



EUROJÄRJESTELMÄ
EUROSYSTEMET

TRUSTING BANKS IN CHINA

Zuzana Fungáčová (Bank of Finland)

Laurent Weill (University of Strasbourg)

MOTIVATION

- ◆ Trust in banks is essential for the effectiveness of the financial system.
 - Greater confidence of individuals in financial institutions enhances their usage of financial system services.
 - It facilitates the pooling of savings and the expansion of credit by banks and represents therefore a major condition for financial development.
 - It fosters financial stability by reducing the risk of bank runs.
- ◆ In China, trust in banks is thus of particular importance to limit potential dangers for financial stability and to preserve the driving force of financial development for economic growth.

MOTIVATION

- ◆ However research on trust in banks remains scarce with no study focusing on explaining trust in banks in China.
 - a handful of single-country studies on the level and the determinants of trust in banks (Sapienza and Zingales, 2012, for the US; Jansen, Mosch and van der Cruisjen, 2014, for the Netherlands; Knell and Stix, 2015, for Austria).
 - the cross-country study from Fungacova, Hasan and Weill (2016).
- ◆ The objective of our paper is to provide the first empirical investigation of the determinants of trust in banks in China.

MOTIVATION

- ◆ We rely on the last wave of the World Values Survey which contains information on trust in banks in China in 2012.
- ◆ We provide a wide analysis of the determinants of trust in banks for Chinese individuals.
- ◆ We perform ordered logit estimations to explain trust in banks with several potential determinants (sociodemographic characteristics, provincial characteristics...)

CONTRIBUTION

- ◆ Our work adds to the literature on the financial system in China.
 - We contribute to explaining cross-provincial differences in financial development by looking at trust in banks (Hasan, Wachtel and Zhou, 2009; Lu and Yao, 2009).
 - The identification of the determinants of trust in banks helps understand what shapes financial stability in China.

CONTRIBUTION

- ◆ We contribute to the literature on the determinants of trust in China.
 - Evidence on the factors influencing interpersonal trust in China (e.g., Buchan and Croson, 2004), trust in police (Sun et al., 2013), trust toward public institutions (e.g., Cui et al., 2015), or trust toward foreigners in transactions (Özer, Zheng and Ren, 2014).
- ◆ We complement these studies by examining trust in banks.

DATA

- ◆ Last wave of the World Values Survey which asks individuals about their perceptions of life and institutions in 60 countries during the period 2010-2014 (six waves since 1981).
- ◆ 2,300 observations for China in 2012.
- ◆ Innovation of the last wave: a question on trust in banks for 52 countries: “Could you tell me how much confidence you have in banks: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?” => *Trust in banks*
 - four values: 1 for low confidence and 4 for high confidence.

PROVINCIAL MEASURES OF TRUST IN BANKS

Province	Mean	Province	Mean
Anhui	3.708	Hunan	3.157
Beijing	3.604	Jiangsu	2.913
Chongqing	3.027	Jiangxi	3.194
Fujian	2.970	Jilin	3.292
Gansu	3.020	Liaoning	3.181
Guangdong	2.846	Qinghai	3.068
Guangxi	2.972	Shaanxi	2.842
Guizhou	2.800	Shandong	3.085
Hebei	3.105	Shanxi	3.167
Heilongjiang	2.980	Sichuan	2.721
Henan	3.165	Zhejiang	2.959
Hubei	3.267	Total	3.055

DETERMINANTS OF TRUST IN BANKS

- ◆ Ordered logit model to explain *Trust in banks* (discrete dependent variable with values from 1 to 4).
- ◆ Four groups of tested determinants:
 - sociodemographic factors.
 - information sources
 - economic values.
 - provincial characteristics.

1. Sociodemographic factors

- ◆ Based on former works on the determinants of trust in banks and in institutions.
- ◆ Gender: dummy variable *Female*.
- ◆ Marital situation: dummy variable *Married*.
- ◆ Age: in years.
- ◆ *Education*: dummy variable to one if the individual has secondary or tertiary education.
- ◆ *Income*: self-reported level of income of the respondent relative to the level of income in his country (1-10).
- ◆ *Financial situation*: satisfaction with financial situation (1-10).
- ◆ *Health*: state of health of the respondent from (1-4).

1. Sociodemographic factors

- ◆ **Two China-specific sociodemographic determinants:**
- ◆ Rural location (*Rural*) as the hukou system restricts migration within China.
 - Hukou system divides the population in two separate groups, rural and urban, with different opportunities.
 - Being considered as a source of inequality among individuals, it can therefore be a source of tensions (Wang, 2010) and can hamper trust in institutions including banks.
- ◆ Membership in Communist party (*Communist party*).
 - China has a single-party system with Communist party members being the elite of the country.

2. Information sources

- ◆ Access to information is a key determinant that influences trust in institutions.
- ◆ This impact can be positive if channels of information provide information on financial products by banks.
- ◆ It can be negative if information sources on the news concerning financial scandals or banking troubles.
 - Three dummy variables for access to information related to newspaper (*Newspaper*), television (*Television*), and Internet (*Internet*) (=1 if daily access to this source).

3. Economic values

- ◆ Variables related to attitudes toward the market and the role of state in the economy:
- ◆ *Inequality* (from 1 to 10) measures how much the respondent agrees with the sentence “We need larger income differences as incentives for individual effort”.
- ◆ *Government role* (from 1 to 10) considers the preference for the influence of government ownership in the economy.
- ◆ *Competition harmful* (from 1 to 10) measures how negative the respondent is for increased competition in the economy.

3. Economic values

- ◆ We examine if pro-market individuals trust banks more.
- ◆ On the one hand, given the key role of banks in market economies, positive attitude towards market economy can be associated with higher trust in banks.
- ◆ On the other hand, given the low financial instability in China, individuals can associate government ownership with lower risk of losing their money and consequently trust banks more.

4. Provincial variables

- ◆ Data is collected from the CEIC database with the exception of marketization index from Fan, Wang and Zhang (2011).
 - Size of the banking sector: the ratio of banking sector assets to GRP (*Bank assets*).
 - Riskiness is proxied by the non-performing loans ratio (*NPL*).
 - GRP per capita (*GRP*).
 - Level of inflation measured by CPI (*Inflation*).
 - Ratio of government expenditures to GRP (*Government Expenditures*).
 - Overall marketization index (Marketization) to we account for the institutional environment (Fan, Wang and Zhang, 2001).
 - The legal framework component of the marketization index (*Legal framework*).
- ◆ We perform separate estimations with alternative sets of provincial variables because (1) we have data only for 23 provinces, (2) we are constrained by the correlations between provincial variables.

RESULTS

- ◆ Main estimations: ordered logit model.
- ◆ Marginal effects for the ordered logit model.
- ◆ Robustness check: logit model to explain dummy variable High Trust in Banks

MAIN ESTIMATIONS 1/2

	(1)	(2)	(3)	(4)	(5)
Individual level					
Married	-0.303**	-0.319**	-0.336**	-0.324**	-0.271
Female	0.127	0.136	0.136	0.132	0.140
Education	-0.275*	-0.343**	-0.328**	-0.285**	-0.247*
Age	0.013***	0.014***	0.014***	0.012***	0.013***
Income	0.015	-0.013	-0.002	0.010	-0.024
Health	0.073	0.098	0.089	0.082	0.032
Financial situation	0.094**	0.097**	0.098**	0.100**	0.118***
Rural	-0.416*	-0.431*	-0.296	-0.309	-0.204
Communist party	-0.650***	-0.615***	-0.654***	-0.652***	-0.501***
Newspaper	0.096	0.007	0.060	0.080	-0.044
Television	0.071	0.024	0.057	0.090	0.051
Internet	-0.017	0.009	-0.051	-0.039	-0.098
Inequality	0.069**	0.078**	0.073**	0.074**	0.062*
Government role	0.069***	0.064**	0.068***	0.071***	0.035
Competition harmful	0.055	0.039	0.047	0.057	0.078
(to be continued on next slide)					

MAIN ESTIMATIONS 2/2

	(1)	(2)	(3)	(4)	(5)
Provincial level					
Inflation		0.136	0.430	0.296	
NPL		-0.663	-0.513	-0.528	
Marketization		-0.017			
Bank assets		0.278***			
GRP			0.000		
Government exp.			0.011	-1.238	
Legal framework				-0.016	
Province FE	no	no	no	no	yes
Observations	1,496	1,496	1,496	1,496	1,496
Pseudo R2	0.0304	0.0420	0.0376	0.0350	0.0850

TRUST IN BANKS

- ◆ Evidence that some sociodemographic variables matter for trust in banks.
 - Married (-), age (+), education (-), financial situation (+)
 - No significance for gender, income and health.
- ◆ Both China-specific sociodemographic determinants have an influence on trust in banks:
 - Rural location is negatively associated with trust in banks.
 - Membership in the Communist party is associated with lower trust in banks

TRUST IN BANKS

- ◆ Access to information sources has no significant impact on trust in banks.
- ◆ Economic values tend to influence trust in banks:
 - Significantly positive coefficient for *Inequality*.
 - No significant influence for *Competition harmful*.
 - Positive and significant coefficient for *Government role*, indicating that individuals who prefer government ownership in the economy have a higher degree of trust in banks.
- ◆ No influence on trust in banks for most provincial characteristics.
 - The only significant provincial variable is *Bank assets* which is positive.

MARGINAL EFFECTS 1/2

	(1)	(2)	(3)	(4)	(5)
Individual level					
Married	-0.049*	-0.050**	-0.054**	-0.052*	-0.039
Female	0.019	0.020	0.021	0.020	0.019
Education	-0.041*	-0.050**	-0.049**	-0.043**	-0.034*
Age	0.002***	0.002***	0.002***	0.002***	0.002***
Income	0.002	-0.002	-0.000	0.002	-0.003
Health	0.011	0.015	0.014	0.013	0.004
Financial situation	0.014**	0.014**	0.015**	0.015**	0.016***
Rural	-0.061*	-0.061**	-0.043	-0.045	-0.028
Communist party	-0.085***	-0.080***	-0.085***	-0.085***	-0.062***
Newspaper	0.015	0.001	0.009	0.012	-0.006
Television	0.011	0.004	0.009	0.014	0.007
Internet	-0.003	0.001	-0.008	-0.006	-0.013
Inequality	0.011*	0.012**	0.011*	0.011**	0.009*
Government role	0.011***	0.010**	0.010***	0.011***	0.005
Competition harmful	0.008	0.006	0.007	0.009	0.011
(to be continued on next slide)					

MARGINAL EFFECTS 2/2

	(1)	(2)	(3)	(4)	(5)
Provincial level					
Inflation		0.020	0.065	0.045	
NPL		-0.099	-0.078	-0.081	
Marketization		-0.002			
Bank assets		0.042***			
GRP			0.000		
Government exp.			0.002	-0.189	
Legal framework				-0.002	
Province FE					
Observations	no	no	no	no	yes
Pseudo R2	1,496	1,496	1,496	1,496	1,496

Robustness check: with the logit model

- ◆ Explained variable : dummy variable High Trust in Banks (=1 if the respondent has a great deal or quite a lot of confidence in banks).
- ◆ Presentation of results of logit model with marginal effects.

LOGIT MODEL 1/2

	(1)	(2)	(3)	(4)	(5)
Individual level					
Married	-0.041	-0.044*	-0.045*	-0.043*	-0.045*
Female	0.016	0.017	0.018	0.017	0.023
Education	-0.038	-0.042	-0.044*	-0.039	-0.025
Age	0.001	0.001	0.001	0.001	0.002
Income	0.004	0.003	0.002	0.003	0.003
Health	0.022*	0.024*	0.024*	0.024*	0.022
Financial situation	0.017**	0.018**	0.017**	0.018**	0.018***
Rural	0.013	0.013	0.026	0.028	0.024
Communist party	-0.078**	-0.082**	-0.081**	-0.079**	-0.077**
Newspaper	0.019	0.016	0.015	0.018	0.015
Television	0.041*	0.044*	0.043*	0.046*	0.040
Internet	0.031	0.032	0.029	0.031	0.031
Inequality	0.010**	0.011**	0.010**	0.011**	0.007
Government role	0.010***	0.010***	0.010***	0.010***	0.005
Competition harmful	0.003	0.003	0.003	0.004	0.007
(to be continued on next slide)					

LOGIT MODEL 2/2

	(1)	(2)	(3)	(4)	(5)
Provincial level					
Inflation		0.010	0.032	0.017	
NPL		-0.094	-0.079	-0.081	
Marketization		-0.003			
Bank assets		0.004			
GRP			0.000		
Government exp.			-0.011	-0.152	
Legal framework				-0.003	
Province FE	no	no	no	no	yes
Observations	1,606	1,606	1,606	1,606	1,576

Robustness check: with the logit model

- ◆ All in all, estimations performed with the logit model corroborate the main findings obtained for
 - economic values.
 - provincial variables.
 - information sources.
 - several sociodemographic characteristics (such as gender, income, financial situation, or member of the Communist party).
- ◆ They nevertheless do not provide support for the influence of age and rural location on trust in banks.

CONCLUSION

- ◆ First analysis explaining trust in banks in China.
- ◆ Several sociodemographic indicators matter:
 - trust in banks tends to increase with age and to decrease with education.
 - satisfaction with the financial situation and not being married favor trust in banks.
 - membership in the Communist party and rural location are negatively associated with trust in banks: they have the highest economic significance.
- ◆ Access to information does not have overall an impact on trust in banks.

CONCLUSION

- ◆ Economic values tend to impact trust in banks.
 - Individuals who positively consider inequality as incentives for individual efforts and government ownership in the economy are more trusting toward banks.
- ◆ The economic and institutional framework at the provincial level does not seem to affect trust in banks.
 - We do not find evidence of any influence of provincial characteristics on trust in banks with the exception of the positive impact of the size of the banking sector.

POLICY IMPLICATIONS

- ◆ Our conclusions suggest that authorities wishing to foster trust in banks in China can favor the positive perception of the financial situation and of government ownership in the economy.
- ◆ They should promote particularly trust in banks in rural areas.

Thanks for your attention.