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LOOKING AHEAD: FUTURE DIRECTIONS FOR RESEARCH AND POLICY

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This chapter provides a forward-looking discussion that elaborates on the findings and conclusions from the various chapters in this volume and links those to policies. The chapter is structured around a number of research and policy issues that need to be addressed in the near future in order to enhance our understanding of the nexus of gender, migration, and development and to improve related policies. The chapter is divided into five sections. The first section focuses on issues related to the determinants of women's migration, the second addresses the economic impacts of female migration, the third discusses its noneconomic impacts, and the fourth presents issues related to temporary and circular migration (including mode IV). The final section addresses some methodological issues.

Determinants

As noted in chapter 1, the participation of women in international migration has grown over time; currently, women represent almost half of all international migrants. A growing number of women—married and unmarried—migrate alone or with other migrants outside of their family circle (UNFPA 2006; Piper 2005). As demonstrated in this volume, however, the gender composition of migration stocks varies substantially from country to country.

Many questions remain to be answered regarding the determinants of female and male migration. For instance, do levels of gender equality in sending and receiving nations matter—that is, do women migrate from countries with low levels of gender equality to countries with higher levels of gender equality? Clearly, to the extent that increased gender equality is associated with higher wages for women, we would expect this to be the case. Thus greater gender equality in receiving (sending) countries would result in larger (smaller) flows of female immigration. But does equality matter above and beyond any effect it has on labor market insertion and wages? Anecdotal evidence (see, for example, Ehrenreich and Hochschild 2003) show that women in abusive relationships with their husband or in-laws tend to use migration as a strategy for escaping abuse. Evidence from Massey et al. (2006) shows that women living in patriarchal societies (Mexico and Costa Rica) display lower rates of emigration than their male counterparts, whereas matrifocal countries (Nicaragua and the Dominican Republic) have higher rates of female than male migration. This issue has not been examined systematically, and it warrants more investigation.

Another determinant of female migration is the level of women's empowerment. A significant body of noneconomic literature examines the relationship between international migration and the empowerment of women. As Hugo (2000) notes, "Migration can be both a cause and consequence of female empowerment." The relationship between migration and empowerment is far from linear. According to Hugo (2000), whether or not migration results in increased empowerment hinges on the context in which the migration occurs, the type of movement, and the characteristics of the female migrants.

The relationship between migration and the empowerment of women also hinges on the definition of empowerment used. World Bank (2002) defines empowerment as "the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives." Drèze and Sen (2002) define women's empowerment as "altering relations of power . . . which constrain women's options and autonomy and adversely affect health and well-being." While there are multiple definitions—both theoretical and operational—of women's empowerment, a small number of concepts are common to many: options, choice, control, and power. There are frequent references to women's ability to make decisions and influence outcomes that are important to them and their families (Malhotra, Schuler, and Boender 2002).

The fluidity of the notion of empowerment makes it difficult to compare findings across the relatively large body of studies in this area. Both qualitative and quantitative research will be needed to understand the relationship between migration and women's empowerment. Methodological aspects of estimating the determinants of migration are discussed later in this chapter.

Economic Impacts of Migration

Similar to men, many women migrate to increase their income and send remittances that are spent on the household members back home. A number of studies have shown that remittances result in lower levels of household poverty and higher levels of expenditures on education, health, housing, and other investments, and the fact that women's contribution to household expenditures increases after migration may increase their power to influence the allocation of these expenditures.

Female Migrants' Impact on Household Welfare: The Role of Household, Community, and Society

The literature on intra-household expenditures (presented in chapter 5 in this volume) finds that women tend to spend their income in ways that lead to better child development outcomes and more immediate reductions in household poverty than does an equivalent amount of income in the hands of men. Thus if female migration raises women's level of empowerment and income, it might be expected to generate these benefits for the household; it is unclear, however, whether the findings on women's allocation of expenditures generalize to increases in empowerment and income that result from women's migration.

One of the reasons for this uncertainty is that the gender-specific impact of migration on household welfare is likely to depend on a number of household, community, and overall social, cultural, and economic characteristics in source countries and receiving countries as well as on the type of migration, and these may have different implications for male and female migrants. For instance, the existence of older children who can look after the younger ones is likely to be more important when women migrate than when men do. Another issue is that the cost of illegal relative to legal migration is likely to be greater for female than for male migrants because women are more vulnerable to abuse.

Household members in the home country are likely to benefit from women's migration if migration empowers women and gives them greater control over household expenditures. The answer to this question may depend on the counterfactual situation selected. One possibility is to compare the case of women's migration with that of no migration. Another possibility is to compare it to that of migration of a male household member, household head, oldest son, and so forth. It is possible that the migration of a mother has negative impacts on various noneconomic aspects of household welfare, particularly on children's welfare and family stability; however, some existing research documents positive effects on the educational outcomes of children left behind, although this research has not distinguished to date between the impact of absent mothers and absent fathers.[1]

Hence whether the net impact of women's migration on household or children's welfare is positive or negative remains an open question that still needs to be answered.

Sending-Country Wages and Unemployment

An important aspect of migration that is not captured in household surveys is its potential benefit in terms of raising wages and reducing unemployment in migrants' countries of origin. This benefit is potentially very important in reducing poverty. How male and female wages in sending countries are affected by both male and female migration is an important issue where research would most likely have returns.

Fungibility and Agency Problems

The impact of the migration of women on the allocation of household expenditures depends on the degree of control they are able to exercise within the household. This degree of control is constrained by the fact that they live in another country than the rest of the household. Two types of problems exist that limit the increase in women's empowerment: fungibility and agency problems.

Fungibility

Under fungibility, expenditures can be shifted among different types of expenditures so that one cannot identify the source of income used for the various expenditure items. Thus a woman who remits and stipulates that a certain amount must be spent on a certain item—for example, girls' education—cannot be sure that the allocation to this expenditure item will actually increase because household members could reduce the allocation of resources previously spent (that is, spent in the pre-migration situation) on that item in order to spend the freed resources on other items. Ensuring that remittances do result in an increased allocation to the item specified by the female migrant in the presence of fungibility requires that the female migrant stipulate that a *greater* amount be spent on that item than was previously spent.

Agency Problems

Another factor affecting women's control over spending relates to the agency problem, some elements of which are discussed in chapter 5. The woman who migrates (that is, the principal) wants the remittances she sends home to be allocated to specific expenditure items and in specific amounts. The adult in the household who is charged with the allocation of expenditures (that is, the agent) may have a different utility curve than the principal. The problem for the migrant

is that she may not have full control over the agent's allocation decisions. As explained below, the agency problem has several causes, including asymmetric information (the migrant may not know how expenditures are allocated at home), lack of overall control, and time-inconsistency associated with reference-dependent preferences.

Second, in addition to the lack of perfect control over the spending of remittances, the migrant has imperfect control over the labor force participation of the remaining adult(s). With the income obtained from remittances, the husband left behind may decide to reduce his hours of work partly or entirely. In male-dominated cultures, the husband's self-esteem may also suffer and may lead him to behavioral patterns that are not in the household's interest, over and above the reduction in labor force participation, including dissipating savings designed for investment such as for improvements to the family house (Ehrenreich and Hochschild 2003).

Third, under asymmetric information, female migrants may not know the precise allocation of expenditures because the agent (the husband, some other member of the household, or someone else such as an uncle or cousin) shares only limited information. Alternatively, the agent may not be entirely truthful about the information provided.

Fourth, even if female migrants have full information and exercise full control over a number of specific items, they may not have full information and control over items that they care about. In that case, female migrants' demands related to the set of items they care about may have limited impact on household (children's) welfare and may even be counterproductive. For instance, the male head of household or other individuals (that is, other agents) taking care of the children may react by threatening to take some action that may not be in the children's interest.

Numerous examples of migrant women exercising limited control over the allocation of household expenditures are provided in Ehrenreich and Hochschild (2003). Various contributors describe cases where women return home after spending several years abroad only to find that their husband did not spend the remittances they sent on additional education for their children or on building a larger house, but instead used them mostly for his own needs. Remittances may also be spent on individuals not specified by the female migrants, especially in cases where her children are taken care of by her siblings or in-laws or where the husband has established a relationship with another woman.

The analysis applies to male migrants as well: their control over women's decisions on the allocation of household expenditures may be limited because of fungibility and agency problems, which increases women's decision-making power over household expenditure allocations and activities. There is, however, a

difference between the impact of male and female migration on women's decision-making power due to the relative power of the adult male and female members of the household before migration takes place. Men tend to be dominant in the household in many, if not most, source countries. Because women's initial decision-making power is relatively low, their migration is likely to raise it. However, men's dominance may be sufficiently strong in some cases that they might be able to maintain it following women's migration, in which case the increase in women's decision-making power is likely to be limited. Some of the examples in Ehrenreich and Hochschild (2003) illustrate such a situation.

Assuming, as is claimed in the intra-household expenditure literature, that women spend their income in ways that lead to better child development outcomes and more immediate reductions in household poverty, what policy interventions could be implemented to minimize the agency problem that limits female migrants' control over the allocation of household expenditures? One option would be to develop a system in which the woman pays directly into a bank account from which money can be expended only on the types of goods and services that the woman remitter has selected (for example, for a girl's education). However, this approach would still be subject to the fungibility problem.

Another way to solve the agency problem would be to develop innovative technological solutions. Card-based instruments, such as stored value cards or credit cards, are frequently used to send remittances to locations that have access to card-processing machines. Cellular phones are also increasingly used in Kenya, the Philippines, and other countries as a safe way of transferring remittances. Through other systems such as iKabo.com, remitters can send their money over the Internet (World Bank 2006). All these technologies lower the cost of sending remittances and thus raise household welfare. They might also empower women migrants by reducing the agency problem because of the reduction in information costs and the greater ease of sending money to the intended target.[2] It is important to acknowledge, however, that these solutions may not fully solve the fungibility problem.

Noneconomic Impacts

All of the impacts of female migration tend to have economic implications, whether directly or indirectly. We define here the "noneconomic" impact of female migration as the impact on variables other than education, health, housing, labor force participation, small business formation, and other variables that are typically examined in economic studies of migration. These variables have been examined by sociologists, demographers, and others, although very little, if at all, by economists. However, examining these effects is crucial because they

affect the overall impact of migration and may turn a positive economic impact on household welfare into a negative one.

Fertility

A topic that has been of particular interest to migration researchers has been the impact of female migration—both international and internal—on the fertility of migrants. Prior research has looked at the possible effects of adaptation to destination fertility norms, diffusion, and assimilation. The most careful research has corrected for possible selection effects, the impact of spousal separation during the migration process, and income effects (Lindstrom and Saucedo 2002; Brockerhoff and Yang 1994). The remaining challenges in modeling the impact of international migration on migrant women's fertility relate to modeling the proximate determinants of fertility and how these proximate determinants, in turn, are modified by the act of migration. Recent research by Jensen and Ahlburg (2004) on migration in the Philippines notes that the large impact of migration on fertility disappears if migration is not followed by work for pay.

An interesting study by Fargues (2006) examines the impact of migration on fertility of women in *source* countries. This impact is hypothesized to take place through various channels, including information flows and demonstration effects. Fargues finds that fertility declined in Morocco and Turkey, where migration was to Western Europe, a low-fertility region. In contrast, most of Egypt's migration was to high-fertility countries in the Gulf, and its fertility failed to decline. The paper provides strong evidence on correlations over time between the level of migration and remittances, on the one hand, and fertility levels, on the other.

As for the research agenda in this context, one issue that has not been examined is the source-country fertility impact of male migration, female migration, and joint migration. One hypothesis to be tested is that female migration has a greater impact on source-country fertility than male migration. Fargues (2006) considers the reduction in source-country fertility to be beneficial for these countries; if so, female migration would be preferable to male migration from this viewpoint. More empirical work is also needed on the links between migration and gender, bargaining power, labor force participation, and fertility.

Family Cohesion

Another important aspect of migration that seems to have been ignored in the literature is its impact on family cohesion. Women tend to be the center of the household that holds the family together. Hence their migration is more likely to result in a breakdown of the family than the migration of men. In the Philippines,

the migration of women is sometimes referred to as a "Philippine divorce" (Parreñas Salazar 2003). However, migration may be women's only way to escape an abusive husband or in-laws. The impact of female and male migration on family structure, divorce rates, and other measures of family cohesion is an area that warrants more research in the future.

Reference-Dependent Preferences

Individuals may have reference-dependent preferences. These may include preferences that are dependent on past consumption. In the case of female migration, the remaining members of the household may have suffered from the departure of the adult female but have become accustomed to living without her over time—that is, they already paid the price of her absence.[3] Moreover, they may also have become accustomed to a higher standard of living and new resource allocation. In other words, their preferences have changed over time. This would not be a problem if households made optimal *household* decisions and foresaw all of these effects.

However, it is likely that some of these effects were not foreseen when the migration of the female took place, and some households might be worse off than in the absence of migration. Nevertheless, once female migration has taken place and new habits have been formed, the new optimum may be for it to continue. Examples are provided in Ehrenreich and Hochschild (2003) of women who return home to face a worse situation than they expected to find and nevertheless return to their job in the host country and continue sending remittances.

Children's Welfare

Another area that deserves more attention is the impact of male and female migration on the welfare and development of children left behind. The first, most basic question to answer is whether these children fare better or worse on a series of developmental measures, such as education and psychological and physical health, than children of nonmigrants, and whether the impact on these developmental measures differs depending on the sex of the migrant.

One might expect poorer outcomes with regard to education, as shown in the voluminous literature on the negative outcomes associated with single-parent families. However, remittances from an absent household member may allow the purchase of higher-quality schooling, which promotes better educational outcomes. In practice, the little research on this topic has tended to show a positive impact in most countries. Acosta (2007) shows for El Salvador and Mansuri (2007)

for Pakistan that migration and remittances result in an increase in the level of education for both girls and boys. In fact, in Pakistan, the increase is much larger for girls—for example, migration increases girls' school enrollment by as much as 54 percent compared with just 7 percent for boys. In the case of El Salvador, migration and remittances reduce the level of absenteeism of boys and girls during primary education and prolong the education of girls, but not of boys, beyond age 14.

In the Philippines, recent research finds that, due to the higher incomes associated with remittances, children of migrants are much more likely to attend private schools than children of nonmigrants. Within each school, children of migrants receive slightly higher grades than children of nonmigrants (Scalabrini Migration Center 2004, cited in Piper 2005; Bryant 2005). Another study on the Philippines shows that an increase in remittances results in greater school attendance and a reduction in child labor (Yang and Martínez 2006). Other research, however, shows migrant and nonmigrant Filipino children with essentially identical academic performance and probabilities of attending school (Bryant 2005).

In terms of expenditure patterns in households left behind by migrants, chapter 5 in this volume explores whether expenditure patterns are influenced by the sex of the migrant sending the remittances and the sex of the household head receiving the remittances. The authors find that households receiving remittances from women allocate a larger expenditure share on health and other goods, but a lower share on food, than do households receiving remittances from men.[4] These allocations have implications for the welfare of children living in the receiving households.

In addition to educational outcomes, it is frequently argued that children of absent migrants suffer from psychological problems or problems with interpersonal relations. However, existing research (again from the Philippines) finds no difference between children of migrants and children of nonmigrants along the following dimensions: Social Anxiety Scale for Children, Children's Loneliness Scale, relationship problems, psychological problems, or likelihood of having premarital sex, drinking alcohol, or smoking (Scalabrini Migration Center 2004; Battistella and Conaco 1998; Choe et al. 2004, cited in Bryant 2005). Similar research from Indonesia and Thailand supports these broad findings, with one exception. The presence of both parents in Thailand does seem to lower the risk that an adolescent will smoke, drink, or have premarital sex (Choe et al. 2004).

Although the bulk of the evidence for these three countries points to the fact that children who are left behind do not suffer disproportionately compared to other children, solid research from other parts of the world is warranted in order to explore this issue further. The issue is particularly important given the broader impact that an adverse effect of migration on children's psychological health might have for society. Children who are angry and depressed because of their

parent's absence are unlikely to be as good and productive spouses, parents, or members of society as children who have benefited from their parent's presence. Hence they may generate negative externalities for the source country. In other words, even if households maximize household welfare and foresee all of the effects of female migration, their decisions may not be optimal from the viewpoint of society or future generations.

It is particularly important to discern whether the impact of migration on children is influenced by the gender of the absent parent. The existing research on this topic is quite scanty. A 2002 study by the University of the Philippines finds that respondents are more likely to "be sad or worried about their family" if the mother is absent than if the father is absent, while the 2003 study by the Scalabrini Migration Center finds that, on average, children miss an absent mother more than an absent father (University of the Philippines, Tel Aviv University, and KAIBIGAN 2002; Scalabrini Migration Center 2004). Examples are also provided in Ehrenreich and Hochschild (2003) of children who grow up without their mother being severely depressed, particularly if the mother left when they were young. Given the importance of this issue and the dearth of significant evidence, research in this area should have a high rate of return.

As mentioned above, few, if any, of these "noneconomic" effects have been examined by economists. Developing a framework that would allow these effects to be incorporated in the analysis of the impact of female migration should constitute an important element of the research agenda.

In terms of policy options, various types of interventions might help to minimize children's noneconomic costs from women's migration. First, the authorities could launch a targeted information campaign that would raise parents' awareness of these issues so that they can be incorporated in their decision-making process. Second, community arrangements helpful to children might be negotiated, including paying someone they trust to take care of the children on a part-time basis or to help with various tasks within the household. Third, since children obtain an important part of their resources in school, where they have access to education and (often) food and to less tangible resources such as friendship and possibly guidance, schools could be given more responsibility (and resources) in order to monitor the welfare of children with one or more absent parents and take action when needed. A related approach would be to target youth development interventions to children with absent parents, including mentoring programs and after-school programs.

Trafficking of Women

This volume focuses on economic aspects of women's migration in source-countries and on women's labor market performance in the United States; it does

not include an analysis of female trafficking. However, this section is included here because of (a) the global importance of trafficking—the International Labour Organisation estimates that at least 2.45 million trafficking victims are currently being exploited and that another 1.2 million are trafficked annually, both across and within national borders; up to 80 percent of these trafficking victims are women and girls (UNFPA 2006); (b) the importance of trafficking for the welfare of the female victims and their households back home; and (c) the impact of trafficking on crime, especially organized crime, in the destination countries. Thus research on how to reduce or prevent trafficking of women is a clear priority, and no volume on the migration of women would be complete without at least a brief discussion of trafficking.

Given the enormous weakness of trafficking data (see, for example, Laczko 2002), it is difficult to set out a research agenda in the area of gender and international trafficking. One urgent need is to develop economic models that can predict emerging trafficking risks in particular areas—a type of early-warning system for trafficking. Current data on trafficked persons, based on data collected in destination areas and with significant biases in terms of origin areas covered, do not allow the estimation of such models, though.

Another priority for the formulation of public policy is to determine whether trafficking prevention programs work or not. The most recent *State of the World Population* (UNFPA 2006) confidently notes, "Effective prevention requires a comprehensive approach. This involves education and includes awareness-raising campaigns, community involvement, poverty reduction initiatives, and the creation of livelihood opportunities. It also involves more equitable income distribution and the rebuilding of societies following conflict. Legal reforms that allow equal rights to own and control property and land will help cut the risks associated with the trafficking of women in rural communities."

Yet these confident policy prescriptions on how to combat trafficking may be premature. While there are many examples of interventions and approaches that aim to reduce the vulnerability of women in poor communities, there is little knowledge about which of these approaches and programs are effective and which are not. A first step in establishing a productive research program would be to take stock of the existing data on trafficking of women and of programs designed to deal with this issue. This would help to determine what sort of research is feasible and relevant. It also would help to establish what data are most urgently needed for evaluating the impact of existing programs and designing other ones. Serious impact evaluation work relying on ex ante experimental design or ex post quasi-experimental evaluations also is needed to determine the effectiveness of trafficking prevention programs. Solid criminological research linking trafficking to the emergence or consolidation of organized crime networks in destination countries would also serve to galvanize political will to combat trafficking of women and children.

Temporary, Return, and Circular Migration, Including Mode IV

All migrants who do not remain permanently or for extended periods in their destination country are temporary migrants. Temporary migrants who return to their country of origin are labeled "return migrants." Of these, a smaller subset, referred to as "circular migrants," may be able to migrate to the host country again.[5]

There is a modest literature on gender and temporary migration (see, for example, Yang and Guo 1999). Early work suggested that the labor force insertion of female temporary migrants to the United States from Mexico may be quite different than that of male circular migrants (Kossoudji and Ranney 1984). More recent research looks at the labor market insertion of female temporary migrants in diverse locations such as China and Germany (Roberts et al. 2004; Dustmann 1997).

Host countries tend to prefer temporary to permanent migration because it entails lower fiscal and social costs. However, an issue of great concern is that temporary migrants may overstay and enter the illegal job market. Since temporary migrants typically migrate without their family, one of the determinants of the decision to return is the degree of attachment to the family. First, single migrants have less of an incentive to return than married ones. As for the gender-specific difference in return migration, the answer may depend on the migrants' cultural background. A large number of cultures tend to give more independence to young men than to young women, suggesting that return migration is more prevalent for the latter. Second, mothers are generally thought to be more attached to their children than fathers, implying that married women, particularly mothers, are more likely to return home at the end of their contract period than married men.

These hypotheses should be tested empirically, as should the issue of whether any of the findings hold in general or vary across countries, time, and skill levels. Regarding the impact of skill levels, a plausible hypothesis is that skilled individuals overstay less because they have more to lose from being caught and may have fewer employment opportunities in the illegal job market. Another hypothesis to be examined is that an increase in skill level reduces overstaying to a greater extent for men than for women, since men are more frequently the principal breadwinner in the family.

It is not clear whether circular migration is more prevalent among married women or men. Single men and women are more likely to engage in circular migration than married ones, and—in many cultures—the same is true of single men more than single women, married men more than married women, and married women with no children more than married women with children.

Permanent migration typically entails simultaneous or subsequent migration by the rest of the family. This tendency reduces the incentive to return migrate, although a share of families or individual family members undoubtedly do

return migrate. Whether the desire to return is stronger for the husband or the wife is very hard to assess, as is the influence of each on the family's decision in this area.

As noted, host countries have become increasingly concerned with the surge in the number of immigrants and the perceived social and fiscal costs. Temporary migration, which would enable receiving countries to increase the size of their labor force without increasing the size of their permanent population, would help to resolve this problem. The fact that temporary migrant workers return home at the end of the contract period tends to reduce these perceived costs significantly. At the same time, temporary migration schemes may be only an imperfect solution, because migrants might overstay and enter the illegal job market.

More than one type of temporary migration arrangement exists. Temporary migration contracts have typically been between an individual in a source country and an employer in a receiving country. An alternative arrangement would be for a firm employing source-country labor (in the source country or elsewhere) to sign a contract with an employer in a receiving country for the delivery of a type of service that requires the temporary movement of service providers, a type of trade in services known as Mode IV. This type of arrangement exists, for instance, between firms employing workers from countries in South and Southeast Asia and the Gulf countries.

The fear of rich host countries that migrants might overstay is the reason why negotiations on Mode IV (of the General Agreement on Trade in Services, or GATS) at the Doha Round of the World Trade Organization have not advanced so far. This fear, however, is highly exaggerated. The reason is that host-country governments could impose strict regulations that would dramatically reduce the likelihood of overstaying. One such regulation would be for governments to forbid a foreign firm from ever working in their country if any of its employees fail to leave when their contract expires or, alternatively, to levy large fines on the firm for each such violation. This would provide a strong incentive for the firm's owners and managers to set up a screening process in order to improve the selection of employees and for the owners, managers, and workers' supervisors to monitor their behavior. Perhaps more important, it would provide strong incentives for the firm's employees to monitor one another.[6]

Mode IV, which entails the temporary movement of persons working for a service-exporting company, might constitute a powerful mechanism for the empowerment of women. Developed countries' demand for a number of services that are traditionally intensive in female labor is growing rapidly because of rising incomes, continuing increase in women's labor market participation in rich countries, and population aging. The services include domestic service as nannies or maids, work as nurses in health care centers and in private homes, and more. These

are occupations that already employ female migrants and where labor shortages are expected to increase in the future.

There are at least three advantages in exporting female rather than male labor-intensive services through mode IV. First, as discussed in the context of temporary migration, women tend to be more attached to their family and are therefore more likely than men to return home at the end of the contract period. Second, the types of jobs that are intensive in female migrant labor, such as nannies and maids, are likely to enable the more educated native-born women in the destination countries to enter the labor force. The increase in the employment of skilled workers would have a positive impact on the productivity and wages of unskilled labor. In other words, immigration of unskilled female labor might result in higher wages for unskilled labor in general (Kremer and Watt 2004). This is not necessarily the case for male immigrant workers.[7] For instance, male immigrants working in construction or agriculture are unlikely to enable skilled people to enter the labor force. Third, female migrants themselves would benefit from the export of services under mode IV as compared to the standard temporary migration agreements. The reason being that contracts would be between host-country employers (firms or households) and foreign firms employing source-country migrant women, rather than between host-country employers and migrant women. This would tend to reduce the likelihood of abuse of female migrants by their employers.

In conclusion, both sending and host countries would benefit from agreements on the provision of services under Mode IV—whether the agreements are made at the bilateral, regional, or multilateral level—and source-country governments could use the information provided here as an additional argument in advocating for an open-door policy by destination countries regarding the temporary movement of female service providers. An "experiment" in promoting the temporary migration of workers in female-intensive services could also prove to be a useful way to test how well the policy works. Trade in male worker–intensive services under Mode IV might be considered at a later stage.

Methodological Issues

This section presents various methodological concerns related to the empirical study of gender-specific migration.

Joint Decision Making

The use of joint decision (or intra-household) migration models would substantially improve our understanding of the determinants of female and male migration as well as of the sequencing of the migration of various household members.

To date, studies on this topic (including chapter 3 in this volume and other papers presented in the critical review in chapter 2) have estimated the determinants of male and female migration separately. However, household migration decisions for women are unlikely to be independent of those for men. Such interdependence should not be assumed a priori; rather, its existence and characteristics should be determined by the data.

Consequently, an important aspect of the research agenda on female migration would be to formulate joint decision migration models where hypotheses on the conditions for the absence of migration or the presence of male migration, female migration, or male-and-female migration could be derived. The estimation of such models would allow hypotheses to be tested empirically. These models could also capture some migration dynamics. For instance, the male adult might migrate first, with the female adult—and other household members—joining after the male has acquired a decent job or the household has saved enough money to pay for the migration costs of the additional migrant(s). This hypothesis could also be tested empirically.

The issue of joint decision making also applies to the choice of destination—internal or international—and to the sector of employment. Mora and Taylor (2006) contribute to this literature by estimating the determinants of migration from rural Mexico for total migration as well as for four categories of migration: internal and international migration and migration to the agricultural and nonagricultural sectors. By disaggregating migration flows into these four categories, this study provides a significant step forward in the analysis of migration determinants. The next step is to integrate the decisions on the various types of migration, including on male and female migration, into a unified framework.

Policy

Few studies explicitly include policy variables in the estimation of the determinants of international migration. One notable exception has been the voluminous and high-quality research examining the impact on Mexico-U.S. migration of the 1986 Immigration Reform and Control Act (IRCA) in the United States and the North American Free Trade Agreement (NAFTA; see Donato 1993; Orrenius and Zavodny 2005). Some recent research by Donato et al. (2003) looks at the gender-disaggregated impacts of the IRCA and uncovers some differential impacts on men and women. This type of research is the exception rather than the rule, however, and more studies should examine gender-differentiated impacts.

Current policies may affect the incentives to migrate and affect them differentially for men and women. For instance, the migration of men tends to respond more strongly to changes in labor market incentives than that of women. Thus policy changes that affect labor market conditions will affect not only migration

in general but also the gender composition of migration, with implications for the impact of migration as well. Moreover, through their impact on migration, past policies would also have an impact on current household structure and migrant networks. Thus current and past policy variables should be included in the analysis of gender and migration.

Remittance Costs

Another improvement in methodology that is warranted is to introduce the remittance costs as a determinant of migration; thus far, this variable seems to be missing from empirical analyses.[8] These costs have declined in recent years, especially in high-volume corridors. World Bank (2006) reports a decline at the global level; for instance, costs declined by more than 60 percent between 1999 and 2005 in the U.S.-Mexico corridor. A decrease in remittance costs implies an increase in the benefit obtained from migration and therefore should lead to an increase in migration flows. These costs may also differ for men and women, possibly because of differences in preferences to remit formally versus informally or because of women's more limited access to financial intermediaries in a large number of countries. Moreover, the increase in migration flows associated with a specific reduction in remittance costs is also likely to differ according to gender.

Change in Household Size

One measure of household welfare is per capita income, which is obtained by dividing household income by the number of members. However, migration changes the size of the household. Thus, even if migration does not affect household income, household welfare increases, since the same income is now shared among fewer individuals. Using data from a household survey on Ghana, Schiff (2006) finds that incorporating the change in household size associated with migration results in an impact on poverty that is between 2.5 and 4.5 times greater than when household size is assumed to remain constant.[9]

Income Earned before Migration

In order to identify the impact of male and female migration on household income, it is essential that income is defined and estimated correctly. Various approaches have been used. A number of studies, for example, have estimated the impact of remittances by comparing the situation where migrants send remittances with that where they do not. This approach implicitly assumes that the migration decision is independent of the remittance decision. This is quite

unrealistic because one of the basic motives for migrating is to send remittances to the household members in the home country. In other words, one should examine the impact of the joint decision to migrate and remit. This makes quite a difference because migrants may have earned an income before migrating, and this income is lost to the household. Thus the net change in household income is not equal to the amount of remittances but is equal to the difference between remittances and the income the migrant earned before migrating.

The impact on household income of male migrants is likely to differ from that of female migrants because of likely differences in both remittance levels and income earned before migrating. For instance, women's lower labor force participation rate compared to that of men means that their migration entails a smaller loss of income for the household. Recall, though, that the smaller economic loss associated with female migration has to be weighed against the potentially greater noneconomic cost.

Data Considerations

What is the share of women in migration flows? The answer to even such a basic question may hinge on whether the data used are from source or destination countries. For instance, Ibarraran and Lubotsky (2005) show that the share of women age 16 or older in total migrants who migrated in the previous five years from Mexico to the United States obtained from the 2000 Mexican census is 23 percent, while that obtained from the U.S. 2000 census is 40 percent. This problem is likely to apply more generally.

What are the possible reasons for this large gap? First, we know that surveys or censuses in source countries do not capture those households where all members have migrated, because they cannot be surveyed. Assume for simplicity that on the whole these households consist of the same number of male and female members. Because the absolute number of female migrants from Mexico to the United States is smaller than that of males, the *proportion* of female migrants missed by household surveys or censuses in Mexico is greater than that of male migrants. This is not the case for census data in the United States, which cover the entire population, including the migrant population.

Second, assume that the total number of female and male migrants is identical. If men tend to migrate first and women later, there may still be a gap between the volume of female migration captured by surveys in countries of origin and destination. In households where migration takes place sequentially, a larger share of men will tend to migrate before the women do. Thus women can be interviewed before they leave to a greater extent than men because a smaller share of women tend to migrate first and leave male household members behind who can report

on them. In other words, a household where the female adult member has migrated is more likely to be completely absent than a household where the male adult member has migrated, in which case the female adult is more likely to remain in the source country. Hence household surveys or censuses tend to capture male migrants to a greater extent than female migrants.

Third, illegal migration may also have an impact on the gap between the share of women in total migrants obtained from censuses in developing source countries and in developed destination countries. The direction of the impact on the gap is not clear, however. Indications exist (see, for instance, chapter 3 in this volume) that men are more likely than women to migrate illegally, both absolutely and proportionately. This seems to hold in the case of migrants from Mexico to the United States.

In this case, male migrants are likely to be undercounted in source-country censuses to a greater extent than female migrants because illegal migration is underreported. However, underreporting is likely to occur at both ends. The degree of underreporting in source or destination countries may depend on the specific countries involved. The U.S. 2000 census tries to capture all migrants by making an assessment of undocumented migrants. Whether they are able to capture all or most of them is difficult to discern. The U.S. 2000 census is typically more detailed than those in other Organisation for Economic Co-operation and Development (OECD) destination countries, so the latter are unlikely to do a better job of covering illegal migrants. A greater degree of underreporting of illegal migrants in the source country will result in a greater gap between the share of women in total migrants obtained from census data in destination countries and the share obtained from household surveys in source countries. The opposite holds if the degree of underreporting is greater in the destination country.

Not only does the undercounting of female relative to male migrants matter for a large number of issues, but so too does their absolute undercounting. The latter creates a downward bias in migrant flows and is likely to bias the evolution of aggregate and bilateral flows as well as gender-specific ones. Second, it also biases the cross-country distribution of bilateral flows if cross-country differences exist in the share of partial-migration and full-migration households or in the share of illegal migrants. Third, the characteristics of the various types of migrants and households are likely to differ. This will bias the estimation results on the determinants and impact of total migration, gender-specific migration, and results on gender differences. For all these reasons, an effort to improve the accuracy of data on the volume of female migration should be high on the research agenda.

There is also a need to collect data on how migration and remittances affect intra-household bargaining in order to explore the impact of both female and

male migration on women's empowerment and on the allocation of household expenditures (one conclusion drawn from chapter 5 in this volume). Moreover, a number of important questions will require that the global brain drain database constructed by Docquier and Marfouk (2006) be extended with gender-disaggregated data. The construction of such a database is currently being done by the World Bank.

Concluding Comments

This chapter has attempted to show that there are a host of interesting issues related to gender and migration about which we know very little and that many of them have important policy implications. There are many opportunities for intellectually stimulating and policy-relevant research. This volume, which provides new evidence and analysis, constitutes a modest step in this direction. It will have served its purpose if it acts as a catalyst for further research on gender and international migration.

Endnotes

1. This research is concentrated disproportionately in the Philippines and Thailand. In addition to research on the impact of absent fathers versus absent mothers, research is urgently needed in other sending countries.

2. Assuming that this new technology is increasingly used over time, data could be collected on the evolution of the volume and share of remittances sent that way, the cost, and its impact on household expenditure allocation, in the case of both male and female migrants.

3. In fact, children may have developed anger against their mother to the point that they do not welcome her presence when she returns after a number of years (see the introduction in Ehrenreich and Hochschild 2003).

4. However, the lower share spent on food might be due to greater food consumption by men than by women, particularly if the men worked in physically demanding occupations (such as agriculture) before migration.

5. The issue of Mode IV migration is a potentially important subset of temporary migration.

6. The impact of reciprocal monitoring by the firms' employees is similar to that obtained under the lending arrangements established by the Grameen Bank, where borrowers in a given community are able to obtain new credit only if *all* the loans to the community are repaid. The Grameen Bank experiment has been considered a success (its founder received the Nobel Peace Prize in 2006), enabling thousands of small entrepreneurs—many, if not most, of them women—to borrow small amounts of money to start a microenterprise. There is no reason why the incentives provided for firms' employees to monitor one another would not be as successful in preventing temporary migrant workers from overstaying. Winters, de Janvry, and Sadoulet (1999) have calculated that the global benefits of temporary South-North migration, which equal 3 percent of the labor force in developed OECD countries, are greater than those obtained from eliminating all trade barriers in the world. Nevertheless, until the authorities of destination governments can be convinced that the risks associated with mode IV are sufficiently small, female migrants and their households back home will not be able to capture these potentially huge benefits.

7. The impact of immigration on unskilled wages is still a debated topic. Most receiving countries fear that that the increase in labor supply that the immigrants constitute will result in a decrease in

wages for unskilled natives. However, Peri (2007) finds that during the period 1960–2004, immigration to the state of California stimulated the demand for and wages of most U.S. native workers. He explains that immigrants were imperfect substitutes for natives with similar education and age. As interesting as this result is, it is not clear that it can be generalized to other regions or countries.

8. The remittance cost is likely to be endogenous because an increase in migration raises the level of remittance flows and thus reduces the cost of remitting.

9. The difference in impact varies, depending on the measure of poverty examined (level, depth, or severity) and on the destination of households' migrants (internal, international, or both).

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