Iris Claus: In this paper, Hong Gao, Ming Lu, and Hiroshi Sato quantify the impact of city scale, which is measured by cities’ population size, on employment in China using probit model estimations and individual level survey data from 2002 and 2007. To control for a potential endogeneity bias in the estimations, cities’ population growth rates between 1953 and 1982 are used as instrumental variables. The potential endogeneity bias arises from two main sources. First, employment could affect city scale because individuals may locate where they are more likely to find work. Second, unobservable shocks may simultaneously affect city scale and employment. Using cities’ population growth rates between 1953 and 1982 overcomes the endogeneity problem because voluntary relocations were prohibited during this period because in China’s planned economy the government strictly controlled migration.

There are several reasons why city scale may affect employment outcomes. For instance, the economic geography literature postulates that positive externalities arise from people living and working in close proximity because of better input sharing, skill matching, knowledge transfer, and generation of ideas. These positive agglomeration effects lead to more productive workers and a higher marginal product of labor. A higher marginal product of labor in turn raises firms’ demand for labor and increases the probability of workers being employed. Another possible reason why the probability of being employed may increase with city size is that agglomeration reduces unemployment. Unemployment may be lower in cities, and lower the larger the cities, because of reduced search and matching frictions, greater job creation and destruction in cities, and/or lower reservation wages of urban workers.

The authors do not examine the potential underlying factors of why city scale in China may increase the probability of workers being employed, however—they do not test a particular theoretical model and their analysis is purely statistical. Their estimation results show that it is more likely for individuals to gain employment in big cities. More specifically, a 1 percent increase in city scale increases workers’ employment probability by between 0.044 and 0.050 percentage points. This finding is not particularly remarkable. Larger cities produce more output than smaller cities and therefore are expected to be
employing more people. The more interesting result is that the city scale effect is found to vary for individuals with different education levels, and the estimates suggest that the least skilled workers benefit the most from living in cities.

There are at least two influences in the Chinese economy that may be causing the larger effect of city scale on the employment probability of low-skilled workers compared with more highly educated workers. The first is China’s *hukou* or household registration system, which prevents the free movement of people, especially between urban and rural areas. Although migration controls have been relaxed since the beginning of China’s economic reforms in the 1980s, substantial restrictions remain in place with respect to migration to large metropolitan areas. People living in rural China tend to have lower education (and hence skill levels) than people living in urban areas. The *hukou* system therefore restricts the movement of unskilled workers in particular to larger metropolitan areas. This is expected to increase the demand for unskilled workers in cities, thus raising the probability of these people of finding employment in cities. An alternative explanation is China’s demographic transition. The finding that the least skilled workers benefit the most from living in cities is in line with the hypothesis that China has passed through its Lewis turning point—namely, China has moved from a vast supply of low-cost workers to a labor shortage, because of a sharp decline in fertility and population aging (Cai 2012).

If the *hukou* system is the dominant factor driving the city scale effects, the policy implications are clear. The *hukou* system should be reformed and reforms should be broad based—that is, they should not exclude large cities as they are currently being implemented. If demographic transition, however, is the main factor driving the result that the least skilled workers benefit the most from living in cities, it is less clear that policies could or in fact should affect economic outcomes. The paper thus provides a careful statistical analysis, which measures the impact of city scale on employment outcomes. But to be able to draw policy implications from the empirical estimations further analysis is needed on the particular aspects of city scale that affect employment outcomes.

**Reference**


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