The New Economics of Labor Migration

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Research on the economics of labor migration has undergone an exciting and significant transformation during the past few years. At a theoretical level, migration research has expanded the domain of variables that seem to impinge upon and are affected by spatial labor supply decisions; it has highlighted the role of wider social entities and interactions within them in conditioning migration behavior; it has identified new linkages between migration as a distinct labor market phenomenon and other labor market and nonlabor market phenomena; and it has contributed to our understanding of the processes of economic betterment and development. At an empirical level, recent work on the economics of labor migration has confirmed the usefulness of old and well-established models of labor migration. It has also provided better estimates of key behavioral parameters, many of which are important ingredients in ongoing debates over public policies relating to migration. With such an impressive score, it is a wonder that more of the profession has not shifted into migration research. Perhaps this has to do with lack of information.

Our goal here is to summarize the actively evolving ideas, findings, and difficulties in the economics of labor migration. We do this mainly by illustrating selected theoretical and empirical developments which we believe to be on the frontier of research in this area. We also identify several new research topics that comprise part of the next research frontier. Prior to proceeding with these tasks, we wish to point out that much of the more interesting recent research is associated with migration within and from developing economies. This situation might be partly explained by the fact that the impact of wage differentials on migration tends to be offset by unemployment compensation programs and other fiscal policies in the developed economies. The LDCs' scene thus constitutes a good migration research laboratory for studying migration in general.

I. Theoretical Issues

Whereas owners of production inputs or commodities, such as bricks or bottles of wine, can ordinarily ship them away (so as to maximize profits or utility) while themselves staying put, owners of labor must usually move along with their labor. Furthermore, owners of labor have both feelings and independent wills. Indeed, most aspects of human behavior, including migratory behavior, are both a response to feelings and an exercise of independent wills. These simple observations divorce migration research from traditional trade theory as the former cannot be construed from the latter merely by effecting a change of labels.

People engage quite regularly in interpersonal income comparisons within their reference group. These comparisons generate psychic costs or benefits, feelings of relative deprivation or relative satisfaction. A person may migrate from one location to another to change his relative position in the same reference group, or to change his reference group. Membership in a low relative deprivation reference group may be well preferred to membership in a high relative deprivation reference group even if in the former a person's absolute income is lower. In general, a person who is more relatively deprived can be expected to have a stronger incentive to

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migrate than a person who is less relatively deprived. Moreover, a reference group characterized by more income inequality is likely to generate more relative deprivation and higher propensities to migrate. Note also that as particular individuals migrate, the relative deprivation perceived by nonmigrants may change, thereby creating second-round inducements to migrate. For example, if relative deprivation is gauged through a comparison with a reference group statistic such as average income, migration by low-income (i.e., relatively deprived) individuals will cause this statistic to increase and thereby induce migration by other individuals who become increasingly relatively deprived.

Not only can the migration behavior of individuals be expected to differ in accordance with their perceived relative deprivation, it can also be expected to differ according to their skill levels. This outcome results when the assumption of heterogeneous workers is paired with the assumption of imperfect skill information on the part of employers. To obtain some strong illustrative results, consider the following polar case. In a given profession, workers with skill $S$ receive wages $W_P(S)$ and $W_R(S)$ from employers at $P$ and $R$. Assume that skill follows a uniform distribution along a unit interval, that the functions $W_P(S)$ and $W_R(S)$ are nondecreasing and linear, and that $S$ is known by $P$ and $R$ employers. Assume further that for low levels of $S$, say $S < S^*$, $W_P(S) > W_R(S)$, whereas for $S \geq S^*$ the reverse inequality holds. Clearly, the lowest-skilled workers will not wish to migrate. Assume now that $R$ employers cannot observe the true skill level of individual $P$ workers (i.e., that skill information is asymmetric), but that they know the distribution of $S$ and will pay migrants from $P$ a wage that is equal to the average productivity of the migrant group. The interior solution $S^*$ now vanishes and is replaced by one of two corner solutions: there is either no migration at all, or there is migration by all. This result follows essentially because the highly skilled workers who migrate under perfect information may not do so if the pooled wage is too low. But if they do not, the pooled wage is lowered so that the next highly skilled group also does not find it advantageous to migrate, and so on.

Just as it is clear that neither a brick nor a bottle of wine can decide to move between markets, so should it be equally clear that a migrant is not necessarily the decision-making entity accountable for his or her migration. Migration decisions are often made jointly by the migrant and by some group of nonmigrants. Costs and returns are shared, with the rule governing the distribution of both spelled out in an implicit contractual arrangement between the two parties. For example, one important component of the direct returns to the nonmigrating family from the migration of a family member are his or her remittances. Theory suggests the view, that empirical evidence seems to support, that patterns of remittances are better explained as an intertemporal contractual arrangement between the migrant and the family than as the result of purely altruistic considerations.

Theory also offers reasons for the migrant and the family to enter voluntarily into a mutually beneficial contractual arrangement with each other—rather than with a third party—and identifies conditions under which the contract is self-enforcing. Since the chosen contractual arrangement reflects the relative bargaining powers of the parties, this approach can also be used to generate empirically falsifiable predictions about remittance patterns, that is, that variables that enhance the bargaining power of the family and the importance of its support (such as a high-unemployment urban labor market) will positively influence the magnitude of migrant-to-family remittances. Note that this approach demonstrates the efficiency, flexibility, and what we might call the dynamic comparative advantage of the family. In other words, it does not view the family as an entity that is split apart as its independence-seeking younger members move away in an attempt to dissociate themselves from familial and traditional bondage, regardless of the negative externalities thereby imposed upon their families. Moreover, this approach shifts the focus of migration theory from individual independence (optimization against nature) to mutual interdependence (optimi-
zation against one another), that is, it views migration as a “calculated strategy” and not as an act of desperation or boundless optimism.

Risk handling provides another illuminating example in which a wider social entity is collectively responsible for individual migration. Clearly, the family is a very small group within which to pool risks. But the disadvantages of small scale may be made up by an ability to realize scale economies yet remain a cohesive group. Such scale economies are achieved by the migration of one or more family members into a sector where earnings are either negatively correlated, statistically independent, or not highly positively correlated with earnings in the origin sector. Again, as in the remittances example, the important point to note is that both parties are better off due to migration since, in this case, an exchange of commitments to share income provides coinsurance. Note, in addition, that just as it explains migration by part of the family, this example also accounts for nonmigration by the remainder.

The nature of intragroup interaction could also help to explain features of the economic performance of migrants. To begin with, migrants often outperform the native born in the receiving economy. (We say more on this in Section II.) In addition, heavy reliance upon “network and kinship capital” is another prominent characteristic of migrant behavior patterns. The latter may explain the former quite readily in the context of an economy with a large number of agents whose transactions are governed by a prisoner’s dilemma super game. Briefly, a migrant who offers to cooperate in his trade with anyone in the first game, whereas thereafter the choice in each game is that of the other agent in the previous game, will tend to be better off than a native who never behaves cooperatively, provided a sufficiently high proportion of trades by migrants are conducted among migrants. This result provides an interesting explanation for the observation that new migrants are assisted by those who have migrated earlier; one good way of having a higher proportion of all trades conducted among migrants when there are few of them is to have additional migrants. The arrival of new migrants confers benefits upon the earlier migrants. It also suggests a resolution to the apparent inconsistency of altruistic behavior within a small group (say, a family) and selfish behavior within larger groups (say, a marketplace); the same strategy, viz, cooperate in the first game, thereafter reciprocate, is systematically applied throughout.

This appeal to strategic behavior may also be used to derive further migration-related insights. Consider, first, a not-atypical village economy in an LDC where farming landlords are in an oligopsonistic position with respect to the determination of wages and employment. Through collusion, the farmers can increase their profits. However, labor migration can constitute a credible counterstrategy to this possibility, provided that, from time to time, some undertake it. Note that once again, migration confers benefits upon those who stay behind, in addition to those associated with a leftward shift in the supply curve of labor. Second, consider the case of employers who, in static and dynamic contexts alike, are better off with a larger labor pool than with a smaller labor pool. Since a large labor pool can be developed by cultivating an image of worker success, it might be worthwhile for employers to create high-paying jobs in order to attract more migrants. As long as a large number of workers have the belief that high-paying employment can be obtained, or that it is worth waiting for, a migratory response will be produced. High “institutionally determined” wages in urban labor markets in LDCs are thus not necessarily externally imposed upon reluctant employers by government legislation and trade unions. Instead, they may result from endogenously determined strategies designed to maximize profits in dynamic settings. Also, generating few very high-paying jobs and heavily advertising, so to speak, the rewards associated with them may help

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1 The insurance attribute of migration applies to the individualistic case too. For example, just as general human capital provides self-insurance, so does migration in conjunction with specific human capital. Thus, in easing risk bearing associated with investment in specific human capital, migration facilitates such investment thereby conferring efficiency gains.
to maintain a large labor pool in the presence of high levels of unemployment. This strategy will tend to confuse migrant calculations, which may suggest that expected urban income is less than rural income. Thus, high-paying jobs might also be created in response to high levels of unemployment rather than preceding them and bringing them about.

Since the endowments and preferences of economic agents are always heterogeneous in practice, selectivity, as such, in response to a given set of prices and opportunities and changes in it, by way of migration or otherwise, is quite obvious. In many cases, whether migration selectivity prevails is not as interesting as the extent to which the migration response diffuses. Indeed, migration can be looked upon as a process of innovation adoption and diffusion. As time goes by, what proportion of a given group of potential migrants have migrated? To illustrate, assume there are a number of migration destinations and that there is some prior belief that one particular destination is better than the others. In this setting, the experience of actual migrants provides valuable information that presumably reduces future uncertainty of the remaining pool of potential migrants. Under these circumstances, the most interesting research issues relate to the determination of the speed of adoption of migration as an innovation and the characteristics associated with the delay in the adoption of the innovation (rather than whether it takes place), that is, why are some individuals quicker to migrate than others? For the case of rural-to-urban migration in LDCs where, if history were to repeat itself, most rural people will end up as migrants, such an approach seems particularly appropriate. Note that as with a demonstration effect in the case of innovation adoption, a stock of past migrants at a given destination (particularly a large stock) represents evidence that might lead to an upward revision of beliefs that migration is a worthy investment. Moreover, the impact of migration upon the society from which it takes place is now stage-specific. Thus, the divergence of views concerning the consequences of migration (for example, its impact upon the distribution of income by size) can partly be attributed to the simple fact that the underlying observations are made at distinct stages of the diffusion process.

II. Empirical Considerations

Recent empirical research on the economics of labor migration has benefited a great deal more from the development of new econometric techniques than from new theoretical ideas. The techniques that have substantially improved our ability to use micro data sets in the estimation of relatively standard models of labor migration include techniques for the analysis of qualitative dependent variables, techniques that correct for sample selection bias, and techniques for the analysis of longitudinal and pseudo-longitudinal data. At the micro level, most empirical studies have attempted to test simple micro-economic models of migration according to which individuals (or families) make locational decisions primarily by comparing their income opportunities at alternative locations. The key feature of recent studies of this type is their focus on the estimation of structural, as opposed to reduced-form, models of the migration decision. In the past, a major problem that made the estimation of such models difficult was the absence of data on the wages that particular individuals would receive at two or more locations at the same point(s) in time. In other words, survey data sets typically provide researchers with information on the wages received by individuals at their residential location at the time of the survey, their migrant or nonmigrant status at that location, and selected individual characteristics (for example, age, education, and marital status). To the extent that particular unobserved characteristics of individuals are rewarded differently at different locations, the average wage of individuals (conditional on their observed characteristics) at location A, who migrated there from location B, will provide a biased estimate of the wage that individuals who remained at location B would receive if they moved to location A.

Largely as a result of advances in the statistical analysis of selected samples, however, we now have fairly simple methods that
we can use to test and correct for the bias associated with this unobserved wage problem. To date, estimates of these structural models of labor migration uniformly support the hypothesis that individuals respond to income incentives in making decisions to migrate. However, further application of these models is desirable, using different data sets and more carefully formulated and tested empirical specifications. It would be interesting to examine whether the strength of the migration response to wage differentials decreases over time, while the response to variables such as relative deprivation increases. We would also like to point out that longitudinal data may prove particularly useful in analyzing the determinants of migration, insofar as they permit a distinctly different approach to the problem of sample selection (i.e., longitudinal data permit researchers to control more directly for unobserved variables that affect wages and that are correlated with the migration decision).

Furthermore, much empirical research has been conducted on the labor market progress of migrants, with special attention paid to the behavior of international migrants. To date, most studies of this topic have involved the estimation of cross-sectional wage equations in which “years since migration” is entered as an independent variable and its coefficient is interpreted as a measure of migrant progress. Typically, these studies find that migrant workers earn less than native-born workers with similar characteristics during the first few years after migration but more thereafter. It has been suggested, however, that this longitudinal conclusion, based on analyses of cross-sectional data, may be an artifact of either the declining quality of migrant labor over time (i.e., a vintage effect) or the outmigration of the least successful migrants. In view of the contradictory nature of extant empirical conclusions, and given the academic and policy importance of this issue, additional research on the pace of migrants’ labor market progress is clearly needed. Further analysis of longitudinal data on migrant earnings would also be helpful.

In addition to the two focal points for empirical work discussed above, there are four other areas that empirical economists have touched upon and which we think should receive further attention. The first of these areas involves estimation of the macroeconomic effects of migration. There is a surprising lack of empirical work on the effects of labor migration on wages and employment in net-sending and net-receiving locations, especially for different types of labor (for example, skilled and unskilled labor). Further work on this topic would be of interest, perhaps involving estimation of the wage and employment effects of migration in the context of well-defined structural models of equilibrium and disequilibrium labor markets. Analysis of the distributional impacts of migration and the degree of substitutability between international and internal migration in the process of labor market adjustment would also be helpful.

Second, the microeconomic and macroeconomic relationships between aging and labor migration are topics which have received only scant and indirect empirical attention (for example, age is usually a right-hand side variable in microeconomic studies of migration decision making). Indeed, empirical evidence strongly suggests that older workers are less mobile than younger workers. This finding is quite plausible for a variety of reasons relating to the differential preferences and opportunities of older and younger workers. It therefore seems likely that workforces in many low-fertility countries will show a declining propensity to respond to exogenous economic change by migration as they age over the next two decades. Thus, to the extent that mobility is one of the key requirements for economic efficiency, it would be useful to know more about the extent to which the aggregate migration behavior of a population is influenced by its age distribution and the underlying bases for this relationship. Such information could be very helpful in debates over public policies that provide incentives to migrate.

The third topic that deserves further empirical attention is the migration behavior of dual-earner families. In its most general form, this issue relates to the broader one of the appropriate unit of analysis for studying migration behavior to which we alluded in Section I, that is, the individual or the family.
In this connection we may consider the extent to which the labor market activities of one family member are conducive to the migration of another family member, especially in the LDCs context or, alternatively, the extent to which the labor market activities of one family member impose a constraint on the migration behavior of another family member, especially in the DCs context. In view of the dramatic rise in the labor force participation rates of females in many DCs, such constraints may have noticeable effects on aggregate migration rates. It would be fruitful to conduct further empirical work on this problem, developed in the context of a structural model of constrained consumer choice, and which focuses on occupational characteristics as well as earnings.

Finally, at this point in time, we still await the empirical implementation of many of the new theoretical ideas relating to labor migration. Part of the lag stems from the fact that much of the inspiration for recent theoretical work on labor migration is provided by the experience of developing economies in which data on migration are either nonexistent or of poor quality. Nevertheless, given the contribution that careful econometric analysis of the new ideas can make to the fullness of our understanding of migration, it seems clear that such efforts cannot be very far off.