

Trust in China?

The Impact of Development, Inequality, and Openness on Political Trust across China's Provinces, 2001-2012

Supplementary Appendix

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1. INTRODUCTION

This appendix presents descriptions for the individual-level and macro-level variables used in the analyses found in the paper and additional analyses referenced in the text.

2. INDIVIDUAL-LEVEL VARIABLES

All of the individual-level variables were constructed using items from the 2001, 2007, and 2012 China surveys conducted by the World Values Survey project.¹

Social Trust. An individual's orientation toward general trust that is typically assessed through social trust measures is often found to be an exogenous predictor of political trust (see Norris 1999, 2011; Pharr and Putnam 2000; Keele 2007). High interpersonal trust could translate into higher political trust because trusting individuals are less concerned about being taken advantage of by political institutions (Brehm and Rahn 1997; Chen and Lu 2007). Often interpreted as an important component of social capital, social trust is deemed to promote cooperation among citizens and make political institution function smoothly (Putnam et al. 1993; see also Yang and Tang 2010). It requires stronger evidence of performance failure for them to lower their trust in political institutions. In previous studies on political trust in China, scholars using single-year surveys find positive linkages between social trust and political trust, particularly in the urban settings (Tang 2005; Chen and Lu 2007).² We measure social trust using the classic survey item on interpersonal trust (Levi 1996; Uslaner 2002). This item asks respondents to state whether they believed that most people could be trusted or they needed to be careful in dealing with others. This binary choice is reflected in our independent variable with 1 indicating social trust and 0 indicating social distrust. In our sample, 58% of the population responded that they believed that most people could be trusted.

¹ The World Values Survey is a global survey project conducted over dozens of countries throughout the world and over time. These data are publicly available and accessed at www.worldvaluessurvey.org.

² Tang (2005) shows that general interpersonal trust increases people's confidence in political institutions in urban China. Chen and Lu (2007) find that in Beijing urban residential neighborhoods, social trust is positively associated with people's confidence in their directly elected Community Residential Committees, a self-governing entity for each residential community.

Economic Satisfaction. An individual's satisfaction with their own personal financial situation is often a strong predictor of their trust in government (Citrin and Green 1986). Here we measure economic satisfaction using a question asking respondents to rate their satisfaction with their household financial situation along a nine point scale. This variable ranges from 0 (dissatisfied) to 9 (satisfied) with a mean of 5.0 across our sample.

Political Salience. This variable indicates the salience of politics to the respondents by measuring both the importance of politics in their daily lives and their overall interest in politics. The first item asks the respondents to rate the importance of politics to their life along a four point scale (0 to 3). The second item has the respondents rate their interest in politics along a four point scale (0 to 3). For the political salience indicator we use the individual mean from these two items resulting in a scale ranging from 0 (low political salience) to 3 (high political salience) with a mean of 1.56 across our sample.

Respect for Authority. As one of China's oldest political ideologies, Confucianism sets a clear hierarchy in the relationships among members of the society. Respect and deference from sons to fathers, students to teachers and subjects to leaders, is regarded as the "correct conduct" of societal members (Lieberthal 2004: 8-10). Based on Confucianism, ordinary citizens are expected to respect and show deference to governmental officials. Therefore, beliefs in Confucian values should directly influence individuals' disposition toward trust in their governmental institutions. Individuals who are heavily influenced by Confucianism will show more deference, respect and trust in their government than others (Shi 2001). Prior studies examining the impact of Confucianism on political attitudes in China find a strong connection between the Confucian ideology and individuals' support for and trust in government (Shi 2001; Dalton and Ong 2006; Wang et al. 2013; Chang et al. 2005; Shi and Lu 2010). Therefore, we expect an individual's respect for authority to have a positive influence on political trust in China. To measure respect for authority, we use the response to the question asking the respondent to assess the desirability of "greater respect for authority" as a potential change to "our way of life" in the near future. Respondents could indicate whether greater respect for authority would be a bad thing (0), don't mind (1), or a good thing (2). In our sample, the mean for this variable is 1.33.

National Pride. An individual's national pride often has a positive influence on trust in government as nationalism is often linked to faith in respective government. Here we measure the respondents' national pride using a response to the question asking them to express their level of pride in their country. This variable ranges from 0 (not at all proud) to 3 (very proud) with a mean of 2.02 across our sample.

Socioeconomic Characteristics. We use standard measures of socioeconomic characteristics in our individual-level model. The survey items used to construct the *age*, *gender*, and *education* variables are self-explanatory and consistent across surveys. For income, we generated an ordinal variable based on the WVS income question which had the respondents place their income along a 10 point scale in steps. In previous releases of the integrated cross-national data, the WVS generated an ordinal variable of income from the various country-specific measures of income for comparability purposes. Because WVS did not create this ordinal income variable for the 2007 or 2012 China surveys, we use the same coding rules that the WVS used to generate their ordinal variable from the income measure in the 2001 survey. This categorical income variable ranges from 0 (low individual income) to 2 (high individual income) with a mean of 0.39 across our sample.

3. MULTIPLE IMPUTATION

We use the Amelia II software package to impute missing data for our individual-level and macro-level predictor variables and avoid the bias inherent in listwise deletion (Honaker, King and Blackwell 2011). Amelia II computes values for each missing cell in the individual-level data matrix through a method of multiple imputations. Amelia generates several data sets in which the missing data take on different values mirroring the uncertainty associated with the missing values but leave observed values remain unchanged.

For the individual-level variables, we generated five imputations for each survey and distinguished between regions in the imputation process. For the province-level variables, we generated ten imputations for each province. To retain the ability to employ all of the different estimation strategies and techniques reported in the paper using Stata 14, we determined which imputed dataset was ‘best’ for each survey for the individual-level data and for province for the province-level data from the diagnostic information (see Eddings and Marchenko 2012) and use those to conduct our analysis in the paper. We also replicated the analyses reported in the paper using the unimputed individual-level data to make sure that using the imputed data did not alter our substantive conclusions. When using the unimputed individual-level data, our results remain unchanged.

4. ADDITIONAL ANALYSES

In this section, we include tables and figures referenced in the manuscript that represent important robustness checks for our findings.

Table A1: Effect of Contextual Factors on Political Trust across Chinese Provinces, 2007-2011

	Model 4		Model 5		Model 6	
<i>Individual-Level</i>						
Social Trust	.10**	(.02)	.10**	(.02)	.10**	(.02)
Economic Satisfaction	.03**	(.00)	.03**	(.00)	.03**	(.00)
Politics Salient	.12**	(.02)	.12**	(.02)	.12**	(.02)
Respect for Authority	.04**	(.01)	.04**	(.01)	.05**	(.01)
National Pride	.13**	(.02)	.13**	(.02)	.13**	(.02)
Age	.00**	(.00)	.00**	(.00)	.00**	(.00)
Education	-.08**	(.01)	-.08**	(.01)	-.08**	(.01)
Income	-.01	(.02)	-.01	(.02)	-.09*	(.04)
Female	.04**	(.02)	.04**	(.02)	.04**	(.02)
<i>Province-Level</i>						
Average Income			.008**	(.001)	.006**	(.003)
Economic Inequality			-.07	(.04)	-.08*	(.04)
Openness			-4.8**	(1.62)	-4.5**	(1.59)
<i>Income x Average Income</i>					.002**	(.00)
Education Rate			-.65	(.42)	-.59	(.42)
Media Density			-.45**	(.22)	-.40*	(.22)
Constant	1.45**	(.06)	1.85**	(.22)	1.87**	(.21)
<i>Random Effects Parameter</i>						
Survey	.01	(.003)	.01	(.003)	.01	(.004)
Residual	.23	(.01)	.23	(.01)	.23	(.01)
<i>Intraclass Correlation</i>						
	.056		.041		.038	
<i>Observations</i>						
Province Survey Units	38		38		38	
Individuals	3538		3538		3538	

* = Coefficient is significant at the 0.10 level. ** = Coefficient is significant at the 0.05 level.

†The intra-class correlation for the oneway ANOVA is .064.

Note: Entries are maximum likelihood coefficients estimated using Stata 14, with robust standard errors in parentheses.

Higher values on the following individual-level variables indicate: higher social trust, economic satisfaction, salience of politics, respect for authority, national pride, age, education and income levels, and female.

Higher values on the following province-level variables indicate: higher GDP per capita, urban/rural income gap, percentage of foreign enterprise workers in workforce, percentage of individuals with only a middle school education, and ratio of newspapers to total population.

Table A2: Effect of Contextual Factors on Political Trust (3 Item) across Chinese Provinces, 2001-2011

	Model 7		Model 8		Model 9	
<i>Individual-Level</i>						
Social Trust	.10**	(.02)	.10**	(.02)	.10**	(.02)
Economic Satisfaction	.02**	(.00)	.02**	(.00)	.02**	(.00)
Politics Salient	.12**	(.02)	.12**	(.02)	.12**	(.02)
Respect for Authority	.04**	(.01)	.04**	(.01)	.04**	(.01)
National Pride	.14**	(.02)	.14**	(.02)	.14**	(.02)
Age	.00**	(.00)	.00**	(.00)	.00**	(.00)
Education	-.08**	(.01)	-.08**	(.01)	-.08**	(.01)
Income	-.02	(.02)	-.01	(.02)	-.04*	(.03)
Female	.03**	(.01)	.03**	(.01)	.03**	(.01)
<i>Province-Level</i>						
Average Income			.005**	(.001)	.005**	(.001)
Economic Inequality			-.07*	(.04)	-.07**	(.04)
Openness			-3.3**	(1.41)	-3.3**	(1.41)
<i>Income x Average Income</i>					.001	(.00)
Education Rate			-.37	(.36)	-.35	(.36)
Media Density			-.36**	(.11)	-.35**	(.11)
Constant	1.52**	(.05)	1.82**	(.20)	1.84**	(.20)
<i>Random Effects Parameter</i>						
Survey	.01	(.003)	.01	(.003)	.01	(.004)
Residual	.27	(.01)	.27	(.01)	.27	(.01)
<i>Intraclass Correlation</i>						
	.051		.041		.037	
<i>Observations</i>						
Province Survey Units	57		57		57	
Individuals	4352		4352		4352	

* = Coefficient is significant at the 0.10 level. ** = Coefficient is significant at the 0.05 level.

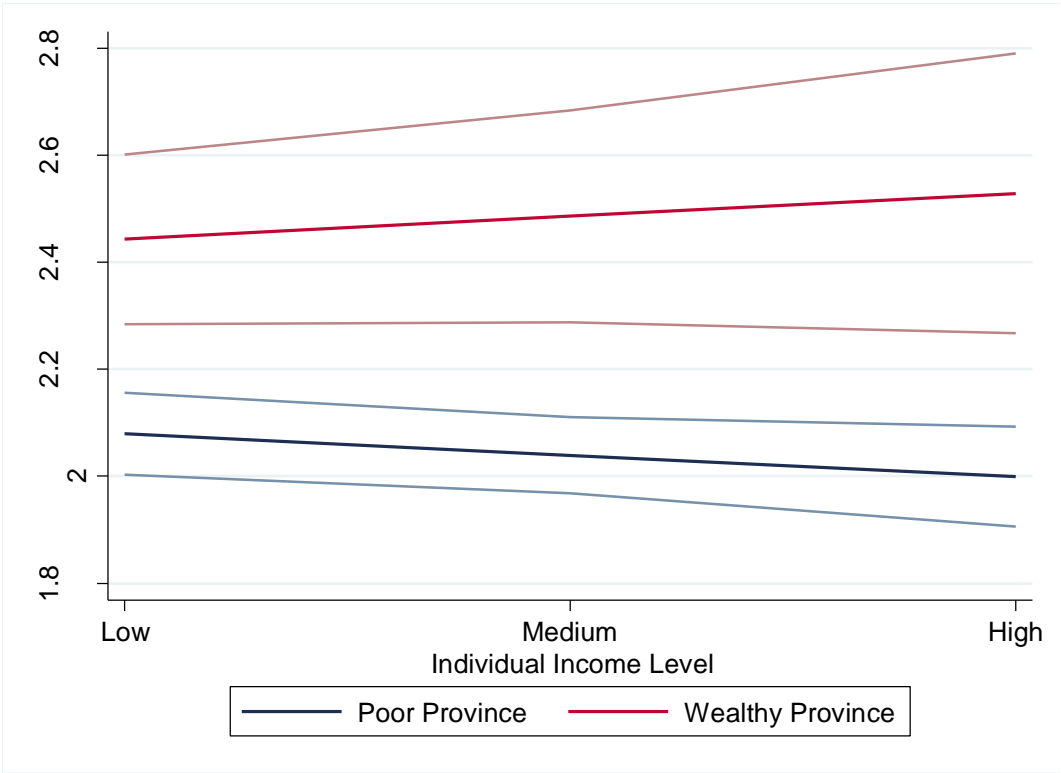
†The intra-class correlation for the oneway ANOVA is .064.

Note: Entries are maximum likelihood coefficients estimated using Stata 14, with robust standard errors in parentheses.

Higher values on the following individual-level variables indicate: higher social trust, economic satisfaction, salience of politics, respect for authority, national pride, age, education and income levels, and female.

Higher values on the following province-level variables indicate: higher GDP per capita, urban/rural income gap, percentage of foreign enterprise workers in workforce, percentage of individuals with only a middle school education, and ratio of newspapers to total population.

Figure A1: Conditional Effect of Province-level Wealth on Political Trust across Income Groups



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