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**Female Migration in Developing Countries:
A Framework for Analysis**

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Abstract

The economic and social determinants of female migration and the factors that may distinguish female from male migration are examined, thus questioning the assumptions in existing theories of migration according to which differences between the determinants, consequences, and patterns of male and female migration are assumed to be insignificant. A conceptual framework for the analysis of female migration—both autonomous and associational female migration—that identifies variables particular to women is proposed. Thus the associational migration of married women, generally assumed to be merely passive, accompanying migration, may indeed be induced by economic factors. If the goal or motive of migration is economic betterment and/or status mobility, divergence between the goal attainment strategies of male and autonomous female migrants is immediately apparent: for men, wage-earning employment is the sole avenue to economic betterment and status mobility; for women, marriage provides an additional or alternative approach to the same end. These and other potential differences in the constraints, goals, and attainment strategies of male and female migrants are incorporated in a formal, empirically testable framework.

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Amidst the volume and diversity of recent research on rural-urban migration in developing countries lie some common issues and unifying elements. One element common to almost all of the varied approaches and perspectives is the marked absence of analysis of women in the migratory process. Implicit in the dominant approaches in the field of migration is the assumption that the patterns and characteristics of female migration are likely to mirror those of male migration. And consequently, gender-related variations in the determinants, consequences, and patterns of migration have not been considered either relevant or potentially significant to warrant specific analysis (see, for example, Standing 1978).

Speculation, however, about possible gender-related differences in the migratory process summons to mind a variety of factors that may indeed affect male and female migrants differently and that call for elucidation and analysis. Thus in the very general model of migration put forth by Lee (1966) emphasizing the factors relevant to the determinants of migration--factors related to the area of origin, area of destination, intervening obstacles, and personal factors--the potential differences between male and female migrants, at least as regards intervening obstacles and personal factors, are fairly obvious. The possibility of social constraints against the autonomous migration of women, or even the "associational" migration of wives in some cases, is merely one obvious area of difference between males and females in the factors affecting the decision to migrate. Social perceptions and cultural norms relating to migration may well support and promote the migration of males while inhibiting or impeding the migration of females. Factors associated with the places of origin and destination are also likely to be characterized by gender-related differences in the "push" or "pull" variables involved in migration. Thus, the subordinate position of women in the traditional social hierarchy of

the rural area may be a powerful negative factor in the place of origin—a "push" factor unique to women, in some situations. The significance of these gender-related differences is, of course, a matter for empirical verification, but at the level of theoretical speculation, male-female differences in migration are clearly evident. If, for example, the goal or motive of migration is, as is generally assumed, economic betterment and the improvement of social status, and the channels of these are seen to be education and/or employment, then the divergence between male and female attainment strategies is immediately apparent. For, whereas education and/or employment is the sole avenue of economic betterment and status mobility for men, an appropriate marriage to an upwardly mobile man may be an alternative or additional approach in the pursuit of the same goal for women.

These potentially significant gender-related differences in the migratory process suggest the need for a specific and differentiated analysis of female migration. Recent research provides preliminary evidence of the steadily expanding stream of female migration, both the associational migration of wives accompanying migrant spouses and the autonomous migration of unattached women.¹ It is particularly this latter category of new migrants—unattached women—that reveals the inadequacy of existing approaches to the study of migration which have taken female migration into account but which have tended to focus on household or family migration or, occasionally, on marriage migration.

Bogue, for example, attempted to explain the early male dominance and subsequent female dominance in the migration streams in terms of the household; because the first migratory moves were always attended by uncertainties, both economic and noneconomic, males usually migrated first. With the recurrence of migration waves, and its ultimate routinization, the migration of wives and families followed and accounted, Bogue suggests, for the situation in which the migration of female began to equal or exceed that of males (Bogue 1969, p. 764).

Along the same lines, accounts of marriage migration represent a variation of household migration explanations. These explanations have focused on marriage customs, and the demographic imbalances in sex ratios which result in the migration of women, and sometimes men, in the pursuit of suitable or desirable alliances. In the Cameroons, for example, Podlewski finds female mobility more important than male mobility, and suggests that the practice of exogamy accounts for the sex variation in migratory flows: "[Since] the members of a same clan are usually united in the same villages, and as the wife usually goes to live in the husband's clan, a great volume of female migration is recorded" (Podlewski 1975, p. 559). In India, too, where village exogamy and group endogamy prevail, female migration has been attributed entirely to marriage migration. Bose, for example, states, "the predominant female migration in India is what may be called 'marriage migration' (on account of village exogamy in several parts of India) and 'associational migration' (accompanying their migrant husbands). Economic causes are relatively unimportant in India . . ." (Bose 1973, p. 142).

It is perhaps these a priori assumptions, as well as the relative lack of data about the migration of women and the "invisibility" of women, who as wives merely accompany or join migrant males, that account for the paucity of analysis of women in the migratory process. It has been almost axiomatic in the migration literature that patterns of female migration will reflect patterns of family or household migration. It has been suggested that this assumption in the migration literature—that female migration will reflect family or household migration—may lie in prevailing patrilineal patterns and in the subordinate position of women in many societies which deters their autonomous migration (Cornell et al. 1976).

The attempt to focus specifically on female migration is not without its problems. It may be problematic in some cases to identify female migration that is independent of or separate from household or family migration. Even where female migration may be responsive to wage and opportunity differentials in urban areas, it is difficult in cases of family migration to ascertain whether the decision to migrate was based on the incentives for the household head (assuming male head of household) or for the women in the household. The responsiveness of female migration to income and opportunity differentials in urban relative to rural areas may also be considerably affected by specific cultural constraints relating to the migration of women.

It is perhaps these difficulties in disentangling the effects of the different factors involved in female migration that may account for the prevalence of two assumptions regarding female migration: (1) that it is mainly family or marriage migration and thus reflects male migration, or (2) if it is a response to perceived urban-rural differentials in opportunities, that it is unlikely to be significantly different from male migration.

Given these assumptions regarding female migration and the preponderance of males in the migration streams till relatively recently (excluding those in Latin America and the Philippines), analyses of migration have been based almost entirely on information gathered from male migrants. These analyses, assumed to be generalizable to both male and female migration, are, in fact, sex-specific theories--specific to male migration. For in the absence of a gender-differentiated analysis or with the neglect of sub-sample variation between males and females, the results of empirical inquiry cannot in fact be tacitly assumed to apply to both sexes. The impact of, and responses to, various aspects of social change, including migration, are inevitably differentiated by gender, and theories of migration which have not taken women into account--or which have overlooked gender-variations in their analyses--

must be regarded as special rather than as general theories. In the absence of research on female migration, these special, male-specific theories of migration have tended to be perpetuated and reinforced.

The framework proposed here is also gender-specific, however, focused specifically on the migration of women, in an effort to redress the male bias in the approaches to migration and to analyze the specific determinants of female migration with a view to an assessment of the nature and significance of gender-related factors in the determinants of migration.

I. THE EVIDENCE

Recent studies provide some evidence of the gradually expanding stream of female migration, and particularly the autonomous migration of unattached women.² However, explanations of this increased pace and volume of female migration have tended to be related to family migration—the associational migration of wives or daughters accompanying the "primary" male migrant—or, in the case of unattached female migration, to the existence of economic and employment opportunities in the urban areas and therefore no different from male migration.³ The nature of urban wage and employment activities for female migrants has in turn been related to their economic roles in the rural areas, suggesting a continuity in the urban and rural economic roles of women.⁴ Thus it has been argued that the "activity pattern of immigrant women in the town is determined primarily by the customary pattern of female employment in the village, and especially by the extent to which women participate in non-agricultural activities in the village" (Boserup 1970, p. 175).

As shown below in the schematic and considerably simplified presentation of a complex situation, the generalization that urban activity patterns are "determined primarily" by rural activity patterns does not appear to be the case in Latin America, Africa, or India.

| <u>Female Activity Rates in Village</u> | <u>Female Activity Rates in Town</u> | <u>Country Groups</u> |
|---|--------------------------------------|---------------------------|
| Low | Low | Arab Countries |
| Low | High | Latin American countries |
| High | High | Southeast Asian countries |
| High | Low | Africa and India |

(Boserup 1970, p. 186)

Latin America

In the rural areas of Latin America, as the table indicates, women's participation in agriculture and other economic activities is low. In those Latin American countries where Spanish and other European influence was strong, women are primarily engaged in domestic activities (ibid.). In the urban areas, on the other hand, women have a high level of participation in both the modern and traditional sectors (ibid., pp. 186-187).

The migration of women from places where employment opportunities are virtually nonexistent, to places where employment may be found, is evident in the capital cities of Chile, Argentina, Mexico, Colombia and Costa Rica. It is in these Latin American countries where the predominance of female migration has been most marked.⁵

Boserup explains:

. . . why sex patterns of migration in Latin America are radically different from those in developing countries in other continents. In Latin America, young rural women are attracted to the towns because they offer them better employment opportunities than the rural areas. Poor farmers send their daughters to town to become domestic servants, because they are not needed at home if the mother does little more than domestic duties. Moreover, there is little agricultural work for them to do, except in regions where female labour is needed for plucking the principal crop. In town, on the other hand, women find many employment opportunities ranging from domestic service for the

daughters of poor farmers, to clerical jobs for the educated daughters from better-off farm families. As a result the flow of women from the countryside to the towns is larger than that of men.

Owing to this high rate of rural-urban migration of young girls, Latin American towns, in sharp contrast to other towns in developing countries, have a higher proportion of women than the rural areas.

(Boserup 1970, p. 187)

Southeast Asia

The predominance of females in the migration streams in the Philippines has been regarded as resembling most closely the Latin American pattern. It is to the particular structure of urban employment opportunities to which these predominantly female flows are attributed in both the Philippines and Latin America (Connell et al. 1976, p. 204). However, a closer look at the sex composition of migration streams in some other Southeast Asian countries reveals that the movement of female migrants is not confined to the Philippines alone. Remarking on the widely held notion that migrants tend to be males rather than females, Pryor has commented that "the notion of male dominance is either incorrect or there has been a marked change in the late 1960's . . ." (Pryor 1977, p. 7). He has observed further that "overall there is a significant predominance of females among migrants to Manila (sex ratio 64 males to 100 females), Surabaya (Indonesia) and Bangkok" (*ibid.*). The significant shift in the sex composition of migration streams has also been observed recently in Malaysia where there has been a dramatic increase in the volume of female migrants from the rural areas to urban industrial centers (Khoo and Pirie 1979; Ariffin 1978).

In Boserup's schematic presentation of the participation levels of women in rural and urban economic activities (see page 6) the Southeast Asian pattern

is characterized by high levels of female activity in both village and town. Women are active in agricultural and other productive activities in the rural areas and, the wide range of economic opportunities in the urban area for women in both trade and domestic service in the informal sector and in the modern sector is reflected in the high levels of female employment⁶ (Boserup 1970, p. 189).

West Africa

The Southeast Asian pattern of high levels of female participation in economic activities in both urban and rural areas is found also in West Africa where women are active in both agricultural and market and trading activities. The existence of urban economic opportunities, given other predisposing conditions, has led to a considerable increase in the volume of female migration, resulting in altered sex ratios in the cities and in the emergence of new migration patterns during the decade of the 1960s and 1970s (Carynyk-Sinclair 1974). The presence of a substantial female migrant group in most West African towns and cities and the steadily increasing proportions of migrant women led Caldwell to suggest that "the female propensity for rural-urban migration is rising faster than the male" (Caldwell 1968, p. 368). As Sudarkasa has noted, "this 'propensity' is, of course, a predictable response to actual and perceived opportunities for employment, education, and/or marriage in the cities" (Sudarkasa 1977, p. 178).

The characteristics of the typical female migrant in West Africa is described by Sudarkasa as falling under the category of commercial migrants:

The vast majority of women move from the rural areas to the cities. This is the direction of most internal migration. . . . Because they do not have the formal educational qualifications required for the types of wage employment open to women, many female rural-urban migrants have had to enter market trade or similar occupations. In the past two decades, however, more

and more young women with some degree of formal education have been moving to the cities in the hope of obtaining jobs in the "modern sector." As often as not, these young women do not find the clerical, industrial, or technical jobs they seek, and they, too, have to turn to trading on their own account or with female relatives in order to eke out a living.

(Sudarkasa 1977, p. 183).

East Africa

In contrast to the West African situation of high levels of female participation in both agriculture and nonagricultural economic activities is the situation in East Africa where women in the rural areas are engaged primarily in agricultural work (Mair 1969, p. 63). It is the productivity of women's agricultural roles in East Africa compared to the very limited urban employment opportunities for women, even in the informal sector, that is a constraining factor in the migration of women to the urban areas (Thedani 1978). As Boserup's generalization would suggest, the low level of participation in nonagricultural economic activities appears to limit the options for urban economic participation.

However, although males have been predominant in the migratory process, there has been a shift in the sex-composition of migration flows in the recent past. Female migration has been gradually yet steadily increasing. Thus Ominde has noted the marked increase, in both absolute and relative terms, of the movement of women to the urban areas of Kenya during the 1960s (Ominde 1968, p. 189). In addition, Heisler reported that during the 1960s the migration of women to the cities exceeded that of men in Zambia (Heisler 1974, p. 63).

South Asia

Although little information is available on the rural-urban migration of women in Pakistan and Bangladesh, one would expect to find a generally

similar pattern to that found in India, where female migration is characterized as being almost exclusively family or marriage migration. The migration of women is believed to be induced entirely by the movement of either the parental or the marital household (Joshi and Joshi 1976, p. 138).

Although there are significant regional and community differences in women's economic roles in rural India, the overall picture of women's agricultural and other economic activities is that of a high level of participation (Boserup 1970, pp. 68-69). In the urban areas, however, participation in economic activities is reportedly low (ibid., p. 186). Because female migration is believed to be primarily for the purposes of marriage (Bose 1967, p. 3), other reasons for migration, such as employment or education are not believed to be of importance. There is, however, one interesting exception reported in the literature--that of Moti Ghadal in Gujarat, where female migration, which comprises 32 percent of total migration, is unexpectedly high because of the high level of migration for education among young women (Connell et al. 1976, p. 181). Other such interesting and "deviant" patterns, which in all likelihood prevail, have as yet been undetected.

II. THE FIELD

The striking feature about the approaches to the study of migration is its diversity. This diversity is attributable, in large part, to the wide range of disciplinary perspectives in the field and to the different levels of analysis from which the various aspects of the subject can be studied. Different disciplines, utilizing specialized vocabularies and conceptual frames, have focused on different elements of the migration process. Thus economists have typically studied migration at the macro level and focused on adjustments in the labor market and on labor transfers; sociologists have focused on the study of motivation, social mobility, and the assimilation and adaptation of

migrants; and geographers on the spatial patterns of mobility in an attempt to relate these to broad social, economic, and environmental changes.⁷

Moreover, within the frames of reference of the different disciplines lies the issue of levels of analysis—micro or macro, structural or individualist. For example, from the perspective of economics, it is possible to view the migratory process at the macro level as an inevitable consequence of the unequal spatial and sectoral distribution of factors of production and thus determined by the strategy of overall development and the allocation of scarce resources. At the micro level, from the perspective of the individual migrant, the inducement to migrate can be seen to lie in the existence of severe urban-rural imbalances in employment opportunities and income levels. The issue, as Parkin states, is "how much analytical emphasis should be placed on the individual migrant as being free to decide between alternative courses of action, and how much on the wider political, economic, and ecological factors directing and constraining migratory flows of particular groups" (Parkin 1975, p. 9).

It is specifically in relation to the analysis of women in the migratory process that the issue of the level and type of analysis has been raised (Leeds 1976). In a short but strident piece, Anthony Leeds has vigorously decried the study of women in the migratory process. Leeds contends that the analysis of "men" or "women" involves an "individualistic, reductionist, and motivational" emphasis which reduces all "structural elements to epiphenomena" (Leeds 1976, p. 73). Migration ought to be analyzed, according to Leeds, in terms of the structural flows of resources, including human labor capacity and money, and shifts in these flows entailed by migration. Leeds argues further that the focus on migrants and the reductionism that this involves "has a strong ideological element . . . emphasis on which serves to divert people, including social scientists, from closer examination of dominating forms of

economy and polity and their major institutions, e.g., capitalist exploitation, as these shape migration" (ibid.).

Along similar ideological lines as Leeds, Samir Amin has stated that "the decision of the migrant to leave his region of origin is . . . completely predetermined by the overall strategy determining the 'allocation of factors,' or, the overall strategy of development, and it is "here that the ultimate cause of migration lies" (Amin 1974, pp. 88-89). He dismisses the possibility of "rational choice" on the part of the migrant as being mere rationalizations of behavior within a system and determined by the system; one that is merely the "immediate apparent cause, a platitude which leads nowhere" (ibid.).

Amin's argument suggests that the emphasis placed on the macro-structural level precludes and obviates the need for analysis at other levels. Others, however, have pointed to the necessity for analysis at both macro and micro levels (Parkin 1975; Taylor 1969). To those of this orientation, the two levels are viewed as being alternative approaches rather than necessarily incompatible ones, and as being simply different perspectives posing different questions. Parkin, for example, suggests that the macro context can be regarded as a "given" in a micro study of migrants and further that "since a macro context does change over time (e.g., government and political systems are altered, economic expansion alternates with recession, etc.), then the relationship between its changing nature and alterations in the choices open to individuals requires analysis at both levels" (Parkin 1975, p. 13). Understandably, however, there have been relatively few analyses which do explicitly attempt to incorporate both the macro context and the micro level of the migrant.⁸

The specific link between macro-structural factors and the problems of individual migration from rural to urban areas, while undoubtedly plausible,

still requires considerable clarification and elaboration. Moreover, although macro-structural factors may create the internal imbalance conducive to migration, a wide variety of social, cultural, and individual factors operate to determine who actually migrates. The perceptions and expectations of prospective migrants regarding rural-urban variations in attainable opportunities and their means, both in terms of the financial resources needed to migrate and the sociocultural norms favoring--or at least sanctioning--migration, affect the propensity to migrate to a degree no less significant than the macro context. Thus Mitchell makes an apt distinction between the "underlying determinants" predisposing towards migration and the particular motives or "triggers" that result in the individual decision to migrate (Mitchell 1959).

It is at the micro level that research has been concentrated overwhelmingly on the determinants of migration (Brown and Newberger 1977, p. 446). The basic questions at this level of the individual migrant have been: Who migrates? Why? With what consequences for the individual, his or her family, and for the sending and receiving communities? The most relevant characteristics in answer to the question "who migrates" pertain to age, sex, marital status, educational attainment, and occupation/employment/income levels. Explanations of the causes of migration have tended to revolve around the economic, sociocultural, and environmental determinants. Economic explanations center on the search for enhanced opportunities of income and employment; social and cultural factors on the desire of migrants to break away from traditional constraints and inequities; the lure of the cities; and physical/environmental factors on the migration induced by conditions of disaster, displacement, demographic pressures and/or imbalances.

Because migration often involves some elements of these different factors, discipline-bound studies of migration have been found to be inherently unsat-

isfactory (Shaw 1975). Thus although economic models of the determinants of migration in terms of urban-rural wage differentials and expectations of employment are the dominant mainstream explanations in the field, and although there is considerable empirical support for the expected income economic model (Todaro 1976; Fields 1979; House and Reapel 1978), the emphasis on economic factors alone has often been regarded as too simple to explain the complexity of the migration process. For example, where migration has become an intrinsic part of the life cycle, it has acquired an institutionalization, a ritualization, similar to a "rite of passage" into adulthood or social status. Among youths in Talara (Peru), migration is considered crucial to social maturation (McIrvin 1970). In north Thailand, Keyes found that "every young man considers it a part of his maturation to spend a few months or even years working in an urban center before returning to the village to settle down, marry, and follow the traditional village way" (Keyes 1966, p. 329). Similarly, in parts of Africa the early patterns of periodic or circular migration have gradually become integrated into the life cycle of young males (Gugler 1968). Because these sociocultural functions of migration may in some cases counteract its economic utility, and because as Du Toit has argued, "motivations for mobility . . . are not simply conditioned by perceived economic opportunity . . ." (Du Toit 1975, p. 203), an argument has often been made against relying totally on any uni-dimensional system of explaining migration, given the often complex sets of conflicting pressures and interests (Connell et al. 1976; Du Toit and Safa 1975; Shaw 1975).

Models developed to organize the interacting causes of migration have included various forms of push-pull theories, emphasizing the negative or "push" factors at the place of origin and the positive or "pull" factors at the place of destination; cost-benefit models that include both push and pull factors; and gravity models that center on the characteristics of the origin

and destination, and on the distance and alternative opportunities between them. There is also the more general model of migration articulated by Lee which emphasizes the factors associated with the area of origin and destination, as well as the intervening obstacles and personal factors (Lee 1966).

In the light of these important considerations for the analysis of migration--(1) the necessity for appropriate, alternate conceptualization and separate models and theories, given the diversity of migratory phenomena and the potential gender-related differences, and (2) the unavoidable limitations of any explanation confined primarily to economic factors, the framework proposed here for the analysis of female migration attempts to identify those factors uniquely involved in the migration of a specific group within the pool of migrants (women) and to incorporate some pertinent noneconomic factors.

III. THE FRAMEWORK

Speculation about the factors involved in the migration of women has tended to focus on unattached women who migrate independently. Women migrating with their families—either parents or spouse—are assumed to be merely accompanying the "primary" migrant. This particularly female type of migration has been characterized as "associational" migration. However, even the associational migration of women may be induced, in part, by the expectation of urban employment and/or by the dislocation of their traditional economic activities. The expectation of urban employment and the nature of urban opportunities for women is likely to have an impact on their associational migration. Given the often substantial contribution of women in the rural areas to the support of their families, the absence and/or limited nature of urban opportunities may conceivably be a deterrent to associational migration. Conversely, the presence of urban employment possibilities may increase the incidence of associational migration.

The associational migration of women may be impelled also by the dislocation of their rural economic activities. The impact of modern methods of agriculture and the introduction of mechanized farming has, in some cases, driven women out of agricultural labor and thus out of economic activity (Boserup 1970). Development programs for agricultural training, cooperatives, and credit and market improvement, by neglecting women, have sometimes undermined their economic activities (Tinker 1973). Thus where women have played important roles in agriculture or other economic activities such as rural craft occupations or in the bazaar and trading sector, the decline in the importance of their traditional activities may induce greater associational migration. Such labor-displacing or dialocating aspects of technical change and development strategies will, of course, also tend to exacerbate urban-rural differentials in income and employment opportunities.

In contrast to the descriptions about the migration of married women, explanations pertaining to the autonomous migration of unattached women have ranged over a variety of issues. It has been suggested that, in Africa, migration from the village to the city offers women an escape—an escape from their traditional ascribed status, perhaps an escape from obedience to male kinsmen, and an escape from a life of exceedingly hard work: "It is hardly surprising that there should be a widespread desire among African women to exchange a village life of hard toil for an urban life of leisure" (Boserup 1970, p. 191). It has also been suggested that women move to towns in search of husbands, with few young potential male candidates left in the rural villages. Some seek to escape customary sanctions (which vary among different tribes) against unmarried mothers. Then there are the women who are either divorced or have deserted their husbands. They may be runaways from unhappy, broken, or barren marriages (Little 1973, pp. 19-22). Or they may come as "ayahs"—young girls, usually from poorer families, who come to the city as

live-in maids and/or babysitters—a situation not dissimilar to that in Latin America where the employment opportunities for unschooled and low-income women in domestic service has led to the preponderance of females in the migration flows from rural to urban areas (Schultz 1971, pp. 157-163).

But regardless of whether female migrants are single or married at the time of migration, and especially given the fluidity of marital status (a migrant could be single at the place of origin and arrive at the destination married, or alternatively change from married to separated, divorced or widowed), it has been suggested that, as with men, women have tended to move out of areas where economic opportunities are limited to areas where employment is more readily available. Thus the economic motive is seen as the major factor in female as well as male migration (Standing 1978, p. 212; Fields 1979).

The migration of women, like that of men, is indeed likely to be job-oriented, with employment opportunities and wage differentials, actual or perceived, between rural and urban areas being of central significance. A distinguishing feature of female compared to male migration, however, is the importance of marriage as a reason for migration. Marriage could be, as Pryor has phrased it, an "unavoidable correlate" of migration, as in India, where marriage migration involves the movement of the bride to the parental household of her spouse, dictated by the practice of village exogamy and group endogamy. Marriage could also be the end or goal of migration, as in West Africa, where the dissatisfaction of young women with marriage prospects in their rural villages has been suggested as a reason for migration—marital migration (Gugler 1969). Marriage could also be an alternative route to socioeconomic status and social mobility—mobility marriage. As Pryor has noted, female migrants tend to return to their rural village if they neither marry nor obtain jobs in the city (Pryor 1977, p. 8).

Accordingly, the variables that we suggest are central to the analysis of female migration involve the economic factors of income and employment opportunities, marriage as a means to financial betterment and status mobility (mobility marriage) plus the two other aspects of marriage suggested above (marriage migration and marital migration). Marriage migration refers to the movement involved in marriage, such as the movement of brides to the place of residence of their spouse; marital migration refers to the migration for marriage, a universal norm in most developing societies, referring to marriage for the sake of marriage rather than for economic betterment, although such betterment may well be a secondary effect. Mediating the effect of these factors impelling female migration are the intervening factors such as sex-role constraints which may impede the migration of women, and the usual residual factors of cost, transport, amenities, etc., which are common to both male and female migration.

The ensuing discussion elaborates on these above-mentioned variables, namely:

- a) Employment/income differentials
 - 1. in the formal sector
 - 2. in the informal sector
- b) Mobility marriage
- c) Marital migration/Marriage migration
- d) Sex-role constraints

while Section IV provides a more formal presentation of the model.

a) Employment/Income Differentials

The relevance of urban-rural differentials in employment and income for female migrants, including wives accompanying a migrant husband, has been suggested earlier. Apart from the largely spatial type of migration

involved in marriage migration, and aside from situations where, traditionally, the strict seclusion of women prevails, female migrants to the urban areas, irrespective of their marital status, are likely to be influenced by perceptions of urban-rural differentials.

The mainstream economic theory in the explanation of rural-to-urban migration, the Todaro model, identifies the "expected" urban-rural real wage as the key determinant, where the "expected" differential is determined by the interaction of two variables, the actual urban-rural wage differential and the probability of obtaining employment in the modern urban sector (Todaro 1969, pp. 138-148). The model, however, makes no distinction between men and women.

1. Formal Sector Differentials

In the case of women, however, data on urban-rural wage differentials in the formal sector require modification to take into account factors peculiar to women such as the sex discrimination frequently encountered by women seeking employment in the modern sector--a situation found not only in developing societies but also in developed ones. This discrimination is manifested in the significant differences between the sexes in the structure of employment opportunities available to them and, in addition, in the considerable differences in the distribution of earnings of women relative to men with comparable characteristics.⁹

In the modern sectors of many developing societies, women are often considerably under-represented, even after allowances have been made for any educational disparities between them and men. In Kenya, for example, women constitute only 15 percent of the modern employment sector, whereas they constitute over 30 percent of the educated, urban labor force (ILO 1972, pp. 53, 59).

The evidence of sexual inequality in the labor market has been abundantly

documented.¹⁰ But it is the degree to which sex-discrimination directly and indirectly affects the probability of obtaining employment as well as the rural-urban wage differential that needs to be incorporated in any realistic model of female migration. The formal framework presented in Section IV attempts to do this.

2. Informal Sector Differentials

Corresponding to the sex discrimination in the modern urban sector, which affects the urban-rural formal sector differential, the traditional roles of women and their control over the distribution of the products of agricultural and other activities in the rural areas directly influence the extent of the rural-urban differential in the informal sector. As Friedl has pointed out, the rights of distribution and the control over channels of distribution are critical economic factors in the status and power differentials between men and women (Friedl 1975).

Because women are often in a subordinate position in the social hierarchy of traditional systems and lack the autonomy derived from power or control over resources, urban migration may represent the promise of freedom and economic independence.

To the degree that women do have relatively low autonomy and power in the rural areas, the potential income from informal sector urban activities, representing, if it does, the control of resources (as opposed to merely the production of resources), will result in a greater positive differential for women compared to men, for any given level of informal urban income.

b) Mobility Marriage

The importance of marriage as a means of upward social mobility for women, in both developed and developing societies, has been generally acknowledged.¹¹

It has been suggested that whereas males rely largely on occupational achievement for social mobility, for women, upward social mobility through personal attainment can be supplemented or substituted (for those who marry well) by the acquisition of social status through marriage. Implicit in these explanations of social mobility is an "exchange theory" of marriage that posits a marriage market¹²--not dissimilar to the market in which economic goods and services are exchanged--in which females offer the characteristics sought after by males in exchange for the characteristics and status they desire from males. Implicit also is the idea that rational, status-seeking considerations are not unimportant influences in the marital choices of females, underlying assumptions which have not gone unchallenged.¹³

The "marital mobility" factor is thus particular to women, and may be of special benefit to low-status women, who are at a competitive advantage over low-status men, in the marriage market. For, whereas high-status males may generally not be reluctant to marry lower-status females, the reverse--high-status females marrying lower-status males--is less probable.

As Little perceptively points out, the acquisition of an upwardly mobile, professional, and urbane husband has become part of the West African woman's "dream."¹⁴ He cites a ditty about a young girl's fondest fantasies:

What shall I do to get a man of that type?
One who is a been-to,*
Car full and fridge full [i.e., possessing a car and a
refrigerator]
What shall I do to obtain a man like that?

(K. A. Busia in Little 1972, p. 276)

*A "been-to" is a person who has lived and/or studied in the United Kingdom. Meillassoux reports that in Bamako, Mali, young people of the literate class have the same respectful attitude towards fellow Africans who have lived and/or studied in France, especially Paris. (Claude Meillassoux, Urbanization of an African Community. Seattle and London: University of Washington Press, 1968, pp. 130-142.)

c) Marital Migration and Marriage Migration

The migration of women in marriage and the migration of women in the pursuit of improved marital prospects are two different aspects of marital migration. The requirements of customary marriage practices, as in village exogamy, often necessitate the migration of women. It has been suggested that this type of marriage migration is generally rural-rural and of short distance (Connell et al. 1976, p. 42). But in addition to this type of migration dictated by customary practices is the type of marital migration induced by the simple fact of an imbalance in sex ratios, or an imbalance in the sex ratios within certain status groups, that may result in the migration of females.¹⁵ Little suggests that this may be the case for West African women who find few eligible husbands left in the rural areas, given the sex selectivity of previous periods of migration (Little 1972).

The introduction of this latter aspect of marital migration and "mobility marriage" would appear to limit the relevance of this explanation to young and marriageable women. To some degree it does. But, as used here, "marriage" is intended to include a wide variety of arrangements and forms of cohabitation, and not confined to a formal, legal or "western" definition of marriage. In Kenya, for example, the range of possibilities includes: "Christian" marriage, recognized by the law courts; tribal marriage, based on African customary practices; and "free marriage," which involves cohabitation with varying degrees of permanence. These forms of marriage overlap, as when a couple living on terms of "free marriage" undertakes to have a Christian or tribal marriage later on. The complex array of types of marriage--"multiple" marriage, "serial marriage"--has been identified in several contexts.¹⁶ Because of the diversity of domestic arrangements and the diversity of forms of consensual union which fall outside the purview of "marriage" strictly

defined, and because both young and not-so-young women are involved in these arrangements, the initial impression that the marriage factors included here pertain only to eligible young women is perhaps unwarranted. The dependence of poor and unschooled women on men in urban areas, given the absence of alternative economic options (Van Allen 1974), reinforces the idea of "marriage," loosely construed, as an economic as well as social factor in explanations of migration.

The interplay between the economic factors and the marriage factors above may be presented schematically as in the following figure.

Figure 1: Alternative Types of Female Migration:
A Classification

| | | URBAN AREAS | |
|-------------|--|---|---|
| | | Employed/ Seeking Employment | Not Employed/ Not Seeking Employment |
| RURAL AREAS | <u>MARRIED</u> —at the time of migration | 1 Economic Differentials | 4 Marriage Migration or "Pure" Associational Migration |
| | <u>UNMARRIED</u> —at the time of migration (divorced, separated, widowed) | 2 Economic Differentials and/or Mobility Marriage and/or Marital Migration | 3 Mobility Marriage and/or Marital Migration |

Taking into account the marital status of women in the rural area at the time of migration, and their employment status in the city, four variants of female migration can be identified:

- 1) married women in search of urban employment and induced to migrate by perceived urban-rural differentials;
- 2) unmarried women in search of urban employment--induced to migrate for economic and/or marital reasons;
- 3) unmarried women induced to migrate solely for marriage reasons, and
- 4) married women engaged in nonemployment-oriented associational migration--that is, pure associational migration.

d) Sex-Role Constraints

The sex-role factor refers to the sociocultural valuation of migration, and the differences in the attitudes toward male and female migration. For men, migration may be regarded as necessary and routine, necessary to the attainment of status in the community, and routine as an expected and accepted stage in the life cycle. On the other hand, the disrepute attached to the position of women in some cities, which were recently largely "male-towns" (reflecting in many countries the colonial policy of recruiting men for indigenous labor in the mining sites, for example) may have the effect of considerably deterring the migration of unattached women (Boserup 1970, pp. 85-86).

Attitudes toward female migration are diverse. Positive valuations toward female migration are evident in West Africa among the Nupe of northern Nigeria, for example, where the itinerant aspects of women's market and trading activities require mobility, a mobility which is socially sanctioned (Levine 1966). Similarly, Caldwell (1968, 1969) in his study of rural-urban migration in Ghana, found that rural parents admitted no societal constraint on the

migration of women to urban areas. Ross (1975), on the other hand, reports considerable opposition in Kenya to the migration of women to the cities, and Little indicates that in Zambia the strict regulation of the migration of women was an attempt to preserve tribal stability and induce the return of migrating males (Little 1972, pp. 18-20).

Sociocultural evaluations of migration may be an effective constraint on the migration of women, and particularly of unattached women. The autonomous migration of women may indeed be found only where values supporting, or at least sanctioning, their mobility prevail. However, it is not inconceivable that even where female migration is currently restricted by cultural mores, the growing disparities between urban and rural areas and increasing rural impoverishment may in fact have an impact on the cultural constraints and social deterrents to female migration, and sheer economic stress may impel the migration of women from rural areas in search of a means of support for themselves and their families. It is the interaction between these factors--between urban-rural differentials in income and employment opportunities and the strength and pervasiveness of culturally prescribed economic and social roles of women--that need to be taken into account in the analysis of female migration. Gender-related differentials in urban employment and the nature of sociocultural norms associated with marriage and motherhood are likely to have specific effects in either encouraging or discouraging, promoting or impeding the migration of women.

IV. A MORE FORMAL FRAMEWORK

Having set forth in previous sections the rationale for a separate and distinct migration model for women, we can now spell out more formally the specific components of our proposed theory. The migration of women (both unattached and "associational"), with any given level of educational attainment, is assumed to be determined jointly by economic and social factors, while being constrained by cultural sex role prescriptions. The key variables in our model include: (1) the differential between expected urban income (both in the modern and informal sectors) and average rural income, where that differential takes into account the degree of sex discrimination in both job hiring (thus affecting the probability of successful job search) and salary scales (affecting actual wages paid); (2) the "mobility marriage" factor expressed in terms of marriage probabilities to males either engaged in or actively searching for modern sector employment; (3) the "customary marriage" differential reflecting the relative probability of marriage to any eligible male in urban as opposed to rural areas; (4) the strength and pervasiveness of sex role constraints on any kind of spatial mobility for women from particular areas of origin; and (5) all other residual factors including distance, amenities, extended family contacts, size of origin and destination areas, etc., that might modify the pace and direction of female migration. Clearly, some of these variables also have sex biases (e.g., amenities, extended family contacts, etc.). But, for purposes of this paper, we focus primarily on the first five variables as the major determinants of female migration and of unattached female migration in particular. "Associational" migration may also be influenced to some degree by variables 1, 2 and 5, but--and this will vary in different societies--the relative spatial economic opportunities for husbands may well be the principal determining factors in the household decision to migrate.

Our specific migration equation is then formulated as follows:

$$\frac{M_{ij}}{P_i} = f(Y_{ij}, m_{ij}^Y, m_{ij}^P, Q_i, Z) \quad (1)$$

where:

$\frac{M_{ij}}{P_i}$ is the dependent variable representing the gross flow of female migrants between, say, the ages of 15 and 45 over a given period of time from one area i to another area j (M_{ij}) divided by the same age specific population in the origin area at the beginning of the period (P_i). For purposes of this paper, i and j represent rural and urban areas respectively. One would also want to adjust $\frac{M_{ij}}{P_i}$ for education and to distinguish between associational and unattached female migration.

Y_{ij} is the expected modern sector urban (j) - rural (i) income differential where, as shown below, expected income is expressed both in terms of actual urban-rural female wage differentials and employment probabilities for women in the modern and informal urban sectors;

m_{ij}^Y is the mobility marriage income differential reflecting an unattached female migrant's chances of achieving a certain expected income through marriage to a modern sector male, either gainfully employed or in the process of job search;

m_{ij}^P is the "customary" marriage differential reflecting the relative probability that an unattached female can find any spouse in urban as distinct from rural areas. Thus, whereas m_{ij}^Y is an income concept reflecting potential socioeconomic mobility through marriage, m_{ij}^P is a noneconomic, cultural concept reflecting social

pressures on women to marry independently of the financial status of their potential spouse.

Q_i is a sex role constraint variable designed to reflect and measure the sociocultural, religious, etc., obstacles to geographic mobility faced primarily by women qua women. It is one of Lee's intervening obstacles that affects female migrants in particular (Lee 1966). Q_i can range from zero (total constraint on mobility) to one (no constraint), and may vary by the nature of origin and destination areas as well as by the ethnic, caste or religious groups that dominate those areas. Q_i will be explained further below.

Z finally, is a residual variable reflecting all other influences on female migration such as distance, personal contacts, range of amenities, etc., that for the present are assumed not to exert any differential effect on female as distinct from male migrants.

Equation (1) needs to be decomposed further, both for analytical and estimation purposes. Specifically, the expected income variable, the two marriage variables, and the sex role constraint need to be given a more precise meaning in order that they may be measured and their relative influences ultimately estimated in proposed econometric studies of female migration. Equation (1) may, therefore, be rewritten as follows:

$$\frac{M_{ij}}{P_i} = F \left[\alpha_j^m \rho_j^m \beta_j^m w_j^m + (1 - \alpha_j^m \rho_j^m) w_{jF}^I - w_{iF} \right], \pi_F \rho_j^m w_j^m, \lambda_j / \lambda_i, Q_i, Z \quad (2)$$

where:

Y_{ij} , the urban rural modern plus informal sector female expected wage differential in equation (1) is now expressed as

$$\alpha_j^m \rho_j^m \beta_j^m w_j^m + (1 - \alpha_j^m \rho_j^m) w_{jF}^I - w_{iF}$$

ρ_j^m is the probability of employment for males in the modern sector, so that $\rho_j^m w_j^m$ is the expected modern sector urban wage as expressed, for example, in the Todaro model where only male migrants were considered, or it was assumed that no male/female differential in expected earnings existed (Todaro 1969). In equation (2), we modify this assumption of sex symmetry by taking explicit account of two new sex specific variables, α_j^m and β_j^m , designed to reflect, first, the degree of sex discrimination in modern sector job hiring (α_j^m) when male and female applicants are equally qualified (for example, when they have the same educational credentials), and second, sex discrimination in modern wage scales (β_j^m) for the same job. Both α_j^m and β_j^m may vary from zero to one—i.e., $0 < \alpha_j^m < 1$ and $0 < \beta_j^m \leq 1$. An α_j^m equal to one would imply no discrimination. To the degree, therefore, that α_j^m is less than one but greater than zero, the probability of successfully securing modern sector employment will be lower for women than for men—i.e., $\alpha_j^m \rho_j^m < \rho_j^m$ for $\alpha_j^m < 1$. Similarly, a β_j^m less than one but greater than zero (it cannot equal zero since this would imply a zero wage for women) would modify downward the actual wages paid to women as opposed to men for equal work.

In short, everything else being equal, the existence of sex discrimination in both job hiring and salary scales results in a lower expected urban modern sector income for women than for men. This lower income is expressed in the first right-hand term of equation (2) as female expected income equal to $\alpha_j^m \rho_j^m \beta_j^m w_j^m$. This is less than $\rho_j^m w_j^m$, the male expected income when α_j^m and/or β_j^m is less than 1.

By rearranging terms, it can be shown from equation (2) that when sex discrimination prevails, average male expected earnings will exceed that of females by a factor of $1/\alpha_j$ so that ceteris paribus, the propensity of females to migrate in search of modern sector jobs, will be lower than for males.

If the probability of modern sector employment for women is $\alpha_j^m \rho_j^m$, then it follows that the probability of informal sector employment (which, in this case, includes the relatively small amount of open unemployment but consists mostly of small scale petty retail and trade activities, domestic service, etc.) is $(1 - \alpha_j^m) \rho_j^m$. $w_{j\mathcal{I}}^I$ and $w_{j\mathcal{I}}^F$ are average levels of informal sector and rural income for women. These may or may not differ from that of men depending on the general ease of entry into informal urban activities and the nature of household resource allocation in rural areas (particularly, the degree to which women have control over any component of rural household resources). We assume for simplicity that the extent of job and/or wage discrimination against women is less pervasive and, in many cases, negligible in the informal sector compared with the formal urban sector. Therefore, we do not incorporate the equivalents of the α_j^m and β_j^m into the informal sector expected income variable (though one certainly could do this). It follows that ceteris paribus, female informal expected income will be higher than male informal income by a factor of $1 - \alpha_j^m$ and a greater proportion of female migrants will participate in informal sector activities in comparison with male migrants (note, we refer here only to proportions of migrants and not absolute numbers).

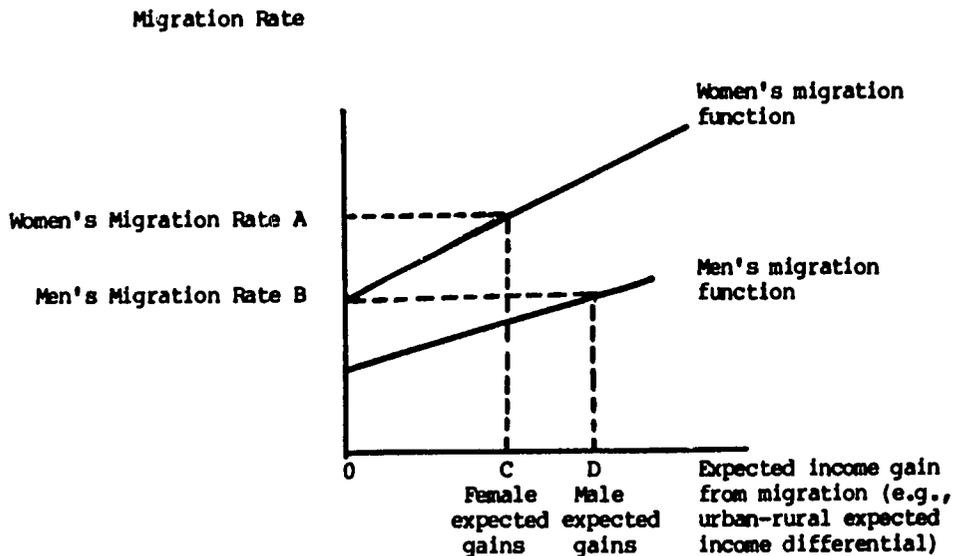
Finally, when job probability and sex discrimination parameters are formulated as in equation (2) and when urban job markets are decomposed into the formal and informal sectors, it becomes necessary to combine formal and informal urban income into one expression to reflect the total expected urban employment income for potential female migrants. Subtracting average rural income, w_{if} , gives us the expected urban-rural income differential for women. This explains the lengthy first term within the square brackets of equation (2). m_{ij}^y , the mobility marriage expected income variable of equation (1), is expressed in detail in equation (2) as $\pi_f \rho_j^m w_j^m$, where π_f is the probability of a female migrant marrying a male with a modern sector expected income of $\rho_j^m w_j^m$. This probability variable, π_f , which can range between zero and one for any given time period, is assumed to be positively related to a female migrant's educational level and the relative sex ratio of employable modern sector males and unattached females; that is, the greater the educational level of the female migrant and the higher the male/female ratio, the higher will be the probability of successful mobility marriage and, indirectly, the greater will be the expected income of potential female migrants. Thus, while the combined effect of modern and informal expected incomes from direct employment may be lower for females than for males and thus lower their propensity to migrate, the possibility of unattached females "capturing" some of that higher expected male urban income through marriage creates an added stimulus to female rural-urban migration. Moreover, the dynamics of the urban growth process, with able-bodied young males predominating in early migration streams, create the conditions for

the eventual acceleration of female migration, both for reasons of employment and marriage. π_f , the mobility marriage probability, may be estimated as a simple numerical ratio constrained to be less than or equal to one, or it may be estimated as some time-function of that ratio. In any case, we assume that it is an important determinant of female migration.

But marriage-determined female rural-urban migration can also occur for noneconomic reasons. As explained earlier, for women in many societies marriage may be sought after as an end in itself, arising out of community pressures and mores that are for the most part independent of social and/or economic mobility considerations. The psychic and social costs of nonmarriage in developing societies where universal marriage is the norm can be very severe. Thus, we introduced what can be called the "customary marriage" determinant of migration in equation (1) and expressed it as m_{ij}^P . In equation (2), m_{ij}^P is formulated as λ_j/λ_i where λ_j is the ratio of unmarried females to males in urban (or destination) areas and λ_i is the same ratio for rural (or origin) areas. The higher λ_j/λ_i , the greater will be the propensity of female migration. A significant amount of female rural-urban migration can, therefore, occur simply as a time sequence following rapid male outmigration, assuming that the latter is not of the circular variety. High urban unemployment and thus low modern sector job probabilities would not deter the "customary marriage" process of female migration. Such migration is simply a function of the changing sex ratio in urban and rural marriage markets.

The net effect of including the two marriage variables into a formal theory of female migration is to cause an "upward shift" in the female "propensity to migrate" function in comparison with the male migration function. This may help to explain why a number of empirical migration studies based on a strict economic model (e.g., the Todaro model) find that for any given expected income differential, the propensity of women to migrate will be higher than for men (see, for example, Fields 1979). In Figure 2, where women are assumed to be more responsive to any expected income gain from migration than men, we see for example that the observed rate of female migration (OA) can be higher than the corresponding male migration rate (OB), even though women's expected income gain from migration (OC) is less than men's (OD).

Figure 2: Male-Female Migration Differentials as Functions of Expected Income Gains: An Illustration



The intercept and perhaps also the slope of the female migration function will be higher than the corresponding male migration function to the extent that location-specific marriage possibilities provide an added economic and/or social incentive to female migration. With the urban marriage market more dynamic and financially more attractive to rural women—particularly those with increasingly higher levels of schooling—it can be anticipated that any narrowing of male/female expected income differential from modern sector employment will elicit an even larger differential in future female/male migration rates. The implication of this phenomenon for urbanization policies, for rural educational investment decisions, and for demographic projections should not be underestimated.

Regarding the anticipated relationship between our four major independent variables and the rate of female rural-urban migration, we hypothesize that:

$F'(Y_{1j}) > 0$; the higher the expected urban-rural income differential, the greater the female migration rate;

$F'(m_{1j}^Y) > 0$; the higher the probability of urban mobility marriage, the greater the migration rate;

$F'(m_{1j}^P) > 0$; the higher the unattached male/female ratio in urban as compared with rural areas, the greater the propensity for female outmigration; and

$F'(Q_1) < 0$; the stronger the sex role constraint on mobility, the lower will be the rate of female rural outmigration.

V. METHODOLOGICAL ISSUES OF MEASUREMENT AND ESTIMATION

Variable Measurement

Although a few of the key new variables introduced in our model of migration can be measured from census data, in most cases more accurate measurements will require the supplementation of census data with survey information (an approach that is more desirable, in any case, than strict reliance on census studies of migration) (see Todaro 1976, pp. 53-56). Numerous econometric migration studies have dealt with the measurement of expected incomes by using origin and destination unemployment rates and wage differentials (see, for example, Knowles and Anker 1977; Barnum and Sabot 1976; references in Todaro 1976; House and Rempel 1978; and Fields 1979). Nothing further needs to be said, therefore, about these variables. However, in our theory of female migration, we have introduced five new parameters of particular relevance to women, namely, α_j^m , β_j^m , π_f , $\lambda_{i,j}$ and ϕ_i , each of which requires some actual or some proxy measurement.

First, α_j^m , the sex discrimination parameter in modern sector job hiring, might, as a first approximation, be measured as the number of employed females with a given set of job qualifications relative to employed males with those same qualifications in the entire urban labor force. Symbolically,

$$\alpha_j^m = (\bar{F}_j^E / \bar{M}_j^E) + (F_j^E / M_j^E)$$

where:

\bar{F}_j^E is the number of employed females with
education E;

\bar{M}_j^E is the number of employed males with
education E;

F_j^E is the total number of women with education E in the active urban labor force; and
 M_j^E is the total number of men with education E in the active urban labor force.

The extent of discrimination in job hiring, therefore, would depend on how the proportion in the numerator measures up in relation to the proportion in the denominator. If there were no discrimination, the ratios in both the numerator and denominator would be the same and α_j^m would equal one. Total job discrimination would occur if no qualified women were employed, so that both the numerator and α_j^m would equal zero. A careful urban labor market study should generate this information.

Second, β_j^m , the wage discrimination parameter, can be calculated on a longitudinal basis from both income and expenditure survey instruments as well as from official wage and employment statistics. The sample survey technique would again be preferable since it may be difficult using census or official statistics to measure the differential level of total compensation for men and women with the same credentials, the same job category and the same seniority level. β_j^m could be then estimated as equal to w_j^f / w_j^m , the female/male wage ratio for different skill levels. A careful survey of occupational categories in both the public and private sectors would be desirable. Once the data were collected, estimation of the coefficients for different levels of education and job classification could then be undertaken with, however, careful regard for problems of aggregation.

π_f , the probability of success in the modern sector marriage market, could be estimated by a simple linear regression of an independent variable (Y), measuring the ratio of unattached urban women to unmarried working modern sector males, on the dependent variable (X), measuring the propor-

tion of married women among the total urban labor force. The mobility marriage parameter, π_f , would then be the estimated coefficient of the variable, Y , in the simple equation $X = a + \pi_f Y$. Since a woman's age and education are likely to affect her probability of marriage to a modern sector male, the collected data should be stratified by women's age and/or educational levels. Also, in those regions where polygamous marriages are common as in much of Africa, the specification of the Y variable will have to be modified appropriately.*

$\lambda_{i,j}$, the customary marriage probability variable, could be estimated either from census or survey data as the simple numerical ratio of unmarried eligible males to females in both origin and destination areas. Specifically,

$$\lambda_{i,j} = G_{i,j} / H_{i,j}$$

where:

$H_{i,j}$ is the total number of unmarried women in a certain age group (e.g., 15-45) in area i or j , and

$G_{i,j}$ is the total number of eligible males in each region.

As the ratio $G_j/H_j + G_i/H_i = \lambda_j/\lambda_i$ varies over time as a result of migration and differential rates of natural increase, the relative strength of the customary marriage parameter, $m_{ij}^P = \lambda_j/\lambda_i$ will change and by assumption exert an independent effect on female migration flows.

The final key parameter of our model Q_i , the sex role constraint, is more difficult to measure. Its estimation would probably require a judicious combination of quantitative as well as qualitative information. On the quantitative side, one could use the survey instrument to estimate the

*In many African countries, a man can legally have more than one wife. The Islamic religion, for example, which is predominant in most African countries north of the equator permits a man to have up to four wives. In Nigeria and some sub-Saharan countries, native laws and customs permit a man to legally marry as many wives as he can "afford."

differential proportions of women with similar characteristics (age, education, rural income, etc.), migrating from different regions of origin as a proxy measure of the sociocultural constraint. When this quantitative data is combined with qualitative anthropological or sociological information derived from the researcher's knowledge of family structure, customs, laws and religious sanctions in different regions of origin, it would not be too difficult to construct an index of sex role constraint ranging from zero (total restriction on movements) to one (no barriers to geographic mobility). Presumably, as modernization and development proceed, the index will rise over time until it approaches one, as is the case in most developed nations.

Estimating the Migration Equation

The most appropriate first step in estimating the female migration equation would be to use the double log formulation of a multiple regression equation (Todaro 1976, p. 50). This approach is typically defended for migration studies on two grounds. First, on the basis of pure convenience, the double log formulation permits the coefficients of the independent variables to be interpreted as "elasticities." This is often useful for policy analysis as, for example, when one wants to know how a certain percentage change in urban wage rates might affect the rate of rural outmigration or what the impact of a ten percent increase in urban job opportunities will be on the rate of rural-urban migration. In our model, one might also wish to know how the effective elimination or reduction of discrimination in modern sector urban job hiring might influence the rate of female rural-urban migration.

Second, and more importantly, the double log form of the regression equation has a clear advantage over the simple linear formulation in that in the former the marginal impact of a change in one independent variable depends on the values of the other variables in the function. In the linear formulation,

the explanatory variables are "additive" in their effect on the dependent variable. Thus, in our formulation one cannot treat wage discrimination independently of job hiring discrimination. Moreover, if the function were additive as in simple multiple regression, a value of zero for the sex role constraint, Q_i , implying a total prohibition on female migration, would not significantly modify the influence of the other variables on projected rates of female migration. In reality, a $Q_i = 0$ should cause the entire value of the migration equation to fall to zero and this would only happen if the equation were expressed in double log form.

For econometric purposes, therefore, our migration equation can be estimated as:

$$\frac{\ln M_{ij}}{P_i} = \ln a + b \ln Y_{ij} + c \ln m_{ij}^Y + d \ln m_{ij}^P + e \ln Q_i + f \ln Z \quad (3)$$

where for convenience of presentation the exogenous, explanatory variables of equation (1) are used, and the coefficients b, c, d, e, and f apply to those variables unique to female migration. In actual practice, however, equation (2) is the one that should be estimated.

Female migrants now predominate the migration streams throughout Latin America and in parts of Asia. They also represent a growing proportion of internal migrants in Africa. With increased access to primary and secondary education, the gradual relaxation of discriminatory practices in job hiring and the inexorable labor displacement and mechanization of traditional agriculture, all indications point to an even greater proportionate influx of young and increasingly independent women into the cities of developing nations.

Most governments in the developing world have expressed great concern with their growing problems of rapid urbanization and rising unemployment. Numerous

policy alternatives designed either to modify the pace of internal migration or to accommodate expected increases in urban migrants have been proposed. Some countries like South Korea, Indonesia, the Philippines, Tanzania, Cuba and Venezuela have adopted specific measures to ameliorate what they perceive is an undesirable growth of their major cities resulting from natural increase and especially rural-urban migration.

And yet, when the discussion turns to policy options to deal with migration, whether in the scholarly literature or in government legislative bodies, the special determinants and consequences of female as opposed to male migration are never considered. Part of the reason for this oversight is the failure of researchers and government statistical offices to recognize and/or give due consideration to the growing phenomenon of female dominance of internal migration processes. Lacking either a theory of the determinants of female internal migration or a sense of the empirical significance of such migration in a male-oriented society, governments in less developed nations are likely to fail to meet the challenge of needed urbanization policies if they do not begin to recognize the unique nature and importance of women in the development process.

In this paper, we have attempted to provide a framework for analyzing the special characteristics and circumstances of female migration in developing countries. By focusing on income and employment opportunities in the urban labor market (in the context of wage and job discrimination) as well as the role of the urban marriage market and the special institutional, cultural and political constraints on women's migration decision making processes, we believe the framework presented in this paper can serve as an initial basis for organizing needed empirical research on female migration in developing nations.

NOTES

¹See following Evidence Section.

²The literature surveys listed in footnote 6 include some references to studies of female migration. But, because the shifts in the sex composition of migration streams are of quite recent origin, documentation of the trends in female migration lags considerably behind initial preliminary, impressionistic evidence.

³As Standing (1978) states it, "The migration of men, other than of men moving to retire or for education, can be expected to be related to relative employment opportunities, but the widespread tendency for women to migrate independently of their families is an indication that migration plays a similar function for many women in those economies, since it is usually for the purpose of seeking employment" (p. 209-210).

⁴The extent to which migration to urban areas involves women in significant and substantial changes in both economic and social roles and life options is highly variable, both in cultural, sub-cultural, and class terms, and not amenable to ready generalizations.

⁵The predominance of female migration:

| <u>Country</u> | <u>Citation</u> |
|----------------|-----------------------------------|
| Chile | Herrick 1965 Elizaga 1966 |
| Argentina | Margulis (1968) in Findley (1976) |
| Mexico | Cabrera in Jelin (1977) |
| Colombia | Schultz 1971 |
| Costa Rica | Carvajal and Geithman 1974 |

⁶Although migration in Southeast Asia is believed to be largely family migration (Standing 1978, p. 209), there is evidence of substantial independent female migration.

| <u>Country</u> | <u>Citation</u> |
|----------------|-----------------------------|
| Philippines | Hart 1971 Anderson 1975 |
| Indonesia | Heeren 1955 Suharso 1975 |
| Thailand | Pryor 1977 Piampiti 1977 |

⁷Among the many literature surveys of migration, the following are perhaps the most comprehensive: Findley (1976), Shaw (1975), Todaro (1976), Simmons et al. (1977), Stark (1976) and Yap (1975).

⁸See the discussion in Parkin 1975, pp. 12-16, for two such attempts, and Taylor in Jackson 1969.

⁹In the case of Colombia, for example, Fields provides data indicating that women can expect to earn approximately 63 percent as much as men with similar educational backgrounds and in similar jobs (Fields, pp. 24-25).

¹⁰For studies of discrimination in the U.S. labor market, see Cynthia Fuchs Epstein, Woman's Place: Options and Limits in Professional Careers (Berkeley: University of California, 1970); Juanita Kreps, Sex in the Market-Place: American Women at Work (Baltimore: Johns Hopkins Press, 1971). For the developing countries, see Boserup 1970, Chapter 8.

¹¹For several references to the marital mobility of women in the West, see Glenn, Norval D., Adreain A. Ross, and Judy Corder Tully, "Patterns of Intergenerational Mobility of Females through Marriage," American Sociological Review, 39 (October 1969):683-699. For African women, see Little 1972, p. 276.

¹²See Becker 1974.

¹³See Taylor, Patricia Ann and Norval D. Glenn, "The Utility of Education and Attractiveness for Females' Status Attainment Through Marriage," American Sociological Review, 41 (June 1976):484-498.

¹⁴Barbara Lewis describes the situation among Ivoirian urban women:

These less-educated and marginally employable women under twenty-five years of age have other motives for holding out for jobs that they have a slim chance of acquiring. . . . As young women, they hope to attract boyfriends who will both pay them the customary flexible allowance, and better still, find them jobs. Some have boyfriends who, while employed, are unlikely to have such connections. . . . Others have been befriended by more successful men. Here a particular combination of entrepreneurship and delusion often prevails. At the optimistic extreme is the hope that the liaison will lead to marriage; perhaps the boyfriend will divorce his current wife or will take the younger and more educated contender as his "civil law" wife, thus placing her above his other wives by customary marriage. Some hope for help in finding a job or funds to attend one of the many professional training courses available in Abidjan. Others settle for more immediate gains such as gifts of cash, clothing, or perhaps school fees for a younger brother. Because they are young and more desirable than uneducated women, they gamble for the long shot—a good job they find themselves, a good marriage, or a job opportunity through some male connection—rather than accepting the hard competitive business of petty trade. . . . They represent perhaps the most extreme form of the feminine struggle for social mobility.

(Schlegel 1977, p. 172).

¹⁵Although marriage migration is usually believed to be chiefly female, male marriage migration has been reported in a rural region in the Philippines where considerable female migration resulted in the paucity of eligible wives for the young men left behind (J. A. Anderson, "Social Strategies in Population Change: Village Data from Central Luzon," in Kantner and McCaffrey 1975).

¹⁶See, for example, Hyman Rodman, "Affluence, Poverty, and the Family's Future: The Case of Trinidad," Studies in Comparative International Development, XII, 1 (Spring 1977):115-122. And Susan E. Brown, "Love Unites Them and Hunger Separates Them: Poor Women in the Dominican Republic," in Rayna E. Reiter (ed.), Toward an Anthropology of Women (New York: Monthly Review Press, 1975).

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