**Research question:**

Internal migration and Self-Selection by skill level in China

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| --- | --- | --- | --- | --- |
|  | 2010 | 2012 | 2014 | 2016 |
| Id | pid |  |  | pid |
| Birthplace | qa102acode |  |  |  |
| Age 12 place | Qa 4 是否相同  Qa401acode 省 |  |  |  |
| residence place 10-16 | provcd | Provcd | Provcd14 | Provcd16 |
| work status | Qg3 |  |  |  |
| Work type/ Industry | qg307egp 分类  qg307code |  |  |  |
| Wage 2010-2016 (income and working hour) | Income  Qg401 月  Qg402 日  Qg403 小时  Qh1 月  Qh2 日  Qh3 小时 |  | P\_income | Income  Qg6 |
| Age | qa1age |  |  |  |
| Gender | gender |  |  |  |
| Education | cfps2010edu\_best  cfps2010eduy\_best |  |  |  |
| Union status | qa7\_s\_1 工会=5 |  |  |  |
| Marital status | qb307\_a\_1 |  |  |  |
| Health status | Qp3 |  |  |  |
| Metropolitan residence | / |  |  |  |

The past 40 years have witnessed both China’s rapid economic growth and extensive internal migration. As of 2013, there are 163.4 million migrant workers in urban areas, constituting approximately 40 percent of the Chinese urban labor force (NBS, 2013). Since internal migration can be an important source of labor supply and a determinant of shifts in regional economic growth, it is necessary to understand the determinants of its size and flow in China.

The early empirical study of Chinese migration flows focused on explaining the rural-to-urban migration. Zhao points out that the abundance of household labor and the shortage of farmland are among the most important determinants of labor migration, which can be predicted by Lewis’ dual sector model. However, many studies have shown that wages of hired workers in the agricultural sector have increased dramatically since 2003, and China has reached its Lewis turning point before 2010. Under such circumstances, we can shift our emphasis from rural-urban migration to a more general study of the determinant of China’ labor migration. Several later papers emphasize the mean income difference as the crucial determinant of labor migration in China. These results follow from Hicks-Sjaastad model which predicts that income differentials (minus migration costs) generate unidirectional migration flows. However, statistics from China Family Panel Studies suggest that all provinces have in-migration and many low-income provinces, including Jilin, Heilongjiang, and Chongqing, have more than 10% residents as in-migrants. To understand such phenomenon, this paper employs the general Roy model which first proposed by Roy and applied to migration by Borjas. It stresses regional differences in the returns to skills (as well as regional differences in mean income) and predicts that regions that pay higher returns to skills attract more skilled workers than regions that pay lower returns.

Using data from China Family Panel Studies, this paper provides an empirical analysis of internal migration flows in China and serves as an empirical test for the applicability of Roy model in the developing country’s context.

This paper is the first to apply Roy’s self-selection model to understand the inter-provincial migration in China. The model predicts that interstate differences in the returns to skills and mean income level are major determinants of both the size and skill composition of inter-provincial migration flows in China. Using data from China Family Panel Studies from 2010 to 2016, this paper also provides an empirical analysis to test for the two predictions from Roy model: correlation between skill levels and out-migration rates should be more positive in states with lower returns to skills, and skilled workers should move to states with higher returns to skills.