Should We Have Been Born Urban: *Hukou* Types and Dual Labor Market at Southeast China in 2005

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Introduction

- Studies on China have found a significant difference between urban and rural areas in terms of returns to education - the returns to education in rural areas are much lower than those in urban areas after 1990s.
- There are arguments that attribute all the discriminations against rural immigrant labors to "prejudice", which means an antipathy based on faulty and inflexible generalization and might be directed toward a minority group or an individual of that group.
- Some economists, on the other hand, pointed that wage discrimination might be based on reasons other than prejudice and personal characters such as gender, age and race. It might be a costless way to separate those employees with higher productivity and human capital.

Questions:

- Do the returns to education play a role in explanation of this wage disparity based on *hukou* status?
- Which theory, the scapegoat theory or information economics, is more preferable in explaining China's wage disparity based on *hukou* status?

Data and Methods

Data: China 2005 1% National Population Sample Survey (NPSS). For the sampling method and questionnaires of this micro-census, please see the website of State StatisticalBureau: http://www.stats.gov.cn/tjgb/rkpcgb/qgrkpcgb/t20060316_402310923.htm

Area: Eleven provinces located in the southeast part of China, which cover more than half (52.4%) of the country's population and account for 73.8 % of the nation's GDP. These areas include the major origins and destinations of rural-urban migrants in contemporary China

Methods: Spline regression model; Hierarchical linear model; and, Spacial model dealing with errors' spatial autocorrelation heteroskedasticity

Figure 1. The location map of studied areas

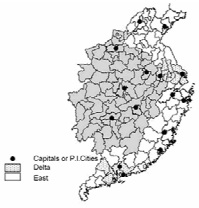

Figure 2. Indication map for three geographical variables

Results- returns to education and China's dual labor market

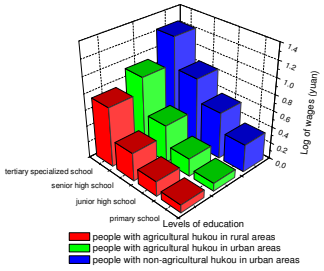

Figure 3. Relative returns to education at different educational levels

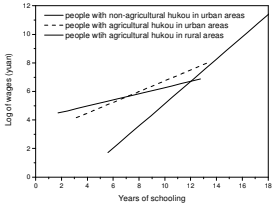

Figure 4. Returns to education after controlling geographical factors

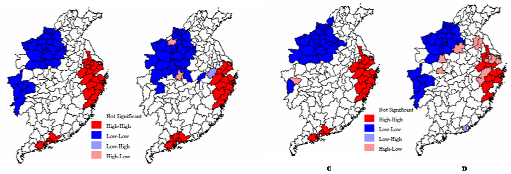

Figure 5. LISA Cluster Map for log wage after purging person-level effect
Notes: A is calculated from the overall samples;
B is calculated from people with non-agricultural *hukou* in urban areas (N= 135,693);
C refers to people with agricultural *hukou* in urban areas (N= 186,195);
D refers to people with agricultural *hukou* in rural areas (N= 307,483).

Table 1. Coefficients for spatial models of the determinants of region's average wage [a]

	Model 1		Model 2		Model 3		Model 4	
Independent variables	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Intercept	-0.374	0.405	0.489	0.464	-0.010	0.513	2.119	0.580
Spatial proximity			0.472	0.094			0.725	0.064
Delta district	0.048	0.035	0.039	0.042	-0.036	0.044	-0.026	0.054
Eastern region	0.108	0.025	0.129	0.033	0.081	0.032	0.160	0.047
Provincial capitals or planning independent cities	0.107	0.036	0.136	0.031	0.050	0.045	0.099	0.033
Log of food expenditure per capita [b]	0.529	0.055	0.409	0.064	0.427	0.070	0.163	0.079
Proportion of non-agricultural product	0.364	0.125	0.449	0.135	0.315	0.158	0.245	0.161
Proportion of labor-intensive workers	0.062	0.090	0.138	0.092	0.218	0.114	0.387	0.107
Pseudo R^2 (%)	81.3		83.1		62.2		73.1	
Log-likelihood	112.0		116.3		77.8		94.4	
Diagnostic tests (p-value)								
Spatial error dependence (LM)	0.015				7(10-7)			
Likelihood-ratio test for spatial dependence			0.003				1(10-8)	
Moran's I z-value for residuals [c]	0.007		0.382		1(10-4)		0.193	
Heteroskedasticity	0.029		0.103		0.125		0.063	

Note: N=145. Model 1 and 2 refer to people with non-agricultural *hukou* in urban areas; model 3 and 4 refer to people with agricultural *hukou* in urban areas, a: Person-level's within effect is purged from each model using the coefficients generated by centering person-level independent variables around their group means. b: This variable is computed from people located in urban areas in that region. c: Moran's I is a statistic used to depict degrees of spatial autocorrelation (see Anselin, 1995). The z-value of Moran's I is generated from randomization with 9999 computations to achieve a robust estimation (Anselin, 2005).

Conclusions

- Theories of information economics, rather than prejudice, are preferred to explain the wage disparity based on hukou status. Agricultural hukou might serves as a signal for lower quality of education received, due to the unequal educational investment and policy in urban and rural areas.
- The gap of returns to education is a way to explain wage discrimination against rural immigrants, rather than prejudice.
- The hypothesis that education may engender wage disparity in the dual labor market with "primary" and "secondary" sectors was proved in explaining China's rural-urban migration and related bewildering phenomenon.

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