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CREDIT SUPPLY, UNCERTAINTY AND TRUST: THE ROLE OF SOCIAL CAPITAL

by Maddalena Galardo[*], Maurizio Lozzi[**] and Paolo Emilio Mistrulli[***]

Abstract

Despite social capital being widely acknowledged as a key factor in the functioning of financial markets, the evidence on the channels through which it operates is still scant. In this paper we isolate one possible channel and investigate whether social capital plays a role in mitigating the impact of uncertainty shocks on bank credit supply. We exploit both the huge rise in the level of uncertainty that followed the Lehman Brothers default and a very granular and rich loan-level dataset from the Italian Credit register that allows us to clearly disentangle demand and supply factors. We find that social capital makes credit markets more resilient to uncertainty shocks, especially when informational asymmetries between banks and borrowers are more severe.

JEL Classification: A13, G01, G2.
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1 Introduction[1]

Social capital, defined as "those persistent and shared beliefs and values that help a group overcome the free-rider problem in the pursuit of socially valuable activities" (Guiso, Sapienza, and Zingales 2011), is largely acknowledged as being a key factor affecting the functioning of financial markets (Guiso, Sapienza, and Zingales 2004). However, the literature is still scant on the channels through which it affects credit supply. In this paper, we identify one of the possible channels and, particularly, we assess whether social capital may help smooth the transmission of uncertainty shocks to credit supply.[2] The 2008 crisis provides us with an ideal setting. Indeed, following Lehman Brothers' default an unexpected rise in uncertainty occurred (Bloom 2014 and Stein and Stone 2013, among others) leading to a huge loss in trust (Sapienza and Zingales 2012). As a consequence, also banks trusted less borrowers and their willingness to lend was consequently reduced beyond the effects of the crisis on their financial soundness (Acharya and Naqvi 2012; Alessandri and Bottero 2017 and Valencia 2017). Indeed, a rise in uncertainty amplifies asymmetric information and makes banks less able to distinguish whether borrowers' default depends on excessive risk-taking (i.e., moral hazard), bad quality of the borrower that was not possible to detect ex-ante (i.e., adverse selection), or unexpected adverse shocks. Social

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[2]Trustworthiness and creditworthiness are indeed closely related concepts (Glaeser et al. 2000) since credit is ultimately an exchange of a sum of money today for a promise to pay back the loan in the future.

capital may lower the impact of uncertainty on credit supply. Where social capital is higher borrowers are more compliant with moral norms, and then less prone to moral hazard, and also information is more frequently shared, which means that banks are better able at screening borrowers. The main aim of this paper is to verify whether social capital is able to smooth the impact of an uncertainty shock on trust and then on credit supply.

To identify the nexus between social capital, uncertainty, and credit supply we rely on an econometric strategy that comprises several ingredients. First of all, the Lehman default provides us with a variation in uncertainty that was fairly exogenous to Italy. Second, the level of social capital is quite unevenly distributed within the country, providing a cross-sectional heterogeneity that is adequate to identify the causal effect of it on credit supply.[3] Furthermore, since social capital has been accumulated over a very long period and it is persistent (Guiso, Sapienza, and Zingales 2004), it was also little affected by the crisis and then we can rule out the possibility that our results might be biased because of the effect of some omitted variables on the level of social capital.

Even in this favorable setup, the identification of a causal link between uncertainty, social capital, and credit supply, is still challenging since a change in the level of uncertainty affects both the demand and the supply of credit.[4] However, the Italian Credit Register tracks both loan applications

[3]Indeed, the accumulation of social capital followed quite different patterns within Italy that for a long period has not been unified (Banfield 1958; Putnam, Leonardi, and Nanetti 1994).

[4]A greater uncertainty appears to reduce the willingness of firms to hire and invest and that of consumers to spend, especially in durable goods. Furthermore, it also increases the probability of default, by expanding the size of the left-tail default outcomes (Christiano, Motto, and Rostagno 2014; Arellano, Bai, and Kehoe 2010).

and loan grants, allowing us to disentangle demand and supply factors, in line with the existing empirical literature (Puri, Rocholl, and Steffen 2011; Jiménez et al. 2012 and 2014; Albertazzi, Bottero, and Sene 2016; Di Patti and Sette 2016; Ippolito et al. 2016; Alessandri and Bottero 2017) that has exploited loan applications and rejections to isolate credit supply from demand.[5] As it is explained in detail in the following sections, we build on the methodology used in other papers and improve it in several respects. Our measure of loan approval is more robust to changes in the search strategy adopted by borrowers which may vary after a shock in terms of how many banks and how long a borrower is willing to ask for a loan. We also distinguish between full and partial approval and we adopt a broader definition of loan approval that encompasses incumbent banks. Furthermore, the granularity of the Italian Credit Register allows us, following the difference-in-difference approach, to focus on firms applying for bank credit both before and after the uncertainty shock (i.e., the Lehman default) and then to control for all observable and unobservable time-invariant firm characteristics by using firm fixed effects. We also exploit the heterogeneity in the pool of banks firms ask for a loan before and after the shock which allows us also to add bank fixed effects.

In order to bring the theory to the data, it is crucial to measure social capital. We rely on outcome-based proxies like the number of blood donations and participation in referenda. Moreover, we also propose a new measure of social capital. In particular, we use as a proxy for social capital the percentage of

[5]Particularly, Alessandri and Bottero 2017 use the Italian CR to disentangle the effect of uncertainty on credit supply from demand.

recyclable waste. In Italy, until 2003, since waste sorting was not mandatory and people got no private benefit from it, the action was mainly driven by the moral obligation of leaving a healthy planet to future generations. Therefore, waste sorting was driven by social pressure and internal norms, i.e., the fundamental components of social capital, as well as electoral participation and blood donation are.

The main findings of the paper are the following. A rise in the uncertainty lowers banks' willingness to lend.[6] However, the impact is less pronounced for firms headquartered in provinces where social capital is high compared to similar firms in low social capital areas. We also find that social capital played a greater role in those cases where the informational asymmetries between banks and borrowers are wider, in line with the hypothesis that social capital mitigates adverse selection and moral hazard phenomena.[7]

The rest of the paper is organized as follows. Section 2 and 3 describe the data and the econometric strategy. Section 4 comments the results of the econometric analysis and Section 5 concludes.

2 Data

Our main data source is the Credit Register (CR) run by Banca d'Italia, the Italian supervisory authority. The CR contains confidential and very

[6]Consistently with the findings of Baum, Caglayan, and Ozkan 2009, Bordo, Duca, and Koch 2016, Valencia 2017, Chi and Li 2017 and Alessandri and Bottero 2017.

[7]See among others, (Guiso, Sapienza, and Zingales 2004, DeYoung et al. 2012 and Mistrulli and Vacca 2015 for the impact of social capital on financial development, and Ivashina and Scharfstein 2010; Carvalho, Ferreira, and Matos 2015; Puri, Rocholl, and Steffen 2011; Gambacorta and Mistrulli 2014; Bolton et al. 2016; Alessandri and Bottero 2017 for credit supply shocks.

detailed information on the end-of-month bank debt exposure of each borrower whose total debt from a bank is at least 30,000 euros (75,000 euros until December 2008). The CR also reports the number of requests of information each bank posts on each borrower. Indeed, one of the main reasons why credit registers exist is that they make banks able to share information about borrowers (see Padilla and Pagano 2000, Jappelli and Pagano 2002). Credit registers share information among banks in two ways. First, banks automatically receive information about firms and households they are currently lending to on a monthly basis. Second, they can also ask the CR for information about households and firms they are not lending to. By law, banks are allowed to do that only in certain circumstances that are also tracked in the register. One of these occurs when firms or households ask banks for a loan. For this reason, following Jiménez et al. 2012 and 2014, other papers have considered information requests to the CR as a proxy for loan demand. One common limitation of the CRs' data is that, while loan requests are explicitly observed, loan denials and acceptances are not reported. However, from the CR it is easily verifiable whether, following a loan request by a firm to a new bank the credit granted to that firm goes from zero to a positive amount.[8]

[8]Appendix A.1 explores the limitations of the CRs' data and possible repercussions on our analysis.

2.1 A new indicator of loan denials

While the approach generally followed in the literature has greatly helped control for loan demand it also has some drawbacks that we address in this paper, thus contributing to the literature also from a methodological perspective. To this aim, we depart from the approach previous papers relied on in several respects. First, we focus on the ability of a firm to obtain credit from the banking system as a whole and not from a specific bank. In particular, we assume that when firms ask more than one bank for a loan they are looking for only one loan and not for more than one, differently from previous papers that have considered each loan application to each bank as a specific loan request. Consistently, we consider a set of loan applications as part of a unique loan search. The rationale behind this behavior is at least twofold. First, by doing this way firms lower the risk of being rejected. Second, in case more than a bank is willing to lend, firms are able to compare different loan proposals and then choose the most convenient to them. In doing this way, we are close to those contributions that investigated the real effects of an exogenous shock to credit supply (Chodorow-Reich 2014 and Paravisini et al. 2015, among others). The main advantage of our approach is that it is robust to the changes in the search strategy that may occur after a shock and may bias the results. For example, if firms ask a greater number of banks for a loan after a shock one would observe, even if all banks' supply has not been affected, an increase in the rejection rate according to the previous methodology, and, correctly, a stable rate according to ours.

Naturally, a crucial issue is how to identify the set of loan applications that are referred to each single loan request. The credit register does not allow to observe the characteristics of the loan requested (e.g., the loan amount, the maturity, the type of loan, ...) and then, similarly to other papers, we are not able to know whether the loan a firm asks a bank is the same as the one it asked another bank. For this reason, we have no choice other than grouping together all the applications that a firm makes in the same month or in the following and consecutive ones until the loan has been granted or the time elapsed from one application to another exceeds three months.

In our setup, we distinguish between two distinct phases: i) the search period, starting from the first loan application month and ending with that of the last one of among, if present, many subsequent applications; and 2) the granting decision period. By construction the overall time window is not constant, being made of both a variable (the search period) and a constant (the granting one) part. In particular, we assume that a set of loan applications is part of a unique loan search unless loan applications are not relatively close, i.e. the time elapsed from one loan application to the following one is not greater than 3 months. Notice that this threshold is analogous to the one used to define the granting period. This implies that, for any single loan application, even if it is part of a given search period, the overall time window is constant and equal to 3 months if the firm does not shop around. Indeed, to compute our outcome variable we start from the first loan request and check what occurs within the following 3 months. We have three possible cases: a) credit is granted by at least a bank ($I(LoanGranted_{it}) = 1$), b) no loan is granted and a new application

is not observed ($I(LoanGranted_{it}) = 0$), c) no loan is granted and a new application is observed. In the latter case, in order to assess whether a firm is successful or not, we have to consider what happens to the second application and, if even in this case it ends up with another c) case we consider the third application and so on until the search period stops (there is no other loan application in following 3 months, $I(LoanGranted_{it}) = 0$). Our approach has also the advantage to overcome another limitation of previous papers. In credit registers, loan application data are observable only if they are referred to banks that are not currently lending to a firm (i.e., new banks) and, as a consequence, other papers using this type of data only investigate the extensive margin of lending. This seems quite a great limitation since a wide literature has stressed the importance of long-lasting lending relationships for a better functioning of the credit market. Petersen and Rajan 1994, and, recently, some papers have shown the crucial role of relationship lending in mitigating the impact of the global crisis on credit supply (Bolton et al. 2016, Beck et al. 2018 and Sette and Gobbi 2015). In our paper, following the argument that firms shop around for a loan, we assume that firms that applied for a loan to new banks have also asked their incumbent banks for that, even if we are not able to observe loan applications to incumbent banks. This seems quite reasonable since incumbent banks have more information than new ones about borrowers and then they are in a better position to lend. Furthermore, by taking incumbent banks into account we also make our results more robust to changes in the search strategy that may occur after the shock. For example, in case firms ask a greater number of incumbent banks for a loan after a

shock, which raises the probability that the loan is granted by an incumbent banks relatively to new banks, one would observe, even if all banks' supply has not been affected, an increase in the rejection rate according to the previous methodology, and, correctly, a stable rate according to ours.

2.2 A new measure for social capital

One of the most critical issues of the literature on social capital is how to measure it. Since the concept itself is complex, most of the measures used are outcome-based, e.g., the level of trust or level of economic cooperation. One problem with these measures, as amply emphasized by Guiso, Sapienza, and Zingales 2004, is that they may be contaminated by other factors. For example, the level of trust people exhibits in their economic behavior could be the result of good law enforcement.

Here we propose an outcome-based measure that is free from this criticism: waste sorting. In Italy, regulation that ruled waste sorting have been partially implemented only after 2003. In 2003, people spending their time in sorting waste had no legal obligation or got direct benefit from it. Therefore, the action was mainly driven by the moral obligation of leaving a healthy planet to future generations, by social pressure and internal norms, i.e., the fundamental components of social capital. Households sort their rubbish in three main categories: non-recyclable, recyclable and organic waste. We use as measure of social capital the percentage of recyclable

waste collected at the province level in 2003.[9] Since in Italy waste sorting is managed at the local level, we control for differences in the quality of the collection infrastructures using quality weights at the province level.[10]

Being social capital the result of past events going far back in the history, we corroborate the results obtained using waste sorting by using other measures already used by Guiso, Sapienza, and Zingales 2004: electoral turnout in referenda that occurred in Italy between 1946 and 1989 and blood donation in 1995, the only year for which a complete dataset is available at the province level.

Interestingly, figure 2-4 show how our three measures of social capital vary within Italy. Social capital is higher in the North of Italy, weaker in the Center, and very weak in the South.[11] However, even within these areas there is variation. This implies that the uncertainty shock due to the default of Lehman had a differentiated impact on trust across Italian regions, allowing us to identify a causal relation between social capital and credit supply.

[9]Nowadays in Italy, regulations exist that provide mandatory quotas for the waste sorting but those are not yet completely implemented: in 2009 law stated that at least 35 percent of municipal waste was recycled and 65 percent within 2012. However, in 2013 only around 43 percent of the Italian rubbish was sorted.

[10]Typically, rubbish is collected by a waste disposal company contracted to the municipal authority. The collection of waste can happen in two ways: door-to-door collection, where the garbage truck picks up the trash from individual bins; and central collection, where people have to place their garbage at a central drop off area. We use as quality weights the percentage of population served by infrastructures for the collection of sorted waste.

[11]North of Italy is the north of the Apennines, the Center the area from the Apennines to Rome, and the South that at south of Rome.

2.3 Descriptive statistics

Between January 2005 and December 2011, about 800 banks lodged six million information requests related to more than almost a million of non-financial firms asking for a loan.[12] We match these loan applications with data on more than 4.5 million loans granted from the first quarter of 2005 to the last of 2012. We obtain a monthly dataset of loan applications that uniquely links a borrower with a bank: loan applications at the firm-bank level.[13]

A preliminary analysis of our data confirms that on average firms apply to more than one bank at the same time. Furthermore, we see that banks take more than a month to grant a loan and, finally, that firms' search for a loan lasts on average two months and it takes three months from the application to actually grant the loan (Table 1).[14]

Since we are interested in the effect of uncertainty shock to credit supply, we focus on information requests lodged from January 2007 to June 2010 about non-financial firms that asked some banks for a loan both before and after

[12]Mergers and acquisitions among banks have been taken into account by assuming that all mergers occurred since the first month of our sample period. In Appendix A.5 we also checked whether our results change controlling for banks involved in M&A: our findings are unchanged, Table A.7.

[13]Non-performing loans are excluded. In this way, we avoid a possible bias that would imply an underestimation of the rejection rate and that is due to the absence of a reporting threshold for non-performing loans. The most reasonable case is indeed that a firm is currently borrowing from a bank for an amount below the threshold required for performing loans, a new loan is asked and denied since a borrower is close to a default and then default occurs. This case is much more plausible than the one in which a bank first approve the loan request and then, in a quarter, the exposure is classified as non-performing.

[14]Indeed, using the CR we are able to observe only when the loan is materially granted and the process may last several months since the lender usually requests documents, such as firms last available balance sheet, current year performance and business plan for the financed project, which are analyzed before the granting.

Lehman Brothers collapse. Our main sample of analysis lasts until June 2010 that is usually identified as the start of the European Sovereign Debt Crisis which was not a pure uncertainty shock since it directly affected banks balance-sheet.[15] Our sample of analysis then consists of 832,110 loan-level applications placed by 275,799 firms.[16]

Table 2 describes all the variables used. Table 3 reports a comparison of loan granting in high and low social capital provinces both before and after the Lehman Brothers default that was followed by a huge increase in uncertainty. The period after October 2008 was characterized by a mean shift in the most commonly used measures of uncertainty as the VIX index and the Economic Policy uncertainty Index recently developed by Baker, Bloom, and Davis 2016, top panel of Figure 1. The uncertainty shock we are exploiting was huge, unexpected and more importantly from our perspective exogenous to the Italian credit market.[17] Moreover, as suggested by the graph in the bottom panel of Figure 1, absent the shock, lending in high and low social capital provinces would have evolved along the same path. Indeed, the internal validity of our difference-in-difference framework hinges on the assumption of parallel trends.[18] Even though the different patterns before and after the shock provide an ideal experiment to analyse the nexus between social capital and uncertainty, we should be careful as

[15]Separate regressions are provided for this second shock, please see Table 8.

[16]Loan searches started before October 2008 and ended after are excluded.

[17]The Lehman Brothers default might have had material effects only on few Italian large banks. We explicitly test if our results were driven only by the largest banks. Table A.9 and A.10 show that Italian banks were affected by the default of Lehman behind its material effect on their balance-sheets.

[18]The analysis in Appendix A.2 shows that the difference in the acceptance rate between the two groups, high and low social capital provinces, shifted up after the uncertainty shock (Figure A.1).

the rise in uncertainty could increase firms' default probabilities making our identification strategies more challenging. To address this issue we rely on data from Cerved Group, a private company providing a database for a large sample of Italian firms, which contains detailed information about firms' activity, balance sheets, and risk, reported on a yearly basis.[19] On average, firms who apply for loans have good credit scorings: the mean Z-score is 5.3 on a scale ranging from 1 to 9, where scores below 3 typically indicate sound firms and scores above 7 identify troubled firms. The quality of the applicants is very similar in the pre-crisis and crisis period (Table 4). From our perspective, what matters more is to have a homogeneous distribution of firms' characteristics between low and high social capital provinces. Table 5 displays some information regarding the composition of the sample in terms of credit scorings. The composition is fairly the same between low and high social capital provinces.[20]

3 Econometric Setup

To identify the causal effect of social capital on credit supply we rely on a sample including only firms that asked for a loan both before and after the Lehman Brothers collapse. To this aim, we estimate the probability of obtaining a loan as a function of the level of social capital available in the province where firms are headquartered by means of the following linear

[19]Banks rely on the same dataset for their granting decisions.

[20]The only relevant difference is detected for firms classified as low default risk, further analysis on this issue are reported in the Appendix A.3.

probability model:

$$I(LoanGranted_{it}) = \alpha + \beta SocCap_i * UncShock_t + \gamma UncShock_t + \\ + \delta firm_i + \lambda BANK_{it} + \theta other_{t-1} + u_{it} \quad (1)$$

where $I(LoanGranted_{it})$ is an indicator variable that equals 1 if the search for a loan started in month t by firm i ends up with the granting of a loan within the following quarter, and zero otherwise. $UncShock_t$ is a dummy variable that equals 1 after October 2008, and 0 otherwise. $SocCap_i$ is the level of social capital in the province where the firm i is headquartered and $firm$ and $BANK$ are, respectively, firm and bank-pool fixed effects. In particular, $BANK$ is the vector of bank dummies borrower i asked for a loan that may change over time.[21] Finally, $time$ are fixed effects referred to the last month of the loan search period that are included alternatively to $UncShock_t$ and macroeconomic controls. $other$ refers to a set of variables at the firm and province-level that are included consecutively. In particular, we first feature province or regional time-varying characteristics concerning economic performance and legal enforcement, then we test the robustness of our results to the inclusion of firms' time-varying characteristics, as the riskiness and the characteristics of the search strategy.

Using continuous measures of social capital allows us to fully capture heterogeneity across provinces. However, the role of social capital as a

[21] Results are robust to the inclusion of different sets of fixed effects. The additional specifications are reported in Appendix A.4. We estimate different models: province fixed effects in place of firm fixed effects (Table A.4), excluding bank-pool fixed effects (Table A.5) and including the incumbent banks fixed effect (Table A.6).

buffer against shocks is not directly interpretable and also it is not easy to compare the impact across different measures of social capital. Therefore, to easily identify the gain a firm could get from moving to a high social capital from a low province we use a second model with categorical variables. In particular, for each alternative measure, we identify those provinces where the level of social capital is high, that is it ranks beyond the fourth quartile of the province distribution, and low in case it ranks below the first quartile. Accordingly, we compute a dummy variable, $HiSocCap_i$, that equals 1 in case the borrower is headquartered in a province where social capital is high, and 0 otherwise. Similarly, we define a dummy for provinces where social capital is low, $LoSocCap_i$. Then we estimate the following model:

$$I(LoanGranted_{it}) = \alpha + (\beta_{hi} HiSocCap_i + \beta_{lo} LoSocCap_i) * UncShock_t + \\ + \gamma UncShock_t + \delta firm_i + \lambda BANK_{it} + \theta other_{t-1} + u_{it} \quad (2)$$

We expect β_{lo} to be negative and β_{hi} positive indicating that, with respect to intermediate values for social capital, firms based in high-social capital communities are better shielded from uncertainty shock than those based in province with intermediate and, in particular, low social capital. The difference between β_{hi} and β_{lo} is directly interpretable as the benefit a firm might gain from moving to a high-social capital province from a low-social capital one. Another advantage of this approach is that, differently from equation 1, we are not constraining the effect of social capital on credit supply to be linear.

We restrict our sample to a balanced panel of firms such that, for each

of them, we observe at least one loan search before and one after the uncertainty shock occurs, here identified by Lehman's collapse. In addition, we control for observed and unobserved time-invariant firm heterogeneity by using firm fixed effects and for the characteristics of the banks receiving loan requests, by plugging fixed effects identifying the set of banks that a firm has asked for a loan. We are allowed to do so since the same pool of banks may be asked for a loan by more than a firm, both before and after the shock. To complete our specifications we include quarterly GDP growth, inflation rate, and the Euro Overnight Index Average rate (EONIA) or monthly fixed effects that control for all macroeconomics factors.

We also check whether our results are robust to the inclusion of time-varying controls both at the firm and at the province level. Moreover, we study how the uncertainty shock affects credit supply depending on the level of social capital within a set of loan searches started by firms of comparable risk levels and headquartered in provinces characterized by the same economic performance and legal enforcement. Last but not least, to fully convincingly identify the effect of social capital we focus on a model that includes both firm fixed effects, bank-pool fixed effects, and area-quarter dummies to control for all the observable and unobservable time-varying traits of the geographic area in which the firm is headquartered. Finally, we cluster errors at the province-month level.[22] In any model analyzed we use firm fixed effects and bank-pool fixed effects. The inclusion of firm fixed effects in a logit or probit model naturally restricts the sample to those firms that

[22]Results are robust to the two-way province and time clustering exercise, Appendix A.6.

filed at least one loan search that did result in a loan granted and one that did not.[23] To avoid this problem we employ linear probability models in the main regressions but we estimate also logit models for robustness purposes. An additional advantage of employing linear probability models is that the coefficient of the interaction terms, the main focus of the analysis, are directly interpretable and standard errors do not require any correction.

4 Results

In this section, we first discuss the estimated impact of the rise in the level of uncertainty which followed the Lehman's default ($UncShock$) and, second, and more important, the estimated coefficients of the interactions between the $UncShock$ and the level of social capital proxied, alternatively, by the percentage of recyclable waste, blood donations and voter turnouts in referenda. We then assess the channels by which social capital works as a buffer against uncertainty shocks.

4.1 Credit Supply and Uncertainty

The first column of Table 6 reports the results for the baseline specification that excludes the measures of social capital. Model (1) includes firm fixed effects and bank-pool fixed effects, consistent with the theory modeling how monetary and economic conditions affect loan supply, we find that short-term

[23] Moreover probit estimates are known to be biased when there is a large number of fixed effects Lancaster 2000.

interest rate hikes reduce loan granting, while the national GDP growth spurs loan granting. The estimated coefficient for the variable *UncShock* is negative as expected. We find that a rise in uncertainty lowers banks' willingness to lend, consistently with the results of recent papers (Bordo, Duca, and Koch 2016, Valencia 2017 and Alessandri and Bottero 2017).

4.2 The Role of Social Capital

Models (2), (3), (5), (6), (8) and (9) of Table 6 include the interactions between the dummy variable *UncShock* and our three measures of social capital. They confirm the hypothesis that social capital is able to mitigate the impact of uncertainty shock. The coefficient of the interaction term $UncShock * SocCap$ is positive and significant for all the three different measures of social capital we use.

To better evaluate the economic significance of our results and compare them across different measures of social capital we estimate equation 2. In practice, we estimate the advantage a firm headquartered in a high social capital province has compared to a firm headquartered in a low one in columns (4), (7) and (10)

The results show that for firms headquartered in provinces endowed with a level of social capital beyond the 75th percentile ($HighSocCap * UncShock$) the decline in the probability of approval was lower, about 2.0 percent, according to all the alternative measures of social capital, compared to firms headquartered in provinces where social capital level was below the 25th percentile ($LowSocCap * UncShock$).

However, our results might be driven by some unobserved characteristics of the province where firms are headquartered that affected the response to the crisis and also correlate with the level of social capital.[24] For this reason, in Table 7 we report further results obtained by adding some time-varying characteristics of the local economy. In columns (1)-(3) we control, alternatively, for the regional disposable income and GDP annual growth, and the province quarterly growth of export. In addition, since enforceability of contracts may depend both on social and legal norms we verify whether our results are confirmed once we control for some measure of legal enforcement of contracts. To this aim, we add, alternatively, the regional percentage of trials ended by less than 2 years and the average amount of rejected payments at the province level. Results reported respectively in column (4) and (5), confirm our previous results, showing that social capital has a positive impact on loan approval. Column (6) reports results obtained including at the same time all the local markets controls.

Finally, in the last column, we include area*quarter fixed effects in order to control also for unobserved time-varying characteristics of the area where firms are headquartered.[25] Column (7) reports the results obtained in the case in which we split the country into the two main areas, the North-Center

[24]Knack and Keefer 1997 and Zak and Knack 2001 show that the level of social capital is positively correlated with economic development. Moreover several studies (e.g. Bentivogli et al. 2013, for Italy) have suggested that areas that are more oriented to export their products are also most resilient to economic downturns.

[25]Naturally, we cannot include province*quarter fixed effects and then we define wider geographic areas.

and Southern Italy. All previous results are confirmed.

The sovereign debt crisis **-** In order to support our view that social capital may mostly compensate for uncertainty shocks, we have verified whether it was able to mitigate the impact of the sovereign debt crisis on credit supply. Indeed, while the default of Lehman was mainly an uncertainty shock, the sovereign debt crisis directly affected financial intermediaries' balance-sheets because of their sovereign security holdings. Furthermore, as sovereign bond yields rise and sovereign ratings deteriorate, sources of funding become indeed more scarce and more costly: availability of wholesale funding markets, especially unsecured, becomes much thinner and banks capacity to access secured lending decreases, as the value of eligible collateral, typically sovereign bonds, drops. These factors all contribute to transmit tensions from the sovereign bond markets to credit supply (Bofondi, Carpinelli, and Sette 2017). In Table 8 we analyse the effect of the sovereign shock on credit supply by estimating our main specification from December 2010 to December 2011 identifying the crisis period as of starting from June 2011. Consistently with Bofondi, Carpinelli, and Sette 2017, we find that the sovereign debt crisis had a significant and negative impact on banks' lending. However, social capital seems to have no role in mitigating the crisis effects: the coefficients are mostly not statistically significant, consistently with the view that social capital cannot be a substitute for banks' soundness. In the following of the paper, we then concentrate on Lehman Brothers' default as a significant uncertainty shock.

Search strategy **-** One may be concerned that our previous results might be driven by some change in the loan search strategy followed by firms in response to the global crisis, due to unobserved factors that correlate with the level of social capital. We consider three different aspects of the loan search strategy that vary across time and borrowers: a) borrowers ask or not a bank that was lending to them in the three years before the current application. This is done in order to distinguish between the cases in which a borrower is totally unknown to the bank from those cases in which, even if the bank is not currently lending to her, it lent in the past and then already knows the loan applicant; b) among those banks borrowers ask for a loan, some of them have branches in the province where the applicants are headquartered and some others not. This is another important aspect of the loan search since it affects the loan search costs faced by applicants; c) borrowers may ask only one bank for a loan or many banks. We then control for the overall number of new banks that are asked for a loan. Again, this is crucial since the greater is the number of lenders borrowers ask for a loan the higher the probability that at least one is willing to lend. In the first three columns of Table 9 we add separately to the model we previously estimated a control for each search strategy characteristics mentioned before, and in the last one we control simultaneously for all of them. Our results show that the coefficient for the interaction term $UncShock * SocialCapital$ is unaffected once we add those controls for all different measures of social capital. This result is also confirmed once we put all search strategy controls into the equation. Interestingly, the controls we have added seem to have a significant impact on the approval probability. In the first two columns

of Table 9 the variable *Strategy* is the ratio of the number of banks the borrower asks for a loan that did not lend to her in the last three years over the total number of lenders that received a loan application. The relative coefficient is negative indicating that the probability declines as long as a firm relies more on banks to whom she is totally unknown. In columns (3)-(4) we look at the distance from the bank. In particular, we compute the ratio of the number of lenders that have branches in the province where firms are headquartered over the total number of lenders borrower asks for a loan. The coefficient is statistically significant and negative indicating that those who tend to concentrate their search only within their provinces are less able to obtain a loan compared to others that also look for that further away. Finally, the coefficient for the number of calls is positive as expected, indicating that the more intense is the loan search the higher the probability of being successful.

In Table 10, we add an interaction term $Strategy * UncShock$ to control for the fact that, apart from a change in the search strategy between the pre and post-Lehman, also the impact of any given strategy on the probability of a loan request to be approved may change. We find that the advantage a borrower could get by applying to banks that already know her or to more than a bank at the same time decreases after the shock occurs. Again, our previous results regarding the role of social capital are confirmed.

Time-to-grant a loan **-** Another possible objection to our results is that the greater uncertainty that followed the Lehman collapse made the time banks needed to approve and grant a loan might be longer in a

crisis. Then, the negative coefficient estimated for $UncShock$ might be overestimated since it is computed on the base of the loan disbursement in the three months after the loan request. It may also be that the change in the time-to-grant affected in a different way high versus low social capital areas. To this aim in Table 11 we report the estimation results obtained by extending the time-to-grant period to 6, 9 and 12 months. Our findings about the role played by social capital in mitigating the effects of the uncertainty shock are confirmed.

Time-varying firm characteristics **-** Our previous results have been obtained by using firm fixed effects controlling only for time-invariant characteristics of borrowers. To verify whether our results are confirmed when we control also for time-varying characteristics of the borrower we add the latest available Z-score, at the time of the loan search, computed by Cerved Group S.p.A. (Cerved from now onward).[26] As expected the results reported in Table 12 show that the probability of loan approval decreases as riskiness increases. More important for the perspective of this paper, the coefficients for $UncShock * SocialCapital$ are not affected.

Firm opaqueness **-** The Z-scores computed by Cerved may be also a proxy for firms' opacity and useful to explore whether the effect of social capital was stronger in those cases in which asymmetries of information were more severe. In particular, we argue that opacity is greater for two sets of

[26]Following Altman 1968, they assign to each firm a value from 1 to 9 where values from 7 upwards indicate sensible riskiness.

firms: a) firms that are not scored, since the characteristics of their balance sheets do not allow to compute the Z-score),[27] and b) firms whose level of risk is between "high" and "low". While it is quite obvious that unscored firms are particularly opaque, we argue that the reason why "medium risk" borrowers are more opaque than other scored firms is that, reasonably, there is little uncertainty about firms' creditworthiness in those cases in which borrowers are, at one extreme, very good or, at the other, very bad.

To this aim we rely on Z-scores computed on 2007 balance-sheet data before the shock occurred, and we split the whole sample into four sub-samples: i) low risk, ii) medium risk, iii) high risk, and iv) unscored firms. As shown in Table 13, we find that the impact of the uncertainty shock on the credit supply was mitigated by social capital. For opaque firms the result is confirmed regardless of the measure used to proxy social capital. This confirms that for firms that are informational-opaque the ability to get credit depends even more crucially on the possibility of imposing moral sanctions and/or the existence of moral norms in a given community, i.e., on the level of social capital. The table also indicates that the crisis had no impact on low-risk firms and then the positive and significant coefficients obtained for the interaction term is only indicating that low-risk firms tend to be headquartered in high social capital areas more often than other firms. Furthermore, consistent with Jiménez et al. 2014, we find that a lower overnight interest rate induces banks to grant more loan to ex-ante risky

[27] Cerved defines firms risk principally by using data from the balance-sheet Italian firms submit to the Italian Chambers of Commerce. Therefore, a firm is unscored if it has not submitted its balance-sheet to the Italian Chambers of Commerce or if the information in the balance-sheet is not complete.

firms.

In Table 14 we further explore our main findings by testing whether the mitigation role of social capital differed between types of lending relationships (single vs. multiple lending ones) the borrower searching for a loan had before the crisis. This is important since as shown by Bolton et al. 2016 the adverse effects of Lehman's collapse have been smoothed by close lending relationships. The loan applications we analyze here are placed to outside banks (as discussed in Section 2), therefore the estimated results in the columns "Single" of Table 14 refer to borrowers who had an exclusive relationship with a bank and were trying to switch. These borrowers face one main disadvantage: the existence of an exclusive relationship with only one bank has originated an increasing asymmetry of information between the incumbent and other potential lenders over time, as long as the duration of the relationship lengthened. As a consequence the hold-up phenomenon is particularly important (Farinha and Santos 2002) and, consistently, we find that for those firms the negative impact was fiercer, given they were less able to switch lenders compared to firms that were borrowing from more than one lender. The coefficient for $UncShock$ is indeed significant and higher in absolute terms compared to that obtained for the multiple lending case. At the same time, social capital, consistently with the view that it may help more in those cases in which informational asymmetries are more important, had a greater significant role in smoothing the shock. However, the mitigating role of social capital seems to have a limit.

Finally, in Table 15, we focus on those borrowers that were not previously reported in the Credit Register and that presumably are start-up companies

or very small firms for which credit history is not available at all. In these cases, the negative effect of the uncertainty shock is huge, around -15 percent, while the mitigating role of social capital is small and mostly not statistically significant.

Full versus partial loan acceptance **-** Our previous results have been obtained by assuming the loan search period terminates at the moment the borrower has obtained a new loan from the banking system. However, it might be possible that the borrower was not completely successful since she was only able to obtain part of the funds needed (partial acceptance). Our results might then be biased in case the uncertainty shocks had an impact on partial acceptances, possibly raising their relative importance compared to normal times, and this impact was heterogeneous between low and high social capital areas. For these reasons we have checked whether, even if a borrower has obtained a new loan she does not stop searching in the following three months. In other terms, we treat partial acceptances as rejections and the event "loan has been granted" occurs only if a borrower obtains a loan and after that, she stops searching. In Table 16 we report the results for this more stringent definition of loan granting which confirms the mitigating role of social capital for all the different measures used.

Incumbent banks **-** Our estimations have so far considered only new banks. However, it is quite reasonable that firms, once they ask new banks for a loan, they may also ask their incumbent banks for it. This is in line with a large body of literature, among others Petersen and Rajan 1994,

that have widely shown how relationship lending is beneficial to borrowers. Firms may initially apply to new banks (outside banks) and then ask their current lenders (inside banks) for a loan in case outside applications failed or because they did not receive any switching discount from the outside bank (Ioannidou and Ongena 2010).

Once we extend our analysis to incumbent banks we have to face some data gaps. The main one is that, differently from loan applications to new banks, those made to incumbent banks are not tracked in the Credit register. As a consequence, in this section, we keep our sample of firms unchanged and we only modify the dependent variable by transforming some zeros into one in case no new banks granted a loan but at least an incumbent one has done that. Thus, we simply add a check to verify whether, following a loan request made to outside banks, a borrower obtains or not a loan from at least one inside lender. The dependent variable, $I(LoanGranted_{it})$, is then an indicator variable that takes value 1 if the firm searching for a loan from a new bank receives new credit from any bank, an incumbent or a new one. Table 17 reports estimations in which incumbent banks are considered, showing that our main results about the role of social capital are confirmed. When we consider also incumbent banks, the fact that we are not able to observe loan applications made to incumbent banks may raise some selection bias concerns. Indeed, our sample is not able to cover those firms that make loan applications only to inside banks. For this reason, in Table 18 we report the results obtained by using a two-step procedure *à la* Heckman (Heckman 1974). In the first stage, we start from the whole sample of firms for which a lending relationship is in place and we model the probability

of asking new banks for a loan. Since application for a bank loan bears a cost related to the time applicants spend in traveling to new banks, we include in the first stage equation proxies for this cost that is the number of branches in the district where the company is headquartered, the distance from the closest branch and the average distance among branches in a range of 10 kilometers (exclusion restriction). The added regressors are statistically significant different from zero. The coefficients for branches are positive while those for the distance are negative, consistently with the view that traveling distance to reach the bank is a cost for the applicant and disincentives new applications. From this first step, we estimate the parameter vectors to calculate the inverse Mills ratio, λ. In the second stage, we estimate our main specifications using a linear probability model including λ as a regressor. Again, our results on the role of social capital are confirmed.

Robustness checks **-** As described in Section 1, differently from other papers analyzing loan granting (Jiménez et al. 2012, 2014 and Albertazzi, Bottero, and Sene 2016 among others) which use a definition of the loan application at the firm-bank level, here we use an identification at the firm level. Particularly, since we are interested in the ability of a firm to get a new loan independently of the bank that is granting it, we consider loan applications lodged by the same firm to different banks with no more than three months between each request as a unique credit application, assuming that the firm is shopping around for the same loan. This means that we are less interested in a single loan request and more on the ability of a firm to obtain a loan after having started looking for it. Then, while it is reasonable

to assume that each bank takes a few months to make a decision, it is also reasonable to argue the whole loan search process goes beyond the time a bank needs to process all the information about the borrower and make a decision.

However, for robustness purposes and also for making our results comparable with those obtained in other papers, in Table 19 we re-estimate our main model following the standard bank-firm approach. What we observe is that previous results are qualitatively confirmed while the magnitude is lower for all the coefficients compared to the estimates obtained above using the loan search approach. The mitigation role of social capital and the effect of the uncertainty shock are almost halved. This result may be driven by a change in the loan search strategy followed by firms. Statistics reported in Table 4 and Figure 5 show that after the crisis firms apply to a smaller number of banks for the same loan, in a bank-firm model this would results in a higher number of artificial rejections before the shock and lead to interpret as credit supply a demand-driven phenomenon.

There are two common ways to estimate the model we presented in this paper: conditional fixed effects logit, or fixed effects linear probability model (LMP). We preferred the LPM to simplify interpretation of the coefficients, and because it allows us to not restricts the sample only to those firms that filed at least one loan search that did result in a loan granted and one that did not, an advantage that outweighs the minor gains from limited dependent variable techniques (Beck 2011). However, here we examine conditional fixed effects logit as well. We show results in Table 20 and the

findings obtained using LPM are qualitatively and quantitatively confirmed. The parameters associated to our variables of interest, the interactions between social capital and the uncertainty shock, keep their sign and achieve high significance levels.

In this paper to capture the increase in uncertainty which followed Lehman's default we simply use a dummy taking value one after the uncertainty shock occurs. Indeed, there is no commonly accepted way of measuring uncertainty, and most proxies are likely to be subject to measurement error. However, here to test the robustness of our results we re-estimate our main models using a continuous measure of uncertainty: the Economic Policy Uncertainty index constructed by Baker, Bloom, and Davis 2016.[28] Results are reported in Table 21. The parameters associated with our variables of interest, the interactions between social capital and the uncertainty shock, keep their sign and achieve high significance levels.

5 Concluding remarks

In this paper, we have identified one of the possible channels by which social capital may affect credit supply. We find that it makes credit supply more resilient to uncertainty shocks, consistently with the view that social capital is one of the most important determinants of trust which, in turn, is pivotal

[28]The index aims to capture the uncertainty that surrounds monetary, fiscal and regulatory policy interventions by counting the occurrences of uncertainty- and policy-related keywords in daily newspapers. It has been used in a wide range of applied micro and macroeconomic empirical works on uncertainty. For Italy see Alessandri and Bottero 2017.

for the functioning of credit markets. We also provide evidence that social capital has a greater role in those cases in which informational asymmetry problems are more severe. The role of social capital as a buffer against shock affecting credit markets provides support to government actions aimed at fostering the formation of social capital. Indeed, since social capital is a public good - non-excludable and non-rivalrous - the market will under provide the production of such good (Dowla 2006, Baliamoune-Lutz 2011, Sander and Lowney 2006) and the role of the policymaker then becomes crucial.

Our paper also provides a methodological contribution. Similar to other papers, our results are obtained by using a very granular database that allows us to disentangle demand and supply factors. However, we depart from the existing literature approach by using an indicator of loan granting that is robust to changes in the search strategy and accounts for existing bank-firm relationships, allowing a better identification of the impact of shocks on credit supply.

Table 1: Datasets

	Average value				
	firm-bank level	loan-level			
	2005-2011	2005-2011	2007m1-2010m6		
				Estimation Sample	
			New Banks		Incumbent
months of search	1.00	1.98	1.97	1.47	1.47
		(2.850)	(2.463)	(1.104)	(1.104)
months before the loan is granted	2.48	2.94	2.88	2.27	2.27
	(2.969)	(2.372)	(3.02)	(2.206)	(2.206)
calls for period	1.62	2.61	2.46	1.78	1.78
	(1.111)	(6.86)	(4.945)	(1.52)	(1.52)
Loan Granted in 3 months	0.07	0.17	0.17	0.17	0.29
	(0.249)	(0.375)	(0.378)	(0.374)	(0.462)
in 6 months	0.07	0.18	0.19	0.18	0.34
	(0.261)	(0.388)	(0.392)	(0.386)	(0.473)
in 9 months	0.08	0.19	0.2	0.19	0.36
	(0.267)	(0.394)	(0.397)	(0.392)	(0.481)
in 12 months	0.08	0.20	0.20	0.20	0.38
	(0.271)	(0.398)	(0.401)	(0.396)	(0.485)
N	8907125	3410190	1779168	832110	832110

Standard deviations in parentheses. In firm-bank level dataset the search time is 1 month by construction.

Table 2: Variable Description

Variable	Units	Description	Source	Obs.	Mean	Std.Dev
Social Capital						
Recyclable waste	%	Percentage of recyclable waste in 2003 at the province level. In 2003 the national legal obligation to sort rubbish was not implemented. Nowadays in Italy, regulations exist that provide mandatory quotas for the waste sorting but those are not yet completely implemented: in 2009 law stated that at least 35 per cent of municipality waste was recycled and 65 per cent within 2012. However, in 2013 only around 43 per cent of the Italian rubbish was sorted.	Istat	110	19.1	13.0
Quality of the collection infrastructures	%	Since in Italy waste sorting is managed at the local level, we control for differences in the quality of the collection infrastructures using quality weights at the province level (w).	Istat	110	90.6	20.3
Waste Sorting		Ratio between recyclable waste and the quality of the collection infrastructures using quality weights at the province level (w).	Istat	110	0.21	0.15
Blood Donations	bags	Number of blood bags (each bag contains 16 ounces of blood) per million inhabitants in the province collected by AVIS, the Italian association of blood donors, in 1995 among its members. The association, which is completely private and nonprofit. It groupped about 875,000 donors and is the largest blood donors' association not only in Italy where it collects over 90 percent of the whole blood donation, but also in the world.	Guiso, Sapienza, and Zingales 2004	110	28.2	20.9
Partecipation in Referenda	%	Voter turnout at the province level for all the referenda on the period between 1946 and 1987. For each province turnout data were averaged across time.	Guiso, Sapienza, and Zingales 2004	110	79.9	8.2
Dependent Variable						
$I(LoanGranted^{3}_{ti})$	0/1	A dummy variable, which equals 1 if the search for a loan started in month t firm i is successful and the loan is granted within 3 months, and equals 0 otherwise.		832110	0.168	0.139
$I(LoanGranted^{6}_{ti})$	0/1	A dummy variable, which equals 1 if the search for a loan started in month t firm i is successful and the loan is granted within 6 months, and equals 0 otherwise.		832110	0.182	0.149
$I(LoanGranted^{9}_{ti})$	0/1	A dummy variable, which equals 1 if the search for a loan started in month t firm i is successful and the loan is granted within 9 months, and equals 0 otherwise.		832110	0.189	0.153
$I(LoanGranted^{12}_{ti})$	0/1	A dummy variable, which equals 1 if the search for a loan started in month t firm i is successful and the loan is granted within 12 months, and equals 0 otherwise.		832110	0.194	0.156
Independent Variables						
Macro-Level Variables						
UncShock	0/1	A dummy variable which equals 1 after Lehman Brothers Default in October 2008.		832110	0.487	0.499
$\Delta Overnight_{t-1}$	%	Monthly change at $t-1$ in the Euro overnight index average rate (EONIA), which is the target interest rate for monetary policy in the Eurosystem.	Bloomberg	42	-0.003	0.012
ΔCPI_{t-1}	%	Monthly Italian Consumer Price Index at $t-1$.	Istat	42	2.017	1.155
ΔGDP_{t-1}	%	Quarterly change of Italian gross domestic product in real terms at $t-1$.	Istat	14	-1.23	3.07
Additional controls for Local Markets	%					
Economic Performance						
Disposable Income	%	Annual growth of regional disposable income.	Istat	80	0.008	0.024
GDP growth	%	Annual growth of regional gross domestic product in real terms at $t-1$.	Istat	80	0.785	3.018
Export growth	%	Quarterly growth of export at the province level in $t-1$.	Istat	1.442	1.359	30.266
Legal Enforcement						
% of Trials in 2y	%	Yearly percentage of first-degree trials completed within 2 years by the courts located in a province. It has been computed in $t-3$ using courts-level data on the length of trials and then averaged at the regional level. Data on 2006 has been used for 2010.	Istat	80	68.4	14.2
Rejected Payments	1000	Average amount of rejected payments in 2007 computed at the province level.	Istat	110	38021	82310
Firm-Level Credit Risk Variables						
Z-score	1/9	Z-scores are synthetic indicator used to predict corporate defaults. We use z-score computed by the private company Cerved. Following Altman 1968, each firm is assigned a value from 1 to 9 where values from 7 upwards indicate sensible riskiness.	Cerved Group S.p.A	390905	5.310	1.830
Low Default Risk	0/1	A dummy variable which equals 1 if the Z-score, computed considering the 2007 balance sheet, is between 1 and 3. Data about 2006 or 2008 balance sheet are used if 2007 balance sheet is absent.	Cerved Group S.p.A	832110	0.071	0.256
Medium Default Risk	0/1	A dummy variable which equals 1 if the Z-score, computed considering the 2007 balance sheet, is between 4 and 6. Data about 2006 or 2008 balance sheet are used if 2007 balance sheet is absent.	Cerved Group S.p.A	832110	0.257	0.437
High Default Risk	0/1	A dummy variable which equals 1 if the Z-score, computed considering the 2007 balance sheet, is between 7 and 9. Data about 2006 or 2008 balance sheet are used if 2007 balance sheet is absent.	Cerved Group S.p.A	832110	0.170	0.375
Unscored	0/1	A dummy variable which equals 1 if no data are available about the the 2006, 2007 or 2008 balance sheet.	Cerved Group S.p.A	832110	0.502	0.500

Table 3: Loan Granting and Social Capital

	Low Social Capital Provinces				High Social Capital Provinces			
	Uncertainty Shock				Uncertainty Shock			
	Pre		Post		Pre		Post	
Loan Granted in	Obs	Mean	Obs	Mean	Obs	Mean	Obs	Mean
				Waste Sorting				
3 months	45349	0.221	41246	0.149	134270	0.189	122185	0.137
6 months	45349	0.240	41246	0.162	134270	0.204	122185	0.149
9 months	45349	0.250	41246	0.169	134270	0.213	122185	0.154
12 months	45349	0.258	41246	0.174	134270	0.218	122185	0.159
number of calls	45349	1.880	41246	1.673	134270	1.766	122185	1.687
months of searching	45349	1.536	41246	1.413	134270	1.507	122185	1.407
months before the loan is granted	11687	2.379	7169	2.157	29298	2.290	19459	2.123
3 months	66009	0.218	59789	0.147	175958	0.179	160428	0.128
6 months	66009	0.237	59789	0.161	175958	0.195	160428	0.139
9 months	66009	0.248	59789	0.168	175958	0.203	160428	0.145
12 months	66009	0.254	59789	0.173	175958	0.208	160428	0.150
number of calls	66009	1.887	59789	1.644	175958	1.858	160428	1.811
months of searching	66009	1.535	59789	1.420	175958	1.520	160428	1.410
months before the loan is granted	16788	2.367	10346	2.234	36564	2.355	24065	2.176
3 months	52494	0.225	47702	0.152	124287	0.192	111907	0.131
6 months	52494	0.245	47702	0.166	124287	0.208	111907	0.142
9 months	52494	0.255	47702	0.173	124287	0.216	111907	0.148
12 months	52494	0.263	47702	0.178	124287	0.221	111907	0.153
number of calls	52494	1.937	47702	1.667	124287	1.830	111907	1.774
months of searching	52494	1.544	47702	1.423	124287	1.512	111907	1.409
months before the loan is granted	13796	2.404	8486	2.201	27463	2.262	17070	2.168

Notes: High Social Capital Provinces refers to provinces where social capital is above the 75th percentile while Low Social Capital Provinces to province below the 25th percentile. Pre-Uncertainty Shock refers to the period from January 2007 to September 2008. Post Uncertainty Shock refers to the period from October 2008 to June 2010.

Table 4: Descriptive Statistics: Pre and Post Uncertainty Shock

	Uncertainty Shock			
	Pre		Post	
	Obs	Mean	Obs	Mean
$I(LoanGranted_{ti}^{3})$	435981	0.196	396129	0.136
$I(LoanGranted_{ti}^{6})$	435981	0.213	396129	0.148
$I(LoanGranted_{ti}^{9})$	435981	0.222	396129	0.154
$I(LoanGranted_{ti}^{12})$	435981	0.228	396129	0.159
number of calls	435981	1.835	396129	1.718
months of searching	435981	1.520	396129	1.412
months before the loan is granted	99330	2.331	62966	2.182
Kg of sorted waste (per capita)	435981	24.50	396129	24.53
Population served by sorted waste collection (%)	435981	96.16	396129	96.15
Weighted fraction of sorted waste	435981	0.260	396129	0.261
Blood donation (number of 16-ounce blood bags)	435981	34.66	396129	34.71
Voter tornout if referenda (%)	435981	83.10	396129	83.09
$\Delta Overnight_{t-1}$	435981	0.001	396129	-0.006
ΔGDP_{t-1}	435981	1.178	396129	-3.570
ΔCPI_{t-1}	435981	2.645	396129	1.456
GDP growth (%)	435981	2.966	396129	-1.165
Export growth (%)	422799	8.318	383843	-9.453
Disposable Income (%)	435981	0.030	396129	-0.011
Time varying Zscore	208680	5.338	182225	5.278
% of Trials in 2 years	435981	69.93	396129	70.29
Rejected Payments (quartile)	422799	3.107	383843	3.111
Borrower already known (%)	435981	0.039	396129	0.039
Single lending	435981	0.444	396129	0.446
Loan requests inside the market (%)	435981	44.99	396129	46.54

Notes: Pre Uncertainty Shock refers to the period from January 2007 to September 2008.
Post Uncertainty Shock refers to the period from October 2008 to June 2010.

Table 5: Firms Risk across Low and High Social Capital Provinces

	Composition			
	Default Probability			
%	Low Default	Medium Default	High Default	Unscored
		Waste Sorting		
Low Social Capital	4.96	25.15	16.17	53.72
High Social Capital	8.1	25.86	16.49	49.55
		Blood Donation		
Low Social Capital	5.72	26.72	16.09	51.47
High Social Capital	8.26	26.19	17.28	48.27
		Voter Turnout in Referenda		
Low Social Capital	5.02	26.8	15.65	52.53
High Social Capital	7.31	24.5	16.73	51.46

	Imbalance				
	Multivariate $\Im$	Univariate $\Im$			
		Low Default	Medium Default	High Default	Unscored
Waste Sorting	0.072	0.029	0.010	0.002	0.040
Blood Donation	0.054	0.020	0.007	0.0036	0.017
Referenda	0.088	0.031	0.007	0.007	0.031

Notes: The imbalance test is conducted using also the $\Im$ statistic, as described in Iacus, King, and Porro 2008, it could be considered a comprehensive measure of global imbalance. The multivariate $\Im$ is based on the difference between the multidimensional histogram of covariates in the treated group and that in the control group. The covariates are coarsened into bins and the measure of imbalance is the absolute difference over all the cell values (Blackwell et al. 2009). Perfect global balance is indicated by $\Im = 0$, and larger values indicate larger imbalance between the groups, with a maximum of $\Im = 1$, which indicates complete separation.

Table 6: Uncertainty and Social Capital

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.100***	0.098***		0.052***	0.050***		0.090***	0.091***	
		(0.018)	(0.014)		(0.009)	(0.007)		(0.023)	(0.018)	
UncShock	-0.038***	-0.061***			-0.056***			-0.113***		
	(0.004)	(0.005)			(0.005)			(0.019)		
UncShock*Low social capital				-0.016***			-0.003			-0.021***
				(0.004)			(0.004)			(0.004)
UncShock*High social capital				0.009**			0.021***			-0.003
				(0.004)			(0.003)			(0.003)
$\Delta Overnight_{t-1}$	-1.589***	-1.595***			-1.593***			-1.592***		
	(0.217)	(0.208)			(0.210)			(0.215)		
ΔCPI_{t-1}	0.007***	0.007***			0.007***			0.007***		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.006***	0.006***			0.006***			0.006***		
	(0.001)	(0.001)			(0.001)			(0.001)		
Observations	832110	832110	832110	832110	832110	832110	832110	832110	832110	832110
Adjusted R^2	0.139	0.139	0.145	0.145	0.139	0.145	0.145	0.139	0.145	0.145
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. Standard errors clustered at the province-month level are reported in brackets.

Table 7: Uncertainty and Social Capital: Extended models

VARIABLES	Economic Performance			Legal Enforcement		All local markets controls	2 Areas
	Disposable Income	GDP growth	Export growth	% of Trials in 2y	Rejected Payments		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Waste Sorting			
UncShock*Social capital	0.090***	0.099***	0.094***	0.077***	0.092***	0.082***	0.098***
	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.016)	(0.021)
Adjusted R^2	0.145	0.145	0.145	0.145	0.145	0.145	0.143
				Blood Donation			
UncShock*Social capital	0.045***	0.052***	0.048***	0.042***	0.049***	0.039***	0.047***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.010)
Adjusted R^2	0.145	0.145	0.145	0.145	0.145	0.145	0.143
				Voter turnout in Referenda			
UncShock*Social capital	0.070***	0.092***	0.085***	0.080***	0.084***	0.049**	0.036
	(0.020)	(0.018)	(0.018)	(0.018)	(0.018)	(0.020)	(0.041)
Adjusted R^2	0.145	0.145	0.144	0.145	0.144	0.145	0.143
Observations	832110	832110	806021	832110	806021	806021	832110

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include the intercept, firm fixed effects, bank-pool fixed effects and month fixed effects. Standard errors clustered at the province-month level are reported in brackets. Each column shows the estimate for different specifications where the variable reported in the columns' title is added to control for economic performance and legal enforcement. For the estimation in column (6) the additional control variables (disposable income, GDP growth, export growth, % of trials in 2 years and rejected payments) are included all together. In the last column, (7), area*time fixed effect are added.

Table 8: Social Capital and Credit Supply during the Sovereign Debt Crisis

VARIABLES	Baseline	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SovCrisis*Social capital		0.019	0.016	0.023**	0.022**	-0.037	-0.036
		(0.016)	(0.014)	(0.009)	(0.009)	(0.024)	(0.022)
SovCrisis	-0.019***	-0.023***		-0.026***		0.012	
	(0.006)	(0.007)		(0.008)		(0.019)	
Observations	228599	228599	228599	228599	228599	228599	228599
Adjusted R^2	0.158	0.158	0.161	0.158	0.161	0.158	0.161
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of non-financial firms that asked for a loan before and after sovereign debt crisis: December 2010 to June 2011 represents the pre-crisis period, and the period between June and December 2011 represents the crisis period. All the regressions include firm fixed effects, bank-pool fixed effects and month fixed effects or macro-controls alternatively. Where *SovCrisis* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 9: Search Strategy

VARIABLES	Borrower already and not known		Loan request lodged inside and outside the market		Number of calls per period		All Search Strategies	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Waste Sorting				
UncShock*Social capital	0.102***	0.099***	0.099***	0.097***	0.099***	0.097***	0.102***	0.099***
	(0.018)	(0.014)	(0.018)	(0.014)	(0.018)	(0.014)	(0.018)	(0.014)
UncShock	-0.062***		-0.061***		-0.060***		-0.061***	
	(0.005)		(0.005)		(0.005)		(0.005)	
Strategy	-0.108***	-0.107***	-0.027***	-0.027***	0.023***	0.024***		
	(0.004)	(0.004)	(0.003)	(0.003)	(0.001)	(0.001)		
Adjusted R^2	0.142	0.147	0.140	0.145	0.140	0.146	0.143	0.149
				Blood Donation				
UncShock*Social capital	0.053***	0.051***	0.051***	0.050***	0.051***	0.050***	0.053***	0.052***
	(0.009)	(0.007)	(0.009)	(0.007)	(0.009)	(0.007)	(0.009)	(0.007)
UncShock	-0.057***		-0.056***		-0.056***		-0.056***	
	(0.005)		(0.005)		(0.005)		(0.005)	
Strategy	-0.108***	-0.107***	-0.027***	-0.026***	0.024***	0.024***		
	(0.004)	(0.004)	(0.003)	(0.003)	(0.001)	(0.001)		
Adjusted R^2	0.142	0.147	0.140	0.145	0.140	0.146	0.143	0.149
				Voter turnout in Referenda				
UncShock*Social capital	0.093***	0.094***	0.087***	0.088***	0.089***	0.090***	0.095***	0.096***
	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)	(0.023)	(0.018)
UncShock	-0.116***		-0.111***		-0.112***		-0.117***	
	(0.019)		(0.019)		(0.019)		(0.019)	
Strategy	-0.107***	-0.107***	-0.027***	-0.027***	0.024***	0.024***		
	(0.004)	(0.004)	(0.003)	(0.003)	(0.001)	(0.001)		
Adjusted R^2	0.142	0.147	0.139	0.145	0.140	0.146	0.143	0.149
Observations	832110	832110	832110	832110	832110	832110	832110	832110

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 10: Search Strategy

VARIABLES	Borrower already or not known (1)	Loan request lodged inside the market (2)	Number of calls per period (3)
		Waste Sorting	
UncShock*Social capital	0.099***	0.097***	0.096***
	(0.014)	(0.014)	(0.014)
UncShock*Strategy	0.118***	0.003	0.005***
	(0.007)	(0.003)	(0.001)
Strategy	-0.163***	-0.028***	0.022***
	(0.005)	(0.003)	(0.001)
Adjusted R^2	0.148	0.145	0.146
		Blood Donation	
UncShock*Social capital	0.051***	0.050***	0.049***
	(0.007)	(0.007)	(0.007)
UncShock*Strategy	0.118***	0.002	0.005***
	(0.007)	(0.003)	(0.001)
Strategy	-0.163***	-0.028***	0.022***
	(0.005)	(0.003)	(0.001)
Adjusted R^2	0.148	0.145	0.146
		Voter turnout in Referenda	
UncShock*Social Capital	0.094***	0.088***	0.091***
	(0.018)	(0.018)	(0.018)
UncShock*Social capital	0.094***	0.088***	0.088***
	(0.018)	(0.018)	(0.018)
UncShock*Strategy	0.118***	0.002	0.005***
	(0.007)	(0.003)	(0.001)
Strategy	-0.163***	-0.028***	0.022***
	(0.005)	(0.003)	(0.001)
Adjusted R^2	0.148	0.145	0.146
Observations	832110	832110	832110

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and month fixed effects. Standard errors clustered at the province-month level are reported in brackets.

Table 11: Time-to-grant a loan: 6, 9 and 12 months

VARIABLES	Baseline (1)	Waste Sorting (2)	Blood Donation (3)	Voter turnout in Referenda (4)
		$I(LoanGranted_{ti}^{6})$		
UncShock*Social capital		0.106***	0.052***	0.101***
		(0.015)	(0.007)	(0.018)
UncShock	-0.038***			
	(0.004)			
Adjusted R^2	0.139	0.155	0.155	0.155
		$I(LoanGranted_{ti}^{9})$		
UncShock*Social capital		0.108***	0.054***	0.106***
		(0.015)	(0.007)	(0.018)
UncShock	-0.048***			
	(0.004)			
Adjusted R^2	0.158	0.163	0.162	0.162
		$I(LoanGranted_{ti}^{12})$		
UncShock*Social capital		0.113***	0.058***	0.113***
		(0.015)	(0.007)	(0.019)
UncShock	-0.049***			
	(0.004)			
Adjusted R^2	0.163	0.168	0.168	0.168
Observations	841444	841444	841444	841444

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following 6, 9 or 12 months. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank fixed effects and macrocontrols or month fixed effects alternatively. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 12: Time varying Zscore

VARIABLES	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)
UncShock*Social capital	0.100***	0.098***	0.052***	0.051***	0.090***	0.091***
	(0.018)	(0.014)	(0.009)	(0.007)	(0.023)	(0.018)
UncShock	-0.061***		-0.057***		-0.113***	
	(0.005)		(0.005)		(0.019)	
Z-Score= 1.0000	0.020***	0.022***	0.021***	0.022***	0.021***	0.022***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Z-Score= 2.0000	0.012**	0.012**	0.013**	0.013**	0.013**	0.013**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Z-Score= 3.0000	0.019***	0.019***	0.019***	0.020***	0.019***	0.020***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Z-Score= 4.0000	0.005	0.005	0.005	0.005	0.006	0.006
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Z-Score= 5.0000	-0.009**	-0.009**	-0.009**	-0.009**	-0.008**	-0.009**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Z-Score= 6.0000	-0.019***	-0.019***	-0.019***	-0.019***	-0.018***	-0.019***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Z-Score= 7.0000	-0.026***	-0.027***	-0.026***	-0.027***	-0.026***	-0.027***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Z-Score= 8.0000	-0.042***	-0.043***	-0.042***	-0.042***	-0.042***	-0.042***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Z-Score= 9.0000	-0.078***	-0.077***	-0.078***	-0.076***	-0.078***	-0.076***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Adjusted R^2	0.140	0.145	0.140	0.145	0.140	0.145
Observations	832110	832110	832110	832110	832110	832110

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where $UnShock$ is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets. The estimation sample includes both scored and unscored firms, i.e. firms without a Z-Score. Z-Scores range from 1 to 9 where values from 7 upwards indicate sensible riskiness. For the estimation the unscored category is used as baseline.

Table 13: Firms opaqueness - Default Risk

	Default Risk							
VARIABLES	Low		Medium		High		Unscored	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Waste Sorting				
UncShock*Social capital	0.101***	0.096***	0.112***	0.107***	-0.005	-0.001	0.112***	0.109***
	(0.032)	(0.030)	(0.027)	(0.022)	(0.026)	(0.023)	(0.017)	(0.015)
UncShock	-0.001		-0.020**		-0.025***		-0.091***	
	(0.010)		(0.008)		(0.008)		(0.005)	
$\Delta Overnight_{t-1}$	-0.042		-1.544***		-2.141***		-1.774***	
	(0.489)		(0.319)		(0.361)		(0.234)	
Adjusted R^2	0.120	0.125	0.138	0.145	0.158	0.165	0.142	0.147
				Blood Donation				
UncShock*Social capital	0.042**	0.043**	0.037***	0.035***	0.004	0.006	0.069***	0.068***
	(0.018)	(0.017)	(0.013)	(0.011)	(0.013)	(0.012)	(0.010)	(0.008)
UncShock	0.008		-0.007		-0.027***		-0.090***	
	(0.009)		(0.007)		(0.008)		(0.005)	
$\Delta Overnight_{t-1}$	-0.046		-1.539***		-2.141***		-1.767***	
	(0.488)		(0.322)		(0.361)		(0.234)	
Adjusted R^2	0.120	0.125	0.138	0.145	0.158	0.165	0.142	0.147
				Voter turnout in Referenda				
UncShock*Social capital	0.079	0.076	0.085**	0.087***	-0.027	-0.019	0.110***	0.109***
	(0.057)	(0.055)	(0.036)	(0.030)	(0.038)	(0.034)	(0.025)	(0.021)
UncShock	-0.043		-0.065**		-0.003		-0.157***	
	(0.049)		(0.030)		(0.032)		(0.021)	
$\Delta Overnight_{t-1}$	-0.044		-1.540***		-2.141***		-1.767***	
	(0.489)		(0.324)		(0.361)		(0.241)	
Adjusted R^2	0.120	0.125	0.138	0.145	0.158	0.165	0.142	0.147
Observations	53296	53296	204809	204809	132490	132490	407848	407848

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where $UnShock$ is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 14: Firms opaqueness - Lending Relation

	Baseline		Waste Sorting				Blood Donation				Voter turnout in Referenda			
							Lending Relation							
VARIABLES	Single	Multiple	Single		Multiple		Single		Multiple		Single		Multiple	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
UncShock*Social capital			0.073***	0.074***	0.073***	0.066***	0.055***	0.054***	0.025**	0.023***	0.080***	0.081***	0.008	0.007
			(0.019)	(0.015)	(0.022)	(0.018)	(0.010)	(0.009)	(0.010)	(0.008)	(0.025)	(0.021)	(0.029)	(0.024)
UncShock	-0.079***	-0.001	-0.095***		-0.019***		-0.097***		-0.010*		-0.145***		-0.008	
	(0.004)	(0.005)	(0.006)		(0.007)		(0.005)		(0.006)		(0.021)		(0.024)	
Adjusted R^2	0.151	0.140	0.152	0.157	0.141	0.147	0.152	0.157	0.141	0.147	0.152	0.157	0.140	0.147
Observations	360892	454406	360892	360892	454406	454406	360892	360892	454406	454406	360892	360892	454406	454406

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 15: Firms opaqueness - No Credit Information

VARIABLES	Baseline	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
UncShock*Social capital		0.045*	0.045**	0.045***	0.042***	0.017	0.016
		(0.025)	(0.021)	(0.014)	(0.011)	(0.035)	(0.028)
UncShock	-0.140***	-0.150***		-0.155***		-0.155***	
	(0.006)	(0.008)		(0.008)		(0.029)	
Adjusted R^2	0.173	0.173	0.183	0.173	0.183	0.173	0.183
Observations	175935	175935	175935	175935	175935	175935	175935

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 16: Model with *full acceptance*

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.096***	0.089***		0.050***	0.047***		0.087***	0.083***	
		(0.022)	(0.016)		(0.009)	(0.007)		(0.021)	(0.017)	
UncShock	-0.026***	-0.048***			-0.044***			-0.098***		
	(0.003)	(0.005)			(0.004)			(0.017)		
UncShock*Low social capital				-0.015***			-0.002			-0.020***
				(0.004)			(0.004)			(0.004)
UncShock*High social capital				0.009***			0.020***			-0.004
				(0.003)			(0.003)			(0.003)
Adjusted R^2	0.156	0.156	0.160	0.160	0.156	0.160	0.160	0.156	0.160	0.160
Observations	753784	753784	753784	753784	753784	753784	753784	753784	753784	753784

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and the successful firm does not start a new search in less than three months. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 17: Including Incumbent Banks

VARIABLES	Baseline	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
UncShock*Social capital		0.056***	0.055***	0.020**	0.020***	0.025	0.029*
		(0.017)	(0.013)	(0.009)	(0.007)	(0.024)	(0.017)
UncShock	-0.045***	-0.058***		-0.052***		-0.066***	
	(0.004)	(0.006)		(0.005)		(0.020)	
Adjusted R^2	0.219	0.219	0.224	0.219	0.224	0.219	0.224
Observations	832110	832110	832110	832110	832110	832110	832110
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	No	Yes	No	Yes	No	Yes

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan in the following quarter by a current or a new bank, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 18: Incumbent Banks: Correcting for the probability of loan application

VARIABLES	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)
			Second Step			
UncShock*Social capital	0.088***	0.080***	0.043***	0.038***	0.060**	0.048***
	(0.017)	(0.013)	(0.009)	(0.007)	(0.025)	(0.018)
UncShock	-0.082***		-0.077***		-0.112***	
	(0.006)		(0.006)		(0.021)	
λ	0.772***	0.754***	0.774***	0.754***	0.772***	0.752***
	(0.047)	(0.047)	(0.047)	(0.047)	(0.047)	(0.047)
Observations	810821	810821	810821	810821	810821	810821
Adjusted R^2	0.219	0.224	0.219	0.224	0.219	0.224
			First Step			
UncShock*Social capital	0.204***	0.159***	0.153***	0.131***	0.238***	0.151***
	(0.006)	(0.006)	(0.004)	(0.004)	(0.010)	(0.010)
UncShock	-0.156***		-0.163***		-0.308***	
	(0.002)		(0.002)		(0.009)	
Branches (standardized)	0.056***	0.057***	0.055***	0.056***	0.053***	0.055***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Distance from the closest branch	-0.006***	-0.007***	-0.006***	-0.006***	-0.007***	-0.007***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Average distance in 10 km	-0.010***	-0.010***	-0.010***	-0.010***	-0.009***	-0.009***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	6574763	6574763	6574763	6574763	6574763	6574763
Prob>chi2	0	0	0	0	0	0
Chisquare	60482	152262	61299	152971	59999	151869
Log Likelihood	-4.466e+06	-4.420e+06	-4.466e+06	-4.420e+06	-4.466e+06	-4.420e+06

Notes: The first step is estimated by probit model. The dependent variable is a binary variable that equals 1 if the firm reported in the Credit Register has applied for a loan to a new bank. All the regressions include the intercept, firms time varying Z-Score and month fixed effects. The second step is estimated by linear probability model. The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan in the following quarter by a current or a new bank, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table 19: Firm-bank model

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.050***	0.048***		0.024***	0.022***		0.037***	0.036***	
		(0.011)	(0.009)		(0.005)	(0.004)		(0.013)	(0.011)	
UncShock	-0.012***	-0.023***			-0.020***			-0.043***		
	(0.002)	(0.003)			(0.003)			(0.011)		
UncShock*Low social capital				-0.007***			-0.001			-0.010***
				(0.002)			(0.002)			(0.002)
UncShock*High social capital				0.004			0.011***			-0.003
				(0.002)			(0.002)			(0.002)
Observations	1396943	1396943	1396943	1396943	1396943	1396943	1396943	1396943	1396943	1396943
Adjusted R^2	0.127	0.127	0.129	0.129	0.127	0.129	0.129	0.127	0.129	0.129
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable equals 1 if the loan is granted in quarter following the loan application, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include the intercept, firm fixed effects and bank fixed effects. Standard errors clustered at the province-month level are reported in brackets.

Table 20: Conditional fixed effects Logit Models

VARIABLES	Baseline	Waste Sorting	Blood Donation	Voter turnout in Referenda
	(1)	(2)	(3)	(4)
UncShock*Social Capital		0.532***	0.143***	0.130
		(0.052)	(0.030)	(0.084)
UncShock	-0.964***	-1.082***	-1.013***	-1.072***
	(0.018)	(0.021)	(0.021)	(0.071)
Observations	459575	459575	459575	459575
Prob>chi2	0	0	0	0
chisquare	10662	10768	10686	10665
Log Likelihood	-168842	-168789	-168830	-168840

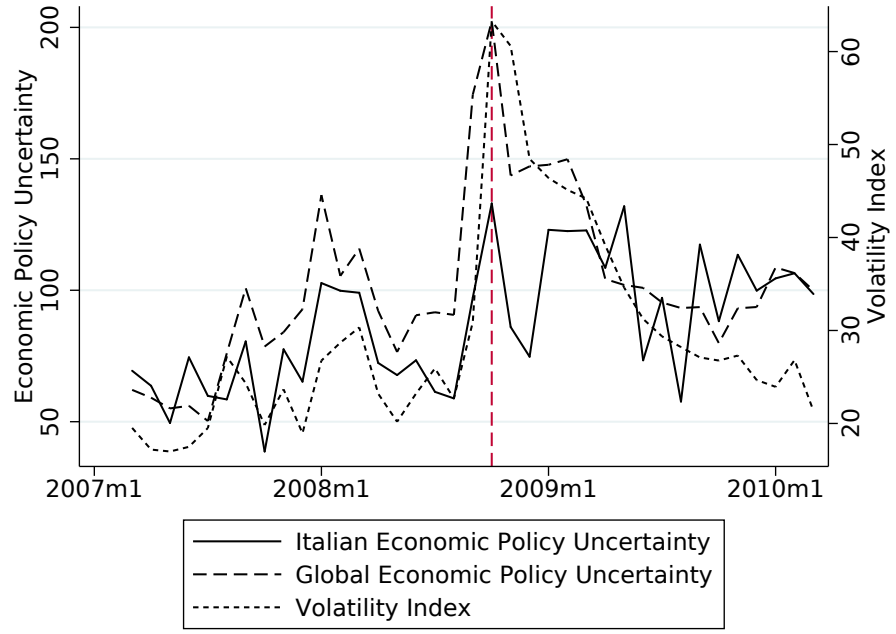
Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include the intercept and firm fixed effects. Standard errors clustered at the province-month level are reported in brackets.

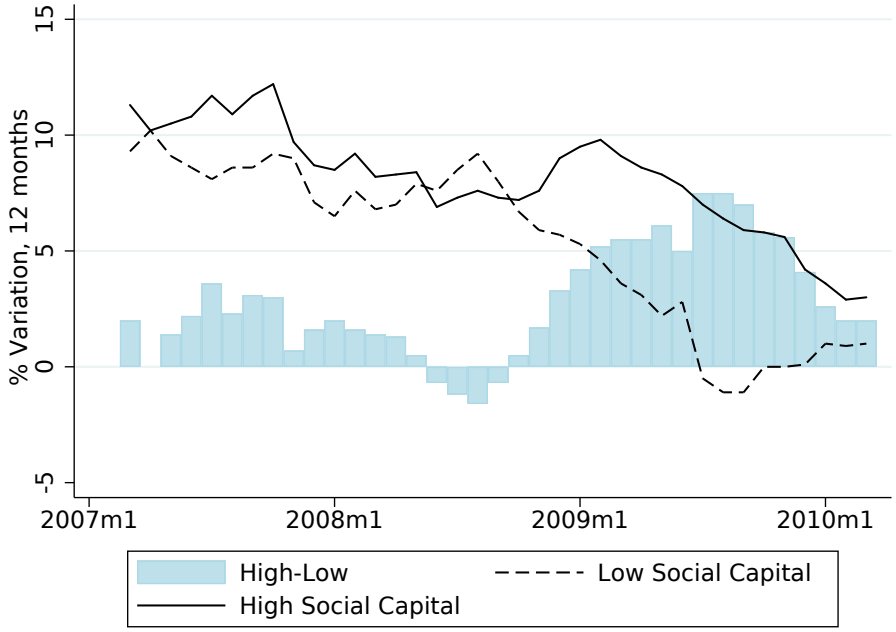
Table 21: Economic Policy Uncertainty

VARIABLES	Baseline	Waste Sorting	Blood Donation	Voter turnout in Referenda
	(1)	(2)	(3)	(4)
UncShock*Social capital		0.066***	0.033***	0.077***
		(0.010)	(0.005)	(0.011)
UncShock	-0.009***	-0.024***	-0.020***	-0.073***
	(0.002)	(0.003)	(0.003)	(0.009)
Observations	832110	832110	832110	832110
Adjusted R^2	0.140	0.140	0.140	0.140

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include the intercept, firm fixed effects and bank-pool fixed effects. Standard errors clustered at the province-month level are reported in brackets.

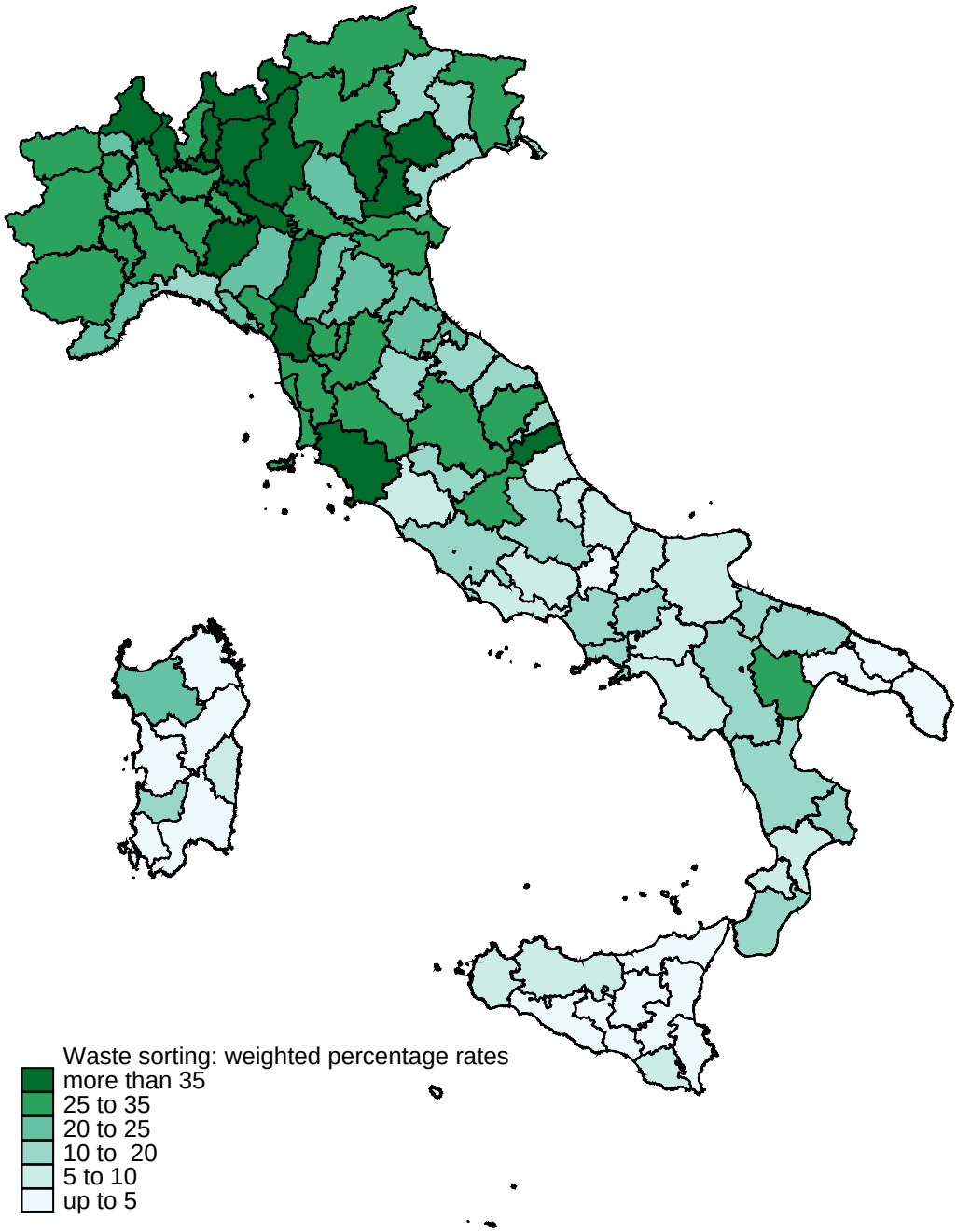
Figure 1: Uncertainty and Credit





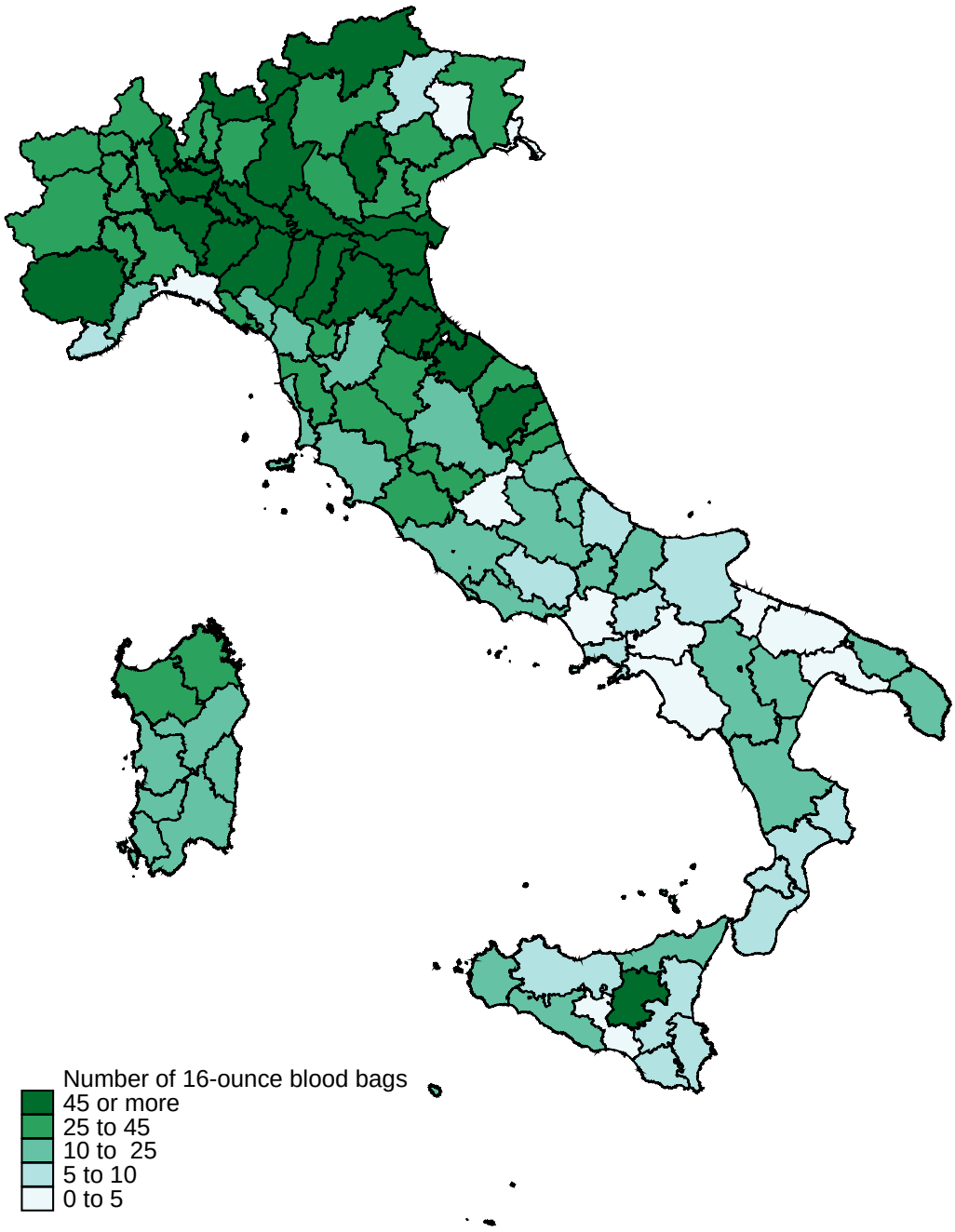
Notes: The upper panel reports the Global and Italian Economic policy uncertainty index constructed by Baker, Bloom, and Davis 2016. The lower panel compares the credit growth rate of two bordering provinces, one endowed with a level of social capital below the 25^{th} percentile and the other with a level above the 75^{th} percentile.

Figure 2: Trust across Italian Provinces: Waste Sorting



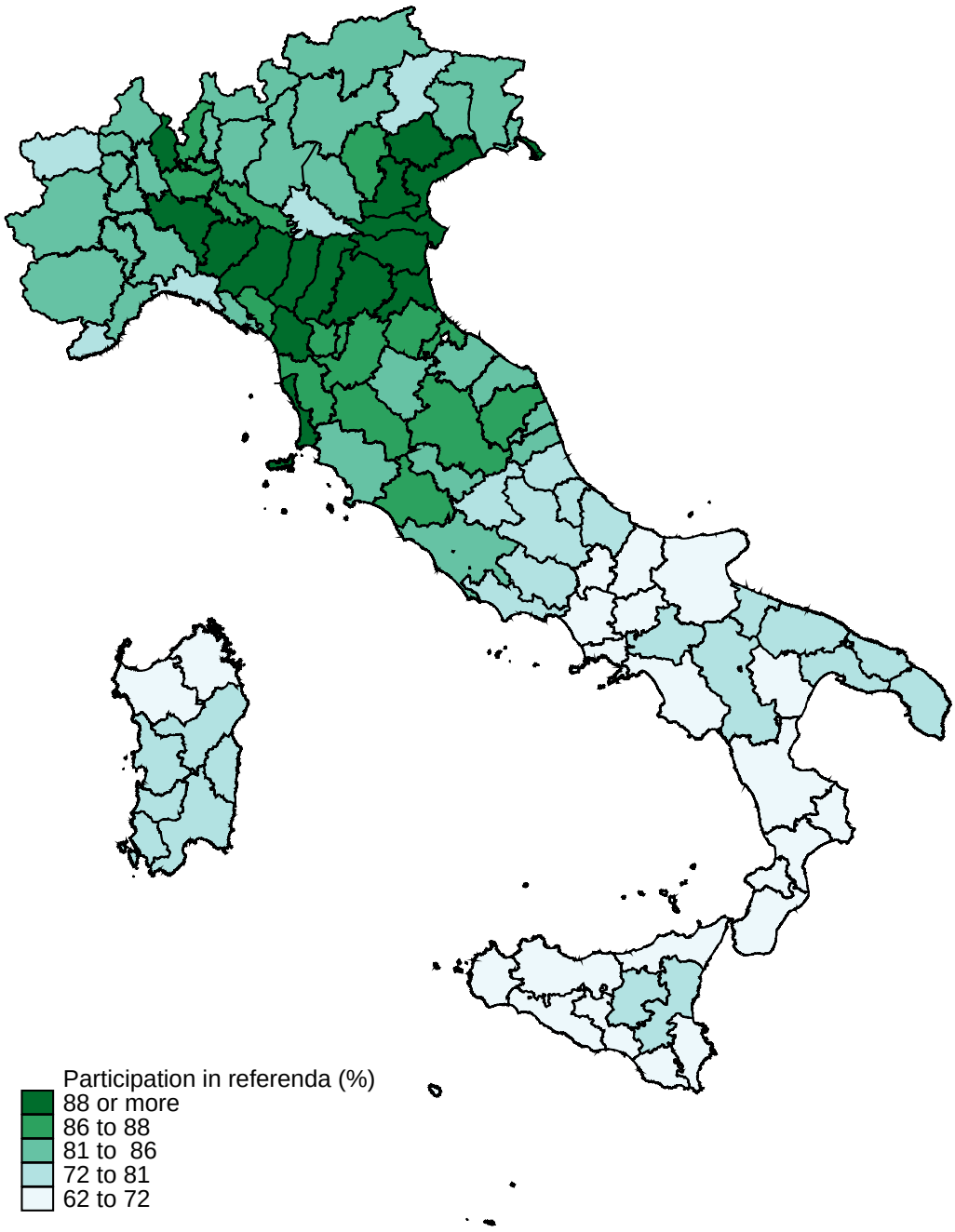
Notes: Darker areas correspond to provinces with higher fraction of waste sorted. The data are weighted for the presence of facilities dedicated to collect sorted waste.

Figure 3: Trust across Italian Provinces: Blood Donation



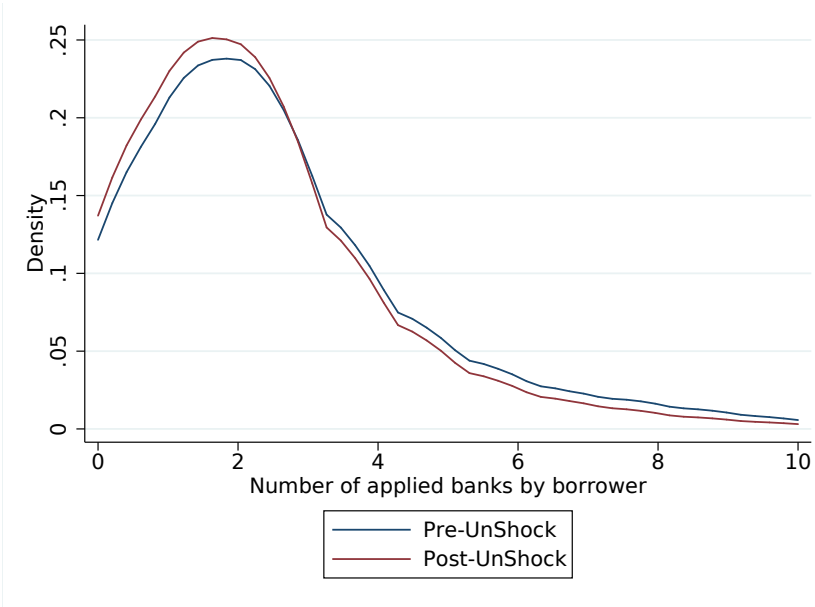
Notes: Darker areas correspond to provinces with higher level of blood donation

Figure 4: Trust across Italian Provinces: Participation in Referenda



Notes: Darker areas correspond to provinces with higher participation in referenda

Figure 5: Number of calls by borrowers



Notes: Kernel density for the number of banks whom the same borrower applied for a loan in the same month.

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Appendices

A.1 Credit Register data and Social Capital

One common limitation of the CRs' data is that, while loan requests are explicitly observed, loan denials and acceptances are not reported. However, from the CR it is easily verifiable whether following a loan request by a firm to a new bank the credit granted to that firm goes from zero to a positive amount. However, a potential underestimation bias of the probability of approving a loan may arise since while loan applications are reported independently of the loan amount demanded, loans are reported only if their amount is beyond a certain threshold. While it is not possible to rule out the possibility that some loan requests are approved for loan amounts that are below the reporting threshold, it is worthwhile to note that, for the purposes of this paper, a less stringent condition has to be met. In practice, what we need to assure is that the change in the threshold had a homogeneous impact on the rejection bias, independently from the level of social capital of the province where the borrower is headquartered.

To this aim, we exclude from our sample all bank-firm pairs below 75,000 euro throughout the whole sample period. This in practice means that we treat loan approvals between 75,000 and 30,000 euro as they were rejections. By doing this way, on the one hand, we overestimate rejection rates while, on the other hand, we make them comparable before and after the change in the threshold occurred. However, even once we have made the threshold constant over time, one may still doubt that the threshold and the rejection

bias have a different impact within the country and across firms, depending on the level of social capital. To check whether the effect of the threshold is independent from the level of social capital we do the following econometric test.[29] We estimate the probability that a borrower reported in the credit register at the end of January 2009 was not reported in the CR at the end of 2008 as a function of the level of social capital of the province where the borrower is headquartered, plus other controls. In this way, we check whether social capital is orthogonal or not to the threshold. Results in Table A.1 show that social capital, measured by the level of waste sorted, is not related to the level of the threshold. A statistical significant impact is detected for other measures but coefficients are economically not significant.

A.2 Parallel Trend Assumption

The idea behind our model is that the uncertainty shock makes the role of social capital more relevant. The parallel trend assumption requires that, before the uncertainty shock, the difference in credit supply due to social capital is constant over time. To test this assumption we interact the level of social capital with time dummies allowing for leads and lags around the shock, leaving out as baseline both the interactions for the last pre-treatment and the first treatment periods, since our dependent variable is defined on

[29] A less stringent condition, alternative to independence, is that the rejection bias goes in the opposite direction, i.e. that, following Lehman default, the demand for credit declined by more in those areas endowed with a higher level of social capital. In that case, the bias would go against our hypothesis that social capital mitigated the impact of the rise in the level of uncertainty implying that while the magnitude of the impact of social capital is underestimated the sign of the related coefficient is not distorted.

a not constant time window. Figure A.1 plots the estimated coefficients with their confidence intervals for all our measures of social capital. The coefficients are close to zero and flat before the shock, after the shock they are higher and increasing. This suggests that the parallel trend assumption is satisfied.

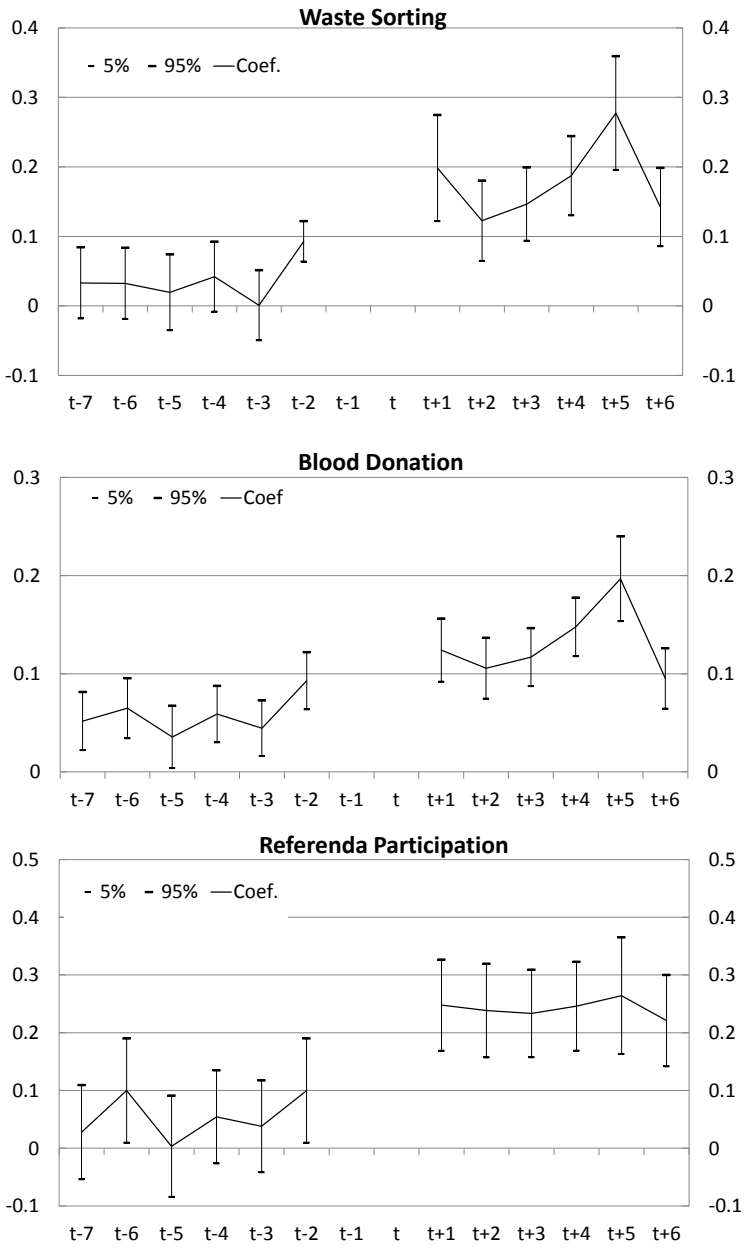
The different patterns before and after the shock provide an ideal experiment to analyse the nexus between social capital and uncertainty.

A.3 Firms Riskiness and Social Capital

The rise in uncertainty that followed the Lehman default could increase firms' default probabilities making our identification strategies more challenging. To address this problem we rely on data from Cerved group a private company providing a database for a large sample of Italian firms which contains detailed information about firms' activity, balance sheets, and risk, reported on a yearly basis.[30] On average, firms who apply for loans have good credit scorings: the mean Z-score is 5.3 on a scale ranging from 1 to 9, where scores below 3 typically indicate sound firms and scores above 7 identify troubled firms. As shown in the main text the quality of the applicants is very similar in the pre-crisis and crisis period (Table 4). Table 5 in the paper displays some information regarding the composition of the sample in terms of credit scorings. The composition is fairly the same between low and high social capital provinces except that for firms classified as low default risk. To further explore this concern we compute three indicator variables: i) *low default risk* that equals 1 if the Z-score is below 3,

[30]Banks rely on the same dataset for their granting decisions.

Figure A.1: Comparing trend before and after the Uncertainty shock



ii) *medium default risk* that equals 1 if the Z-score is between 4 and 6, iii) *high default risk* if the Z-score is above 7. We estimate our main regression using these indicator variables as dependent variables. Table A.2 shows that social capital does not affect the probability of being a high or medium default risk firm. As expected the probability of being a low default risk firm is positively affected by social capital, this evidence is consistent with the idea that social capital enhances firms' creditworthiness and suggests that we should be careful when interpreting results concerning low default risk firms. However, this category represents only around 6 percent of the full sample and would unlikely affect our main results. To upfront any doubt we estimate our main specification excluding the firms classified as sound. Table A.3 shows that our findings are robust to this extent.

A.4 Different set of fixed effects

Additonal robustness:

- *Using province fixed effects in place of firm fixed effects*

  Using firm fixed effects allows us to perfectly account for unobserved firm characteristics. However, in this way we are restricting our estimation sample to firms that apply both before and after the shock. These firms may be a particular kind of firm, short of credit both before and after the shock. To check whether our results are more general and apply to all firms we test their robustness to the use of province fixed effects in place of firm fixed effects. Table A.4 shows that results are

robust.

- *Excluding bank-pool fixed effects*: Table A.5
- *Including the incumbent banks in the bank-pool fixed effects*: Table A.6

A.5 Controlling for banks involved in M&A

To avoid strange behaviors in the data driven by mergers and acquisitions among banks, we assumed that all mergers occurred since the first month of our sample period. To further asses this issue, here we re-estimate our model including a dummy $M\&A$ that takes value 1 for banks involved in M&A operations in a range of 6 months around the date of the merge or of the acquisition. Our results are not affected, Table A.7.

A.6 Two-way clustered errors

- *Two-way clustered errors*

  We conduct further test on our estimation multi-clustering errors simultaneously at the province and month level (as in Cameron, Gelbach, and Miller 2011), Table A.8.

A.7 Uncertainty shock and banks dimension

The default of Lehman was an uncertainty shock mainly exogenous to the Italian banking system. However, one could argue that the largest

banking groups were directly affected by the global financial crisis and, consequently, that our results could be driven by those largest banks. If this is the case, we would expect to detect the negative effect of the uncertainty shock and the mitigating role of social capital only for the credit supply of the largest banks. In order to address this issue, we run two separate regressions: one focusing on firms applying to only 5 largest banking groups and another focusing only on firms not applying to 5 largest banking groups. Table A.9 and A.10 show that the default of Lehman was mainly an uncertainty shock affecting banks behind its material effect on their balance-sheets.

Table A.1: Threshold change and Social Capital

	Waste Sorting	Blood Donation	Voter turnout in Referenda
Social capital	-0.005	-0.000***	0.001***
	(0.003)	(0.000)	(0.000)
Low Default Risk	-0.161***	-0.161***	-0.161***
	(0.002)	(0.002)	(0.002)
Medium Default Risk	-0.174***	-0.174***	-0.174***
	(0.001)	(0.001)	(0.001)
High Default Risk	-0.194***	-0.194***	-0.194***
	(0.001)	(0.001)	(0.001)
Constant	0.366***	0.370***	0.259***
	(0.003)	(0.003)	(0.010)
Observations	1897972	1897972	1897972
Adjusted R^2	0.112	0.113	0.113

Notes: The dependent variable equals 1 if the credit relationship appers in the first quarter of 2009 due to the threshold change, and zero otherwise. Data refer to all the exposure reported in the Credit Register on the first quarter of 2009. All the regressions include area and bank fixed effects.

Table A.2: Firms Riskiness and Social Capital

	Default Risk		
VARIABLES	Low	Medium	High
		Waste Sorting	
UncShock*Social capital	0.014***	0.009	-0.004
	(0.003)	(0.006)	(0.005)
$\Delta Overnight_{t-1}$	0.002	-0.016	0.011
	(0.019)	(0.035)	(0.029)
R^2	0.800	0.789	0.764
		Blood Donation	
UncShock*Social capital	0.005***	0.001	-0.000
	(0.002)	(0.003)	(0.003)
$\Delta Overnight_{t-1}$	0.002	-0.016	0.011
	(0.019)	(0.035)	(0.029)
R^2	0.800	0.789	0.764
		Voter turnout in Referenda	
UncShock*Social capital	0.019***	-0.007	-0.007
	(0.005)	(0.009)	(0.008)
$\Delta Overnight_{t-1}$	0.002	-0.016	0.011
	(0.019)	(0.035)	(0.029)
R^2	0.800	0.789	0.764
Observations	832110	832110	832110
Firm fixed effects	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes
Bank-Pool FE	Yes	Yes	Yes

Notes: Each column reports the results for different estimation. For the first column, *Low*, the dependent variable is an indicator variables taking value 1 if the firm is rated as low default risk, i.e the Z-score is below 3. For the second column, *Medium*, the dependent variable is an indicator variables taking value 1 if the firm is rated as medium default risk, i.e the Z-score is between 4 and 6. For the last column, *High*, the dependent variable is an indicator variables taking value 1 if the firm id rated as high default risk, i.e the Z-score is above 7.

Table A.3: Uncertainty and Social Capital - Excluding Low Default Risk firms

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.090***	0.091***		0.048***	0.049***		0.079***	0.082***	
		(0.016)	(0.015)		(0.008)	(0.007)		(0.021)	(0.019)	
UncShock	-0.038***	-0.058***			-0.054***			-0.103***		
	(0.003)	(0.005)			(0.004)			(0.017)		
$\Delta Overnight_{t-1}$	-0.272***	-0.271***	-0.192**	-0.194**	-0.271***	-0.193**	-0.193**	-0.271***	-0.193**	-0.193**
	(0.084)	(0.082)	(0.075)	(0.077)	(0.083)	(0.076)	(0.077)	(0.084)	(0.077)	(0.077)
ΔCPI_{t-1}	0.007***	0.007***			0.007***			0.007***		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.005***	0.005***			0.005***			0.005***		
	(0.001)	(0.001)			(0.001)			(0.001)		
UncShock*Low social capital				-0.015***			-0.003			-0.020***
				(0.004)			(0.004)			(0.004)
UncShock*High social capital				0.008**			0.020***			-0.004
				(0.004)			(0.004)			(0.004)
Observations	772663	772663	772663	772663	772663	772663	772663	772663	772663	772663
Adjusted R^2	0.139	0.140	0.142	0.142	0.140	0.142	0.142	0.139	0.142	0.142

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where $UnShock$ is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table A.4: Using province fixed effects in place of firm fixed effects

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.112***	0.109***		0.060***	0.059***		0.129***	0.128***	
		(0.016)	(0.014)		(0.007)	(0.006)		(0.020)	(0.016)	
UncShock	-0.036***	-0.061***			-0.056***			-0.143***		
	(0.003)	(0.004)			(0.004)			(0.016)		
$\Delta Overnight_{t-1}$	-0.149**	-0.148***	-0.175***	-0.176***	-0.148**	-0.175***	-0.175***	-0.148**	-0.176***	-0.176***
	(0.059)	(0.057)	(0.052)	(0.053)	(0.057)	(0.052)	(0.053)	(0.058)	(0.053)	(0.053)
ΔCPI_{t-1}	0.011***	0.011***			0.011***			0.011***		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.003***	0.003***			0.003***			0.003***		
	(0.000)	(0.000)			(0.000)			(0.000)		
UncShock*Low social capital				-0.022***			-0.007**			-0.028***
				(0.003)			(0.003)			(0.003)
UncShock*High social capital				0.010***			0.025***			-0.002
				(0.003)			(0.003)			(0.003)
Observations	1568047	1568047	1568047	1568047	1568047	1568047	1568047	1568047	1568047	1568047
Adjusted R^2	0.091	0.092	0.093	0.093	0.092	0.093	0.094	0.092	0.093	0.093

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include province fixed effects, firm's Zscore, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text.

Table A.5: Excluding bank-pool fixed effects

VARIABLES	Baseline	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
UncShock*Social capital		0.092***	0.089***	0.035***	0.034***	0.059**	0.059***
		(0.020)	(0.016)	(0.009)	(0.007)	(0.024)	(0.019)
UncShock	-0.041***	-0.062***		-0.053***		-0.090***	
	(0.005)	(0.006)		(0.006)		(0.020)	
$\Delta Overnight_{t-1}$	-2.456***	-2.457***		-2.458***		-2.458***	
	(0.359)	(0.351)		(0.356)		(0.358)	
CPI_{t-1}	0.003***	0.003***		0.003***		0.003***	
	(0.001)	(0.001)		(0.001)		(0.001)	
ΔGDP_{t-1}	0.009***	0.009***		0.009***		0.009***	
	(0.001)	(0.001)		(0.001)		(0.001)	
Observations	986694	986694	986694	986694	986694	986694	986694
Adjusted R^2	0.069	0.069	0.075	0.069	0.075	0.069	0.075
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	No	Yes	No	Yes	No	Yes

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. Standard errors clustered at the province-month level are reported in brackets.

Table A.6: Including the incumbent banks in the bank-pool fixed effects

VARIABLES	Baseline	Waste Sorting		Blood Donation		Voter turnout in Referenda	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
UncShock*Social capital		0.057***	0.059***	0.043***	0.045***	0.095***	0.099***
		(0.014)	(0.013)	(0.008)	(0.007)	(0.024)	(0.020)
UncShock	-0.033***	-0.046***		-0.048***		-0.112***	
	(0.003)	(0.005)		(0.004)		(0.020)	
$\Delta Overnight_{t-1}$	0.684***	0.679***		0.682***		0.682***	
	(0.225)	(0.220)		(0.219)		(0.223)	
CPI_{t-1}	0.002***	0.002***		0.002***		0.002***	
	(0.001)	(0.001)		(0.001)		(0.001)	
ΔGDP_{t-1}	0.002***	0.002***		0.002***		0.002***	
	(0.001)	(0.001)		(0.001)		(0.001)	
Observations	410707	410707	410707	410707	410707	410707	410707
Adjusted R^2	0.289	0.290	0.295	0.290	0.295	0.290	0.295
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month fixed effects	No	No	Yes	No	Yes	No	Yes
All Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. Standard errors clustered at the province-month level are reported in brackets.

Table A.7: Controlling for banks involved in M&A

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.100***	0.098***		0.052***	0.050***		0.089***	0.090***	
		(0.018)	(0.014)		(0.009)	(0.007)		(0.023)	(0.018)	
UncShock	-0.039***	-0.061***			-0.057***			-0.113***		
	(0.004)	(0.005)			(0.005)			(0.019)		
M&A	-0.005*	-0.004	-0.003	-0.003	-0.004	-0.003	-0.003	-0.004	-0.003	-0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
$\Delta Overnight_{t-1}$	-1.597***	-1.602***			-1.600***			-1.599***		
	(0.217)	(0.208)			(0.209)			(0.215)		
CPI_{t-1}	0.007***	0.007***			0.007***			0.007***		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.006***	0.006***			0.006***			0.006***		
	(0.001)	(0.001)			(0.001)			(0.001)		
UncShock*Low social capital				-0.016***			-0.003			-0.021***
				(0.004)			(0.004)			(0.004)
UncShock*High social capital				0.009**			0.021***			-0.003
				(0.004)			(0.003)			(0.003)
Observations	832110	832110	832110	832110	832110	832110	832110	832110	832110	832110
Adjusted R^2	0.139	0.139	0.145	0.145	0.139	0.145	0.145	0.139	0.145	0.145

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table A.8: Two-way clustered errors

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.100***	0.098***		0.052***	0.050***		0.090**	0.091**	
		(0.027)	(0.026)		(0.017)	(0.017)		(0.040)	(0.039)	
UncShock	-0.038***	-0.061***			-0.056***			-0.113***		
	(0.013)	(0.015)			(0.015)			(0.038)		
$\Delta Overnight_{t-1}$	-1.589***	-1.595***			-1.593***			-1.592***		
	(0.440)	(0.442)			(0.441)			(0.440)		
CPI_{t-1}	0.007**	0.007**			0.007**			0.007**		
	(0.003)	(0.003)			(0.003)			(0.003)		
ΔGDP_{t-1}	0.006***	0.006***			0.006***			0.006***		
	(0.002)	(0.002)			(0.002)			(0.002)		
UncShock*Low social capital				-0.016**			-0.003			-0.021***
				(0.006)			(0.008)			(0.008)
UncShock*High social capital				0.009			0.021***			-0.003
				(0.007)			(0.006)			(0.006)
Observations	832110	832110	832110	832110	832110	832110	832110	832110	832110	832110
Adjusted R^2	0.139	0.139	0.145	0.145	0.139	0.145	0.145	0.139	0.145	0.145

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where *UnShock* is estimated, macroeconomic controls are included in place of month fixed effects, see text.

Table A.9: Only firms applying to 5 largest banking groups

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.142***	0.121***		0.064***	0.053***		0.121***	0.109***	
		(0.031)	(0.024)		(0.017)	(0.014)		(0.040)	(0.035)	
UncShock	-0.037***	-0.071***			-0.060***			-0.138***		
	(0.006)	(0.008)			(0.007)			(0.033)		
$\Delta Overnight_{t-1}$	-0.608*	-0.656**			-0.629*			-0.619*		
	(0.328)	(0.324)			(0.325)			(0.328)		
CPI_{t-1}	0.002*	0.002*			0.002*			0.002*		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.004***	0.004***			0.004***			0.004***		
	(0.001)	(0.001)			(0.001)			(0.001)		
UncShock*Low social capital				-0.024***			-0.003			-0.024***
				(0.009)			(0.007)			(0.008)
UncShock*High social capital				0.010*			0.023***			0.009
				(0.005)			(0.005)			(0.006)
Observations	201281	201281	201281	201281	201281	201281	201281	201281	201281	201281
Adjusted R^2	0.104	0.104	0.115	0.115	0.104	0.115	0.115	0.104	0.115	0.115

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where $UnShock$ is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

Table A.10: Only firms not applying to 5 largest banking groups

VARIABLES	Baseline	Waste Sorting			Blood Donation			Voter turnout in Referenda		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
UncShock*Social capital		0.076***	0.079***		0.045***	0.046***		0.079***	0.080***	
		(0.017)	(0.015)		(0.009)	(0.008)		(0.027)	(0.023)	
UncShock	-0.031***	-0.047***			-0.045***			-0.096***		
	(0.004)	(0.006)			(0.006)			(0.023)		
$\Delta Overnight_{t-1}$	-2.070***	-2.057***			-2.062***			-2.066***		
	(0.265)	(0.258)			(0.258)			(0.262)		
CPI_{t-1}	0.010***	0.010***			0.010***			0.010***		
	(0.001)	(0.001)			(0.001)			(0.001)		
ΔGDP_{t-1}	0.006***	0.006***			0.006***			0.006***		
	(0.001)	(0.001)			(0.001)			(0.001)		
UncShock*Low social capital				-0.018***			-0.004			-0.021***
				(0.005)			(0.005)			(0.005)
UncShock*High social capital				0.003			0.017***			-0.011***
				(0.004)			(0.004)			(0.004)
Observations	391834	391834	391834	391834	391834	391834	391834	391834	391834	391834
Adjusted R^2	0.161	0.162	0.167	0.167	0.162	0.167	0.167	0.162	0.167	0.167

Notes: The dependent variable equals 1 if the search for a loan started in month t by firm i ends with the granting of a loan within the following quarter, and zero otherwise. Data refer to a panel of nonfinancial firms that asked for a loan before and after Lehman Brothers collapse. All the regressions include firm fixed effects, bank-pool fixed effects and macrocontrols or month fixed effects alternatively. Where $UnShock$ is estimated, macroeconomic controls are included in place of month fixed effects, see text. Standard errors clustered at the province-month level are reported in brackets.

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