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Depositors' Trust: Some Empirical Evidence from Indonesia

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Abstract

We develop a comprehensive index, based on Robbins and Judge's (2008) five dimensions of trust, to measure depositors' trust in individual banks as well as trust in the banking industry and financial safety-net. Using a survey of 992 retail depositors in Indonesia, we find that on average the depositors have a relatively high level of trust in individual banks as well as trust in the banking industry and financial safety-net. Next, we find that depositors' trust is affected by personal characteristics—for instance, women and older depositors have relatively lower trust. Depositors tend to put their trust in individual banks and the financial system if they have higher trust in the information conveyed by the government. Religious and economic values have positive effects on depositors' trust at both the micro and macro levels. Our results also document that depositors' risk-taking level is positively associated with depositors' trust. Furthermore, we find that more educated depositors have relatively lower trust, which might imply that higher financial literacy helps to improve market discipline.

Keywords: trust, depositors, banks, financial system, survey

1. Introduction

In the theory of financial intermediation, banks play an essential role to enhance aggregate investment in the economy by channeling savings into productive activities (Bhattacharya and Thakor, 1993). To perform this role, banks offer short-term deposit contracts to savers and then channel the savings to fund productive long-term investments by firms through loan contracts. In other words, banks perform a liquidity creation function to the economy (Berger and Bouwman,

2009). Since the deposit contracts allow depositors to withdraw their savings anytime at any amount, banks face the risk of deposit runs when many depositors withdraw a large amount of their savings at almost the same time (Bryant, 1980; Diamond and Dybvig, 1983). The banks will not be able to handle the deposit runs as banks will likely lose the value of their illiquid loan contracts through fire sales (Diamond and Rajan, 2001). Bank runs are contagious, similar to a viral infection. Once a depositor observes other depositors abnormally withdraw their savings from a bank, the depositor's trust in his bank might be eroded worrying that a similar problem has occurred to the bank and that the bank will not be able to pay him back if he withdraws later (e.g. Kiss et al., 2014). This behavior can be exacerbated if a bank has more large uninsured depositors (e.g. Iyer and Puri, 2012; Trinugroho et al., 2020). Therefore, depositors' trust in banks becomes the necessary condition for a banking system to operate effectively.

Though depositors' trust in banks is a crucial concept, measuring it is a challenging research problem. Padua (2014) relates the concept of trust in the economy as a complex construct that lies between the "animal spirit" in Keynes (1936) and confidence that is based on the rational choice theory. Similarly, Blomqvist (1997) and Fehr (2009) contend that a universal definition of trust seems to be hard to define as it is usually context-specific and might have multi-perspective in different fields. This paper offers a novel comprehensive measure of depositors' trust, which covers five dimensions of trust in Robbins and Judge (2008), from a survey to individual depositors of commercial banks in Indonesia. To our knowledge, not many papers yet that are close to our study. Several notable papers are survey-based cross-country studies such as Stevenson and Wolfers (2011), Fungáčová et al. (2019), and single-country studies such as Sapienza and Zingales (2012), Carbó-Valverde et al. (2013), Jansen et al. (2015), Knell and Stix (2015), Filipiak (2016), and Park (2020). These single-country studies use survey data from the U.S., Spain, Netherland, Austria, India, and South Korea respectively.

Our paper is different from its predecessors in several ways. First, most of the previous studies rely on a single question about the level of trust in banks or trust in financial institutions, and none have considered multidimensionality to measure depositors' trust. In this paper, we consider five dimensions of trust based on Robbins and Judge (2008) to construct an index of depositors' trust in banks. Second, we measure depositors' trust in individual banks as well as trust in the banking industry and financial safety-net, both in normal time and from their experience during the recent global financial crisis. Third, to our knowledge, our paper is the first to present

empirical evidence of survey-based depositors' trust from Indonesia, the largest country in Southeast Asia. On the one hand, by using a single country setting, this study mitigates heterogeneity bias that generally becomes the main critic of most cross-countries studies. On the other hand, as the largest archipelagic country in the world with multi-ethnic groups and religions¹, Indonesia offers a unique diversity in socio-demographic factors and values. Lastly, we explore a battery of determinant factors of depositors' trust including socio-demographic, personal values related to religion, materialism, culture, and risk-taking, as well as general trust, exposures to social media, and individual bank reputation. These determinant factors extend what the previous literature has explored.

By way of preview, from the survey of 992 individual depositors in Indonesia, we find that on average the depositors have a relatively high level of trust in individual banks as well as trust in the banking industry and financial safety-net. Consistent with the information asymmetry hypothesis, depositors' trust in individual banks is higher than trust in the banking industry and financial safety-net. Next, in line with the literature, we find that depositors' trust is lower during the recent global financial crisis than normal time, whether it is trust in individual banks or trust in the banking industry and financial safety-net. In terms of determinants of depositors' trust, we find that gender, age, risk-taking, and personal values affect trust in banks and trust in the banking industry and financial safety-net. In particular, men, young, and risk-taker depositors have relatively higher trust in banks as well as trust in the banking industry and financial safety-net. Moreover, we find that more educated depositors have lower trust in individual banks and trust in the banking industry and financial safety-net. Based on this evidence, we argue that financial literacy through education might be an important policy instrument to mitigate the concern of market discipline erosion with deposit insurance in place.²

The rest of the paper is organized as follows. Section 2 discusses the related literature. Section 3 describes the data and methodology used in this paper. Section 4 presents empirical results and robustness checks. Section 5 concludes.

¹ The CIA's world factbook about Indonesia, can be accessed at <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html>.

² Indonesia has explicit deposit insurance with flat-rate premium system since 2005, in which each member bank pays the same premium regardless its risk. IADI (2013) suggests its members to consider the so-called differential premium system, which adjusts premium rate by each member bank's risk, in order to mitigate the potential moral hazard due to risk subsidy to unsound banks in a flat-rate premium system.

2. Related literature

Depositor distrust could lead to a bank run, in which a substantial number of depositors withdraw their funds because they are worried that the bank will fail (e.g. Iyer and Puri, 2012). A bank run can endanger economic stability by causing a contagion effect, which may trigger a deeper financial crisis. One notable example was in Indonesia during the 1997/1998 Asian financial crisis, which recorded in history as one of the costliest financial crises in the world (Laeven and Valencia, 2013).³ In November 1997, the closing of sixteen banks eroded public confidence in Indonesia's banking system, which then led to bank runs in several other banks including large banks. The government subsequently decided to implement a blanket guarantee in January 1998, limited to domestic banks, to rebuild public trust in the banking system (Enoch et al., 2003; Hadad et al., 2011). Considering the potentially damaging impact of a bank run to the overall economy during a financial crisis, restoring trust in banks is among the top priorities of financial regulators (e.g. Knell and Stix, 2009; Carbó-Valverde et al., 2013).

Despite its importance, trust is a complex construct to measure in an empirical study. The complexity comes from the fact that trust commonly context-specific and might have multi-perspective in different fields (Blomqvist, 1997; Fehr, 2009, Padua, 2014). Addressing this multidimensionality in trust construct, two economists in behavioral science literature, Robbins and Judge (2008) define trust as a psychological state that exists when someone agrees to make himself dependent on others because of positive expectations. Further, they contend that trust consists of five dimensions: integrity, competence, consistency, loyalty, and transparency. Integrity refers to honesty and truthfulness, competence is related to technical and interpersonal knowledge and skills, consistency means reliability, predictability, and good judgment in handling situations, loyalty is associated with willingness to protect or dedication to trustors, while transparency is defined as openness to give trustors the full truth.

There are a few numbers of studies that have examined depositors' trust in banking. Several studies examine trust in banking using a single country setting, and a few others use cross-country settings. In general, these studies rely on several survey questions on trust or confidence in banks or financial institutions.

³ Laven and Valencia (2013) show that the Asian financial crisis imposed fiscal costs up to 56.8 percent of GDP to Indonesia.

Sapienza and Zingales (2012) use a telephone survey to study 1,034 households in the United States, posing questions about how much respondents believe in certain types of institutions or people including bankers, banks, the government, large companies, capital markets, and brokers. Carbó-Valverde et al. (2013) conduct a study in Spain using telephone interviews. They question the level of respondents' trust in general, trust in specific types of banks, and changes in their behavior in response to the financial crisis happening in Europe at that time. Knell and Stix (2015), using a sample from Austria, detail the results of an IFES (Institute for Empirical Social Studies) survey with 2,000 respondents. They ask how much respondents believe in various types of institutions, including the Austrian National Bank, domestic banks, the European Central Bank, and foreign banks. Filipiak (2016), using the National Data Survey on Savings Patterns of Indians (NDSSP), measures the level of trust in financial institutions by providing respondents with five alternative answers: 1) I will definitely trust my money to them, 2) I might trust my money to them, 3) I do not like to trust my money to them, 4) I certainly will not trust my money to them, and 5) Do not know the institution. Jansen et al. (2015) retrieve data from two household surveys in the Netherlands conducted by DNB (the Dutch central bank). This survey asks respondents what has caused them to lose trust in the bank, as indicated by their withdrawal of funds. Indicated factors that are included as scenarios are; 1) the bank is led by a dominant person, 2) the bank manager receives a large bonus, 3) the explanation regarding the bank's financial products is difficult to read, 4) the bank's share price fell sharply, 5) family and friends suggest withdrawing funds from the bank, 6) there are reports that the bank's customers are withdrawing funds from the bank, 7) the bank received assistance from the government to remain financially healthy, and 8) the government nationalized the bank. Park (2020) surveys 827 respondents in South Korea, asking a question adopted from the World Value Survey about whether the respondent thinks that financial institutions can be trusted in general.

Stevenson and Wolfers (2011) examine trust in institutions, including banks, in the U.S. and cross-country comparisons. Using the annual Gallup surveys of Trust in Institutions, General Social Survey (GSS), and Gallup's Trust and Honesty polls, they analyze how much US respondents have confidence in banks, in people running banks and financial institutions, and in bankers' honesty and ethical standards respectively. Meanwhile, the Gallup World Poll is used to study trust in financial institutions or banks using a question of how confidence each respondent is to the financial institutions or banks. They find that trust in banks and/or trust in financial

institutions follows the business cycle. Fungáčová et al. (2019) conducted a cross-country study using data from the World Values Survey, which quantifies responses to a direct question about how much confidence a respondent has in banks. This survey measures trust in banks with a scale from one to four: 1) a great deal of confidence, 2) quite a lot of confidence, 3) not very much confidence, or 4) none at all. They find large cross-country differences in trust in banks and that it is affected by several sociodemographic indicators such as gender, income, age, education, access to television and internet, as well as religious, political, and economic values.

In summary, most of the previous studies rely on a limited number of questions about the level of depositors' trust in banks or trust in financial institutions, and none have considered multidimensionality to measure depositors' trust or study a more general depositors' trust in the banking industry and financial safety-net. Moreover, none of the previous studies has presented empirical evidence of depositors' trust from Southeast Asian countries. This is somewhat surprising given that the 1997/1998 Asian financial crisis was initialized in Southeast Asia. At that time, Indonesia as the largest country in this region had to deal with pervasive bank runs (Enoch et al., 2003) and burdened fiscal costs up to 56.8 percent of GDP, which made it as one of the costliest financial crises in the world (Laeven and Valencia, 2013).

3. Data and methodology

3.1. Data

We measure depositors' trust using a survey to a sample of 992 individual depositors in Indonesia. The depositors are selected randomly using stratified purposive sampling from all 34 provinces in Indonesia. The sample covers both small depositors whose deposits in a bank less than the maximum deposit insurance coverage of IDR2 billion, and large depositors whose deposits larger than IDR 2 billion in a bank.⁴ All of the depositors in the sample are surveyed via direct interviews over two weeks in February 2019. Tables 1a and 1b show the distribution of our sample by province and by the size of each depositor's account respectively.

⁴ Under the Indonesia Deposit Insurance Corporation (IDIC) Act of 2004, as amended by the Act No. 7/2009 and the Government Regulation No. 66/2008, all depositors in the Indonesian banking industry are insured by the IDIC up to IDR2 billion for each depositor within every bank. Assuming an exchange rate of IDR16,000/USD, the maximum deposit insurance coverage is about USD125,000.

Table 1a

The sample distribution of depositors surveyed by province.

Province	Number of depositors	% Number of depositors	Province	Number of depositors	% Number of depositors
Aceh	13	1.31%	West Nusa Tenggara	19	1.92%
North Sumatera	38	3.83%	East Nusa Tenggara	7	0.71%
West Sumatera	20	2.02%	West Kalimantan	24	2.42%
Riau	14	1.41%	Central Kalimantan	7	0.71%
Jambi	10	1.01%	South Kalimantan	16	1.61%
South Sumatera	27	2.72%	East Kalimantan	19	1.92%
Bengkulu	6	0.60%	North Kalimantan	1	0.10%
Lampung	33	3.33%	North Sulawesi	8	0.81%
Bangka Belitung archipelago	5	0.50%	South Sulawesi	29	2.92%
Riau archipelago	8	0.81%	Southeast Sulawesi	5	0.50%
Jakarta, special district of the capital	58	5.85%	West Sulawesi	3	0.30%
West Java	159	16.03%	Central Sulawesi	5	0.50%
Central Java	166	16.73%	Gorontalo	6	0.60%
Yogyakarta, special district	29	2.92%	Maluku	3	0.30%
East Java	172	17.34%	North Maluku	2	0.20%
Banten	47	4.74%	Papua	8	0.81%
Bali	20	2.02%	West Papua	5	0.50%

This table reports the geographical distribution of 992 depositors surveyed from all Province in Indonesia. The main Java island includes 6 provinces: Jakarta, West Java, Banten, Central Java, Yogyakarta, and East Java. This island is the most populous is the center of government administration, business centers and manufacturing (Affandi et al., 2019).

At first glance, our sample covers about 63.61% of depositors from the Java island, the most populous island in Indonesia where most of the government offices and business centers are located. Our sample also comprises of 94.4% of small depositors that are fully insured by the Indonesia Deposit Insurance Corporation (IDIC). Though might not completely mimic the real distribution of depositors by province and depositors by size, we consider that our sample is a decent representation of the population distribution.⁵

⁵ The number of depositors data by province in the population is unavailable. The Indonesian Statistical Bureau (BPS) estimates that the number of residents in Java island in 2020 is about 56.2% (www.bps.go.id). Meanwhile, the IDIC statistics as of February 2019 shows that about 99.91% of depositor accounts have IDR 2 billion or less balance. However, one depositor might have more than one account in a bank. Unfortunately, we do not have access to this data.

Table 1b

The sample distribution of depositors surveyed by the size of each depositor's account.

Size of each depositor's balance in a bank	Number of depositors	Percentage (%)	Cumulative percentage (%)
IDR 25 million or less	512	51.6%	51.6%
Above IDR 25 million up to IDR 50 million	160	16.1%	67.7%
Above IDR 50 million up to IDR 100 million	114	11.5%	79.2%
Above IDR 100 million up to IDR 200 million	61	6.1%	85.4%
Above IDR 200 million up to IDR 500 million	45	4.5%	89.9%
Above IDR 500 million up to IDR 1 billion	24	2.4%	92.3%
Above IDR 1 billion up to IDR 2 billion	20	2.0%	94.4%
Above IDR 2 billion up to IDR 5 billion	42	4.2%	98.6%
Above IDR 5 billion	9	0.9%	99.5%
Not answered	5	0.5%	100.0%
TOTAL	992	100.0%	

This table reports the distribution of 992 depositors surveyed in Indonesia, classified by the size of each depositor's account. Each depositor might have more than one account in a bank.

The summary statistics of our sample for all variables are shown in Table 2. In brief, women constitute 44% of the respondents, and the average respondent age is 32.5 years old. These facts show that our sample has a relatively balanced composition between men and women and covers working-age depositors. Further, 81% of respondents put their major deposits in one of the big four banks and their average education is between diploma and undergraduate.

In terms of personal values, the average religious, economic, social, material, and cultural values of respondents in our sample are 7.42, 6.20, 8.84, 5.96, and 7.39, respectively. This implies that depositors in Indonesia put more emphasis on social, religious, and cultural values rather than economic and material values. Meanwhile, the average risk-taking level is 7.32, in line with Hofstede et al. (2010, p.232) that show Indonesian people have relatively low uncertainty avoidance (and hence, taking a higher risk). People with low uncertainty avoidance tend to treat uncertainty as a normal feature of life rather than a threat.⁶ Next, the respondents in our sample

⁶ Though uncertainty avoidance is not the same as risk avoidance, these two concepts bear much similarity. The difference between the two concepts lies on whether a probability can be assigned on it (Hofstede et al., 2010, p.199). More specifically, uncertainty is often associated with diffuse feelings without any probability can be assigned on it, while risk is commonly associated with a probability that something different that expectation occurs. Hofstede et al. show that Indonesian people have an uncertainty avoidance level at 48, which is considered a low level compared to

believe that government authorities are the most trustable sources of information (8.21), while social media are the least trusted (5.96).

Table 2
Descriptive statistics and variable definitions.

Variable	Description	Obs.	Mean	Std. Dev	Min	Max
TIB	Trust in bank index of 2019, measured by average score of each respondent's answers (scale 1 to 10). A larger scale means greater trust.	992	8.24	0.81	4.83	10
TBF	Trust in banking and financial system index of 2019, measured by the average score of each respondent's answers (scale 1 to 10). A larger scale means greater trust.	992	7.29	0.90	1.77	9.46
DTI	Depositor's trust index of 2019, measured by average score of each respondent's answers (scale 1 to 10). A larger scale means greater trust.	992	7.58	0.76	3.79	9.47
Education	Depositor's education level (1=junior high school or less, 2=senior high school, 3=diploma, 4=undergraduate, 5=graduate)	988	3.81	0.90	1	5
Woman	Dummy variable for depositor's gender (1 for woman, 0 for man)	992	0.44	0.50	0	1
Age	Respondent's age (in years)	990	32.52	11.32	19	70
Size_Deposits	Size of deposits in banks, classified to 9 tiers (see Table 1b)	987	2.37	2.01	1	9
Big4	Dummy variable for the big 4 banks (Bank Mandiri, Bank Central Asia, Bank Negara Indonesia, Bank Rakyat Indonesia). Equals 1 if a depositor puts most of his/her money in at least one of the big 4 banks, and 0 otherwise.	992	0.81	0.39	0	1
Religious	Depositor's religious value (scale 1 to 10). A larger scale means greater importance.	984	7.42	1.55	1	10
Economic	Depositor's economic value (scale 1 to 10). A larger scale means greater importance.	990	6.20	2.01	1	10
Social	Depositor's social value (scale 1 to 10). A larger scale means greater importance.	990	8.84	1.01	4	10
Material	Depositor's material value (scale 1 to 10). A larger scale means greater importance.	990	5.96	2.17	1	10
Cultural	Depositor's cultural value (scale 1 to 10). A larger scale means greater importance.	989	7.39	1.52	1	10
Risk-Taking	Depositor's risk-taking behaviour (scale 1 to 10). A larger scale means more willingness to take risk.	990	7.32	1.69	1	10
Family	Depositor's trust in information delivered by a family member (scale 1 to 10). A larger scale means greater trust.	988	6.96	1.74	1	10
Social Media	Depositor's trust in information from social media (scale 1 to 10). A larger scale means greater trust.	990	5.96	1.72	1	10
Online Media	Depositor's trust in information from online media (scale 1 to 10). A larger scale means greater trust.	990	6.93	1.53	1	10
Newspaper	Depositor's trust in information from newspaper (scale 1 to 10). A larger scale means greater trust.	974	7.43	1.45	1	10
Television	Depositor's trust in information from television (scale 1 to 10). A larger scale means greater trust.	984	7.13	1.60	1	10
Expert	Depositor's trust in economic experts' information analysis (scale 1 to 10). A larger scale means greater trust.	989	6.87	1.50	1	10
Govt	Depositor's trust in information delivered by government authorities (scale 1 to 10). A larger scale means greater trust.	990	8.21	1.41	1	10
Dummy_Java	Dummy variable for a depositor living in the Java island (1 if a depositor lives in the Java island, 0 otherwise)	992	0.64	0.48	0	1

other countries. As our sample shows that Indonesian depositors have relatively high level of risk-taking, we argue that this might reflect a low level of uncertainty avoidance among Indonesian people.

3.2. Measure of depositors' trust in individual banks

To address the multidimensionality of trust construct, we construct an index of depositors' trust in individual banks using Robins and Judge's (2008) five dimensions of trust. More specifically, the five dimensions include integrity (honesty and truthfulness), competence (technical and interpersonal knowledge and skills), consistency (reliability, predictability, and good judgment in handling situations), loyalty (willingness to protect or dedication to trustors), and transparency (openness to give trustors the full truth). We ask six questions to measure depositors' trust in individual banks.⁷

The first question asks in a general sense of how confident is a depositor to put his/her money into a bank.⁸ The next five questions ask each of the five dimensions respectively. Each depositor's response is measured in a ten Likert scale from 1 (none at all) to 10 (greatly confident). The questions are as follows.

Q_{A1}: How confident are you to save money in your bank?

Q_{A2}: How confident are you in your bank's honesty and truthfulness (integrity)?

Q_{A3}: How confident are you in your bank staffs' technical and interpersonal knowledge (competence)?

Q_{A4}: How confident are you in your bank staffs' reliability, predictability, and good judgment in handling situations (consistency)?

Q_{A5}: How confident are you in your bank's willingness to protect your interest or dedication to your interest (loyalty)?

Q_{A6}: How confident are you in your bank's openness to give you the full information (transparency)?

A depositor's trust in an individual bank (TIB) is then measured as the average of his/her responses to the six questions above.

3.3. Measure of depositors' trust in the banking industry and financial safety-net

To measure a more general depositors' trust in the banking industry and financial safety-net (TBF), we ask thirteen questions to each depositor in our sample. Consistent with the measure of TIB as in the previous subsection, each depositor's response is measured in a ten Likert scale from 1 (none at all) to 10 (greatly confident). The questions are as follows.

⁷ In order to make sure that each depositor can understand the concept of trust and several economic terms used in the survey, we equip each of our interviewer with a dictionary of terms definition. The interviewer shares the dictionary to each depositor prior to an interview session and is asked to reconfirm the depositor's comprehension level on each question asked during the interview session. This strategy aims to ensure that each depositor interviewed can understand the question and response to it accordingly, thus, mitigates a possible confusion bias.

⁸ If a depositor puts his money in more than one bank, we ask the response to be specific to the bank where he/she puts most of his/her money in.

- QB1: How confident are you in the Indonesian banking industry's performance currently?*
QB2: How confident are you in the Indonesian banking industry's performance in one year ahead?
QB3: How confident are you in the Indonesian banking industry's performance in five years ahead?
QB4: How confident are you to not withdraw your money largely (more than 20% of your deposits) from the Indonesian banking industry in one year ahead due to loss in trust?
QB5: How confident are you to not withdraw your money largely (more than 20% of your deposits) from the Indonesian banking industry in five years ahead due to loss in trust?
QB6: How confident are you that the Indonesian banking industry is managed by competent bankers?
QB7: How confident are you in the Indonesian banking regulator's reliability to regulate and supervise the banking industry?
QB8: How confident are you in the central bank's reliability to manage the exchange rate volatility?
QB9: How confident are you in the central bank's reliability to manage inflation?
QB10: How confident are you in the deposit insurance's reliability to protect your deposits?
QB11: How confident are you that the Indonesian's financial safety net can prevent and/or overcome a financial crisis effectively?
QB12: How confident are you that the Indonesian financial safety net can mitigate macroeconomic risk?
QB13: How confident are you in the Indonesian current economic performance?

A depositor's trust in the banking industry and financial safety-net (TBF) is then measured as the average of his/her responses to the thirteen questions above.

3.4. The depositors' trust index

Finally, we combine the TIB and TBF through a simple average to get a comprehensive index of depositors' trust (DTI). This index measures depositors' trust both at a micro-level (individual bank) and macro-level (banking industry and financial safety-net).

4. Empirical results

4.1. Depositors' trust

As shown in Table 2, we observe that the average of depositors' trust in individual banks (TIB, 8.24) as well as trust in the banking industry and financial safety-net (TBF, 7.29) are both at relatively high levels of trust in the baseline year (2019). TIB is relatively higher than TBF, which might reflect the degree of information asymmetry. In particular, the depositors might know their banks well from historical transactions (either by depositing their money in the banks or getting bank loans from the banks), but they might not be well-informed about other banks in the industry or about the financial safety-net arrangements. In overall, the depositors' trust index (DTI) has a mean of 7.58. For retrospective comparison with the baseline year, we ask our respondents to answer the same set of questions based on their experience during the height of the 2008 global

financial crisis.⁹ As Table 3 presents, we find that TIB, TBF, and DTI during the crisis period are statistically lower than their level in 2019.¹⁰ The difference in depositors' trust is also economically significant. More specifically, TIB, TBF, and DTI are lower by about 13.95%, 10.82%, and 14.35% respectively during the height of the crisis period compared to the baseline year. This finding aligns with the previous literature that mostly shows the deterioration of trust in banks during a financial crisis period (e.g. Stevenson and Wolfers, 2011; Sapienza and Zingales, 2012; Carbó-Valverde et al., 2013; Knell and Stix, 2015).

Table 3

Depositors' trust in normal time and crisis period.

Variables	Mean	Difference	% Difference	<i>t</i> -Statistic
TIB_2019	8.2390	1.1490***	13.95%	33.6031
TIB_2008	7.0900			
TBF_2019	7.2883	0.7883***	10.82%	24.8672
TBF_2008	6.4500			
DTI_2019	7.5849	1.0888***	14.35%	37.1248
DTI_2008	6.4962			

This table reports the results of paired mean *t*-tests on trust in individual banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) between the baseline year (2019) and the height of the 2008 global financial crisis. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively.

4.2. *Determinants of depositors' trust*

4.2.1. *Multicollinearity check*

Extending the previous literature, we consider several subsets of depositors' trust determinants including sociodemographic factors, deposits and bank characteristics, personal values, risk-taking, trust in information sources, and geographical factors. The pair-wise correlations of the trust determinant variables and their Variance Inflation Factors (VIFs) are displayed in Table 4a and 4b respectively.

⁹ We define the peak period of the 2008 global financial crisis in Indonesia is between October and November 2008. In October 2008, the Government of Indonesia increased the maximum deposit insurance coverage for 20 times from IDR 100 million to IDR 2 billion for each depositor in every bank (Saheruddin, 2017). In November 2008, the Government of Indonesia decided to bail out Bank Century to mitigate possible contagion effects on the banking system stability (Boediono, 2016, p. 238).

¹⁰ We do not pick the 1997/1998 Asian financial crisis as a retrospective time in this survey to mitigate a potential recall error bias. Beckett et al. (2001) show that retrospective studies are more likely to be consistent if the retrospective time is 12 years or less.

Table 4a

Pair-wise correlations between depositors' trust determinant variables.

	Gender	Age	Education	Size_ Deposits	Big4	Religious	Economic	Social	Material	Culture	Risk- Taking	Social Media	Online Media	Newspaper	Television	Govt	Expert	Family	dummy_ jawa
Gender	1.00																		
Age	-0.12***	1.00																	
Education	0.03	0.14***	1.00																
Size_ Deposits	-0.13***	0.45***	0.15***	1.00															
Big4	-0.02	-0.00	-0.02	0.01	1.00														
Religious	0.04	0.19***	0.03	0.06*	-0.03	1.00													
Economic	0.01	0.06*	-0.01	0.04	-0.03	0.27***	1.00												
Social	-0.03	0.04	0.01	0.02	0.00	0.13***	0.05	1.00											
Material	0.03	-0.07**	-0.05	-0.01	-0.02	0.09***	0.27***	-0.08**	1.00										
Culture	-0.02	0.13***	0.06*	0.09***	0.01	0.26***	0.18***	0.16***	0.15***	1.00									
Risk- Taking	-0.10***	-0.06*	0.12***	0.05	0.05	0.04	0.16***	0.17***	0.04	0.19***	1.00								
Social Media	0.09***	-0.06*	-0.06*	-0.11***	-0.01	0.18***	0.24***	0.06*	0.14***	0.13***	0.10***	1.00							
Online Media	0.01	-0.05	0.02	-0.09***	-0.02	0.14***	0.17***	0.14***	0.05	0.11***	0.16***	0.46***	1.00						
Newspaper	0.09***	-0.04	-0.01	-0.08**	-0.02	0.10***	0.16***	0.15***	0.07**	0.09***	0.13***	0.30***	0.60***	1.00					
Television	0.11***	0.09***	-0.02	-0.03	-0.03	0.21***	0.23***	0.15***	0.16***	0.16***	0.07**	0.36***	0.51***	0.60***	1.00				
Govt	0.07**	0.03	0.05	-0.02	0.02	0.17***	0.18***	0.18***	0.09***	0.11***	0.09***	0.18***	0.38***	0.41***	0.39***	1.00			
Expert	0.15***	-0.14***	-0.02	-0.16***	-0.02	0.10***	0.14***	0.09***	0.08**	0.09***	0.10***	0.28***	0.28***	0.30***	0.30***	0.23***	1.00		
Family	0.08***	0.10***	-0.05	0.09***	-0.02	0.32***	0.23***	0.09***	0.14***	0.17***	0.10***	0.32***	0.19***	0.12***	0.23***	0.16***	0.29***	1.00	
dummy_ jawa	0.08***	-0.00	0.00	-0.02	-0.03	-0.05	0.02	-0.09***	0.02	-0.00	0.01	0.03	0.01	0.09***	0.01	0.00	0.10***	0.03	1.00

***, **, and * are statistically significant at 99%, 95%, and 90% respectively.

As shown in Table 4a, no pairwise correlation between variables that is greater than 0.8. Moreover, Table 4b shows that there is no variable with VIF larger than 10. Following the rules-of-thumb in Gujarati (2004, p.359), these indicate that no serious multicollinearity problem between the variables.

Table 4b
Multicollinearity check through VIFs.

Variable	VIF	1/VIF
Newspaper	2.04	0.490
Online Media	1.95	0.513
Television	1.92	0.520
Social Media	1.47	0.681
Age	1.40	0.714
Family	1.35	0.739
Govt	1.33	0.750
Size_Deposits	1.33	0.753
Expert	1.30	0.768
Religious	1.28	0.784
Economic	1.25	0.801
Culture	1.17	0.852
Risk-Taking	1.15	0.867
Material	1.15	0.872
Social	1.12	0.893
Gender	1.09	0.916
Education	1.08	0.929
dummy_jawa	1.04	0.959
Big4	1.01	0.991
Mean VIF	1.34	

This table reports Variance Inflation Factors for all independent variables used in this paper. The VIF coefficients are sorted in descending order.

4.2.2. Main estimations

To examine the determinants of depositors' trust, we estimate an ordinary least square regression model as follows.

$$Trust_i = \alpha + \sum_{k=1}^K \beta_k X_k + \gamma Geo_i + \varepsilon_i$$

where *Trust* is the depositors' trust measure (TIB, TBF, DTI), *X*s are the depositors' trust determinants including sociodemographic factors, deposits and bank characteristics, personal

values, risk-taking, and trust in information sources. Meanwhile, *Geo* is the geographical factor and ε is the error term. The results of our main estimations are displayed in Table 5.

Sociodemographic factors

We find that women have significantly lower trust in individual banks as well as in the banking industry and financial safety-net than men. This finding differs from Fungáčová et al. (2019) and Knell and Stix (2015), who report that women have more trust in banks than men.¹¹ However, our finding aligns with Mewes (2014) that finds women tend to have less general trust than men in countries where there are sizeable gender gaps in labor participation. Based on the study by AIPEG (2017), Indonesia has a much lower labor force participation rate for women than men compared to its peer countries at a comparable stage of development.

Next, we find that older depositors tend to have lower trust in the banking industry and financial safety-net. This result is consistent with Knell and Stix (2015) and Fungáčová et al. (2019), although their focus is limited to trust in banks. Meanwhile, we do not find that age affects depositors' trust in individual banks. A possible explanation for this result is that older depositors might have longer relationships with their banks. Iyer and Puri (2012) show that bank-depositor relationships can mitigate bank runs.

Depositors with higher education significantly have lower trust in individual banks as well as trust in the banking industry and financial safety-net. This finding aligns with Fungáčová et al. (2019) that discover a similar result and contend that better-educated depositors might have a better understanding of the financial system, which drives them to be more skeptical of banks. Similarly, Bijlsma and Van der Wiel (2012) reveal that an individual's level of financial literacy affects the level of trust in banking institutions. Meanwhile, other related studies that use single-country survey data from Asia, such as Filipiak (2016) in India and Park (2020) in South Korea, do not find significant evidence that education affects trust in banks. We provide more discussion on this finding and its potential policy implication in subsection 4.3.

¹¹ Fungáčová et al.'s sample does not include Indonesia, while Knell and Stix use a survey data from Austria.

Table 5

Determinants of depositors' trust—main estimations.

	(1) TIB	(2) TBF	(3) DTI
<i>Sociodemographic factors</i>			
Woman	−0.146*** (−2.91)	−0.137** (−2.56)	−0.138*** (−3.11)
Age	−0.00255 (−1.03)	−0.00815*** (−3.18)	−0.00664*** (−3.15)
Education	−0.0465* (−1.65)	−0.0900*** (−3.31)	−0.0724*** (−3.15)
<i>Deposits and bank characteristics</i>			
Size_deposits	0.0128 (0.87)	0.00232 (0.16)	0.00655 (0.57)
Big4	0.00522 (0.09)	0.168*** (2.74)	0.115** (2.22)
<i>Personal values</i>			
Religious	0.0629*** (3.40)	0.0773*** (4.32)	0.0760*** (5.13)
Economic	0.0372** (2.58)	0.0555*** (3.37)	0.0481*** (3.58)
Social	0.0743*** (2.86)	0.00789 (0.30)	0.0295 (1.34)
Material	−0.00727 (−0.63)	0.0248* (1.75)	0.0162 (1.41)
Culture	0.0115 (0.62)	0.00299 (0.16)	0.00381 (0.25)
Risk-Taking	0.0228 (1.37)	0.0644*** (3.61)	0.0496*** (3.44)
<i>Information sources</i>			
Social Media	0.0446** (2.49)	−0.0173 (−0.90)	0.000838 (0.05)
Online Media	0.0140 (0.62)	0.0440* (1.74)	0.0334 (1.61)
Newspaper	0.0350 (1.27)	0.0310 (1.22)	0.0320 (1.47)
Television	0.0309 (1.43)	0.0698*** (2.84)	0.0563*** (2.76)
Govt	0.112*** (5.13)	0.141*** (5.80)	0.131*** (6.58)
Expert	0.0125 (0.58)	−0.0198 (−0.99)	−0.00766 (−0.44)
Family	0.00326 (0.16)	−0.0138 (−0.71)	−0.00623 (−0.38)
Dummy_Java	0.114** (2.24)	−0.00446 (−0.08)	0.0403 (0.92)
_cons	5.021*** (16.23)	4.338*** (12.44)	4.541*** (15.82)
Nbr. of obs.	954	954	954
R-squared	0.216	0.257	0.301

This table reports the results of our main estimations using OLS regressions with robust standard errors. The dependent variables are trust in banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) in column (1), (2), and (3) respectively. Numbers in parentheses are t-statistics. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively.

Deposits and bank characteristics

We find that the size of deposits does not affect depositors' trust. Meanwhile, depositors that have put most of their deposits within the big four banks tend to have higher trust in the banking industry and the financial safety-net. As the big four banks have major market shares in the Indonesian banking industry (Hanggraeni, 2018), the big four banks' depositors might perceive that the banking industry's stability is driven by these banks, in which they trust their deposits on.¹²

Personal values

Some individual values are also found to have significant effects on depositors' trust. Consistent with the finding of Fungáčová et al. (2019), religious depositors have greater trust both in individual banks and in the banking industry and financial safety-net. Similarly, a higher depositors' value on economic growth is associated with higher trust in individual banks and trust in the banking industry and financial safety-net. The coefficients are positive and statistically significant in all specifications in Table 5 for both *Religious* and *Economic* variables.

Depositors' concern on social value is associated with a higher trust in individual banks but not related to trust in the banking industry and financial safety-net. Meanwhile, materialism value only marginally affects trust in the banking industry and financial safety-net.

Lastly, our results indicate that the risk-taking level is positively associated with depositors' trust in the banking industry and financial safety-net. One possible explanation of this finding is that Indonesian people have relatively low uncertainty avoidance, which means that they treat uncertainty as a normal feature of life rather than a threat (Hofstede et al. 2010, p.232). Therefore, Indonesian depositors trust the banking industry and financial safety-net even though they might realize some uncertainty in it.

Trust in information sources

Fungáčová et al. (2019) consider that access to information affects trust in banks. Taking a different perspective, rather than measure how frequent depositors observe information from certain channels (television, newspapers, or internet), we measure how much depositors trust the information sources.

¹² Hanggraeni (2018) shows that the big four banks hold about 49.5% of market share of deposits in the Indonesian banking industry.

The government highly regulates the banking industry to protect the economy from the danger of a financial crisis (e.g. Acharya, 2009). Therefore, we might expect that depositors' trust in the government will likely determine their trust in individual banks as well as trust in the banking industry and financial safety-net. Our finding aligns with this notion. As presented in Table 5, higher trust in government as the source of information is associated with higher depositors' trust in all specifications.

In terms of trust in information sources other than the government, depositors who have more trust in television as the information source tend to have a higher trust in the banking industry and financial safety-net. This finding is parallel with Fungáčová et al. (2019). Surprisingly, we find some evidence that trust in social media and online media are related positively to depositors' trust, different from Fungáčová et al. (2019). One possible explanation of this finding is that the Indonesian government has strict regulations on online and media communication (Purwanegara et al., 2014) and therefore, the spread of negative sentiments or rumors about banks is relatively tamed. Lastly, we find no evidence that trust in experts or families as sources of information influences depositors' trust.

Geographical factor

We find that depositors in Java island tend to have higher trust in individual banks other than depositors from other islands. One plausible explanation of this finding is that people in Javanese island tend to have higher general trust compared to people from other islands in Indonesia (e.g. Saktiawati et al., 2013).

4.2.3. Robustness Checks

We perform several robustness checks as presented in Table 6 until Table 9 in the appendix to ensure the consistency of our empirical results. First, we re-estimate our regression model using an ordered logit model instead of OLS, following Fungáčová et al. (2019). Second, instead of using a dummy variable to distinguish between depositors located in Java Island and those outside Java Island, we take into account the province fixed effect, enabling us to control for province-specific factors. Third, we replace two demographic factors (depositors' age and the size of deposits) with marital status and monthly income, respectively. The size of deposits is highly correlated with monthly income, and depositor age also has a strong correlation with marital status. Therefore,

these factors should be estimated in a separate model. In general, the results using alternative specifications are relatively consistent with our baseline model.

4.3. Policy Implications

In this subsection, we discuss several possible policy implications of our findings. First, we find that depositors with higher education significantly have lower trust in individual banks as well as trust in the banking industry and financial safety-net. Based on the previous literature in deposit insurance, there is a concern that deposit insurance might erode depositors' market discipline (e.g. Martinez Peria and Schmukler, 2001; Davenport and McDill, 2006; Fueda and Konishi, 2007; Hadad et al., 2011; Tovar-García, 2017). We argue that increasing depositors' financial literacy through education might be able to mitigate the erosion of market discipline due to the deposit insurance existence. In other words, more-educated depositors might be the key players in disciplining banks as a collective market force even in a banking industry with explicit deposit insurance. This is particularly more important for countries where the deposit insurance coverage is relatively generous and still uses a flat rate premium system such as in Indonesia, in which all banks pay the same premium rate regardless of their risk level (e.g. Demirgüç-Kunt and Detragiache, 2002; Demirgüç-Kunt and Huizinga, 2004; Angkinand and Wihlborg, 2010; Hadad et al., 2011; Demirgüç-Kunt et al., 2015). This finding might be an initial evidence of the nexus between financial literacy and market discipline.

Second, we find that trust in individual banks and trust in the banking industry and financial safety-net the financial system are significantly affected by trust in information provided by the government. This finding suggests that maintaining the credibility of information conveyed by the government is important to protect depositors' trust.

5. Conclusion

In this study, we develop an index to measure depositors' trust by disentangling trust in individual banks and trust in the banking industry and financial safety-net. Using a survey of 992 retail depositors in Indonesia, we find that on average the depositors have a relatively high level of trust in individual banks as well as trust in the banking industry and financial safety-net. Consistent with the notion that depositors might know more information about their banks, with which they have historical transactions, compared to information about other banks in the banking

industry or the financial safety-net arrangements, we find that depositors' trust in individual banks is relatively higher than trust in banking industry and financial-safety net. Next, investigating the determinants of the depositors' trust, we find that depositors' trust is affected by personal characteristics, and in particular, women and older depositors have relatively lower trust. Moreover, more-educated depositors are also found to have lower trust suggesting initial evidence of financial literacy-market discipline nexus. Meanwhile, depositors tend to put their trust in individual banks and trust in the banking industry and financial safety-net if they have higher trust in the information conveyed by the government. Furthermore, religious and economic values have positive effects on trust both at micro and macro levels. Our results also document that risk-taking behavior is positively associated with depositors' trust.

Our results have several important policy implications. First, it is widely argued that the implementation of formal deposit insurance improves the public's confidence in the banking system. On the other side, however, it may weaken market discipline. Our results show that depositor disciplining efforts may still work, particularly for well-informed depositors, who tend to be conservative in trusting banks and the financial system. This might imply that it will be useful to bolster depositors' financial literacy to mitigate the effect of deposit insurance on market discipline. Second, trust in individual banks and trust in the banking industry and financial safety-net are affected by trust in information provided by the government, suggesting the importance of institutional credibility to maintain the banking system stability.

Appendix

Table 6

Robustness checks: ordered logit model.

	(1) TIB	(2) TBF	(3) DTI
<i>Sociodemographic factors</i>			
Woman	-0.357*** (-2.946)	-0.332*** (-2.721)	-0.420*** (-3.443)
Age	-0.006 (-0.939)	-0.016*** (-2.624)	-0.015** (-2.535)
Education	-0.096 (-1.408)	-0.193*** (-2.940)	-0.213*** (-3.278)
<i>Deposits and bank characteristics</i>			
Size _deposits	0.048 (1.361)	-0.013 (-0.406)	0.011 (0.348)
Big4	0.102 (0.700)	0.439*** (2.991)	0.385*** (2.618)
<i>Personal values</i>			
Religious	0.167*** (3.684)	0.189*** (4.478)	0.225*** (5.405)
Economic	0.077** (2.309)	0.123*** (3.297)	0.128*** (3.481)
Social	0.237*** (3.606)	0.048 (0.796)	0.116* (1.898)
Material	-0.014 (-0.477)	0.045 (1.362)	0.039 (1.237)
Culture	0.011 (0.249)	0.014 (0.336)	0.007 (0.162)
Risk-Taking	0.029 (0.745)	0.152*** (3.815)	0.138*** (3.545)
<i>Information sources</i>			
Social Media	0.098** (2.279)	-0.044 (-1.001)	-0.009 (-0.203)
Online Media	0.063 (1.143)	0.093 (1.565)	0.083 (1.392)
Newspaper	0.120* (1.732)	0.096* (1.750)	0.131** (2.069)
Television	0.066 (1.223)	0.150*** (2.877)	0.143** (2.560)
Govt	0.261*** (5.039)	0.309*** (5.718)	0.355*** (6.996)
Expert	0.051 (0.973)	-0.049 (-1.020)	-0.020 (-0.403)
Family	0.010 (0.206)	-0.020 (-0.463)	0.006 (0.133)
dummy_Java	0.311** (2.510)	0.018 (0.148)	0.104 (0.847)
Nbr. of obs.	954	954	954
Pseudo R-squared	0.043	0.038	0.044

This table reports the results of our estimations using ordered logit regressions. The dependent variables are trust in banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) in column (1), (2), and (3) respectively. Numbers in parentheses are t-statistics. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively.

Table 7

Robustness check: Province fixed effects (FE).

	(1) TIB	(2) TBF	(3) DTI
<i>Sociodemographic factors</i>			
Woman	−0.139*** (−2.71)	−0.123** (−2.30)	−0.124*** (−2.80)
Age	−0.00299 (−1.19)	−0.00747*** (−2.86)	−0.00608*** (−2.84)
Education	−0.0448 (−1.54)	−0.0870*** (−3.19)	−0.0720*** (−3.07)
<i>Deposits and bank characteristics</i>			
Size _deposits	0.0110 (0.74)	−0.00114 (−0.08)	0.00282 (0.23)
Big4	0.0205 (0.33)	0.167*** (2.62)	0.115** (2.14)
<i>Personal values</i>			
Religious	0.0671*** (3.52)	0.0809*** (4.36)	0.0768*** (4.87)
Economic	0.0317** (2.22)	0.0580*** (3.59)	0.0488*** (3.72)
Social	0.0654** (2.47)	0.0192 (0.73)	0.0342 (1.54)
Material	−0.00746 (−0.64)	0.0214 (1.53)	0.0136 (1.19)
Culture	0.00205 (0.11)	−0.00177 (−0.09)	−0.000688 (−0.04)
Risk-Taking	0.0193 (1.13)	0.0601*** (3.50)	0.0471*** (3.31)
<i>Information sources</i>			
Social Media	0.0389** (2.17)	−0.0215 (−1.15)	−0.00272 (−0.17)
Online Media	0.0134 (0.59)	0.0481** (1.97)	0.0362* (1.78)
Newspaper	0.0300 (1.06)	0.0397 (1.57)	0.0373* (1.70)
Television	0.0350 (1.59)	0.0579** (2.27)	0.0494** (2.38)
Govt	0.115*** (5.04)	0.145*** (5.88)	0.135*** (6.62)
Expert	0.0212 (0.96)	−0.0170 (−0.84)	−0.00350 (−0.20)
Family	0.00501 (0.26)	−0.00897 (−0.44)	−0.00597 (−0.35)
_cons	5.474*** (14.22)	4.783*** (13.91)	5.000*** (16.39)
Province Fixed Effect	Yes	Yes	Yes
Nbr. of obs.	954	954	954
R-squared	0.257	0.310	0.341

This table reports the results of our estimations using OLS regressions with robust standard errors. The dependent variables are trust in banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) in column (1), (2), and (3) respectively. Numbers in parentheses are t-statistics. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively. Province FE is used instead of the Java island dummy.

Table 8

Robustness check: Change the proxies for personal (demographic) factors.

	(1) TIB	(2) TBF	(3) DTI
Woman	-0.153*** (-2.98)	-0.132** (-2.44)	-0.136*** (-3.06)
Married	-0.0139 (-0.27)	-0.209*** (-4.00)	-0.155*** (-3.58)
Education	-0.0468 (-1.59)	-0.0854*** (-3.07)	-0.0689*** (-2.93)
Income	0.00188 (0.08)	-0.0112 (-0.49)	-0.00666 (-0.35)
Big4	0.00239 (0.04)	0.154** (2.53)	0.105** (2.02)
Religious	0.0669*** (3.64)	0.0840*** (4.67)	0.0820*** (5.59)
Economic	0.0362** (2.51)	0.0550*** (3.38)	0.0474*** (3.57)
Social	0.0762*** (2.88)	0.00867 (0.33)	0.0307 (1.38)
Material	-0.00205 (-0.18)	0.0260* (1.82)	0.0186 (1.63)
Culture	0.00473 (0.26)	-0.00101 (-0.06)	-0.00105 (-0.07)
Risk Taking	0.0234 (1.41)	0.0662*** (3.72)	0.0511*** (3.54)
Social Media	0.0431** (2.40)	-0.0188 (-0.97)	-0.000826 (-0.05)
Online Media	0.00928 (0.41)	0.0422* (1.66)	0.0304 (1.46)
Newspaper	0.0478* (1.79)	0.0367 (1.43)	0.0401* (1.87)
Television	0.0235 (1.08)	0.0656*** (2.70)	0.0510** (2.52)
Govt	0.107*** (4.97)	0.143*** (5.81)	0.131*** (6.58)
Expert	0.0191 (0.91)	-0.0175 (-0.85)	-0.00411 (-0.24)
Family	0.00119 (0.06)	-0.0152 (-0.78)	-0.00765 (-0.46)
dummy_Java	0.107** (2.11)	-0.0109 (-0.21)	0.0337 (0.77)
_cons	4.955*** (15.76)	4.155*** (11.68)	4.388*** (15.02)
Nbr. of obs.	944	944	944
R-squared	0.214	0.263	0.305

This table reports the results of our estimations using OLS regressions with robust standard errors. The dependent variables are trust in banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) in column (1), (2), and (3) respectively. Numbers in parentheses are t-statistics. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively. Alternative proxies for personal (demographic) factors and Java island dummy are used.

Table 9

Robustness check: Alternative proxies for personal (demographic) factors and province FE.

	(1) TIB	(2) TBF	(3) DTI
Woman	-0.146*** (-2.79)	-0.116** (-2.14)	-0.122*** (-2.72)
Married	-0.0396 (-0.75)	-0.204*** (-3.89)	-0.151*** (-3.44)
Education	-0.0435 (-1.42)	-0.0838*** (-2.98)	-0.0695*** (-2.87)
Income	-0.0000539 (-0.00)	-0.00836 (-0.33)	-0.00539 (-0.26)
Big4	0.0167 (0.27)	0.154** (2.43)	0.105* (1.95)
Religious	0.0724*** (3.83)	0.0889*** (4.79)	0.0839*** (5.37)
Economic	0.0314** (2.21)	0.0571*** (3.59)	0.0481*** (3.72)
Social	0.0665** (2.48)	0.0199 (0.75)	0.0350 (1.57)
Material	-0.00205 (-0.18)	0.0229 (1.63)	0.0164 (1.43)
Culture	-0.00500 (-0.27)	-0.00606 (-0.33)	-0.00595 (-0.38)
Risk-Taking	0.0196 (1.15)	0.0612*** (3.57)	0.0479*** (3.37)
Social Media	0.0364** (2.03)	-0.0229 (-1.21)	-0.00448 (-0.28)
Online Media	0.00894 (0.39)	0.0461* (1.88)	0.0334 (1.64)
Newspaper	0.0435 (1.60)	0.0465* (1.84)	0.0465** (2.18)
Television	0.0281 (1.28)	0.0527** (2.09)	0.0436** (2.11)
Govt	0.110*** (4.86)	0.145*** (5.84)	0.134*** (6.57)
Expert	0.0276 (1.30)	-0.0131 (-0.64)	0.00135 (0.08)
Family	0.00239 (0.12)	-0.0112 (-0.55)	-0.00838 (-0.49)
_cons	5.415*** (14.45)	4.553*** (12.68)	4.823*** (15.42)
Province Fixed Effects	Yes	Yes	Yes
Nbr. of obs.	944	944	944
R-squared	0.257	0.315	0.345

This table reports the results of our estimations using OLS regressions with robust standard errors. The dependent variables are trust in banks (TIB), trust in the banking industry and financial safety-net (TBF), and depositors' trust index (DTI) in column (1), (2), and (3) respectively. Numbers in parentheses are t-statistics. ***, **, and * are statistically significant at 99%, 95%, and 90% respectively. Alternative proxies for personal (demographic) factors and province FE are used.

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