



The Inequity of Education, Human Capital and Urban-Rural Income Gap in China

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Abstract: This paper uses the method of SYS-GMM to analysis the impact of inequity of education and human capital on urban-rural income gap with the provincial panel data from 2002 to 2011. The results show that the inequity of education should broaden urban-rural income gap significantly with the lagged effect. The increase of human capital narrows urban-rural income gap significantly with the lagged effect, and the ratio of urban-rural expenditure of primary school and the ratio of urban-rural expenditure of secondary school also narrow urban-rural income gap.

Key words: The Inequity of Education; Human Capital; Urban-Rural Income Gap

1. Introduction

The last three decades have witnessed a process of urban-rural income gap in China. The literatures give explanations such as dual-system; opening-up; institutions and so on. But the ability of earning relies on the human capital of the labor, and the inequity of education in China should the significant reason for the income gap.

2. Data and Methodology

We analyze the impact of inequity of education and human capital on urban-rural income gap with the provincial panel data from 2002 to 2011. The source of data is from the website of National Bureau of Statistics of the People's Republic of China. We consider the GMM estimator by Arellano and Bond (1991), where first differences are used to eliminate country-specific effects and instrumental variables correct for endogeneity.

The dependent variable is gap, meaning urban-rural income gap. Independent variables are Eg, Ps and Ss, which represents gini of education, the ratio of urban-rural expenditure of primary school and the ratio of urban-rural expenditure of secondary school. Other control variables include urbanization (urb), ratio of opening (open), financial development (fir), government power (gov) and GDP Per capita.

3. Result

Table 1 presents a summary of the results based on the GMM estimator. The results suggest that the inequity of education(Eg) should broaden urban-rural income gap significantly with the lagged effect.

Table1 The inequity of education and urban-rural income gap

	Dependent Variable: Gap				
L.Gap	0.65***	0.61***	0.608***	0.526***	0.359***
Eg	0.692***				
L.Eg		1.591***			
L(2).Eg			2.942***		
L(3).Eg				1.396***	
L(4).Eg					3.271***
Urb	-0.615***	-0.392***	-0.309***	-0.289***	0.076

Open	-0.101***	-0.151***	-0.248***	-0.191***	-0.322***
Fir	-0.06***	-0.055***	-0.028**	-0.018	0.043***
Indu	3.151***	2.93***	4.5***	4.263***	0.735
Gov	0.058**	-0.05	-0.283***	-0.043	-0.36***
Pgdp	-0.198***	-0.176***	-0.16***	-0.287***	-0.179***
Pgdp ²	0.02***	0.017***	0.011***	0.024***	0.011***
constant	-1.124***	-1.126***	-2.831***	-1.929***	1.084***
AR(2)	0.422	0.231	0.058	0.268	0.252
Sargan	0.959	0.956	0.957	0.875	0.9

Note: *Significance level at 10%; **Significance level at 5%;***Significance level at 1%.

The results from Table 2 suggest that the increase of human capital (Hc) narrows urban-rural income gap significantly with the lagged effect, and the ratio of urban-rural expenditure of primary school (Ps) and the ratio of urban-rural expenditure of secondary school (Ss) also narrow urban-rural income gap.

Table2 The inequity of education, human capital and urban-rural income gap

	Dependent Variable: Gap				
L.Gap	0.613***	0.526***	0.631***	0.577***	0.563***
Eg	0.635***	0.021	0.812***	0.979***	1.24**
L(2).Hc	-0.16***				
L(3).Hc		-0.095***			
Ps			-0.081***		-0.19***
Ss				-0.263	-0.155***
Urb	-0.377***	-0.213***	-0.623***	-0.622***	0.669***
Open	-0.171***	-0.111***	-0.091***	-0.009	0.004
Fir	-0.036***	-0.013	-0.048***	0.022**	0.015
Indu	4.252***	3.782***	3.08***	3.164***	3.379***
Gov	-0.266***	-0.064	0.05	-0.134	0.046
Pgdp	-0.142***	-0.261***	-0.211***	-0.225***	-0.242***
Pgdp ²	0.015***	0.023***	0.021***	0.018***	0.019***
constant	-0.835***	-0.547***	-0.955***	-0.798***	-0.893***
AR(2)	0.057	0.344	0.443	0.768	0.974
Sargan	0.956	0.922	0.952	0.974	0.981

Note: *Significance level at 10%; **Significance level at 5%;***Significance level at 1%.

4. Conclusion

This paper uses the method of SYS-GMM to analysis the impact of inequity of education and human capital on urban-rural income gap with the provincial panel data from 2002 to 2011. The results show that the inequity of education should broaden urban-rural income gap significantly with the lagged effect. The increase of human capital narrows urban-rural income gap significantly with the lagged effect, and the ratio of urban-rural expenditure of primary school and the ratio of urban-rural expenditure of secondary school also narrow urban-rural income gap.