The Seeds of Social Stability: Building Social Values through Education

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On behalf of

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Problem

In China (as in other developing countries) today, students from disadvantaged (e.g. poor, rural) backgrounds are **receiving much less upper secondary education** than their urban peers (Wang, Liu, Rozelle, 2013; Duflo, Kremer, 2003; Reddy, Sinha, 2010; Loyalka et al., 2011; Yi et al., 2013).

As China's (same as other developing countries) economy transitions from low-wage, labor-intensive manufacturing to high-wage, higher value-added industries, their **demand for skilled labor** will increase significantly (Heckman et al., 2012; Liu et al., 2009)

This means that rural students likely need to be educated at the high school level or higher to compete in China's coming economy (Zhang et al., 2012).

Problem

An undereducated rural population may lead to:

- Hardship for individuals who can't find (good) jobs.

- A slowdown in economic development (World Bank, 2005).

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What is even worse if they are already the poorest one, how will these undereducated young people survive in their future life? ---- **The rise of social disparity of those unemployed or underemployed young people.**

Problem

Education is known to contribute to more than just skills/human capital—education also helps **foster the social values** that are necessary for social stability (Putnam, 2000; Leigh, 2006).

As a result, current disparities in education may well be leaving substantial segments of the population with lower levels of social trust, which may contribute to **social instability in the long run** (Delhey and Newton, 2005).

Problem in Research

Research has shown the importance of education for fostering social trust in developed countries (Helliwell and Putnam, 2007; Leigh, 2006), but there has been little investigation of the impact of education on social values in the developing world.

1. There has been little research on current levels of social trust among rural youth in developing countries.
2. There has been little empirical analysis about the relationship between education and social trust in developing countries.
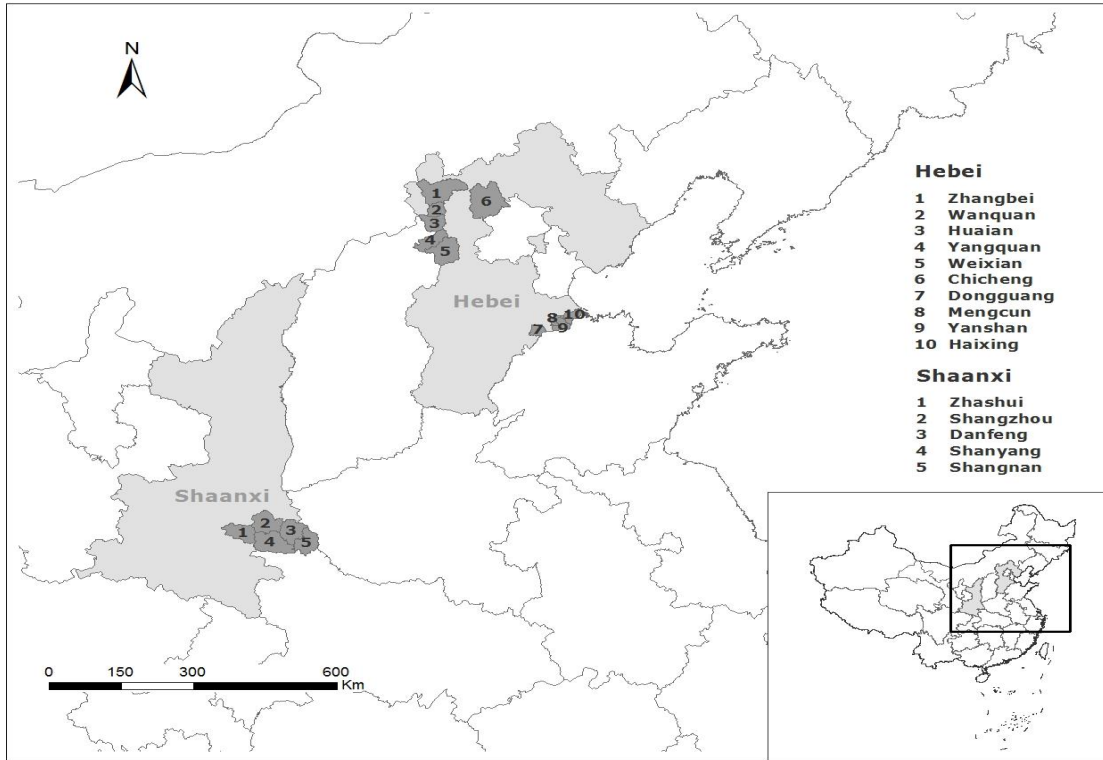
Objectives

Our overall goal is to analyze the relationship between opportunities to attend upper-secondary schooling and social values.

First, we describe the social values held by poor, rural students who have different opportunities to attend upper secondary school.

Second, we analyze the impact of attending upper secondary school on social values in rural China.

Choosing the sampling frame

Hebei
1. Zhangbei
2. Wanquan
3. Huaian
4. Yangquan
5. Weixian
6. Chicheng
7. Dongguang
8. Mengcun
9. Yanshan
10. Haixing

Shaanxi
1. Zhashui
2. Shangzhou
3. Danfeng
4. Shanyang
5. Shangnan

- 15 poor counties were selected from Shaanxi and Hebei

- 132 rural junior high schools were enrolled

- 473 classes were randomly selected

- Around 20 000 students were surveyed

Baseline Survey to Identify Poor Students

October, 2010: 7th grade students

- **Student survey**
  - Family assets;
  - Basic student/family characteristics

- **Homeroom teacher survey**
  - list of 5 poorest students in the class

We combine family asset information from student survey and the list of poorest 5 students provided by homeroom teacher to identify the 2272 poorest students (4 each class) in these classes.

Endline Survey to Assess Social Values

September 2013: fall of first year of high school

- **Student survey**
  - Social values
  - Current schooling status
    - Academic high school
    - Vocational high school
    - Repeating last year of junior high
    - Finished junior high, no high school
    - Dropped out during junior high, no high school

Measures of Social Values

- **Group 1:** Social Trust
  1. Interpersonal trust
  2. Trust in the school system
  3. Trust in the media
  4. Trust in the banking system (and financial markets)
  5. Trust in government.

- **Group 2:** Life Expectations.
  1. Expectations for their family's future
  2. Expectations for their children's future

Measures of Social Values

问题	选项、单位	答案
49. 你对以下几种社会机构的管理者是否有信心？（非常有信心、有一些信心、几乎没有信心？）		
(1) 学校	A=非常有信心； B=有一些信心； C=几乎没有信心；	
(2) 新闻媒体	A=非常有信心； B=有一些信心； C=几乎没有信心；	
(3) 银行	A=非常有信心； B=有一些信心； C=几乎没有信心；	
(4) 政府部门	A=非常有信心； B=有一些信心； C=几乎没有信心；	
50. 晚上 10 点以后您在您家周围附近（一公里左右）散步，是否会感觉害怕？	A=是 B=否	
51. 等到您的孩子长到你这个年纪的时候，您认为他们的生活水平和您现在相比会怎样？	A=好很多 B=好一些 C=一样 D=差一些 E=差很多	
52. 总体来说，您觉得大部分的人能够信任还是待人需要谨慎？	A=大部分的人可以相信 B=大部分的人需要谨慎对待	
对于以下的论述，你是否认同此观点？		
53. 当今社会，像我这样的人以及像我家这样的家庭是有很好的机会来提高生活水平的。	A=完全同意 B=同意 C=不确定 D=不同意 E=完全不同意	

Descriptive Analysis

Where do rural students go after junior high school?

- *Less than half of rural students go to high school*

- *About 1/3 of rural young adults do not even finish junior high school.*

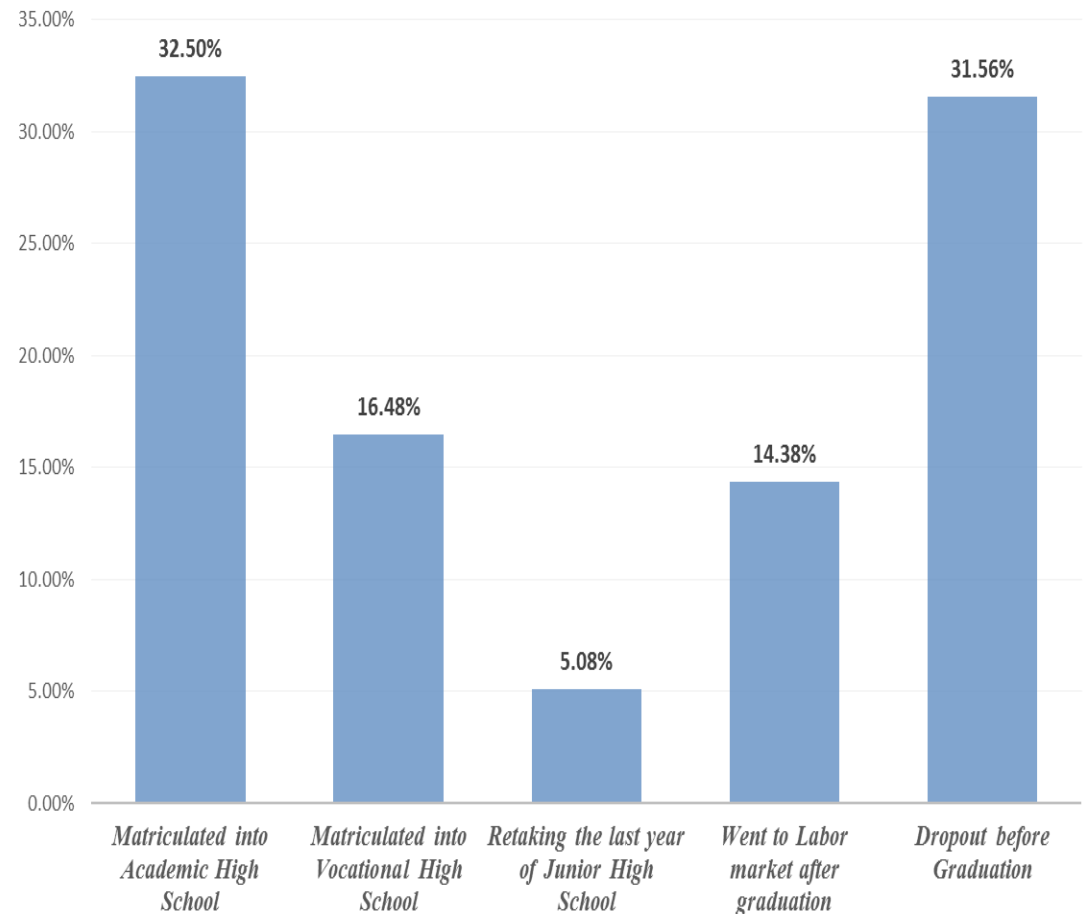**Figure 1: Paths of poor, rural students after junior high**

Table 1: Social values of young people who are in-school and those who are out of school.

Outcome variables	In school (1)	Out of school (2)	Difference (3) = (1) - (2)	P-values
Group 1: Social Trust Indicators				
Interpersonal trust	0.574	0.441	0.134***	0.003
	-0.03	-0.034	-0.043	
Trust in the school system	2.433	1.984	0.449***	0
	-0.031	-0.054	-0.058	
Trust in the media	2.125	1.947	0.178***	0.001
	-0.036	-0.044	-0.049	
Trust in the banking sector (and financial markets)	2.405	2.211	0.195***	0
	-0.036	-0.038	-0.048	
Trust in government	2.409	2.035	0.375***	0
	-0.039	-0.049	-0.059	
Group 2: Life Expectations				
Expectations for their children's future	4.575	4.404	0.170***	0.01
	-0.057	-0.062	-0.064	
Expectations for their family's future	3.673	3.404	0.268***	0.005
	-0.057	-0.076	-0.092	

Notes: (1) Robust Standard error reported in parentheses.

(2) *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

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Trust in the banking sector (and financial markets)	2.405	2.211	0.195***	0
	-0.036	-0.038	-0.048	
Trust in government	2.099	2.035	0.375***	0
	-0.059	-0.049	-0.059	
Group 2: Life Expectations				
Expectations for their children's future	4.575	4.404	0.170***	0.01
	-0.057	-0.062	-0.064	
Expectations for their family's future	3.673	3.404	0.268***	0.005
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Notes: (1) Robust Standard error reported in parentheses.
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□ *Young people who are not in school are significantly less trusting than those who have stayed in school.*

□ *Young people who are in school have significantly higher expectations for their family's and their children's futures.*

Academic vs. Vocational High School

- Students in China attend either academic high school or vocational high school

- Vocational high schools are a "lower track" in the Chinese education system… generally, only students who cannot get into academic high school go to VET

Table 2: Social values of AHS students and VHS students, restricted to students who went to high school;

Outcome variables	Academic high school students (1)	Vocational high school students (2)	Difference (3) = (1) - (2)	P-values
Group 1: Social Trust Indicators				
Interpersonal trust	0.616 (0.043)	0.453 (0.044)	0.163*** (0.059)	0.008
Trust in the school system	2.470 (0.040)	2.297 (0.073)	0.173** (0.083)	0.041
Trust in the media	2.137 (0.047)	2.102 (0.053)	0.035 (0.066)	0.599
Trust in the banking sector (and financial markets)	2.454 (0.050)	2.305 (0.076)	0.149 (0.095)	0.123
Trust in government	2.458 (0.044)	2.258 (0.075)	0.199** (0.082)	0.018
Group 2: Life Expectations				
Expectations for their children's future	4.679 (0.044)	4.391 (0.097)	0.288*** (0.087)	0.002
Expectations for their family's future	3.675 (0.076)	3.584 (0.103)	0.091 (0.122)	0.457

Notes: (1) Robust Standard error reported in the parentheses, *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

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Trust in the school system	2.470	2.297	0.173**	0.041
	(0.046)	(0.075)	(0.085)	
Trust in the media	2.137	2.102	0.035	0.599
	(0.047)	(0.053)	(0.066)	
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Expectations for their family's future	3.675	3.584	0.091	0.457

Notes: (1) Robust Standard error reported in the parentheses, *** p < 0.01; ** p < 0.05; * p < 0.1

1. Vocational high school students are significantly less trusting than academic high school students on
- *Interpersonal trust*
- *Trust in the schooling system*
- *Trust in government*

2. Academic high school students have significantly higher expectations for their children's futures.

Table 3: Social values of young people who dropped out of junior high and young people who completed junior high.

Outcome Variables:	Finished junior high (1)	Dropped out during junior high (2)	Difference (3) = (1) - (2)	P-values
Group 1: Social Trust Indicators				
Interpersonal trust	0.527 (0.024)	0.463 (0.040)	0.064 (0.039)	0.112
Trust in the school system	2.322 (0.035)	1.921 (0.074)	0.401*** (0.081)	0.000
Trust in the media	2.069 (0.037)	1.954 (0.045)	0.114** (0.052)	0.031
Trust in the banking sector (and financial markets)	2.355 (0.030)	2.191 (0.053)	0.164*** (0.059)	0.007
Trust in government	2.300 (0.036)	2.033 (0.070)	0.267*** (0.076)	0.001
Group 2: Life Expectations				
Expectations for their children's future	4.558 (0.048)	4.314 (0.083)	0.244*** (0.078)	0.003
Expectations for their family's future	3.608 (0.045)	3.364 (0.104)	0.244** (0.105)	0.023

Notes: (1) Robust Standard error reported in parentheses.
(2) *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Results:

Young people who dropped out of junior high are significantly less trusting than those who finished junior high.

- Trust in the schooling system
- Trust in the media
- Trust in the banking system
- Trust in government

Young people who finished junior high have significantly higher expectations for their family's and their children's futures.

OLS Regression

Table 4: The correlations of high school enrollment on students' social values

Outcome Variables	Interpersonal Trust	Trust in Schools	Trust in Media	Trust in Banks	Trust in Government	Child's Future	Family's Future
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treatment Variables							
1. Student went to high school (1=yes).	0.142***	0.436***	0.193***	0.302***	0.324***	0.117*	0.289***
	(0.052)	(-0.046)	(-0.053)	(-0.046)	(-0.067)	(0.060)	(0.079)
2. Student characteristics controlled	YES	YES	YES	YES	YES	YES	YES
3. Parent characteristics controlled	YES	YES	YES	YES	YES	YES	YES
4. Family characteristics controlled	YES	YES	YES	YES	YES	YES	YES
Constant	0.801**	2.168***	2.306***	1.638***	2.693***	3.932***	3.377***
	(0.331)	(0.347)	(0.281)	(0.409)	(0.421)	(0.417)	(0.403)
Observations	1,181	1,180	1,181	1,181	1,181	1,180	1,173
R-squared	0.146	0.311	0.229	0.233	0.221	0.243	0.134

Notes: (1) Robust Standard error reported in parentheses.
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R-squared	0.146	0.311	0.229	0.233	0.221	0.243	0.134

After we controlled other covariates as much as possible, we found consistent results as we found from the descriptive analysis.

Notes: (1) Robust Standard error reported in parentheses.
(2) *** p < 0.01; ** p < 0.05; * p < 0.1

Endogeneity problem of schooling choice might bias the OLS estimation.

Propensity Score Matching

Table 5: Impact of attending high school on social values, kernel-based matching and nearest neighbor matching results;

Outcome Variables	Kernel-based matching			Nearest Neighbor Matching		
	ATT	Number of Treated	Number of Control	ATT	Number of Treated	Number of Control
	(1)	(2)	(3)	(4)	(5)	(6)
Interpersonal Trust	0.201***	725	563	0.263***	725	198
	-0.04			0.052		
Trust in Schools	0.469***	725	563	0.487***	725	198
	-0.059			-0.066		
Trust in the Media	0.237***	725	563	0.282***	725	198
	-0.05			0.054		
Trust in Banks	0.370***	725	563	0.396***	725	198
	-0.063			0.073		
Trust in Government	0.374***	725	563	0.407***	725	198
	-0.073			0.069		
Child's Future	0.021	725	563	-0.001	725	198
	(0.058)			(0.056)		
Family's Future	0.240***	725	563	0.322***	725	198
	(0.067)			(0.092)		

Notes: (1) Robust Standard error reported in parentheses.

(2) *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Findings:

- The propensity score matching results are consistent with the OLS regression.

- For example, the P-score matching results reveal that attending high school could improve students' interpersonal trust about 20 percentage points, and it is significant at 1 percent level, which is more than 5 percentage point higher than the estimation results from OLS.

Conclusion:

- Less than 50% of poor, rural students in our sample attended high school at last.

- Young people who stay in school have higher levels of social trust and higher expectations for the future as compared with their peers who went out of the school.

- OLS and propensity score matching methods consistent results that attending high school has a significant impact on increasing young people's social trust and expectations for their future

- Low rates of high school attendance in rural China may be setting the stage for social instability in the future.

Thank you!

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