

Educational Attainment, “Brain Drain,” and Self-Employment: Examining the Interstate Mobility of Baccalaureate Graduates, 1993-2003

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Purpose

States looking to grow their economies must ensure that sufficient human capital exists to raise productivity, output, and incomes throughout the state. Some of these gains will stem from the creation of new enterprises, which previous research links to higher living standards.

Many policymakers and economic development leaders worry about the net outflow of talent from their states, especially in rural or economically depressed areas. With states investing heavily in the education of their youth, the hope is that losses of high-achieving students will be balanced by a comparable influx of talent.

This paper explores the mobility of labor from one state to another, using data from the 2003 Baccalaureate and Beyond longitudinal survey. Baccalaureate graduates have devoted years to their studies and are ready to engage the “real world” for success in the job market. Opportunities will await some of them locally, allowing them to stay close to their family and friends. For others, the job market dictates a move to another city, state, or country.

Overall Findings

This paper looks at the issue of employment and location ten years after a baccalaureate degree is awarded. In general, its findings are consistent with the existence of “brain drain” from many states. Bachelor’s degree students with good grades, especially attendees of expensive top-tier universities, are highly mobile and willing to move away from their home states. These students are also apparently attracted to opportunities elsewhere, evidenced by the strong relationship between mobility and economic growth.

The self-employed appear to have the same motivations as their wage and salary counterparts, with a few differences, suggesting that the choice to become self-employed is entirely different from the decision whether or not to relocate.

Highlights

- **In labor mobility, the self-employed are very similar to their wage and salary counterparts, with three exceptions in this study.** First, the self-employed models have fewer significant variables. This is likely a function of the smaller sample of self-employed; with a larger sample, more variables might have been significant. Second, prior experience with self-employment in 1997 was strongly associated with later self-employment in 2003. Finally, the effects of many variables are larger for the self-employed than they are for wage and salary workers. Again, this could result from the smaller sample size.
- **Baccalaureate grades are more important for determining mobility than the majors themselves.** Students with mostly As or mostly As and Bs in their majors are more likely to be mobile than their counterparts, especially among the self-employed. These students are about 2.5 percent more likely to be mobile as wage and salary workers, and over 12 percent more likely as self-employed workers. The choice of one’s baccalaureate major, is not a significant determinant of labor mobility, except for business and education majors (both of which are more likely to be non-mobile wage and salary workers).
- **The “best and brightest” students are highly mobile.** Other educational variables also suggest that the highest achieving students are more likely to switch states within ten years

after graduation. Students receiving an expensive, high-caliber education are highly willing to move from their home state in search of new opportunities. Graduate education can be another important determinant of mobility. Having a well-educated spouse also makes it more likely that a student will move on, particularly for wage and salary workers (but not the self-employed).

- **There is a strong correlation between mobility and economic growth.** For example, states that experience real GDP growth of 10 percent or more than the national average between 1993 and 2003 are 13 to 15 percent more likely (in this sample) to have students moving there from another state. Similar findings are found using employment and firm growth data. The Beacon Hill Competitiveness Index is a significant indicator of mobility for wage and salary workers (but not the self-employed), suggesting that highly innovative states—focused on the so-called “knowledge economy”—are also attracting new workers.
- **Having strong ties to home prevents people from leaving.** In general, if you are older, married, with children, and a homeowner, you are less likely to leave your home state. Marriage and children are not significant factors, however, in determining self-employment mobility. The strongest variable here is homeownership, decreasing the likelihood of mobility by over 12 percent for wage and salary workers and between 22 and 24 percent for the self-employed. Students desiring to live close to their parents and relatives are 9 to 11 percent less likely to leave their home states, while students wishing to move away from their parents had greater probabilities of mobility. Once again, the effect for the self-employed is significantly larger on this variable: those desiring to move away are nearly 16 percent more likely to do so – almost triple the probability rates found for wage and salary workers.

Note

The author obtained access to this data set, which is restricted because of privacy concerns, after the U.S. Small Business Administration and the U.S. Department of Education’s National Center for Education Statistics signed a memorandum of understanding (MOU). Interested parties can reference MOU control number 0701163, signed January 17, 2007.

Scope and Methodology

The Baccalaureate and Beyond data series is used for this analysis. Graduates of the class of 1993 were asked a series of questions in the 1992-1993 academic year and in three subsequent follow-ups. Respondents answered a question in 2003 regarding their current employer. This study observes various differences between the self-employed and wage and salary workers. It is a nationally representative sample, and many distinguishing characteristics can be observed by contrasting the groups. Tables 1 through 8 discuss such differences.

Multivariate logit regressions are performed. In each model, the decision to live in a state different from where the student earned his or her bachelor’s degree (defined as “mobility” in this study) is the independent variable, and various dependent variables help to predict whether or not a graduate of the class of 1993 would choose such an outcome. The results of these logit equations appear in Tables 9 and 10.

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