The Effects of Economic Crisis on Trust: Paradoxes for Social Capital Theory

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Abstract
The theory of social capital rarely takes economic variables into account. This article confirms that economic factors had greater explanatory power for social trust and trust in institutions during times of economic crisis, due mainly to increased economic polarization of the population. We use Spain as a case study to analyse the impact of a number of variables on social and institutional trust before and during the economic crisis. The 2008 economic crisis in Spain resulted in a paradox: a notable decline in trust in institutions, together with a surprising increase—rather than the expected decrease—in social trust. The data analysed here also highlight the possibility that the two types of trust did not track in a mutually supportive manner due to the emergence of Movimiento 15 M, which gave rise to the appearance of new political parties such as Podemos, on the extreme left of the electoral scale.

Keywords Social trust · Trust in institutions · Economic crisis · Political movements · Social capital

1 The Effects of Economic Crisis on Trust

The objective of this study is to analyse the different impacts that economic polarisation, generated by economic crisis, has on social trust and trust in institutions. In explaining levels of trust, the theory of social capital focuses more on social variables such as civic participation, satisfaction with democracy and the appearance of a critical citizenry, and less on the effect of economic variables. We hypothesise that, in addition to these social effects,
increased economic polarisation in moments of economic crisis alters the foundations of social trust and trust in institutions.

Although social trust and trust in institutions are distinct variables, they are frequently considered to feed into each other, and to be mutually supportive (Putnam 1993, 2000; Brehm and Rhan 1997; Newton and Norris 2000; Zmerli and Newton 2008; Rothstein 2011). In this study we seek to analyse how the two variables behaved in a context of economic recession. To date, explanations of social trust and trust in institutions have focused more on questions of civic participation (Putnam 1993, 2000), on satisfaction with democracy (Zmerli and Newton 2008), and on the presence of a critical citizenry (Norris 2011), than on the economy. Our hypothesis, however, is that in moments of economic crisis, the relationship between the two types of trust is not mutually supportive for two key reasons. The first refers to the fact that economic polarisation profoundly changes the basis of social trust and trust in institutions. The second refers to the social response to the emergence of new leftist social and political movements that are highly critical of institutions, but that trust in the capacities of society. We aim to investigate whether these two factors—increased economic polarisation and the emergence of leftist movements—that emerged from the economic crisis contributed to the non-mutually supportive relationship between social trust and trust in institutions, contrary to the predictions of social capital theory.

To test both hypothesis we use the case of 2008 economic crisis in Spain to analyse the impact of a number of variables on social trust and trust in institutions before and during the economic crisis. Using data for Spain from the European Social Survey, we conduct structural equation modelling with five dependent variables. One of these variables is trust between individuals (social trust). To facilitate observations of differential effects, the other four variables are four different forms of trust in institutions: trust in Parliament, trust in political parties, trust in the legal system, and trust in the police. The model involves testing the effects of five economic variables and one political variable. The economic variables are: a person’s satisfaction with the economy; whether they have economic difficulties or not; their principal source of income; the type of employment contract they hold; and whether or not they are unemployed. And, the political variable is: self-positioning on the political spectrum (from 1 to 10, from left to right).

We compare these effects with the effects of two variables which, at the theoretical level, are considered to influence levels of trust: (1) satisfaction with democracy, (2) civic participation (whether a person has been part of a civic association in the past 12 months). We control for the effect of other socioeconomic variables. The model is replicated at two specific points in time: before the crisis (2004) and during the crisis (2013) to allow an assessment of any changes that may be attributed to the crisis.

The 2008 economic crisis had a more socioeconomically significant impact in Spain than in the majority of European Union (EU) countries. Spain’s GDP per capita declined in line with other EU countries during the crisis: in 2006, GDP stood above the average for EU countries (105%), but by 2013 it was already below the average, at 95% (EUROSTAT 2015). Public debt, which in 2007 stood at 36.1% of GDP, rose to 93.4% by 2013 (Bank of Spain 2013). The impact of the crisis on labor markets was devastating. Unemployment, from 7.95% of the active population in 2007, reached the historical high of 27.16% in 2013, with youth unemployment (unemployed individuals aged less than 25 years) reaching 1 Unemployment severely affected the construction and service sectors that are central to an economy with a large tourism industry. However, following Foronda-Robles et al. (2016), tourism industry has shown itself to be more able to recover from the economic crisis than other economic sectors.
57.2% according to the national Labour Force Survey (2013). Such figures paint a picture of general deterioration in quality of life, corroborated by the fact that average household income in Spain fell from 29,634 euros per year in 2009 to 26,174 euros per year in 2013, according to the national Quality of Life Survey (Spanish Statistical Office 2015). In addition, poverty and social exclusion increased at an alarming rate from the beginning of the crisis. In 2014, 29.2% of the Spanish population found itself at risk of poverty or social exclusion, 2.3 million more people than in 2008 and exceeding the EU15 average by more than 6 percentage points (Intermon-Oxfam 2016).

The economic crisis had three key effects at social and political levels: (1) a rapid increase in income inequalities given that the crisis affected the rich and the poor in very different ways, (2) the emergence of the 15 M Movement (Movimiento 15 M) in 2011, which gave rise to new political parties that identified as more left-leaning than traditional parties, with the most notable case being the We Can (Podemos) party, founded in 2014, and (3) a collapse in trust in institutions among Spanish citizens together with a surprising increase in social trust.

The rapid rise in income disparities in Spain during the crisis was particularly significant. Discounting Cyprus, of all OECD countries Spain saw the greatest increase in inequality as a result of the crisis: an increase almost 10 times greater than the European average, and 14 times more than increases in Greece (Intermon-Oxfam 2016). Although the crisis affected the entire Spanish population, it did not do so equally, with the poorest losing significantly more than the richest. Between 2008 and 2011, the poorest 10% of society saw their annual incomes decrease by 42.4%, while the richest 10% saw a decrease of just 5.6% in the same period. With this, Spain became the second-most economically unequal country in the EU, exceeded only by the United Kingdom, according to the Income Inequality Update (OECD 2014).

The economic crisis in Spain also gave rise to public protests between 2011 and 2015. These protests became known as the 15 M Movement (Movimiento 15 M), or the movement of the Indignados (known in many international spheres as the “Spanish Revolution”). The protests gave voice to a wide range of political, economic and social claims that reflected the desire of participants for profound changes in the prevailing democratic and economic model of the time. From this social mobilization emerged new political parties that leaned further to the left of traditional parties. The most significant of these was We Can (Podemos), which was established in January 2014 and participated in the European elections of the same year, securing five Eurodeputies and becoming the fourth most voted for group.²

Yet perhaps the most surprising effect of the 2008 crisis was that Spanish citizens’ trust in democratic institutions decreased notably, while social trust, understood as trust in other individuals, not only did not decrease, but in fact increased. Table 1 compares social trust and trust in institutions among Spanish citizens in 2004, a year in which GDP growth in Spain was significant due to growth in the real estate sector and the mass arrival

² Following Parés, Ospina and Subirats in their book “Social Innovation and Democratic Leadership” published in 2017 at Edward Elgar, 15 M movement in Spain is a significant example of the urban protests that has multiplied at a global level such as Occupy Wall Street in the US and “the Arab Spring”. These protests have been conceptualized as “Revolution 2.0”. These mobilizations were linked to a proliferating series of eruptions of discontent in cities as diverse as Madrid, Barcelona, Athens, Lisbon, Rome, El Cairo, Istanbul, Sao Paulo, México, Honk Kong, Paris and New York. In the countries of Southern Europe the crisis was especially virulent, so these social movements remained firm, giving rise to political parties of the extreme left such as Podemos in Spain, Syriza in Greece, or the 5 Star Movement in Italy.
of immigrant workers in the construction and services sectors, and in 2012, during full economic crisis.

The data show that the percentage of people not trusting in Parliament doubled between 2004 and 2012, growing from almost 30% to more than 60%. Trust in political parties was already very low in 2004, with more than 57% of people stating that they mistrusted political parties, but during the crisis it collapsed: almost 85% said they mistrusted political parties and only 7% stated that they trusted them. Citizens also lost trust in the legal system: before the crisis, 40% of people mistrusted the legal system, with this number rising to almost 60% during the crisis. The only institution that saw continued trust from citizens was the police. These changes coincided with harsh governmental economic adjustments and a rapid increase in poverty and inequality. Yet the clear collapse in trust in institutions was not mirrored by a collapse in social trust. Rather, social trust during the crisis increased by almost five percentage points: from nearly 40%, the number of people stating that they trusted others rose to around 45%. In theoretical terms, it is no surprise that the economic crisis led to decreases in trust in democratic institutions (Rothstein and Uslaner 2005; Nannestad 2008; Zmerli and Castillo 2015). However, what is surprising is that this decrease was not accompanied by a decrease in social trust.

2 Theoretical Framework

Interpersonal exchanges and reciprocity are basic elements of social life and human behaviour. The very notion of society is inseparable from these, and from all types of relationships among people. However, in order to function, human relationships require a minimal level of trust. Social trust offers the cohesiveness necessary for producing meaningful social relationships. There is a consensus among scholars that trust is a necessary condition for a healthy economy, society and political life (Uslaner 2002). However, there are a number of nuances in defining trust.
Social trust can be defined as a belief that others will not cause one harm in a deliberate or conscious manner, if they can avoid it, and that they will consider one’s interests as far as possible (Delhey and Newton 2005). The assumption here is that people choose how they behave. Conversely, Luhmann (1979) conceives trust simply as a mechanism for reducing uncertainty and the complexity of the world today. For Yamagishi (2001), trust is a form of social intelligence that is contingent on people having mutual interests and certain characteristics. Cultural theories suggest that social values influence the degree to which individuals trust one another, although these effects are seen only in the medium and long-term. For example, Rahn and Transue (1998) revealed that the rapid growth of materialistic values among young North Americans in the 1970s and early 1980s reduced their level of trust in other people. Putnam (2000) also points to a decline in social trust in the United States and links this with a change in daily lifestyle, citing a lack of spare time, the incorporation of women into the labour market, increasing city size and individual anonymity, mobility facilitated by the mass use of cars and the influence of technology and communication media as factors. Individual and collective levels of optimism are also related to levels of trust (Uslaner 2002).

Social trust is distinct from trust in institutions (Putnam 1993; Uslaner 2002). Newton (1999) argues that social trust belongs to the private sphere and that it is a characteristic of personal relationships based on first hand experiences and knowledge. Conversely, trust in institutions belongs to the public and political spheres and it is established based on secondary sources, particularly mass communication media. According to Levi and Stoker (2000), trust in institutions depends on individuals’ positive evaluations of the most relevant attributes making each institution worthy of trust, such as credibility, justice, competence, transparency and openness to different points of view. The quality of institutions and their operation affects levels of trust (Rothstein 2011). Existing research, known as performance theories, propose that citizens’ trust in institutions depends on their perceptions of how those institutions are performing. Lipset and Schneider (1987) highlight that levels of trust in institutions are primarily linked to the effect that institutional action has on the economic wellbeing of citizens. Other authors, such as Kramer (1983), posit that the successes and prestige of the State are also central in determining the level of trust that people have in democratic institutions. Newton and Norris (2000) equate trust in institutions and political trust given that they consider trust in institutions to be the key indicator of citizens’ fundamental views of the political system. According to Montero, Zmerli and Newton (2008), political trust in an institution entails a belief that the institution will not act in an arbitrary or discriminatory manner that would be damaging for the interests of the people or the country, but that it will treat all citizens in an equal, fair and correct manner.

Although social trust and trust in institutions are two distinct concepts, in line with the theory of social capital, they tend to be viewed as related and as feeding into each other (Putnam 1992, 2000; Brehm and Rhan 1997; Newton and Norris 2000; Zmerli and Newton 2008; Rothstein 2011). As Zmerli and Newton (2008) explain, social trust facilitates cooperation and reinforces behaviours that are beneficial to the general public interest. Trust between individuals promotes tolerance and empathy, increases interactions, and favours voluntary work and participation in associations (Hearn 1997). In organizations, trust promotes a climate of cooperation, job satisfaction and increased productivity (Fukuyama 1995). In this sense, trust helps to build the institutional bases of civil society, upon which a stable, peaceful and efficient democracy can function. Zmerli and Newton (2008) also argue that democracy and good governance, in turn, reinforce the conditions that allow social trust and trust in institutions to develop, leading citizens to cooperate effectively both in the private and public spheres.
This relationship between social trust and trust in institutions is generally accepted at the theoretical level. However, in cases where empirical evidence is sought, the relationship appears more ambiguous. Although numerous studies demonstrate the existence of a clear and positive relationship between social trust and trust in institutions (Brehm and Rahn 1997; Jagodzinski and Manabe 2004; Zmerli and Newton 2008), others suggest that the correlation between the two is weak or even negative (Newton 1999; Newton and Norris 2000; Uslaner 2002; Sønderskov and Dinesen 2016).

Within the theory of social capital, trust is more often explained using variables such as levels of civic participation, satisfaction with democracy, or a more pronounced critical citizenry, and less through economic variables. Some scholars posit that the existence of mature civil societies is a reflection of, but also a condition for, the blossoming of social trust. Putnam (1993) points out that people learn civic virtues and learn to trust in the framework of their relationships, and particularly their voluntary relationships. Reciprocal exchanges produce greater trust and emotional attachment when they are spontaneous than when they are negotiated (Molm et al. 2000). People with a richer social network tend to have greater trust in others than people who lead more isolated lives. However, a person’s position in this network also matters. Individuals in more central positions in the network, particularly in the case of a dense network, express greater levels of trust than others (Buskens 1998). Similarly, people who have succeeded in life tend to trust more or, at least, they are more inclined to due to their own personal experience (Delhey and Newton 2005).

There is therefore an important relationship between civic participation and social trust, as described by Brehm and Rahn (1997). The same authors, however, also observe that civic participation is negatively related to trust in government (Brehm and Rahn 1997). In this sense, although numerous studies agree that civic participation generates greater levels of social trust, the same is not necessarily true for trust in institutions: certain studies hold that civic participation reinforces trust in institutions (Rosenstone and Hansen 1993; Leighley 1996) while others state that the relationship is not significant (Newton 1999, 2001; Newton and Norris 2000).

In their 2008 study, Zmerli and Newton present robust and statistically significant correlations that confirm the relationship between levels of satisfaction with democracy and both social trust and trust in institutions. In previous work, the same authors argue that an individual’s satisfaction with democracy is based on a set of perceptions—which tend to remain stable over time—of the capacity of a certain political system to resolve problems deemed important by the individual. Furthermore, the authors stress the need to distinguish satisfaction with democracy from political satisfaction, which consists of citizens’ evaluations of the performance of authorities and their political results. Although citizens of advanced economies remain largely committed to democratic principles, they have gradually been losing trust in political institutions. For example, as a result of the EU’s economic adjustment programme, citizens in crisis-hit countries appear to have become ‘detached’ from their democratic political system (Armingeon et al. 2016). Nevertheless, in this regard, other studies stress the importance of institutional performance (Torcal 2014).

Despite the fact that the theory of social capital gives more weight to the variables of civic participation and levels of trust in democracy than it gives to socioeconomic conditions in explaining trust, there is robust evidence that trust is associated with economic equality and equality of opportunities (Delhey and Newton 2005; Nannesta 2008; Rothstein and Uslaner 2005). Countries with significant inequalities suffer from limited trust in their institutions (Zmerli and Castillo 2015). Moreover, there is also evidence that situations of socioeconomic difficulty, such as unemployment, are associated with a reduction in trust (Iravani and Dindar 2011). Various authors maintain that the increasingly unequal
distribution of incomes and wealth is responsible for a general decrease in trust (Putnam 1993; Fukuyama 1995). As inequality increases, so does the social distance between people, leading them to believe that they have less in common and, in the medium term, resulting in the development of different cultures (Fairbrother and Martin 2013). While trust is strengthened among the upwardly socially mobile, the opposite is true for those with little social mobility (Yaojun et al. 2008). Therefore, there is a broad consensus in the literature regarding the importance of inequality, but the opposite is also true. Bergh and Bjørnskov (2014), for example, find that low levels of social trust have a more direct impact on inequality and low economic development.

There are also studies that link socioeconomic conditions directly to social capital. In the opinion of Obert et al. (2019), the 2008 financial and economic crisis provided a unique opportunity to study the relationships between economic developments and social capital. They suggest that the negative effects of economic crisis, such as increasing unemployment and economic inequalities, are associated with a decline in social capital, especially in southern European countries. According to Catanzaro (2018), this is due to the fact that the bridging and linking elements of social capital are reduced while the bonding elements become stronger; that is, people stop trusting institutions and begin to trust only in the closest family and social networks. This occurs especially in the countries of southern Europe due to their familist welfare states. Moreno (2017) explains that during the economic crisis that began in 2008, the traditional Spanish extended family supported its members by providing financial and personal care.

Following Parés, Ospina and Subirats (2017), after the 2008 financial collapse liberal-representative democracies conformed to a consensus based post-political paradigm in which there was no space for alternatives and dissensus. Dissidents were excluded from the political debate and politics was divided between: those with access to and control over resources, and who influenced public policies and produced dominant and hegemonic discourses, and those without resources or policy influences, who were marginalized. Nevertheless, the 2011 global uprisings brought hope for alternative forms of understanding and practicing what same authors, such as Mouffe (1992) had earlier named “radical democracy”. Despite the fact that these urban political movements occurred in a wide variety of historical and geographical contexts, they spread a new way of conceiving of and engaging in a collective action (Della Porta 2015), new organizing practices and new forms of collective leadership characterized by networks (Cullen-Lester and Yammarino 2016).

In this context of distrust in the classic institutions, and the uprising of social practices that could be drivers of social change in political terms, extreme left parties, as it is the case of Podemos (“We can”), which promise egalitarian practices and new forms of leadership, have their chance to consolidate. As Blanco, Fleury and Subirats (2012) point out, in a face of a weak and delegitimized State, community responses focused on social transformation could emerge as new institutionalities redistributing resources and power in each community.

3 Methodology

The objectives and hypothesis of this study require the measurement of variation over time in the explanatory capacity of the various factors impacting social trust and trust in institutions (Fairbrother and Martin 2013). We therefore use structural equation modelling to analyse the ‘crisis effect’ on social trust and trust in institutions in an integrated
The effect of the crisis is estimated by comparing two points in time. Specifically, we compare the years 2004 (before the crisis) and 2013 (during the crisis). The data are drawn from the second and sixth editions of the European Social Survey (ESS2 and ESS6). The sample size is 1663 (ESS2) and 1889 (ESS6) individuals over 15 years of age. The sampling method used is stratified two-stage probability sampling. Fieldwork was conducted between September 2004 and January 2005, and between January and May 2013, respectively.

The structural equation modelling consists of five dependent variables. The first is social trust, measured through the question “do you believe that you can trust in others?” The other four are variables that measure trust in political institutions (parliament, political parties, the legal system and the police). These five variables, measured on a scale of 0 to 10, are dichotomised with 5 as the cut-off point. We note that the original variables cannot be analysed as a normal multivariate curve; as a result, the structural equation model can’t be estimated using these as dependent variables. Furthermore, considering that we have ordinal dependent variables, if our aim is to analyse both: the individual and simultaneous behaviour, the available sample does not have sufficient information to represent the effects of the explanatory variables in each value of the scale. Therefore, although grouping the scale of 0–10 can be interpreted as a loss of information, it is necessary to do so to identify the effects of the explanatory variables in a multivariate model. Given that it’s difficult to justify the many various alternatives, which are available when aggregating the original scale, we addressed this difficulty by simplifying the process and forming two groups -below 5 and equal to and above 5. The selection of 5 as the cut-off point is based on the fact that in 2004 the means of the variables in the original scale are close to 5 and, although in 2012 these means had tended to decline, except for the trust in other people, we maintained the same cut-off point to have the same reference in both years.

Our explanatory variables consist of a number of variables linked to the economy: satisfaction with the economy, living with economic difficulties (or not), main source of income, and type of contract held/whether unemployed; and a variable that involves placing a person’s political ideology on a scale (from left to right) in order to assess the effect of the Movimiento 15 M’s protests and its progressive drift towards the creation of political parties that are more left-leaning than Spain’s traditional parties. We compare the effects of the economic and political variables with the effects of two variables to which the theory of social capital usually attributes the most influence on trust: satisfaction with democracy and the level of civic participation, measured by asking whether someone has participated in a civic organisation in the previous 12 months. Finally, we include control variables relating to some key socio-demographic variables such as gender, age, education level, extent of religiosity, place of birth (Spain or overseas), and political placement on the left–right axis.

In this study, we analyse five indicators of trust. Let these indicators be $Y_j^*, j = 1, \ldots, 5$, five random, continuous variables whose values indicate the level of trust in $j$. Our objective is to estimate the following multivariate model, consisting of five regression equations linked through their random error terms:

\[
Y_1^* = x_1' \beta_1 + \epsilon_1 \\
Y_2^* = x_2' \beta_2 + \epsilon_2
\]

\footnote{In the annex, Table 4 with the descriptive analysis of explanatory variables in the multivariate model and Table 5 with the descriptive analysis of explained variables in the multivariate model have been added.}
where \( x = (x_1, \ldots, x_k)' \) is the vector of explanatory variables, which in our models is the same for each dependent variable, although it could be different; \( \beta_j = (\beta_{j1}, \ldots, \beta_{jk}) \), \( j = 1, \ldots, 5 \) are the parameter vectors associated with the explanatory variables; and \( \varepsilon_j, \, j = 1, \ldots, 5 \) are random errors that are normally distributed and correlated between themselves.\(^4\)

In practice, the level of trust \( Y_j^* \) cannot be measured as a continuous variable. This is because individuals are asked to locate themselves on a subjective scale of 1–10, meaning that methods for estimating the parameters for the model defined in (1), which are based on a misunderstanding that the distribution of the dependent variables is multivariate normal, are no longer optimal. In this sense, we opt to simplify the problem to a model with binary dependent variables based on whether an individual trusts or does not trust.

Let \( Y_j, \, j = 1, \ldots, 5 \), be the measured levels of trust, so that:

\[
Y_j = \begin{cases} 
\geq 5 & \text{if } Y_j^* > 0 \\
< 5 & \text{if } Y_j^* \leq 0
\end{cases} \quad j = 1, \ldots, 5.
\]

(1)

In addition, assuming that an individual trusts in something if they indicate a level of trust of 5 or more on the scale of 1–10, the following binary variables are defined:

\[
y_j = \begin{cases} 
1 & \text{if } Y_j^* > 0, \text{the individual trusts in } j \\
0 & \text{if } Y_j^* \leq 0, \text{the individual does not trust in } j
\end{cases} \quad j = 1, \ldots, 5.
\]

Finally, we model the joint probability that an individual trusts in the 5 items under analysis. This is known as a multivariate Probit model and in this case it is expressed as follows:

\[
P(y_1 = 1, y_2 = 1, y_3 = 1, y_4 = 1, y_5 = 1) \\
= P(Y_1^* > 0, Y_2^* > 0, Y_3^* > 0, Y_4^* > 0, Y_5^* > 0) \\
= P(x' \beta_1 + \varepsilon_1 > 0, x' \beta_2 + \varepsilon_2 > 0, x' \beta_3 + \varepsilon_3 > 0, x' \beta_4 + \varepsilon_4 > 0, x' \beta_5 + \varepsilon_5 > 0) \\
= P(\varepsilon_1 \leq x' \beta_1, \varepsilon_2 \leq x' \beta_2, \varepsilon_3 \leq x' \beta_3, \varepsilon_4 \leq x' \beta_4, \varepsilon_5 \leq x' \beta_5) \\
= \Phi_5(x' \beta_1, x' \beta_2, x' \beta_3, x' \beta_4, x' \beta_5; R),
\]

(2)

where \( \Phi_5(\cdot;R) \) is the function of cumulative probability of a multivariate normal curve (dimension 5), with a correlation matrix \(^5\) \( R \).

We estimate the parameter vectors \( \beta_j = (\beta_{j1}, \ldots, \beta_{jk})' \), \( j = 1, \ldots, 5 \), by maximising the logarithm of the model’s plausibility function (2). Calculating and maximising the logarithm of the plausibility function is more complex than for univariate Probit or Logit models.

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\(^4\) Indicates the transpose of the vector.

\(^5\) When the variables are standard normal variable, the matrix of variances and covariances are equivalent to the matrix of linear correlations.
We interpret the estimated parameters $\hat{\beta}_j = (\hat{\beta}_{j1}, \ldots, \hat{\beta}_{jk})'$, $j = 1, \ldots, 5$ in the same way we would if dealing with 5 univariate and independent Probit or Logit models.

4 Results

Table 2 shows the variation in the indicators between 2004 and 2012 according to different types of trust. In analysing the data, first we look at how the crisis altered the influence of economic variables on social trust and trust in institutions. Second, we analyse the explanatory capacity of the most significant control variables in the two time periods.

To compare multivariate model with correlations different from zero (dependency) with the model that assumes correlations equal zero (independency), we have added the Information Akaike Criterion (AIC), which depends on the logarithm of likelihood and allows us to compare both these models considering that the lowest AIC indicates the best fit; so the multivariate models with dependency improves independent models.

Table 3 shows the marginal effects of the explanatory variables in 2004 and 2012 of different types of trust. For binary variables (all but the Age) this effect is calculated as the increase in probability when the variable changes from 0 to 1, the rest of binary variables remain at 0 and the age is equal to its mean in each analysed year (2004 and 2012). The marginal effect for the age is calculated on the mean and with binary variables equal to 0.

The analysis of the statistical model allows us to pose some questions of interest on how increased economic polarization in moments of economic crisis alters the foundations of social trust and trust in institutions. In today’s postmodernity or late modernity, we see increasing evidence of a so-called ‘two-thirds society’. That is to say, one part of the population is integrated in the socioeconomic system and the rest are excluded from it (Lash and Urry 1994). Analysis of our statistical model suggests that the behaviour of these two societal groups—one that is part of the system and one that is increasingly excluded—is increasingly different in terms of social trust and trust in institutions.

It is possible to argue that trust at a global level decreases more among those who suffer more from the effects of the crisis than among the rest, as can be seen in Table 4, where it has been calculated how the joint probability of trusting in the five dependent variables (the four institutional trust and the social trust) changes from the year 2004–2012 depending on whether the respondent lives with or without difficulties. The global probability of trusting goes from 19.7% in 2004 to 11.2% in 2012, which represents a decrease of approximately 43%. But this decrease in global confidence is explained more by the loss of confidence among those who live with economic difficulties (with a decrease of 49.7%) than among those who live without economic difficulties (with a decrease of 41.4%).

However, the in-depth analysis of the results of the statistical model in Table 2, indicates the importance of differentiating between social trust and trust in institutions, because the behavior of people with respect to the two types of trust differs depending on the degree to which they have suffered the effects of the crisis.

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6 The estimated correlation matrix, $\tilde{R}$, provides information on the dependency between levels of trust not captured by the explanatory variables. If these correlations were zero, the optimal result would be to estimate five univariate Probit models. However, the estimated correlations are significantly different to zero.

7 The AIC is equal to $(2 \times \text{number of parameters} - 2 \times \text{logarithm of likelihood})$. It allows to compare nested models with different number of parameters. In our case multivariate model with dependence adds the correlation parameters.
| Table 2  Relationship between different variables and interpersonal and institutional truth in Spain 2004 and 2012 (Seemingly Unrelated Regression Coefficients) |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                  | Trust in other people 2004 | Trust in parliament 2004 | Trust in political parties 2004 | Trust in the legal system 2004 | Trust in the police 2004 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Intercept                         | −0.668**         | −0.804**         | −1.668***        | −0.396          | 0.128           |
|                                  | 0.667***         | 0.017            | −0.176**         | −0.216          | 0.063           |
| Feeling about household’s income: Living without difficulties | 0               | 0               | 0               | 0               | 0               |
| Feeling about household’s income: Living with fair income | 0.081           | −0.041           | 0.103           | −0.100          | −0.067          |
|                                  | 0.008           | 0.033           | 0.036           | 0.010           |                  |
| Feeling about household’s income: Living with difficulties | −0.049          | −0.03            | −0.031          | −0.138          | −0.288**        |
|                                  | −0.457***        | −0.143           | −0.323***        | −0.083          | −0.150          |
| Unemployment within last 5 years | −0.158          | −0.017           | −0.050          | −0.219          | −0.123          |
|                                  | −0.229**         | −0.298***        | 0.058           | 0.038           | 0.055           |
| Main source of household income: Employed | 0               | 0               | 0               | 0               | 0               |
| Main source of household income: Self employed | 0.069           | 0.045           | −0.235**        | 0.051           | 0.124           |
|                                  | 0.123           | 0.019           | −0.307***        | 0.124           | 0.233*          |
| Main source of household income: Pension | −0.244*         | −0.19           | 0.061           | −0.137          | 0.001           |
|                                  | −0.124           | 0.1969*         | −0.076           | −0.049          | −0.166          |
| Main source of household income: Unemployed | −0.400          | 0.422           | 0.074           | −0.178          | 0.822           |
|                                  | 0.054           | −0.106          | −0.182           | 0.066           | −0.087          |
| Main source of household income: Social assistance | 3.997           | 3.837           | −0.662*         | 0.724           | 3.383           |
|                                  | −0.152           | 0.006           | 0.22            | 0.067           | 0.154           |
| Main source of household income: Investment or other | 4.667           | 3.003           | −0.285          | −0.099          | −0.335          |
|                                  | −0.122           | 0.111           | −0.622          | −0.548*         | −0.883***       |
| Employment contract duration: unlimited | 0               | 0               | 0               | 0               | 0               |
| Employment contract duration: temporarily | 0.110           | 0.027           | 0.005           | 0.093           | −0.189          |
|                                  | −0.018           | 0.007           | −0.102          | −0.011          |                  |
| Employment contract duration: doesn’t have | 0.332*          | 0.161           | −0.403*         | −0.514***       | −0.555***       |
|                                  | −0.106           | 0.076           | 0.300*          | −0.070          | −0.322**        |
| Satisfaction with state of economy in country | 0.219***         | 0.513***        | 0.356***        | 0.375***        | 0.279***        |
|                                  | 0.546***         | 0.176           | 0.721***        | 0.120           | −0.155          |
Table 2 (continued)

|                              | Trust in other people | Trust in parliament | Trust in political parties | Trust in the legal system | Trust in the police |
|------------------------------|-----------------------|---------------------|---------------------------|---------------------------|---------------------|
|                              | 2004  | 2012 | 2004  | 2012 | 2004  | 2012 | 2004  | 2012 | 2004  | 2012 | 2004  | 2012 |
| Satisfaction with the way democracy works in country | 0.263*** | 0.416*** | 0.677*** | 0.849*** | 0.680*** | 0.644*** | 0.538*** | 0.683*** | 0.575*** | 0.699*** |
| Worked in civic organization or association last 12 months | 0.220** | 0.402*** | 0.105 | −0.011 | 0.087 | 0.153* | −0.063 | 0.015 | −0.068 | 0.008 |
| Political scale self-placement: center | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Political scale self-placement: left | 0.033 | 0.265*** | 0.137 | −0.031 | 0.271*** | 0.187* | −0.173* | −0.146* | −0.228* | −0.142* |
| Political scale self-placement: right | −0.069 | 0.007 | −0.012 | 0.226*** | 0.250** | 0.282*** | −0.072 | 0.005 | 0.108 | 0.123 |
| Gender | 0.11 | −0.020 | −0.088 | 0.103 | −0.150* | −0.040 | −0.190** | 0.067 | 0.077 | −0.015 |
| Age | 0.560* | −0.213 | 0.675** | −0.830*** | 0.881*** | 0.409 | 0.742** | −0.114 | 0.443 | 0.719** |
| Education level: without studies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Education level: primary | 0.195 | −0.131 | −0.012 | −0.019 | 0.077 | 0.071 | −0.035 | −0.365*** | 0.138 | −0.091 |
| Education level: secondary | 0.106 | −0.090 | −0.108 | −0.048 | −0.003 | 0.116 | −0.056 | −0.173** | −0.048 | −0.101 |
| Education level: university | 0.494*** | −0.103 | 0.017 | −0.083 | 0.065 | −0.015 | −0.001 | 0.037 | 0.001 | −0.006 |
| Religiosity: not religious | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Religiosity: moderately religious | 0.027 | 0.055 | 0.158 | 0.304*** | 0.232** | −0.062 | 0.136 | 0.168* | 0.166 | 0.179** |
| Religiosity: more religious | 0.197 | 0.231** | 0.377*** | 0.546*** | 0.393*** | 0.104 | 0.209* | 0.300*** | 0.491*** | 0.339*** |
| Born in Spain | 0.249 | 0.054 | 0.276 | −0.264* | 0.068 | −0.048 | 0.101 | −0.211* | 0.062 | 0.120 |

Source: European Social Survey (second and fifth waves)

Confidence levels: *10%, **5% and ***1%. N=1155 cases (2004). y N=1518 cases (2012). The model also includes the categories: Unemployment within last 5 years: Can’t work. and Employment contract duration: Doesn’t apply
| Table 3 | Marginal effects of variables on interpersonal and institutional truth in Spain 2004 and 2012 (for significant coefficient) |
|-----------------------------------------------|
|                                               |
|                                               |
| Feeling about household’s income: living with  |
| fair income                                    |
| 2004: 0                                       |
| 2012: 0                                       |
| Feeling about household’s income: living with  |
| difficulties                                   |
| 2004: 0                                       |
| 2012: 0.171                                   |
| Unemployment within last 5 years               |
| 2004: 0                                       |
| 2012: 0.082                                   |
| Main source of household income: self employed |
| 2004: 0                                       |
| 2012: 0                                       |
| Main source of household income: pension       |
| 2004: 0                                       |
| 2012: 0.087                                   |
| Main source of household income: unemployed    |
| 2004: 0                                       |
| 2012: 0                                       |
| Main source of household income: social assistance |
| 2004: 0                                       |
| 2012: 0.176                                   |
| Main source of household income: investment or |
| other                                       |
| 2004: 0                                       |
| 2012: 0                                       |
| Employment contract duration: temporary       |
| 2004: 0.130                                   |
| 2012: 0.152                                   |
| Employment contract duration: doesn’t have    |
| 2004: 0.085                                   |
| 2012: 0.200                                   |
| Satisfaction with state of economy in country  |
| 2004: 0.102                                   |
| 2012: 0.264                                   |
| Satisfaction with the way democracy works in  |
| country                                      |
| 2004: 0.085                                   |
| 2012: 0.119                                   |
| Worked in civic organization or association   |
| last 12 months                                |
| 2004: 0.085                                   |
| 2012: 0.083                                   |
| Political scale self-placement: left           |
| 2004: 0.083                                   |
| 2012: 0.081                                   |
| Political scale self-placement: right          |
| 2004: 0                                       |
| 2012: 0.081                                   |
| Gender                                        |
| 2004: 0                                       |
| 2012: 0                                       |
| Age                                           |
| 2004: 0.211                                   |
| 2012: 0.248                                   |
| Education level: primary                      |
| 2004: 0                                       |
| 2012: 0.282                                   |
| Education level: secondary                    |
| 2004: 0                                       |
| 2012: 0.158                                   |
| Education level: university                   |
| 2004: 0.194                                   |
| 2012: 0.052                                   |
| Religiosity: moderately religious             |
| 2004: 0                                       |
| 2012: 0.073                                   |
| Religiosity: more religious                   |
| 2004: 0                                       |
| 2012: 0.146                                   |
| Born in Spain                                 |
| 2004: 0                                       |
| 2012: 0                                       |
On the one hand, the crisis very clearly affected social trust among people with few economic resources. Specifically, people that suffered the most through the crisis stopped trusting in others. Before the crisis, people in financial difficulty and people in financial comfort demonstrated similar levels of trust in other individuals, while after the crisis the two groups reported significantly different levels.

Figure 1 shows the probability of trusting others according to age for individuals who declare that they live with difficulty (thicker lines) and those who live without difficulty (thinner lines).

This argument that people who suffered the most from the crisis lost trust in others is reinforced if we analyse unemployment. In 2004, social trust among people that had been unemployed once was no different to social trust among people that had never been unemployed. However, this changed in 2013, when unemployed people, or those who had been unemployed at some point, trusted less in others. Therefore, due to the economic crisis, people’s behavior regarding social trust differs depending on the degree to which people have suffered the effects of the crisis. The lower the effect of the economic crisis on people’s quality of life, the less their level of social trust deteriorates, to the point that people who were satisfied with the state of the economy during the crisis double their levels of social confidence.

On the other hand, trust in political institutions collapsed in much the same way across different economic strata with the arrival of the economic crisis. However, around the time of the crisis, groups from different economic realities began to demonstrate trust or
mistrust in institutions based on whether they perceived the behaviour of these institutions to be favourable or unfavourable to their interests. We observe this effect among unemployed people and people who depend on social assistance, who trusted less in parliament than others after the crisis. Self-employed workers also demonstrated interesting changes in trust: during the crisis, such workers lost trust in parliament and in the legal system much like salaried workers. Similarly, individuals living off investments and/or rents lost trust in the legal system and in the police during the crisis. Finally, people satisfied with the economy demonstrated greater trust in political parties than all other Spaniards.

The loss of confidence in democratic institutions goes hand in hand with a drop in confidence in the functioning of democracy in Spain. The percentage of people satisfied with democracy in Spain dropped dramatically during the crisis. We observe the emergence of a critical citizenry through the fact that in 2004, two in every three individuals positively evaluated the country’s democracy, and in 2013 this figure was down to one in every four (ESS2 2005; ESS6 2013). However, for the minority group that continued to trust in how democracy was functioning despite the crisis, the crisis had the effect of reinforcing the relationship between trust in democracy and trust in institutions.

From these results, it is possible to analyze the paradox that the 2008 economic crisis in Spain caused a notable decline in trust in institutions, together with a surprising increase -rather than the expected decrease- in social trust. We see that, although social confidence grows during the crisis, this behavior is not homogeneous for all social strata. It is possible to argue that social trust increases during an economic crisis because, faced with difficulties in accessing formal institutions to access resources, people turn to their social networks. The difference in behavior between social classes, as shown in our statistical model, could indicate that the increased economic polarization derived from the crisis has negative consequences for the group of people who suffer the most, who are socially excluded and do not have enough personal networks to secure their financial resources. This would explain why the greater the effect of the economic crisis on people’s quality of life, the more their level of social trust deteriorates. This argument is reinforced by the analysis of civic participation in our model.

Civic participation in Spain increased four percentage points during the economic recession, from 18% in 2004 to 22% of the population in 2013 (ESS2 2005; ESS6 2013). We identify a positive relationship between working in a tertiary sector association and trusting in others, which intensified with the economic crisis. It would be an example of how the 2008 crisis pushes Spanish society towards a process of economic polarization. A part of the population that is still integrated into society mobilizes to help another part of the population that has suffered more the consequences of the crisis and are at risk of exclusion because of their lack of support networks. These latter groups’ social trust is very low.

The economic crisis in Spain leads to the emergence of a social majority of critical citizens that distrust the way the Spanish democratic model and its institutions work. In contrast, there is a minority socio-economic elite satisfied with the functioning of Spanish democracy and its institutions. This process of social dualization allows us to hypothesize that, probably, in the absence of institutional trust, behaviors emerge that empower social

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8 However, levels of trust in institutions did not differ significantly between individuals who participated in civic associations and those who did not, neither before nor during the crisis. We only observe greater levels of trust in political parties among people who worked in tertiary sector associations in the year 2013, although this data is only marginally significant and is surely explained by the links between some of these associations and the political parties themselves.
groups. These groups build on social trust to create forms of collaboration outside of institutional participation. All this leads to the emergence of new leftist social and political movements that are highly critical of institutions, but that trust in the capacities of society. They spread a new way of conceiving of and engaging in collective action, new organizing practices and new forms of collective leadership characterized by networks.

Moreover, in terms of self-positioning on the political spectrum, the crisis clearly affected individuals placing themselves to the left of the scale, who reported greater levels of social trust than individuals who placed themselves in the centre or on the right. It is interesting to note that the positive relationship between being on the left and trusting others was only significant during the crisis. In the year 2004, before the crisis, it was not. Therefore, the relationship between placing oneself to the left of the scale and trusting more in others could be due to the emergence of social mobilization that gradually organized into new left-wing political parties. The fact that the crisis also affected trust in institutions among individuals that placed themselves on the left, who trust less in institutions than those in the centre or on the right, reinforces this possibility.

5 Conclusions

This study confirms the hypothesis that, at a time of economic crisis, economic variables had greater influence on levels of social trust and trust in institutions. As posited by Delhey and Newton (2005), Rothstein and Uslaner (2005) and Nannestad (2008), this is due to the fact that trust is associated with equality of economic conditions and opportunities. The explanatory capacity of economic factors in understanding social trust and trust in institutions is enhanced mainly as a result of increased inequality. The data analysis conducted here indicates that increases in socioeconomic difficulty and inequality, stemming from the economic crisis, had a double effect: among social groups that suffered the worst effects of the crisis—the unemployed, or those in financial difficulty—trust in other individuals and in institutions decreased, while it increased among groups that were satisfied with the economy despite the crisis. Therefore, we can state that inequality increases the social distance between individuals as argued by Fairbrother and Martin (2013), that trust is reinforced among groups with upward social mobility, and the inverse (Yaojun et al. 2008), and, finally, that situations of socioeconomic difficulty, such as unemployment, are associated with a decrease in trust (Iravani and Dindar 2011).

One could argue that performance theory, which states that trust in institutions depends on the extent to which they function well, is useful in explaining decreased trust in political institutions among the Spanish people during the economic crisis. However, our statistical analysis suggests that the Spanish case reflects more closely the theory of Lipset and Schneider (1987), who stress that levels of trust in institutions primarily depend on the influence that the actions of those institutions have on people’s economic wellbeing. It is true that in the Spanish case, levels of trust decreased overall, but a detailed analysis suggests that some important interest groups—the unemployed, uncontracted workers, individuals dependent on social assistance, self-employed workers, landlords, and investors—behave differently to other groups in that their trust or mistrust in institutions depends on whether they perceive those institutions to benefit them economically, or not.

Although the capacity of economic factors to explain social trust and trust in institutions increases at times of economic crisis due mainly to increased inequality, the explanatory variables from social capital theory—levels of civic participation and perceptions of how
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democracy is functioning—continue to be important and highly significant, although their explanatory capacity is also influenced by the effects of the crisis. In that regard, our study notes that there is a significant relationship between civic participation and social trust, as demonstrated by well-known studies (Putnam 1993; Brehm and Rah 1997). However, the relationship between civic participation and trust in institutions is not significant, as suggested by the results of studies by Newton (1999, 2001) and Newton and Norris (2000). Our analysis also confirms the relationship between satisfaction with democracy and both social trust and trust in institutions, as posited by Zmerli and Newton (2008). Moreover, economic crisis reinforces this relationship.

Finally, authors such as Putnam (1993) and Fukuyama (1995) argue that an increasingly unequal distribution of income and wealth generates a general decrease in trust. However, when analysing the effects of the 2008 economic crisis in the Spanish case at a global level, we observe a notable decrease in trust in institutions together with a slight increase in social trust: the two types of trust do not behave in a mutually supportive manner. This may be due to the effect that the economic crisis had in terms of attitude polarisation, where personal economic situation played an important role. It can be argued that during a process of economic recession, people should trust their personal networks to obtain resources, instead of going to formal institutions. Catanzaro (2018) argues that this is a typical behavior in the countries of southern Europe due to their familist welfare states. So, it is important to have support networks in difficult times. But the risk of social exclusion is defined by the absence of support networks, so the greater the effect of the economic crisis on people’s lives, the more their level of social trust deteriorates, as argued by Iravani and Dindar (2011). The opinions of groups that were socially excluded and suffered the highest levels of poverty, inequality and marginalisation as a result of the crisis increasingly differed from others. On the one hand, we find a majority of the population in need of turning to their personal networks for help and showing high social confidence. On the other hand, we find an increase in excluded social groups without personal networks to exploit and with growing levels of social mistrust. Depending on the weight of each of the poles, social confidence would increase or decrease. This is undoubtedly an interesting starting point for future research.

On another plausible explanation of why social trust and trust in institutions were not mutually supportive during the economic crisis in Spain relates to the emergence of social movements (such as the Movimiento 15M), which gradually organized into new left-wing political parties. The appearance of a new leftist sentiment that was more critical of traditional political institutions but allowed for greater trust in individuals, the creation of community responses focused on social transformation and a new way of conceiving of and engaging in a collective action, could explain why social trust did not suffer to the extent that trust in institutions did during the crisis. Our data indicate that, during the period of the crisis, those who placed themselves on the left of the political spectrum changed their way of thinking. From that moment onwards, they demonstrated more trust in other individuals and less trust in institutions than groups who placed themselves in the centre or on the right of the political spectrum. Future research should further explore this phenomenon and assess whether this effect persists when the economy begins to improve.

Appendix

See Tables 5 and 6.
Table 5 Descriptive analysis of explanatory variables in the multivariate model

| Variable Description                                      | 2004       | STD   | 2012       | STD   |
|------------------------------------------------------------|------------|-------|------------|-------|
| Feeling about household’s income: living without difficulties*** | 0.392  | 0.490 | 0.267  | 0.443 |
| Feeling about household’s income: living with fair income   | 0.454  | 0.499 | 0.440  | 0.497 |
| Feeling about household’s income: living with difficulties*** | 0.154  | 0.362 | 0.293  | 0.456 |
| Unemployment within last 5 years***                        | 0.136  | 0.344 | 0.238  | 0.426 |
| Main source of household income: employed***               | 0.649  | 0.479 | 0.554  | 0.498 |
| Main source of household income: self employed              | 0.153  | 0.361 | 0.140  | 0.347 |
| Main source of household income: pension**                 | 0.185  | 0.389 | 0.220  | 0.414 |
| Main source of household income: unemployed***             | 0.009  | 0.093 | 0.054  | 0.227 |
| Main source of household income: social assistance***      | 0.001  | 0.034 | 0.017  | 0.128 |
| Main source of household income: investment or other***    | 0.004  | 0.060 | 0.015  | 0.122 |
| Employment contract duration: unlimited                    | 0.465  | 0.500 | 0.477  | 0.500 |
| Employment contract duration: temporal                     | 0.191  | 0.395 | 0.180  | 0.385 |
| Employment contract duration: doesn’t have                 | 0.050  | 0.219 | 0.053  | 0.225 |
| Satisfaction with state of economy in country***           | 0.475  | 0.501 | 0.060  | 0.237 |
| Satisfaction with the way democracy works in country       | 0.661  | 0.475 | 0.261  | 0.440 |
| Worked in civic organization or association last 12 months*** | 0.197  | 0.399 | 0.245  | 0.431 |
| Gender (1 = Men, 0 = Women)                                | 0.531  | 0.501 | 0.509  | 0.500 |
| Age***                                                   | 43.110  | 17.580 | 46.746  | 17.227 |
| Education level: Without studies***                        | 0.182  | 0.387 | 0.103  | 0.304 |
| Education level: primary                                  | 0.151  | 0.359 | 0.161  | 0.368 |
| Education level: secondary***                             | 0.449  | 0.499 | 0.309  | 0.463 |
| Education level: university***                            | 0.218  | 0.414 | 0.173  | 0.379 |
| Religiosity: not religious**                              | 0.156  | 0.364 | 0.188  | 0.391 |
| Religiosity: moderately religious***                      | 0.520  | 0.501 | 0.460  | 0.499 |
| Religiosity: more religious*                               | 0.324  | 0.470 | 0.352  | 0.478 |
| Born in Spain***                                          | 0.943  | 0.233 | 0.899  | 0.302 |
| Political scale self-placement: center***                 | 0.481  | 0.501 | 0.398  | 0.490 |
| Political scale self-placement: left***                   | 0.283  | 0.452 | 0.343  | 0.475 |
| Political scale self-placement: right*                    | 0.236  | 0.426 | 0.259  | 0.439 |

Confidence levels: *10%, **5% and ***1%

9 According to data from the World Bank, between 2004 and 2012, life expectancy at birth for Spaniards rose from 79.87 to 82.43 years. This explains, in part, the fact that the mean age is higher in the 2012 section than in the 2004 section. Moreover, there is another explanation that would be interesting to consider. In 2004 Spain was in a period of economic boom that was attracting large numbers of immigrant workers. According to data from the Spanish National Institute of Statistics, non-Spanish citizens accounted for 8.4% of the population at that moment; they totalled 3,691,500, that is, an increase of almost 700,000 from the previous year. However, four years later, everything changed. The 2008 economic crisis and the austerity policies driven by Spanish governments had a significant effect on the dynamics of international migration processes since, a large part of these immigrants, returned to their countries due to the lack of work. These changes marked the beginning of a new migratory phase in which Spanish emigration -without being a massive phenomenon- occupied a prominent place in the media and political agenda. Between 2008 and early 2012, almost a million and a half people emigrated from Spain, most of them international immigrants returning to their countries. Spanish population accounted for only 13% of departments (Ortega-Rivera et al. 2016). Therefore, in our statistical model, we considered it necessary to add the effects of the demographic variable to take into account the changes that have occurred between the two years analysed. See Spector and Brannick (2011) that discuss the usage of demographic variables in regression models.
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### Table 6 Descriptive analysis of explained variables in the multivariate model

|                                      | 2004 Mean | 2004 STD | 2012 Mean | 2012 STD |
|--------------------------------------|-----------|----------|-----------|----------|
| Most people can be trusted or you can’t be too careful | 5.054     | 2.177    | 5.202     | 2.101    |
| Trust in country’s parliament        | 5.207     | 2.198    | 3.445     | 2.522    |
| Trust in political parties           | 3.826     | 2.273    | 1.893     | 2.198    |
| Trust in the legal system            | 4.806     | 2.381    | 3.624     | 2.569    |
| Trust in the police                  | 5.926     | 2.266    | 5.854     | 2.437    |
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