# "IS OUT-MIGRATION AFFECTED BY ECONOMIC CONDITIONS"*: AN ABSTRACT

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This paper reports on an investigation of the effects of economic variables on gross out-migration rates from states 1955-1960 utilizing controls for the propensity to migrate.

One of the most important determinants of out-migration is whether an individual has previously migrated or not. In particular, those living outside of their state of birth are almost three times as likely to migrate as those still within their state of birth. This greater propensity to migrate of previous migrants is partially due to selection of individuals with characteristics that make for mobility. In addition, previous mobility makes future mobility more likely by destroying the human capital built up in the original place of residence. A recent arrival has not yet developed strong ties to a place and its people (a form of human capital) and is hence willing to move for a smaller economic incentive than someone who has lived in one place all of his life.

Because the same conditions expected to reduce out-migration (high income, rapidly growing employment, low unemployment, a warm climate etc.) are also the factors that promote out-migration, the population in an area with such characteristics is likely to consist of an unusually high proportion of recent arrivals, who have a high propensity to migrate. The result is that the out-migration resulting from some fraction of the recent arrivals moving on conceals the true effects on out-migration of the other variables. To discover how economic conditions are affecting out-migration, it is necessary to control for the propensity to migrate by using either the percent born out of state, or the percent who are recent in-migrants.

Because the educated have higher migration rates and the more prosperous areas have a higher level of education, it is necessary to control for the level of education in order to avoid biasing estimates of the effects of the economic variables. Because the larger a state the less the need to look outside the state to find a suitable employment opportunity, the out-migration rates from larger states are lower than from less populous states. This can be controlled for by including the logarithm of population.

Although the gross out-migration rate was found to have a very low simple correlation with the level of family income in a state, there was a statistically significant relationship when the propensity to migrate was controlled for by using the percent born out of state. In the absence of a control for the rate of growth in employment it was found that each thousand-dollar increase in median family income was associated with increased retention of the population amounting to 1 1/2% of the initial population over five years, not a very powerful effect. In addition, the percent who had attended college

*The full paper presented at the 1972 Williamsburg meeting is in the January, 1973 Southern Economic Journal.

**The work reported on was done while the author was employed by the New England Regional Commission.

and the logarithm of population were found to be statistically significant variables.

Although out-migration and the rate of growth in employment as defined by the Census are almost completely uncorrelated, the rate of growth in employment does become a powerful determinant of the gross out-migration rate when the propensity to migrate is controlled. Once the census rate of growth of employment is included in the equation, the average family income is no longer significant. It appears that the lower out-migration rates from the higher income states are at least partially a reflection of the more rapid growth of employment in these states (due to a low degree of dependence on employment in slow-growing, low-wage industries such as agriculture).

The Census measure of employment growth suffers from several defects, notably that out-migration of the self-employed (including farmers) is also a decline in employment. When the Bureau of Labor Statistics measure of nonagricultural employment was substituted it was still statistically significant, but the overall explanatory power of the equation was reduced (from 89% to 79%). Family income again became significant suggesting that low income of the self-employed (notably farmers) and farm workers did promote out-migration.

The principal conclusions drawn are that it would be desirable in surveys of out-migration (such as the Census) to calculate separate out-migration rates for those who had resided in a place since birth, and for those who had moved in from elsewhere. Failing that, it is necessary to control for the propensity to migrate if accurage estimates of the effects of other variables are to be obtained. Failure to do so is the likely reason why Lowry did not find that economic conditions in the area of origin affected migration.[1] With such controls, this study did find that economic conditions affected out-migration. The rate of growth of employment was found to be the most important determinant of out-migration, and when this was controlled for, the influence of the wage level was much reduced, or eliminated.

# FOOTNOTES

[1]Ira S. Lowry -- Migration and Metropolitan Growth: Two Analytical Models, Institute of Government and Public Affairs -- University of California, Los Angeles, California, 1966.