cost; for the faculty member, if he moves, receives during his retirement years a sum representing the contributions of his employer as well as his own contributions for the years of covered service (plus accumulated interest). The nonvested plan, however, imposes a heavy financial burden on the faculty member who leaves an institution before retirement age.

Estimates of the financial cost of movement under a nonvested system are given in table 1. It is clear from these data that the financial cost of leaving an institution with a nonvested plan increases at a decreasing rate with years of covered service; and that, after 15 years of service, for example, the cost of moving to another position becomes large enough ($4,997 lump sum or $333 annually to retirement age) to cause a senior faculty member to deliberate carefully before departure and, in some cases, to decide against leaving.[9]

TABLE 1.—FINANCIAL COST OF MOVEMENT UNDER A NONVESTED PENSION SYSTEM[1]

Age individual leaves nonvested plan (1)	Net additional sum needed by individual to make up for lost pension benefit (2)	Same as column (2) except on annual basis to age 65 (3)
35	$561	$28
40	2,020	116
45	4,997	333
50	9,458	781
55	16,742	1,925
60	26,881	5,725

[1] Assume salary scale as follows:

30 to 34	$5,000
35 to 39	7,500
40 to 49	10,000
50 to 65	12,000

Notes: The net additional sum needed by a faculty member to buy the same retirement benefits that he would have received had he not moved is given in columns (2) and (3). Column (2) is the lump-sum figure and column (3) is the annual amount he would have to pay until retirement age is reached (assumed to be 65). The costs of movement under a nonvested system have been determined in the following manner: first, I assumed an age of entry into the pension system (age 30), a salary scale, a contribution rate (5 percent), and an interest rate (3 percent); second, I computed the total pension income lost; third, the total pension income lost was converted to the single sum needed to replace the lost benefit; and fourth, I subtracted from the lump-sum cost, the amount of the individual's contribution returned on leaving the pension system (computed at 3 percent compound interest).

The question to be considered here, however, is not whether it is more costly to move under a nonvested pension plan (for it clearly is), but whether faculty consider this cost a major obstacle to their mobility. If they do, in fact, act like Homo Economicus, then, other things equal, voluntary separation rates will be lower in IHE with nonvested plans as compared to separation rates in IHE with vested plans. Of course, the crucial problem in this study and all cross-section studies is whether the comparison is made with "other things equal." As indicated earlier, the methodology of correcting for the effects of other factors is discussed in the appendix, section 2.

The age of faculty is one of the factors discussed in the appendix as having an impact on separation rates; for it is clear that mobility

[9] Few components of faculty income other than pensions have the distinctive feature of increasing in value with increased employment. Life insurance, hospitalization, surgical, and major medical plans can be bought by the mobile professor at most IHE at about the same price. The rewards and privileges forthcoming to senior staff for long-time loyalty and service, although often not quantifiable, undoubtedly reduce the mobility of professors. But this kind of immobility is likely to be distributed randomly among all IHE: or, at least, we do not expect that general academic immobility will be associated with the fact that an institution has a vested or nonvested pension system.