Non-Metropolitan to Metropolitan Area Migration of Young Adults

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Abstract
The decisions of young adults from non-metropolitan areas to either migrate to metropolitan areas or remain in non-metropolitan areas following the completion of schooling are studied in this paper. The migration decision is decomposed into an hourly initial earnings component and a cost component comprising the financial, psychic, and employment attainment costs of migration. There are three noteworthy findings. First, while the propensity to migrate increases in educational attainment, contrary to conventional wisdom, this is entirely attributable to lower costs to migration among more educated individuals. Second, weak local economic conditions exert a strong influence on migration behavior. Specifically, high local unemployment rates and low per-capita county income significantly increase the cost of migration. Third, expected differences in initial earnings continue to provide an important incentive for young adults to migrate from non-metropolitan to metropolitan areas.

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1. Introduction

Over the past thirty years net migration flows between non-metropolitan and metropolitan areas of the United States have reversed three times (Fuguitt and Beale). Net out-migration from non-metropolitan areas prior to the 1970s and during the 1980s have lead to calls for policies to foster the retention of the rural population base, while during periods of net in-migration concern has largely focused on the preservation of the ‘rural character’ of communities and managing growth. Development and retention of a skilled rural labor force has remained, however, a constant concern. The successful design of rural labor force development initiatives must specifically account for the migration behavior of young adults, given their relatively high propensity to migrate and the rapid aging of the population remaining in non-metropolitan areas.

Previous efforts to identify the underlying components of non-metropolitan to metropolitan area migration decisions in the United States have focused on either persistent non-metropolitan - metropolitan area earnings gaps or on the financial and psychic costs to migration (Hoch; Deaton, Morgan, and Anschel; Broomhall and Johnson). This paper builds on those efforts by formally developing a model of the joint roles of initial hourly earnings and a cost component, encompassing the financial, psychic, and employment attainment costs of migration, in individual migration decisions. Using a sample of 1476 young adults resident in non-metropolitan areas at age 14 from the National Longitudinal Survey of Youth (NLYS), the influence of individual characteristics and local economic conditions on initial hourly non-metropolitan and metropolitan earnings are consistently estimated by the maximum likelihood method of Type 2 Tobit (Amemiya). Consistent estimates of the influence of individual characteristics and local economic conditions on the cost component of the migration decision are then recovered through a structural probit that includes the log of the ratio of predicted metropolitan to non-metropolitan initial hourly earnings as an explanatory variable.

The results suggest that migration decisions are partly based on gains in expected initial hourly earnings, but the cost component also plays a major role. Contrary to conventional wisdom, the ratio of expected metropolitan to non-metropolitan hourly earnings appears to decrease with education. Therefore, observed higher propensities of more educated individuals to migrate from non-metropolitan to metropolitan
areas are strictly attributable to their relatively low costs of migration. Further, poor local economic conditions, as measured by high county unemployment rates and low county per-capita income, have a negative overall impact on the propensity to migrate due to the strong tendency of these variables to increase the cost of migration.

The findings are developed in the remainder of the paper as follows. The next section presents a simple model of non-metropolitan to metropolitan area migration. Section 3 discusses empirical specification and estimation. Section 4 describes the data. Section 5 presents the empirical results and Section 6 presents simulation results. Section 7 then discusses labor market mechanisms that may induce the strong observed influences of education and local economic conditions on the cost component of individual migration behavior and briefly concludes with the implications for rural development policy.

2. A Model of Youth Migration to Metropolitan Areas

Individual $i$, resident of a non-metropolitan area, is on the verge of completing his or her desired level of schooling and entering the labor force. Initial earnings in a metropolitan labor market is denoted as $W_{i,0,U}$. The growth rate of metropolitan earnings is represented as $g_U$. Similarly, initial earning and growth rate of earnings in the local non-metropolitan labor market are denoted as $W_{i,0,R}$ and $g_R$, respectively. These growth rates may be interpreted as the coefficients of work experience in standard Mincer earnings functions. It follows that,

\[(1) \quad W_{i,t,U} = W_{i,0,U} e^{g_U t}\]

and

\[(2) \quad W_{i,t,R} = W_{i,0,R} e^{g_R t}\]

where $W_{i,t,U}$ and $W_{i,t,R}$ are, respectively, worker $i$’s metropolitan and non-metropolitan earnings at time $t$ after commencement of employment.

The transition from school to work is not frictionless. Assume that upon completing school, workers receive job offers generated by stochastic processes. Worker $i$ expects to receive a job offer with probability
\( \lambda_{i,U} \) if he migrates to a metropolitan area upon completing school. On the other hand, worker \( i \) expects to receive a job offer with probability \( \lambda_{i,R} \) in the local labor market. These probabilities are functions of labor market conditions and worker characteristics.

The worker’s planning horizon is a period of duration \( T \). Denote the subjective rate of discount as \( r_i \), letting \( r_i \neq g_U, g_R \). Then, given (1), the expected present value of the worker’s earnings over time \( T \) in a metropolitan area is

\[
V_{i,U} = \lambda_{i,U} \int_0^T W_{i,0,U} e^{-b_{g_U} t} dt = \lambda_{i,U} \frac{W_{i,0,U}}{r_i - g_U} \left[ 1 - e^{-b_{g_U} T} \right].
\]

Similarly, given (2), the expected present value of his earnings over time \( T \) in the local non-metropolitan area is

\[
V_{i,R} = \lambda_{i,R} \int_0^T W_{i,0,R} e^{-b_{g_R} t} dt = \lambda_{i,R} \frac{W_{i,0,R}}{r_i - g_R} \left[ 1 - e^{-b_{g_R} T} \right].
\]

If the costs of migration are substantial, the condition for migration is:

\[
\frac{V_{i,U}}{V_{i,R}} \neq C_i
\]

where \( C_i \) is an index of the financial, psychic, and employment attainment costs of migration, \( C_i \neq 1 \). Taking logs of both sides of (5), using (3) and (4), and applying a Taylor series approximation of nonlinear terms around mean values of \( r_i, \bar{r}, \)

\[
I^* \approx \alpha_0 + \left( \ln W_{i,0,U} - \ln W_{i,0,R} \right) + \left( \ln \lambda_{i,U} - \ln \lambda_{i,R} \right) + \alpha_1 r_i - \ln C_i
\]

where

\[
\alpha_1 = \frac{1}{r - g_R} - \frac{1}{r - g_U} + \frac{T e^{-b_{s_R} T}}{1 - e^{-b_{s_R} T}} - \frac{T e^{-b_{s_s} T}}{1 - e^{-b_{s_s} T}}
\]

\[
\alpha_0 = \ln \left( \frac{1}{r - g_R} - \frac{1}{r - g_U} + \frac{T e^{-b_{s_R} T}}{1 - e^{-b_{s_R} T}} - \frac{T e^{-b_{s_s} T}}{1 - e^{-b_{s_s} T}} \right) - \frac{\bar{r}}{r - g_R} + \frac{\bar{r}}{r - g_U} - \frac{T \bar{r} e^{-b_{s_R} T}}{1 - e^{-b_{s_R} T}} + \frac{T \bar{r} e^{-b_{s_s} T}}{1 - e^{-b_{s_s} T}}
\]

3
3. Empirical Specification and Estimation

$I_i^*$ represents the worker’s latent tendency to migrate. Worker $i$ would migrate to a metropolitan area if $I_i^* > 0$ and remain in the non-metropolitan labor market if $I_i^* \leq 0$. Assume that

(7) \[ \ln W_{i,0,U} = X_{i1} \beta_1 + e_{i1} \]

(8) \[ \ln W_{i,0,R} = X_{i2} \beta_2 + e_{i2} \]

(9) \[ \ln \lambda_{i,U} - \ln \lambda_{i,R} + \alpha_i r_i - \ln C_i = X_{i3} \beta_3 + e_{i3} \]

where the $X_i$ are exogenous regressors and the $e_i$ are error terms. Substituting (7) - (9) in (6) yields

(10) \[ I^* = Z_i \Pi + v_i \]

where $Z_i$ is the union of the regressors $X_{i1}$ to $X_{i3}$, and $v_i$ consists of an error from approximation and a linear combination of the errors $e_{i1}$ to $e_{i3}$. While $I^*$ is unobserved, the migrant status of worker $i$ is known. Assuming $v_i$ is normally distributed, the equation (10) may be estimated by probit ML.

Initial hourly earnings of workers who completed schooling and entered the labor force before 1979, the first year of the NLSY, are unavailable. Hence, hourly earnings equations are estimated as

(7.1) \[ \ln W_{i,21,U} = X_{i1} \beta_1 + g_{U} t_{21} + e_{i1} \]

(8.1) \[ \ln W_{i,21,R} = X_{i2} \beta_2 + g_{R} t_{21} + e_{i2} \]

where the $W_{i,21}$ are worker $i$’s hourly earnings at age 21 or the earliest year thereafter when observed out of school, $t_{21}$ is work experience at this time, and the $g$ are, as previously defined, the growth rates of earnings in metropolitan and non-metropolitan areas. Assuming $e_{i1}$ and $v_i$, and $e_{i2}$ and $v_i$, are bivariate normally distributed, (7.1) and (10), and then (8.1) and (10), may be consistently estimated by the maximum-likelihood method of type-2 tobit (Amemiya).

Once (7.1) and (8.1) are consistently estimated, worker $i$’s predicted initial hourly earnings in metropolitan and non-metropolitan areas, $\ln W_{i,0,U}$ and $\ln W_{i,0,R}$, may be generated as $X_{i1} \beta_1$ and $X_{i2} \beta_2$. 
respectively, the worker having no experience at the time of entry to the labor force. It follows that a consistent estimate of $\beta_3$ up to a factor of proportionality may be obtained by applying probit ML to the structural equation

$$I_i^* = \alpha_0 + \epsilon_i \ln W_{i,0,U} - \ln W_{i,0,R} + X_{i1}\beta_3 + \epsilon_i,$$

$\epsilon_i$ denoting the regression error. The structural probit (11) decomposes worker $i$’s migration propensity into its earnings component, $\epsilon_i \ln W_{i,0,U} - \ln W_{i,0,R}$, and its cost component, $X_{i1}\beta_3$. Note that identification of (11) requires that $X_{i1}$ or $X_{i2}$ contain at least one variable that is not included in $X_{i3}$.

4. Data and Variables

The primary data source for the study is the NLSY, a unique panel of 12,686 individuals 14 to 21 years of age in 1979 that has been resurveyed annually. A population of 1899 individuals who resided in a non-metropolitan county at age 14 was drawn. For those employed at age 21 or the earliest year thereafter when observed out of school, complete information on hourly earnings, location of residence, and individual and family characteristics was available for 1476 persons. An individual is considered a migrant if resident in a metropolitan county by age 21 or the earliest year thereafter when observed out of school. Supplemental data on county unemployment rates for the years 1975 and 1979 were obtained from the Bureau of Labor Statistics. Information on 1975 and 1980 county per capita income, 1980 population per square mile, and 1980 agricultural and manufacturing employment shares were obtained from the 1983 County and City Data Book, U.S. Department of Commerce, Bureau of the Census. The indicator of adjacency to metropolitan areas was created from 1983 rural - urban continuum codes prepared by the Economic Research Service of the U.S. Department of Agriculture (Tolbert and Sizer).

A comparison of the characteristics of individuals who migrated to metropolitan areas and those who remained in non-metropolitan areas reveals that migrants have higher earnings, higher levels of educational attainment, score higher on the Armed Forces Qualification Test, and more educated parents. Migrants also tend to come from counties with lower manufacturing shares of total employment and lower population.
densities as well as to have mothers not born in the state and to have lived at 14 in a county adjacent to a metropolitan area.

In the empirical model, log hourly earnings in metropolitan and non-metropolitan areas are specified separately for migrants (7.1) and non-migrants (8.1) as functions of individual human capital attributes (GRADE, AFQT80, EXPER), as well as gender, race, and ethnicity. The log of hourly earnings of non-migrants is also specified as a function of local economic conditions (AGSHARE, MANUSHAR, COUNEMP, YPERCAP, POSQML) and dummy indicators of region (NC14, SO14, WE14). The unequal number of regressors in the two earnings equations is necessitated by the natural unavailability of metropolitan county attributes for non-migrants when predicting potential metropolitan wages.

The AFQT80 variable, a measure of innate abilities, is excluded in the specification of the structural equation (11) to meet identification conditions. While such abilities influence worker productivity and quickly manifest themselves in hourly earnings, they are not observed beforehand by employers and, thus, do not influence the probabilities of a job offer. Neither is there reason to believe that innate abilities influence the financial and psychic costs of migration.

Except for AFQT80, all variables in the earnings equations (7) and (8) are included in the structural equation (11) to recover consistent estimates of the cost component of migration decisions. Four variables (NOATTACH, ADJMETRO, PAGRADE, MAGRADE) not included in the earnings equations appear in (11) to capture additional financial, psychic, and employment attainment costs of migration.

5. Results

Probit estimates of the reduced form and structural equations (10) and (11) are presented in table 1. The probability of migration to a metropolitan area is found to be positively and significantly associated with education, being Black, and paternal education. An individual residing at age 14 in a state other than his mother’s state of birth is also significantly more likely to migrate to a metropolitan area, as are youth residing in non-metropolitan counties adjacent to metropolitan areas. County population density is negatively and
significantly associated with the propensity to migrate.

**Table 1: Probit Equations**

<table>
<thead>
<tr>
<th></th>
<th>Reduced Form</th>
<th>Structural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>ASE</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>-2.227</td>
<td>0.440****</td>
</tr>
<tr>
<td>GRADE 21</td>
<td>0.080</td>
<td>0.021***</td>
</tr>
<tr>
<td>MALE</td>
<td>-0.091</td>
<td>0.072</td>
</tr>
<tr>
<td>BLACK</td>
<td>0.334</td>
<td>0.118***</td>
</tr>
<tr>
<td>HISPANIC</td>
<td>-0.007</td>
<td>0.156</td>
</tr>
<tr>
<td>PAGRADE</td>
<td>0.034</td>
<td>0.013***</td>
</tr>
<tr>
<td>MAGRADE</td>
<td>-0.026</td>
<td>0.017</td>
</tr>
<tr>
<td>AGSHARE</td>
<td>-0.078</td>
<td>0.600</td>
</tr>
<tr>
<td>MANUSHAR</td>
<td>-0.442</td>
<td>0.469</td>
</tr>
<tr>
<td>COUNEMP</td>
<td>-0.102</td>
<td>1.471</td>
</tr>
<tr>
<td>YPERCAP</td>
<td>0.062</td>
<td>0.034*</td>
</tr>
<tr>
<td>POSQML</td>
<td>-0.261</td>
<td>0.997***</td>
</tr>
<tr>
<td>NOATTACH</td>
<td>0.337</td>
<td>0.080***</td>
</tr>
<tr>
<td>ADJMETRO</td>
<td>0.345</td>
<td>0.083***</td>
</tr>
<tr>
<td>NC 14</td>
<td>-0.031</td>
<td>0.186</td>
</tr>
<tr>
<td>SO 14</td>
<td>-0.052</td>
<td>0.186</td>
</tr>
<tr>
<td>WE 14</td>
<td>-0.036</td>
<td>0.223</td>
</tr>
<tr>
<td>AFQT80</td>
<td>0.005</td>
<td>0.002***</td>
</tr>
</tbody>
</table>

Note: * Indicates significance in a two-tailed t-test at the P=0.10 level, ** indicates significance in a two-tailed t-test at the P=0.05 level, and *** indicates significance in a two-tailed t-test at the P=0.01 level.

Agricultural share of employment and unemployment rate in non-metropolitan county of residence at age 14 are negatively and significantly associated with migration in the structural equation (11), but the variables are insignificant in the reduced form equation (10). Parameter differences in the two equations suggest that these variables have countervailing influences on the initial earnings and cost components of migration decisions. Per-capita income in the non-metropolitan county of origin also shows a positive and highly significant association with migration in the structural equation, but is only significant at the 10 percent level in the reduced form equation. AFQT scores, a measure of innate abilities, are positively and significantly associated with migration in the reduced form equation. As discussed, the variable is excluded from the structural equation to meet identification conditions. Finally, the log of the ratio of predicted starting hourly
earnings in metropolitan and non-metropolitan areas is positively and significantly associated with migration in the structural equation.

**Table 2: Log Earnings Equations**

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan (Coefficient)</th>
<th>Metropolitan (ASE)</th>
<th>Non-Metropolitan (Coefficient)</th>
<th>Non-Metropolitan (ASE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>0.491</td>
<td>0.322</td>
<td>0.269</td>
<td>0.286</td>
</tr>
<tr>
<td>GRADE 21</td>
<td>0.048</td>
<td>0.017***</td>
<td>0.063</td>
<td>0.017***</td>
</tr>
<tr>
<td>MALE</td>
<td>0.174</td>
<td>0.052***</td>
<td>0.200</td>
<td>0.033***</td>
</tr>
<tr>
<td>BLACK</td>
<td>0.012</td>
<td>0.092</td>
<td>0.002</td>
<td>0.058</td>
</tr>
<tr>
<td>HISPANIC</td>
<td>0.111</td>
<td>0.134</td>
<td>-0.009</td>
<td>0.065</td>
</tr>
<tr>
<td>AFQT80</td>
<td>0.005</td>
<td>0.001***</td>
<td>0.003</td>
<td>0.001***</td>
</tr>
<tr>
<td>EXPER</td>
<td>0.059</td>
<td>0.025**</td>
<td>0.049</td>
<td>0.020**</td>
</tr>
<tr>
<td>AGSHARE</td>
<td>-0.518</td>
<td>0.284*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANUSHAR</td>
<td>-1.539</td>
<td>0.194</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUNEMP</td>
<td>-1.500</td>
<td>0.686**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YPERCAP</td>
<td>0.010</td>
<td>0.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSQML</td>
<td>0.013</td>
<td>0.042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NC 14</td>
<td>0.083</td>
<td>0.080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO 14</td>
<td>0.129</td>
<td>0.090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE 14</td>
<td>0.300</td>
<td>0.105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rho</td>
<td>0.0002</td>
<td>0.279</td>
<td>0.187</td>
<td>0.272</td>
</tr>
</tbody>
</table>

Note: * Indicates significance in a two-tailed t-test at the P=0.10 level, ** indicates significance in a two-tailed t-test at the P=0.05 level, and *** indicates significance in a two-tailed t-test at the P=0.01 level.

Consistent estimates of the metropolitan area and non-metropolitan earnings equations (7.1) and (8.1) are reported in table 2. In both metropolitan and non-metropolitan areas, log hourly earnings is positively related to years of schooling, AFQT score, and experience. The larger parameter estimate of AFQT in the metropolitan area earnings equation and the positive association between the log ratio of metropolitan to non-metropolitan earnings and migration accounts for the variable’s significant positive coefficient in the reduced form equation (10). In non-metropolitan areas, log hourly earnings is negatively related to the county unemployment rate and, at the 10 percent level, to the county agricultural share of employment. Finally, estimates of Rho are not significant in both earnings equations. This result suggests the error terms in the earnings equations are not highly correlated with the error term in the reduced form equation (10) and that OLS parameter estimates of the earnings equations would not be strongly influenced by selection bias.
6. Simulations

Potential differences in metropolitan and non-metropolitan area earnings are simulated from earnings equations estimates (table 3). A ‘typical’ individual in the sample (male, white, non-Hispanic, living in the south, and possessing mean levels of other characteristics) expects to earn $5.32 per hour in a metropolitan area and $4.85 in a non-metropolitan area, a 9.6 percent difference. Further, the earnings difference increases in work experience, other work characteristics constant. Immediately upon completion of schooling, the initial earnings gap is 6.6 percent; after 10 years of work experience, the gap increases to 17.8 percent. Thus, the importance of the earnings component of an individual’s migration decision plausibly increases in the length of his planning horizon and decreases with the subjective discount rate.

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan</th>
<th>Non-Metropolitan</th>
<th>% Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical*</td>
<td>5.32</td>
<td>4.85</td>
<td>9.6</td>
</tr>
<tr>
<td>No Experience</td>
<td>4.51</td>
<td>4.23</td>
<td>6.6</td>
</tr>
<tr>
<td>10 Years Experience</td>
<td>8.14</td>
<td>6.91</td>
<td>17.8</td>
</tr>
<tr>
<td>Females</td>
<td>4.47</td>
<td>3.97</td>
<td>12.5</td>
</tr>
<tr>
<td>Low Education (10th Grade)</td>
<td>4.65</td>
<td>4.07</td>
<td>14.3</td>
</tr>
<tr>
<td>High Education (College Degree)</td>
<td>6.21</td>
<td>5.94</td>
<td>4.4</td>
</tr>
<tr>
<td>High Unemployment (15.4%)</td>
<td>5.32</td>
<td>4.32</td>
<td>23.0</td>
</tr>
<tr>
<td>Agricultural County (23.4% Employment Share)</td>
<td>5.32</td>
<td>4.58</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Note: * Indicates a male, white, non-hispanic, living in the south with mean levels of other characteristics.

Females can expect lower hourly earnings in both metropolitan and non-metropolitan areas, but have a larger gap between predicted hourly earnings in metropolitan and non-metropolitan labor markets than males. Conversely, given a higher estimated rate of return to schooling in non-metropolitan labor markets, the predicted earnings gap decreases in educational attainment. Individuals with a 10th grade education earn 14.3 percent more in metropolitan than in non-metropolitan labor markets, while otherwise similar individuals with a college degree earn only 4.4 percent more. Since the ratio of metropolitan to non-metropolitan earnings is positively associated with the propensity to migrate, increases education has a negative influence on the earnings component of the migration decision.
High unemployment rates in non-metropolitan areas increase the ratio of expected metropolitan to non-metropolitan hourly earnings. A doubling of the average non-metropolitan unemployment rate from 7.7 to 15.4 percent increases the gap between metropolitan and non-metropolitan hourly earnings from 9.6 to 23.0 percent. Thus, an increase in the local unemployment rate would tend to raise the probability of migration from non-metropolitan areas through the earnings component of migration behavior. Similarly, a doubling of the average agricultural share of employment from 11.7 to 23.4 percent decreases non-metropolitan earnings and increases the gap between metropolitan and non-metropolitan earnings from 9.6 to 16.9 percent, tending, again, to raise the probability of migration via the earnings component of the migration decision.

As mentioned, probit estimates of (11) indicate that an increase in the ratio of metropolitan to non-metropolitan starting hourly earnings results in a significant increase in the probability of migration from a non-metropolitan to a metropolitan area. Simulations suggest that a doubling of the typical earnings gap from 9.6 to 19.2 percent results in a 5.5 percentage point increase in the probability of migration. Estimates of the structural equation (11) also reveal that GRADE21 has opposite earnings and cost component effects on migration propensities, as are the earnings and cost effects of COUNEMP. It is clear that in the case of GRADE21, the positive and significant relationship to migration propensities in the reduced form equation (10), is due to the greater strength of the effect of education on the cost component of the migration decision. Calculation of marginal effects from the probit estimates of (11) at the mean values of the variables indicates that the cost component effect of an additional year of schooling is a 4.1 percentage point increase in the probability of migration. By a similar calculation, the cost component effect of a thousand dollar increase in per-capita income in a non-metropolitan county is a 3.1 percentage point increase in the probability of migration, while the cost component effect of one percentage point increases in the unemployment rate and the share of agricultural employment are, respectively, 1.5 and 0.5 percentage point decreases in the probability of migration.

7. Discussion and Policy Implications

The paper has identified how individual characteristics and local economic conditions in non-
metropolitan areas influence the initial earnings and cost components of migration behavior among young adults. Of particular note in the results are the strong influences of schooling and local economic conditions on the cost component of migration decisions. The model developed in section 2 of the paper suggests that there are two major factors underlying the cost component of migration behavior. The first is the cost of employment attainment captured by the ratio of probabilities of employment in metropolitan and non-metropolitan labor markets. The second is the financial and the psychic cost of migration.

Since education at the college level or above often entails living away from home, it is likely to significantly reduce attachment to place of childhood residence and, thus, lower the psychic costs of migration. However, the influence of schooling may also operate through relative expectations of employment in metropolitan and non-metropolitan labor markets to reduce the relative cost of employment attainment in metropolitan areas. Specifically, education is believed to increase the geographic scope of employment opportunities and, thus, increase the probability of an employment offer in a metropolitan area (Simpson).

Similarly, local economic conditions directly affect the availability of employment opportunities in the non-metropolitan labor market of residence. Relatively weak local economic conditions, as evidenced by high county unemployment rates and low median per-capita incomes, are, therefore, expected to increase local costs of employment attainment and induce migration. Weak local economic conditions, however, also increase the economic isolation of a region. Economic isolation, like geographic isolation, can raise the perceived and real costs of job search in other areas (Molho). Economic isolation may also reduce information flows about opportunities outside the local labor market (Carrington, Detrapiache, and Vishwanath). Surprisingly, the negative influence of economic isolation seems to outweigh the increased costs of attaining non-metropolitan employment in the migration decision.

More research is needed to precisely identify the structural factors underlying the cost component of migration decisions. But even without identification of these specific factors, several important implications for rural development policy emerge from the results. First, efforts to retain more-educated young adults in non-metropolitan areas must focus on more than competitive wages. The common notion that more-educated youth
leave non-metropolitan areas because they do not receive competitive returns on their education distracts
attention from the true complexity of individual migration decisions. Cost components play an important role
in migration decisions and must be addressed in rural development initiatives to retain skilled young adults in
non-metropolitan areas.

Second, the retardant effects on migration of weak local economic conditions often keeps people in
economically isolated areas where they have significantly lower earnings potential. Appalachia and the
Mississippi Delta region provide two prime examples in the rural development literature. While low income,
high unemployment communities may fear additional population losses, reducing the cost to migration
stemming from economic isolation may be an important first step in re-establishing labor market equilibrium
with the wider economy. Such programs may focus, for example, on providing information on employment
opportunities outside of the local labor market area or ensuring continuation of current government transfer
benefits upon migration. As part of current welfare reform efforts Kentucky, Washington, South Carolina,
Florida, and Arkansas have enacted relocation-assistance programs that provide grants to cover costs of
migration to areas with better labor market employment opportunities (Jaffee).

Rural development policies that improve economic conditions will, by necessity, reduce economic
isolation and induce out-migration from non-metropolitan areas in the short-run. In the long-run retention of
young adults in non-metropolitan labor markets must be accomplished through attractive career and lifestyle
opportunities, not economic isolation and associated barriers to exit.
References:


