

AN EXAMINATION OF THE LOCATION BEHAVIOR OF EASTERN OKLAHOMA HIGH SCHOOL GRADUATES¹

David Holland and Luther Tweeten

Department of Agricultural Economics, Oklahoma State University, Stillwater, Oklahoma

Results of this study indicate that certain background characteristics, such as high school size, time of high school graduation, father's occupation, post-high school training, and education of the mother, affect the probability that the individual will leave his high school community. However, such factors do not affect the distance moved.

Americans are very mobile people. Each year, since 1947, about 20% of the people have changed their house, apartment, or other place of residence. In some cases, the migration of human capital implied in these high mobility rates has created problems. For example, the outmigration of human capital from rural areas has raised important and complex questions concerning the efficient and equitable financing of schooling and other social services in both the sending and receiving areas. Part of the information that the allocation branch and distribution branch of the government must have for correct assessment of this problem is some notion of actual migration patterns, as well as of motivating factors and characteristics of the people in question.

The study presented in this paper examines the factors affecting the migration behavior of a sample of eastern Oklahoma high school graduates. The sample consisted of individuals who had graduated from Muskogee, Chandler, Stroud, Wetumka, Morris, Olive, and Big Cabin high schools at five year intervals since 1920. Questions dealing with the individual's location since high school graduation were included in the survey; thus, a history of place of residence was compiled for most of the individuals who responded to the survey.

A number of alternative models have been employed to explain the volume and direction of immigration. The models used include Markov process models, gravity models, and prospective unemployment models. The major disadvantage of these models is that they explain migration be-

havior only in the aggregate, and have little to say about what will cause a particular individual to move. In addition, much of the necessary data are unavailable for time periods and regions which may be of interest to the investigator.

Since primary data were available, this study focused on individual migration behavior. First an equation predicting the probability that an individual has moved away from his home town was developed. Then for people who have moved, an equation predicting the distance of the move was obtained. The multiple regression equation describing the probability of moving was formulated, with the dependent and most of the independent variables as dummy variables. The second equation used the same set of independent variables, but the dependent dummy variable was replaced by distance moved.

It was hypothesized that the following factors would be of primary importance in explaining differences in the probability that an individual would leave his home town and, for those who left, distance moved: high school size, proximity to a large metropolitan area, sex, race, marital status, time of high school graduation, grades in high school, father's occupation, armed forces training, family size, advanced training, mother's education, father's education, and income of the individual.

The results of the regression analysis indicate that the important variables affecting the probability that an individual has left his home town 10 years after high school graduation are high school size (which is also a rough indication of community size), year of graduation, occupation of the individual's father, and the advanced training of the individual. Grad-

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uates of Muskogee high school were less likely to leave their community than were graduates of smaller schools. The raw data in percentage terms also indicate this. Graduates prior to 1940 were less likely to leave their home town than were graduates of more recent times. People whose fathers were blue or white collar workers were more likely to remain in town than people whose fathers were in the military or retired. And individuals with blue collar fathers were more likely to stay than those with white collar fathers.

Obtaining a college degree makes an individual much less likely to remain in his home town. Compared to people with no training after high school, those individuals who did receive some advanced training were more likely to migrate. The variables representing "good grades" in high school and "income," while not significant at the .10 level, have signs consistent with the hypothesis that each variable increases the probability of outmigration. The variables that do not seem to have any significant effect upon migration probability are sex, race, marital status, father's education, family size, and proximity to a large metropolitan area.

When distance moved is the dependent variable, the set of independent variables employed in this study lose most of their explanatory power, *i.e.*, the percentage of variation in the dependent variable explained by variation in the independent variables is extremely small (.04). The important variables in explaining variation in distance moved are high school size, sex, advanced training, and income.

Although people from the Group I high school were less likely to move away from their home town, when they did move, they tended to move a greater distance than individuals from the smaller schools. Females were more likely to move longer distances than males. People with higher

incomes have generally moved farther than people with lower incomes. The surprising coefficient is the one associated with advanced training. From the previous equation, it is established that people with advanced training were more likely to move than those with only a high school education. However, when we restrict ourselves just to persons who moved, the persons with only a high school background tend to migrate a greater distance than do those with advanced training or college education.

The technique of employing dummy variables and multiple regression analysis to examine the effect of family background characteristics upon individual migration probabilities does appear to yield useful information. However, because of the nature of the dependent dummy variable, the regression analysis results in a low R^2 .

Our findings indicate that the individual most likely to have moved away from the home town would be a white, married woman who attended Olive high school after 1940. Her grades in high school would be excellent and she would have a college degree and a high income. Her father would be listed as retired or in the military and she would have a large number of brothers and sisters. Her father would be relatively well educated, having at least a high school education, but her mother would not have finished grade school.

The same set of variables do not seem to be adequate to explain the distance associated with individual out-migration. An extremely low R^2 was associated with this relationship and the signs of several of the significant coefficients have low intuitive appeal. It would appear that distance moved is explained primarily by chance events and other factors such as personal preferences not accounted for by the explanatory variables available for this study.