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HUMAN CAPITAL ACCUMULATION AND JOB MOBILITY*

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1. INTRODUCTION

Particularly at the beginning of one's working life, job experience tends to increase substantially one's marketable skills. It is therefore quite likely that a young worker will pick a job because it provides excellent on-the-job training and not because it offers the highest wage. Only eventually may the worker move on to another job that offers a more generous reward for the accumulated education, training, and job experience.

Job mobility varies with age and education. The young are more likely to move because they have more time left to recover the costs of mobility [Sjaastad (1962)], and the greater likelihood of the educated to move is traditionally explained by postulating a relationship between the stock of education and mobility. Schwartz summarizes the general view when he argues that "as education increases, the market (for individual occupations at each level of education) tends to become geographically wider but quantitatively smaller" [Schwartz (1973, p. 1160)]. We accept this explanation but will show that it is incomplete because it neglects the possibility that the process of accumulation of education (or of human capital generally) may also affect an individual's incentives to move.

Job mobility is the result of uncertainty, of changes in the labor market, or of changes in the individual. In this paper we ignore uncertainty and labor market fluctuations to isolate the effect of the accumulation of human capital on job mobility.

The topics discussed here are related to the job search and migration literature. In order to assess the expected gains from a job change, a worker must gather information about job availability, wage rates and nonmonetary benefits, and about skill requirements. If a job necessitates a change in location, the information about this location and about the costs of moving will also be needed. Information is costly to acquire. Even if perfect information could be obtained, the worker would usually not buy all the information available, due to budget constraints and/or decreasing marginal returns to information. With decisions based on incomplete information, expectations about a new job may not be met, and the disappointment may lead to yet another move.

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This research has two major objectives. First, it demonstrates that static models which treat migration as if it were the only move in a person's lifetime are inferior to dynamic models which allow for a sequence of possible moves. Second, this research adds new insights about the role of human capital in the migration decision. In a dynamic model, the process of accumulation of human capital may itself contribute to a migratory move, while the traditional static models consider only the role of the stock of human capital.

2. THE IMPORTANCE OF SUCCESSIVE MOVES

In a seminal paper, Sjaastad (1962) explains why migration is selective with respect to age and education. In an insightful discussion, he highlights the importance of different human capital endowments. Because of individual differences, migration is not unidirectional.

In Sjaastad's study, the potential migrant is thought of as computing the present value of the net benefits of moving. Let T be the length of the remaining working life, and let 0 be the present date. $Y_i(t)$ is the benefit derived from working at a job in location i at time t, $K_{ii'}$ is the cost of moving from i to i', and ρ is the subjective discount rate. The present value of a move from i to i' is given by

$$PV_{ii'}(0,T) = \int_0^T e^{-\rho t}\,[Y_{i'}(t) - Y_i(t)]dt - K_{ii'} \tag{1}$$

A move will occur if Max $\{PV_{ii'}(0,T)\}$ is positive; i' denotes all available choices.

A worker following Sjaastad's decision rule is likely to make suboptimal choices. If he would consider the possibility of a second move, he might find one of the following three choices to be superior to a single move from i to i':

$$\text{(a)}\quad PV_{ii'}(0,T) < PV_{ii'}(0,t^*) + PV_{i'k}(t^*,T) \qquad (0 < t^* < T)$$

$$\text{(b)}\quad PV_{ii'}(0,T) < PV_{il}(0,t'') + PV_{li'}(t'',T) \qquad (0 < t'' < T)$$

$$\text{(c)}\quad PV_{ii'}(0,T) < PV_{in}(0,t') + PV_{nm}(t',T) \qquad (0 < t' < T)$$

In the first case, Sjaastad's decision rule would correctly predict the destination of the first move but fail to foresee the subsequent move from i' to k at time t^*. In the second case, the rule would predict the final destination correctly, but leave the first move from i to l unexplained. Finally, it is possible that a move to i' would not occur at all. Thus, the possibility of repeat moves is a crucial aspect of the migration decision.

Many people move and change jobs more than once. The majority of movers crossing the boundaries of the Standard Metropolitan Statistical Areas or of the nonmetropolitan State Economic Areas are repeat movers [DaVanzo (1978)]. Thus our argument has great empirical relevance. Any explanation of mobility is incomplete if it does not account for repeat moves, and is likely to lead to false predictions. The analysis of the influence of human capital accumulation on job mobility must allow for repeat moves to be meaningful. The accumulation of education, training, or job experience, by changing the value of a person's labor, opens up new job opportunities, thereby increasing the likelihood of a move. This hypothesis is consistent with the observation that moves are most likely to occur at

the end of a period of schooling, and at other important junctures in a person's life [DaVanzo (1978)].

3. A HUMAN CAPITAL APPROACH TO JOB MOBILITY

The Model

Human capital is not a homogeneous asset. It is the result of formal schooling and training, and of experience. Some of the human capital is of value only in the performance of specific tasks. Other parts of the human capital are of more general use. This leads to our first assumption. Denote different jobs and activities by the subscript i, and different locations by the subscript j.

Assumption 1: There are two basic types of human capital. E is the vector of human capital acquired through formal schooling, and H is the vector of accumulated job experience. The elements of the vectors E and H, E_{ij} and H_{ij}, denote the total formal schooling or training for, and the total job experience in, job j at location i, respectively ($i = 1, 2, . . ,n; j = 1, 2, . . , m$).

Assumption 2: The potential labor income per unit of time depends on the vectors E and H.

$$Y_{ij} = Y_{ij}[E(t), H(t), t] \tag{2}$$

The partial derivatives are assumed to be nonnegative, and Y_{ij} is assumed to be strictly concave in E and H.

Assumption (2) is not needed for mathematical reasons, but it is made to eliminate any incentives to move other than those that can be attributed to changes in the stock of human capital.

Assumption 3: The individual allocates his time among three competing uses: leisure, l, schooling, e_{ij}, and work, h_{ij}.

$$l + \sum_i \sum_j (e_{ij} + h_{ij}) = 1 \tag{3}$$

Assumption 4: Human capital changes as a consequence of conscientious efforts to increase the stock of human capital. It is assumed that human capital does not depreciate.

$$\dot{E}_{ij} = e_{ij}; \dot{H}_{ij} = h_{ij} \qquad (i = 1, 2, \ldots, n; j = 1, 2, \ldots, m) \tag{4}$$

A dot above a variable will always denote the time derivative. For notational convenience, the variables will be written explicitly as functions of time, t, only when necessary to avoid misunderstandings.

Assumption 5: Let A denote the financial capital, expressed in real terms. It is assumed that at the beginning of his lifetime ($t = 0$), every worker possesses a positive amount of financial capital.

$$A(0) > 0 \tag{5}$$

Assumption 6: The only cost of acquisition of human capital is the opportunity cost of the time spent for this purpose. Migration is assumed to have zero time and money cost.

The purpose of this research is the discussion of the qualitative effect of human capital accumulation, and not an empirical investigation of migration. Moving costs will reduce the benefits to be obtained from a job change, and some moves predicted by the model may not occur if these costs are recognized. However, omitting the costs of mobility does not alter the qualitative theoretical conclusions obtained from the model. Hence, it is justified to use Assumption 6 to avoid considerable mathematical complications, but if the model is to be used for empirical studies, this assumption has to be relaxed.

Assumption 7: The capital market is assumed to be perfect. This means that the worker can borrow arbitrarily against future earnings. r is the constant interest to be paid on debts; it is also the rate of return on financial capital.

Given Assumption 6 and 7, the budget constraint takes the following form (c is the consumption at time t):

$$\dot{A} = rA + \sum_i \sum_j h_{ij} Y_{ij} - c \tag{6}$$

Assumption 8: The lifetime of a worker is equal to T. T is known.

Assumption 8 does not exclude the possibility that a worker dies in debt. This problem could be solved requiring that $A(T)$ be nonnegative. The alternative solution chosen here is based on the assumption that the worker derives utility from leaving a financial bequest, $B(T)$, at the time of his death. This approach also provides the justification for Assumption 5.

Assumption 9: Utility is derived from consumption, c, leisure, l, and from the final bequest. The utility function is assumed to be additively separable in c and l on one side, and the utility of the final bequest, $B(T)$, on the other.

$$U = U(c, l) \tag{7}$$

U is assumed to be strictly concave. c^* and l^* are the life-sustaining minimal amounts of consumption and rest. The Inada conditions are assumed to hold at c^* and l^*.

$$B = B[A(T)] \tag{8}$$

The derivative of B with respect to $A(T)$ is assumed to approach infinity as $A(T)$ approaches zero. B is assumed to be concave.

Assumption 10: The worker attempts to maximize his discounted lifetime utility, subject to (2) – (6). ρ is the subjective discount rate.

$$\underset{\{c,l,e_{ij},h_{ij}\}}{\text{Maximize}} \int_0^T e^{-\rho t} U(c, l) dt + B[A(T)] \tag{9}$$

subject to (2) – (6).

This completes the formal presentation of the model. Clearly, the assumptions are of varying degrees of realism. Assumption 6, in particular, can easily be criticized. However, relaxing this assumption would complicate the model considerably without yielding qualitatively different results. Locations are distinguished only by potential income to be earned, given the stock of human capital. The location itself does not enter the utility function.

This is a model in the tradition of Sjaastad (1962). Its formulation has been influenced by the work of Blinder and Weiss (1976) and Seater (1977).

Optimality Conditions

The model presented above can be formulated as an optimal control problem, where c, e_{ij}, and h_{ij} are the control variables, E_{ij}, H_{ij}, and A are the state variables, and λ_{ij}, ω_{ij}, and μ are the corresponding costate variables. The Hamiltonian function takes the following form:

$$(10)\quad H(c, e_{ij}, h_{ij}, E_{ij}, H_{ij}, A, \lambda_{ij}, \omega_{ij}, \mu) = e^{-\rho t}\left\{U\left[c, l - \sum_i \sum_j (e_{ij} + h_{ij})\right] + \sum_i \sum_j \lambda_{ij} e_{ij} + \sum_i \sum_j \omega_{ij} h_{ij} + \mu\left(rA + \sum_i \sum_j h_{ij} Y_{ij} - c\right)\right\}$$

The first-order necessary conditions of an optimal control problem and their derivation can be found in Hadley and Kemp (1971), or in other texts on optimal control theory. The optimality conditions are stated below. For notational convenience, the functions are written without their arguments, except when needed to avoid misunderstandings:

$$(11)\quad \partial H/\partial c\colon U_c - \mu = 0$$

$$(12)\quad \partial H/\partial e_{ij}\colon -U_l + \lambda_{ij} \begin{cases} = 0 & (0 < e_{ij} < 1) \\ \leq 0 & (e_{ij} = 0) \end{cases}$$

$$(13)\quad \partial H/\partial h_{ij}\colon -U_l + \omega_{ij} + \mu Y_{ij} \begin{cases} = 0 & (0 < h_{ij} < 1) \\ \leq 0 & (h_{ij} = 0) \end{cases}$$

$$(14)\quad \partial H/\partial E_{ij}\colon \dot{\lambda}_{ij} = \rho\lambda_{ij} - \mu \sum_x \sum_y h_{xy} \partial Y_{xy}/\partial E_{ij} \qquad (x = 1, \ldots, n; j = 1, \ldots, m)$$

$$(15)\quad \partial H/\partial H_{ij}\colon \dot{\omega}_{ij} = \rho\omega_{ij} - \mu \sum_x \sum_y h_{xy} \partial Y_{xy}/\partial H_{ij} \qquad (x = 1, \ldots, n; j = 1, \ldots, m)$$

$$(16)\quad \partial H/\partial A\colon \dot{\mu} = \mu(\rho - r)$$

$$(17)\quad \partial H/\partial \lambda_{ij}\colon \dot{E}_{ij} = e_{ij}$$

$$(18)\quad \partial H/\partial \omega_{ij}\colon \dot{H}_{ij} = h_{ij}$$

$$\partial H/\partial \mu\colon \dot{A} = rA + \sum_i \sum_j h_{ij} Y_{ij} - c \tag{19}$$

$$E_{ij}(T)\lambda_{ij}(T) = H_{ij}(T)\omega_{ij}(T) = 0 \tag{20}$$

$$\mu(T) = B'[A(T)] \tag{21}$$

Since U, B, and Y are assumed to be differentiable and concave, the first-order conditions are sufficient [Takayama (1974)].

Interpretation of the Optimality Conditions

The Hamiltonian is maximized with respect to the control variables at every point in time. This results in Equations (11)–(13). These are the traditional marginal utility conditions. (14)–(16) describe the changes of the costate variables over time. If $U(c, l)$ is additively separable, then it follows from (11) and (16) that the optimal consumption pattern depends only on the difference between ρ and r. If the subjective discount rate exceeds the interest rate, consumption decreases over the individual's lifetime. If the two rates are equal, it is constant, and if the interest rate is larger, then c will increase until time T.

Equations (17)–(19) are restatements of Equations (4) and (6), describing the change of the state variables. Equations (20) and (21), finally, are the transversality conditions. In particular, (20) is a formal statement that human capital dies with its owner.

λ_{ij}, ω_{ij}, and μ are the shadow prices of education, job experience, and financial assets, respectively. Recalling that the marginal utilities are positive, (11) and (12) show that the shadow price of financial assets must always be positive. The same does not follow for λ_{ij} and ω_{ij}. However, if e_{ij} is positive for some t, then λ_{ij} must also be positive at that instant. This follows from (12). Also, at time T, the transversality condition requires that λ_{ij} be zero if E_{ij} is positive. Since it follows from (14) that once λ_{ij} is negative it will stay that way, one can conclude that any λ_{ij} associated with a positive E_{ij} must be nonnegative. The same argument holds for ω_{ij} and H_{ij}.

Repeat migration is not assured. Its occurrence depends on the magnitude of the first partial cross-derivatives with respect to education and training. It is clear from the first-order conditions that a worker moves to where the rewards are the greatest. If experience gained at one job is valued more at another job, then the accumulation of human capital creates new opportunities for a profitable move. Since we assume here that the economic conditions are not changing, it is only through changes in human capital that job mobility may occur.

If $Y_{ij}[E(t), H(t), t] = Y_{ij}[E(t), H(t)]$, then the incentives to move change over time only with the marginal value of education and experience. If we accept the assumption that the marginal value of education and experience is decreasing, we have an additional explanation of why young workers are more likely to move, which complements the traditional argument that the propensity to move decreases with age because of the decreasing length of the period over which the costs of mobility can be recovered.

In general, the more education is required for a job, the smaller the share of routine tasks in the total workload, and therefore, the greater the value of experience which exposes the worker to a wide range of possible situations.

Consequently, the marginal value of work experience decreases, at least initially, at a lower rate for jobs requiring a high level of education. This explanation complements the one offered by Schwartz (1973).

There are some professions which require substantial schooling and training, yet consist in the execution of relatively routine tasks. Airline pilots or operators of nuclear power stations may serve as examples. In such occupations, the value of substantial job experience lies not necessarily in the improved ability to perform standard duties, but in the greater ability to respond calmly and competently to possible emergency situations, which, if not handled properly, could result in catastrophic losses of lives and assets.

Given the interpretation of λ_{ij} and μ, the value of education, ME_{ij}, can be expressed formally:

$$ME_{ij} = \frac{\lambda_{ij}}{\mu} E_{ij} \tag{22}$$

It follows from the earlier argument that the value of education is nonnegative. Notice also that $ME_{ij}(T)$ is equal to zero. Taking the time derivative of (22), rearranging terms, and using the definition of ME_{ij}, the following expression can be obtained:

$$\dot{ME}_{ij} = \left(\frac{\dot{\lambda}_{ij}}{\lambda_{ij}} - \frac{\dot{\mu}}{\mu} + \frac{\dot{E}_{ij}}{E_{ij}}\right) ME_{ij} \tag{23}$$

Using (11), (14), and (16), Equation (23) can be transformed into (24):

$$\dot{ME}_{ij} = rME_{ij} + \dot{E}_{ij}\frac{\lambda_{ij}}{\mu} - \frac{1}{\lambda_{ij}} \sum_x \sum_y h_{xy} (\partial Y_{xy}/\partial E_{ij})\, U_c ME_{ij} \tag{24}$$

The first term is the market return to education, the second term shows the increase resulting from investing in education, and the third term denotes the change in the opportunity costs. Similar expressions and interpretations can be obtained for the value of job experience.

Generality of the Model

While the lack of consideration of monetary and psychic costs of mobility and the deterministic treatment are serious shortcomings of the model, it is quite general in other respects. It recognizes that workers migrate not only in response to higher wage rates, but in response to profitable opportunities to increase their human capital as well.

Repeat and return migration are possible events. Simultaneously with the choice of the location, the worker determines the amount of time he wants to work. The present model can be transformed into Weiss' (1971) model by adding the following assumption.

Assumption 11: Assume l is constant and positive, i.e., everybody works a given amount. Time 0 is the start of a person's working life, and T is the time of death, as before.

Given the assumption that it is possible to borrow arbitrarily against future earnings, under Assumption 11 the maximization of the total discounted utility is equivalent to the maximization of the total discounted life earnings. Thus

$$(9') \qquad \underset{\{e_{ij},\, h_{ij}\}}{\text{Maximize}} \int_0^T e^{-\rho t} \sum_i \sum_j h_{ij}\, Y_{ij}\, dt$$

subject to (2) – (5) and (A.11). This is the problem that Weiss (1971) posed and his results therefore apply.

Education or experience that is of value only in a particular job is called specific. If $\partial Y_{ij}/\partial E_{xy} = \partial Y_{ij}/\partial H_{xy} = 0$ for $i \neq x$ or $j \neq y$, then human capital is perfectly specific. For this special case, Weiss (1971) proved the following proposition.

Specialization Proposition [Weiss (1971)]: If experience and education are perfectly specific, then it is not optimal to switch jobs or to delay investment in education.

This result may be useful in the empirical analysis of job mobility. If there exists a relationship between education and the acquisition of specific skill (specialization), then Weiss' proposition leads to the conclusion that, ceteris paribus, the more highly educated a worker, the less likely he or she is to switch to a new career which does not utilize the acquired skills.

Weiss' model can be further specialized by adding one more assumption.

Assumption 12: $Y_{ij} > 0$ and $\partial Y_{ij}/\partial E_{xy} = \partial Y_{ij}/\partial H_{xy} = 0$ for all i, x, j, and y.

If Assumption 12 holds, there will be no investment into education since no benefits result from such an action. A worker will migrate to the location where income is highest at time t. Repeat migration may still occur if $Y_{ij}(t)$ changes with time. Thus the model is still more general than Sjaastad's model represented by Equation (1). To get that model we have to restrict the choice of h_{ij} to only one location/job combination. Then we arrive at a formulation equivalent to (1), except that the costs of mobility have been set equal to zero. Only one move would also result if $Y_{ij}(t) = \overline{Y}_{ij}$ for all i and j, i.e. if we assume a stationary economy.

Empirical Relevance

The central hypothesis of the model is that the accumulation of human capital, by changing an individual's marketable skills, contributes to the likelihood of a job-related move. The empirical relevance of this hypothesis depends on the magnitude of the partial derivative of Y_{ij} with respect to E_{xy} and H_{xy}.

A test of this hypothesis requires detailed information about individual workers so that we are able to account for other factors that affect the workers' mobility. We do not currently have the necessary data to test the model, but the explanations obtained in this research are compatible with the results of many published empirical studies. Thus, some studies find that "migrants generally show lower wages (but) the most vigorous movers enjoy a positive differential" [Antel (1980)]. These results contradict the predictions of models based on the

traditional Sjaastad formulation. However, if one allows for the possibility that an individual does not necessarily respond to opportunities to maximize current income, this observation can be explained. A worker with a longer planning horizon may make his first moves to jobs which offer excellent opportunities to acquire human capital, to increase his marketability for high wage jobs in the future. After the initial moves, when the marginal returns to job experience have become relatively low, a position is taken which offers a high reward for the accumulated education and job experience.

The pattern of job mobility predicted by our model has been observed empirically. Frequent movers tend to get higher returns from migration than occasional movers. The model's prediction is also consistent with the finding that young workers are more likely to move than old.

Our model predicts that voluntary job-related mobility decreases with a worker's age. Evidence presented by Bartel (1979, Table 1) supports this prediction. Bartel uses data from the National Longitudinal Surveys (NLS) which was available for young men (19 to 29 years old in 1971) from 1971 to 1973, and for mature men (45 to 59 years old in 1966) from 1966 to 1971. Migrants were defined as persons who crossed the boundary of the Standard Metropolitan Statistical Area (SMSA). As expected, the proportion of migrants is much higher among the NLS young men. A comparison of the migrants among the NLS young men and the migrants among the NLS mature men shows that among the latter, moves that involve a job quit are much less frequent. The relative frequency of moves that were not job related did not differ significantly between the two groups of migrants.

Bartel compares the NLS data to the results presented by Coleman and Rossi for individuals who were 26 to 35 years old in 1964, and who were observed during the period from 1964 to 1969. The findings of these two researchers are similar to those obtained from analyzing the NLS data.

The research results described above offer some casual evidence that the implications of our model are of potential importance to explain job-related mobility. It is, of course, no substitute for empirical testing of our hypotheses.

4. MIGRATION AND JOB SEARCH

This research presents a dynamic theory of job mobility. It unrealistically assumes away all uncertainty in order to isolate the effect of the accumulation of human capital on mobility behavior. In a dynamic, changing world, however, uncertainty plays a very important role.

The job search literature emphasizes three types of uncertainty. Models in the tradition of Harris and Todaro (1968, 1970) focus on the availability of jobs; Lippman and McCall (1976a) concern themselves with wage uncertainty; and finally, Lippman and McCall (1976b) consider the uncertainty about the future performance of the economy. Starting with the work of Harris and Todaro, job search has been incorporated into theoretical models of migration only recently [see Shaw (1975)].

Migration is either preceeded or followed by job search. It would, therefore, be desirable to incorporate job search into a migration model. This has rarely been

done. A notable exception is the paper by David (1974). He considers an arbitrary number of spatially-separated labor markets. In order to sample a market, one has to migrate there first. Job search is assumed to be a full-time activity. Once a job is accepted, search will not be resumed again. This is a feature that is common to many search models [see Lippman and McCall (1976a)]. The model can therefore say nothing about repeat migration. Once the individual has found the optimal location there is no reason for a second move, because neither the wage rates nor the marketable skills of the worker change over time.

When starting the search activity, the worker is uncertain about the availability of jobs as well as wage rates, but it is assumed that he knows the probability distribution of wages in all markets. Job offers remain open until a decision is reached.

The model is restrictive in that it does not allow for long-distance or part-time search. The assumption that only one market is sampled is also questionable. As Miron (1978) points out, one can easily imagine search strategies where several markets are sampled before a final decision is made. In spite of these shortcomings, David is able to provide some interesting insights. In particular, he points to the importance of the variance of the wage distribution. A high variance is an expression of high risk, but it is also an expression of the opportunity to obtain a wage significantly above the mean. Therefore, the effect of the variance on migration behavior is ambiguous and depends on the risk behavior of the individual.

A different approach has been offered by Polachek and Horvath (1977). Their model distinguishes between two kinds of human capital: information about the wage distribution at the workers current location, and information about the wage distribution at each other location relative to the current one. An increase in the knowledge about wages in other areas will increase the worker's wage only if he moves. After a move, part of the information becomes obsolete. Thus, every move is preceded by search for relevant information. The search need not be full time. Although Polachek and Horvath are able to derive a model where information about wage distributions must be acquired, we find their approach unsatisfactory because it implies that a worker will always have an incentive to resume search after a move. He will never believe that he has finally found the best location. This feature can cause periodic moves. Since resumption of search is not motivated by a change in the worker himself or by a change in the labor market, however, there does not seem to be a convincing motive behind this action.

Job availability as a factor influencing mobility has been incorporated in a theoretical model by Harris and Todaro (1968, 1970). They consider a two-sector economy with a rural and an urban sector. Earnings are higher in the urban sector. However, at the end of every period, an urban worker is laid off and rehired at the beginning of the next period with probability p. If the urban wage rate is w, then rural workers will migrate to the urban area only if the rural wages are lower than pw. This model incorporates a simple model of job search. A rural resident who would like an urban job must move to the city to search. The movement is unidirectional.

Relatively few researchers have investigated the relationship between job

search and geographical mobility. The studies done provide evidence that unemployment and turnover rates (in short, job availability) do influence migration behavior [e.g., Fabricant (1970), Fields (1976, 1979)]. This shows that job search must occur in conjunction with migration decisions.

Our model shows that a worker may rationally choose to search for a new job even if he is not unemployed. Therefore, it provides a possible starting point for a model incorporating job search and job mobility. Very interesting suggestions have also been offered by Miron (1978). We believe that fruitful new insights will result from the successful integration of job search and migration models.

5. CONCLUSIONS

This research offers additional explanations of why human mobility varies with education and age. The acquisition of human capital in the form of schooling, training, and job experience opens up new job opportunities, which may induce a move to a new job. This explanation supplements the traditional explanations; it does not replace them.

If we consider a move as a decision that is made once and for all time, then it is sufficient to look only at the way in which the current stock of human capital affects job mobility. However, if we allow for more than one move, the process of human capital accumulation can contribute to the decision to move.

The empirical significance of the hypothesis depends on the magnitude of the partial derivatives of Y_{ij} with respect to E_{xy} and H_{xy}. While no empirical tests have been performed, it was shown that the model's predictions are compatible with the findings of important empirical studies.

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