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THE MIGRATION DECISIONS OF THE UNDERPRIVILEGED: AN APPLICATION OF THE FRIEDMAN-SAVAGE HYPOTHESIS

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In a study utilizing 1960 race specific data on the 100 largest Standard Metropolitan Statistical Areas (SMSA's), Greenwood [6] found significant differences in the determinants of nonwhite and white aggregate migration flows. According to Greenwood [6, p. 14]:

> "Several interesting points of contrast between the white and nonwhite groups are apparent. One of the most interesting is that nonwhite CLF (civilian labor force) members are attracted to cities with high nonwhite income levels and to cities experiencing sizeable increases in such levels, whereas white CLF members display no particularly strong tendency to migrate either to localities with high white income levels or to those experiencing sizeable white income growth. On the other hand, white CLF members are more likely than nonwhite CLF members to move to cities experiencing job opportunities (for whites), but nonwhites are also somewhat responsive to such opportunities (for nonwhites)."

The greater sensitivity of nonwhite migrants to SMSA income levels and growth is interpreted by Greenwood as probably reflecting a positive correlation between nonwhite median income and per capita welfare benefits (+0.377). Thus, Greenwood [6, p. 11] conjectures:

> "The availability of higher per capita welfare benefits in higher income localities may help explain the white-nonwhite differentials in responsiveness to income levels and growth. Welfare benefits are likely to be of particular importance to lower-income individuals, and hence to nonwhite persons. The level of per capita welfare benefits is significantly more highly correlated with the level of nonwhite income than with the level of white income. Hence for nonwhites destination income level may serve as a better proxy for the availability of welfare benefits of various sorts. If this is true, then the nonwhite income level variable may be 'picking up' more than the white income-level variable."

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The results of Greenwood's study are consistent with the results of empirical studies of black/white migration behavior by Pack [8], Kohn, Vedder and Cebula [7], Bowles [2], Sommers and Suits [10], Glantz [5], Cebula [3], and Persky and Kain [9]. In general, their studies indicate that nonwhite (black) migrants are more affected by welfare benefits in destination regions than whites; whereas, whites are more affected by employment and income opportunities.

Apparently, convincing evidence has been found that significant differences in migration behavior exist among the races. The economic literature lists group differences in risk aversion, informational flows, time preferences, and work ethic--differences which are a function of group demography--as contributing to racial migration response differentials. For example, Greenwood [6, p. 14-15], when discussing the causes of differential black/white migration response functions, concludes that "Such differences as exist between the groups are likely to be the result of appreciable differences in the underlying characteristics of white CLF as compared to nonwhite CLF members."

Economic theory suggests that the response of underprivileged migrants to interregional welfare benefit differentials results in allocative inefficiencies in resource utilization. In addition, the increasing spatial concentration of poor families in high income regions--with generous welfare programs--has negative fiscal impacts on state and local fiscal structures. The urban "fiscal crisis," for example, is allegedly a result, inter alia, of demographic changes in central city populations as high income whites suburbanize in response to nonwhite in-migration.[1] To correct for these allocative and fiscal inefficiencies, economists generally prescribe a national system of uniform welfare payments (e.g., negative income tax). According to Glantz [5, p. 80-81]:

> "From the standpoint of economic efficiency it is in the national interest to eliminate interregional differences in welfare payments. . . .A federal takeover of the welfare function would preserve the desired freedom of mobility and at the same time eliminate "artificial" incentives for the disadvantaged to migrate to areas offering higher welfare payments."

Conclusions drawn from the human capital literature about the motivational factors underlying the migration decisions of the races, and their policy implications, may be misleading. A basic weakness of the human capital framework, which views migration as an investment decision, is that it does not adequately explain the decision to migrate under varying economic conditions (risk) for all income classes. In particular, maximization of expected monetary returns ignores the impact of uncertainty and social status on the evaluation of migration

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[1]The Greenwood study, for example, found white out-migration more responsive to black in-migration than vice versa [6, p. 10].

choices.[2] While perhaps less important for the better educated and more affluent migrants, uncertainty may be a major factor in the migration decision of the underprivileged (poor). For the poor, migration may be viewed as an opportunity to significantly improve earnings and job security. Thus, to a rural farm worker, or a Southern black, a job in an industrial center may represent an improvement so significant that migrating to a higher paying region may be worth the gamble (in terms of expected utility of income) even when the expected monetary gain is equal to or less than the migrants' current income position. Another weakness of the human capital framework is the implicit assumption that the marginal utility of income is a constant. In an uncertain environment, the presumption that an individual attaches the same increment of utility to income at various levels regardless of the risks associated with obtaining the income is unrealistic. In general, migration choices result in actions whose consequences are not known with certainty. Also, the degree of uncertainty may be higher for low income members of the labor force who often lack job information and skills. If so, black migrants may be affected to a larger extent by uncertainties (risks) in regional labor markets than whites. Thus, economic models that assume certainty, or certainty equivalents, may misspecify the decision-making process of low income black migrants.

The objective of this paper is to examine the migration decisions of the underprivileged (blacks) and the privileged (whites) within a decision framework that explicitly incorporates uncertainty. When uncertainty is incorporated into the analysis, it is shown that migration responses may depend upon the particular economic circumstances (risks) confronting the decision maker and not necessarily upon demographically based attitudinal and behavioral peculiarities. A major policy conclusion of the analysis is that a national system of uniform welfare benefits, by altering the risks inherent in the migration decision, will not necessarily neutralize the affects of welfare payments on the decision to migrate. In fact, the spatial concentration of low income families in high income regions may be an increasing function of the level of national welfare payments.

First, a model is presented of migration behavior of the underprivileged and the privileged that incorporates uncertainty. In the model the object of choice of the potential migrant is the expected utility of income available in alternative regions. Next, the impact of varying labor market conditions on migration

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[2]Migration theory in economics is largely based upon utility maximization within a human investment framework. In the investment framework, the migrant is assumed to compute monetary equivalents for nonmonetary costs and returns and include these along with explicit monetary costs and returns in his investment calculations. Risk enters the investment decision framework in the form of a risk adjusted discount rate and/or as an adjustment to the implicit monetary flows associated with alternative locations. In any case, uncertain monetary (cash) flows are converted to "certainty equivalents," a technique which virtually removes risk and uncertainty from the decision to migrate.

choices is examined. Then, alternative welfare arrangements are incorporated into the migration framework.

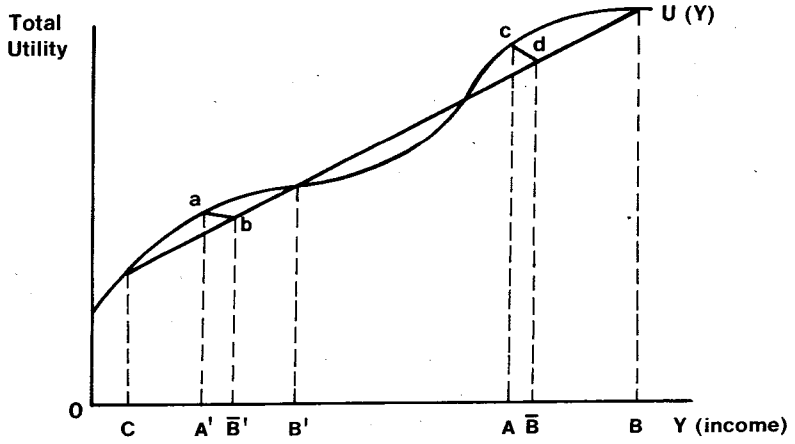
Migration Behavior by Income Class Under Conditions of Uncertainty

This section develops a model of the decision to migrate under conditions of uncertainty; the objective is to focus on the effects of labor market risks on the spatial flow of the privileged (rich) and the underprivileged (poor) among subregions. Other simplifying assumptions are: (1) the migrant population is divisible into two distinct socio-economic classes: the underprivileged (low income families) and the privileged (high income families); (2) migrants are not certain of the consequences of their actions, but they do know the probability distribution of alternative consequences; (3) the alternative consequences of migration decisions (actions) are restricted to employment and unemployment with known probabilities; (4) the privileged and underprivileged members of regional labor markets form noncompeting groups; (5) a higher proportion of non-white migrants belong to the underprivileged class than white migrants; and (6) the Friedman-Savage [4] utility of income function has general applicability. For notational convenience, the superscript prime is used throughout the paper to distinguish labor market variables relevant to the migration decisions of the underprivileged. Variables presented without the prime superscript, other than welfare, are assumed to be relevant to the decisions of the privileged migrants.

$U(Y)$ in Figure 1 depicts the utility function of income (Y) confronting the i^{th} migrant (privileged or underprivileged). Total utility of income and the level of income are represented on the vertical and horizontal axes respectively. $U(Y)$ is of the form utilized by Friedman and Savage to explain the seemingly contradictory decisions to gamble and purchase insurance within an individualistic utility maximization framework. Following the suggestion of Friedman and Savage, the two segments of $U(Y)$ that are convex from above are interpreted to represent different socio-economic groups. The convex segment to the left is assumed to be applicable to low income families (the underprivileged class). The convex segment to the right is interpreted to depict the utility of income for the high income class (privileged). The first derivative ($U'(Y) > 0$) is positive over the entire range of $U(Y)$ implying that poor people prefer more money to less; whereas, the second derivative ($U''(Y) > 0$) is negative over the two convex segments and positive ($U''(Y) > 0$) over the concave, or transition, segment. This suggests that the marginal utility of income declines for income changes within socio-economic groupings (defined as intraclass mobility) but rises (falls) for income changes associated with movement to higher (lower) socio-economic groups (defined as interclass mobility). The intermediate income range, which is concave from above, depicts the transition from income positions associated with a lower socio-economic status to a higher socio-economic status.

A basic implication of the Friedman-Savage utility function for migration behavior is that interregional job changes (via migration) which represent intraclass adjustment, whether for the rich or the poor, are viewed differently than interregional job changes which provide an opportunity for advancement to a higher socio-economic group. Also, the Friedman-Savage utility function

Fig. 1 Intraclass Social Mobility and Human Migration Behavior



implies that the set of risks and uncertainties confronting the underprivileged are different than for the privileged. In the model, migration offers an opportunity for the poor to advance to a higher socio-economic group with little probability of success, but for the wealthy it represents a large chance for intraclass social improvement and a small chance for movement to a lower socio-economic class. Thus, the poor may be induced to gamble to a larger extent and migrate to high income regions even though the probability of employment is relatively low. According to Friedman and Savage [4, p. 29], "Men will do and take great risks to distinguish themselves, even when they know what the risks are."

Intraclass Migration Responses and Risk Aversion. Intraclass migration choices of the poor (underprivileged) and rich (privileged) under conditions of uncertainty are illustrated in Figure 1. The analysis demonstrates that when risks are considered maximization of expected monetary returns will not necessarily be a good choice predictor.

The poor migrant is assumed to be employed in region A. For him the migration choice is a choice between employment income A' in region A (which is known with certainty) and the uncertainty prospect (B'C) in region B.[3] B' represents income obtainable for the underprivileged employed in region B and C represents the welfare income level. $\bar{B}'$ is the migrant's expected monetary income if he chooses the uncertainty prospect (B'C); $\bar{B}' = p'B' + 1 - p'C$ where p' and 1 - p' represents the probability of employment and unemployment respectively. The utility of income of the uncertainty prospect (B'C) in region B is measured by the vertical distance B'b above the expected income levels $\bar{B}'$[4]; whereas, utility of income obtainable in region A is measured by the vertical distance A'a above income level A'.

For the privileged individual initially employed in region A, the migration choice is between certainty income A in region A and the uncertainty prospect (B C) in region B. A > A' and B > B' on the assumption that the privileged migrant has a higher earnings potential than the underprivileged migrant. At $\bar{B}$, which represents expected monetary income in region B for the privileged migrant, the expected utility of income of the uncertainty prospect (B C) is $\bar{B}d$. Ac is the utility of income A in region A for the privileged migrant. For both classes of migrants, the expected monetary gains from migrating to region B exceeds the certainty income in region A. However, in both cases expected utility of income of the uncertainty prospect is less than the utility of income available to the migrants in region A. Thus, although the investment approach to human migration would suggest that both the underprivileged and the privileged will migrate to region B, the expected utility hypothesis suggests that when risks are considered

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[3]Uncertainty prospect is a term borrowed from Alchian [1] who presents a non-mathematical discussion decision-making under conditions of uncertainty.

[4]The expected utility of the uncertainty prospect (B' C) as the probability of employment ranges between 0 and 1 is given by the height of a cord a b above the horizontal axis in Figure 1.

neither individual will migrate. Since the marginal utility of income declines over the convex range considered for the representative migrant of the two subpopulations, the loss of utility associated with a possible decline in income to C is greater than the gain in utility associated with a possible intraclass improvement in the income position of the migrants. Hence, under conditions assumed by the model for intraclass migration decisions, the investment and expected utility hypotheses result in different migration choices.

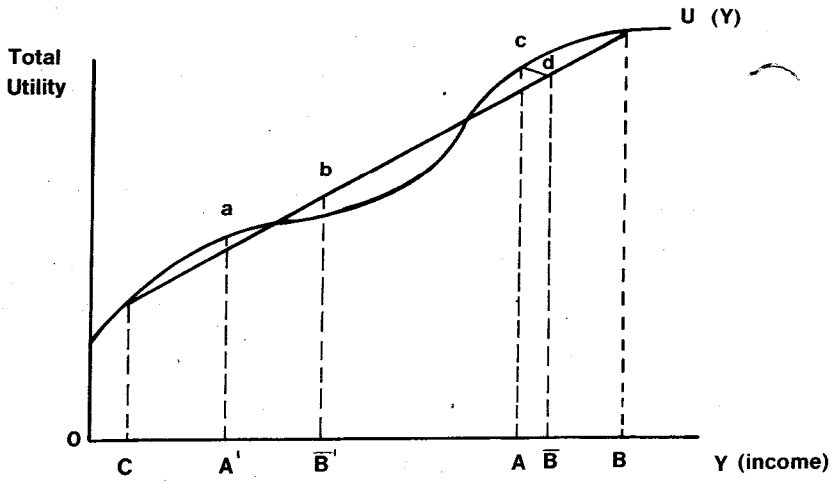
Interclass Migration of the Underprivileged. The assumption of noncompeting groups is relaxed in this section. Our objective is to analyze the migration decisions of the underprivileged and privileged initially employed in region A who are competing for similar jobs in region B. In Figure 2, the privileged individual is confronted with a choice between certainty income A in region A and the uncertainty prospect (B C) in region B which yields expected income $\bar{B}$. Since the utility of the certainty income (vertical distance Ac) exceeds the expected utility of the uncertainty prospect (vertical distance $\bar{B}$d), the expected utility hypothesis suggests that the privileged individual will choose not to migrate.

The underprivileged individual in region A, however, is confronted with a choice between certainty income A' in region A and the uncertainty prospect (B C) in region B. The underprivileged migrant has a probability p' of obtaining employment income B in region B. Since the probability of obtaining employment for the underprivileged migrant is less than the probability of obtaining employment that yields the same income for the privileged migrant ($p' < p$), the expected monetary gain from migration to region B is lower for the underprivileged migrant. Thus, $\bar{B}' < \bar{B}$ suggesting that the privileged have more of a monetary incentive to migrate. However, for the underprivileged the expected utility of (B C) exceeds the utility of income A ($\bar{B}'b > A'a$). Thus, the underprivileged would be willing to gamble by migrating whereas the privileged would not, even though they have a much higher probability of employment.

In the model, the underprivileged are initially on the convex portion of U(Y) to the left of the concave segment; whereas, the privileged are on the convex segment to the right of the concave segment. Thus, the underprivileged are confronted with an opportunity for a small chance of obtaining a relatively large income (B-A') and a large chance of a relatively small reduction in income (A'-C). The rising marginal utility of income associated with upward social mobility from a low income class to a high income class suggests that the possible gain in utility exceeds the possible loss in utility for the underprivileged. In contrast, the migration decision of the privileged represents a large chance of obtaining a relatively small intraclass improvement (B-A) and a small chance of receiving a significant reduction in income (A-C). Thus, the potential loss in utility associated with downward social mobility to a lower socio-economic level exceeds the potential gain in utility of a small chance for higher status within the privileged class.

The analysis of this section can explain the observed differences in the aggregate responses of black and white migrants to interregional income differentials. Blacks may be more responsive to income variables than whites, ceteris paribus, because they may view migration as an opportunity for advancement to the

Fig. 2 Interclass Social Mobility and Human Migration Behavior



privileged class. On the other hand, migration for the whites may be perceived more as an opportunity for a movement up the social hierarchy within the privileged class. Thus, the differential black/white migration response functions may simply reflect the peculiar economic circumstances (risks) confronting the decision makers under conditions of uncertainty.

The Impact of Regional Employment Opportunities on the Migration Decisions of the Underprivileged and the Privileged. Next, we drop the assumption that employment income in the original region is known with certainty and analyze the impact of employment decline (growth) in the origin and destination regions on migration choices under conditions of uncertainty. It is assumed throughout this discussion that wages are inflexible downward so that a decline in regional demand for labor reflects rising regional unemployment and not a reduction in the incomes of those who remain employed.

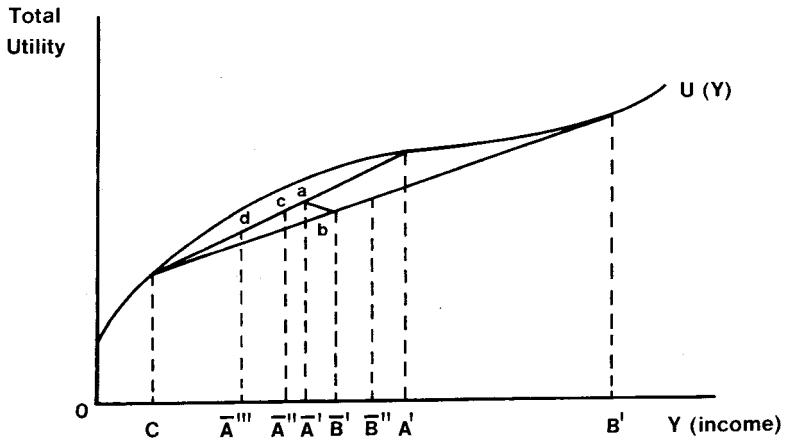
Let A be a declining region in which the potential underprivileged migrant is currently employed. In Figure 3, declining employment opportunities raise the probability that the underprivileged individual will obtain welfare income C rather than employment income A' if he remains in region A. Region B offers the uncertainty prospect (B'C) with expected value $\bar{B}'$ to the potential underprivileged migrant. Thus, the underprivileged migrant is initially confronted with a choice among uncertainty prospects (A'C) and (B'C) in the origin and destination regions. (A'C) and (B'C) yield expected utility $\bar{A}$'a and $\bar{B}$'b respectively.

Since $\bar{A}'a > \bar{B}'b$ the potential migrant will initially opt to remain in region A. However, declining employment opportunities in the origin region raise the probability that the underprivileged migrant will become unemployed in region A. By assumption, A' and C are unaffected by rising unemployment levels in region A. Thus, the effect of declining job opportunities in A--by lowering the probability of employment in A--will be a lower expected monetary value of uncertainty prospect (A'C) from its initial level $\bar{A}'$. The potential migrant will remain in region A as long as $\bar{A}' \geq \bar{A}''$; however, if rising unemployment in region A causes $\bar{A}'$ to fall below $\bar{A}''$ (to say $\bar{A}'''$), the underprivileged individual will be induced to migrate to region B. At $\bar{A}'''$ the expected utility of the uncertainty prospect (A'C) in region A is less than the expected utility of the uncertainty prospect (B'C) in region B. Since $\bar{B}'b > \bar{A}'''d$ the expected utility of the uncertainty prospect (B'C) in region B will be above the expected utility of uncertainty prospect (A'C) in region A. When this occurs migration of the underprivileged from region A to B will result.

Conversely, if economic conditions in region A remain constant but employment opportunity in B are expanding (without a rise in wage rates), $\bar{B}'$ will rise and $\bar{A}'$ will remain constant. If $\bar{B}' > \bar{B}''$ the expected utility of the uncertainty prospect (B'C) in region B will be above the expected utility of uncertainty prospect (A'C) in region A. When this occurs migration of the underprivileged from region A to B will result.

Analogous arguments can be made for the wealthy classes but we would be dealing with the convex portion of U(Y) to the right of the transition segment. Since expected utility of the uncertainty prospects is a function of the prob-

Fig.3 Changes in Regional Employment Opportunities and Migration Behavior



ability of employment, inter alia, and the probability of employment is directly related to employment opportunities, an increase in employment opportunities will raise the expected utility of uncertainty prospects of both the underprivileged and the privileged. Thus, it would appear that the privileged and the underprivileged would be equally responsive to employment growth among the regions when formulating migration decision. However, the empirical relationship between growth in employment opportunities and migration has been observed to be weaker for blacks (the underprivileged) than for whites (the privileged). Our analysis suggests several factors that may contribute to black/white migration response differentials with respect to employment growth:

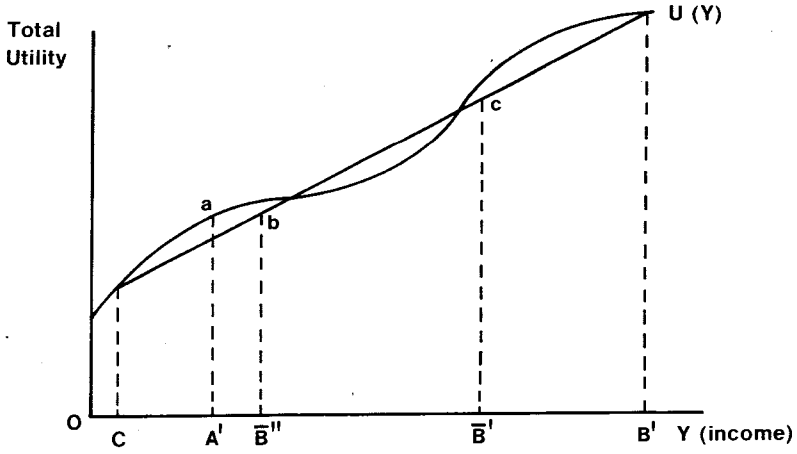
1. The additional jobs that are being created in rapidly growing regions may be skilled and professional jobs out of reach of noncompeting low income earners. In fact, a disaggregated analysis of employment growth may show a decline in the number of low skilled jobs. Thus, the disadvantaged (blacks) may not migrate to regions exhibiting high employment growth, ceteris paribus, because for them employment growth may represent a decline in the probability of employment (and consequently the expected utility of income).

2. Discrimination among the races may exist implying that qualified blacks do not have an equal chance in competition with whites for the new jobs; thus, job growth may weigh less heavily in the calculus of potential black migrants.

The effect of job discrimination on expected utility of income is illustrated in Figure 4. Figure 4 depicts the decision of an equally qualified black and white member of the underprivileged class in region A to migrate to region B. Both potential migrants are confronted with a choice among certainty income A' in region A and the uncertainty prospect (B'C) in region B. For the white migrant uncertainty prospect (B'C) offers an expected monetary value of $\bar{B}'$ which yields expected utility $\bar{B}'c$. Since $\bar{B}'c > A'a$, the white migrant will move to region B. Although the consequences of migration are the same for blacks and whites, discrimination alters the probability that a particular consequence will occur. In particular, for blacks it raises the probability of obtaining welfare income and reduces the probability of obtaining labor market returns. The differences in weight that blacks attach to employment opportunities in region B reduces the expected value of the uncertainty prospect (B'C) to $\bar{B}''$. At $\bar{B}''$, $\bar{B}''b < A'a$; thus, aggregate black migration flows would not appear to be as responsive as aggregate white migration flows to regional growth differentials in employment opportunities.

3. Another plausible explanation may be that whites (the privileged) in the aggregate place a higher subjective value on growth in employment opportunities as a form of insurance against possible losses in current employment, a loss that drops them to a socio-economic level associated with income level C. Although growth in specific job opportunities may decline, employment growth provides some assurance that the adversely affected can find similar employment at equal or

Fig. 4 Discrimination and Migration Behavior Under Conditions of Uncertainty



better salaries. For the blacks loss of a job may mean movement to a lower position within the underprivileged class.

4. Growth in employment opportunities may provide non-monetary motives for migration that are more appealing to whites than blacks. As suggested, the privileged may view migration decisions as an intraclass adjustment; whereas, the underprivileged may view migration more as an interclass adjustment. Thus, because of their unique economic circumstances, whites may be more concerned with such factors as fringe benefits, working conditions and prestige when formulating migration decisions. Since the availability of nonwage labor market returns is likely to be higher in regions experiencing employment growth, whites would be expected to be more responsive than blacks to regional employment growth differentials.

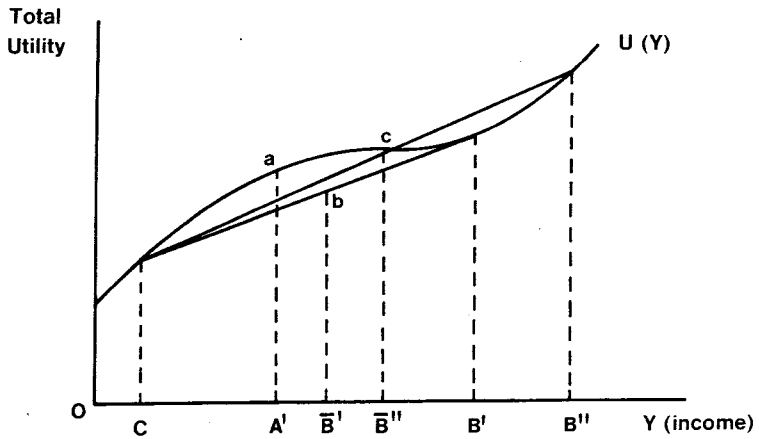
Impact of Regional Income Growth on the Migration Decisions of the Privileged and the Underprivileged. Growth in income may be a more significant factor affecting the migration decisions of the underprivileged than the privileged. This hypothesis is illustrated in Figure 5 which incorporates income growth into the decision to migrate in the presence of uncertainty. For simplicity, employment opportunities, the probability of employment and welfare income levels are assumed not to change. The migration choice of the underprivileged is initially between sure income A' in region A and the uncertainty prospect (B'C) in region B. Since $\bar{B}'b < A'a$, the potential migrant will initially choose to remain in region A.

Suppose, however, that income levels relevant to the underprivileged are growing in region B while they remain constant in region A. In particular, assume that the lower level of the income (wage) structure in region B rises from B' to B''. The expected utility of uncertainty prospect (B''C) and sure income A' confronting the underprivileged migrant are $\bar{B}''c > A'a$, respectively. Under these conditions the underprivileged have an incentive to migrate to region B. Income growth in occupations relevant to the privileged would also increase the attractiveness of region B to the privileged since the expected utility of income rises ($U'(Y) > 0$); however, being on the second convex portion of $U(Y)$, the privileged receive diminishing marginal utility as income levels rise. Thus, income growth benefits both classes but since the underprivileged may view income growth as an opportunity to move to a higher socioeconomic class ($U''(Y) > 0$) they would be expected to be more responsive to income growth differentials among the regions than the privileged. This implication is consistent with the findings of empirical studies on the determinants of aggregate black/white migration responses to interregional growth differentials discussed in the introductory section.

Welfare Programs and Interregional Migration Patterns

In a previous section we dealt with uncertainty and migration decision of the underprivileged and the privileged under varying assumptions about economic conditions in regional labor markets. In this section we drop the assumption of a given level of uniform welfare payments across all regions. Our objective

Fig. 5 Regional Income Growth and Migration Behavior of the Underprivileged



is to, first, analyze the effects of interregional differentials in welfare payments on migration decisions within the context of the model developed earlier. Secondly, the implications of variations in the level of uniform regional welfare payments on migration behavior are analyzed.

Interregional Welfare Differentials and the Decision to Migrate. Initially assume in Figure 6 that an underprivileged migrant is confronted with uncertainty prospects (A'C) and (B'C) in regions A and B respectively. The expected utility of (A'C) at expected value $\bar{A}'$ is $\bar{A}'a$. At expected value $\bar{B}$, uncertain prospect (B'C) yields expected utility $\bar{B}'b$. Since $\bar{A}'a > \bar{B}'b$, under a system of uniform welfare payments the potential underprivileged migrant will initially prefer region A to region B.

Suppose, however, that welfare benefits in region B rise to C' and remain at level C in region A. The increase in welfare benefits in region B raises expected utility of income for levels of income between C' and B' in region B. In addition, the expected value of (B'C') will exceed the expected value of (B'C) since C' > C and the probability of employment (p') and income levels A' and B' are unaffected by the change. If $\bar{B}'$ rises to $\bar{B}''$ the expected utility of (A'C) will be equal to the expected utility of (B'C'); i.e., $\bar{A}'a = \bar{B}''c$. Under these conditions the potential underprivileged migrant will be indifferent in his location choices. If C rises above C' to C'' and $\bar{B}''$ rises to $\bar{B}'''$, however, the migrant will not be indifferent since $\bar{B}'''d > \bar{A}'a$. Thus, differentially high welfare benefits in region B above C' provides an incentive for the otherwise risk adverse underprivileged migrant to gamble on obtaining a higher income from employment in region B. In the extreme, if C = A' (i.e., welfare benefits in region B are equal to earnings from employment for the underprivileged in region A) all underprivileged residents of region A will prefer the uncertain prospect (B'C) = A') in region B to the certain income A' = C in region A. The risks of migration would be eliminated thus inducing the underprivileged to take advantage of an opportunity for a movement to a higher socio-economic employment income level in region B. Hence, we conclude that differential levels of welfare benefits affect interregional migration choices. Other things equal, potential migrants receive a higher expected utility of income in regions offering a higher level of welfare benefits. Thus, regions with relatively attractive welfare programs should attract larger numbers of underprivileged migrants than regions with lower levels of welfare payments.[5]

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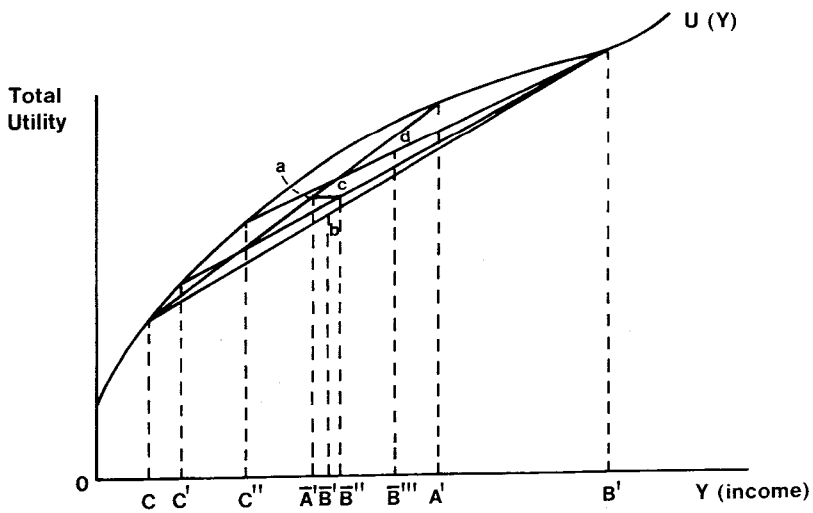
[5]Although the analysis of this section is cast in terms of potential underprivileged migrants, high income earners will also be affected by interregional welfare differentials. However, since the weight that poor migrants place on welfare income in their utility calculations exceeds the weight that the wealthy attach to welfare income (i.e., $1 - p' > 1 - p$), region B is relatively more attractive to lower income families. Thus, although the expected utility of income is higher for all individuals calculating a move to region B, welfare induced migration flows to region B should contain a higher proportion of low income families. In addition, if taxes are considered, and the privileged class in region B objects to the redistributive scheme in region B, migration of the white privileged class to region A would occur but, then migration choices would be constrained by the limited employment opportunities in region B.

Fig. 6

Interregional Welfare Differentials and the Migration Decisions of the Underprivileged



In the preceding analysis higher welfare benefits in region B induced risk averters in region A to gamble on obtaining higher employment earnings in region B. Of course, if welfare levels in region A were higher than in region B, the tendency for risk aversion would be reinforced; i.e., the economic incentives for low income families to remain in region A would be increased. Which is the preferred arrangement depends, to a large extent, upon the income redistribution consequences. Higher, or at least equal, levels of welfare benefits in region A, by reducing migration flows to region B, may perpetuate differentials in employment incomes among the races. On the other hand, higher levels of welfare benefits in region B, although they would reduce earnings differentials among employed blacks and whites (because of in-migration), would likely raise the black unemployment rate relative to the white unemployment rate. Nevertheless, since the black unemployed in region B are receiving a higher non-employment income, the relative position of black families may be improved.

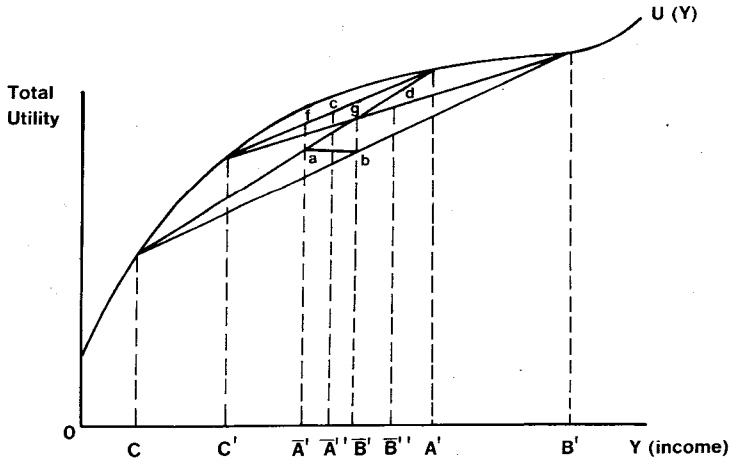
Impact of Changes in the Level of a National Uniform Level of Welfare Benefits on Migration Decisions Under Conditions of Uncertainty. A geographically uniform system of welfare benefits has been advocated by economists as a necessary condition to achieve allocative efficiency in resource allocation. Local responsibility for welfare programs allegedly results in a concentration of welfare recipients within metropolitan regions which generally have higher levels of welfare payments (e.g., New York City). The poor, in turn, being "tax eaters" rather than "tax payers" allegedly contribute to the fiscal problems of the host cities. Under a nationally uniform system of welfare payments, however, the poor would presumably choose locations on the basis of employment opportunities, thus contributing to economic efficiency.

While a nationally uniform system of welfare payments may neutralize the effects of welfare benefit differentials on migration behavior, the expected utility hypothesis suggests that the decision to migrate may be affected by the level of national welfare benefits. In particular, since the risks inherent in the migration decision are a decreasing function of the level of geographically uniform national welfare benefits, the analysis of this section suggests that increases in the level of national welfare benefits will not necessarily reduce the concentration of poor families in high income areas.

To show the potential effects of alternative levels of national welfare payments on migration behavior, consider the migration decision of an underprivileged migrant whose choice between uncertainty prospect (A'C) in region A and (B'C) in region B is depicted in Figure 7. $\bar{A}'$ represents expected monetary income in region A and $\bar{B}'$ represents expected monetary income in region B. $\bar{B}' > \bar{A}'$ and $\bar{A}'a > \bar{B}'b$. Since expected utility of income associated with opportunities in region A is higher, the potential migrant will initially prefer to locate in region A.

What happens to the relative attractiveness of regions A and B when the welfare level rises uniformly across all regions above level $\bar{C}$ to level C'? First, the gain in expected utility in region A at the initial expected income $\bar{A}'$ is less than the gain in expected utility in region B at the initial expected income $\bar{B}'$. The differential gain in expected utility in region B reflects the fact that as a resident of region B the potential migrant is more likely to be

Fig. 7 The Level of Uniform Welfare Payments and the Interregional Migration of the Disadvantaged



a recipient of welfare benefits than if he lived in region A, i.e., 1 - p' in region B exceeds 1 - p' in region A (the probability of employment [p'] is assumed to be higher for the underprivileged in the region of origin). The differential gain is shown graphically in Figure 7 by comparing the vertical cords bg and af; bg > af. Secondly, the change in welfare benefits from C to C' raises expected income in both regions, but the increase in expected income is largest in region B. This also reflects the larger weight (1 - p') attached to income from nonemployment sources in region B. Thus, $\bar{B}'' - \bar{B}' > \bar{A}'' - \bar{A}'$ where $\bar{B}''$ and $\bar{A}''$ represent the expected monetary value of uncertainty prospects (B'C') and (A'C') respectively.

Both of these factors raise the relative attractiveness of region B to potential migrants. In Figure 7, the improvement is sufficient to raise the expected utility of uncertainty prospect (B'C') above the expected utility of uncertainty prospect (A'C') (i.e., B''d > A''c). Under these conditions the representative migrant depicted by Figure 7 would be induced to migrate from region A to region B. Continuing, if C is raised to level A' all residents in region A would be guaranteed a basic level of income equal to the expected value of uncertainty prospect (A'C). Now, the migration choice would be a choice between uncertainty prospect ($A'\bar{A}'$) in region A and the uncertainty prospect ($B'\bar{A}'$) in region B. Presented with an opportunity to gain income B' > A' without risking a reduction in income below the maximum level expected in region A, the underprivileged would have more of an incentive to gamble on obtaining income level B' in region B. In the extreme, if C' = A' all residents of region A would be guaranteed an income no lower than income from employment in the origin region. With no chance to lose, residents of A would find it profitable to gamble on obtaining income B' in region B. This would be the case even though the odds of obtaining income level B may be very small.

In general, the analysis of this section supports the contention that regional welfare benefit differentials contribute to the concentration of low income families in high income regions. This conclusion depends upon the assumption that the level of welfare payments is higher in the more affluent regions. However, by altering risks associated with migration, the expected utility approach also suggests that a national system of uniform welfare payments will not necessarily neutralize the effects of welfare payments on the locational choices of migrants. In particular, migrants from regions that would otherwise have lower welfare benefits may be induced to gamble by migrating to regions offering more attractive labor market opportunities. Since out-migration is likely to be from low income regions with a larger proportion of the poor, a national welfare system (e.g., negative income tax) may lead to an increased concentration of low income families in high income regions.

Summary and Conclusions

The objective of this paper was to provide an alternative to the human capital framework for analyzing migration behavior. A model based upon the expected utility hypothesis was developed and used to analyze the impact of changing regional economic conditions on human migration behavior. In the model, the working underprivileged viewed migration as a gamble that offered an opportunity to advance to the privileged class at the expense of a possible intraclass decline in their

current socio-economic position. For the privileged, the opposite psychology prevailed. Thus, the underprivileged were more concerned with income levels and growth and welfare payment differentials when formulating migration decisions. Welfare payments served as a form of insurance against the risk of not obtaining employment in the destination regions. The wealthy, on the other hand, were concerned with growth in employment opportunities which provided (1) an opportunity to obtain additional nonlabor market returns (e.g., better working conditions); and (2) insurance against a possible interclass reduction in their social position. In short, the poor were more concerned with improving their status whereas the wealthy were more concerned with protecting their current position.

A major conclusion of the analysis is that a national system of uniform welfare payments, by reducing the risks of migration to the poor, might induce higher concentrations of low income families in high income regions. Although the underprivileged class may be better off, because the unemployed and employed members would receive higher nonlabor market and labor market returns respectively, the negative fiscal impacts of high concentrations of low income families would remain. Thus, a system of fiscal transfers among governments may be a necessary compliment to a nationally uniform redistributive scheme which emphasizes income transfers among individuals.

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