full vesting.6 The majority of "vested" plans (154) provided for deferred vesting, with 75 percent of the plans specifying a prerequisite of either 10 or 15 years of service. On the basis of this study I concluded that one was unlikely to find a manufacturing industry with a large enough number of immediate, fully vested plans to allow a comparison to be made between mobility under contrasting vesting schemes. Among nonmanufacturing industries, only the higher education industry was found to have the kind of vesting distribution of pension systems that would allow an interfirm cross-section analysis to be made.

## DATA AND METHODOLOGY

To make a cross-section analysis of the mobility (herein defined as voluntary separations) of employees in firms with vested as contrasted to employees in firms with nonvested pension plans in the higher education industry, one needs (1) data to classify pension plans in American colleges and universities according to the extent of vesting; (2) data on the voluntary separation rates of faculty, by institution; and (3) data to standardize the sample—that is, to hold "constant" the impact on voluntary separation rates of factors other than the extent of vesting.

Greenough and King's study of pension plans in American colleges and universities furnishes a description of the vesting provisions in most institutions of higher education (hereafter, IHE).7 The voluntary separation rates of faculty, by institution, have, to my knowledge, never been collected; therefore, these data were secured by mailed questionnaires. Data to standardize the sample were drawn from higher education source books, of which the U.S. Office of Education's annual Education Directory was the most useful. Section 1 of the appendix contains a detailed discussion of the collection and use of the data.

To standardize the sample, a deflation procedure was used; that is, I divided the voluntary separation rates of one academic rank of faculty by the rates of another rank of faculty in the same institution. If, in a given institution, a factor (other than the extent of vesting) affects the average separation rate of faculty in the four academic ranks in the same direction and in approximately the same amount, then the deflation process provides a method of minimizing the effect of this factor on relative (interfirm) separation rates. Section 2 of the appendix is devoted to a more complete treatment of the methodology used.8

## THE EFFECT OF NONVESTED PENSION PLANS ON FACULTY SEPARATION RATES

What predictions can be made about the voluntary separations of faculty under vested and nonvested pension plans? Voluntary separation under a fully vested pension plan is almost without financial

<sup>&</sup>lt;sup>6</sup> W. W. Koladrubetz, "Vesting Provisions in Pension Plans," Monthly Labor Review, vol. 82, July 1959, pp. 745-746.

<sup>7</sup> W. C. Greenough and F. P. King, Retirement and Insurance Plans in American Colleges, New York, 1959.

<sup>8</sup> For a similar use of the deflation procedure, see M. Lurie, "The Effect of Unionization on Wages in the Transit Industry," Journal of Political Economy, vol. 69, December 1961, p. 562.