past unemployment experience								
never unemployed more than 3 months	0.62	0.01	17,116	0.67	0.01	13,147		
ever unemployed 3 to 12 months	0.21	0.00	17,116	0.21	0.01	13,147		
ever unemployed more than 12 months	0.17	0.00	17,116	0.13	0.00	13,147		
level of education								
ISCED I	0.11	0.00	28,567	0.05	0.00	13,152		
ISCED II	0.21	0.00	28,567	0.14	0.00	13,152		
ISCED IIIb	0.18	0.00	28,567	0.20	0.01	13,152		
					(continue)	d on next page)		

Table 1: Summary statistics for the key variables in the ESS

European Social Survey is in general positive. For instance, it equals to 0.24 for the UK and 0.27 in the case of Italy (own calculation from the ESS 2016).

⁵ Not all EU countries are covered by the ESS. For more details and to see which countries took part in each ESS round, please consult <u>https://www.europeansocialsurvey.org/about/participating_countries.html</u> on the official ESS website.

· · · · · · · · · · · · · · · · · · ·						
ISCED IIIa	0.16	0.00	28,567	0.16	0.00	13,152
ISCED IV	0.12	0.00	28,567	0.16	0.00	13,152
ISCED V1	0.08	0.00	28,567	0.11	0.00	13,152
ISCED V2	0.13	0.00	28,567	0.18	0.01	13,152
other	0.00	0.00	28,567	0.00	0.00	13,152
level of occupation						
ISCO 1	0.08	0.00	26,017	0.09	0.00	12,955
ISCO 2	0.18	0.00	26,017	0.20	0.01	12,955
ISCO 3	0.17	0.00	26,017	0.18	0.01	12,955
ISCO 4	0.09	0.00	26,017	0.09	0.00	12,955
ISCO 5	0.17	0.00	26,017	0.16	0.00	12,955
ISCO 6	0.03	0.00	26,017	0.02	0.00	12,955
ISCO 7	0.11	0.00	26,017	0.11	0.00	12,955
ISCO 8	0.07	0.00	26,017	0.06	0.00	12,955
ISCO 9	0.10	0.00	26,017	0.08	0.00	12,955

Table 1 (continued)

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org).

Notes: Data are weighted. The full sample gathers respondents who are employed, unemployed or out of the labor force. The mean values computed for past unemployment experience in Panel A are based on the labor force sample. Included countries are: Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom.

The key correlates of Euroscepticism on the *demand* side that we consider in our analysis are education and employment status. The ESS contains detailed information on the number of years of education of the respondents, but we also use the International Standard Classification System of Education (ISCED) proposed by UNESCO which classifies education achievements along seven categories ranging from lower than secondary to higher tertiary education. The ESS also contains information on the profession of the respondents as classified by ILO's International Standard Classification of Occupations (ISCO) which divides jobs along nine major groups (ISCO 1: managers, ISCO 2: professionals, ISCO 3: technicians and associate professionals, ISCO 4: clerical support workers, ISCO 5: service and sales workers, ISCO 6: skilled agricultural, forestry and fishery workers, ISCO 7: craft and related trades workers, ISCO 8: plant and machine operators and assemblers, ISCO 9: elementary occupations). Finally, in order to account for the relative vulnerability of the employment status, we also look at past unemployment experience using information on whether the respondent has ever been unemployed and seeking work for a period of more than three months and if any of these periods lasted for more than 12 months.

Regarding the *supply* side, we measure the exposure to politics online (labelled *online politics* below) with a dummy variable taking value equal to 1 if the respondent declares to have posted or shared something about politics online, for example on blogs, via email or on social media such as Facebook or Twitter during the last 12 months, and 0 otherwise.

As shown in Table 1, between one fifth of the respondents from the full sample (Panel A) and one quarter from the sample of employed (Panel B) have posted or shared something about politics online. In addition, on average, employed respondents appear to be more educated than those from the full sample (mean years of education is 13.10 in Panel A and 14.3 in Panel B). Indeed, almost 30 per cent of the employed respondents (Panel B) have a tertiary-level education (ISCED V1 & ISCED V2), versus 21 per cent of the respondents from the full sample (Panel A). In parallel, 39 per cent of the employed respondents (Panel B) have only a compulsory education (ISCED I, ISCED II & ISCED IIIb), versus 50 per cent of the respondents from the full sample (Panel A). It is also worth noting that the distribution across occupations is somewhat similar when relying on the full sample (Panel A) or the sample of employed (Panel B).⁶ More interestingly, less than 10 per cent of the respondents work in jobs demanding low skills (ISCO categories 4 to 8) or high skills (ISCO categories 1 to 3).

Inspecting the ESS data allows us to uncover some regularities in our quest for the roots of populism, on both the demand and the supply side. Figure 2 shows how the share of respondents that would vote for leaving the EU in case of a hypothetical referendum decreases consistently, with just one aberration at the 7th decile, across all ten income deciles: over 30 per cent of respondents would vote for exit in the first decile while roughly a half of this share would do the same in the top decile.

Analogous results hold for education (Figure 3). Using the UNESCO's International Standard Classification of Education (ISCED) we observe that almost the 45 per cent of respondents within the first category (roughly respondents having completed only the primary education cycle) would be in favor of an exit from the EU while this figure drops down to around the 10 per cent for the last category (respondents holding a master or an equivalent post-tertiary title).

⁶ Unemployed and inactive respondents were asked to provide their last occupation.





Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Sample of individuals in paid work (data are weighted). Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. *EU exit* corresponds to the cases where a respondent from a given country would vote to leave if a referendum should take place tomorrow about membership of the European Union. Each bin represents the percentage of responds in favor of leaving the European Union by income decile group.



Figure 3: Education and Euroscepticism

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Note: Sample of individuals in paid work (data are weighted). Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. *EU exit* corresponds to the cases where a respondent from a given country would vote to leave if a referendum should take place tomorrow about membership of the European Union. Each bin represents the percentage of responds in favor of leaving the European Union by level of education ISCED (<u>http://uis.unesco.org/en/topic/international-standard-classification-education-isced/</u>).

Descriptive statistics seem more difficult to interpret once we look at the supply side. Indeed, as displayed in Figure 4, the share of respondents declaring themselves in favor of an exit from EU is almost the same, around the 20 per cent, within the subsample of those exposed to online to politics and the rest of the population. At the same time, more educated (see Figure 5), richer and younger individuals tend to be more exposed to online politics (results not shown), and respondents in these categories are also on average more in favor of the EU. Therefore, looking at simple bi-variate descriptive statistics is insufficient to undercover the kind of association between supply side characteristics, as the use of social media for political activity, and Euroscepticism.



Figure 4: Online politics and Euroscepticism

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Sample of individuals in paid work (data are weighted). Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. *EU exit* corresponds to the cases where a respondent from a given country would vote to leave if a referendum should take place tomorrow about membership of the European Union. *Online politics: yes* corresponds to the cases where, during the last 12 months, a respondent posted or shared anything about politics online, for example on blogs, via email or on social media such as Facebook or Twitter. Each category represents the percentage of responds in favor of leaving the European Union by use of online politics.



Figure 5: Education and online politics

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Sample of individuals in paid work (data are weighted). Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. *Online politics: yes* corresponds to the cases where, during the last 12 months, a respondent posted or shared anything about politics online, for example on blogs, via email or on social media such as Facebook or Twitter. Each category represents the percentage of responds having online politics activities by level of education ISCED (<u>http://uis.unesco.org/en/topic/international-standard-classification-education-isced/</u>).

Figure 6 represents a first step to overcome these difficulties (the next section presents the results of full-fledged multivariate econometric analysis). Here the units of analysis are the 17 sample countries whose respondents were asked in 2016 about the possibility for their own country to leave the EU. We split the sample between those who declare themselves to be involved in online political activities and those who don't, and then examine the correlation between the share of low-educated people (i.e. share of population within less than 13 years of education) and the share of population in favor of EU exit at the country level. Interestingly, while within those active in online politics there is a positive correlation between share of low-educated people and Euroscepticism, the result does not hold in the other case. This represents an initial evidence on the potential interaction between demand- and supply-side variables.



Figure 6: Supply and Demand of Populism – a first test

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>) Notes: Sample of individuals in paid work (data are weighted). Included countries are Austria (AT), Belgium (BE), Czechia (CZ), Finland (FI), France(FR), Germany (DE), Hungary (HU), Ireland (IE), Italy (IT), Lithuania (LT), Netherlands (NL), Poland (PL), Portugal (PT), Slovenia (SI), Spain (ES), Sweden (SE), and the United Kingdom (GB). *EU exit* corresponds to the cases where a respondent from a given country would vote to leave if a referendum should take place tomorrow about membership of the European Union. *Online politics: yes* corresponds to the cases where, during the last 12 months, a respondent posted or shared anything about politics online, for example on blogs, via email or on social media such as Facebook or Twitter. The loweducated are those with less than 13 years of education. All percentages are calculated at the country level.

3.2 ISTAT Multipurpose Household Survey

The second dataset we employ for our analysis is the ISTAT Multipurpose Household Survey on 'Aspects of Everyday Life' which covers the resident population in private households by interviewing a sample of 20,000 households and 50,000 people. The survey provides information on the citizens' habits in different thematic areas including school, work, family and social life, spare time, political and social participation, health and lifestyle.

Interestingly, the ISTAT survey includes not only questions on trust in major EU institutions and on online participation in politics, but also distinguishes between the use of social networks to acquire information about politics and online political activities not mediated through these networks (e.g. consultation of websites linked to traditional media or blogs). It therefore allows us to refine the analysis based on ESS data and to carefully assess the impact on attitudes toward the EU of exposure to social media versus traditional media internet platforms (newspapers, televisions, etc.). We consider the years ranging from 2013 to 2016 (the latest available).

The key outcome variable here is represented by trust in European Parliament that ranges between 0 and 10, with higher values being associated with higher trust in the EU Parliament. The average level of trust in European parliament over the period 2013-2016 is approximatively 3.75 among the sample of employed individuals (Panel B of Table 2) and is slightly higher among the full sample (Panel A), indicating overall that the average Italian is rather Eurosceptic. In addition, attitudes towards European parliament have deteriorated over the period 2013-2015 and then stabilized around its lowest value. The average level of

trust among employed individuals was 3.90 in 2013, 3.75 in 2014 and 3.68 in 2015 and in 2016.

	Panel A: Full sample				el B: Sample c individu	of employed als
Variable	Mean	Standard S.E.	Observations	Mean	Standard S.E.	Observations
trust in European parliament	3.78	0.01	145,728	3.75	0.01	61,299
online politics w/o social media (yes/no)	0.14	0.00	145,728	0.22	0.00	61,299
online politics via social media (yes/no)	0.09	0.00	145,728	0.13	0.00	61,299
level of education						
bachelor and higher tertiary degrees	0.13	0.00	145,728	0.21	0.00	61,299
high school diploma	0.37	0.00	145,728	0.47	0.00	61,299
compulsory school	0.50	0.00	145,728	0.31	0.00	61,299
employment status						
unemployed	0.22	0.00	78,234			

Table 2: Summary statistics for the key variables in the MHS

Source: Multipurpose Survey on Households provided by https://www.istat.it.

Notes: data are unweighted. Summary statistics are based on samples pooled over 2013, 2014, 2015 and 2016, where individuals below 18 years old are excluded. The full sample gathers respondents who are employed, unemployed or out of the labor force; the mean values computed for unemployment in Panel A are based on the labor force sample.

The ISTAT survey contains detailed information on the level of education of the respondents (i.e. the highest diploma achieved). It also offers the possibility of controlling for the employment status (a binary variable *unemployed* for unemployed looking for a job and first-job seekers), sex, age group, civil status, household type, and the urban dimension of the city of residence.

As anticipated above, with regards to the exposure to politics online, the ISTAT survey distinguishes between getting information about politics through social networks (like Facebook or Twitter) and getting information on internet but in other ways (e.g. through websites related to traditional media or blogs). This distinction allows us to investigate whether different ways of using internet in the political realm are associated with different attitudes towards the EU.

As shown in Table 2, 23 per cent of the respondents from the full sample (Panel A) are exposed to politics online, and about 40 per cent of them rely on social media to get political information on internet. In parallel, the share of respondents exposed to politics online is higher among the sample of employed (Panel B), corresponding to 13 per cent and 22 per cent when exposure operates through social media and traditional websites, respectively. Moreover, among the full sample, half of the respondents have a compulsory education only (Panel A). Among the sample of employed (Panel B), the share of low-educated is much lower (31 per cent) and the majority holds a high school diploma as highest degree (47 per cent). Finally, the share of unemployed is 22 per cent over the period 2013-2016, a higher figure than those officially reported by ISTAT⁷ since we also consider first-job seekers in addition to the unemployed looking for work.

Figure 7 illustrates how average trust in the European parliament recorded in the four successive iterations of the survey correlates with education and media exposure. In line with the results obtained using the ESS, we find that the average level of trust is much higher for more educated individuals (i.e. those achieving degrees beyond compulsory education). We also find that those respondents using social media to acquire information about politics display on average less trust in the European parliament than respondents that do not make use of internet for politics. On the contrary, the simple exposure to politics online without mediation through social media is associated with higher rather than lower levels of trust as compared with individuals not exposed to online political activity.



Figure 7: Average Trust in European Parliament, in Italy, over 2013-2016

Source: Multipurpose Survey on Households provided by <u>https://www.istat.it</u>

Notes: Analysis based on unweighted data pooled over the period 2013-2016, using the full sample (employed, unemployed, or out of the labor force). *Trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). *Online politics via social media* corresponds to cases where a respondent does inquire about politics online through social media, such as Facebook or Twitter. *Online politics without social media* corresponds to cases where a respondent does inquire about politics online through social media as inquire about politics online without using social media. *No online politics* corresponds to the cases where a respondent does not inquire about politics through the internet.

⁷ <u>http://dati.istat.it/Index.aspx?QueryId=25247&lang=en</u>

The differences among different types of exposure to online politics emerge clearly also when we aggregate the data at the regional level (20 broad Italian regions). Figure 8 depicts the correlation between the average level of trust in the European parliament recorded in each one of the twenty Italian regions covered by the ISTAT survey from 2013 to 2016. It charts the share of respondents making use of social media to acquire information about politics (left panel of Figure 8) and the share of respondents using other online activities to acquire this type of information (right panel of Figure 8). The correlation is negative in the former case and slightly positive in the latter.





Source: Multipurpose Survey on Households provided by <u>https://www.istat.it</u> Notes: Analysis based on unweighted data pooled over the period 2013-2016, using the full sample (employed, unemployed, or out of the labor force). *Trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). *Online politics via social media* corresponds to cases where a respondent does inquire about politics online through social media, such as Facebook or Twitter. *Online politics without social media* corresponds to cases where a respondent does inquire about politics online without using social media. All percentages are calculated at the level of Italian regions; twenty regions are considered (Piemonte, Valle d'Aosta, Lombardia, Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia, Liguria, Emilia-Romagna, Toscana, Umbria, Marche, Lazio, Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicilia, Sardegna).

4. Econometric Specification and Results

In this section we use econometric methods to check whether the partial correlations between diffusion of Eurosceptic ideas (i.e. preference for exit from EU and low trust in EU parliament) and each of the demand and supply factors identified above (and their interactions) are consistent with our hypothesis.

4.1 Internet, Education and Euroscepticism

We first work with the data of the ESS and start by studying the cross-sectional correlation between Euroscepticism and exposure to online politics, along with education and employment status. To account for the binary nature of the observed dependent variable *EU exit*, we use a probit model in which cross-sectional individual weights are incorporated to produce representative estimates of the surveyed population in the ESS. We also check that the somehow special condition of UK after the Brexit vote does not affect our results by

running separate sets of regressions for the sample of all countries (including individuals from 17 countries in total) and for the sample with the exclusion of individuals from the UK.

In estimating the relationship between Euroscepticism and our key explanatory variables, we control for the age, age squared, sex, and foreign-born status of the respondent, her/his civil status and the presence of children at home. Wilkinson (2018) observes that rural areas and smaller urban centers are increasingly uniform in terms of social conservatism and constitute the basis of support for populist movements in many western economies. We therefore also include dummy variables aimed at controlling for this dimension: whether the respondent is living in suburbs of big city, in a small city, in the countryside or in a village. We also use as a control variable the level of household income declared by the respondents and classified in deciles. All specifications include country fixed effects.

Based on the sample of all countries, columns 1, 3, and 5 in Panel A of Tables 3 and 4 show that exposure to online politics is never significantly correlated with Euroscepticism. However, when excluding individuals from the UK, as shown in columns 1, 3, and 5 in Panel B of the same tables, exposure to online politics is always positively and significantly correlated with Euroscepticism.⁸ Irrespective of whether individuals from the UK are included or not, our results also show that the propensity to be in favor of leaving the EU is associated negatively with years of education (i.e. more educated individuals tend to disfavor the idea of leaving the EU) and positively with a lengthy experience in past unemployment.

	(1)	(2)	(3)	(4)	(5)	(6)		
		Full s	ample		In paid	In paid work		
A. Sample including the UK								
online politics	0.000	0.422***	0.008	0.576***	-0.030	0.582***		
	(0.036)	(0.135)	(0.039)	(0.144)	(0.049)	(0.200)		
years of education	-0.052***	-0.046***	-0.044***	-0.035***	-0.058***	-0.047***		
	(0.004)	(0.004)	(0.005)	(0.005)	(0.007)	(0.008)		
online politics*education		-0.030***		-0.041***		-0.042***		
		(0.009)		(0.010)		(0.014)		
control variables	yes	yes	yes	yes	yes	yes		
country fixed effects	yes	yes	yes	yes	yes	yes		
household income (deciles)	no	no	yes	yes	yes	yes		
Observations	28,598	28,598	23,929	23,929	13,165	13,165		

Table 3: Probit regressions of EU exit on online politics interacted with years of education

⁸ Note that once we run our regressions including UK but not controlling for country fixed effects, we obtain again positive and significant coefficients for online politics. This suggests that inclusion of individuals from the UK, along with UK fixed effect, partly absorbs the positive link between Euroscepticism and online politics.

Table 3 (continued)

A. Sample excluding the UK						
online politics	0.114***	0.251*	0.123***	0.421***	0.100**	0.440**
	(0.037)	(0.137)	(0.041)	(0.148)	(0.050)	(0.204)
years of education	-0.051***	-0.049***	-0.043***	-0.038***	-0.048***	-0.042***
	(0.004)	(0.005)	(0.005)	(0.006)	(0.007)	(0.008)
online politics*education		-0.010		-0.022**		-0.024*
		(0.009)		(0.010)		(0.014)
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	26,878	26,878	22,448	22,448	12,324	12,324

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Panel A includes individuals from the following countries: Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. Individuals from the United Kingdom are excluded in Panel B. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise. Control variables: Sex, age, age squared, marital status, children at home, foreign born, and urban level. Full regression results are reported in Table A.1.1 (including the UK) and Table A.1.2 (excluding the UK) in the Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)
	In	paid work o	r unemploy	ed	In paid work	
A. Sample including the UK						
online politics	-0.010	-0.061	-0.029	-0.093	-0.036	-0.086
	(0.043)	(0.056)	(0.046)	(0.059)	(0.049)	(0.060)
ever unemployed 3 to 12 months	0.056	0.074	0.047	0.048	0.038	0.038
	(0.045)	(0.052)	(0.049)	(0.058)	(0.052)	(0.061)
ever unemployed more than 12						
months	0.156***	0.074	0.112**	0.030	0.079	-0.014
	(0.049)	(0.056)	(0.054)	(0.059)	(0.063)	(0.068)
online politics*ever unemp. 3 to 12						
months		-0.057		0.007		0.009
		(0.097)		(0.104)		(0.109)
online politics*ever unemp. more						
than 12 months		0.336***		0.330***		0.357***
		(0.104)		(0.111)		(0.135)
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	17,116	17,116	14,544	14,544	13,147	13,147

Table 4: Probit regressions of EU exit on online politics interacted with past unemployment experience

B. Sample excluding the UK						
online politics	0.094**	0.070	0.090*	0.069	0.094*	0.077
	(0.045)	(0.059)	(0.047)	(0.061)	(0.050)	(0.062)
ever unemployed 3 to 12 months	0.079	0.103*	0.069	0.080	0.055	0.067
	(0.048)	(0.055)	(0.053)	(0.062)	(0.057)	(0.066)
ever unemployed more than 12						
months	0.159***	0.109*	0.102*	0.070	0.065	0.023
	(0.051)	(0.057)	(0.056)	(0.061)	(0.063)	(0.070)
online politics*ever unemp. 3 to 12						
months		-0.093		-0.037		-0.040
		(0.104)		(0.111)		(0.116)
online politics*ever unemp. more						
than 12 months		0.211**		0.140		0.184
		(0.105)		(0.110)		(0.134)
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	16,121	16,121	13,648	13,648	12,306	12,306

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Panel A includes individuals from the following countries: Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. Individuals from the United Kingdom are excluded in Panel B. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise. Control variables: Sex, age, age squared, marital status, children at home, foreign born, and urban level. Full regression results are reported in Table A.2.1 (including the UK) and Table A.2.2 (excluding the UK) in the Appendix.

These initial estimates assume that the effects of our demand and supply side variables on the attitudes towards leaving the EU are independent of each other. Our working hypothesis, however, suggests the existence of an interaction between these variables. In particular, we expect the correlation between exposure to online politics and Euroscepticism to be strengthened when looking at vulnerable individuals characterized by low levels of education and unsecure employment status.

We test formally for the presence of an interaction between exposure to online politics and different measures of socio-economic weakness by estimating the following model:

$$Pr(EUexit_i = 1 | X_i) = F(\alpha + \beta on line politics_i + \gamma y_i + \delta on line politics_i * e_i + \rho C_i + \varepsilon_i).$$

*EU exit*_i and *online politics*_i are the dummy variables on the attitudes towards leaving the EU and the exposure to politics on internet for individual *i*, while e_i represents the indicator of socio-economic weakness that may change in different specifications (education and employment status). *C* is a vector containing the different control variables along with income deciles and country fixed effects, as discussed above. Since we take the probit as reference empirical model, *F* is the cumulative normal distribution function.

Columns 2, 4, and 6 in Panels A and B of Table 3 overall show a positive and significant association between exposure to online politics and Euroscepticism after the introduction of the interaction term. Also, the existence of a negative association between education and Euroscepticism is confirmed. More interestingly, we find clear evidence of a positive and significant effect of the interaction term between exposure to online politics and education, supporting the idea of an interplay between demand and supply factors that shapes the attitudes towards leaving the EU. Furthermore, as shown in Table 4, also the interaction between exposure to online politics and having been unemployed for more than 12 months is found to be significantly positive, in particular when including individuals from the UK (Panel A).

Figure 9 uses the results of the fourth columns in Panel A of Table 3 to plot the marginal effects of exposure to online politics on Euroscepticism at different levels of education. The horizontal axis measures variations in the number of years of education attained. The marginal effect is positive and statistically significant only for those individuals with relatively few years of education (the marginal effect turns positive only when the level of educational attainment lies below the twelve years which is roughly equivalent to the first two educational cycles). The marginal effect of exposure to online politics on Euroscepticism is instead negative (and significant) for individuals with high educational attainment.



Figure 9: Average marginal effects of online politics by years of education

Notes: Calculation from the fourth column in Panel A of Table 3. The average marginal effects are plotted with the 95 per cent confidence intervals. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

Analogously, Figure 10 uses the results of the fourth column in Panel A of Table 4 to plot the marginal effects of exposure to online politics for different length of past unemployment experiences. The figure shows that the marginal effect is positive and statistically significant only for individuals that experienced at least a period of unemployment longer than 12 months. The marginal effect loses significance for individual never unemployed more than 3 months or unemployed for less than one year.



Figure 10: Average marginal effects of online politics by past unemployment experience

Notes: Calculation from the fourth column in Panel A of Table 4. The average marginal effects are plotted with the 95 per cent confidence intervals. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

In Table 5 we check whether our results are robust to using an alternative measure of education or a proxy for occupational skills. The results remain unaffected once we substitute the number of years attained with the equivalent ISCED classification, irrespective of whether we consider the sample with or without individuals from the UK. The results are also broadly confirmed once we introduce the type of jobs as classified by the ILO's ISCO classification in our regressions.⁹ Individuals in job categories from 4 to 10 (i.e. jobs demanding intermediate or low skills) are more likely to be Eurosceptic and the interaction

⁹ Within the ISCO framework, the classification of a job is based on the nature of the skills that are required to carry out the tasks and duties of the job—not the way these skills are acquired (Hoffmann 2003: 143).

terms between these categories and exposure to politics online are always positive and often significant (Table 6).

	(1)	(2)	(3)	(4)	(5)	(6)
		Full sa	ample		In paid	d work
A. Sample including the UK						
online politics	0.024	0.325**	0.025	0.399***	-0.009	0.677***
	(0.036)	(0.137)	(0.039)	(0.146)	(0.049)	(0.219)
ISCED II	-0.165***	-0.150***	-0.159***	-0.146**	-0.162	-0.109
	(0.052)	(0.055)	(0.058)	(0.062)	(0.113)	(0.125)
ISCED IIIb	-0.131**	-0.130**	-0.144**	-0.135*	-0.289**	-0.250**
	(0.062)	(0.065)	(0.067)	(0.070)	(0.116)	(0.126)
ISCED IIIa	-0.311***	-0.259***	-0.298***	-0.233***	-0.376***	-0.284**
	(0.063)	(0.066)	(0.068)	(0.072)	(0.119)	(0.130)
ISCED IV	-0.391***	-0.351***	-0.399***	-0.323***	-0.573***	-0.434***
	(0.072)	(0.076)	(0.077)	(0.081)	(0.126)	(0.137)
ISCED V1	-0.614***	-0.587***	-0.582***	-0.543***	-0.816***	-0.791***
	(0.081)	(0.086)	(0.085)	(0.091)	(0.133)	(0.148)
ISCED V2	-0.721***	-0.589***	-0.665***	-0.499***	-0.910***	-0.690***
	(0.089)	(0.091)	(0.093)	(0.096)	(0.146)	(0.155)
other	-0.450	-0.732**	-0.739**	-0.848**	-0.734	-0.632
	(0.284)	(0.337)	(0.338)	(0.394)	(0.513)	(0.552)
online politics*ISCED II		-0.221		-0.227		-0.527**
		(0.162)		(0.177)		(0.259)
online politics*ISCED IIIb		-0.136		-0.193		-0.476**
		(0.153)		(0.163)		(0.236)
online politics*ISCED IIIa		-0.388**		-0.460***		-0.721***
		(0.154)		(0.165)		(0.237)
online politics*ISCED IV		-0.341**		-0.503***		-0.904***
		(0.167)		(0.1//)		(0.253)
online politics*ISCED V1		-0.292		-0.361*		-0.519**
apling politics*ISCED V2		(U.178) 0.619***		(U.187) 0.724***		(0.256) 1.072***
online politics isced vz		-0.018		-0.754		-1.072
online politics*other		1 028*		0.157		-0.873
onine ponties other		(0.609)		(0.437		(0.885)
control variables	ves	ves	ves	ves	ves	ves
country fixed effects	ves	ves	ves	ves	ves	ves
household income (deciles)	no	no	yes	yes	yes	yes
			-	-	-	-
Observations	28,567	28,567	23,912	23,912	13,152	13,152

 Table 5: Probit regressions of EU exit on online politics Interacted with the highest level of education ISCED

Table 5 (co	ontinued)
-------------	-----------

B. Sample including the UK						
online politics	0.125***	0.350**	0.129***	0.410**	0.108**	0.420
	(0.037)	(0.156)	(0.041)	(0.166)	(0.049)	(0.297)
ISCED II	-0.130**	-0.123*	-0.136**	-0.136*	-0.182	-0.190
	(0.060)	(0.063)	(0.068)	(0.072)	(0.137)	(0.148)
ISCED IIIb	-0.106	-0.100	-0.110	-0.100	-0.271*	-0.274*
	(0.073)	(0.076)	(0.079)	(0.083)	(0.144)	(0.152)
ISCED IIIa	-0.279***	-0.252***	-0.266***	-0.226***	-0.399***	-0.356**
	(0.073)	(0.077)	(0.079)	(0.083)	(0.146)	(0.156)
ISCED IV	-0.302***	-0.269***	-0.297***	-0.234**	-0.510***	-0.428**
	(0.087)	(0.092)	(0.094)	(0.099)	(0.157)	(0.168)
ISCED V1	-0.478***	-0.460***	-0.432***	-0.409***	-0.653***	-0.646***
	(0.097)	(0.101)	(0.104)	(0.108)	(0.166)	(0.176)
ISCED V2	-0.603***	-0.514***	-0.523***	-0.396***	-0.789***	-0.654***
	(0.104)	(0.107)	(0.111)	(0.115)	(0.178)	(0.187)
other	-0.846**	-0.859**	-0.951**	-0.982**		
	(0.333)	(0.361)	(0.392)	(0.447)		
online politics*ISCED II		-0.141		-0.116		-0.060
		(0.182)		(0.195)		(0.327)
online politics*ISCED IIIb		-0.140		-0.179		-0.138
		(0.168)		(0.178)		(0.308)
online politics*ISCED IIIa		-0.256		-0.325*		-0.357
		(0.170)		(0.182)		(0.309)
online politics*ISCED IV		-0.275		-0.418**		-0.512
opling politics * ISCED V1		(0.180)		(0.193)		(0.328)
online politics isceb vi		-0.220		-0.237		-0.225
online politics*ISCED V2		-0 473***		-0 620***		-0 646**
		(0.176)		(0.190)		(0.312)
online politics*other		0.208		0.230		(0.0)
		(0.747)		(0.801)		
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	26,854	26,854	22,434	22,434	12,305	12,305

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Panel A includes individuals from the following countries: Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. Individuals from the United Kingdom are excluded in Panel B. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise. Control variables: Sex, age, age squared, years of education, marital status, children at home, foreign born, and urban level. Full regression results are reported in Table A.3.1 (including the UK) and Table A.3.2 (excluding the UK) in the Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)
		Full sa	ample		In paid	l work
A. Sample including the UK						
online politics	0.033	-0.157*	0.023	-0.152*	-0.004	-0.198*
	(0.039)	(0.082)	(0.041)	(0.086)	(0.050)	(0.108)
ISCO 1	0.066	0.017	0.106	0.074	0.159*	0.150
	(0.064)	(0.071)	(0.071)	(0.078)	(0.088)	(0.103)
ISCO 3	0.123**	0.084	0.130**	0.094	0.129*	0.077
	(0.049)	(0.056)	(0.053)	(0.061)	(0.069)	(0.079)
ISCO 4	0.252***	0.160**	0.226***	0.145**	0.282***	0.192**
	(0.056)	(0.064)	(0.061)	(0.070)	(0.081)	(0.093)
ISCO 5	0.341***	0.282***	0.261***	0.201***	0.373***	0.273***
	(0.051)	(0.057)	(0.055)	(0.060)	(0.073)	(0.078)
ISCO 6	0.223***	0.113	0.143	0.020	0.226*	0.039
	(0.083)	(0.088)	(0.090)	(0.094)	(0.122)	(0.132)
ISCO 7	0.408***	0.342***	0.386***	0.325***	0.504***	0.428***
	(0.055)	(0.059)	(0.060)	(0.065)	(0.080)	(0.085)
ISCO 8	0.367***	0.267***	0.323***	0.236***	0.440***	0.335***
	(0.066)	(0.072)	(0.073)	(0.079)	(0.098)	(0.107)
ISCO 9	0.368***	0.281***	0.307***	0.211***	0.404***	0.282***
	(0.061)	(0.066)	(0.067)	(0.073)	(0.092)	(0.102)
online politics*ISCO 1		0.150		0.080		-0.037
		(0.158)		(0.171)		(0.185)
online politics*ISCO 3		0.106		0.095		0.131
		(0.116)		(0.123)		(0.150)
online politics*ISCO 4		0.334**		0.293**		0.273
		(0.131)		(0.137)		(0.172)
online politics*ISCO 5		0.188		0.193		0.315**
		(0.116)		(0.123)		(0.155)
online politics*ISCO 6		0.569**		0.611**		0.793**
		(0.253)		(0.264)		(0.318)
online politics*ISCO 7		0.235*		0.209		0.216
		(0.136)		(0.148)		(0.186)
online politics*ISCO 8		0.440***		0.360**		0.343
		(0.161)		(0.167)		(0.214)
online politics*ISCO 9		0.380**		0.421**		0.460**
		(0.160)		(0.172)		(0.219)
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	26,017	26,017	22,192	22,192	12,955	12,955

Table 6: Probit regressions of EU exit on online politics interacted with the level ofoccupation ISCO

Table 6 (continued)						
B. Sample excluding the UK						
online politics	0.137***	-0.075	0.136***	-0.081	0.122**	-0.101
	(0.040)	(0.089)	(0.042)	(0.095)	(0.051)	(0.111)
ISCO 1	0.024	-0.005	0.107	0.084	0.164	0.192*
	(0.073)	(0.078)	(0.081)	(0.086)	(0.102)	(0.114)
ISCO 3	0.130**	0.092	0.140**	0.095	0.188***	0.138
	(0.052)	(0.060)	(0.057)	(0.067)	(0.072)	(0.085)
ISCO 4	0.237***	0.145**	0.212***	0.129*	0.315***	0.223**
	(0.062)	(0.071)	(0.067)	(0.077)	(0.086)	(0.099)
ISCO 5	0.311***	0.236***	0.239***	0.148**	0.422***	0.297***
	(0.056)	(0.062)	(0.059)	(0.067)	(0.077)	(0.086)
ISCO 6	0.200**	0.110	0.120	0.009	0.189	0.002
	(0.089)	(0.094)	(0.096)	(0.102)	(0.135)	(0.148)
ISCO 7	0.369***	0.312***	0.340***	0.280***	0.501***	0.421***
	(0.059)	(0.064)	(0.064)	(0.070)	(0.085)	(0.091)
ISCO 8	0.360***	0.276***	0.335***	0.261***	0.522***	0.443***
	(0.072)	(0.078)	(0.079)	(0.085)	(0.104)	(0.113)
ISCO 9	0.340***	0.258***	0.283***	0.196**	0.495***	0.391***
	(0.066)	(0.072)	(0.073)	(0.080)	(0.099)	(0.111)
online politics*ISCO 1		0.083		0.051		-0.200
		(0.192)		(0.207)		(0.208)
online politics*ISCO 3		0.123		0.141		0.143
		(0.124)		(0.133)		(0.158)
online politics*ISCO 4		0.383***		0.329**		0.316*
		(0.144)		(0.153)		(0.188)
online politics*ISCO 5		0.304**		0.372***		0.466***
		(0.119)		(0.127)		(0.158)
online politics*ISCO 6		0.443*		0.522*		0.761**
		(0.265)		(0.278)		(0.339)
online politics*ISCO 7		0.204		0.210		0.276
		(0.144)		(0.159)		(0.188)
online politics*ISCO 8		0.378**		0.298*		0.258
		(0.169)		(0.176)		(0.220)
online politics*ISCO 9		0.369**		0.379**		0.404*
		(0.168)		(0.185)		(0.233)
control variables	yes	yes	yes	yes	yes	yes
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	24,396	24,396	20,788	20,788	12,132	12,132

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Panel A includes individuals from the following countries: Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. Individuals from the United Kingdom are excluded in Panel B. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise. Control variables: Sex, age, age squared, years of education, marital status, children at home, foreign born, and urban level. Full regression results are reported in Table A.4.1 (including the UK) and Table A.4.2 (excluding the UK) in the Appendix.

4.2 The medium matters

Our main results are confirmed also when employing the ISTAT Multipurpose Household Survey. But using this dataset allows us to move one step further and analyze the association between different forms of online activity and Euroscepticism. We run ordered probit regressions with robust standard errors on the four separate rounds of the survey and on the complete dataset running from 2013 to 2016. The dependent variable in this set of regressions is represented by the level of trust in the EU parliament as divided in 11 ordered categories, ranging from no trust (0) to complete trust (10). Put differently, the dependent variable can be thought of as a measure of *propensity* to exhibit positive attitudes toward the EU. The key independent variables are either the level of education as divided in three categories (compulsory education, high school diploma, and Bachelor and higher tertiary degrees) or the employment status along with the type of exposure to politics on internet. Since this latter variable takes three values, we construct two dummy variables (the reference category corresponding to the situation where the respondent does not use internet to get information about politics): the dummy online politics w/o social media equals 1 if the respondent makes use of internet to get information about politics but not through social media (0 otherwise) while the dummy online politics via social media equals 1 if the respondent makes use of internet to get information about politics through social media (0 otherwise). We control for all the individual characteristics mentioned above and always include region fixed effects and year fixed effects (when using the dataset pooled over all available years).

Columns 1, 3, 5, 7 and 9 of Table 7 show that while the use of social media to get information on politics is always negatively and significantly correlated with trust in the EU parliament (especially in Panel B when the sample is restricted to employed individuals), the simple use of internet to get access to information not mediated through social media is in general positively associated with trust in the parliament. This is particularly interesting since, as discussed in Section 2, it highlights the specific role that social media can play to favor populist's movements as opposed to the effect of the simple (increased) access to information enabled by the world wide web. These results also show that levels of education below tertiary degrees tend to be associated with lower trust in European institutions.

Columns 2, 4, 6, 8 and 10 of Table 7 confirm all the results even after the explicit introduction of interaction terms between different types of exposure to online politics and educational attainements. In line with our hypothesis, the coefficient estimated for the interaction term between the use of social media to get information about politics and the lowest educational attainment (completion of only compulsary schooling) is negative and in most cases strongly significant. Once again, this result suggests that categories of lower-educated Italians are particularly vulnerable to social media and that exposure in this case is particularly effective in shaping attitudes towards populist positions.

When we introduce the unemployment status as a proxy for social vulnerability we find somewhat similar results (Table 8). Columns 1, 3, 5, 7 and 9 of Table 8 fully confirm that it is not the simple exposure to online politics that matters but its type. Not surprisingly, they

also show that unemployed individuals tend to have less trust in the European parliament. The interaction between social status and internet exposure in this case is not significant (columns 2, 4, 6, 8 and 10).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	2013 t	o 2016	20	13	20	14	20	15	20	16
A. Full sample	2									
online politics w/o social media	0.048***	0.062***	0.082***	0.121***	0.058***	0.073**	0.041**	0.040	0.006	0.018
	(0.008)	(0.016)	(0.016)	(0.032)	(0.017)	(0.032)	(0.017)	(0.031)	(0.017)	(0.032)
online politics via social media	-0.046***	-0.004	-0.005	0.056	-0.033	0.006	-0.026	0.033	-0.110***	-0.097**
	(0.010)	(0.020)	(0.021)	(0.041)	(0.022)	(0.042)	(0.020)	(0.038)	(0.019)	(0.038)
high school diploma	-0.183***	-0.169***	-0.188***	-0.164***	-0.163***	-0.145***	-0.211***	-0.199***	-0.168***	-0.163***
	(0.009)	(0.012)	(0.017)	(0.024)	(0.018)	(0.024)	(0.017)	(0.023)	(0.017)	(0.024)
compulsory school	-0.276***	-0.262***	-0.305***	-0.275***	-0.276***	-0.266***	-0.275***	-0.263***	-0.247***	-0.238***
online politics w/o	(0.009)	(0.011)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)
social media*h.s.		-0.020		-0.029		-0.037		-0.001		-0.030
·		(0.019)		(0.038)		(0.040)		(0.038)		(0.040)
online politics w/o social media*compulsory		-0.002		-0.105**		0.033		0.027		0.030
school		(0.025)		(0.050)		(0.051)		(0.048)		(0.051)
online politics via social media*h.s. diploma		-0.040*		-0.073		-0.052		-0.067		0.019
alpionia		(0.024)		(0.049)		(0.050)		(0.046)		(0.045)
online politics via social media*compulsory		-0.098***		-0.089		-0.057		-0.125**		-0.122**
school		(0.031)		(0.063)		(0.066)		(0.060)		(0.057)
Control variables	yes									
Italian region fixed effects	yes									
year fixed effects	yes	yes	no							
Observations	145,728	145,728	37,532	37,532	36,085	36,085	36,825	36,825	35,286	35,286

Table 7: Ordered probit regressions of trust in European parliament on online politicsinteracted with the level of education

Table 7 (continue	ed)									
B. Sar	mple of empl	oyed								
online politics w/o										
social media	0.045***	0.060***	0.092***	0.140***	0.035	0.047	0.045**	0.028	0.006	0.026
	(0.011)	(0.019)	(0.021)	(0.039)	(0.022)	(0.039)	(0.021)	(0.038)	(0.022)	(0.040)
online politics via			0.0-0*		0 0 - 0 + + +		0.046*			0 4 0 0 * *
social media	-0.083***	-0.012	-0.050*	0.063	-0.078***	0.003	-0.046*	0.016	-0.14/***	-0.102**
hish ashaal	(0.013)	(0.024)	(0.028)	(0.053)	(0.028)	(0.050)	(0.026)	(0.046)	(0.025)	(0.046)
diploma	-0 211***	-N 192***	-0 221***	-0 180***	-0 177***	-0 152***	-0 251***	-0 223***	_∩ 185***	-0 171***
dipiona	(0.011)	(0.016)	(0.022)	(0.021)	(0.022)	(0.031)	(0.021)	(0.031)	(0.105	(0.032)
	0.0011)	0.010	0.022)	0.031)	0.022)	0.001)	0.021)	0.031)	0.022)	0.052)
compulsory school	-0.300	-0.273	-0.328	-0.279	-0.307	-0.288	-0.295	-0.278***	-0.207	-0.238
online politics w/o	(0.013)	(0.016)	(0.025)	(0.032)	(0.026)	(0.032)	(0.025)	(0.032)	(0.026)	(0.033)
social media*h.s.										
diploma		-0.009		-0.048		-0.021		0.047		-0.017
		(0.024)		(0.047)		(0.049)		(0.047)		(0.050)
online politics w/o										
media*compulsory										
school		-0.026		-0.091		0.024		-0.008		-0.041
		(0.033)		(0.064)		(0.068)		(0.065)		(0.069)
online politics via										
social media*h.s.										
diploma		-0.076**		-0.133**		-0.110*		-0.056		-0.028
		(0.030)		(0.065)		(0.062)		(0.058)		(0.057)
online politics via social										
media*compulsory										
school		-0.184***		-0.229**		-0.145		-0.205**		-0.180**
		(0.042)		(0.089)		(0.092)		(0.080)		(0.076)
Control variables	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
ltalian region fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
year fixed effects	yes	yes	no	no	no	no	no	no	no	no
Observations	61,299	61,299	15,718	15,718	15,041	15,041	15,487	15,487	15,053	15,053

Source: Multipurpose Survey on Households provided by <u>https://www.istat.it</u>

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses in Panel A are based on the full sample (employed, unemployed, or out of the labor force) and those in Panel B on the sample of employed, where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics. Sex, age group, marital status, household type, and urban level. Full regression results are reported in Table A.5.1 (full sample) and Table A.5.2 (sample of employed) in the Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	2013 t	o 2016	20	13	20	14	20	15	20	16
online politics w/o social media	0.046***	0.044***	0.085***	0.089***	0.045**	0.038*	0.045**	0.044**	0.005	0.002
	(0.010)	(0.011)	(0.019)	(0.020)	(0.020)	(0.021)	(0.019)	(0.021)	(0.021)	(0.022)
online politics via social media	-0.079***	-0.087***	-0.053**	-0.057**	-0.060**	-0.078***	-0.035	-0.045*	-0.158***	-0.155***
	(0.012)	(0.013)	(0.025)	(0.028)	(0.025)	(0.028)	(0.023)	(0.026)	(0.022)	(0.025)
unemployed	-0.073***	-0.078***	-0.077***	-0.076***	-0.089***	-0.102***	-0.077***	-0.084***	-0.044**	-0.045**
	(0.010)	(0.011)	(0.020)	(0.022)	(0.020)	(0.022)	(0.020)	(0.023)	(0.020)	(0.023)
online politics w/o social		0.010		-0.031		0.038		0.006		0.030
		(0.028)		(0.055)		(0.056)		(0.053)		(0.059)
social media *unemployed		0.034		0.019		0.080		0.046		-0.015
		(0.028)		(0.059)		(0.060)		(0.053)		(0.054)
control variables	yes									
Italian region fixed effects	yes									
year fixed effects	yes	yes	no							
Observations	78,234	78,234	19,898	19,898	19,427	19,427	19,876	19,876	19,033	19,033

Table 8: Ordered probit regressions of trust in European parliament on online politics interacted with the unemployed status

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the labor force sample (employed or unemployed) where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics. Sex, age group, education level, marital status, household type, and urban level. Full regression results are reported in Table A.6 in the Appendix.

If the level of education (or its interaction with exposure to online politics) is correlated with unobserved skills in computer and software use, related estimates from Table 7 would be plagued by the omitted variable bias. Indeed, low-educated individuals may exhibit poor knowledge about computer and internet, thus being more prone to misuse social networking sites to such an extent that they are unable to distinguish fake news from real news. Put differently, the possible correlation between low education and social media misuse may induce more exposure to populist propaganda posts.

The first, second, fifth and sixth columns of Table 9 show baseline estimates similar in the spirit of those displayed in Table 7: compulsory education and its interaction with online politics via social media are negatively associated with trust in the European parliament. To

check the robustness of our results, we further control for indicators of self-assessed computer and software use that are available in this form only in 2015 and 2016.¹⁰ *F* tests, reported in the third, fourth, seventh and eighth columns at the bottom of Table 9, indicate that their inclusion is jointly significant. At the same time, these additional regressions confirm our previous results. For instance, as presented in the fourth and eighth columns of the same table, the interactions between compulsory education and online politics via social media are still significant when proxies for computer skills are taken into account.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Full sa	ample			Sample of e	employed	
	w/o comp	uter skills	with compu	uter skills	w/o compu	ter skills	with compu	iter skills
online politics w/o social media	0.024**	0.027	0.010	0.019	0.024	0.026	0.014	0.023
	(0.012)	(0.022)	(0.013)	(0.024)	(0.015)	(0.027)	(0.017)	(0.029)
online politics via social media	-0.069***	-0.034	-0.089***	-0.054*	-0.099***	-0.045	-0.106***	-0.055
	(0.014)	(0.027)	(0.015)	(0.028)	(0.018)	(0.032)	(0.020)	(0.034)
high school diploma	-0.190***	-0.182***	-0.173***	-0.163***	-0.218***	-0.211***	-0.211***	-0.202***
	(0.012)	(0.017)	(0.013)	(0.018)	(0.015)	(0.022)	(0.016)	(0.023)
compulsory school	-0.261***	-0.251***	-0.223***	-0.210***	-0.280***	-0.257***	-0.253***	-0.226***
	(0.013)	(0.016)	(0.014)	(0.018)	(0.018)	(0.023)	(0.021)	(0.026)
online politics w/o social media*h.s. diploma		-0.012		-0.019		0.015		0.005
		(0.027)		(0.029)		(0.034)		(0.036)
online politics w/o social media*compulsory		0.032		0.024		-0.022		-0.037
school		(0.025)		(0 027)		(0.047)		
online politics via social media*h.s. diploma		-0.023		-0.019		-0.042		-0.037
•		(0.032)		(0.033)		(0.041)		(0.042)

 Table 9 : Ordered probit regressions of trust in European parliament on online politics

 interacted with the level of education, adding proxies for computer skills

¹⁰ The variables for self-assessed computer skills are derived from various operations that were performed in the last 12 months: transfer files between computers and/or other devices such as digital camera, cell phone, or MP3 player (yes/no), install software or applications (yes/no), change the settings of any software, including operating systems or security programs (yes/no), connect and install peripherals like printers or modems (yes/no), compress or zip files (yes/no), copy or move a file or folder (yes/no), use software for word processing like e.g. Microsoft Word (yes/no), use "copy and paste" to copy or move information within a document (yes/no), create presentations or documents that include texts, images, graphics, tables (yes/no), use spreadsheets for calculation like e.g. Microsoft Excel (yes/no), use the advanced functions of the spreadsheets for calculation to organize and analyze data like e.g. sort, filter, use formulas, create graphics (yes/no), use software to edit photos, videos, audio files (yes/no) and write code in a programming language (yes/no).

Table 9 (continued)

online politics via social media*compulsory school		-0.120***		-0.132***		-0.191***		-0.190***
		(0.041)		(0.043)		(0.055)		(0.058)
proxies for computer skills	no	no	yes	yes	no	no	yes	yes
Control variables	yes	yes	yes	yes	yes	yes	yes	yes
Italian region fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
Test for joint signific	ance of cor	nputer skills						
F-test Observations	72,111	72,111	93.24*** 66,812	93.58*** 66,812	30,540	30,540	51.58*** 28,402	52.17*** 28,402

Source: Multipurpose Survey on Households provided by <u>https://www.istat.it</u>

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the full sample (employed, unemployed, or out of the labor force) and the sample of employed workers, pooled over 2015 and 2016, where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics for self-assessed computer skills are derived from various operations that were performed in the last 12 months (see footnote 8). Control variables: Sex, age group, education level, marital status, household type, and urban level. Full regression results are reported in Table A.7 in the Appendix.

The main issue with the estimations presented in Table 7 and 8 (and also in the regression analyses based on the ESS data) relates to the potential endogeneity of our variables measuring the exposure to internet and social media. One can argue that anti-EU activists and politically motivated citizens might be more prone to make use of internet (and social media) to get access to political (and politically biased) information and propaganda, and later share this material within their communities. Indeed, this is the Neuman's idea of political pull that we discussed in Section 2; motivated voters engage actively in digital media, keep up the digital bonding that expresses support for the populist movements and therefore reinforce from the bottom-up their platforms.

In order to address this issue, following Campante et al. (2018), we instrument the exposure to online politics and social media using a series of variables intended to capture the speed of connection available to the respondent and therefore the relative easiness of using internet and social media to get access to political information. We employ the following variables as instruments: availability of a DSL connection (yes/no), availability of a smartphone connection (yes/no), availability of a SIM/USB connection (yes/no) and availability of an ISDN connection (yes/no). These four binary variables are available only in 2014, 2015 and 2016, therefore for the IV analysis we are unable to use the information contained in the previous round of the MHS Survey.

Over the period 2014-2016, more than half of the respondents from the full sample use a DSL connection, about a quarter a smartphone connection, at least 13 per cent a SIM/USB connection, and 2 per cent an ISDN connection. These figures are more or less similar to those computed from the labor-force sample or the sample of employed respondents (results not shown).

We run an ordered probit IV with two first-stage probit regressions in which the dependent variables are exposure to politics online either through traditional websites (*online politics w/o social media*) or via social media (*online politics via social media*). As in the regressions of Table 7 and 8 we consider as a dependent variable the level of trust in the EU parliament. In order to investigate the differential impact of exposure to internet by education level, we split the sample between individuals having completed only compulsory education cycles (low educated) and those with high school diploma, Bachelor or higher tertiary degrees (high educated). In our regressions we also introduce region fixed effects and control for sex, age cohort, civil status, household type and the urban dimension of the city of residence.

Table 10 displays the results obtained running our ordered probit IV specification on the full sample (employed, unemployed and out of the labor force) and compares the results of the instrumented analysis with the estimates of the standard model. We also tested specifications based on respondents in the labor force sample or only employed respondents, leading to substantively equivalent results (see Table A.8 in the Appendix). We find that the main results are robust to the use of instrumental variables. In particular, we find that the use of internet (without mediation via social media) does not play any role in affecting trust in the European parliament. On the contrary, getting information about politics on internet through social networks (like Facebook or Twitter) is negatively and significantly associated with trust in EU but only for low-educated individuals.

Derived from Table 10, Figure 11 allows us to visualize the marginal effects of each type of internet use for political information on each category of trust in the European parliament. Among the low-educated, the marginal effect of online political activity via social media is clearly negative for values of trust reaching at least the middle-scale position (these results hold for both the standard ordered probit and its IV version.) Interestingly, the marginal effects estimated for the low-educated using the IV method tend to be higher than those estimated via the standard method. Put differently, standard estimates appear to underestimate the marginal effect and could be considered as lower bounds of the true estimates.

These results confirm that: (i) it is not the use of internet per se that favors Eurosceptic platforms but the exposure to social media networks; and (ii) low-educated individuals are more vulnerable to the political use of social media and more likely to be influenced by populist messages. In this sense, demand and supply factors interact in determining political preferences.

The results presented in Table 10 also reports the values of the first-stage *F* statistics which are significant and relatively high, typically exceeding 10. Accordingly, the null

hypothesis of weak instruments is always rejected using the *F* test on excluded instruments, casting out potential doubts on the validity of our instruments.

	(1)	(2)	(3)	(4)
	Standard ord	ered probit	IV ordere	ed probit
	Compulsory	Higher	Compulsory	Higher
	education	education	education	education
online politics w/o social media	0.066***	0.064***	-0.048	0.009
	(0.022)	(0.011)	(0.070)	(0.080)
online politics via social media	-0.134***	-0.014	-0.216***	0.057
	(0.027)	(0.013)	(0.065)	(0.049)
control variables	yes	yes	yes	yes
Italian region fixed effects	yes	yes	yes	yes
year fixed effects	yes	yes	yes	yes
F test (dep. var> online politics w/o social media)			1284.04***	1253.75***
F test (dep. var> online politics via social media)			812.95***	1299.22***
Observations	53,192	55,004	52,917	54,910

Table 10: Standard and IV Ordered Probit regressions of trust in European parliament ononline politics by education

Source: Multipurpose Survey on Households provided by <u>https://www.istat.it</u>

Notes: Standard and IV Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). The IV ordered probit estimation involves two first-stage probit regressions. Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the full sample pooled over 2014, 2015 and 2016, where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics on yariables are sex, age groups, married, household type, and urban level. The instrumental variables are DSL connexion (yes/no), smartphone connexion (yes/no), SIM/USB connexion (yes/no) and ISDN connexion (yes/no); these four variables are available in this form only in 2014, 2015 and 2016. We also tested specifications based on the labor force sample or the sample of employed individuals, leading to substantively equivalent results (see Table A.8 in the Appendix).



Figure 11: Average marginal effects of online politics by level of education

Notes: Calculation from Table 10. The average marginal effects are plotted with the 95 per cent confidence intervals.

5. Conclusions

Recent literature has emphasized the role that increasing economic vulnerabilities and inequality have played in raising the demand for populist messages and ideas in western democracies, paving the way for parties and movements that employ these messages. Other contributions, conversely, stress the importance of innovations that took place on the supply side of the political arena. The use of internet and the diffusion of messages via social media, these contributions posit, might have disproportionally favored political actors who presume to establish open communication channels between the leaders and their followers.

This paper investigates the intersection and relative importance of each of these dimensions. We examine how socio-economic characteristics (education and employment status), different uses of the internet to acquire information about politics, and their interactions, correlate with the diffusion of a well-known populist mantra: an aversion to EU institutions and to European integration.

Our results show that: (i) socio-economic vulnerabilities, in particular low education and an unsecure employment status, are associated with a higher propensity to be in favor of leaving the EU and to a lower trust in its institutions; (ii) for low-educated citizens, but only for them, the exposure to online politics is associated with Eurosceptic attitudes and distrust in the European institutions; and (iii) the interaction between education and exposure to online political activities is always negatively and significantly correlated with Euroscepticism. Furthermore, the different types of internet use, i.e. the acquisition of political information through social media or via more traditional sources of information on the web, play an important role. We find that (iv) it is not the use of internet per se that is associated with distrust in EU institutions but the specific use of social media for political activity by the low-educated.

Our results suggest that looking at either demand or supply factors separately to explain political phenomena can be misleading. Considering the whole picture has in fact allowed us to disentangle the importance of the interaction between the two sides of the market. Our results also highlight the importance of looking carefully, and separately, at the different types of internet-powered activities (i.e. social networks vs. traditional online media) to understand their impact(s) on socio-political dynamics.

Finally, our results confirm the important role played by education for the correct functioning of democratic institutions. Fortunato and Panizza (2015) show how democratic institutions are more likely to flourish when education is spread throughout the entire population. In line with their results, we find that more-educated individuals are less vulnerable to populist ideas diffused through social media platforms.

Acknowledgements

We gratefully acknowledge comments and suggestions from Didier Ruedin.

References

- Aalberg T, Esser F, Reinemann C, et al. (eds) (2016) *Populist political communication in Europe*. Routledge, New York, NY, London.
- Acemoglu, D. and D. Autor (2010), Skills, Tasks and Technologies: Implications for Employment and Earnings, in *Handbook of Labor Economics*, Elsevier.
- Acemoglu, D., Egorov, G. and K. Sonin (2013), A Political Theory of Populism, *The Quarterly Journal of Economics*, Volume 128, Issue 2, Pages 771–805, <u>https://doi.org/10.1093/qje/qjs077</u>.
- Algan, Y, S Guriev, E Papaioannou, and E Passari (2017), "The European trust crisis and the rise of populism", CEPR, Discussion Paper 12444, forthcoming in *Brookings Papers on Economic Activity*.
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-36.
- Autor, D., Dorn, D., Hanson, G. and K. Majlesi (2017), A Note on the Effect of Rising trade Exposure on the 2016 Presidential Election, MIT Working Paper.
- Baldwin-Philippi, J. (2018), Politics 2.0: Social Media Campaigning, in: *The SAGE Handbook of Social Media*, SAGE.
- Bale, T., van Kessel, S. and P. Taggart (2011), 'Thrown Around With Abandon? Popular Understandings of Populism as Conveyed by the Print Media: A UK case study', *Acta Politica*, Vol. 46 (2), pp. 111–131.

- Becker, S. O., and Ferrara, A. (2019). Consequences of forced migration: A survey of recent findings. *Labour Economics*, 59 (August): 1–16.
- Becker, S O, T Fetzer and D Novy (2017), "Who voted for Brexit? A comprehensive districtlevel analysis", *Economic Policy*, 32(1).
- Berezin, M. (2013), "The Normalization of the Right in Post-Security Europe", in: Armin Schaefer and Wolfgang Streeck (eds.), Schaefer, Armin and Wolfgang Streeck. (eds), *Politics in an Age of Austerity.* Cambridge: Polity Press.
- Bracciale R, Martella A (2017) Define the populist political communication style: the case of Italian political leaders on Twitter. *Information, Communication & Society*, 20(9), 1310–1329.
- Card, D. (2009). Immigration and inequality. American Economic Review, 99(2), 1-21.
- Clemens, M. A., and Hunt, J. (2019). The labor market effects of refugee waves: reconciling conflicting results. *ILR Review*, 72(4), 818-857.
- Dalio, R., Kryger, S., Rogers, J., and Davis, G. (2017). Populism: the phenomenon. *Bridgewater: Daily Observations*, 203(226-3030).
- Campante, F., Durante, R. and F. Sobbrio (2018), Politics 2.0: The Multifaceted Effect of Broadband Internet on Political Participation, *Journal of the European Economic Association*, Volume 16, Issue 4.
- Canovan, M. (2002), 'Taking Politics to the People: Populism as the Ideology of Democracy', in: Meny, Yves and Yves Surel (eds.), *Democracies and the Populist Challenge*. New York: Palgrave, pp. 25-44.
- Chadwick, A. (2013), The hybrid media system, Oxford University Press, Oxford.
- Colantone, I and P Stanig (2016a) "The real reason the UK voted for Brexit? Jobs lost to Chinese competition", The Washington Post, 7 July.
- Colantone, I and P Stanig (2016b) "Global competition and Brexit", BAFFI CAREFIN Centre Research Paper 2016-44.
- Colantone, I. and P. Stanig (2018). Global Competition and Brexit. *American Political Science Review*, 112 (2), 201-218.
- Dal Bo', E.F., Finan, O.F., Persson, T. and J. Rickne (2019), Economic Losers and Political Winners: Sweden's Radical Right, unpublished manuscript.
- Engesser S, Ernst N, Esser F et al. (2017) Populism and social media: how politicians spread a fragmented ideology. *Information, Communication & Society*, 20(8):1109–1126.
- Fortunato, P. and U. Panizza (2015), Democracy, education and the quality of government, *Journal of Economic Growth*, Springer, vol. 20(4).
- Gerebaudo, P. (2018), Social media and populism: an elective affinity?, *Media, Culture & Society*, Vol. 40(5) 745–753.

- Gidron, N. and and B. Bonikowski (2015), Varieties of Populism: Literature Review and Research Agenda, Weatherhead Center for International Affairs Working Paper No. 13-0004.
- Guiso, L, H Herrera and M Morelli (2017), "Populism: Demand and supply of populism", Einaudi Institute for Economics and Finance (EIEF), Working Paper n°1703.
- Harmsen, R. (2010), Concluding Comment: On Understanding the Relationship between Populism and Euroscepticism, *Perspectives on European Politics & Society*, Vol 11(3).
- Hendrickson, C. and W. A. Galston (2017), Why are populists winning online?, Brookings TechTank.
- Hoffmann, E. (2003), 'International Statistical Comparisons of Occupational and Social Structures, in Hoffmeyer-Zlotnik, J. H. and Wolf, C., (eds.) Advances in Cross-national Comparison: A European Working Book for Demographic and Socio-economic Variables, chapter 8, pp. 137–158. Boston: Springer Science & Business Media.
- Hopkin, J. and M. Blyth (2018), The Global Economics of European Populism: Growth Regimes and Party System Change in Europe, *Government and Opposition*, 54(2), 193-225.
- Levitsky, S. and J- Loxton (2012), Populism and competitive authoritarianism: the case of Fujimori's Peru, in: Mudde, Cas and Cristóbal Rovira Kaltwasser (eds.). *Populism in Europe and the Americas*. Cambridge: Cambridge University Press.
- Levitsky, S. and J- Loxton (2013), 'Populism and competitive authoritarianism in the Andes', *Democratization*, Vol. 20 (1), pp. 107-136(30).
- Maldonado, M. A. (2017), Rethinking Populism in the Digital Age: Social Networks, Political Affects and Post-Truth Democracies, unpublished.
- Mazzoleni, G. and R. Bracciale (2018), Socially mediated populism: the communicative strategies of political leaders on Facebook, *Palgrave Communications*, volume 4, Article number: 50.
- Milanovic, B. (2016), *Global Inequality A New Approach for the Age of Globalization*, Harvard University Press.
- Milligan, K., Moretti, E. & Oreopoulos, P. (2004). Does education improve citizenship? Evidence from the U.S and the U.K. *Journal of Public Economics*, 88(3), 1667-1695.
- Neuman, W. R. (2016): *The Digital Difference. Media Technology and the Theory of Communication Effects*, Harvard University Press, Cambridge and London.
- Ostrom, E. (2006). A Frequently Overlooked Precondition of Democracy: Citizens Knowledgeable About and Engaged in Collective Action. in Preconditions of Democracy, The Tampere Club Series, vol. 2, ed. Geoffrey Brennan, 75-89. Tampere, Finland: Tampere University Press.

- Mayda, A. M. (2006). Who is against immigration? A cross-country investigation of individual attitudes toward immigrants. *The Review of Economics and Statistics*, 88(3), 510-530.
- Mudde, C. (2004), 'The Populist Zeitgeist', *Government and Opposition*, Vol. 39 (4), pp. 542–563.
- Pappas, T. (2013), 'Populist Democracies: Post Authoritarian Greece and Post-Communist Hungary', *Government and Opposition*, 49(1), 1-23.
- Pecoraro, M., and Ruedin, D. (2016). A foreigner who does not steal my job: The role of unemployment risk and values in attitudes toward equal opportunities. *International Migration Review*, 50(3), 628-666.
- Pecoraro, M., and Ruedin, D. (2019). Occupational exposure to foreigners and attitudes towards equal opportunities, *Migration Studies*, mnz006, <u>https://doi.org/10.1093/migration/mnz006</u>.
- Pirro, A. and P. Taggart (2018), The populist politics of Euroscepticism in times of crisis: A framework for analysis, *Politics*, Vol 38(3).
- Rodrik, D. (2018), Populism and the economics of globalization, *Journal of International Business Policy*, 1(1-2), 12-33.
- Rooduijn, M., Van Kessel, S., Froio, C., Pirro, A., De Lange, S., Halikiopoulou, D., Lewis, P., Mudde, C. & Taggart, P. (2019). The PopuList: An Overview of Populist, Far Right, Far Left and Eurosceptic Parties in Europe. <u>http://www.popu-list.org</u>.
- Rovira Kaltwasser, C. (2013), The Responses of Populism to Dahl's Democratic Dilemmas, *Political Studies*, Volume62, Issue 3.
- Ruzza, C. (2009), Populism and euroscepticism: Towards uncivil society?, *Policy and Society*, Volume 28, Issue 1, Pages 87-98.
- Skocpol, T. and V. Williamson (2012), *The Tea Party and the Remaking of Republican Conservatism*. Oxford: Oxford University Press.
- Timmer, M. P., Los B., Rand, S., and G. de Vries (2013) ,Fragmentation, Incomes and Jobs. An analysis of European competitiveness', *Economic Policy*, 28(76), 613-661.
- UNCTAD (2017) Trade and Development Report, 2017: Beyond austerity: Towards a global new deal. New York and Geneva: United Nations Publication.
- Wilkinson, W. (2018), The Density Divide: Urbanization, Polarization, and Populist Backlash, The Niskanen Center Research Paper.
- Wirth W, Esser F, Wettstein M, et al. (2016) The appeal of populist ideas, strategies and styles: A theoretical model and research design for analyzing populist political communication. Working paper no. 88. Available from: http://pwinfsdw.uzh.ch/publications/workingpaper/pdf/wp88.pdf.

Appendix

Table A.1.1

	(1)	(2)	(3)	(4)	(5)	(6)
		Full s	ample		In paid	d work
online politics	0.000	0.422***	0.008	0.576***	-0.030	0.582***
	(0.036)	(0.135)	(0.039)	(0.144)	(0.049)	(0.200)
years of education	-0.052***	-0.046***	-0.044***	-0.035***	-0.058***	-0.047***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.007)	(0.008)
online politics*education		-0.030***		-0.041***		-0.042***
		(0.009)		(0.010)		(0.014)
women	-0.117***	-0.118***	-0.131***	-0.133***	-0.176***	-0.179***
	(0.026)	(0.026)	(0.030)	(0.029)	(0.041)	(0.041)
age	0.051***	0.051***	0.052***	0.052***	0.052***	0.052***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.011)	(0.011)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.159***	-0.161***	-0.113***	-0.115***	-0.142***	-0.144***
	(0.028)	(0.028)	(0.032)	(0.032)	(0.043)	(0.043)
children at home	0.078***	0.076**	0.121***	0.117***	0.097**	0.089**
	(0.030)	(0.030)	(0.033)	(0.033)	(0.044)	(0.044)
foreign born	-0.154***	-0.151***	-0.176***	-0.172***	-0.160**	-0.153**
	(0.054)	(0.054)	(0.059)	(0.059)	(0.076)	(0.076)
suburbs of big city	0.019	0.018	0.031	0.028	0.069	0.067
	(0.057)	(0.057)	(0.062)	(0.062)	(0.081)	(0.081)
small city	0.094**	0.092**	0.106**	0.103**	0.130**	0.125**
	(0.045)	(0.045)	(0.049)	(0.049)	(0.064)	(0.064)
village	0.076*	0.075*	0.113**	0.110**	0.125**	0.121*
	(0.043)	(0.043)	(0.048)	(0.047)	(0.063)	(0.063)
home in countryside	0.159**	0.161**	0.178**	0.178**	0.169*	0.166*
	(0.070)	(0.070)	(0.076)	(0.076)	(0.100)	(0.100)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	28,598	28,598	23,929	23,929	13,165	13,165

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
		Full sa	ample		In paic	l work
online politics	0.114***	0.251*	0.123***	0.421***	0.100**	0.440**
	(0.037)	(0.137)	(0.041)	(0.148)	(0.050)	(0.204)
years of education	-0.051***	-0.049***	-0.043***	-0.038***	-0.048***	-0.042***
	(0.004)	(0.005)	(0.005)	(0.006)	(0.007)	(0.008)
online politics*education		-0.010		-0.022**		-0.024*
		(0.009)		(0.010)		(0.014)
women	-0.121***	-0.121***	-0.139***	-0.140***	-0.200***	-0.202***
	(0.028)	(0.028)	(0.031)	(0.031)	(0.044)	(0.044)
age	0.053***	0.053***	0.054***	0.054***	0.036***	0.037***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.012)	(0.012)
age squared	-0.001***	-0.001***	-0.001***	-0.001***	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.183***	-0.183***	-0.114***	-0.115***	-0.146***	-0.147***
	(0.030)	(0.030)	(0.035)	(0.035)	(0.047)	(0.047)
children at home	0.063**	0.063**	0.106***	0.105***	0.106**	0.103**
	(0.032)	(0.032)	(0.035)	(0.035)	(0.047)	(0.047)
foreign born	-0.047	-0.046	-0.057	-0.056	-0.028	-0.025
	(0.057)	(0.057)	(0.062)	(0.062)	(0.083)	(0.083)
suburbs of big city	-0.010	-0.011	0.012	0.010	0.085	0.083
	(0.063)	(0.063)	(0.068)	(0.068)	(0.086)	(0.086)
small city	0.083*	0.082*	0.091*	0.090*	0.112*	0.110*
	(0.046)	(0.046)	(0.050)	(0.050)	(0.062)	(0.062)
village	0.074*	0.073*	0.104**	0.103**	0.147**	0.145**
	(0.043)	(0.043)	(0.048)	(0.048)	(0.061)	(0.061)
home in countryside	0.195***	0.195***	0.192**	0.192**	0.238**	0.237**
	(0.071)	(0.071)	(0.080)	(0.080)	(0.105)	(0.104)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	26,878	26,878	22,448	22,448	12,324	12,324

Table A.1.2

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

In paid work or unemployed In paid work In paid work In 0.043 In paid work In 0.056 In paid work In 0.056
online politics -0.010 -0.061 -0.029 -0.093 -0.036 -0.086 (0.043) (0.056) (0.046) (0.059) (0.049) (0.060) ever unemployed 3 to 12 months 0.056 0.074 0.047 0.048 0.038 0.038 ever unemployed more than 12 0.045) (0.052) (0.049) (0.058) (0.052) (0.054) months 0.156*** 0.074 0.112** 0.030 0.079 -0.014 (0.049) (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
online politics -0.010 -0.061 -0.029 -0.093 -0.036 -0.086 (0.043) (0.056) (0.046) (0.059) (0.049) (0.060) ever unemployed 3 to 12 months 0.056 0.074 0.047 0.048 0.038 0.038 (0.045) (0.052) (0.049) (0.058) (0.052) (0.049) (0.058) (0.052) (0.061) ever unemployed more than 12 months 0.156*** 0.074 0.112** 0.030 0.079 -0.014 (0.049) (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
(0.043) (0.056) (0.046) (0.059) (0.049) (0.060) ever unemployed 3 to 12 months 0.056 0.074 0.047 0.048 0.038 0.038 (0.045) (0.052) (0.049) (0.058) (0.052) (0.049) ever unemployed more than 12 0.156*** 0.074 0.112** 0.030 0.079 -0.014 months 0.156*** 0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
ever unemployed 3 to 12 months 0.056 0.074 0.047 0.048 0.038 0.038 (0.045) (0.052) (0.049) (0.058) (0.052) (0.061) ever unemployed more than 12 0.156*** 0.074 0.112** 0.030 0.079 -0.014 months 0.156*** 0.074 (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 months -0.057 0.007 0.009
(0.045) (0.052) (0.049) (0.058) (0.052) (0.061) ever unemployed more than 12 0.156*** 0.074 0.112** 0.030 0.079 -0.014 months 0.156*** 0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
ever unemployed more than 12 0.156*** 0.074 0.112** 0.030 0.079 -0.014 months 0.049) (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
months 0.156*** 0.074 0.112** 0.030 0.079 -0.014 (0.049) (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
(0.049) (0.056) (0.054) (0.059) (0.063) (0.068) online politics*ever unemp. 3 to 12 -0.057 0.007 0.009
online politics*ever unemp. 3 to 12 months -0.057 0.007 0.009
months -0.057 0.007 0.009
(0.097) (0.104) (0.109)
online politics*ever unemp. more
than 12 months 0.336*** 0.330*** 0.357***
(0.104) (0.111) (0.135)
years of education -0.060*** -0.056*** -0.056*** -0.058*** -0.058*** -0.058***
(0.005) (0.005) (0.006) (0.006) (0.007) (0.007)
women -0.137*** -0.140*** -0.153*** -0.156*** -0.177*** -0.177***
(0.035) (0.035) (0.038) (0.038) (0.041) (0.041)
age 0.038*** 0.037*** 0.044*** 0.043*** 0.050*** 0.049***
(0.010) (0.010) (0.010) (0.010) (0.012) (0.011)
age squared -0.000*** -0.000*** -0.000*** -0.000*** -0.001*** -0.000***
(0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000)
married -0.126*** -0.127*** -0.126*** -0.125*** -0.139*** -0.139***
(0.038) (0.038) (0.041) (0.041) (0.043) (0.043)
children at home 0.062 0.065* 0.091** 0.093** 0.096** 0.100**
(0.038) (0.038) (0.042) (0.042) (0.044) (0.044)
foreign born -0.146** -0.144** -0.162** -0.159** -0.163** -0.161**
(0.063) (0.063) (0.069) (0.070) (0.076) (0.076)
suburbs of big city 0.042 0.046 0.052 0.055 0.069 0.077
(0.073) (0.073) (0.077) (0.076) (0.081) (0.081)
small city 0.107** 0.113** 0.099* 0.104* 0.132** 0.140**
(0.054) (0.054) (0.058) (0.058) (0.064) (0.063)
village 0.088* 0.091* 0.106* 0.110* 0.128** 0.135**
(0.053) (0.053) (0.057) (0.057) (0.063) (0.062)
home in countryside 0.168** 0.172** 0.148 0.152 0.173* 0.177*
(0.084) (0.084) (0.095) (0.095) (0.100) (0.100)
country fixed effects ves ves ves ves ves
household income (deciles) no no yes yes yes yes
Observations 17,116 17,116 14,544 14,544 13,147 13,147

Table A.2.1

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
	In	paid work c	or unemploy	ed	In paid	d work
online politics	0.094**	0.070	0.090*	0.069	0.094*	0.077
	(0.045)	(0.059)	(0.047)	(0.061)	(0.050)	(0.062)
ever unemployed 3 to 12 months	0.079	0.103*	0.069	0.080	0.055	0.067
	(0.048)	(0.055)	(0.053)	(0.062)	(0.057)	(0.066)
ever unemployed more than 12						
months	0.159***	0.109*	0.102*	0.070	0.065	0.023
	(0.051)	(0.057)	(0.056)	(0.061)	(0.063)	(0.070)
online politics*ever unemp. 3 to 12						
months		-0.093		-0.037		-0.040
		(0.104)		(0.111)		(0.116)
online politics*ever unemp. more		4.4				
than 12 months		0.211**		0.140		0.184
		(0.105)		(0.110)		(0.134)
years of education	-0.052***	-0.052***	-0.047***	-0.047***	-0.048***	-0.048***
	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)
women	-0.161***	-0.163***	-0.182***	-0.183***	-0.202***	-0.202***
	(0.036)	(0.036)	(0.041)	(0.041)	(0.044)	(0.044)
age	0.032***	0.032***	0.031***	0.031***	0.035***	0.034***
	(0.010)	(0.010)	(0.011)	(0.011)	(0.012)	(0.012)
age squared	-0.000***	-0.000***	-0.000**	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.146***	-0.146***	-0.119***	-0.119***	-0.142***	-0.142***
	(0.040)	(0.040)	(0.044)	(0.044)	(0.047)	(0.047)
children at home	0.055	0.057	0.094**	0.095**	0.105**	0.107**
	(0.041)	(0.041)	(0.045)	(0.045)	(0.047)	(0.047)
foreign born	-0.043	-0.042	-0.038	-0.036	-0.032	-0.030
	(0.070)	(0.070)	(0.076)	(0.076)	(0.083)	(0.083)
suburbs of big city	0.050	0.052	0.066	0.066	0.085	0.088
	(0.081)	(0.080)	(0.085)	(0.084)	(0.087)	(0.087)
small city	0.068	0.074	0.076	0.079	0.112*	0.117*
	(0.054)	(0.054)	(0.059)	(0.059)	(0.062)	(0.062)
village	0.090*	0.092*	0.120**	0.122**	0.148**	0.152**
	(0.052)	(0.052)	(0.057)	(0.057)	(0.061)	(0.060)
home in countryside	0.173**	0.178**	0.185*	0.188*	0.242**	0.245**
	(0.088)	(0.087)	(0.103)	(0.102)	(0.105)	(0.105)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	16,121	16,121	13,648	13,648	12,306	12,306

Table A.2.2

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
	(1)	Eull s	amnle	(+)	 In nair	(U) dwork
		1 011 30	ampie		in par	
online politics	0.024	0.325**	0.025	0.399***	-0.009	0.677***
	(0.036)	(0.137)	(0.039)	(0.146)	(0.049)	(0.219)
ISCED II	-0.165***	-0.150***	.0.159***	-0.146**	-0.162	-0.109
	(0.052)	(0.055)	(0.058)	(0.062)	(0.113)	(0.125)
ISCED IIIb	-0.131**	-0.130**	-0.144**	-0.135*	-0.289**	-0.250**
	(0.062)	(0.065)	(0.067)	(0.070)	(0.116)	(0.126)
ISCED IIIa	-0.311***	-0.259***	-0.298***	-0.233***	-0.376***	-0.284**
	(0.063)	(0.066)	(0.068)	(0.072)	(0.119)	(0.130)
ISCED IV	-0.391***	-0.351***	-0.399***	-0.323***	-0.573***	-0.434***
	(0.072)	(0.076)	(0.077)	(0.081)	(0.126)	(0.137)
SCED V1	-0.614***	-0.587***	-0.582***	-0.543***	-0.816***	-0.791***
	(0.081)	(0.086)	(0.085)	(0.091)	(0.133)	(0.148)
SCED V2	-0.721***	-0.589***	-0.665***	-0.499***	-0.910***	-0.690***
	(0.089)	(0.091)	(0.093)	(0.096)	(0.146)	(0.155)
other	-0.450	-0.732**	-0.739**	-0.848**	-0.734	-0.632
	(0.284)	(0.337)	(0.338)	(0.394)	(0.513)	(0.552)
online politics*ISCED II	()	-0.221	()	-0.227	()	-0.527**
		(0.162)		(0.177)		(0.259)
online politics*ISCED IIIb		-0.136		-0.193		-0.476**
		(0.153)		(0.163)		(0.236)
online politics*ISCED IIIa		-0.388**		-0.460***		-0.721***
		(0.154)		(0.165)		(0.237)
online politics*ISCED IV		-0.341**		-0.503***		-0.904***
		(0.167)		(0.177)		(0.253)
online politics*ISCED V1		-0.292		-0.361*		-0.519**
		(0.178)		(0.187)		(0.256)
online politics*ISCED V2		-0.618***		-0.734***		-1.072***
		(0.166)		(0.179)		(0.249)
online politics*other		1.028*		0.457		-0.873
	0.01.0*	(0.609)	0.000	(0.631)	0.005	(0.885)
years of education	-0.010*	-0.011*	-0.008	-0.008	-0.005	-0.005
vomon	(0.006)	(U.UUb) 0 111***	(U.UUb) 0.121***	(U.UU/) 0.122***	(U.UIU) 0.151***	(U.UIU) 0.1E6***
women	-0.110	-0.111	-0.121	-0.125	-0.151	-0.150
200	0.020)	0.020)	0.050)	0.050)	0.041)	0.041)
age	(0.003)	(0.003)	(0.005)	(0.054	(0.055	(0.012)
age squared	-0 000***	-0.000***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.148***	-0.150***	-0.114***	-0.117***	-0.151***	-0.155***
	(0.029)	(0.028)	(0.032)	(0.032)	(0.043)	(0.043)
children at home	0.080***	0.079***	0.118***	0.114***	0.083*	0.077*
	(0.030)	(0.030)	(0.033)	(0.033)	(0.045)	(0.045)
foreign born	-0.139***	-0.134**	-0.154***	-0.148**	-0.143*	-0.132*
	(0.053)	(0.054)	(0.059)	(0.059)	(0.076)	(0.076)

Table A.3.1

Table A.3.1 (continued)

suburbs of big city	-0.008	-0.012	0.013	0.007	0.053	0.041
	(0.058)	(0.058)	(0.063)	(0.063)	(0.084)	(0.084)
small city	0.058	0.056	0.082*	0.079	0.099	0.091
	(0.046)	(0.045)	(0.050)	(0.050)	(0.066)	(0.066)
village	0.042	0.041	0.084*	0.083*	0.087	0.078
	(0.044)	(0.043)	(0.048)	(0.048)	(0.066)	(0.065)
home in countryside	0.128*	0.130*	0.153**	0.153**	0.133	0.124
	(0.070)	(0.070)	(0.076)	(0.076)	(0.100)	(0.100)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	28,567	28,567	23,912	23,912	13,152	13,152

Source: European Social Survey, Round 8, 2016 (www.europeansocialsurvey.org)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
		Full sa	ample		In paid	d work
u u :	<u> </u>					
online politics	0.125***	0.350**	0.129***	0.410**	0.108**	0.420
	(0.037)	(0.156)	(0.041)	(0.166)	(0.049)	(0.297)
ISCED II	-0.130**	-0.123*	-0.136**	-0.136*	-0.182	-0.190
	(0.060)	(0.063)	(0.068)	(0.072)	(0.137)	(0.148)
ISCED IIIb	-0.106	-0.100	-0.110	-0.100	-0.271*	-0.274*
	(0.073)	(0.076)	(0.079)	(0.083)	(0.144)	(0.152)
ISCED IIIa	-0.279***	-0.252***	-0.266***	-0.226***	-0.399***	-0.356**
	(0.073)	(0.077)	(0.079)	(0.083)	(0.146)	(0.156)
ISCED IV	-0.302***	-0.269***	-0.297***	-0.234**	-0.510***	-0.428**
	(0.087)	(0.092)	(0.094)	(0.099)	(0.157)	(0.168)
ISCED V1	-0.478***	-0.460***	-0.432***	-0.409***	-0.653***	-0.646***
	(0.097)	(0.101)	(0.104)	(0.108)	(0.166)	(0.176)
ISCED V2	-0 603***	-0 514***	-0 523***	-0 396***	-0 789***	-0 654***
	(0 104)	(0 107)	(0 111)	(0 115)	(0 178)	(0 187)
othor	(0.104)	0.1077		0.002**	(0.178)	(0.107)
other	-0.840	-0.859	-0.951	-0.982		
apling politics *ISCED II	(0.333)	(0.301)	(0.392)	(0.447)		0.060
online politics isced in		-0.141		-0.110		-0.000
anling nalition*ICCED IIIh		(0.182)		(0.195)		(0.327)
online politics isced lib		-0.140		-0.179		-0.138
apling politics *ISCED III.		(0.108)		(0.178)		(0.308)
online politics isced ina		-0.250		-0.525		-0.557
		(0.170)		(U.182) 0.410**		(0.309)
online politics isced iv		-0.275		-0.418		-0.512
anling nalition*ICCED V1		(0.180)		(0.193)		(0.328)
online politics isced vi		-0.220		-0.257		-0.225
online politics * ISCED V2		(0.191)		(0.204)		(0.522)
online politics isced v2		-0.4/5		-0.020		-0.040
anling nalities*athor		(0.176)		(0.190)		(0.312)
onnine pointics other		0.200		0.250		
waars of advisation	0 01 5 * *	(0.747)	0.012*	0.001)	0.004	0.002
years of education	-0.015	-0.014	-0.015	-0.015	-0.004	-0.005
womon	(0.007)	(0.007) 0.121***	(0.000) 0.121***	(U.UUO) 0 125***	(U.UIU) 0 102***	(U.UII) 0 107***
women	-0.119	-0.121	-0.151	-0.155	-0.165	-0.167
200	(U.UZO) 0 054***	(0.020) 0.055***	(U.USI) 0 054***	(U.USI) 0 055***	(0.044) 0 020***	(0.044) 0.020***
age	(0.004)	(0.004)	(0.054	(0.055	(0.012)	(0.059
ago squared	(0.004)	(0.004)	(0.005)	(0.005)	(0.012)	(0.012)
age squareu	-0.001	-0.001	-0.001	-0.001		
married	(0.000) _0 176***	(0.000) _0 170***	(0.000) _0 114***	(0.000) _0 117***	(0.000) _0 1/7***	(0.000) _0 151***
manneu	-0.1/0	(0 020) -0.110	-0.114 ° ° °	-0.TT\	-0.14/ 0.16)	-0.131
childron at home	(U.U3U) 0.067**	(0.030)	(U.U33) 0 105***	(U.U33) 0 102***	(U.U4D) 0 101**	(U.U4D) 0.005**
children at nome	U.Ub/***		0.105****	(0.025)	0.101**	0.095**
fereien herr	(0.032)	(0.032)	(0.035)	(0.035)	(0.047)	(0.047)
toreign born	-0.032	-0.031	-0.039	-0.038	-0.010	-0.004
	(0.056)	(0.056)	(0.061)	(0.062)	(0.081)	(0.081)

Table A.3.2

Table A.3.2 (continued)

suburbs of big city	-0.030	-0.032	-0.005	-0.007	0.066	0.066
	(0.063)	(0.063)	(0.068)	(0.068)	(0.087)	(0.087)
small city	0.054	0.054	0.072	0.072	0.085	0.084
	(0.046)	(0.045)	(0.050)	(0.050)	(0.062)	(0.062)
village	0.042	0.043	0.078	0.081*	0.109*	0.109*
	(0.043)	(0.043)	(0.048)	(0.048)	(0.061)	(0.061)
home in countryside	0.164**	0.167**	0.169**	0.172**	0.201*	0.206**
	(0.071)	(0.071)	(0.080)	(0.080)	(0.104)	(0.103)
country fixed effects	yes	yes	yes	yes	yes	yes
Observations	26,854	26,854	22,434	22,434	12,305	12,305

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
		Full sa	ample		In paid	d work
online politics	0 022	0 157*	0 022	0 152*	0.004	0 109*
omme pontics	(0.035	-0.157	0.025	-0.152	-0.004	-0.196
	(0.039)	(0.082)	(0.041)	(0.080)	(0.050)	(0.108)
ISCO I	0.066	0.017	0.106	0.074	0.159*	0.150
1600.0	(0.064)	(0.071)	(0.071)	(0.078)	(0.088)	(0.103)
1500 3	0.123**	0.084	(0.052)	0.094	0.129*	(0.077)
1500 4	(0.049)	(0.056)	(0.053)	(0.061)	(0.069)	(0.079)
1500 4	0.252***	0.160**	0.226***	0.145***	(0.001)	(0.002)
1600 F	(0.056)	(0.064)	(0.061)	(0.070)	(0.081)	(0.093)
ISCO 5	0.341***	0.282***	0.261***	0.201***	0.3/3***	0.2/3***
1500 6	(0.051)	(0.057)	(0.055)	(0.060)	(0.073)	(0.078)
ISCO 6	0.223***	0.113	0.143	0.020	0.226*	0.039
1999 7	(0.083)	(0.088)	(0.090)	(0.094)	(0.122)	(0.132)
ISCO 7	0.408***	0.342***	0.386***	0.325***	0.504***	0.428***
	(0.055)	(0.059)	(0.060)	(0.065)	(0.080)	(0.085)
ISCO 8	0.367***	0.267***	0.323***	0.236***	0.440***	0.335***
	(0.066)	(0.072)	(0.073)	(0.079)	(0.098)	(0.107)
ISCO 9	0.368***	0.281***	0.307***	0.211***	0.404***	0.282***
	(0.061)	(0.066)	(0.067)	(0.073)	(0.092)	(0.102)
online politics*ISCO 1		0.150		0.080		-0.037
		(0.158)		(0.171)		(0.185)
online politics*ISCO 3		0.106		0.095		0.131
		(0.116)		(0.123)		(0.150)
online politics*ISCO 4		0.334**		0.293**		0.273
		(0.131)		(0.137)		(0.172)
online politics*ISCO 5		0.188		0.193		0.315**
		(0.116)		(0.123)		(0.155)
online politics*ISCO 6		0.569**		0.611**		0.793**
		(0.253)		(0.264)		(0.318)
online politics*ISCO 7		0.235*		0.209		0.216
		(0.136)		(0.148)		(0.186)
online politics*ISCO 8		0.440***		0.360**		0.343
		(0.161)		(0.167)		(0.214)
online politics*ISCO 9		0.380**		0.421**		0.460**
		(0.160)		(0.172)		(0.219)
years of education	-0.034***	-0.034***	-0.031***	-0.032***	-0.036***	-0.037***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.007)	(0.007)
women	-0.113***	-0.113***	-0.104***	-0.103***	-0.136***	-0.136***
	(0.030)	(0.030)	(0.033)	(0.033)	(0.044)	(0.044)
age	0.047***	0.047***	0.047***	0.048***	0.058***	0.059***
0	(0.005)	(0.005)	(0.005)	(0.005)	(0.012)	(0.012)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.149***	-0.151***	-0.112***	-0.113***	-0.148***	-0.148***
	(0.029)	(0.029)	(0.032)	(0.032)	(0.044)	(0.044)
children at home	0.080**	0.077**	0.114***	0.111***	0.084*	0.077*
	(0 031)	(0.031)	(0 033)	(0.033)	(0 044)	(0.045)
	(0.001)	(0.001)	(0.000)	(0.000)	(0.044)	(0.0-0)

Table A.4.1

Table A.4.1 (continued)

foreign born	-0.169***	-0.164***	-0.174***	-0.170***	-0.181**	-0.174**
	(0.056)	(0.056)	(0.060)	(0.060)	(0.076)	(0.076)
suburbs of big city	0.025	0.029	0.051	0.053	0.070	0.068
	(0.060)	(0.060)	(0.063)	(0.063)	(0.083)	(0.084)
small city	0.069	0.066	0.084*	0.080	0.095	0.090
	(0.046)	(0.046)	(0.050)	(0.050)	(0.065)	(0.065)
village	0.073	0.074*	0.113**	0.113**	0.101	0.099
	(0.045)	(0.045)	(0.049)	(0.049)	(0.064)	(0.064)
home in countryside	0.154**	0.158**	0.205***	0.209***	0.164	0.167*
	(0.070)	(0.070)	(0.078)	(0.077)	(0.101)	(0.100)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
	26.047	26.047	22.402	22.402	42.055	40.055
Observations	26,017	26,017	22,192	22,192	12,955	12,955

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

	(1)	(2)	(3)	(4)	(5)	(6)
		Full s	ample		In paid	d work
online politics	Λ 127***	-0.075	0 126***	-0.081	በ 1ንን**	-0 101
onnie ponties	(0.040)	(0.073	(0.130	(0.001	(0.051)	-0.101 (0.111)
	(0.040)	0.005	0.107	0.093)	0.164	(0.111)
1500 1	0.024	-0.005	0.107	0.084	0.104	(0.192)
1500.2	(0.075)	(0.078)	(0.001)	0.000	(U.1UZ) 0.100***	(0.114)
1500 3	0.130**	0.092	(0.057)	0.095	(0.072)	0.138
1500 4	(0.052)	(0.060)	(0.057)	(0.067)	(0.072)	(0.085)
15CU 4	0.237***	0.145**	0.212***	0.129**	0.315***	0.223**
1000 F	(0.062)	(0.071)	(0.067)	(0.077)	(0.086)	(0.099)
ISCO 5	0.311***	0.236***	0.239***	0.148**	0.422***	0.29/***
	(0.056)	(0.062)	(0.059)	(0.067)	(0.077)	(0.086)
ISCO 6	0.200**	0.110	0.120	0.009	0.189	0.002
	(0.089)	(0.094)	(0.096)	(0.102)	(0.135)	(0.148)
ISCO 7	0.369***	0.312***	0.340***	0.280***	0.501***	0.421***
	(0.059)	(0.064)	(0.064)	(0.070)	(0.085)	(0.091)
ISCO 8	0.360***	0.276***	0.335***	0.261***	0.522***	0.443***
	(0.072)	(0.078)	(0.079)	(0.085)	(0.104)	(0.113)
ISCO 9	0.340***	0.258***	0.283***	0.196**	0.495***	0.391***
	(0.066)	(0.072)	(0.073)	(0.080)	(0.099)	(0.111)
online politics*ISCO 1		0.083		0.051		-0.200
		(0.192)		(0.207)		(0.208)
online politics*ISCO 3		0.123		0.141		0.143
		(0.124)		(0.133)		(0.158)
online politics*ISCO 4		0.383***		0.329**		0.316*
		(0 144)		(0 153)		(0.188)
online politics*ISCO 5		0.30/**		0 272***		0.466***
onine ponties 1300 5		(0.304 (0.110)		(0 127)		(0 158)
onling politics*ISCO 6		0.112)		0.127)		0.130)
onine pointies isee o		0.445 (0.265)		(0.322		(0.220)
anling nalities*ICCO 7		(0.205)		(0.276)		(0.339)
onine pointies isco 7		0.204		0.210		0.276
		(0.144)		(0.159)		(0.188)
online politics*ISCO 8		0.3/8**		0.298*		0.258
		(0.169)		(0.176)		(0.220)
online politics*ISCO 9		0.369**		0.379**		0.404*
		(0.168)		(0.185)		(0.233)
years of education	-0.032***	-0.032***	-0.030***	-0.031***	-0.024***	-0.024***
	(0.005)	(0.005)	(0.006)	(0.006)	(0.008)	(0.008)
women	-0.119***	-0.119***	-0.115***	-0.115***	-0.170***	-0.171***
	(0.031)	(0.031)	(0.035)	(0.035)	(0.046)	(0.046)
age	0.047***	0.048***	0.048***	0.049***	0.040***	0.041***
	(0.005)	(0.005)	(0.006)	(0.006)	(0.012)	(0.012)
age squared	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
married	-0.171***	-0.172***	-0.110***	-0.111***	-0.140***	-0.142***
	(0.031)	(0.031)	(0.035)	(0.035)	(0.047)	(0.047)
children at home	0.069**	0.068**	0.103***	0.102***	0.105**	0.100**
	(0 033)	(0.033)	(0.036)	(0.036)	(0.047)	(0.047)
	(0.000)	(0.000)	(0.000)	(0.000)	(0.017)	(0.017)

Table A.4.2

Table A.4.2 (continued)

foreign born	-0.072	-0.071	-0.078	-0.079	-0.081	-0.082
	(0.061)	(0.061)	(0.065)	(0.065)	(0.084)	(0.084)
suburbs of big city	-0.002	0.000	0.034	0.034	0.071	0.071
	(0.065)	(0.065)	(0.068)	(0.068)	(0.089)	(0.089)
small city	0.046	0.044	0.069	0.064	0.076	0.069
	(0.046)	(0.046)	(0.051)	(0.051)	(0.062)	(0.062)
village	0.064	0.064	0.101**	0.098**	0.111*	0.104*
	(0.044)	(0.044)	(0.049)	(0.049)	(0.061)	(0.061)
home in countryside	0.190***	0.190***	0.218***	0.219***	0.251**	0.250**
	(0.070)	(0.070)	(0.083)	(0.082)	(0.107)	(0.104)
country fixed effects	yes	yes	yes	yes	yes	yes
household income (deciles)	no	no	yes	yes	yes	yes
Observations	24,396	24,396	20,788	20,788	12,132	12,132

Source: European Social Survey, Round 8, 2016 (<u>www.europeansocialsurvey.org</u>)

Notes: Probit coefficient estimates; linearized standard errors in parentheses (data are weighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. Included countries are Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. The outcome variable *EU exit* is coded as follows: 1, in favor of leaving the European Union; 0, in favor of remaining a member of the European Union. *Online politics* is coded as follows: 1, the respondent posted or shared anything about politics online during the last 12 months; 0, otherwise.

Table A.5.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	2013 t	o 2016	20	13	20	14	20	15	20	16
online politics w/o social media	0.048***	0.062***	0.082***	0.121***	0.058***	0.073**	0.041**	0.040	0.006	0.018
	(0.008)	(0.016)	(0.016)	(0.032)	(0.017)	(0.032)	(0.017)	(0.031)	(0.017)	(0.032)
online politics via social media	-0.046***	-0.004	-0.005	0.056	-0.033	0.006	-0.026	0.033	-0.110***	-0.097**
	(0.010)	(0.020)	(0.021)	(0.041)	(0.022)	(0.042)	(0.020)	(0.038)	(0.019)	(0.038)
high school diploma	-0.183***	-0.169***	-0.188***	-0.164***	-0.163***	-0.145***	-0.211***	-0.199***	-0.168***	-0.163***
	(0.009)	(0.012)	(0.017)	(0.024)	(0.018)	(0.024)	(0.017)	(0.023)	(0.017)	(0.024)
compulsory school	-0.276***	-0.262***	-0.305***	-0.275***	-0.276***	-0.266***	-0.275***	-0.263***	-0.247***	-0.238***
	(0.009)	(0.011)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)
online politics w/o social media*h.s.		-0.020		-0.029		-0.037		-0.001		-0.030
apionia		(0.019)		(0.038)		(0.040)		(0.038)		(0.040)
online politics w/o social media*compulsory		-0.002		-0.105**		0.033		0.027		0.030
301001		(0.025)		(0.050)		(0.051)		(0.048)		(0.051)
online politics via social media*h.s. diploma		-0.040*		-0.073		-0.052		-0.067		0.019
aipionia		(0.024)		(0.049)		(0.050)		(0.046)		(0.045)
online politics via social media*compulsory school		-0.098***		-0.089		-0.057		-0.125**		-0.122**
		(0.031)		(0.063)		(0.066)		(0.060)		(0.057)
women	0.046***	0.046***	0.030***	0.029***	0.057***	0.058***	0.048***	0.047***	0.052***	0.052***
	(0.006)	(0.006)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
25-39	-0.189***	-0.191***	-0.172***	-0.175***	-0.136***	-0.137***	-0.244***	-0.247***	-0.207***	-0.209***
	(0.012)	(0.012)	(0.024)	(0.024)	(0.024)	(0.024)	(0.025)	(0.025)	(0.025)	(0.025)
40-54	-0.152***	-0.153***	-0.089***	-0.091***	-0.127***	-0.127***	-0.222***	-0.224***	-0.175***	-0.174***
	(0.013)	(0.013)	(0.025)	(0.025)	(0.025)	(0.025)	(0.026)	(0.026)	(0.026)	(0.026)
55-64	-0.147***	-0.149***	-0.069**	-0.072**	-0.109***	-0.109***	-0.208***	-0.210***	-0.207***	-0.208***
	(0.014)	(0.014)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.029)	(0.028)	(0.028)
65+	-0.051***	-0.053***	-0.019	-0.024	-0.006	-0.005	-0.092***	-0.094***	-0.087***	-0.089***
	(0.014)	(0.014)	(0.028)	(0.028)	(0.028)	(0.028)	(0.029)	(0.029)	(0.028)	(0.028)
married	0.042*** (0.010)	0.042*** (0.010)	0.026 (0.019)	0.027 (0.019)	0.033* (0.019)	0.033* (0.019)	0.085*** (0.019)	0.086*** (0.019)	0.025 (0.019)	0.024 (0.019)

Table A.5.1 (continued)

couple with children	-0.067***	-0.067***	-0.053**	-0.053**	-0.080***	-0.080***	-0.089***	-0.089***	-0.046**	-0.045**
	(0.011)	(0.011)	(0.022)	(0.022)	(0.023)	(0.023)	(0.022)	(0.022)	(0.022)	(0.022)
couple without children	-0.063***	-0.063***	-0.011	-0.011	-0.087***	-0.088***	-0.118***	-0.118***	-0.039*	-0.038
	(0.012)	(0.012)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)
single-parent father	-0.049**	-0.049**	-0.065	-0.064	-0.131***	-0.130***	-0.014	-0.015	0.008	0.008
	(0.021)	(0.021)	(0.044)	(0.044)	(0.040)	(0.040)	(0.044)	(0.044)	(0.042)	(0.042)
single-parent mother	-0.064***	-0.064***	-0.045*	-0.045*	-0.105***	-0.105***	-0.063***	-0.063***	-0.043*	-0.042*
	(0.012)	(0.012)	(0.024)	(0.024)	(0.024)	(0.024)	(0.023)	(0.023)	(0.024)	(0.024)
municipalities ≤ 10,000 inhabitants	-0.112***	-0.112***	-0.156***	-0.156***	-0.125***	-0.126***	-0.066***	-0.066***	-0.095***	-0.095***
	(0.008)	(0.008)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
municipalities > 10,000 inhabitants	-0.021***	-0.021***	-0.056***	-0.056***	-0.033**	-0.033**	0.014	0.014	-0.004	-0.004
	(0.008)	(0.008)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Italian region fixed effects	yes									
year fixed effects	yes	yes	no							
Observations	145,728	145,728	37,532	37,532	36,085	36,085	36,825	36,825	35,286	35,286

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the full sample (employed, unemployed, or out of the labor force) where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics online without using social media.

Table A.5.2

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	2013 t	o 2016	20	13	20	14	20	15	20	016
online politics w/o										
social media	0.045***	0.060***	0.092***	0.140***	0.035	0.047	0.045**	0.028	0.006	0.026
	(0.011)	(0.019)	(0.021)	(0.039)	(0.022)	(0.039)	(0.021)	(0.038)	(0.022)	(0.040)
online politics via	0 000***	0.040	0.050*	0.000	0 0 7 0 * * *	0.000	0.046*	0.046	~ ~ ~ ~ * * *	0 4 0 0 * *
social media	-0.083***	-0.012	-0.050*	0.063	-0.078***	0.003	-0.046*	0.016	-0.14/***	-0.102**
high school	(0.013)	(0.024)	(0.028)	(0.053)	(0.028)	(0.050)	(0.026)	(0.046)	(0.025)	(0.046)
diploma	-0.211***	-0.192***	-0.231***	-0.189***	-0.177***	-0.152***	-0.251***	-0.253***	-0.185***	-0.171***
	(0.011)	(0.016)	(0.022)	(0.031)	(0.022)	(0.031)	(0.021)	(0.031)	(0.022)	(0.032)
compulsory school	-0.300***	-0.273***	-0.328***	-0.279***	-0.307***	-0.288***	-0.295***	-0.278***	-0.267***	-0.238***
. ,	(0.013)	(0.016)	(0.025)	(0.032)	(0.026)	(0.032)	(0.025)	(0.032)	(0.026)	(0.033)
online politics w/o										
diploma		-0.009		-0.048		-0.021		0.047		-0.017
a.p.oa		(0.024)		(0.047)		(0.049)		(0.047)		(0.050)
online politics w/o		()				(/		()		()
social										
media*compulsory		0.020		0.001		0.024		0.000		0.041
school		-0.026		-0.091		0.024		-0.008		-0.041
online politics via		(0.033)		(0.064)		(0.068)		(0.065)		(0.069)
social media*h.s.										
diploma		-0.076**		-0.133**		-0.110*		-0.056		-0.028
		(0.030)		(0.065)		(0.062)		(0.058)		(0.057)
online politics via social										
media*compulsory										
school		-0.184***		-0.229**		-0.145		-0.205**		-0.180**
		(0.042)		(0.089)		(0.092)		(0.080)		(0.076)
women	0.054***	0.054***	0.016	0.017	0.059***	0.059***	0.070***	0.069***	0.074***	0.073***
	(0.009)	(0.009)	(0.017)	(0.017)	(0.018)	(0.018)	(0.017)	(0.017)	(0.018)	(0.018)
25-39	-0.016	-0.018	-0.009	-0.012	0.080*	0.080*	-0.109**	-0.111**	-0.036	-0.036
	(0.024)	(0.024)	(0.045)	(0.045)	(0.047)	(0.047)	(0.050)	(0.050)	(0.047)	(0.047)
40-54	0.036	0.035	0.089*	0.086*	0.114**	0.114**	-0.079	-0.080	0.008	0.009
	(0.024)	(0.024)	(0.046)	(0.046)	(0.048)	(0.048)	(0.050)	(0.051)	(0.047)	(0.047)
55-64	0.044*	0.043*	0.125**	0.123**	0.115**	0.116**	-0.064	-0.066	-0.007	-0.006
	(0.026)	(0.026)	(0.050)	(0.050)	(0.051)	(0.051)	(0.054)	(0.054)	(0.051)	(0.051)
65+	0.085**	0.083**	-0.054	-0.057	0.329***	0.330***	0.021	0.019	0.020	0.019
	(0.039)	(0.039)	(0.081)	(0.081)	(0.077)	(0.077)	(0.079)	(0.079)	(0.077)	(0.077)
married	0.045***	0.045***	0.017	0.018	0.027	0.027	0.091***	0.091***	0.051**	0.050**
	(0.013)	(0.013)	(0.025)	(0.025)	(0.026)	(0.026)	(0.026)	(0.026)	(0.025)	(0.025)

Table A.5.2 (continued)

couple with										
children	-0.091***	-0.091***	-0.065**	-0.066**	-0.085***	-0.084***	-0.118***	-0.118***	-0.097***	-0.096***
	(0.015)	(0.015)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.030)	(0.030)
couple without										
children	-0.112***	-0.112***	-0.077**	-0.079**	-0.119***	-0.117***	-0.188***	-0.187***	-0.069*	-0.068*
	(0.018)	(0.018)	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)
single-parent										
father	-0.074**	-0.073**	-0.029	-0.026	-0.150**	-0.151***	-0.044	-0.044	-0.059	-0.060
	(0.031)	(0.031)	(0.066)	(0.067)	(0.058)	(0.058)	(0.062)	(0.062)	(0.061)	(0.061)
single-parent										
mother	-0.080***	-0.079***	-0.079**	-0.078**	-0.100***	-0.099***	-0.075**	-0.074**	-0.066*	-0.065*
	(0.018)	(0.018)	(0.037)	(0.037)	(0.037)	(0.037)	(0.035)	(0.035)	(0.036)	(0.036)
municipalities ≤										
10,000 inhabitants	-0.143***	-0.142***	-0.165***	-0.164***	-0.135***	-0.135***	-0.146***	-0.146***	-0.121***	-0.120***
	(0.013)	(0.013)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.027)	(0.027)
municipalities >										
10,000 inhabitants	-0.030**	-0.030**	-0.047*	-0.046*	-0.022	-0.021	-0.043*	-0.043*	-0.003	-0.002
	(0.012)	(0.012)	(0.024)	(0.024)	(0.024)	(0.024)	(0.025)	(0.025)	(0.026)	(0.026)
Italian region fixed										
effects	yes									
year fixed effects	yes	yes	no							
Observations	61,299	61,299	15,718	15,718	15,041	15,041	15,487	15,487	15,053	15,053

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the sample of employed workers, where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics media measures whether an individual does inquire about politics online through social media.

Table A.6

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	2013 t	o 2016	20	13	20	14	20	15	20	16
online politics w/o social media	0.046***	0.044***	0.085***	0.089***	0.045**	0.038*	0.045**	0.044**	0.005	0.002
	(0.010)	(0.011)	(0.019)	(0.020)	(0.020)	(0.021)	(0.019)	(0.021)	(0.021)	(0.022)
online politics via social media	-0.079***	-0.087***	-0.053**	-0.057**	-0.060**	-0.078***	-0.035	-0.045*	-0.158***	-0.155***
unemployed	(0.012) -0.073***	(0.013) -0.078***	(0.025) -0.077***	(0.028) -0.076***	(0.025) -0.089***	(0.028) -0.102***	(0.023) -0.077***	(0.026) -0.084***	(0.022) -0.044**	(0.025) -0.045**
	(0.010)	(0.011)	(0.020)	(0.022)	(0.020)	(0.022)	(0.020)	(0.023)	(0.020)	(0.023)
online politics w/o social		0.010		-0.031		0.038		0.006		0.030
media*unemployed		(0.028)		(0.055)		(0.056)		(0.053)		(0.059)
online politics via social media		0.034		0.019		0.080		0.046		-0.015
unempioyeu		(0.028)		(0.059)		(0.060)		(0.053)		(0.054)
high school diploma	-0.211***	-0.211***	-0.224***	-0.223***	-0.186***	-0.187***	-0.245***	-0.245***	-0.186***	-0.186***
•	(0.010)	(0.010)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
compulsory school	-0.309***	-0.309***	-0.342***	-0.342***	-0.305***	-0.304***	-0.303***	-0.302***	-0.282***	-0.282***
	(0.011)	(0.011)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
women	0.052***	0.052***	0.024	0.024	0.072***	0.072***	0.062***	0.061***	0.055***	0.055***
	(0.008)	(0.008)	(0.015)	(0.015)	(0.016)	(0.016)	(0.015)	(0.015)	(0.016)	(0.016)
25-39	-0.069***	-0.069***	-0.047	-0.046	-0.017	-0.017	-0.133***	-0.133***	-0.092***	-0.092***
	(0.017)	(0.017)	(0.033)	(0.033)	(0.033)	(0.033)	(0.034)	(0.034)	(0.034)	(0.034)
40-54	-0.025	-0.024	0.032	0.032	0.010	0.011	-0.097***	-0.097***	-0.055	-0.056
	(0.017)	(0.017)	(0.034)	(0.034)	(0.034)	(0.034)	(0.035)	(0.035)	(0.035)	(0.035)
55-64	-0.021	-0.021	0.070*	0.070*	0.011	0.011	-0.085**	-0.085**	-0.088**	-0.089**
	(0.019)	(0.019)	(0.038)	(0.039)	(0.038)	(0.038)	(0.039)	(0.039)	(0.039)	(0.039)
65+	0.043	0.043	-0.097	-0.097	0.209***	0.208***	0.029	0.028	-0.013	-0.013
	(0.034)	(0.034)	(0.075)	(0.075)	(0.067)	(0.067)	(0.067)	(0.067)	(0.066)	(0.066)
married	0.040***	0.040***	0.033	0.032	0.020	0.021	0.075***	0.075***	0.035	0.035
	(0.011)	(0.011)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
couple with children	-0.083***	-0.084***	-0.074***	-0.073***	-0.084***	-0.086***	-0.104***	-0.105***	-0.071***	-0.071***
	(0.013)	(0.013)	(0.027)	(0.027)	(0.027)	(0.027)	(0.026)	(0.026)	(0.026)	(0.026)
couple without children	-0.106***	-0.106***	-0.075**	-0.075**	-0.129***	-0.129***	-0.167***	-0.167***	-0.056*	-0.056*
	(0.016)	(0.016)	(0.033)	(0.033)	(0.032)	(0.032)	(0.033)	(0.033)	(0.032)	(0.032)
single-parent father	-0.062**	-0.062**	-0.046	-0.046	-0.123**	-0.123**	-0.033	-0.033	-0.041	-0.041
	(0.026)	(0.026)	(0.056)	(0.056)	(0.050)	(0.050)	(0.053)	(0.053)	(0.052)	(0.052)
single-parent mother	-0.085***	-0.085***	-0.061*	-0.061*	-0.129***	-0.129***	-0.099***	-0.099***	-0.049	-0.049
	(0.015)	(0.015)	(0.032)	(0.032)	(0.031)	(0.031)	(0.030)	(0.030)	(0.031)	(0.031)

Table A.6 (continued)

municipalities ≤ 10,000 inhabitants	-0.120***	-0.120***	-0.158***	-0.158***	-0.122***	-0.123***	-0.089***	-0.089***	-0.106***	-0.106***
	(0.012)	(0.012)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.024)	(0.024)
municipalities > 10,000 inhabitants	-0.013	-0.013	-0.046**	-0.046**	-0.011	-0.011	0.004	0.004	0.008	0.008
	(0.011)	(0.011)	(0.022)	(0.022)	(0.021)	(0.021)	(0.022)	(0.022)	(0.023)	(0.023)
Italian region fixed effects	yes									
year fixed effects	yes	yes	no							
Observations	78,234	78,234	19,898	19,898	19,427	19,427	19,876	19,876	19,033	19,033

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the labor force sample (employed or unemployed) where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics whether an individual does inquire about politics online without using social media.

Tabl	le	Α.	7
------	----	----	---

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
		Full sa	ample		Sample of employed				
	w/o computer skills		with comp	uter skills	w/o compu	iter skills	with computer skills		
online politics w/o	0.024**	0.027	0.010	0.019	0.024	0.026	0.014	0.023	
social media									
	(0.012)	(0.022)	(0.013)	(0.024)	(0.015)	(0.027)	(0.017)	(0.029)	
online politics via social media	-0.069***	-0.034	-0.089***	-0.054*	-0.099***	-0.045	-0.106***	-0.055	
	(0.014)	(0.027)	(0.015)	(0.028)	(0.018)	(0.032)	(0.020)	(0.034)	
high school diploma	-0.190***	-0.182***	-0.173***	-0.163***	-0.218***	-0.211***	-0.211***	-0.202***	
	(0.012)	(0.017)	(0.013)	(0.018)	(0.015)	(0.022)	(0.016)	(0.023)	
compulsory school	-0.261***	-0.251***	-0.223***	-0.210***	-0.280***	-0.257***	-0.253***	-0.226***	
	(0.013)	(0.016)	(0.014)	(0.018)	(0.018)	(0.023)	(0.021)	(0.026)	
online politics w/o social media*h.s. diploma		-0.012		-0.019		0.015		0.005	
		(0.027)		(0.029)		(0.034)		(0.036)	
online politics w/o social media*compulsory		0.032		0.024		-0.022		-0.037	
school									
		(0.035)		(0.037)		(0.047)		(0.050)	
online politics via social media*h.s. diploma		-0.023		-0.019		-0.042		-0.037	
		(0.032)		(0.033)		(0.041)		(0.042)	
online politics via social media*compulsory		-0.120***		-0.132***		-0.191***		-0.190***	
school		(0.041)		(0.042)					
	0 0/0***	0.041)	0 0/0***	0.043)	0 072***	0.033)	0 060***	0.050	
women	(0.049	(0.049	(0.049	(0.049	(0.072	(0.071	(0.008	(0.007	
25.20	(0.000) _0.224***	(0.000) _0.226***	(0.000) _0.220***	(0.000) _0 222***	(0.012) -0.060**	(0.012) -0.070**	(0.015) -0.071**	(0.015) _0 072**	
25-39	-0.224	-0.220	-0.220	-0.222	-0.009	-0.070	-0.071	-0.072	
40 F 4	_0.017)	_0 102***	_0.010) _0.100***	-0.200***	-0.031	-0.037	-0.046	-0.045	
40-54	-0.197	-0.198	-0.199	-0.200	-0.031	-0.032	-0.040	-0.043	
	(0.010) _0 207***	(0.010) _0 202***	(0.019) _0 100***	(0.019) _0 200***	(0.034) _0.021	-0 022	-0 038	(0.030) _0 029	
55-04	(0 020)	(0 0200	(0.133	(0 022)	-0.031 (0.027)	-0.032 (0.037)	(U U30)	(U U30)	
65.	10.020) _0 000***	-0 0020j	(0.022) _0 082***	0.022 <i>)</i> -0.08/1***	0.037	0.037	0.003	0.003	
+60	(0.090	(0 0 0 0 0 0	(0.002	(0.004	(0.025	(0.021	0.003 (N N50)	0.003 (0 059)	
married	0.020	0.020	0.022)	0.022)	0.000	0.000	0.039	0.035)	
marneu	(0.014)	(0.014)	(0.014)	(0.014)	(0.018)	(0.018)	(0.019)	(0.019)	

Table A.7 (continued)

couple with children	-0.068***	-0.067***	-0.075***	-0.074***	-0.108***	-0.107***	-0.112***	-0.112***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.021)	(0.021)	(0.022)	(0.022)
couple without children	-0.078***	-0.078***	-0.087***	-0.087***	-0.126***	-0.126***	-0.136***	-0.135***
	(0.017)	(0.017)	(0.018)	(0.018)	(0.026)	(0.026)	(0.026)	(0.026)
single-parent father	-0.001	-0.002	-0.008	-0.008	-0.051	-0.051	-0.056	-0.057
	(0.030)	(0.030)	(0.032)	(0.032)	(0.043)	(0.043)	(0.045)	(0.045)
single-parent mother	-0.053***	-0.053***	-0.056***	-0.056***	-0.071***	-0.070***	-0.074***	-0.074***
	(0.016)	(0.016)	(0.017)	(0.017)	(0.025)	(0.025)	(0.026)	(0.026)
municipalities ≤	-0.082***	-0.082***	-0.088***	-0.087***	-0.135***	-0.134***	-0.135***	-0.134***
10,000 inhabitants								
	(0.012)	(0.012)	(0.013)	(0.013)	(0.019)	(0.019)	(0.019)	(0.019)
municipalities >	0.003	0.004	-0.001	-0.001	-0.025	-0.024	-0.027	-0.027
10,000 inhabitants								
	(0.011)	(0.011)	(0.012)	(0.012)	(0.018)	(0.018)	(0.018)	(0.018)
proxies for computer skills	no	no	yes	yes	no	no	yes	yes
Italian region fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
Test for joint signific	cance of com	nputer skills						
F-test			93.24***	93.58***			51.58***	52.17***
Observations	72,111	72,111	66,812	66,812	30,540	30,540	28,402	28,402

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the full sample (employed, unemployed, or out of the labor force) and the sample of employed workers, pooled over 2015 and 2016, where individuals below 18 years old are excluded. The outcome variable trust in European parliament is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable online politics via social media measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable online politics w/o social media measures whether an individual does inquire about politics online without using social media. The proxy variables for self-assessed computer skills are derived from various operations that were performed in the last 12 months: transfer files between computers and/or other devices such as digital camera, cell phone, or MP3 player (yes/no), install software or applications (yes/no), change the settings of any software, including operating systems or security programs (yes/no), Connect and install peripherals like printers or modems (yes/no), compress or zip files (yes/no), copy or move a file or folder (yes/no), use software for word processing like e.g. Microsoft Word (yes/no), use "copy and paste" to copy or move information within a document (yes/no), create presentations or documents that include texts, images, graphics, tables (yes/no), use spreadsheets for calculation like e.g. Microsoft Excel (yes/no), use the advanced functions of the spreadsheets for calculation to organize and analyze data like e.g. sort, filter, use formulas, create graphics (yes/no), use software to edit photos, videos, audio files (yes/no) and write code in a programming language (yes/no); these variables are available in this form only in 2015 and 2016.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
		Labor for	ce sample		Sample of employed					
	Standard ordered		IV ordered probit		Standard ordered		IV ordered probit			
	probit				probit					
	Compulsory	Higher	Compulsory	Higher	Compulsory	Higher	Compulsory	Higher		
	education	education	education	education	education	education	education	education		
online politics w/o social media	0.051*	0.075***	0.01	-0.002	0.03	0.073***	0.048	-0.06		
	(0.028)	(0.013)	(0.130)	(0.128)	(0.031)	(0.014)	(0.143)	(0.134)		
online politics via social media	-0.171***	-0.033**	-0.406***	0.048	-0.203***	-0.033**	-0.495***	0.053		
	(0.034)	(0.015)	(0.134)	(0.070)	(0.038)	(0.017)	(0.139)	(0.075)		
control variables	yes	yes	yes	yes	yes	yes	yes	yes		
Italian region fixed effects	yes	yes	yes	yes	yes	yes	yes	yes		
year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes		
F test (dep. var> online politics w/o social media)										
			439.47***	533.09***			290.87***	371.78***		
F test (dep. var> online politics via social media)										
			355.34***	872.19***			242.67***	606.50***		
Observations	19,565	38,771	19,495	38,715	14,208	31,373	14,170	31,336		

Table A.8

Source: Multipurpose Survey on Households provided by https://www.istat.it

Notes: Standard and IV Ordered Probit coefficient estimates; robust standard errors in parentheses (data are unweighted). The IV ordered probit estimation involves two first-stage probit regressions. Significance: *** p<0.01, ** p<0.05, * p<0.10. The analyses are based on the labor-force sample and the sample of employed workers, pooled over 2014, 2015 and 2016, where individuals below 18 years old are excluded. The outcome variable *trust in European parliament* is an ordinal variable, ranging from 0 (no trust at all) to 10 (complete trust). The dummy variable *online politics via social media* measures whether an individual does inquire about politics online through social media, such as Facebook or Twitter. The dummy variable *online politics w/o social media* measures whether an individual does inquire about politics online without using social media. The control variables are sex, age groups, married, household type, and urban level. The instrumental variables are DSL connexion (yes/no), smartphone connexion (yes/no), SIM/USB connexion (yes/no) and ISDN connexion (yes/no); these four variables are available in this form only in 2014, 2015 and 2016.