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In Europe We Trust?

An examination into the determinants of citizen trust in the European Union and European Institutions, and the factors leading to extreme political views among EU citizens.

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ABSTRACT

Recent years have seen the European Union (EU) face a financial crisis, Chinese import shock, a migrant crisis, increasingly fragmented elections, a rise in populism and the first attempt by a member state to exit the Union. In the backdrop to these tumultuous times has been a steady decline in trust in the EU. This dissertation aims to explore the causes or determinants of this decline in trust at the European level, by running a number of empirical analyses on trust in the EU as a whole, as well as in the European Commission and Parliament. Using individual level data from 34 biannual Eurobarometer surveys from 2001 to 2017, alongside national macroeconomic data; a series of binary logistic regressions are conducted on trust in the EU and these institutions, as well as on the factors leading to the take-up of extreme political views among citizens. The results of these analyses show that the Global Financial Crisis did in fact play a part in the decline in EU-level trust, with government debt being identified as the central economic determinant. Moreover, the effect of globalisation in the form of increased import competition, arising from the Chinese import shock, was also found to pose negative consequences for European institutional trust. In terms of extreme political views, it is the characteristics of individuals themselves (age, gender, education, occupation) that drive their propensity to identify with such ideology. The results of this study provide useful insights into public opinion in the EU and in particular the role played by the economy and globalisation in shaping levels of trust among citizens. Furthermore, the findings of our trust models indicate a clear assignment of accountability to the EU by citizens for any losses they have experienced at the hands of globalisation or the financial crisis.

[298 words]

1. INTRODUCTION AND BACKGROUND

The European Union (EU), which traces its roots back to the European Coal and Steel Community of 1951 and the European Economic Community of 1957, is both a political and economic union. These predecessors of the EU were born out of the ashes of World War II, in an attempt to promote peace and collaboration via political and economic integration. Over the years the EU has grown from its original six members, with membership currently standing at twenty-eight member states and five candidate countries being considered to be future members of the EU at present. Despite previous enlargement of the EU in past decades and future enlargement likely to be on the agenda; when it comes to the current state of the EU, it is not all sunshine and roses. Recent years have seen the EU experience the Global Financial Crisis, the China trade shock, the migrant crisis, increasingly fragmented national and European elections, a decline in trust in the Union and rising populist or nationalist sentiment. Moreover, a majority of Britons voted to leave the European Union in a 2016 referendum. The political and economic landscape of the EU has thus experienced major shifts of late, with the future of the union currently standing on a cliff-edge of uncertainty. Thus, this paper sets out to explore the determinants of this dwindling of trust in the EU and its institutions, proposing that individual and economic factors play an important role in the decline in trust in the EU and uniquely positing that the Chinese import shock experienced in recent years, also has a role to play. Moreover, this paper will also explore the determinants of extreme political views among citizens in the EU. Combining national macroeconomic data and individual level public opinion data from 34 biannual standard Eurobarometer waves, a series of binary logistic regressions seek to address these research questions.

Recent years have seen European, as well as global politics experience an increased prevalence of populist parties. In response to the 2008 Global Financial Crisis, many nations adopted

policies of austerity, resulting in heightened levels of inequality. With more and more people feeling disenfranchised and left behind, many argue that this gave rise to the emergence of populist parties and candidates in many member states. Not only did these parties alter the discourse in European politics, but in some cases they achieved electoral success. A prominent example of such a success is that of Italy's Five Star Movement, who received one quarter of votes cast in the 2013 General Election; the first general election contested by the party. A common thread among many of the populist parties that have emerged throughout Europe is that of Euroscepticism, often going hand-in-hand with anti-immigrant stances. Nationalist and Eurosceptic sentiment has thus increased its presence in political dialogue across Europe in recent years, leading to both national and European elections yielding more and more fragmented results, rather than maintaining the status quo. The United Kingdom's (UK) 2016 referendum on EU membership is possibly the most prominent example of this rise of nationalism and Euroscepticism, seeing 51.9% of British voters opting to leave the European Union. While the UK has still yet to leave the Union, the precedent set by this result is that the future of the EU has never been quite so uncertain. Thus, with Euroscepticism on the rise and trust in the European Union institutions (as seen in Figure 1.1) declining year on year, this dissertation attempts to address the reasons behind this trend, by highlighting the role played by individual and economic factors. Moreover, as already mentioned, on top of our trust-based models, further models are employed to explore the drivers of extreme political views in individuals across the EU, given the rise in support for parties and candidates representing the more extreme ends of the political spectrum.

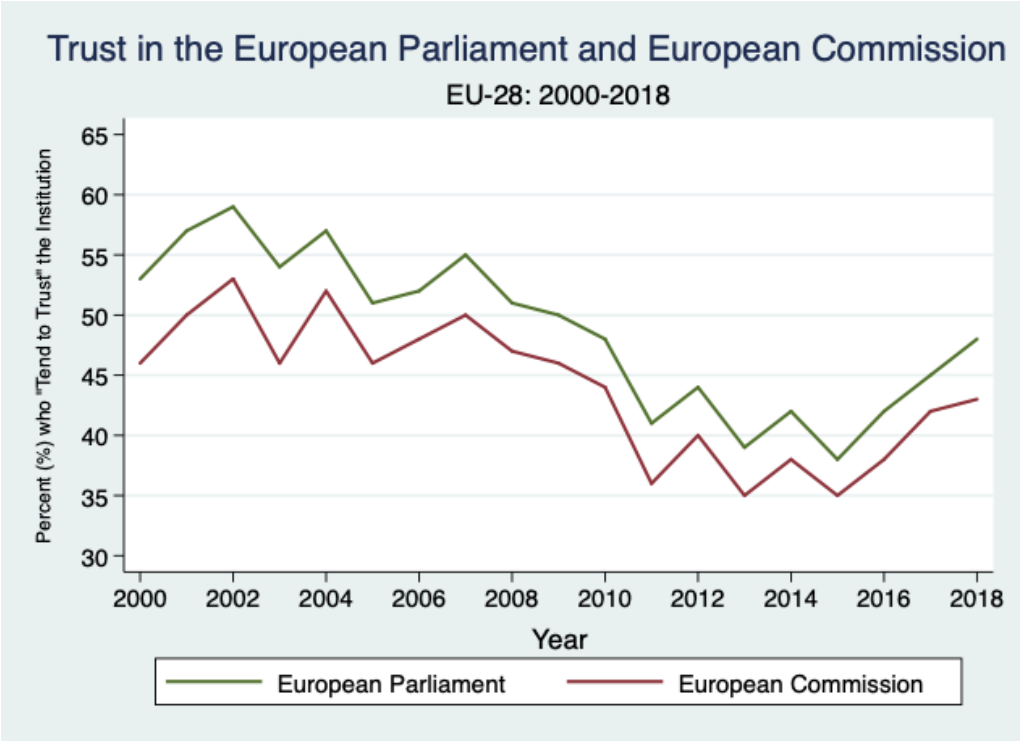

Figure 1.1 - *Data Source: Autumn waves of the Eurobarometer Survey.*

Following the United States (US) subprime mortgage crisis that began in 2007 and the collapse of the Lehman Brothers investment bank in 2008; the US originating epidemic quickly became a Global Financial Crisis. Figure 1.2 shows the trends in Government debt-to-GDP ratios for seven EU member states, as well as for the EU-28 as a whole. Germany, the UK, France, Spain and Italy currently represent the European Union's largest economies, while Ireland, Portugal and Greece, along with Spain and Italy were among the countries worst hit by the crisis. As can be seen from Figure 1.2, significant increases in the debt-to-GDP ratios of member states were seen, with many countries today, including the EU as a whole, still facing debt-to-GDP rates much higher than pre-crisis levels. Therefore, as the crisis ensued, it developed into a sovereign debt crisis; which eventually saw eight EU member states (Cyprus, Greece, Hungary, Ireland, Latvia, Portugal, Romania and Spain) entering into bailout or financial assistance programmes.

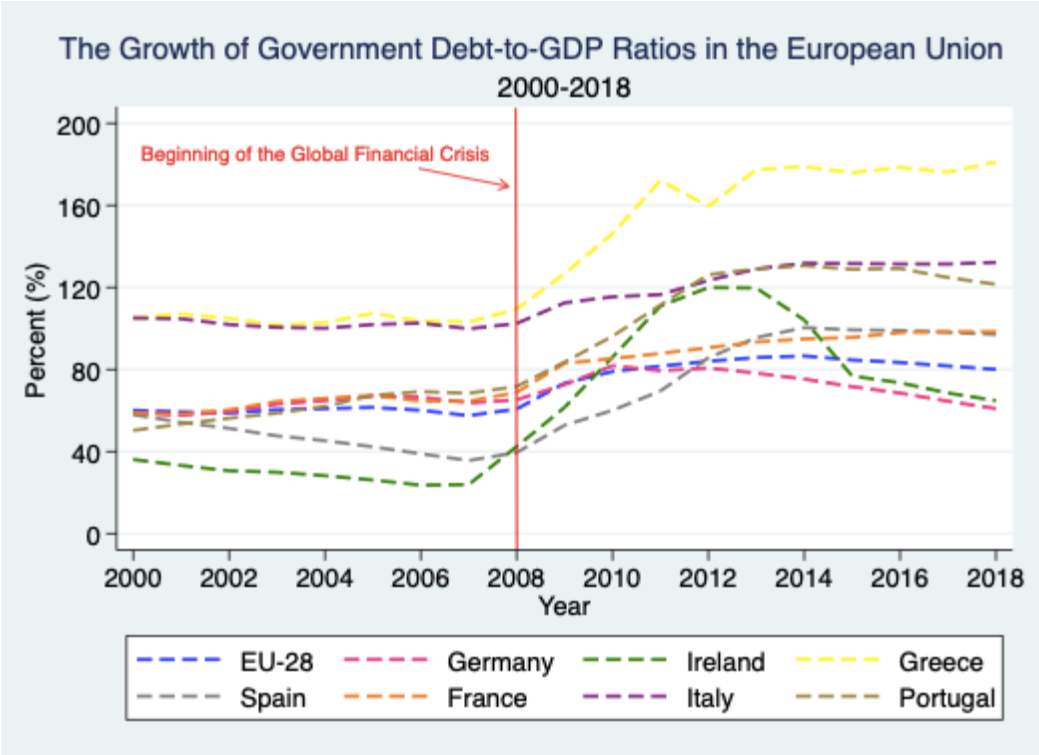

Figure 1.2 - *Source: Eurostat, 2019a. [Dataset: gov_10dd_edpt1]*

Further economic fallout from the Global Financial Crisis involved significant increases in levels of unemployment across the member states. The EU's unemployment rate hit a high of 11% in 2013, but sits at 6.3% as of June 2019, which is below pre-crisis levels (Eurostat, 2019b). While this spike in unemployment was felt across the EU as a whole, along with a general increase in poverty rates; it was the youth who suffered the most (Frieden and Walter, 2017). Ireland, for example, saw youth unemployment increase more than threefold between the years 2007 to 2012, going from 9.2% to 30.8% in that period (Eurostat, 2019c). Furthermore, the crisis in youth unemployment saw both Spain and Greece having over 50% of their economically active young population in unemployment from 2012 to 2014. Therefore, this dissertation, when exploring the role played by the financial crisis in shaping trust in the EU and its institutions, accounts for youth unemployment as part of the cohort of macroeconomic variables.

Alongside the Global Financial Crisis and the rise in populism, a further significant event faced by the European Union recently is that of the dramatic increase in Chinese imports to the European economy. According to the UN Comtrade Database (2019) and as can be seen in Figure 1.3; across the EU-28 as a whole, Chinese imports went from accounting for 7.5% of total imports in the year 2000 to representing 19.9% in 2018. Colantone and Stanig (2018) call this surge in Chinese imports "the major globalization shock for Europe in recent times". The authors also highlight that while globalisation can yield net welfare gains, losers can also be created; particularly in member states and sectors of the economy most affected by this heightened level of import competition. Therefore, this dissertation seeks to explore whether the generation of losers in this setting gives rise to an increased take-up of extreme political views and whether the import shock has contributed to the decrease in trust in the EU and the institutions it encompasses, as people seek to hold someone to account for the losses they experience.

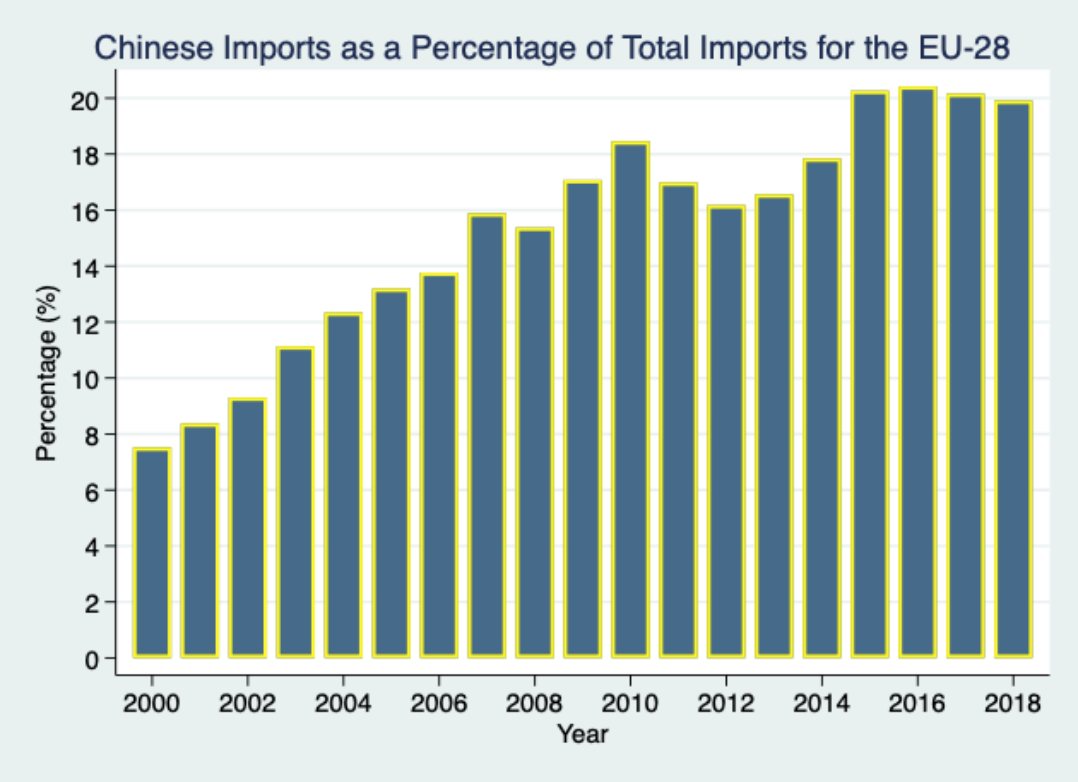

Figure 1.3 - *Source: UN Comtrade Database (2019).*

There is no doubt that since the turn of the century, the European Union has been thrown a number of challenges, particularly in the case of the financial crisis and globalisation in the form of the Chinese import shock. While many economies in Europe have recovered from recessionary times, it is clear that trust in the European project has not been as quick to bounce back to pre-crisis highs. Examining the EU, European Commission and European Parliament separately, the results of this paper indicate that the most recent financial crisis acted as a significant contributor to the decline in trust in the European Union. Moreover, a substantial relationship was found between increased Chinese imports on the European markets and the weakening of levels of trust in European institutions, something not yet accounted for in the literature. Finally in addressing the causes of extreme political ideology among EU citizens, we find that higher levels of education and occupations involving higher skill sets (such as managers and professionals) are associated with lower odds of self-identifying as either far-right or far-left. Therefore, these results act as an important aid to our understanding of public opinion in the European Union, as well as the determinants of Euroscepticism and extreme political views.

The rest of this paper will proceed with a literature review exploring the existing literature relevant to our research questions, followed by a research design section highlighting our proposed hypothesis, the data used in the testing of these hypotheses and an explanation of the methodological approach. After this, the results of our various models will be presented in detail, followed by our penultimate section; which will see a discussion take place centred on the implications of our findings and how the results compare to the hypotheses put forward. The final section will conclude this paper.

2. LITERATURE REVIEW

This section will review a selection of literature across three main areas or themes. Firstly, I will look at the existing literature on the determinants of trust in institutions, including the factors associated with the rise in Euroscepticism. Secondly, I will explore a selection of work examining the political consequences of increased trade integration and globalisation, and finally I will highlight a sample of work on the determinants of political ideology, opinion and voting patterns.

2.1 - EUROSCEPTICISM AND TRUST IN INSTITUTIONS

The empirical study of Euroscepticism and public opinion towards trust in institutions, such as the European Union and its various bodies, has been a growing field in recent decades. Much of this has been facilitated greatly by the existence of EU-wide public opinion surveying, in the form of the Eurobarometer, which began in 1974, and European Social Survey, which was established in 2001. The determinants of support in the European project have been found to be wide-ranging; from socio-economic determinants, to individual-level factors, and the use of proxies or cues based on knowledge of domestic political affairs.

Many studies examining how economic conditions have shaped citizen's attitudes towards the EU centre around the Great Recession; the most severe crisis to hit Europe since the Great Depression of the 1930s. One such study is that of Gomez (2015), who identifies higher rates of inflation and unemployment as central drivers of the decline in support for the EU. In Europe, the economic crisis evolved into a sovereign debt crisis; with interest rates on government bonds reaching record highs. This saw access to credit being restricted for both corporations and citizens alike, as government and corporate bonds faced significant rating downgrades. Therefore, Gomez finds that citizens in member states that experienced higher

interest rates, are less likely to support the EU. Another study in this area is that of Foster and Frieden (2017), who set out to examine the socio-economic determinants of what they refer to as the "Crisis of trust". Here the authors find that countries enrolled in structural adjustment programs, under the umbrella of the European Stability Mechanism (ESM) or the European Financial Stability Mechanism (EFSM), saw trust in the EU collapse by 7 percentage points. Moreover, Foster and Frieden affirm the common finding that high unemployment rates are associated with increased Euroscepticism among citizens. In this same study, Foster and Frieden also find that individuals with higher education and skill levels, tend to trust national government and the EU more than individuals not in these categories.

Similar studies have also been conducted on the impact of the financial crisis on trust in democratic institutions at the national level. Armingeon and Guthmann (2014), using Eurobarometer survey data from 26 EU member states from 2007 to 2011, employ a time-series cross-sectional analysis and find that an increase in interest rates of 5 percentage points yields a 10 percentage point reduction in support or trust in national parliaments. Holding a favourable view of their domestic economy increased an individual's probability of supporting their national democracy by 25 percentage points. Moreover, the authors found that when assessing domestic democratic matters, citizens take developments on the international scene into account when making these evaluations. This indicates the understanding among citizens, that actions taken by international actors can often bypass national-level government decision-making. Thus, Armingeon and Guthmann point out that this relates to the academic work in the area of the democratic legitimacy of the European Union, showing that weakened legitimacy at the EU-level can compromise and erode trust in government decision-making at the country level.

Some researchers have also hypothesised that individuals, when forming opinions about the EU and its institutions, form proxies based on attitudes towards national government and politics. This concept is put to the test by Anderson (1998), who highlights the common trend for citizen awareness of the EU to be significantly low. This indicates that attitudes towards EU-related topics often tend to be formed based on attitudes towards domestic political issues, of which EU citizens tend to have a much deeper knowledge and experience of. Serricchio, Tsakatika and Quaglia (2013) refer to this mechanism as an "institutional proxy", through which "national institutions provide citizens with a cognitive short cut towards trust in EU institutions". This is also very similar to the idea of "information shortcuts" put forward by Lupia (1994), which enables poorly informed citizens or voters mimic the behaviour of well-informed voters. In a game theory or strategic setting, this would be akin to a signalling game. Therefore, using Eurobarometer data, Anderson (1998) finds that "system and establishment party support are the most powerful determinants of support for membership in the European Union".

In the same vein, in an attempt to explain the sinking of support for the EU and further integration in the aftermath of the great recession; Armingeon and Ceka (2014) find a twofold result. While they did find some evidence that the economic crisis and EU policies did play a part in this decline; it is trust in the national government that is found to be the most important factor in determining support for the EU. Using a sequence of multilevel logistic regressions, the authors find that trust in EU institutions stems from an individual's perception or assessment of policy and politics at the domestic level. The authors link this finding to the idea of cue theory; which states that individuals develop cues in order to abridge or simplify their surroundings and aid decision-making. However, in the case of more informed Europeans, this

effect is lessened; as they hold sufficient knowledge of the EU and European affairs to form their own views, without the need for national-level cues.

2.2 - POLITICAL CONSEQUENCES OF GLOBALISATION AND TRADE INTEGRATION

While literature on globalisation has become vast, only a small segment of this examines the political consequences of globalisation and international trade. Here we will see a sample of such literature, with a particular focus on the impacts of the Chinese import shock.

Authors Colantone and Stanig in their 2018 paper, explore the "Trade Origins of Economic Nationalism" using district level electoral data from fifteen countries from Western Europe. To measure the effect of the Chinese import shock the authors created a unique instrumental variable on imports to Europe using data on Chinese imports to the US. This paper finds that increased import competition or a larger shock of imports results in elevated levels of support for nationalist and radical right parties, along with a general rightward shift in the electorate on the ideological spectrum. Colantone and Stanig explain that given the fact that the welfare gains from globalisation tend to be unequally shared, this results in increased opposition to globalisation and free trade. These concerns are then picked up and used by far-right and nationalist parties for political gain and turned into policy stances that can be classified as economic nationalism. Parties and candidates representing these views aim to bring about increased protectionism and a potential u-turn of globalisation.

While Colantone and Stanig created an instrumental variable for effect of the Chinese import shock on Europe, further studies have been conducted on a more local level using regional level import and trade data. Dippel, Heblich and Gold (2015), focussing solely on German

voting patterns, seek to quantify the effect of increased trade between Eastern Europe and China from 1987 to 2009. Here the authors find a statistically significant positive relationship between increased trade exposure and higher vote shares for radical right parties, with two-thirds of this effect being attributed to the associated shifts in the labour market.

Similarly, a recent working paper by Malgouyres (2017) explores the impact of the import shock from low wage countries on the vote share of "Le Front National" from 1995 to 2012. Here the authors find a relatively small but still statistically significant effect, suggesting that an increase in imports-per-worker of one standard deviation leads to the electoral support for France's far-right party to increase by 7% of a standard deviation. Therefore, existing literature indicates that globalisation, generally measured by trade exposure, tends to be associated with increased support and vote share for far-right parties.

2.3 - DETERMINANTS OF POLITICAL IDEOLOGY, OPINION AND VOTING PATTERNS

This section will explore some of the existing literature on the determinants of political ideology, public opinion and voter behaviour, particularly in the case of more extreme or populist parties. The factors at play here include domestic economic conditions, the share of foreigners in the population and individual-level characteristics such as education.

The role played by the economy in shaping political behaviour is something widely explored in the literature. Algan, Y. *et al*. (2017) examine this idea in Europe and find a strong statistically significant linkage between increased unemployment and votes for "nonmainstream" and populist parties. Moreover, they ascertain that economic insecurity, born out of the crisis, also drives populism and distrust of political institutions. Similarly, Rico and

Anduiza (2017) find that economic hardship does in fact contribute to the uptake of populist opinion and views among citizens. Their evidence suggests that individuals in a more vulnerable or precarious economic situation, are more likely to hold populist views. This effect is found to be stronger among individuals engaged in occupations involving manual labour and those on lower incomes. Therefore, Rico and Anduiza highlight that the take-up of populist ideology among citizens does not solely rely on the capacity of populist parties to manipulate an individual's judgement of the state of their country, as the economy itself can act as a tool to further their mandate and support.

Parties associated with populist and nationalist sentiment are often also purveyors of anti-immigrant or anti-immigration policy and ideology. Therefore, in times of economic downturn, it is expected that public opinion towards immigrants and immigration will turn negative. Using European Social Survey data from 2002 to 2012, Hatton (2016) finds a negative relationship between the share of immigrants in the population. Taking Europe as a collective, the impact on public opinion has been relatively moderate, however, taking an intercountry view allows for a clearer perspective. Public opinion reflecting a positive view towards immigration and immigrants is found to have a negative relationship with the proportion of GDP allocated to welfare spending and the proportion of immigrants in the domestic population. Interestingly, the socioeconomic standing of an individual is found to bear no impact on an individual's propensity to express this sentiment. Moreover, a nation's unemployment rate was also found to have a negligible effect. Hatton highlights that this is in line with the political rhetoric of late; which has pivoted from playing on the job market impacts of immigrants, to the fiscal ones.

While Hatton's study examines a period of time that encompasses the most recent financial crisis, similar studies have taken place in recession-free time periods. Otto and Steinhardt (2014) examine the effects of immigration on electoral outcomes at the local level in Hamburg, Germany from 1987 to 1997. The authors find statistically significant and robust evidence that an increased foreigner presence in district populations was discovered to be associated with higher levels of support for far-right parties and parties standing for xenophobic ideology. Similarly, Halla, Wagner and Zweimüller (2012) focus on the ascendance of the far-right Freedom Party of Austria, transpiring from the mid-1980s. The authors find, using an instrumental variables approach, that an increased share of immigrants in a locality, increases the share of votes for the Freedom Party in that area. Moreover, the authors ascertain that it is not only the number of immigrants that matters, but also their skill level. Low and medium skill levels among immigrants increases the tendency of Austrian voters to move toward the extreme right. High skill levels among immigrants, however, is found to be associated with either a negative or statistically insignificant impact on far-right voting.

Thus, while we have seen that immigration patterns can shape public opinion, political ideology and voting behaviour; it is also worth noting that immigration and anti-immigrant sentiment are not the sole components contributing towards a rightward shift in the electorate. Arzheimer (2009) acknowledges that while immigration and macroeconomic conditions such as unemployment do play a role in determining the extreme right vote, it is their interaction with a variety of political properties that contributes to the situation. Racist and nationalist rhetoric are not the only brand messages embodied by parties on the extreme right. Far-right populists also aim to entice those voters who can be classified as anti-establishment and are generally not likely to trust political institutions. Likewise, Werts, Scheepers and Lubbers (2013) using a multilevel analysis of national elections across 18 European states from 2002-

08, seek to explore the contextual determinants of radical right voting. The authors find that the three primary drivers of voting for extreme parties are a perceived ethnic threat, anti-establishment opinion and Euroscepticism. The measure of Euroscepticism used in this paper relies on European Social Survey data on individual trust in the European Parliament. Furthermore, the authors identify that individuals with lower levels of education, working in manual occupations, unemployed or those who do not attend church have a higher propensity to vote for more extreme parties.

3. RESEARCH DESIGN

This section will outline the proposed hypotheses central to this dissertation, the data used, as well as the methodology employed to answer the primary research question concerning the determinants of trust in the EU and its institutions.

3.1 - HYPOTHESES

This dissertation will be centred around four primary hypotheses, which we will now discuss and later evaluate in the discussion section, based on the results of our empirical analysis.

> ***Hypothesis 1*** *- The Economic Crisis played an important role in determining levels of trust in the EU and EU institutions in recent years.*

A number of our models, which will be addressed later in the paper, aim to explore whether our set of national economic variables shapes the extent to which citizens in the European Union trust the EU and its institutions. Similar to the idea of retrospective and economic voting, in a public opinion setting; it is plausible to theorise that citizens decide whether or not they trust a given institution based on the past economic conditions they have experienced. Therefore, we expect to find statistically significant relationships between citizen trust and a number of national-level economic variables, including economic growth, debt-to-GDP ratio and youth unemployment.

> ***Hypothesis 2*** *- The Chinese import shock has contributed to worsening levels of EU trust.*

Previous studies have attempted to measure the effects of the Chinese import shock on voting patterns and have employed the use of US import data as a proxy for European imports from China, as in Colantone and Stanig (2018). However, this study attempts to directly assess the impact of the import shock by employing data on EU imports from China and uniquely testing them against individual-level trust in the EU and its institutions. Therefore, we hypothesise that the Chinese import shock led to a significant reduction in trust in EU institutions, potentially representing an act of finger-pointing for the increased import competition and any associated negative impacts.

Hypothesis 3 *- Time Heals All Wounds.*

As time goes on, the Global Financial Crisis becomes gradually further in the past. Therefore, I hypothesise that citizens of Europe will become less harsh on the EU system as each passing year goes by. Many European economies have made significant strides in their economic recoveries, however, this recovery has not been felt equally among all countries and individuals. Politically speaking, events like the Brexit referendum and the political fragmentation shown in elections across Europe in recent years, show that sentiment towards the EU is still bruised. Despite this, I believe the age-old saying "Time heals all wounds" can be applied to this scenario. This hypothesis will be tested through the use of a variable measuring the years since the financial crisis, which will be discussed later. Furthermore, the theory of economic voting mentioned earlier, ascertains that the economic climate at the time of an election, weighs heavily on the mind of a voter when making their voting decisions at times of an election. While this is not that of an election, it is useful to take the insight from this theory and extend it into our trust situation of European institutional trust. Therefore, we

would expect that even though EU citizens have experienced hard times economically, their trust in the EU will slowly begin to rebuild over time.

> ***Hypothesis 4*** *- Political ideology is driven by individual characteristics (such as education and occupation), while also being impacted by economic factors such as the China Shock.*

This final hypothesis refers to our final models (5, 6 and 7) which explore the individual-level take-up of extreme political ideology. We hypothesise that the driving forces behind these ideology have both economic and individual-based foundations. Therefore, these models will include our national economic variables, along with our individual-level variables which account for a person's sex, age, occupational grouping and education level. We would expect to see those individuals with lower levels of education and those working in less skilled occupations, alongside those who are unemployed, to have an increased likelihood of holding these extreme views.

3.2 - DATA

Given the fact that this dissertation seeks to explore the causal factors determining levels of trust in the EU, survey data is utilised to create a measure of individual trust. The survey data used in this dissertation is that of the Eurobarometer. Eurobarometer conduct approximately 1,000 face-to-face interviews in each EU member state, along with some non-member countries also. While special Eurobarometers are conducted that focus on very specific themes, for the purpose of this study, all of the required individual-level data could be collected from the biannual "Standard Eurobarometer". In order to construct the dataset, 34 individual waves of the Standard Eurobarometer from Spring 2001 to Autumn 2017 were compiled, with the

variables required for analysis identified and extracted for the 28 current EU member states. A table describing each variable and highlighting its source can be found in Appendix 1.

For the variables relating to trust in the EU and its institutions, the Eurobarometer survey asks individuals, for each given institution, whether they "tend to trust it or tend not to trust it?". Individuals can either respond with "Tend to trust", "Tend not to trust", or that they don't know. This trust question was asked in relation to the European Union itself, as well as for the European Parliament and the European Commission; which form the main trust-related dependent variables for this study and can be seen in Appendix 1. Some waves of the survey did include the European Council, however it was dropped from this study due to its inconsistent frequency. Trust in national parliaments was also asked regularly, and so is included in one of our models; along with trust in the United Nations (UN), which is used to form a placebo test. These variables were therefore coded into binary variables, with 1 indicating "Tend to trust" and 0 indicating "Tend not to trust", as seen in Appendix 1.

Eurobarometer survey data was not only used to form the dependent variables, but was also used for a number of individual-level explanatory variables. These individual-level variables can be seen in Appendix 1 and include variables for an individual's sex, age, level of educational attainment, self-identified political ideology, as well as a number of variables accounting for certain current occupation groups. Age is a discrete variable stating the respondent's current age and sex was coded into a dummy variable "Male", coded 1 for males and 0 for females.

Measuring education levels from Eurobarometer data is somewhat difficult due to the lack of specific education questions included in the surveys. The primary source of information on

education that can be obtained from the surveys is simply the age at which an individual completed full-time education. To make use of this information, four measures of educational attainment were created (similar to the approach used by Foster and Frieden (2017)): individuals who finished education before the age of 18 (low education), individuals who finished school at age 18 (medium education), individuals who finished schooling between the ages of 19 and 23 (high education) and individuals who finished education at age 24 and above (advanced education). These four dummy variables were therefore coded 1 when an individual fell into the given category, and 0 if they did not, as seen in Appendix 1.

For our occupation variables, the Eurobarometer asks respondents what their current occupation is and sorts responses into 18 categories, which is a bit excessive for our model. Therefore, we took 6 categories of interest and created 6 dummy variables to account for whether or not an individual fell into this occupational category. The categories of occupation we included were that of currently unemployed individuals, current students, retirees, managers, professionals (eg: medical practitioners, lawyers, accountants, architects) and farmers or fishermen.

To measure political ideology we created two dummy variables for right and left-wing views. Eurobarometer asks respondents, when it comes to political matters, where they would place themselves from 1 to 10 on a left-right scale. Following Eurobarometer's classification of left, centre and right-wing ideology; a dummy variable for left-wing ideology (equal to 1 for those who responded 1-4) and a dummy for right-wing ideology (equal to 1 for those who responded 7-10) were created.

Besides individual-level variables, this study, given its aim to explore the effects of the financial crisis and the impact of the Chinese import shock on institutional trust, also includes a number of national macroeconomic variables. These annual variables, which can also be seen in Appendix 1, include the following: the economic growth rate, youth unemployment rate, debt-to-GDP ratio, net migration and Chinese imports as a proportion of a nation's total imports. The choice to select the youth unemployment rate over the overall unemployment rate is due to the fact that is was one of the economic indicators most affected by the most recent financial crisis and something that has not received much attention in previous literature. Moreover, we also include three further additional variables; a dummy variable for whether a country is a Eurozone member, a variable accounting for the size of the EU and a variable for the number of years since the 2008 financial crisis.

As will be discussed later, the latter models of this paper pivot their focus to that of extreme political views in individuals and the factors contributing to the individual take-up of these ideologies. By extreme views, we are referring to those individuals who self-identify as being either far-right or far-left. This is a dummy variable created from the same original data used to create our right and left-wing ideology variables. Here, however, all individuals who responded 1-2 (far-left) or 9-10 (far-right) on the political scale, were coded 1 in our extreme views variable, with all other responses being coded 0.

3.3 - METHODOLOGY

For all our models, the various dependent variables take a binary form. Thus, given the nature of these dependent variables, the employed identification strategy is that of a binary logistic regression. Model 1 takes each of our measures of trust (EU, European Parliament and European Commission) and regresses them individually against the set of national level socio-

economic variables, along with variables accounting for Eurozone membership, the size of the EU and the number of years since the 2008 financial crisis. In each of the models, β_0 represents the y-intercept and u represents the error term. Furthermore, for all equations *i* denotes individual, *c* denotes country and *t* denotes time. The equation for model 1 is as follows:

$$\log\left(\frac{\pi_{Tend\ to\ Trust_{ict}}}{1-\pi_{Tend\ to\ Trust_{ict}}}\right) = \boldsymbol{\beta_0} + \boldsymbol{\beta_1} EconomicGrowth_{ct} + \boldsymbol{\beta_2} YouthUnemployment_{ct}$$
$$+ \boldsymbol{\beta_3} Debt\text{-}to\text{-}GDP_{ct} + \boldsymbol{\beta_4} NetMigration_{ct} + \boldsymbol{\beta_5} ChineseImports_{ct} + \boldsymbol{\beta_6} EurozoneMembership_{ct}$$
$$+ \boldsymbol{\beta_7} EUSize_t + \boldsymbol{\beta_8} YearsSince2008_t + \mathbf{u_{ict}}$$

Model 2 is very similar to model 1 but simply adds an additional explanatory variable accounting for citizen-level trust in national parliament. Model 3 sees us return to the same set of variables used in model 1, this time with the addition of time (δ_t) and country (α_c) fixed effects. Model 4 is an extension of model 3, with the analysis now including a variety of individual-level variables such as age, sex, political views, occupation and education, to examine whether these characteristics induce variation in levels of trust in European institutions. Therefore, the equation for model 4 is as follows:

$$\log\left(\frac{\pi_{Tend\ to\ Trust_{ict}}}{1-\pi_{Tend\ to\ Trust_{ict}}}\right) = \boldsymbol{\beta_0} + \boldsymbol{\beta_1} EconomicGrowth_{ct} + \boldsymbol{\beta_2} YouthUnemployment_{ct}$$
$$+ \boldsymbol{\beta_3} Debt\text{-}to\text{-}GDP_{ct} + \boldsymbol{\beta_4} NetMigration_{ct} + \boldsymbol{\beta_5} ChineseImports_{ct} + \boldsymbol{\beta_6} EurozoneMembership_{ct}$$
$$+ \boldsymbol{\beta_7} EUSize_t + \boldsymbol{\beta_8} YearsSince2008_t + \boldsymbol{\beta_9} Age_{ict} + \boldsymbol{\beta_{10}} Male_{ict} + \boldsymbol{\beta_{11}} Right\text{-}Wing_{ict} + \boldsymbol{\beta_{12}} Left\text{-}Wing_{ict}$$
$$+ \boldsymbol{\beta_{13}} LowEducation_{ict} + \boldsymbol{\beta_{14}} MediumEducation_{ict} + \boldsymbol{\beta_{15}} HighEducation_{ict}$$
$$+ \boldsymbol{\beta_{16}} AdvancedEducation_{ict} + \boldsymbol{\beta_{17}} OccUnemployed_{ict} + \boldsymbol{\beta_{18}} OccStudent_{ict} + \boldsymbol{\beta_{19}} OccRetired_{ict}$$
$$+ \boldsymbol{\beta_{20}} OccFarmerOrFisherman_{ict} + \boldsymbol{\beta_{21}} OccManager_{ict} + \boldsymbol{\beta_{22}} OccProfessional_{ict} + \boldsymbol{\delta_t} + \boldsymbol{\alpha_c} + \mathbf{u_{ict}}$$

Finally, for models 5, 6 and 7, our focus now shifts to the factors contributing to the individual uptake of extreme political views. With extreme views (defined in Appendix 1) as the dependent variable, model 5 thus examines the effects of national-level economic variables on these extreme ideologies. Model 6 adds time and country fixed effects to the set-up of Model 5 and lastly model 7 adds back in our individual-level characteristics of age, sex, occupation and education. Model 7 thus takes the following form:

$$\log\left(\frac{\pi_{Extreme\ Views_{ict}}}{1-\pi_{Extreme\ Views_{ict}}}\right) = \beta_0 + \boldsymbol{\beta_1} EconomicGrowth_{ct} + \boldsymbol{\beta_2} YouthUnemployment_{ct}$$
$$+ \boldsymbol{\beta_3} Debt\text{-}to\text{-}GDP_{ct} + \boldsymbol{\beta_4} NetMigration_{ct} + \boldsymbol{\beta_5} ChineseImports_{ct} + \boldsymbol{\beta_6} EurozoneMembership_{ct}$$
$$+ \boldsymbol{\beta_7} EUSize_t + \boldsymbol{\beta_8} YearsSince2008_t + \boldsymbol{\beta_9} Age_{ict} + \boldsymbol{\beta_{10}} Male_{ict} + \boldsymbol{\beta_{11}} LowEducation_{ict}$$
$$+ \boldsymbol{\beta_{12}} MediumEducation_{ict} + \boldsymbol{\beta_{13}} HighEducation_{ict} + \boldsymbol{\beta_{14}} AdvancedEducation_{ict}$$
$$+ \boldsymbol{\beta_{15}} OccUnemployed_{ict} + \boldsymbol{\beta_{16}} OccStudent_{ict} + \boldsymbol{\beta_{17}} OccRetired_{ict} + \boldsymbol{\beta_{18}} OccFarmerOrFisherman_{ict}$$
$$+ \boldsymbol{\beta_{19}} OccManager_{ict} + \boldsymbol{\beta_{20}} OccProfessional_{ict} + \boldsymbol{\delta}_t + \boldsymbol{\alpha}_c + \mathbf{u}_{ict}$$

When designing research models, one must consider model robustness. In the case of this study, working with individual-level survey data can give rise to concerns of between respondent intra-country correlations. Primo, Jacobsmeier and Milyo (2007) outline how studies employing mixed-level data, in our case individual and country-level data, often face "statistical pitfalls". The authors explain that if standard forms of regression analyses are used in conjunction with such mixed-level data, this can result in the overstating of statistical significance. Moulton (1990) highlights that even relatively low levels of correlation can produce biased standard errors, which lead to exaggerated statistical significance measures, particularly for aggregate indicators. Therefore, to address this issue of our observations being non-independent or essentially clustered by country, we employ the technique of robust or clustered standard errors. This approach thus takes into consideration both intra-cluster

correlation, along with the standard form of heteroskedasticity (Primo, Jacobsmeier and Milyo, 2007). Thus, robust standard errors are employed in each model. Moreover, country and time fixed effects are applied in a number of models. Time fixed effects allows us to mitigate any possible bias caused by potential omitted variables that vary over time, but remain constant across countries. Meanwhile, country fixed effects control for factors that vary by country, but are time invariant.

4. RESULTS

This section will discuss and present the results of our empirical analysis. The results shown in this section are shown in the form of odds ratios. When dealing with dummy or binary variables; odds ratios for our trust in institutions dependent variables for example, refer to odds of trusting (rather than not trusting) based on a certain condition being fulfilled (e.g. being female) versus the odds of trusting without that condition being fulfilled. For continuous independent variables, the odds ratio can be understood as the difference in odds resulting from a single percentage point increase in the given variable.

Table 1: Models 1 and 2, Expressed in Odds Ratios.

	(1) European Union	(1) European Commission	(1) European Parliament	(2) European Union	(2) European Commission	(2) European Parliament
Economic Growth	1.017* (0.008)	1.022** (0.007)	1.021** (0.007)	1.025* (0.010)	1.026*** (0.007)	1.026*** (0.007)
Youth Unemployment	0.995 (0.005)	0.995 (0.006)	0.995 (0.006)	1.009 (0.007)	1.005 (0.007)	1.006 (0.007)
Debt-to-GDP Ratio	0.993** (0.002)	0.993*** (0.002)	0.994** (0.002)	0.993* (0.003)	0.992** (0.003)	0.994* (0.002)
Net Migration	0.999 (0.000)	1.000 (0.000)	1.000 (0.000)	0.998** (0.001)	0.999* (0.000)	0.999* (0.000)
Chinese Imports	0.939* (0.025)	0.938* (0.027)	0.931** (0.026)	0.949 (0.037)	0.945 (0.030)	0.938* (0.030)
Eurozone Membership	1.167 (0.165)	1.154 (0.175)	1.159 (0.189)	1.063 (0.240)	1.053 (0.185)	1.056 (0.201)
Size of the EU	1.022* (0.010)	1.003 (0.010)	0.996 (0.010)	1.033** (0.012)	1.013 (0.011)	1.005 (0.011)
Years since 2008	0.954*** (0.011)	0.955*** (0.011)	0.953*** (0.011)	0.949*** (0.013)	0.951*** (0.011)	0.948*** (0.011)
National Parliament Trust	—	—	—	7.198*** (0.751)	4.611*** (0.256)	4.928*** (0.306)
Constant	1.639* (0.377)	3.417*** (0.812)	4.345*** (0.981)	0.584 (0.161)	1.497 (0.399)	1.930** (0.481)
Time Fixed Effects	No	No	No	No	No	No
Country Fixed Effects	No	No	No	No	No	No
Observations (N)	721423	673477	708905	688455	623320	654293
Pseudo R^2	0.024	0.028	0.028	0.155	0.110	0.114

Exponentiated coefficients. Robust standard errors in parentheses.
* p<0.05, ** p<0.01, *** p<0.001.

Table 1 reports the results for models 1 and 2, each conducted on three separate dependent variables; trust in the European Union, trust in the European Commission and trust in the European Parliament. Model 1 takes each of these dependent variables and examines whether the chosen set of macroeconomic variables shapes the extent to which citizens trust the given institution. Surprisingly here, neither the youth unemployment rate or net migration yield a statistically significant relationship with citizen trust in any of the three institutions. However, a percentage point increase in economic growth, produces a 1.7%, 2.2% and 2.1% increase in the odds of trusting the European Union, European Commission and European Parliament respectively. A one percentage point increase in debt relative to GDP at the national level, yields a 0.7%, 0.7% and 0.6% reduction in the odds of trusting each of the three institutions. Turning to Chinese imports, a one percentage point increase in Chinese imports as a proportion of total imports of a country, sees the odds of trusting the EU institutions slashed by 6.1% for the EU as a whole, by 6.2% for the European Commission and by 6.9% for the European Parliament. Eurozone membership here does not produce a statistically significant impact on citizen trust, however, the size of the EU does. According to this model, increasing the EU by 1 member state results in the odds of trusting the EU increasing by 2.2%; however, no such statistically significant relationship was found for the European Commission or Parliament. Finally, for each year that has elapsed since 2008, the associated impact on the odds of trust in the institutions is a reduction of 4.6% for the European Union, 4.5% for the European Commission and 4.7% for the European Parliament.

Model 2 takes the same form as model 1, but with the addition of an explanatory variable for citizen-level trust in national parliament. Therefore, model 2 examines whether trust in national parliament is a reliable predictor of trust in EU institutions. Given the binary nature of this additional variable, our model indicates that individuals who trust their national government

have 7.2 times higher odds of trusting the European Union as a whole. Furthermore, for the European Commission and European Parliament, those trusting national government experience 4.6 and 4.9 times higher odds of trusting these institutions respectively. These statistically significant findings support the results found in related literature on the role played by National Parliaments in acting as a cue or proxy to guide citizens in forming opinions about the EU and its institutions (Hooghe and Marks, 2005; Anderson, 1998; Serricchio, Tsakatika and Quaglia, 2013; Lupia, 1994).

Table 2: Model 3 (including Placebo Test), Expressed in Odds Ratios.

	(3) European Union	(3) European Commission	(3) European Parliament	(3) United Nations
Economic Growth	1.000 (0.007)	1.010 (0.010)	1.008 (0.009)	1.004 (0.007)
Youth Unemployment	0.988* (0.005)	0.991 (0.007)	0.991 (0.007)	0.993 (0.005)
Debt-to-GDP Ratio	0.989*** (0.003)	0.986*** (0.003)	0.988*** (0.003)	0.996 (0.002)
Net Migration	1.000 (0.000)	1.000 (0.000)	1.000 (0.000)	1.000 (0.000)
Chinese Imports	0.909*** (0.026)	0.940 (0.031)	0.935* (0.031)	0.963* (0.018)
Eurozone Membership	1.020 (0.091)	0.945 (0.088)	0.946 (0.090)	1.023 (0.105)
Size of the EU	0.886*** (0.029)	0.921** (0.027)	0.916** (0.025)	0.982 (0.027)
Years since 2008	1.215*** (0.054)	1.124** (0.041)	1.115*** (0.036)	0.999 (0.036)
Constant	16.889*** (7.988)	14.191*** (5.500)	17.952*** (6.055)	3.412** (1.391)
Time Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Observations (N)	721423	673477	708905	670582
Pseudo R^2	0.046	0.049	0.047	0.050

Exponentiated coefficients. Robust standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001.

Represented in Table 2 is model 3, which employs the same cohort of variables as model 1, but this time accounting for within country changes in our variables by employing both time

and country fixed effects. Trust in national parliament, utilised in model 2, although a significant predictor of trust at the European level, is dropped from this and further models as it interferes with our other variables due to its highly correlative relationship with EU-level trust. Furthermore, it does not provide much insight into the variation of European trust at the national and individual level, while also interfering with some of our other variables (Foster and Frieden, 2017). Model 3 now sees youth unemployment, which had not had any statistically significant relationship with our dependent variables in models 1 or 2, now yielding a statistically significant relationship with trust in the EU. This model predicts that a single percentage point increase in the youth unemployment rate results in 1.2% lower odds of trusting the EU. Economic growth is no longer statistically significant. However, the negative and statistically significant relationship between trust and the debt-to-GDP ratio remains for all three European dependent variables. In relation to Chinese imports, while no association was found with European Commission trust; a one percentage point increase in imports from China as a proportion of total national imports resulted in a 9.1% decline in the odds of trust in the European Union and a 6.5% reduction in the odds of trusting the European Parliament. On the policy side, Eurozone membership is shown to have no statistically significant impact on trust in the EU or its institutions. However, the size of the EU is also now statistically significant in its relationship with all three institutions; with the model indicating that a one country increase in the size of the EU is associated with an 11.4%, 7.9% and 8.4% reduction in the odds of trusting the EU, European Commission and European Parliament respectively. Moreover, as in the previous two models, years since 2008 is seen to be a strong predictor of trust at the European level, however, this time in the opposite direction. An additional year since the financial crisis is found to increase the odds of trusting the European Union, European Commission and European Parliament by 1.2, 1.1 and 1.1 times respectively.

The final column of table 2 contains our placebo test. This placebo test involves the same explanatory variables as Model 3, except this time the fixed effects binary logistic regression is run with trust in the United Nations (UN) as the dependent variable. Unsurprisingly, the size of the EU and Eurozone membership show no association with UN trust, along with the lack of statistically significant relationship found with years since the financial crisis. Furthermore, no statistically significant relationship is found with any of the national-level economic variables, besides the proportion of Chinese imports. This model predicts that a one percentage point increase in Chinese imports in relation to total imports is associated with a 3.7% reduction in the odds of trusting the UN. Therefore, while economic conditions like youth unemployment, government debt and economic growth at the national level do not seem to be contributing to a general decline in institutional trust; the statistically significant negative relationship found between Chinese imports and trust in the UN indicates that globalisation may be a significant driver in the contraction of trust in institutions more generally.

Model 4, presented in Table 3 below, takes the same form as model 3 but with an additional set of individual-level variables and controls, as explained in the methodology section. Here a 1 point increase in the debt-to-GDP ratio of a country is seen to contribute to a decline in the odds of trusting the EU, Commission and Parliament by 1.2%, 1.5% and 1.3% respectively. A single country increase in the size of the EU itself sees the odds of trust declining by 12.2%, 8.3% and 9.3% for the three European institutions. Years since 2008 maintains its role in healing EU trust, increasing the odds of trust by 1.2, 1.1 and 1.1 times for each of the dependent variables respectively. Finally, a 1 percentage point increase in Chinese imports sees the odds of trusting the EU decline by 9.5% and by 7.3% for the European Parliament.

Table 3: Model 4 (including Placebo Test), Expressed in Odds Ratios.				
	(4) European Union	(4) European Commission	(4) European Parliament	(4) United Nations
Economic Growth	0.997 (0.008)	1.006 (0.011)	1.003 (0.011)	1.002 (0.007)
Youth Unemployment	0.989 (0.006)	0.995 (0.008)	0.995 (0.008)	0.995 (0.005)
Debt-to-GDP Ratio	0.988** (0.004)	0.985*** (0.004)	0.987*** (0.004)	0.997 (0.002)
Net Migration	1.000 (0.000)	1.000 (0.000)	1.000 (0.000)	1.000 (0.000)
Chinese Imports	0.905** (0.032)	0.934 (0.034)	0.927* (0.034)	0.966 (0.021)
Eurozone Membership	1.025 (0.096)	0.946 (0.095)	0.948 (0.100)	1.014 (0.082)
Size of the EU	0.878*** (0.034)	0.917** (0.030)	0.907*** (0.027)	0.972 (0.029)
Years since 2008	1.235*** (0.058)	1.137*** (0.042)	1.136*** (0.036)	1.010 (0.042)
Age	0.998 (0.001)	1.001 (0.001)	1.001 (0.001)	1.000 (0.001)
Male	1.014 (0.019)	0.984 (0.017)	0.971 (0.020)	0.984 (0.016)
Right-Wing Ideology	1.020 (0.078)	0.950 (0.078)	0.931 (0.076)	0.986 (0.054)
Left-Wing Ideology	0.733*** (0.053)	0.699*** (0.053)	0.737*** (0.055)	0.804*** (0.040)
Low Educational Attainment	0.928 (0.036)	0.877*** (0.028)	0.872*** (0.028)	0.902** (0.035)
Medium Educational Attainment	1.121*** (0.025)	1.148*** (0.024)	1.136*** (0.021)	1.051 (0.030)
High Educational Attainment	1.332*** (0.044)	1.402*** (0.034)	1.378*** (0.032)	1.220*** (0.046)
Advanced Educational Attainment	1.539*** (0.067)	1.563*** (0.051)	1.536*** (0.047)	1.276*** (0.057)
Occupation: Unemployed	0.800*** (0.027)	0.738*** (0.023)	0.747*** (0.023)	0.808*** (0.026)
Occupation: Student	1.762*** (0.100)	1.543*** (0.088)	1.651*** (0.104)	1.515*** (0.054)
Occupation: Retired	1.086** (0.029)	1.008 (0.025)	1.028 (0.025)	1.035 (0.022)
Occupation: Farmer / Fisherman	0.994 (0.059)	1.012 (0.064)	1.013 (0.067)	1.002 (0.042)
Occupation: Manager	1.230*** (0.027)	1.234*** (0.024)	1.252*** (0.034)	1.228*** (0.025)
Occupation: Professional	1.185*** (0.043)	1.169*** (0.055)	1.189*** (0.058)	1.079* (0.039)
Constant	18.313***(9.778)	14.977*** (6.487)	19.704*** (7.214)	3.410**(1.539)
Time Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Observations (N)	486260	462438	485376	453978
Pseudo R^2	0.057	0.059	0.058	0.053

Exponentiated coefficients. Robust standard errors in parentheses.
* p<0.05, ** p<0.01, *** p<0.001.

Model 4 also predicts that self-identifying as being right-wing ideologically has no statistically significant impact on an individual's odds of trusting any of our EU institutions. Self-identifying as left-wing however, is associated with a reduced odds of trust across the board; 26.7% for the EU, 30.1% for the European Commission and 26.3% for the European

Parliament. Moreover, our measures of educational attainment, captured by four dummy variables, produce statistically convincing insights into the effects of education on EU-level trust. Having low educational attainment (finishing before age 18), is associated with a 12.3% and 12.8% reduction in odds of trusting the European Commission and European Parliament respectively; both statistically significant at the 99% level. Medium-level education (finishing at age 18) is associated with a 12.1%, 14.8% and 13.6% increase in the odds of trusting the EU, European Parliament and European Commission. High educational attainment, which is equivalent to bachelor degree level, is predicted to see the odds of trusting our three European dependent variables by 33.2%, 40.2% and 37.8% respectively. Our final education dummy is that of advanced educational attainment, which accounts for people who have completed some form of postgraduate studies. Our estimates show that advanced education increases the odds of trust by 53.9%, 56.3% and 53.6% for the EU, European Commission and European Parliament respectively.

The final set of variables included in model 4 account for occupation. As described in the Data section, these are a set of dummy variables, accounting for an individual's presence in specific occupational groups. Those individuals who responded as being currently unemployed are less likely to trust the EU, Commission and Parliament; with odds reduced by 20%, 26.2% and 25.3% respectively. The other occupational groups all see increased odds of trust in the European project. Being a student is associated with the highest odds of trust in this model, seeing the odds of trust being 76.2%, 54.3% and 65.1% higher for the three European dependent variables. Having a management-level job is associated with 23%, 23.4% and 25.2% greater odds of trust in the EU, Commission and Parliament. Moreover, being a professional, which includes occupations such as lawyers, accountants and architects, sees individuals experience their odds of trusting the EU, Commission and Parliament increase by 18.5%,

16.9% and 18.9% respectively. For our retired cohort, a statistically significant relationship is only found with the EU as a whole, with odds of trust elevated by 8.6% for retired individuals. Farmers and Fishermen, occupations which rely heavily on EU funding and policies like the Common Agricultural Policy and Common Fisheries Policy, interestingly present no statistically significant association with trust in the EU or its institutions.

Taking a look at the final column of Table 3, shows us the placebo test for model 4, where the dependent variable is replaced with a binary variable for trust in the United Nations, with the rest of the model remaining unchanged. Here we see that our economic controls, along with eurozone membership, EU size and years since 2008, present no statistically significant relationship with trust in the UN; many of which were shown to be determinants of trust at the EU-level. As with our European models, odds of trust in the UN is seen to be higher among those with high and advanced educational attainment and lower for those with low levels of education, however, the effect is not as strong as with our European dependent variables. Similarly, being a student, manager or professional increases your odds of trusting the UN, while being unemployed reduces these odds; yet again with these effects being less severe than at the European level.

Model 5, as seen in Table 4 below, is similar to that of Model 1 but sees "Extreme Views" entered as the dependent variable. This variable, as explained earlier, accounts for individuals taking extreme right or extreme left positions. Therefore, Model 5 attempts to explore whether macroeconomic variables, along with Eurozone membership, the size of the EU and years since the financial crisis have an affect individuals identifying with these ideologies on the extremes of the left-right spectrum. Here we see that a one percentage point increase in economic growth is predicted to decrease the odds of individuals having extreme views by 2.9%. A single

percentage point increase in youth unemployment increases the odds of extreme ideology by 2.5%. A one percentage point increase in net migration is predicted to decrease the odds of having extreme views, but only by 0.1%. The accession of a single new country to the EU is associated with a 4.4% increase in the odds of extreme views and the financial crisis being an extra year in the past is predicted to increase the odds of extreme views by 3.4%.

Table 4: Models 5, 6 and 7 (including Placebo Test), Expressed in Odds Ratios.

	(5) Extreme Views	(6) Extreme Views	(7) Extreme Views
Economic Growth	0.971* (0.014)	0.993 (0.005)	0.993 (0.005)
Youth Unemployment	1.025***(0.006)	0.998 (0.002)	0.997 (0.003)
Debt-to-GDP Ratio	1.000 (0.002)	1.001 (0.002)	1.001 (0.002)
Net Migration	0.999* (0.001)	1.000 (0.000)	1.000 (0.000)
Chinese Imports	0.946 (0.031)	1.020 (0.016)	1.019 (0.016)
Eurozone Membership	0.958 (0.143)	1.047 (0.069)	1.046 (0.069)
Size of the EU	1.044*** (0.014)	0.978 (0.020)	0.983 (0.020)
Years since 2008	1.034** (0.013)	0.985 (0.026)	0.985 (0.027)
Age	—	—	0.997** (0.001)
Male	—	—	0.877*** (0.016)
Low Educational Attainment	—	—	1.204*** (0.028)
Medium Educational Attainment	—	—	0.936* (0.026)
High Educational Attainment	—	—	0.799*** (0.020)
Advanced Educational Attainment	—	—	0.769*** (0.028)
Occupation: Unemployed	—	—	1.255*** (0.027)
Occupation: Student	—	—	1.165*** (0.030)
Occupation: Retired	—	—	1.134*** (0.031)
Occupation: Farmer or Fisherman	—	—	0.953 (0.026)
Occupation: Manager	—	—	0.848*** (0.018)
Occupation: Professional	—	—	0.928* (0.035)
Constant	0.288***(0.099)	0.614 (0.199)	0.682 (0.230)
Time Fixed Effects	No	Yes	Yes
Country Fixed Effects	No	Yes	Yes
Observations (N)	836210	727593	717012
Pseudo R^2	0.035	0.074	0.081

Exponentiated coefficients. Robust standard errors in parentheses.
* p<0.05, ** p<0.01, *** p<0.001.

While the findings of model 5 are interesting, it is important to account for within country trends in these variables; thus model 6, applies time and country fixed effects. This model then produces no statistically significant relationship with extreme views among any of these national level variables. Represented in the final column of Table 4 is that of model 7, which sees our national level variables being joined by the set of individual level used in model 4. Similar to what is seen in model 6, model 7 sees the national level variables producing no statistically significant relationship with the odds of holding extreme views. However, a year increase in an individual's age is predicted to reduce the odds of holding extreme views, but only by 0.3%. Our data also predicts that being a male reduces an individual's odds of having more extreme political views by 12.3%. When it comes to education, those with lower levels have higher odds (20.4%) of having extreme views. However, having a medium, high and advanced level reduces an individual's odds of identifying with extreme ideology by 6.4%, 20.1% and 23.1% respectively. When it comes to an individual's occupation, being unemployed, a student or retired increases the odds of having extreme views by 25.5%, 16.5% and 13.4% respectively. Moreover, being a manager or a professional however, reduces an individual's odds of holding extreme political views by 15.2% and 7.2% respectively.

5. DISCUSSION

Having highlighted the literature related to this research topic, presented the theorised hypotheses, set out our research design and in turn tested our data against our hypotheses; we will now discuss how the results of this study stand up to our posited expectations. Moreover, Table 5 presents a summary of the verdicts given to our proposed hypotheses.

Table 5: Hypotheses and Verdicts.

Number	Hypothesis Description	Verdict
1	*The Economic Crisis played an important role in determining levels of trust in the EU and EU institutions in recent years.*	Confirmed
2	*The Chinese import shock has contributed to worsening levels of EU trust.*	Confirmed
3	*Time Heals All Wounds.*	Confirmed
4	*Political ideology is driven by individual characteristics (such as education and occupation), while also being impacted by economic factors such as the China Shock.*	Partially Confirmed

Our first hypothesis, that the economic crisis played an important role in determining levels of trust in the EU and its institutions in recent years, was proven to be true by our analysis. The empirical study, which we have already seen, highlights that economic conditions in Europe, at both the level of the member state and the individual, play a key role in shaping citizen-level trust in the EU and its institutions. Models 1 and 2 indicate that economic expansion or positive economic growth, results in increased trust in the EU, European Commission and European Parliament. However, when accounting for within country changes in these variables via country and time fixed effects in model 3; economic growth becomes insignificant in its role in determining EU-level trust. While measures of overall unemployment typically receive the most attention in the literature, this study found youth unemployment to be a significant predictor in determining trust in the EU as a whole. A statistically significant negative relationship was also found with the debt-to-GDP ratio for all three of our European dependent variables. Moreover, when individual-level characteristics were accounted for in model 4, the

effect of domestic debt-to-GDP ratios becomes stronger, while remaining statistically significant. So while not all measures of national economic performance, such as economic growth, are found to be significant predictors of citizen-level European trust, this does not rule our hypothesis invalid. The most recent economic crisis in Europe can be defined as a sovereign debt crisis. Therefore, it is understandable our variable for a country's debt-to-GDP ratio has the most consistent statistically significant and strongest relationship with trust in the EU and its institutions, with a statistically significant negative relationship with trust found in each of our models. In other words, higher levels of government debt accumulation was found to be associated with a reduction in citizen-level trust in the EU, European Commission and European Parliament. Therefore, I believe this is sufficient to render Hypothesis 1 true.

The second hypothesis set out in this paper excogitated that the shock of Chinese imports to the European economy contributed to the decline in trust at the European level. As we saw in the literature review, globalisation has been found in other studies to be associated with a rise in populism. Colantone and Stanig (2018), measuring imports to Europe by instrumenting Chinese Imports to the United States, find that this increased exposure saw voters tending more toward the right and a rise in support for nationalist parties. Therefore, one of the aims of this paper was to ascertain whether this same shock has impacted levels of trust in the EU, European Commission and European Parliament. In model 1, when simply assessing the impacts of a number of national-level macroeconomic indicators and policies, a one percentage point increase in Chinese imports was associated with a decline in trust for the three European dependent variables by over 6% each. When time and country fixed effects were added in model 3, the effect was no longer significant for European Commission trust. However, for the EU and European Parliament, the negative relationship effect was still statistically significant. Similarly in model 4, when accounting for individual-level characteristics and ideology, a

single percentage point increase in Chinese imports was found to reduce trust in the EU and European Parliament by over 9% and 7% respectively. The lack of statistically significant relationship found between trust in the European Commission and Chinese imports in models 3 and 4, could possibly be explained by low levels of citizen awareness in EU affairs, leading to citizens finding it easier to blame the EU as a whole, or the institution in which they directly elect; the European Parliament. However, despite this, I believe the results of our analysis provide sufficient evidence for Hypothesis 2 to be classified as proven correct. This unique finding highlights the impact globalisation, particularly in the case of China's emergence onto the global economy, has had on public opinion and trust in institutions at the EU level. It also signals understanding on the behalf of citizens that responsibility for trade affairs falls under the remit of the EU institutions, and perhaps this finding suggests that citizens feel that they were not adequately protected from the Chinese import shock. Furthermore, when taking a purely national-level examination, model 3 finds Chinese imports to be the only significant economic factor impacting UN trust; our placebo test.

As we saw earlier in Figure 1.1, trust in the EU and the institutions under its umbrella, fell significantly in the aftermath of the financial crisis; and while some recovery has been made, the levels of trust are still far from pre-crisis levels. The "Time Heals All Wounds" Hypothesis or Hypothesis 3 attempts to capture whether the damage done to EU-level trust by the recent financial crisis, is as strong in the minds of citizens today, or whether the age-old maxim applies. In each of our models, a strong statistically significant relationship was found between the number of years since 2008 and trust in the EU, Commission and Parliament. Interestingly, in models 1 and 2, which solely include national level variables, with no fixed effects; a negative relationship was found between trust and an additional year since the financial crisis. However, once country and time fixed effects were added, this relationship became strongly

positive. Moreover, in model 4, when individual-level factors such as ideology, occupation and education were accounted for, the magnitude of this effect was strengthened; with an additional year post-crisis resulting in the odds of trusting the EU, Commission and Parliament increasing by 23.5%, 13.7% and 13.6% respectively. While the recovery has not been overnight, this evidence supports Hypothesis 3; that time does in fact seem to heal all wounds in the case of trust in the European project.

The decision to run some placebo tests, in the case of models 3 and 4, was made with the intention to prove that the conclusions we would make about the determinants of trust at the European level were specific to the EU and related institutions, and were not also applicable to institutions as a whole, nor were they simply spurious findings. Therefore, in model 3, national economic conditions such as youth unemployment, growth or government debt show no statistically significant relationship with trust in the United Nations, as expected. Moreover, being a Eurozone member, the size of the EU and years since 2008 also show no predictive capability in determining UN trust. However, model 3's placebo test does show that a 1% increase in Chinese imports as a percentage of a nation's total imports results in a 3.7% reduction in UN trust. This interesting finding is perhaps an indicator of an underlying undermining of institutional trust more broadly, not via national economic conditions as a whole, but via the effects of globalisation. The creation of winners and losers has, in previous studies, been associated with increased votes and support for populist parties. This suggests the unequal sharing of gains from globalisation could be damaging to overall institutional trust; as citizens do not feel protected from the changing economic landscape. It also indicates that the implications of globalisation and the Chinese import shock stretch far beyond local institutions, but also impact institutional trust on the global level. Therefore, examining the consequences

for institutional trust produced at the hands of globalisation, could in fact be a very interesting avenue for potential future research.

The fourth and final proposed hypothesis postulated that extreme ideology, defined here as an individual self-identifying as being far-right or far-left, is driven by individual characteristics in conjunction with national level economic factors. This proposition was the focus of our final models; models 5, 6 and 7. When accounting only for national economic conditions, with no fixed effects, the state of the domestic economy is seen to be a significant driver in individuals identifying as far-right or far-left. However, when fixed effects are added (in model 6), as well as individual-level variables (model 7), it is an individual's personal characteristics that show statistically significant relationships with holding extreme views. Higher educational attainment is associated with a reduction in the odds of having extreme ideology. Moreover, those not in continuous employment (i.e. students, retirees and jobseekers) have higher odds of being on the extremes of the political spectrum. This finding confirms the results of other studies, such as in Rico and Anduiza's 2017 paper, where the authors ascertain that those in unstable economic conditions are more likely to hold extreme ideology. Moreover, occupations requiring higher skill levels, such as management and professional positions, are predicted to reduce an individual's odds of holding such views; which is in line with the predictions made in Hypothesis 4. Thus, while national level economic factors do not show signs of being clear drivers in the uptake of extreme political views; an individual's own situation greatly shapes their chances of identifying with these sentiments. Therefore, in terms of the proposed hypothesis, the evidence suggests it is partially supported; as although insufficient evidence was found to support the economic drivers of extreme ideology, strong evidence was found in the case of the determinants at the level of the individual.

Individual characteristics being found as a dominant driver of extreme political ideology over economic conditions is support for the idea of egotropic utilitarianism. Gomez (2015) points to "utilitarianism", a subsection of the literature which asserts that public opinion towards the EU should be shaped by the returns from economic integration to citizens, which is known as egotropic utilitarianism, or by the returns to the economy of their country as a whole, which is referred to as sociotropic utilitarianism. Utilitarianism in the egotropic form therefore, would suggest that citizens who are most at risk economically, in terms of their employment and income, would be predicted to view the EU in a more Eurosceptic light; as is suggested by the results of model 7. Moreover, Hypothesis 1 which correctly predicted that the economic crisis did in fact influence levels of European trust, could be argued to be evidence of utilitarianism in the sociotropic sense.

A further interesting finding is that EU enlargement, accounted for using our EU size variable, shows a statistically significant negative relationship with European-level trust in our fixed effects models. Furthermore, this effect still remains when controlling for the individual characteristics of respondents. Therefore, instead of fostering a sense of community, EU enlargement is actually contributing to the decline in EU-level trust.

6. CONCLUSION

As has been discussed throughout this paper, recent years have seen the European Union face tumultuous times, both socioeconomically and politically. In the midst of the numerous challenges posed to the Union, has been a significant decline in levels of trust in the EU and rising Eurosceptic sentiment. Therefore, this paper and its results offer some interesting and important insights into the driving forces behind levels of institutional trust at the European level. Via a series of binary logistic regressions, we have found that the Global Financial Crisis did in fact contribute to the decline in EU-level trust. This impact however, is not equally driven by all measures of economic performance, with member state debt-to-GDP ratios found to be one of the central economic determinants of trust. Moreover, at the individual-level, those in more vulnerable personal economic situations, such as those who are unemployed, have higher odds of distrusting the EU and European institutions, as well as higher odds of gravitating towards more extreme views.

Furthermore, many previous studies that have examined the impacts of globalisation and increased trade integration have focussed on the impacts on businesses, specific industries or economies at the macro-level. However, citizens too are experiencing a shift in dynamics as a result of these trends. Therefore, a key contribution made by this paper, is the unique identification of the Chinese import shock as an important ingredient in the make-up of public opinion towards EU support. This paper has found that the surge of Chinese imports to the EU economy, left citizens feeling vulnerable, resulting in their trust in the EU and European institutions taking a hit. The results of our trust models thus show a clear accountability mechanism at play; where accountability is assigned from citizens to the EU for any losses or negative outcomes they have experienced at the hands of both the globalisation and the financial crisis. This indicates that European citizens understand that the EU and the institutions

it encompasses play an important role in the policy-making and state of affairs within the Union and are therefore, in the eyes of the citizen, at least partly to blame for any negative experiences they have undergone at the hands of a changing economic climate.

Moreover, although the passing of time was found to contribute to the process of healing trust in the European project, the EU cannot take this fact for granted, as shown by the rise in populism and the 2016 Brexit referendum. The results and findings of this paper thus indicate that in order for the EU to foster and grow support or trust in its institutions and aims, it needs to put proactive measures in place to protect citizens from economic shifts such as those associated with the most recent financial crisis and heightened import competition from Chinese imports.

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APPENDIX

APPENDIX 1

Description of variables and data sources.

VARIABLE	DESCRIPTION	SOURCE
Dependent Variables		
European Union (EU) Trust	Binary Variable: 1 Tend to trust, 0 Tend not to trust.	Eurobarometer
European Commission Trust	Binary Variable: 1 Tend to trust, 0 Tend not to trust.	Eurobarometer
European Parliament Trust	Binary Variable: 1 Tend to trust, 0 Tend not to trust.	Eurobarometer
United Nations (UN) Trust	Binary Variable: 1 Tend to trust, 0 Tend not to trust.	Eurobarometer
Extreme Views	Binary Variable: 1 Have Extreme Views, 0 Don't Have Extreme Views. Coded based on those who identified as far-right (9–10) or far-left (1–2) on a 10-point scale of political ideology.	Eurobarometer
National Level Variables		
Economic Growth	Annual percentage growth rate of GDP at market prices based on constant local currency.	The World Bank
Youth Unemployment	The percent of individuals aged 15 to 24 years unemployed compared to the total labour force in that age group.	Eurostat
Debt-to-GDP Ratio	General government debt as a percentage of Gross Domestic Product (GDP).	Eurostat
Net Migration	Net migration plus statistical adjustment: Total population change – natural change.	Eurostat
Chinese Imports	Chinese imports to a given country as a percentage of the country's total imports.	UN Comtrade Data
Eurozone Membership	Binary Variable: 1 yes, 0 no.	
Individual Level Variables		
Age	Discrete variable, age in years.	Eurobarometer
Male	Binary Variable: 1 male, 0 female.	Eurobarometer
Right-Wing Ideology	Individual self-identifies as being right-wing (7–10 on 10-point scale), Binary Variable: 1 yes, 0 no.	Eurobarometer
Left-Wing Ideology	Individual self-identifies as being left-wing (1–4 on 10-point scale), Binary Variable: 1 yes, 0 no.	Eurobarometer
Low Educational Attainment	Finished education when younger than 18 years of age. Binary Variable: 1 yes, 0 no.	Eurobarometer
Medium Educational Attainment	Finished education when 18 years of age. Binary Variable: 1 yes, 0 no.	Eurobarometer
High Educational Attainment	Finished education between the ages of 18-23 inclusive. Binary Variable: 1 yes, 0 no.	Eurobarometer

Advanced Educational Attainment	Finished education when 24 years or older. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Unemployed	Currently unemployed. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Student	Currently a student. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Retired	Currently retired. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Farmer / Fisherman	Currently working as a farmer or fisherman. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Manager	Currently employed at a managerial level. Binary Variable: 1 yes, 0 no.	Eurobarometer
Occupation: Professional	Currently an employed professional (eg: doctor, lawyer, accountant, architect). Binary Variable: 1 yes, 0 no.	Eurobarometer
Further Variables		
EU Size	Number of current EU members.	
Years since 2008	Number of years since the 2008 financial crisis.	

APPENDIX 2

Wald Tests for Models 1 and 2.

Model Number	Dependent Variable	df	Wald chi2	Prob > chi2
1	European Union	8	109.04	0.000
1	European Commission	8	92.35	0.000
1	European Parliament	8	113.65	0.000
2	European Union	9	1117.40	0.000
2	European Commission	9	1591.56	0.000
2	European Parliament	9	1175.20	0.000