## Male Migration, Old-Age Support and Marriage Outcomes of Women in Rural Bangladesh

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## EXTENDED ABSTRACT

Urbanization across the developing world marked by high rural to urban migration has contributed to changing old-age living arrangements in recent years. With rapid demographic transition and a growing share of elderly population this has raised concerns over old-age support for the elderly. Although the new economic model of migration formalizes migration as a household strategy, in which households diversify their economic and ecological risks (Stark 1991) and some recent researches have shown that changing living arrangements need not diminish provision of care for elderly,<sup>1</sup> some concerns persist. An increasing trend of family migration on part of the adult children as opposed to the more common individual and circular migration may restrain the abilities of adult children to provide basic old-age support to their parents like personal care. Moreover, limited public and/or private markets for care may limit the substitutability of financial support for personal care. These are issues that may not only result in a possible adverse effect on elderly well-being but can also alter household decisions in a way detrimental to the adult children as well.

In a recent paper, Giles and Mu (2005) have found that in rural China, younger adults are less likely to migrate to the cities when a parent is ill which they describe as a constraint

<sup>&</sup>lt;sup>1</sup> For example, Asis, Domingo, Knodel, and Mehta (1995), Knodel, Chayovan, and Siriboon (1992), Mason (1992) and Zimmer and Kwong (2003) find that living arrangements tend to alter in ways necessary in the face of demographic transition and that a breakdown of the family-based elderly support system is unlikely. Frankenberg, Lilliard, and Willis (2002), Frankenberg and Kuhn (2003), Lee, Parish, and Willis (1994) and Lilliard and Willis (1994) finds that adult migrant children in countries experiencing rapid urbanization may replace personal care with financial support as a compensation for their prolonged absence.

on the adult children's labor supply decision. In the rural Bangladeshi context, Kuhn (2003) and Kuhn and Protik (2006) have found that parents may try to arrange for their daughters to marry in closer proximity if sons are not available to provide personal care.<sup>2</sup> Such arrangements are likely to have profound effect on the marriage outcomes of the daughters, the quality of grooms they are married to and the dowries paid for example.

In this paper, we examine the impacts of male migration on the marriage outcomes of women with migrant brothers in Matlab, a rural area in Bangladesh consisting of 149 spatially contiguous villages. Matlab is an ideal setting for our analysis as it has been experiencing high rates of out-migration caused by rapid urbanization in the country and facilitated by its close proximity to Dhaka city, the capital. Matlab has also shared the experience of a dramatic decline in fertility across most regions of Bangladesh and now faces the prospect of an aging population. We use a general equilibrium model of the marriage market to show that an increased willingness to stay in close proximity to natal residence on part of a woman would increase surplus in the marriage market, ceteris paribus, if she marries the lower quality groom. In addition, an increased willingness to marry close results in an increased dowry paid for the closer groom who is otherwise similar in quality to the one living far. Our results are driven, in important ways, by the fact that, while deciding on their daughters' marriage location households with migrant sons must recognize that potential grooms are also likely to migrate. This is more so for high human capital men than for the low human capital ones. Hence, marrying the daughter off to a closer location within or around the village does not necessarily mean that she would be around in future. The implication is that, although an attractive candidate, a high human capital

<sup>&</sup>lt;sup>2</sup> There remains a strong norm of hierarchy of personal and financial support in Bangladesh like in other South-Asian countries, based largely on historic patrilineal preferences. Sons are the preferred source of financial support, daughter-in-laws are the preferred source of personal care and daughters are the less preferred source in both (Kuhn 2003). Family migration on part of an adult married son is thus associated with a loss of the preferred source of personal care. Although, daughters typically leave their natal residence after marriage to live with her husband and provide care to his parents if they co-reside, it is not unlikely that she pays visits to her natal residence if extensive health care is needed.

man is also more likely to live far away.

To empirically establish our results we use data from the Demographic Surveillance system (DSS) in Matlab, Bangladesh, that has been collecting retrospective information on vital events like births, deaths, in- and out-migration and marriage since the late 60's. Marriage records are available from 1975 to 1996. Birth, death, in- and out-migration data are available from 1974 to 1996. Periodic censuses have also been carried out in 1974 and 1982 that provide with baseline economic and social characteristics of households containing individuals in the vital registration files. Each individuals in the surveillance area has an unique identifier number assigned to them at the beginning of the surveillance history, or at birth or upon arrival into the surveillance area for the first time through in-migration. Individuals can be linked across files using these unique identifiers. A conditional fixed-effect logistic model is used which is a direct implication of the theoretical model. The regressions are robust to including village-level and year-level fixed effects so that any unobserved village-level and/or year-of-marriage level characteristics are controlled for.

Our results brings some important issues regarding urbanization and migration up front. While migration has been usually considered a good thing for the sending community, it could come at a cost in a society experiencing a rapid demographic transition and has a growing share of elderly population. Most importantly, such costs might be disproportionately borne by women if there is a lack of social safety-nets for old-age support.

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