Women and the Economy in India: Insights from the Data on Migration

By

Smriti Rao

Associate Professor of Economics and Global Studies, Assumption College
and Visiting Scholar, Women's Studies Research Center, Brandeis University.
srao@assumption.edu

December, 2014

Abstract

Rates of permanent economic migration by women in India have been low and falling, in contrast to other parts of the world where capitalists have drawn upon young, single women as a reserve army of labor. In this paper I use NSS surveys from 1983 to 2007/08 to investigate the socio-economic correlates of economic migration by women in India. I decompose migration streams by distance as well as sectoral composition and link these results to the wider debate on the low workforce participation rates of Indian women. The results indicate that low female economic migration rates are not a statistical aberration due to incorrectly designed survey methodology and that a lack of supply of "good" jobs reinforces demand-side barriers to female workforce participation. This data suggests yet again that it is not the state-market tussle (that economists tend to be preoccupied with) but rather the struggle between family and market, and the continuing resilience of the patriarchal family in that tussle, that is the most remarkable feature of the Indian social and economic landscape.

INTRODUCTION

There is little substantive literature on female permanent migrants in India. The economics literature on permanent internal migration in India is largely restricted to economic migrants, or migrants who state that their reason for moving is employment-related. In India, men dominate this category, which means the bulk of research in this area concentrates on male, rural-urban, economic migrants (Dubey et al 2006, Kundu and Sarangi 2007, Kundu 2009, Vakulabharanam and Thuratha 2012). And yet, according to NSS data, the overall rate of permanent female migration has risen substantially over the last three decades.

Women went from 75% to 80% of all migrants over these four rounds, with migrants accounting for 67% of the female population (ages 15-64) by 2007-08, up from 55% in 1983. The male rate of permanent migration was stagnant over the same period, falling slightly from 12% to 11% of all men. According to the NSS, there were about 44 million male permanent migrants in 2007-08, as compared to 208 million female permanent migrants (NSS 2010). This means that the bulk of the research on permanent migration in India has been conducted on a relatively small, shrinking piece of the population (for the few exceptions see Rosenzweig and Stark 1989, Bhattacharya 2000 and, most significantly, Fulford 2013). This paper is part of a project that attempts to fill this gap.

Most of the increase in female migration has been driven by rising shares of marriage migration. Ninety million additional women reported migrating for marriage between 1983 and 2008, with marriage migrants going from 45% to 57% of all working age women over this period. Most other forms of female migration either reduced or remained stagnant in absolute as well as relative terms (Table 1). The share of working age women migrating to "follow an earning member of the family" dropped, from 7% in 1983 to 6% in 2007-08, which corresponds to a very slight increase in absolute numbers from 18 to 23 million over this period. The share and numbers of women migrating "for studies" increased slightly from 0.2% to 0.3% (an increase of 1.6 million). The share of women who report migrating for economic reasons went from 1.3% to 0.8% of all working age women corresponding to a small decrease in the absolute numbers of such migrants.

This paper is motivated by a desire to understand the absence of a sustained stream of female economic migration in India. This is despite a boom in services and, to a lesser extent, manufacturing in urban India. Other countries experiencing such booms – almost all of East Asia, including China, Bangladesh, Mexico through its maquiladoras, even the United States and United Kingdom in the early years of their industrialization and development – have relied upon female labor in what Elson and Pearson (1981) called the "nimble fingers" phenomenon. In each case, deliberate attempts by state and capital to culturally legitimate the migration of young, single women from rural to urban areas have

allowed these female migrants to serve as a docile, reliable, and low-paid reserve army (Bagchi 2011, Standing 1999). The absence of this phenomenon in India is therefore notable (Ghosh 2002).

In a separate paper co-authored with Kade Finnoff (Rao and Finnoff 2014) we use NSS data on permanent migration to attempt to understand female marriage migration better. We analyze the socio-economic correlates of female marriage migration in India and argue that increasing rates of marriage migration by women reflect changes in the matching process in the Indian marriage market. As we will see below, despite increases in the age of first marriage for women, a falling share of working age women (15-64) report never having been married. Rising rates of migration for marriage enable a more "successful" matching process that results in fewer unmarried women.

More importantly, however, we find that rising urban-rural and within-urban inequality in India have also re-shaped the contours of marriage matching in India. We find that despite the continuing reliance on *jati* as the unit of marriage, growing inter-household inequality within urban India means that the best off urban households "match" with each other in the same cities/towns - language and other variations from city to city being so strong, the best match is still most likely in your own city/town. Poorer urban households are able to draw in brides from relatively well-off rural families, who marry "up" at least in educational terms, leaving well off rural men to attempt to draw in urban brides (which seems to happen very rarely), or marry better off local young women. The poorest rural families are then left to seek matches across much wider distances than before. In that sense marriage migration is deeply shaped by economic forces, particularly the urban-biased exclusionary growth of the Indian economy.

This paper hopes to increase our understanding of female migrants who report more directly that employment was the reason they moved. Do these female economic migrants resemble or differ from their male compatriots? And what explains the low and declining levels of female economic migration in India? One possible hypothesis tested here is that female economic migration in India is merely disguised as marriage migration (Krishnaraj 2005). As discussed below, the NSS data does not provide much support for this hypothesis.

On the other hand, if low female economic migration is a real phenomenon what does it tell us about gender equality and economic change in India?

Feminists are rightly skeptical about simplistic equations of paid work with empowerment for women (Charusheela 2003). It is clear that the causes and conditions of work matter tremendously for women's well-being, as does their ability to control their earnings from that work. Is it that young Indian women, or rather the structures of family that surround them in India, are resisting being drawn into the labor force as cheaper substitutes for men or machines? Is Indian patriarchy in this case undermining capitalism? Or have these "missing" women workers disappeared into circuits of super-exploitation based on circular migration or home-based work, buried so deep in the informal economy that they

become invisible to surveys such as the NSS? Data on female migration may provide us with additional insights as we work toward answering these broader questions.

WOMEN'S EMPLOYMENT, MIGRATION AND ECONOMIC CHANGE IN INDIA

The absence of permanent female economic migration in India has, as mentioned above, received little scholarly attention. However, one cannot but be struck by the contrast with China, where women travel by the millions from rural to urban China as migrant workers. Even in neighbouring Bangladesh single and married women seem to migrate for work in the cities in a way that they do not in India.

Such an absence (compared to the historical experience of other countries) is less perplexing if much of the actual female economic migration in India is in fact disguised as marriage migration. Marriage migrants are, after all, young single women. It is certainly possible that the NSS surveys are mis-classifying some economic migration by women as marriage migration. As Krishnaraj(2005) points out, respondents can only provide a single reason for why they moved from their last place of residence and became migrants. Women, she argues, tend to say their reason is marriage rather than 'to look for a job' or any other economic reason. She suggests that women may be unwilling to state any other reason to a (usually) male interviewer and shows that at least in the Indian state of Tamil Nadu, women migrants have higher economic activity rates than non-migrants, indicating that we may be underestimating women's economic motivations to migrate.

If in fact marriage migration is disguised economic migration, this would mean that married women move with their husbands with the intent of working at the destination point, much as the husband does, but then report their move as a move "for marriage". Thus husbands must also be migrants and the actual journey made by the man and woman in the household should be identical – they are both, for example, moving to the same destination. However, in 2007-08 only 5% of spouses of married female marriage migrants of working age were also migrants – as compared to 99% for follower migrants and 90% for economic migrants. Furthermore, this share has dropped over the years from about 7% of all marriage migrants in 1983. This decline is visible across sectoral streams. These migrant couples went from being 4% of all female rural marriage migrants in 1983 to 2% in 2007-08. This sub-group also went from 25% of all rural-urban female marriage migrants in 1983 to 18% in 2007-08 and, in an even steeper decline, from 25% of all urban-urban female marriage migrants in 1983 to 12% in 2007-08.

If we assume that every one of these female marriage migrants with migrant spouses is indeed a disguised economic migrant that would certainly boost the overall share of economic migrants amongst working age women to about 3.3% of the female working age population in 2007-08, although it would not change the narrative of a declining time trend (from 4.5% in 1983). However, as will see below, there are reasons to doubt that rural-rural or urban-urban marriage migrants are indeed disguised economic

migrants. There is a greater likelihood of disguised economic migration amongst rural-urban marriage migrants but overall, at least in this dataset, it does not seem that a substantial share of marriage migrants are disguised economic migrants.

On the other hand, if the low level of and decline in economic migration by women is indeed a real phenomenon, is it linked to wider declines in female labor force participation in India, which have been the subject of considerable debate? If so, how do both fit with the historic interest capitalists have displayed in exploiting this very large pool of cheap labor? Is this yet another piece of evidence in favor of an "aborted transition" (Lerche 2013) in India whereby India stubbornly fails to replicate previous trajectories of development modelled by the west or even the Asian tigers?

Ghosh(2002) focuses on the low levels of female workforce participation in the export sector in India, a key sector for female employment and economic migration in other Asian contexts. She argues that the Indian export sector has remained trapped in low value-added sectors, which promotes a cost-cutting, rather than productivity-increasing, mentality. Thus, she argues, Indian capitalists are more interested in finding ways to sub-contract into the low-cost and low-productivity informal sector where many female workers may be found. As a result production for export in India tends not to rely directly upon female workers. Instead it does so indirectly, forcing female workers deeper into the informal economy and making them invisible to many employment surveys. The absence of female permanent economic migration merely implies an absence of formal sector jobs for women and their super-exploitation by capitalists in the informal economy.

This kind of urban development mutes the incentive as well as the ability to migrate permanently, confining workers to an urban precariat not so different from the rural one they are intimately familiar with. The fact that male permanent migration has also stalled/fallen is possible evidence in favor of this explanation.

Indeed Indian men also have lower permanent migration rates than in many other Asian countries, giving rise to some literature that attempts to explain this referring to the role of caste networks in India in reducing rural-rural mobility and the government's hostility to urban in-migrants and/or the relative under-development of labour intensive manufacturing in the Indian context as reducing rural-urban migration (Munshi and Rosenzweig 2007, Kundu 2009).

The latter argument certainly appears to be backed by considerable evidence on the exclusionary nature of urban Indian growth. While the 1980s have been characterized as a period of high growth with stagnant inequality, the post-1993 period has been marked by rising growth but also rising economic inequality. While results for rural inequality differ somewhat across studies that use standard measures of inter-personal inequality based on household consumption expenditure, most studies find that inequality

between rural and urban areas has clearly risen, as has inequality within urban India (Sen and Himanshu 2004, Thorat and Dubey 2012, Motiram and Sarma 2013).

Vakulabharanam(2010) uses a Marxian class based analysis to show that the most significant beneficiaries of post-1993 economic growth have been those in high skill (and highly educated) service occupations in urban areas, with the majority of urban workers losing out. In rural areas he finds that the self-employed in non-agriculture and very large farmers have gained while rural peasants and agricultural labourers have clearly lost in relative and absolute terms, with agrarian distress marking even the previously high growth green revolution states in the North. The enclave nature of urban growth means that the rural dispossessed have little hope of finding alternative livelihoods in the city.

It is no surprise then that only men from relatively higher castes and those who are relatively more educated have been able to engage in internal economic migration within and to urban areas in India (Dubey et al 2006, Mitra and Murayama 2008, Vakulabharanam and Thakuratha 2012). Kundu and Sarangi(2007) also find that these mostly male urban in-migrants tend to be relatively well-off, although neither the very richest (nor poorest),and argue that urban growth in India is "exclusionary" along economic and non-economic markers of status.

We know much less about the socio-economic characteristics of female migrants more specifically, a gap this paper hopes to fill. But this hypothesis would suggest that our "missing" female economic migrants are not unwilling but unable to migrate permanently and that when they do, they are made invisible, unable to find employment opportunities in the formal sector and driven underground into the informal sector.

An alternative explanation would link low female labor force participation and thus perhaps low rates of female economic migration in India to a "withdrawal effect" (Abraham 2012). The greater prevalence of female seclusion amongst higher castes and the fact that symbols of class and caste mobility are deeply intertwined in India, mean that 'sanskritization' processes result in women withdrawing from the labor force as household incomes rise (Srinivas 1998). Several studies suggest that as a result, female labor-force participation in India is distress driven, correlated with lower levels of female literacy, concentrated amongst the poorest, most vulnerable households(Eswaran et al 2011, Neff et al 2012, Abraham 2012), and seen, even within such households, as a failure of masculinity (Qayum and Ray 2011). As we know from studies of migration, it is middle and upper income groups that are most likely to permanently migrate, with the poorest and most vulnerable restricted to circular, temporary migration(Breman 1996, Deshingkar and Akter 2009). The relative absence of female permanent economic migration would thus be an extension of this phenomenon.

There is a need to unpack what this "withdrawal effect" means for gender equality in India. In Srinivas' original formulation of the concept of 'sanskritization' there was a clear implication that this

was not unchanging tradition at work but rather a morphing of tradition to accommodate status signalling in a new context of inequality and social churn. Evidence on dramatic changes in gender norms in recent years have been provided by a variety of studies showing that norms amongst the lower castes have changed to resemble those of the upper castes, in a patriarchal "race to the bottom" of sorts (Deshpande 2002 and 2012, Kapadia 1995). This has greatly reduced any autonomy gap that might have existed between women of different castes causing gender and economic inequality to overlap and reinforce each other to a much greater extent than before. Data on dowries and sex ratios suggest that regional differences between the more patriarchal north-central part of the country and the southern part have also seemingly narrowed in the wrong direction for women (Basu 1999, Rahman and Rao 2004).

Gender norms in India are thus not immutable. This body of work suggests that rather than changing to accommodate female labor force participation and female autonomy, they have changed in ways that suppress both. Much like the classical political economy literature on agrarian transitions assumed, wrongly, that Indian capitalism would follow a script written by countries that have gone before, comparative analyses of other developing and developed countries might lead us to expect that economic development in India will lead to greater female education, labor force participation, urbanization and a nuclearization of the household that will reshape 'classic patriarchy' (Kandiyoti 1998). Education levels for women have certainly risen but we see little evidence of these other changes for the vast majority of Indian women. Our "missing" female economic migrants in India may be yet another piece of this story of 'aborted transition' (Lerche 2013).

It is not that Indian structures of family have entirely resisted market forces – on the contrary, the literature on dowry suggests that market forces are clearly at play when it comes to marriage and the constitution of family. The economic (lack of) value of a daughter is openly spoken of using the language of the market economy across the country. And yet, Indian capitalism has not been able to, or has not been interested in, reshaping the family in order to draw women into the laborforce. While economists have paid a great deal of attention to the intersection of market and state it appears that more work needs to be done on the intersection of market and family and the apparent resilience of family in the Indian context.

In this paper we evaluate the relative strengths of the two competing hypotheses about the insignificance of and further decline in female economic migration: strengthening norms of sanskritization and/or real improvements in standards of living that have resulted in a "withdrawal" effect that reduces female laborforce participation as well as economic migration; versus merely an absence of work for women of any but the most deeply informalized and thus invisible kind.

As discussed earlier, we generally associate "withdrawal" with status-related norms of female seclusion. Thus if what we are seeing is indeed about a change in reporting (to marriage) rather than an

actual decline in female economic migration, we would expect to see the sharpest drop offs in reporting of economic migration amongst somewhat better off, younger and more educated women and see parallel increases in reported marriage or follower migration in that same group. If the lack of reporting is due to the deteriorating nature of work that such women would have to report, we would expect to see sharper drop-offs in the reporting of the worst kind of work for women (from this perspective)– casual wage, manual work. In order to avoid the genuine problem of a lack of self-reporting by women, another way to get at this might be, for those women who are married, to test the kind of work their husbands report and see whether the drop offs in reported migration seem concentrated in households where men report casual wage work, assuming that women in such households would also be part of urban and rural precariats.

THE DATASET

The empirical analysis in the following sections relies upon the four most recent rounds of the NSS employment-unemployment survey that have asked detailed questions about migration. These are the 38th round conducted in 1983, the 43rd round in 1987-88 and, skipping forward a decade and a half, the 55th round conducted in1999-2000 and the 2007-08 64th round[1]. This means we have data for the 1980s, no data for most of the 1990s, and then data for 21st century post-liberalization India via the 55th and 64th rounds. Our comparisons are thus between 1980s India and India in the 2000s.

The NSS is unable to capture sporadic, temporary migration of varying durations. As a result, our paper (and the economics literature on migration in India more generally) concentrates on permanent, rather than circular, migration.

In each case the NSS asks if the current place of enumeration of each household member differs from the last 'usual place of residence' and then the reason for leaving the last 'usual place of residence'. The answer to the first questions helps us define the category of 'migrants' – those who answer 'yes' ; while the second helps us classify migrants as "economic", "marriage" etc. Note that when women report being marriage migrants, they are already in their marital homes. Female marriage migration statistics thus represent in-migration to the marital household and region. Given that the NSS does not ask about the woman's natal family, we do not have information on the exact location (at the district level) or socio-economic details of the natal home. However we do know her educational status (which is correlated with class in India) and her employment status before migration.

The discussion below is restricted to working age (15-64) women and all descriptive statistics are reported using NSS population weights. International migrants were dropped from the dataset given their

[1] The three earlier surveys are 'thick' rounds of the quinquennial Employment Unemployment Survey conducted alongside the consumption expenditure surveys, and the latter 2007-08 is a separate additional round conducted to specifically investigate migration. However, unlike other thin rounds, the sample size is similar to those of the 'thick' rounds.

small numbers (about 0.8% of the female working age population) as well as the focus of this paper on internal migration. I rely considerably upon correlation coefficients and while I do report regression results, due to considerable endogeneity between the various variables used to mark class and caste status I interpret the results as partial correlation coefficients rather than as evidence of causal mechanisms. In the case of the regressions and well correlation coefficients, I do not use weights both because I am combining data across different rounds as well as to avoid problems of inflated standard errors and thus levels of significance.

In this paper I do not analyse female educational migrants, given their small numbers and demographic particularities (young, unmarried and concentrated in urban areas) but rather focus on the categories of economic, "follower" and marriage migrants to contrast these different categories with non-migrant women in urban and rural areas separately.

The NSS surveys provide information on household consumption expenditure, the demographic characteristics of the household, occupation of each household member and so on. Because this paper in interested in market-based employment, a woman was con considered employed if she engaged in principal (183 days or more) or subsidiary (30 days or more, but less than 183 days) work of the following kinds: self-employment, regular versus casual wage work and unpaid helper in a family business. Women who report purely domestic work, or domestic work along with free collection of goods for the household were not counted as 'employed'.

For 95% of currently married women, I was able to link the woman's records with that of her spouse (using NSS data on relationship to the household), thus incorporating information on the spouse's education, and migration and employment status.

I also used the NSS household level data to calculate (separately for rural and urban areas) a state level average of per capita consumption expenditure, a ratio of the feminization of the agricultural laborforce (the share of female to male workers in the total agricultural wage and self-employed workforce) as well as the rural and urban gini coefficients for each state.

As a general introduction to the dataset, over these four NSS rounds the median age of the sample population rose from 20 years in rounds 38 and 43 to 22 and 24 years in the 55^{th} and 64^{th} rounds. The rural share of the population fell slightly from around 77% in the 1980s to 74% in round 64, while the female share of the NSS population estimate held steady at close to 49%. The regional distribution of these NSS rounds, which is relevant for the analysis below, has changed a little. The north central or 'Hindi heartland' states of Rajasthan, Punjab, Haryana, Chandigarh, Delhi, Himachal Pradesh, Uttar Pradesh, Bihar, Madhya Pradesh and, in the 64^{th} round, Uttaranchal, Chattisgarh and Jharkhand accounted for 45%, 46%, 47% and 48% of the estimated population in the four rounds.

In line with other studies, the Southern region (Andhra Pradesh, Karnataka, Tamil Nadu, Kerala and Pondicherry) had higher ratios of female to male labor force participation rates, higher state level averages of per capita consumption expenditure and higher shares of urban populations, but also higher gini coefficients, than the north-central region in each of these four rounds.

Real expenditure was arrived at by deflating monthly per capita household consumption expenditure(mpce) by the appropriate value of the CPI (AL) for rural households and CPI(IW) for urban households. These values are reported in 2011-12 Rs. We note that the real median per capita expenditure(in 2011-12 Rs) for the population has risen slowly over these four rounds, but the mean real per capita expenditure rose between 1983 and 1988, dropped quite sharply by 1999-00 and then rose again in 2007-08, but to a level only slightly higher than in 1983.

WOMEN'S INTERNAL MIGRATION IN INDIA: SOCIO-ECONOMIC CHARACTERISTICS

As we can see in Table 2, economic and follower migrants, as well as, over time, non-migrants, tend to have higher shares of post-primary education than marriage migrants, but in this respect economic migrants are not distinctive. Economic migrants do stand out with significantly higher shares of households in the top quintile, particularly more recently (Table 3). Follower migrants resemble economic migrants in this, while marriage migrant and non-migrant women have similarly low shares of top quintile households.

A look at the employment profiles of these women and their spouses (if they are married) helps us understand why (Tables 4 and 5). Women who report being economic migrants not surprisingly report higher shares of current employment. They also report a significantly higher share of salaried jobs. In the largely informal economy, these are the coveted government and other stable private sector jobs that come with benefits and are highly sought after, and in most cases, better paid. Marriage migrants, non-migrants and follower migrants look very similar in reporting lower shares of employment in general and salaried employment in particular.

Clearly the income of the household depends on spousal income as well. The first thing to note here is that follower migrants have about the average share of married women in their populations, with economic migrants reporting slightly lower than average shares (Table 6). Marriage migrants have much higher and non-migrant women much lower shares – less than half of non-migrant women were currently married. The latter are younger and thus largely never-married, which perhaps means yet-to-be-married, but in the case of economic migrants, a greater share (20%) are divorced or separated than are never married (16%).

Amongst married, working age women whose records could be matched with a spouse, economic migrants were the least likely to have a spouse engaged in paid employment (defined as wage or self-

employment, but excluding "unpaid family helper") (Table 7). Follower migrants were not only the most likely to have employed husbands, but in particular, employed husbands with salaried jobs (Table 8) and much less likely to have spouses with casual wage labor jobs. Economic migrants' spouses', where employed, tended to reflect the average to a greater extent with no clear time trend, although perhaps one can conclude that they were less likely than spouses of marriage migrants to be self-employed.

Overall, about 40% of economic migrants have no spouses, and a further 30% of those who do have spouses who are not currently employed. It does seem that any dropoff in reported economic migration is concentrated amongst those with spouses, but without salaried employment themselves or for their spouses. Thus many self-declared female economic migrants are women without men, either literally or figuratively.

Follower migrants emerge as the most likely to fit the narrative of a genuine "withdrawal effect" – highly educated, well-off and with spouses in salaried employment. Over successive NSS rounds, these tendencies tended to strengthen.

Marriage migrants, the group that has actually grown over this period, emerged as the least privileged across these different metrics, closely followed by non-migrants. Based on prior research, however, marriage migrants are not a homogenous group (Rao and Finnoff 2014). Urban-urban marriage migrant stand out as more privileged – resembling follower migrants in some ways. In 2007-08, for example, a very high 66% had received some kind of post-primary education. However, in terms of per capita consumption, they were less well off. 24% reported being in the top quintile with another 22% in the next quintile and 29% reported husbands with regular wage employment (both lower than for follower migrants). As with follower migrants, only 15% of these women reported being currently employed and again, all of these tendencies have only strengthened over time. It is possible to imagine these women supplementing their husbands' incomes with some home based work (such as sewing) and thus engaging in unreported subsidiary work. However, their higher levels of education and somewhat higher incomes also make it possible that their "withdrawal" from the laborforce is genuine.

Rural-urban migrants were in a much more vulnerable situation economically. Only 11% reported being in the top income quintile and only 41% reported having any secondary education at all. And yet, only 20% reported being employed. Their employment status was split between casual wage labor, unpaid family helper and part time or subsidiary work only. There was also no clear time trend that emerged. In 2007-08, 21% had spouses who also reported being migrants. If indeed there is some disguised economic migration by women, it would seem most likely that this is the category of migration into which it is being absorbed.

In 2007-08 this group of rural-urban migrants with spouses who were also migrants accounted for 3 mill women, which would add 1 percentage point to the share of economic migrants amongst working

age women. This is certainly not inconsequential since it doubles the rate of economic migration, but still brings it to about 2% of working age women, which remains low.

Rural-rural marriage migrants were the poorest, least-educated group but almost 50% reported being currently employed. Any unreported employment within this group would thus be relatively small in size. In 2007-08 only 2% also had spouses who were permanent migrants. The slight decline in economic migration within this group would thus seem to a real phenomenon.

As a group of women with relatively low levels of education as well as from less affluent families (even within rural India) a "withdrawal effect" due to a real rise in living standards and thus economic status is also less likely for rural-rural marriage migrants. A supply side explanation linked to agrarian distress is certainly plausible. As discussed earlier, it is notable that female labor force participation as well as economic migration is declining where work "outside" is physically gruelling and low paid.

DECOMPOSING FEMALE MIGRATION STREAMS

The NSS data allows us to decompose migration streams not just by reason for migration and location of the migrant (rural versus urban, as well as the state) but also by an indirect measure of distance. Internal migrants are asked to classify their movement as within the same district, within the same state (but different district) or cross state. Since we cannot pinpoint the district/city of origin, we have no exact measure of distance, so this variable serves as an imperfect proxy for distance of migration.

As we know, economic migration by women declined in absolute as well as relative terms, and Table 10 indicates the bulk of this decline is due to a drop in within-state migration, not fully compensated for by increases in cross district and cross state migration. Thus while the shares of the latter categories have increased, their absolute numbers have not.

There have been increases in the numbers of follower migrants over this period, but these have not kept pace with increases in the female working age population as a whole. Once again, in the aggregate, within-district migrants have seen the least growth and cross-state the most (Table 10)

In the case of marriage migrants, it is within-state but cross-district migrants that have seen the largest increases while within-district marriage migrants have seen smaller but still significant increases. As a result, the share of cross-state marriage migrants has remained almost the same at about 6% of all marriage migrants (Table 12).

The growth trajectories of different categories of migrants are somewhat different. Economic and follower migrants are increasingly more likely to be cross-state or at least cross-district, while cross-state marriage migration has not increased very much. Within-district migration has dropped the most for economic migrants and the least for marriage migrants. As a result of the very large volume of marriage migration the combined effect of changes across these categories is that within-district migration still

dominates in female migration with cross-district (but within-state) migration growing the fastest. Any pull or push effects are thus still restricted to intra-state rather than inter-state differences.

This also suggests that if in fact there is some mis-reporting going on, it is within-district migrants who are less inclined than cross-state migrants to call themselves economic migrants in the presence of surveyors and furthermore that this disinclination has strengthened over time. This could be because norms of sanskritization are stronger amongst within-district migrants, which seems unlikely if they are poorer and lower caste than cross-state migrants. Based on tau-b correlation coefficients for those women who do migrate, migration distance is indeed positively correlated with rural/urban quintile and educational status, both correlates of class (Table 13). The first two correlations seem to have become stronger over time in rural areas. Marriage distance for those who do report migrating is also negatively correlated with being a member of Dalit or Adivasi groups. Within-district migrants of all kinds are thus more likely to come from poorer lower caste households, making it less likely that any disinclination to report is due to norms against female work of all kinds.

The other possibility is that the kinds of work within-district migrants would have to report have become more "demeaning" for women over time and are therefore being hidden to a greater extent; or that they are so casualized and uncertain that women no longer can no longer report that they are 'usual status' workers and thus economic migrants.

Here the data seems a little less clear(Table 13). Casual wage labor is negatively correlated with migration distance in both rural and urban areas. Thus within-district migrants are more likely to report casual wage labor than cross-state migrants. If such casual wage work has become more unpredictable over time and/or more "physical" it is certainly possible that women feel less inclined to report such work. The correlation coefficients for reporting only subsidiary work are also very interesting. In rural areas, they start out positive and become negative by 2007-08. That is, within-district migrants were initially less likely to report subsidiary work only (as opposed to principal status work) but the situation has now been reversed. Within-district rural migrants are now much more likely to report being subsidiary workers. This is what we would expect if women's work opportunities have collapsed or become more insecure.

It is hard to see a trend over time in urban areas, but over all four rounds, within-district urban migrants were also more likely than cross-state migrants to report subsidiary work only.

Given the imprecision of this distance estimate it is hard to interpret what these shifts might mean on the ground. A more intuitive way to understand these patterns is to decompose migration by sectoral streams. The data on the migrant's last usual place of residence (upr) lets us determine which state the last upr was in as well as whether the location was rural or urban (although unfortunately not which district it was in). Combining the information on current and previous upr, we can divide migrants into four sectoral

streams: rural-rural, rural-urban, urban-rural and rural-urban. As might be expected given the urban-biased nature of India growth, urban-rural migration comprises a very small share of female (and male) migration of all kinds and thus is left out of this analysis.

In the case of economic migration there has been a collapse of rural-rural economic migration by women, which has not been compensated for by the very small increases in the absolute numbers of rural-urban migrants and slightly larger increases in shares of urban-urban migrants (Table 11). One possible explanation references the increasing feminization of agricultural farm work (including own-farm work) as men diversify into the non-agricultural economy to a greater extent(Jackson and Rao 2009) Such a feminization could make women less mobile and more tied to their family farms at least during the agricultural seasons. In the regression analysis that follows, we test this hypothesis by including a variable for the feminization ratio for agriculture.

'Follower' migrants within rural areas have again seen barely any increase. Rural-urban 'follower' migrants have increased the most, followed by urban-urban migrants (Table 11).

For the entire period, increases in marriage migration have been more evenly distributed across the different sectoral streams. All four streams have increased: urban-urban the most, but closely followed by rural-urban and then rural-rural marriage migration (Table 12).

In terms of the likelihood of disguised economic migration then, the trends over time for rural follower migrants overlap too much with those of economic migrants to be picking up any "missing" within-district, rural-rural economic migrants who are merely reluctant to self-identify as such. As we saw earlier, follower migrants also do not seem to belong to the urban or rural precariat and are more likely to have genuinely withdrawn from the laborforce. As we saw earlier, there is the possibility that a subset of rural-urban marriage migrants are indeed disguised economic migrants.

It would seem useful then to a) turn to regression analysis to test if the socio-economic correlations observed earlier hold up b) to split this analysis by rural and urban separately to understand whether and how economic migrants differ from other kinds of migrants.

REGRESSION ANALYSIS

Table 14 presents odds ratios for a logistic regression with the dependent variable being the probability of being an economic migrant against all other migrants (non-migrants were excluded from the sample for the regression analysis since over half of them are under 25 and never married).

In rural areas, economic migrants are slightly older, more likely to be never married or divorced/separated (as compared to currently married). They are more likely to come from Adivasi or Dalit households whose report being primarily engaged in non-agricultural wage work (going by previous

analysis, probably salaried jobs). They are also, as our earlier analysis suggested, from households with higher per capita consumption.

The impact of changes in state level per capita income is very small although positive and statistically significant. Interestingly, the probability of female economic migration increases as within-sector state level inequality decreases, which makes sense if the kinds of work these women can find are relatively low skill and dependent on economic growth creating jobs at the lower end of the workforce. The feminization of agriculture ratio (the female share of the agricultural labor force) is positively related to the likelihood of female economic migration in rural areas. This again supports a supply-side explanation for the absence of female economic migration – far from restricting female mobility, higher shares of women in the agricultural labor force create the jobs that women can migrate for.

The regression analyses in Table 14 also include time dummies and interaction terms to test the changing effects of education and household per capita consumption levels on the likelihood of being an economic migrant. In urban areas, it would appear that the effect of education in sorting economic from other migrants has weakened (in the earlier analysis we noted that economic migrants were not that distinctive when it came to education levels), but that the effect of per capita consumption has strengthened, at least relative to 1983 and 1988.

It is worth noting that in terms of time trends, 2007-08 is not distinctly different from 1999, but rather from 1983 and 1988. This does lend further support to the sense that post-liberalization India differs in significant ways from pre-liberalization India.

This strong correlation with the Weberian notion of class certainly confirms that being a female economic migrant in rural India is a marker of class privilege. Rather than lowering the likelihood of economic migration (as the withdrawal effect hypothesis would suggest) post-secondary education and higher household income raise it (see Klasen and Peters 2012 for a similar result on employment). Is this because poorer women are unable to find work that would make the move worth it? It would seem like our results on the gini coefficient and the feminization ratio suggest that this the more likely story.

On the other hand, the fact that it is Dalit and Adivasi women who are most likely to be economic migrants raises once again the question of gendered norms and the influence of a ‘classic patriarchy’ in restricting female access to employment as well as education. It is also possible that what we are seeing here (given the very small absolute number of economic migrants) is the effect of state affirmative action policies in employment that might increase the likelihood of Dalit and Adivasi women in rural areas holding jobs in education or other forms of government service.

For a subset of married women, I also introduced dummies for whether the spouse was employed and whether the spouse was employed in casual wage labor (Table 15). As we saw earlier, the spouse not being employed significantly raised the likelihood of female economic migration. However, casual wage

labor employment on the part of the spouse did not have a statistically significant effect upon female economic migration in rural areas.

The results for urban areas are largely similar but with a few notable exceptions. First, secondary education lowers rather than raises the odds that a woman will be an economic migrant, but that this effect that was less negative in 1983 and 1988 compared to 2007-08 (Table 14). That is, the inability or unwillingness to translate educational attainment into economic migration has grown over the years. While rural feminization ratio is, not surprisingly, statistically insignificant, the impact of the gini coefficient is even more strongly negative. Thus rising urban inequality has played a part in deterring economic migration by women. The impact of household per capita consumption is again positive and has grown stronger in 2007-08 as compared to 1983 and 1988 – note again that the time trends are significant for pre versus post liberalization India.

In terms of comparisons with male economic migrants to and within urban India, women economic migrants tend to be older than other migrants (as opposed to male economic migrants, who are younger) and while they also privileged in terms of consumption per capita, female economic migrants were more likely to be Dalit or Adivasi.

For the subset of married female working age migrants, secondary education was insignificant (rather than negatively correlated) in 2007-08 and the time trend for education is less obvious (Table 15). The impact of household per capita consumption again positive and stronger in 2007-08 as compared to 1983 and 1988. Dalit and Adivasi household were still the most likely to have female economic migrants.

The spouse being employed again lowered the odds that a woman would be an economic migrant, but now the spouse having a casual wage labor job (as opposed to self-employment or a salaried job) strongly increased the likelihood that a woman would be an economic migrant.

So what can we conclude? Higher education is not necessarily a positive in urban areas as far as economic migration goes. And higher levels of income inequality mean lower economic migration. Together with the results on caste, thus far we could be telling a 'sanskritization' story about higher status (and greater need to signal status in the face of higher inequality) resulting in lower levels of female economic migration. And yet, increases in household income increased rather than decreased the likelihood of economic migration. Better-off households thus did not seem to be less likely to report female economic migration, which perhaps means that in richer, more equal states, where jobs for less educated women are in greater supply, women are both willing to work and to report moving for work.

At the other end of the economic spectrum, the spouse being unemployed or having a casual wage labor job in urban areas increased the likelihood that women would self-report as economic migrants signalling that where economic need existed women were once again willing to self-report as economic migrants. We had earlier hypothesized that male casual wage labor was a possible proxy for

female casual labor (given problems of female self-reporting) and that if these are the "worst" kinds of jobs, then the "withdrawal effect" hypothesis would suggest that women would be less likely to report economic migration if these were the jobs they were migrating for.

Overall then, the analysis of NSS data points at a lack of supply of good jobs for women, particularly post 1988, as the primary reason for the failure to see higher levels of female economic migration to accompany higher economic growth more generally.

But the very low levels of economic migration even in 1983 may suggest that we need to combine 'sanskritization' based demand-side and supply-side explanations. What we may have here is a vicious cycle where the failure to create the kinds of well-paying work that families in India would be willing to allow their women to perform has further reinforced demand-side barriers to female employment.

First, by adversely affecting decisions to invest in female education which mean an inability to find employment that can justify permanent migration into and across urban areas and makes women ever more dependent on marriage as the source of their livelihood. While Indian parents are more likely to send their daughters to elementary and middle school, there has been much less change in rates of higher education amongst Indian girls. In the NSS data, 24% of rural and 53% of urban 18-year old girls were in school, an increase from 1983 but in rural areas, not dramatically so. As Kingdon and Unni(2001) have shown, in India returns to education increase with higher levels of education so that schooling below a middle school level has almost no labor market benefits. These are the young girls who would have been drafted by urban capital in the alternate universe of India-as-China.

Second, as suggested by Deshpande (2012) and Jackson and Rao(2009) the absence of these 'good' jobs may simultaneously reinforce norms of female seclusion, making women's work even more invisible and precarious.

CONCLUSION

It does appear that the NSS data across these four rounds is fairly internally consistent. That is, we don't see any sharp overlaps or inconsistencies in the data that might suggest that disguised economic migration is high in India, at least when it comes to permanent migration. The most likely candidates for disguised economic migration are the subset of rural-urban marriage migrants whose spouses are also migrants. The data on follower migrants and, to a lesser extent, urban-urban marriage migrants suggests that they are part of socio-economic groups that are less likely to be super exploited the sense of being engaged in the highly casualized, precarious work that is invisible to surveys such as the NSS. These are the somewhat educated, somewhat better off women who might have been factory workers in a different time and place but in India today, appear to have withdrawn from the laborforce.

Rural-urban marriage migrants do occupy relatively precarious spaces in the urban economy and likely engage in the informal, insecure work that Jayati Ghosh sees as the mark of the Indian export sector. If all these women were to be reclassified as economic migrants, this would raise the share of economic migrants in the female working age population by a percentage point, but would not change the overall conclusion of a relative absence of economic migration by women in India. The fact that a majority of their husbands are not economic migrants themselves suggests that it is marriage, rather than employment, that is the direct draw for these women's migrations. We are left with the sense that there is no significant stream of permanent female employment-based migration in India, disguised or otherwise.

Regression analysis points to supply-side rather than demand-side explanations for the absence. In both rural and urban India, the majority of the results point to women being willing to report economic migration in contexts where jobs for them are more likely to exist, in lower inequality states and higher income households that have access to salaried jobs. In rural areas the rural feminization of agriculture ratio is positively related to female economic migration suggesting that women are more willing to move where jobs for them are available.

However, the results for caste and for the unemployment of the spouse and the spouse's employment in casual wage labor also suggest the role of 'push' factors in employment and that some female employment is negatively related to markers of economic status. As we have seen in the case of follower migrants, there clearly are instances where women withdraw from the laborforce (and are unwilling to be drafted as economic migrants) where their spouses are economically well-off, despite their own relatively high levels of education.

The one hypothesis that fits both these findings is that there is a vicious cycle at work that is driven by the absence of 'good jobs' for women. The lack of these good jobs means fewer investments in female education that would enable the kind of rural-urban migration of women seen in China. However, it also reinforces norms of female seclusion since so many women who do work are so obviously working in inferior conditions (even in terms of pay).

What remains fascinating is the remarkable failure of wider processes of cultural legitimation of migration by single women in India driven by states and/or corporates interested in recruiting this workforce. Raka Ray talks of female (economic) migrants to Mumbai who hope to make it big in Bollywood as "unusual women" as opposed to their "usual men" counterparts. She also points out that they lack social networks in the city and are thus taking tremendous social and personal risks by moving[2]. Nowhere in India are the state and corporate sponsored messages about daughters working to help their

[2] The Precarious Middle Class: Gender and Migration in India's New Economy. Lecture by Raka Ray at Boston University, Feb 28, 2014.

parents or gather their dowries; or the massive working women dormitories observed in other parts of the world at similar stages of development. Not surprisingly then, the only route to the city is marriage.

The absence of a large labor intensive manufacturing sector in India is certainly part of the reason, but so is the resilience of the patriarchal family in the Indian context. While the market has clearly re-shaped some intimate aspects of the family, particularly marriage and fertility practices, the gender division of labor appears to have remained stubbornly resistant. This data suggests yet again that it is not the state-market tussle (that economists tend to be preoccupied with) but rather the struggle between family and market, and the continuing resilience of family in that tussle, that is the most remarkable feature of the Indian social and economic landscape.

REFERENCES

Abraham, Vinoj. 2013. "Missing Labor or Consistent De-feminization?" *Economic and Political Weekly*, 48(31), 99-108.

Bagchi, Amiya Kumar. (2011). "Mobility: Internal and International." *Development and Change* 42.1 (2011): 419-36.

Basu, Alaka Malwade. (1999) "Fertility Decline and Increasing Gender Imbalance in India, Including a Possible South Indian Turnaround." *Development and Change* 30.2: 237-63.

Bhattacharya Prabir C. (2000). "An analysis of rural-to-rural migration in India". *Journal of International Development.* Volume 12, Issue 5, pages 655–667, July 2000

Breman, Jan. (1996). *Footloose Labor: Working in India's Informal Economy.* Cambridge: Cambridge University Press.

Charusheela, S. (2003). "Empowering Work? Bargaining Models Reconsidered" in D. Barker and E. Kuiper (eds.), *Towards a Feminist Philosophy of Economics*, pp 287-303. New York: Routledge.

Deshingkar, Priya and Shaheen Akter. (2009). "Migration and Human Development in India". *Human Development Research Paper 2009/13*.

Deshpande, Ashwini. (2002). "Assets versus Autonomy: The Changing Face of the Gender Caste Overlap in India". *Feminist Economics,* 8(2), pp 19-35.

Deshpande, Ashwini (2012). *The Grammar of Caste: Economic Discrimination in Contemporary India*. New Delhi: Oxford University Press.

Dubey, Amaresh, Richard Palmer-Jones and Kunal Sen. (2006). "Surplus Labor, Social Structure and Rural to Urban Migration: Evidence from Indian Data." *The European Journal of Development Research*, 18(1).

Elson, Diane and Ruth Pearson. (1981). 'Nimble Fingers Make Cheap Workers': An Analysis of Women's Employment in Third World Export Manufacturing. *Feminist Review*, 7, pp 87–107.

Eswaran, Mukesh, Bharat Ramaswami, and Wilima Wadhwa. 2011. Status, Caste, and the Time Allocation of Women in Rural India. *Indian Statistical Institute Discussion Paper 11-12.*

Fulford, Scott. (2013). "Marriage migration in India". Boston College Working Paper 820, Boston College Economics Department.

Ghosh, Jayati. 2002. Globalization, Export-Oriented Employment for Women and Social Policy: A Case Study of India. *Social Scientist* Vol. 30, No. 11/12 (Nov. - Dec., 2002), pp. 17-60

Jackson, Cecile, & Nitya Rao. (2009). Gender inequality and agrarian change in liberalizing India. In Shahara Razavi, ed. *Gendered Impacts of Liberalization: Towards "Embedded Liberalism"*. New York: Routledge.

Jayadev, Arjun, Vamsi Vakulabharanam and Sripad Motiram . (2011)."Patterns of Wealth Disparities in India: 1991-2002," in *Understanding India's New Political Economy: A Great Transformation?* Ruperelia et al. editors, Routledge 2011.

Kandiyoti, Deniz. 1998. Bargaining with Patriarchy. *Gender & Society*, Vol.2, no. 3. pp 274-290.

Kapadia, Karin. (1995). *Siva and Her Sisters*. Boulder: Westview Press.

Kingdon, G. and Jeemol Unni. (2001) "Education and Women's Labour Market Outcomes in India", Education Economics, 9, No. 2: 173-195, August 2001.

Klasen, S and Janneke Peters. 2012. Push or Pull? Drivers of Female Labor Force Participation during India's Economic Boom. *IZA Discussion Paper No. 6395*, February 2012

Krishnaraj, Shanthi. (2005). "Gender dimensions in rural- urban migration in India: policy imperatives." Paper presented at the International Union for the Scientific Study of Population XXV International Population Conference Tours, France, July 18-23, 2005

Kundu Amitabh. (2009). "Urbanization and Migration: An Analysis of Trends, Patterns and Policies in Asia." Human Development Research Paper 2009/16.

Kundu, Amitabh and Sarangi, Niranjan. (2007). "Migration, Employment Status and Poverty", *Economic and Political Weekly*, 42 (4), pp. 299-306.

Lerche Jens. (2013). The Agrarian Question in Neoliberal India: Agrarian Transition Bypassed? *Journal of Agrarian Change, Vol. 13 No. 3, July 2013, pp. 382–404.*

Munshi Kaivan and Mark Rozenzwieg. 2007. "Why is Mobility in India so Low? Social Insurance, Inequality and Growth." *International Policy Center Working Paper Series*, Number 68.

National Sample Survey Organization (NSSO). 2010. Migration in India: 2007-08. NSS Report No. 533 (64/10.2/2).

Neff, Daniel, Kunal Sen and Veronika Kling. 2012. The Puzzling Decline in Rural Women's Labor Force Participation in India: A Reexamination. *GIGA Research Unit: Institute of Asian Studies, working paper 196.*

Pal, Parthaprathim and Jayati Ghosh. 2007. Inequality in India: A survey of recent trends. DESA Working Paper No. 45ST/ESA/2007/DWP/45 July 2007.

Rahman L and V Rao. 2004. The determinants of gender equity in India: examining Dyson and Moore's thesis with new data. Population and Development Review, 30(2), 239-268.

Rao Smriti and Kade Finnoff. 2014. "Forgetting my father's home: Marriage Migration in India 1983-2008". Unpublished work.

Rosenzweig, Mark and Oded Stark. 1989. "Consumption Smoothing, Migration, and Marriage: Evidence from Rural India." *Journal of Political Economy*, 97(4), pp 905-26.

Sen Abhijit and Himanshu. (2004). "Poverty and Inequality in India: II: Widening Disparities during the 1990s. *Economic and Political Weekly*, 39(39), pp. 4361-4375

Srinivas, M.N. (1998). *Village, Caste, Gender and Method: Essays in Indian Social Anthropology*. Delhi: Oxford University Press.

Standing, Guy, (1999). Global Feminization Through Flexible Labor: A Theme Revisited. *World Development*, 27(3), pp. 583 -602.

Thorat, Sukhdeo and Amaresh Dubey. (2012). Has Growth Been Socially Inclusive during 1993-94 – 2009-10? . *Economic & Political Weekly*, 47(10), pp 43-54

Uberoi, Patricia. (2012). Family, *Kinship and Marriage in India* ed. Patricia Uberoi. New Delhi: Oxford University Press.

Vakulabharanam, Vamsi. 2010. Does Class Matter? Class Structure and Worsening Inequality in India. Economic and Political Weekly, 45(29)

Vakulabharanam, Vamsi and Saswata Thakuratha. (2012). Why do Migrants do better than Non-migrants at Destination? Migration, Class and Inequality Dynamics in India. Mimeo.

Vakulabharanam, Vamsi and Rahul De. (2012). Growth and Distribution Regimes in India after Independence. Paper presented at the conference, *China and India: Comparing Paths to Development and Their Significance for Asia,* University of Malaya, Kuala Lumpur, December 10-11, 2012.

Zacharias Ajit and Vakulabharanam, Vamsi. (2011). Caste Stratification and Wealth Inequality in India. *World Development*, 39(10), pp 1820-1833

Tables

Table 1: Reason for moving (as a % of all working age women)

	1983	1988	1999	2007
Economic	1	1	1	1
Follower	7	7	7	6
Marriage	45	51	53	57
Non-migrant	45	39	37	33

Table 2:Post-primary education (as a % of all working age women)

	1983	1988	1999	2007
All women	14	15	27	35
Economic	21	27	36	46
Follower	27	30	45	52
Marriage	8	9	18	25
Non-migrant	16	20	36	49

Table 3: Top income quintile (as a % of all working age women)

	1983	1988	1999	2007
Economic	32	35	35	41
Follower	31	34	36	35
Marriage	22	21	21	20
Non-migrant	19	20	21	22

Table 4: Employed (principal and subsidiary status) (as a % of all working age women)

	1983	1988	1999	2007
All women	47	46	41	38
Economic	75	77	71	85
Follower	30	31	27	21
Marriage	53	51	45	43
Non-migrant	43	41	36	31

Table 5: Salaried employment (principal status only) (as a % of all working age women)

	1983	1988	1999	2007
All women	3	3	3	3
Economic	26	27	29	45
Follower	4	4	5	5
Marriage	2	2	2	2
Non-migrant	3	4	4	4

Table 6: Currently Married(as a % of all working age women)

	1983	1988	1999	2007
All women	76	77	76	72
Economic	74	71	75	64
Follower	80	79	80	77
Marriage	91	92	93	93
Non-migrant	63	59	52	45

Table 7: Spouse employed (% of married, working age women only)

	1983	1988	1999	2007
All women	72	75	75	77
Economic	79	76	76	70
Follower	85	86	87	87
Marriage	72	75	74	76
Non-migrant	70	71	74	77

Table 8: Spouse salaried employment (% of married, working age women only)

	1983	1988	1999	2007
All women	14	14	14	14
Economic	25	27	26	25
Follower	43	41	40	43
Marriage	11	11	10	11
Non-migrant	12	14	15	16

Table 9: Spouse casual wage employment(married women, working age only)

	1983	1988	1999	2007
All women	21	22	25	25
Economic	29	27	29	22
Follower	14	14	17	14
Marriage	20	24	26	26
Non-migrant	22	22	26	26

Table 10: Migration distance : economic and follower migrants

Economic migrants	Numbers	Share of total	% change (83 to 08)	Follower migrant	Numbers	Share of total	% change (83 to 08)
1983							
Same district	1,543,757	56.98		Same district	5,977,025	50.27	
Same state	806,751	29.78		Same state	3,752,716	31.56	
Diff state	358,974	13.25		Diff state	2,159,925	18.17	
Total	2,709,482			Total	11,889,666		
2007-08							
Same district	935,268	37.53	-39.42	Same district	7,073,273	38.03	18.34
Same state	1,105,051	44.34	36.98	Same state	7,136,416	38.37	90.17
Diff state	451,656	18.12	25.82	Diff state	4,388,600	23.60	103.18
Total	2,491,975		-8.03	Total	18,598,289		56.42

Table 11: Sectoral streams, economic and follower migrants

Economic migrants	1983	1988	1999	2007-08	**% change**	Follower migrants	1983	1988	1999	2007-08	**% change**
Rural rural	1.4	1.1	1.3	0.8	-75.00	Rural rural	3.6	4	4.6	4	10.00
rural urban	0.7	0.7	0.8	0.8	12.50	rural urban	3.8	3.6	5.8	7.6	50.00
urban_urban	0.4	0.4	0.6	0.6	33.33	urban_urban	3.5	3.3	4.7	5.7	38.60
urban_rural	0.2	0.2	0.3	0.2	0.00	urban_rural	0.9	1.2	1.4	1.3	30.77

Table 12: Marriage migration by distance and sectoral stream

(in millions)	1983	1988	1999	2007-08	% change (83 to 08)
Same district	64	78	101	121	89
Same state, different district	15	18	33	47	213
Different state	5	5	8	11	120
(in millions)	1983	1988	1999	2007-08	% change (83 to 08)
Rural-rural	67	82	111	138	106
Rural-urban	9	10	15	20	122
Urban-urban	5	5	10	13	160
Urban_rural	4	5	6	8	100

Table 13: Correlation coefficients: Migration Distance and socio-economic status

Rural	1983	1988	1999	2007-08	Urban	1983	1988	1999	2007-08
Quintile(rural)	0.07	0.09	0.09	0.10	Quintile(urban)	0.18	0.24	0.18	0.19
Educational status	0.05	0.07	0.08	0.07	Educational status	0.14	0.18	0.11	0.11
Dalit	-0.02	-0.02	-0.03	-0.02	Dalit	-0.03	-0.05	-0.04	-0.03
Adivasi	-0.03	-0.04	-0.05	-0.05	Adivasi	-0.03	-0.03	-0.05	-0.06
Currently Employed	-0.03	-0.05	-0.07	-0.06	Currently Employed	-0.10	-0.09	-0.07	-0.06
Casual wage worker	-0.03	-0.03	-0.05	-0.03	Casual wage worker	-0.08	-0.07	-0.05	-0.06
Regular wage worker	0.02	0.01	0.02	0.02	Regular wage worker	0.02	0.03	0.01	0.02
Self employed	-0.02	-0.04	-0.02	-0.01	Self employed	-0.04	-0.06	-0.03	-0.04
Subsidiary only	0.03	0.01	0.01	-0.01	Subsidiary only	-0.06	-0.06	-0.03	-0.04

All coefficients significant at the 5% level.

Table 14: Logistic Regression Analysis: Economic migration against other forms of migration for all working age women.(dependent variable: Economic migrant, 1=yes, 0=no, state dummies included but not reported)

Rural				Urban		
Number of obs			269160	Number of obs		132011
LR chi2(48)			4682.56	LR chi2(48)		3923.1
Prob > chi2			0	Prob > chi2		0
Pseudo R2			0.106	Pseudo R2		0.0875
Log likelihood			-19744.92	Log likelihood		-20467.47
	Coefficient	Odds Ratic	Std error	Coefficient	Odds ratio	Std error
Age	0.01***	1.010	0.001	0.012***	1.012	0.001
Post-primary education	0.256***	1.292	0.083	-0.262***	0.770	0.049
Never married	0.593***	1.809	0.150	0.321***	1.379	0.091
Married	-0.624***	0.536	0.025	-0.833***	0.434	0.019
Adivasi	0.423***	1.527	0.078	0.794***	2.211	0.138
Dalit	0.087*	1.091	0.047	0.268***	1.308	0.060
Household:Self employed non-agriculture	-0.469***	0.625	0.032	-0.625***	0.535	0.019
Household:Self employed agriculture	-1.256***	0.285	0.013			
Household:Agricultural labor	-0.107**	0.899	0.039			
(log)mpce(2011-12 rs)	0.712***	2.039	0.112	0.686***	1.986	0.096
State average per capita consumption	0.0005***	1.001	0.000	0.0003***	1.000	0.000
State gini(rural)	-1.413*	0.243	0.178	-2.147***	0.117	0.071
Rural feminization ratio	3.313***	27.454	12.020	-0.099	0.905	0.279
Year_1983	3.43***	30.906	16.035	2.418***	11.220	5.667
Year_1987-88	1.234*	3.438	1.833	1.436**	4.205	2.060
Year_1999-00	0.415	1.514	0.887	-0.730	0.482	0.254
Interaction: post-primary education and 1983 dummy	0.469***	1.599	0.184	0.207*	1.230	0.112
Interaction: post-primary education and 1987-88 dummy	0.502***	1.652	0.180	0.332	1.394	0.126
Interaction: post-primary education and 1999-00 dummy	-0.017	0.983	0.102	0.202*	1.224	0.110
Interaction: mpce and 1983 dummy	-0.422***	0.656	0.049	-0.239***	0.787	0.052
Interaction: mpce and 1987-88 dummy	-0.168*	0.845	0.065	-0.127*	0.881	0.057
Interaction: mpce and 1999-00 dummy	-0.071	0.931	0.079	0.111	1.117	0.077

*p<0.05, ** p<0.0, p<0.001

Table 15: Logistic Regression Analysis: Economic migration against other forms of migration for working age married women. (dependent variable: Economic migrant, 1=yes, 0=no, state dummies included but not reported)

Rural				Urban		
Number of obs			269160	Number of obs		111717
LR chi2(48)			4682.56	LR chi2(48)		1983.81
Prob > chi2			0	Prob > chi2		0
Pseudo R2			0.106	Pseudo R2		0.0643
Log likelihood			-15624.6	Log likelihood		-14426.1
	Coefficient	Odds Ratio	Std error	Coefficient	Odds ratio	Std error
Age	0.017***	1.017	0.002	0.0152***	1.015	0.002
Post-primary education	0.322***	1.380	0.106	0.054	1.056	0.088
Adivasi	0.429***	1.536	0.090	0.91***	2.484	0.183
Dalit	0.118**	1.125	0.055	0.333***	1.395	0.077
Household:Self employed non-agriculture	-0.465***	0.628	0.038	-0.608***	0.545	0.023
Household:Self employed agriculture	-1.327***	0.265	0.014			
Household:Agricultural labor	-0.216***	0.806	0.045			
(log)mpce(2011-12 rs)	0.657***	1.930	0.128	0.673***	1.960	0.123
State average per capita consumption	0.001***	1.001	0.000	0.0005***	1.001	0.000
State gini(rural)	-1.876*	0.153	0.130	-2.92***	0.054	0.041
Rural feminization ratio	3.775***	43.578	21.574	-0.241	0.786	0.285
Spouse_employed	-0.113*	0.893	0.041	-0.384***	0.681	0.028
Spouse_casual_wage	0.109	1.115	0.064	0.665***	1.945	0.116
Year_1983	3.974***	53.188	32.387	3.65***	38.463	24.128
Year_1987-88	1.613**	5.018	3.153	2.32***	10.175	6.209
Year_1999-00	0.93	2.535	1.731	-0.606	0.545	0.351
Interaction: post-primary education and 1983 dummy	0.496***	1.641	0.221	0.152	1.164	0.133
Interaction: post-primary education and 1987-88 dummy	0.718***	2.050	0.256	0.429***	1.536	0.176
Interaction: post-primary education and 1999-00 dummy	0.079	1.083	0.129	0.211	1.234	0.141
Interaction: mpce and 1983 dummy	-0.456***	0.634	0.056	-0.341***	0.711	0.059
Interaction: mpce and 1987-88 dummy	-0.193*	0.825	0.075	-0.205*	0.815	0.066
Interaction: mpce and 1999-00 dummy	-0.121	0.886	0.088	0.129	1.138	0.097

*p<0.05, ** p<0.0, p<0.001